

CSR, Sustainability, Ethics & Governance

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Environmental Accounting and Reporting

Theory and Practice

 Springer

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Environmental Accounting and Reporting

Theory and Practice

 Springer

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ISSN 2196-7075 ISSN 2196-7083 (electronic)
CSR, Sustainability, Ethics & Governance
ISBN 978-3-319-50916-7 ISBN 978-3-319-50918-1 (eBook)
DOI 10.1007/978-3-319-50918-1

Library of Congress Control Number: 2017936485

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Cover illustration: The present work has been evaluated by anonymous reviewers.

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Dedication

To our friendship, which is more than a scientific collaboration,

To our respective families, who have already supported our efforts, sacrifices, and travels,

To our students, wishing that they will improve their learning, sensibility, and curiosity for being transformational managers or entrepreneurs for becoming capable to drive change,

To our colleagues and scientific communities, hoping that this is a small stone to contribute to scientific debate,

To our Countries, wishing that this book will benefit to change the culture.



Preface

The crisis that affects enterprises has two salient features, the first of which concerns the transition phase we are going through and that will result in a market system, which has no precedent and that will need to develop ways to address enterprises that were never, or partly only, previously considered. We are in the process of transition to “modern sustainable” growth where “dissipative” growth, which considers profit as the main objective of companies, requires for the various countries a series of local and international interventions that are based mostly on the defense of resources at the time referred to as “nonrenewable.”

This over time has increased the focus on a particular aspect, which in the past had no relevance and that was included in the naming of nonrenewable resources. Currently, instead of the term that inspires even more concern always and above all for companies, increasing attention is given to the “common goods,” i.e., not only goods that belong to everyone and therefore potentially include nonrenewable resources but also goods that appear to be belonging to a nation or a territory, i.e., energy sources, etc., which, paradoxically, instead involve the fate of all humanity.

In the past there dwelt the reasoning about the advantages and disadvantages of globalization; the current status of this reasoning is useful, but it is no longer sufficient to guide business decisions, since globalization is a characteristic feature of all business decisions. These decisions are enriched with other important elements such as just the modern sustainable and common goods. What answers to give to these guidelines, which are critical for the survival of companies and the planet. The company’s objectives are enriched in their new carrier (or dusted) decision variables and the search for “better” becomes the object of measurement processes and communication.

One such variable is the environmental variable. The impact of the environmental variable on the enterprise has changed considerably over time. In fact, in the past it was found to have a bearing mainly on the physical aspects of natural pollution. It also had a connotation of the negative impact on environment in the sense that the company was polluting and wanted to take into account this impact, and therefore, it was necessary to make improvements with appropriate long-term investments or

through the incurrence of costs attributable to exercise to make up for the damage allegedly caused by the company.

The current state of the art, the ecological variable is no longer considered only in terms of physical environment and only in terms of an overload of higher costs for the company, but it has recently developed the logic that the environment variable generates significant economic opportunities for both the company that takes care of it. The environmental variable is creating new business opportunities and employment. This concept is known as “business environment.” This stems from the recognition that the “ecological bales,” such as plastic, paper, and glass, defined as recycled raw materials, are available at a lower cost and then at a lower final cost for the goods derived from them.

It develops therefore a positive consideration of attention to the environment understood as direct impact and not just indirect impact on business activity.

One can imagine a route that starts from a negative connotation of the environmental variable and gradually becomes more and more positive and reaches the opposite end which examines the excessive focus on the environment. This excessive attention to the environment could generate new activities arising from it, such as waste management. In this sense, the meaning of environmental management from the past is reversed, because the push towards an interest in the company was likely to create environmental variable increases, forward excessively oriented towards a profit resulting from the treatment of waste (!).

The book develops an interesting scientific and practical path starting from the importance of the environmental variable to arrive at new and more all-encompassing measurement methods and communication of environmental, social, sustainable, and integral ones. These assessment methods and communication are increasingly necessary to develop and transmit information to guide the decisions of enterprises and stakeholders. Such information is also important to legitimize the enterprises’ activities in the context of globalization in order to build a sustainable modernity. Moreover, the information system must know how to identify (and reward) the ability of companies to create sustainable value and amend the behavior that undermines the sustainability.

While in the past there dwelt the reasoning about the advantages and disadvantages of globalization, currently this reasoning is no longer sufficient to guide business decisions, which are (and must be) enriched by other important elements such as the “modern sustainability,” common goods, and the environmental variable which are critical for the survival of companies and the planet itself.

The current state of the art, the ecological variable is no longer considered only in terms of physical environment and in terms of an overload of higher costs for the company, but it is also considered in terms of business environment. The logic that the environment variable generates significant economic opportunities for both the company and in the socio-economic context (local, national, and international context) has been developed recently.

It is clear that the companies must adapt to the need to work on global markets, given the increasingly fierce competition, ever-dwindling natural resources, and the ever-increasing and new regulatory requirements for clean production.

We show the variety and breadth of opportunities for environmental (and social) accounting and reporting. With this, we believe that the readers of this book from the circles of business will be convinced about the opportunities it provides in taking appropriate management decisions to improve the financial and reputational performance of the organizations. We hope that the critics and skeptics concerning the possibilities of environmental accounting will become less.

We also believe that accounting colleagues in countries without systematic rules for national environmental accounting and reporting, who would read this book, may be convinced how important it is to create national standards for environmental accounting and reporting that can assist the management of the business.

There is abundant experience in purely scientific research and in the practice of environmental accounting and reporting. These two aspects expect their new specific and creative application, adaptation, and enrichment, which is the inevitable future of laboratory science and business.

All of our hopes are based on the conviction that the painful withdrawal of the “industrial wave” may become easier precisely by the efforts of the greening of human industrial and domestic activities and that “postindustrial society and postindustrial economy” are the world in which man belongs to nature, not nature to man.

Environmental accounting and reporting in their tremendous diversity serve this new world to achieve the complex balance between the human well-being and the natural well-being—the symmetry between humans and the environment.

Indeed, this book is the first attempt to show the business circles how to read the measurement methods and how to communicate them. It opens the way to new research questions and to new research fields, and we would be quite satisfied if we have been able to respond to the complex research questions, which we pose at the beginning of the work, that is: “What are the elements that must be taken into account as the foundation of the environmental decision-making process? We have tried to give a first response both from a theoretical point of view and from the practical point of view.”

New perspectives are in fact developing in the environment and enterprise administration, as a passage from Environmental reporting to Integrated reporting. These new challenges, the current state of the art, cannot find an exhaustive answer in terms of measurement and internal/external communication. Such new doctrinal and empirical orientations create an attractive perspective in economics and management research fields that may provide new challenges to accounting scholars.

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Acknowledgements

The Editors want to thank very much Antonio Maticena (Full Professor of Accounting-University of Bologna, Department of Management, Via Capo di Lucca 34, 40126 Bologna-Italy); Ludmila Pascari (Associate professor of Management at Department of Economic International Relation and Marketing, Moldova State University); and Antonio Imperiale (practitioner) for their contribution.

Chapter 1

The sections included in Chap. 1 “New Challenges for the Enterprise in the Age of ‘Sustainable Modernity’” should be attributed to Antonio Maticena (1.1), Maria-Gabriella Baldarelli (1.2., 1.3, and 1.5), and Ludmila Pascari (1.4).

Chapter 2

The sections included in Chap. 2, “Environmental Accounting: Conceptual Framework,” should be attributed to Nesheva-Kiosseva Ninel (2.1 and 2.4) and Baldarelli Maria-Gabriella (2.2. and 2.3).

Chapter 3

Chapter 3 “Measurement and Communication of Environmental Variable” should be entirely attributed to Baldarelli Maria-Gabriella.

Chapter 4

The sections included in Chap. 4, “Toward the Future Perspectives of Business Integrated Measurement and Communication,” should be attributed to Del Baldo Mara (4.1, 4.2, 4.3, 4.4, 4.5, 4.6 and 4.7) and Nesheva-Kiosseva Ninel (4.8 and 4.9).

Chapter 5

The sections included in Chap. 5 “Some Tools and Standards for Reporting” should be attributed to Del Baldo Mara (5.1. and 5.5), Baldarelli Maria-Gabriella (5.2), Nesheva-Kiosseva Ninel (5.4), and Imperiale Antonio (5.3).

Chapter 6

Chapter 6 “Case Studies and Best Practices” should be entirely attributed to Del Baldo Mara.

Chapter 7

The sections included in Chap. 7 “Case Studies and Best Practices” should be attributed to Del Baldo Mara (7.1 and 7.2), Baldarelli Maria-Gabriella (7.3 and 7.5), and Nesheva-Kiosseva Ninel (7.4).

Chapter 8

Chapter 8 “Case Studies and Best Practices” should be entirely attributed to Baldarelli Maria-Gabriella.

Chapter 9

Chapter 9 “Case Studies and Best Practices” should be entirely attributed to Nesheva-Kiosseva Ninel.

Finally, Preface is the result of a common work made by the three authors.

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Chapter 1

New Challenges for the Enterprise in the Age of “Sustainable Modernity”

Maria-Gabriella Baldarelli, Antonio Matacena, and Ludmila Pascari

1.1 The Subject We Are Dealing With: MGA Model of the Enterprise

Whenever we wish to analyze the corporate information system of any company, we need to remember that:

1. All corporate information systems must be structured in such a way as to offer useful data for the decision and result control (data for both internal and external use).
2. All corporate information systems must be structured respecting a precise principle of general order on the basis of which the information produced, whether compulsory or not as the case may be, must highlight the existence of an explicit correlation between (a) the aims pursued by the single company; (b) the organizational structure – as an institutional setup of the single company – which, once having decided on the goals to pursue, defines and implements the strategies and policies needed for achieving them; and (c) the whole set of accounting and non-accounting procedures, with the aim of producing information needed to decide and check.

This is to affirm that in every business, explicit and coherent coordination between mission, governance, and accountability has to exist. Moreover whenever we champion, using the theory of systems, which in every company (whether public or private), at least in theory, the existence of precise and stable *bidirectional* coordination among the mentioned elements has to occur, each corporate ideal type can see itself in its “essential life experiences,” that is, in reasons for existence and in behavioral characteristics, by way of an interpretational *paradigm* being born out of the highlighting of systemic coordinations that are present, inside it, between these elements, knowing obviously that:

- The *mission* declares company finalism which motivates the present and the future of the company, thus connecting company aims pursued to strategies

through which they will be reached – therefore representing the mission, the element which characterizes company direction and targets behavior in favor of certain subjects. Essentially, through the mission “the hypothesis of the centrality of individual (or group [author’s note]) choices which have the aim of maximising satisfaction of the preferences of the individual (or of the group [author’s note]) and the thesis that behaviour of an organisation has to be explained from the choices of the many individuals who make it up remain sound”¹.

- *Corporate governance* underlines the command/government structure that there is within the company, and it identifies the tools by way of which to govern the physiological conflict between the interest of the administrators of the company to exercise control without interference and the interest of the subjects who have made it up and upon whom the result of the management action “falls.” To summarize, by using the term “corporate governance,” we identify the ways through which the forms of corporate government participation of subjects (subject bearers of potentially conflicting interests) who are external to the direct handling of social business are built, a participation to be understood in terms of directional and controlling powers. This being valid, corporate governance may also be defined as “the set of rules that has the aim of prohibiting that disassociation (between property and control) provokes opaqueness, information asymmetries or permits the exclusive pursuing of interests of whoever is in conflict” (Rossi 2003: 36).
- *Accountability* expresses the information responsibility of the same company and substantiates that internal and external communication system, which in the transparency and control of the result find their complete conformation, is an accountability to be understood (remembering that the term in English has no direct translation in Italian) in synthesis as a need (particularly felt in the Anglo-Saxon world) of having to report results obtained in the case where resources belonging to others are used. In summary, through accountability, that power of control on the management results by those upon whom the results of the management itself fall takes shape.

Essentially:

- The mission identifies the goals of the subjects for whom the business lives and which “have given life” to it – the so-called King, the holder of this power of control of the result, that is to say, the power of checking congruence between expectations and results.
- Corporate governance highlights the methods of corporate government and the relationship between government and control, that means the principle of

¹Sacconi and Faillo (2005: 14). The authors continue affirming that “(...) the centrality of ideals (...) here is put in relation to complementarity and not exclusion, with formal systems of government and reporting, which make the company and its administrators and managers responsible while facing their stakeholders.”

command which is implemented by the so-called King Maker – bearer of corporate government – and the principle of direction and control which regulates relationships between the King Maker, King, and remaining stakeholders.

- Accountability identifies the area dedicated to information and corporate communication, an area which has the aim of preparing all the needed information to be offered (1) to the King Maker, to decide²; (2) to the King, to measure the business performance and, therefore, to control and evaluate the King Maker³; and (3) to the stakeholders to evaluate the result of business activity which falls on them. Accountability highlights, that is to say, the whole of the information and methods of communication put in place by the so-called Controller, well understanding that we are dealing with a role that is articulated into various functions covered by various subjects (such as the internal auditor, the external auditor, the investor relator, etc.) who consider the so-called Controller an architect and administrator of information systems, a consultant on checking the pursuit of business aims, a communicator and motivator, and a subject who carries out these functions with professionalism and acting as a third party.⁴ Applying this interpretative paradigm, we will arrive at identifying, within those companies operating in the current market economy, the corporate ideal type characterized by the mentioned coordination and, consequently, the typology and the contents of the accountability which should be therein.

To be brief, let's pause only on those profit-making companies and social companies.

Referring to them, the abovementioned M<->G<->A coordination, analyzed in terms of mission and governance in previous sections, and the consequent main level of accountability can be made evident through the vertical exam in Table 1.1; the horizontal exam of the same will instead allow testing of the othernesses between schematized corporate ideal types. Anyway, before we pause on it, we have to make it clear that:

- The columns relating to the profit-making company are built on the basis of the “pure” model of public company – considering, therefore, that the existence of relationships between shareholders and managers depends on trust duties of the

²An area which, in the profit-making enterprise, relies on the so-called internal/decision-making information system.

³An area which, in the profit-making enterprise, relies on the so-called external information system (very often compulsorily provided for in the minimum-level aspects – the so-called accounting obligation).

⁴In other terms, the whole gamut of mentioned functions which are all made to come together in the figure of the Controller “identifies” him, especially whenever he communicates toward the outside world, as he who has to make the value of the business “understood” to all “public parties” and as he who produces and communicates the information necessary to maintain and feed trust to the company, by all those to whom the company needs to account. He represents, therefore, he who promotes the image of the company.

latter in relation to the former owing to their property rights – in the hypotheses that these companies are therefore characterized by:

1. Separation of property from management, firmly remaining – of course – that the King Maker⁵ must pursue, above everything, satisfaction of the interest of the King, who has “the maximum interest in the company operating in a lasting way and according to economic adequacy (. . .). The objective of pursuit of economic adequacy, in this light, becomes essential to the final goals of the creation of value for the shareholders” (Songini 2002: 8)
 2. Independence and professionalism of the King Maker and the Controller
 3. Transparency in King Maker and Controller behavior
 4. Attention of the King Maker to the issues of social responsibility that weighs on the profit-making enterprise itself and, therefore, to expectations of stakeholders that are different from the shareholder: attention, which is to be considered *anyway instrumental* to the prearranged goal of maximization of capitalist benefit
- *Social responsibility* is considered a *generic mission* in social enterprise and *specific quality of corporate action* in socially non-irresponsible profit-making companies. In the latter, therefore, the responsibility itself comes into the sphere of governance and becomes a tool by which the management implements the function of coordinating the company with its own stakeholders; social responsibility, therefore, is to be considered *as one of the elements with which the same management acquires the nature of the third party in relation to shareholders*.
 - The *character of “entrepreneurship”* of the companies (i.e., of being the enterprise which is economically efficient, solvent, able for self-development, and endowed with wealth so as to guarantee itself continuity and independence) must be considered a *condition for the pursuit of economic meta-objectives* in profit-making ones and *constraint* in social companies.

In Table 1.1 we highlight coordinations which allow us to state that:

1. The strategy/structure relationships (relationships already studied in the past as being founding, to be precise, the being and the becoming of the for-profit enterprises) are the result of the relationships between administrator subjects and beneficiaries/Controller subjects, entrepreneurship being placed within managerial action and the control within the result check⁶

⁵The King Maker, therefore, in economic terms, in the sense of entrepreneur. The text refers to the well-established figure of the Schumpeter entrepreneur (i.e., “solitary” innovator of processes/products/markets); this is in order to be able to separate, inside management, holders of strategic action – the innovating entrepreneur – who are represented by the top management, from those who consolidate and maintain the chosen innovation, who are represented by the executive management.

⁶Note that we talk of optimization and that by this we mean a conditioned maximum in profit-making companies and a tied-up maximum in social companies.

Table 1.1 MGA: profit-making enterprise and social enterprise compared

Subjects	Profit-making enterprise	Subjects	Social enterprise
Shareholders	Mission Capitalist benefit, that is, the optimization of yield for shareholders while pursuing an economic optimum which is sustainable in the long term	Individual and collective users	Mission Collective benefit, that is, optimization of individual, group and/or collective benefits while respecting maintenance of the condition of entrepreneurship as constraint on the continuity of the specific mission
	<i>Unidimensional mission</i>		<i>Multidimensional mission</i>
Entrepreneur actor innovator	Governance Coherent company governance with a finalistic objective, coherence gained by strong command principle made clear by a finalized hierarchical chain and realized through a coordinated directional behavior in relation to social and economic stakeholders	Collective entrepreneur	Governance Ultrademocratic corporate governance due to the presence, in strategic direction, of all the actors of the ethical business; ultrademocratic nature made possible by collective concerted directional behaviors in relation to economic and social stakeholders
	<i>Hierarchical governance</i>		<i>Multi-stakeholder governance</i>
Controller	Accountability Internal information system useful for management separated from external information system which has the aim of producing documents with final data and values. This system is able to produce: 1. Documents which conform to accounting obligations useful for entrepreneurship checking 2. Financial reporting useful for investors 3. Eventual socio-environmental reporting useful for stakeholders considered prevalent at that moment	Controller	Accountability Single information system from whence comes information able to give rise to systematic communication through which to check levels of entrepreneurship and mission pursued and achieved by way of control of the: 1. Administrative results, useful for checking obligations deriving from the presence of eventual subsidy legislation 2. Managerial results, useful for checking constraint for entrepreneurship 3. Institutional results, useful for checking specific social performances and activating mechanisms of fundraising
	<i>Unidimensional accountability</i>		<i>Multidimensional accountability</i>

2. Level of *accountability*:

- Internally depends on pursued management objectives
- Externally functional to mission typology and to the impact level of the same

Let us now examine the contents of the accountability in the two ideal types of companies (Matacena 2005), that is to say, let us develop that which has emerged in Table 1.1 highlighting conformities and differences, starting from accountability of social enterprises, given that they implement “specific social responsibilities” and therefore find themselves in the condition of having to make civil society confirm that condition of trust which has determined their birth and existence.

Owing to the mission that social companies pursue within them, an information system should be provided for which is able to:

- Coordinate social moments and economic constraints, in the implementation stage
- Check, during activity carrying on and at its end, social effects and business constraints of implemented decisions
- Qualify/quantify level of achievement of the social goal and the result of this pursuit in terms of economic nature, solvability, and wealth endowment
- Allow third parties, both internal and external on the basis of their choice, to evaluate (to validate or not) these performances

Needless to say that this information system may only come into being out of a profound change of that system which is typical of profit-making companies, in that a change has to be foreseen of the:

- Decision-making system: from autonomous, even if conditioned, to co-decided, a system which exalts the democratic and pluralist nature of the organization
- Planning system: from implementing the sole goal of profit, even if with “prevalently financial” aims, to social, in that it implements socio-solidarity goals in keeping with the safeguard of entrepreneurship
- Information systems: from aiming at “profit,” as element directed at guaranteeing capitalist remuneration, to being aimed at control/reaction of developments of overall “company/environment relations” and facilitating expression of an “eventual” *social control*; information systems molded in function of the effective contexts of impact of social actor operation

Not wishing to linger any further, through the information system social enterprises, especially when their impact grows, should show, within themselves, application of the principle of the democratic nature which characterizes *multi-stakeholder* organizations and, outside them, respect of the finalistic coherence and the restraints of an economic and financial nature. This therefore means that in them, the information system must be, first of all, able to activate an overall statement of accounts centered upon *a single system of documentation* which contains *ex post* data and values that guarantee the check of the transparency of:

1. The management – transparency pursued through the communication of information which is able to permit the checking of the respect for the economic constraints placed at the forefront of each of them, just like it would be, of any type of profit-making company

2. The administration – transparency pursued through the communication of information which is able to permit the checking of the respect of arising legal constraints, even owing to the eventual concessions enjoyed
3. The institution – transparency pursued through the communication of information which is able to permit control of effective orientation toward the solidarity aims as well as the checking of goal level achievement.

Obviously, this situation cannot be proposed again in the same way for profit-making companies which will, instead, have to, first of all, offer information which contains *ex post* data and values:

1. To third parties, regarding the company's capacity to respect the constraint of entrepreneurship which they undergo.
2. To shareholders on the capacity of operating in a stable way and in a condition of an economic nature in the long period, which is necessary, as we said when presenting the ideal type of the profit-making company, to make value creation possible to their favor.
3. To shareholders and financial market on the created value and value expected and later (and eventually) social information.
4. To the economic and social interlocutors deemed prevalent, this communication has to favor that process of coordination which management, as has often been said, activates in order to facilitate pursuit of the mission.

All information is normally obtained in the profit-making company not with a single information system but through enlargement of documents produced by the external information system which, as is well known, has the aim of producing and communicating documents foreseen in the accounting obligations to which they are subject (normally the company financial year report).

As has been said previously, turning our attention now to management information allows us to state that:

- Within social enterprises, it is functional only for checking the existence of the conditions of entrepreneurship.
- Within profit-making enterprises, it is functional, of course, for checking the existence of entrepreneurship and especially for the analysis of corporate finalism levels reached and desired.

It follows that *management transparency, in social companies*, finds its fullest "expression" through accounting documents which are not part of the financial year report; *in profit-making companies* however *management information*, seeing the dual function that it has got (providing shareholders and third parties with information useful to form their judgements of convenience, providing the financial market with information which can make allocation of available resources efficient), may be offered via an opportunely structured *financial year report* and a *variously articulated system of information, which can be compulsory or voluntary and directed toward stockbrokers* (Quagli 2004); *these reports facilitate the*

determining of presumable value expected from quoted securities and, therefore, the measurement of value generated by the company.

As we may see, management communication, despite its differing aims and specifications of subjects to which to direct it, might reach a homogeneous structuring for each type of enterprise, and we say this when we have it clear in mind that, especially in Italy, we are witnessing an evident obsolescence of the traditional information tools which characterize present accounting obligations (Guatri and Eccles 2000), since processes of standardization of budget information are coming forward – think of IAS (Matacena 2003: 5) – as well as ways to evaluate the merit of credit of the single profit-making companies or social enterprises, think of the Basel II accord, processes with the aim of “subjectivizing” even more information toward financial investors. Standardization is aimed at giving an account of the entrepreneurship and at facilitating control of the past and future trends.

A challenge remains open to that which is *relative to the validity of this type of information*, namely, to its effective transparency where there are potential conflicts of interest among information producers, information managers, and final users of the same information.

Once we have examined the tools used in order to pursue management transparency, let’s now introduce the theme of institutional communication (in social companies) and social communication (in profit-bearing companies).

It is not our wish to linger on the theme of social accounting and social reporting (Matacena 1984; Hinna 2002), which presses us to remember that it is a matter of *hypothesizing* an information system *which facilitates the participation* of management/main internal and external interlocutor to determine various goal levels *in social companies* and *the dialogue and coordination* of management/main internal and external interlocutor *in profit-making companies*; the information system, for this reason, is capable of defining the outlines of the company image in comparison with the whole set of economic and social interlocutors.

In other terms, we are dealing with “constructing” an information system capable of producing “reports” *within the social companies*, which:

- Contain information which permits “ample and selective” interpretation of production, distribution, and consumption processes of the socio-economic wealth which are activated within the company, according to the specific mission and its future implementation
- May be used to face forms of “social control” by the reference civil society

In profit-making companies, “reports” which:

- Contain information which can represent economic externalities produced/assumed by the company
- May be used to talk with all those who contribute “capital,” in all its various forms, and which for this reason are to be remunerated and not damaged (or compensated for the suffered damage) by the company. Confirming, therefore, and we repeat it again here, the hypothesis that this communication, in our opinion, for the former represents the way by which “they account” for their own

mission and results of the same mission, while for the latter it represents a tool through which management tries to optimize the pursued financial objective (Rusconi 2006).

Moreover, said reports, aimed at measuring/communicating institutional/social results achieved, will have to be accompanied by information relating:

1. To the structure of the governance in the enterprise, bearing in mind that in the former it is ultrademocratic in nature (i.e., let us repeat it here, it is a structure made up of subjects who are bearers of differing, even conflicting, interests, even though the aim of solidarity is common to them all; subjects all who have to be involved in the decision-making process), whereas in the latter, it is based on trust (i.e., let's repeat it here, it is managed by proxy by subjects independent who act in the light of balance of the interests involved, a balance whose aim is to facilitate the pursuit of the capitalist benefit of all partners)
2. To the tools used internally by the management to guarantee the “quality” of information produced by the information system, quality connected:
 - In the social enterprise, to the aptitude that the said information contains, internally to favor the decision-making process and externally to favor legal and social forms of control
 - In the profit-making enterprise, to the aptitude that the said information contains, internally, to favor agreement moments and externally, to favor the testing of the legitimacy and consensus to act.

The mentioned processes and tools should be results of a voluntary evolution of governance itself, governance which is more and more aiming at self-vigilance and more and more able to permit maintenance of a legitimate and shared conduct; a governance that is, therefore, guided by a culture, nowadays we could call it, a culture of *compliance* (Antoldi 2003; Comoli 2002).

All that being stated, *institutional communication in social enterprises* is pursued through the predisposition of a descriptive document (social report, mission statement, moral report, etc.) (Italian ONLUS agency: 26) which, where it is made up following the interpretative outlines of the ideal type of business, presented previously, has to contain:

1. Definition of the specific mission, that is of the priority aim, for which the organization was formed, and of the system of convictions which brings the participants together, in whatever shape or form, to the activity of the company (i.e., the vision that the internal subjects have of their productive and distributive function as a means of growth of the collective welfare)
2. Proper *effectiveness* and *result* indicators (also called outcome indicators), able to measure, the former indicators, benefits resulting to the collectivity from the production of main merit goods and, the latter ones, benefits resulting to the users from the distribution of said goods.

Proper *activity* indicators (also called output indicators) are able to measure the production quantitative/qualitative level (Ramanathan 1982; Molteni 1997).

This information should also be completed with the presence of:

1. *Activity program* indicators (also called *program benefit*) aimed at measuring, in economic and monetary terms, gains/costs ratio of the individual institutional programs realized (especially when financed by third parties)
2. *Efficiency* indicators (also called *input* indicators) aimed at measuring the quality of production factors consumed in carrying on individual activities carried out
3. *Organization efficiency* indicators aimed at measuring monetary resources absorbed by back office activities, in relation to those absorbed by its activities of front office.

Essentially, a right evaluation of institutional performance of social companies, to be communicated in the social report, would require the measuring of:

- Effectiveness in terms of quasi-public goods produced and merit goods distributed
- Management efficiency, in terms of optimization of the use of resources available (while respecting any eventual constraints on expenditure imposed by the backers, considering the dominant funding mechanisms of these companies)⁷
- Level of entrepreneurship expressed by the management, especially in terms of backer/user satisfaction and of innovation capacity in carrying out their activity.

In practice, if we consider well that effectiveness, in terms of growth of collective welfare throughout the long term, is lacking in recognized and shared units of measurement, still today, nowadays, we usually affirm that *testing social company performance is principally centered upon the use of indicators, called on to express their “economic efficiency,”* efficiency defined as the capacity to maximize levels of *output* (production) using the least amount of *input* (efficiency).

If we consider, though, that the activities started up by social enterprises (such as training, education, health, welfare, etc.) are able to improve sociocultural conditions of a collectivity, the effectiveness of the social companies has to principally be outlined in terms of *outcome*, that is, in terms of effect, resulting from service provision, on a particular condition, state, or behavior of the user.

⁷For Zamagni:4. “the specificity of these organisations is that of creating value both *instrumental*—in relation to the aims that the society retains as a priority—and *expressive*—OSCs (Co-operative Social Organisations) allow expressing value in which the citizen believes through works. The instrumental value of the ONPs (Not for-Profit Organisations) is measured in terms of results produced—from here is the stress on performance and upon managerial organisation. The expressive (or symbolic) value of the OSCs is, instead, measured by the degree where these subjects are able to produce relational goods and, in the end, social cohesion.”

The outcome therefore takes on the shape of a measuring stick of the result of the service provision for the same users, a dynamic measuring stick, though, because the measurement is carried on in many temporal instants.

Finally, in the social companies, the drawing up of the social report must be accompanied by the timely internal communication of results as soon as they become manifest (previously we spoke of *in itinere* communication); this is necessary if the processes of agreement and strategic implementation which qualify their governance want to be made possible, facilitating, in such a way, that “social control” which makes possible its financing and that “legal control” which permits its possible accreditation (or sanctions its disaccreditation) (Colozzi 2003: 153; Matacena et al. 2005: 135–154).

To sum up, by way of the social report, the social enterprise pursues therefore a plurality of both internal and external objectives:

- Internally, it serves as a tool of strategic implementation, of determination and communication of institutional performance, and of construction of the sense of belonging and of the conditions of participation and loyalty. These elements guarantee the motivation structure of the organization and favor its attractive capacity of partners, workers, etc.
- Externally, it is a tool directed toward facilitating merit, accreditation, dialogue with stakeholders, mechanisms of institutional financialization (donations and fundraising), and conditions of competitive advantage toward other social enterprises.

Mutatis mutandis, on the basis of the abovementioned scheme, it is possible to imagine the “skeleton” of the social report of profit-making companies. A social report which is useful to its *social communication* where it is considered, it must be well kept in mind, according to Freeman’s concept of enterprise as “network of stakeholders.” The social report should contain, first of all, the definition of *the specific “social” vision of the company* and then the definition of the consequent action programs and of the specific indicators directed to determine and evaluate the pursued levels of sociality, making them externally perceivable. Therefore, it must be made up of:

1. The declaration of the mission, that is, of the priority objectives because of which the for-profit company has been constituted – its productive function – and the definition of the conviction system which unites those who take part in the activity of the company, that is, the social vision which the for-profit company has of itself and of its way of operating in the market, declaring, in other terms, its true *modus operandi* (its own *Weltanschauung*) and the image that the stakeholders have of its distributive function.
2. Information on the characteristics of its own governance; on the internal control systems, and on the measures realized in order to reduce, if not to cancel, the conflict of interest which is latent in the case that owners-shareholders and managers are both present in the strategic management; and on ways of actual

coordination with stakeholders and on the results of said coordination in economic terms.

3. Inventory of (carried on and current) actions and programs with social usefulness, which derive from the declared vision, programs whose following items must be identified: borne expense and costs, measuring, at the same time, the ways of use of employed resources, analysis which can be carried on by way of input indicators; appropriate indicators able to measure benefits consequent to social activities; and indicators such as outcome indicators – as said, able to measure, in time, benefits for differing stakeholders deriving from social actions carried on by the for-profit company – and output indicators, as said, able to measure the level of quantitative/qualitative productivity of the same social management.
4. Appropriate reporting which qualifies and quantifies achieved results for the undertaken obligations and carried on actions and which eventually informs of socialized private costs, of eventually undertaken social costs, of internalized social revenues, and of externalized private revenues. This information, where possible, has to be expressed in economic terms, in such a way as to make the *eventual – absolute and relative – “cost” which the same company bears because of the undertaking of a certain specific social responsibility.*

In conclusion by way of the social report, the management of the for-profit company pursues therefore a plurality of objectives, both internal and external ones: internally, it serves as a tool for determining and communicating specific social performances, and externally, it is a tool directed to facilitate legitimization and consent to act and the dialogue with the principal stakeholders.

These aims are, according to us, instrumental to the acquisition of competitive advantages and therefore to the increase in value of the company and to the support of the stock exchange quotation of its shares.

In order to conclude this article of ours, we should still deal with – as regards institutional and social information about which we are here debating – the following themes: its drawing up, presentation, and its eventual integration with the other compulsory or voluntary information provided for by the companies and its eventual standardization and also the methods of its auditing. However, *mutatis mutandis*, these are themes more *quid juris* than the *quid ius*,⁸ themes which honestly little fascinate us and which we can refer to the “boundless” nowadays literature on the theme.⁹

⁸Rossi (2003: 15) of his work, speaking of the conflict of interests as a constant of financial capitalism development, thus writes, “(...) that until now jurists have completely ignored the so-called *quid ius*, the reflection on the essence of law applied to financial capitalism, preferring to concentrate themselves on the *quid juris*, that is on the norms to apply to single cases”, from here, *mutatis mutandis*, the affirmation made in the text.

⁹Beside the already quoted works on the matter of social report of for-profit companies, we wish to remember the recent works of Andreatus (2007) and Mio (2005) and, on the matter of institutional report of social enterprises, the work of Rea (2004).

On the matter of values for determining management results, it is useful to refer to Amigoni and Miolo Vitali (2003).

Rather, it appears more useful to us to remember that, actually,¹⁰ a really copious “social” and “institutional” information is coming to life, voluntarily provided for by the companies; this is a voluntary communication which makes us hope well for the maturity that the market is acquiring on the matter of “communication needs” toward civil society where it lives; this is an attitude that, maybe, will spare us further compulsory regulation¹¹ which would crystallize “past” behavior in order to provide a solution to a problem that is dynamic and changeable in time: *how the market adapts to changes of the surrounding world that contains it, if it wants to survive.*

1.2 Emerging Threats and Opportunities for the Enterprise in the Era of Sustainable Modernity

In this section we are outlining the new threats and opportunities of the environment for enterprises. Then we shall focus on the answers that enterprises must give to environmental challenges.

As anticipated, we are going to start with the analysis of the environment that companies operate in and then we are going to proceed by successive approximations. First the environment is considered as a suprasystem or “ecosystem” and then as a competitive environment and finally as a subsystem that makes up the enterprise.

The crisis that is affecting businesses has these two salient features, the first of which concerns the transition phase we are going through and that will result in a market system, which has no precedent. This crisis needs to develop ways to address enterprises that weren’t previously considered. We are in the process of transition to the “sustainable modernity” (Rullani 2010) where “dissipative” growth considered the profit as the main objective of companies. This profit orientation of enterprises increased the relevance of nonrenewable resources, such as air, water, soil, etc.

At present, instead of the term “nonrenewable resources,” more attention is given to the so-called commons (Ostrom 2012). The commons refer to goods that belong to everyone, and they potentially include nonrenewable resources too. They involve also goods that may seem to be apparently belonging to a nation or a

¹⁰Not the same thing happened in the 1970s when for the first time the themes of CSR became evident.

¹¹The most recent legislation on the matter is French again; it has to do with the Decree No. 2003-221 of the 20 February 2002 implementing Art. 116 of the Law No. 2001-420 of 15 May 2001, a law referring to the new discipline of the commercial corporations – as we can see history repeats itself! On the matter, please see Egan et al. (2003) at the 25th Conference of the Association for Public Policy and Management.

territory, such as the energy sources, but that which are, paradoxically, involving all humanity.

Enterprise decision-making process should be enriched by other important elements, such as “sustainable modernity” and the commons.

The environment variable is also changed considerably in its enterprise impact, and it is greatly varied over time.

In fact, in the past we found his bearings especially in the aspects of physical pollution. At present the environmental variable is no longer considered only in terms of ecological area and only in terms of an overload of higher costs for the enterprise, but it has recently developed the logic of the “business environment.” This stems from the recognition that the “green bales,” such as plastic, paper, glass, as well as recycled raw materials, are well defined. The recycled raw materials (green bales) are available at a lower cost, and consequently this is reflected on a lower cost of the final products that are obtained using them.

The stronger attention to the environmental impact of the enterprise is not only intended as a direct impact. This impact is about the reduction of costs and improving the corporate image. We can consider an imaginary line that begins with a negative connotation of the environmental variable and progressively becomes progressively positive. Enhancing in this direction, the enterprise can reach the opposite pole in which there is the excessive attention to the environmental (ecological) impact and ignore social and ethical dimensions of enterprise management.

Thus, in comparison with the past, the reasoning is overturned in that it pushes toward making companies interested in the environment variable risks generating false dawns, which are excessively oriented toward a profit deriving from the treatment of waste! Therefore, the “financial mentality,” which some classics complain about in decisions regarding water treatment (Miolo Vitali 1978: 115), must be revised according to modern times, in that they can go astray toward opposite directions which are equally dangerous for the responsibility of companies toward stakeholders.

What answers can be given for these trends, which have a fundamental importance for the very survival of the companies and the planet?

The objectives of the company get richer and richer within their vector of new (or dusted down) variables, and the research of the “best” decision becomes the subject of measurement and communication processes.

But, what are the elements which must be taken as a basis of such decisions?

Another aspect, that concerns the general environment, regards the transition which, according to a well-known economic school (Zamagni 2000; Gui 2000; Bruni 2000), is coming about from positional goods to relational goods, that is, to the attention which is exaggeratedly placed upon that which a person has, rather than upon that which a person is. Such an attitude crashes up against the need of the subject to be happy, in that the yearning of having levels the capacity to establish a relationship with others and the capacity to create true and lasting relations, of which everyone has, on the contrary, a pressing need.

Therefore, the interest toward the transition from positional goods to relational goods emphasizes this issue trying to give more importance to and better highlight, besides the competitive market relationships, also the social and interpersonal relationships.

Besides, still concerning the general environment, we examine globalization. It represents the intensification of links between various national economies making them all the more interdependent. This affects the decisions of individual companies, where we have to bear in mind the prospects and consequences that such decisions will have, both at local and global levels.

Globalization might set off positive mechanisms, like the broadening of the procurement and sales markets, which are useful for favoring the development of countries of greater economic and social difficulties. However, globalization might also create considerable problems increasing the divide between rich and poor countries, if the decision-making process of the multinational companies is purely economic, as it happens in the case where a plant is closed down in one State, causing unemployment, in order to open a new one in another State where there is a greater economic advantage to produce the same goods.

Globalization projects companies into a wider market, intensifying, from this viewpoint, the competition relationships between them. However, at the same time, at an international level, companies who already locally boast a position of leadership may consolidate. Whereas companies which have greater difficulties imposing themselves as leading companies are forced to give in, or, at least, they are often led to passively endure trends expressed by multinational companies.

The fourth important aspect, to consider in the environment, regards the technology that nullifies geographic space and allows for communication in real time but, at the same time, generates unease and frustration in those who wish for a more direct relationship or one that can be better qualified as an interpersonal one.

This desire is often softened in the relationship through computers, paradoxically creating a society where the potentials of communication have never been greater, and still, the issue of the poor quality of relationships between people and incommunicability has reached historic highs. This lets us understand the reasons behind how, in this day and age, there are very loud “noises and distortions” (Catturi 2001: 109) between the source which communicates and those who receive the information, with the result that solitude and incomprehension become social problems which have pushed scholars to face up the issue of relationship, as has already been hinted at, and consider it an “economic and social” good of equal worth to other goods (Bruni 2006).

Therefore, in the epoch of knowledge, not all types of knowledge are able to generate positive relationships and are able to protect the environment and respect man, as a person. Indeed, in the past, the issue was not the creation of true relationships, in that the need was generated by necessities, while currently, notwithstanding the abundance/excess of information and possibility of contacts, we have lost our sense of the quality of relationships, which is however the lubricant of knowledge, inasmuch as it allows for instantaneous enrichment of subjects, who maintain a rapport with others exchanging experiences.

If, instead, we move on and reflect on the subsystems, which make up the company and particularly upon how the internal members feel in their working environment, throughout every hierarchical level of the structure, we realize that in the majority of cases, there is a rather limited motivation and moreover a deep-rooted dissatisfaction emerges. This dissatisfaction is coupled with the desire to want to be more and more involved with management of the company itself, not only via forms of monetary incentivisation, rather through forms of active involvement as persons and therefore as bearers of interests that go beyond the simple economic remuneration.

In the working environment, technological innovation, which we have already mentioned previously, may cause issues of integration between technical instruments and human resources, so we need to consider these difficulties, in that the same technologies make relationships independent and impersonal and thus distancing, rather than bringing closer together, people who work in the company. This leads us to think that we have arrived at creating a decision-making assembly line just like that operational one described by Taylor, where everybody, predominantly, faces himself/herself with the computer!

After having defined the main characteristics of the environment, the following section will highlight how companies currently may respond to such solicitations.

1.3 Some Orientations to Reply to Sustainable Modernity

Concerning the current crisis and the important aspects regarding common goods, the legitimization of the company has to, more and more, face itself with the respect for the environment which surrounds it.

Relating to the transition requested from positional goods to relational goods, this passage can sometimes be understood especially within the production fabric of small- and medium-sized businesses, where survival of companies, within a global market, is tightly related to their capacity to create and control relationships that build up in company networks (Mancini 1999).

Even for the big multinationals, the capacity to understand the needs of destination countries is functional to the optimal sale of their goods and services. This means a kind of work that aims at highlighting that which the company is, rather than what the company has (Ferdinandi 2009). Besides, this leads us to connect these considerations to the fourth aspect we analyzed where we spoke about the impact of technology on the company. Such impact is both external, in relation to social and economic interlocutors, and internal, in relation to staff working within the company. This, we have said, tends to depersonalize all relationships, both internal and external, and the companies find themselves having to completely reset all relationships while counting on this new filter which risks, if not appropriately managed, wearing out those relationships which were instead based upon reciprocal trust.

As regards globalization, we note that the issue around the lack of attention to environmental and social questions by companies has a long tradition in business economics.

Besides, companies, in order to show their investors their capacity to be respectful of the environment, more and more undergo procedures of quality, environmental, and ethical revision, which, giving an eco-label, allow them to gain access to economic benefits that are linked to their image on national and international markets. From the financial viewpoint as well, they place themselves at the forefront in the capital market.

Environmental certification might be a first step toward a greater legitimization, but it might also remain a simple attitude of “image,” and therefore it is far from eco-efficient management logics (Burrit 2001; Mio 2002), which instead require a profound change in the company’s decision-making process. Such a change is long and difficult as well, within it the participation of all subjects is needed, and such mechanism can be started only while actively operating (Burrit 2001).

From that which came to the fore in the first and second section, certain characteristics have been outlined which, at the current state of affairs, companies should have. Such characteristics can be summed up in the capacity to instill trust both in the environment and within the company. All this is not simply “legitimacy,” rather it is a matter of looking for a true relationship with the environment in all its expressions, which become both propulsive production factors of the activities carried on in the company, and also guiding elements that are essential to the whole company activity.

Even the definition of the company as a system of relationships is (Ruisi 2004), according to our point of view, a definition to be clarified. Indeed, it does not come about spontaneously, since even within the company there are conflicting interests. Therefore, on the one hand, the company needs to consider how such behavior influences the economic variables, and, on the other, it is necessary to bear in mind that such behavior must be cultivated and built up. This typology of approach has noteworthy reflections upon the ways of definition of the objectives of the company (mission), upon the governance methods, and upon accountability.

Once the characteristics of the environment and the answers that companies can provide have been defined, in the following section, we will examine the dimension we have chosen for this piece of work which is the environmental one.

1.4 Eco-Entrepreneurship: A Strong Promise for Safe Environment

In the twenty-first century, we have inherited many unsolved problems from the previous century, and one of the challenging issues is the protection of the environment. There are many warning signals such as the excessive pollution and the natural resources depletion in various countries. In each country, on local and

international levels the ecological activity has unanimously appreciated that the efforts are insufficiently and unequally distributed on earth. Businesses that haven't intended to be sustainable worsen our health, shorten our life on the earth, and destroy our future patrimony, no matter where the person is located globally. This paragraph provides an overview of the phenomenon of “ecopreneurship.” It begins by explaining the term “ecopreneurship,” after which it has been analyzed the types of ecopreneurs and has been identified the barriers that may occur in the way of developing the green business and has been analyzed the strategies to foster ecopreneurship.

It is apparent that the economic growth has conditioned by degradation of environmental factors the business sectors needed to find some solutions to preserve and improve them. The specific activities for protecting and improving the environment follow the protection of natural resources by its unreasonable exploitation and avoid the pollution with noxious substances, which damage quality of environment.

Under conditions of aggravation of the crisis in the natural environment, the economists try to find solutions to ensure a natural environment able to support a sustainable economic development. An important problem faced by developing countries and industrialized ones is finding the way to support the economic growth without doing prejudice to the environment. One of the examples is the ecopreneurship.

Natural environmental issues are increasingly becoming an integral part of business. Traditionally, the environmental business has focused its attention on how and why existing firms on the market can become “greener.” It has spent a lot of time and efforts for examining the tools that can be used to make firms more sustainable and environmentally responsible.

It has been remarked that an entrepreneur is easy to recognize but hard to define. In general, entrepreneurs are individuals who identify the new business opportunities and take on the risks required to implement these ideas into practice.

Schumpeter, 1934, stated that the entrepreneur is one who applies “innovation” within the context of the business to satisfy unfulfilled market demand (Leibenstein 1995). In his elaborations, he has seen an entrepreneur as an innovator who implements change within markets through the carrying out of the new combinations. The carrying out of the new combinations can take several forms:

- New good or standard of quality
- New method of production
- New market
- New source of new materials supply
- New forms of organization in any industry.

Various writers have used different terms to elucidate the notion of ecopreneurship.

An ecopreneur is an entrepreneur which has passion to address the environmental issues and work toward making a “greener” economy. Most popular heuristics of ecopreneurship are reduce, reuse, and recycle (The 3 R's).

Primary ecopreneurs start businesses in eco-friendly markets for making profits, and now they are contributing to environmental sustainability. Examples of eco-businesses are reducing pollution, recycling waste materials, water purification technologies, and renewable energy technologies (Folmer and Tiettenberg 2005). Some of the advantages of ecopreneurship include to reduce environmental degradation, improve agricultural practices and freshwater supply, and maintain biodiversity (Shepherd and Patzelt 2011).

The expression “ecopreneurship” is sometimes referred to as green, enviropreneurship, and ecological entrepreneurship. Eco-entrepreneurship is a combination of two words “ecological” (eco) and entrepreneurship which suggests the creation of a very innovative company that provides environmentally friendly products and services. Proponents argue that green entrepreneurs are like a combination of environmental and business aims, with the intention of achieving the social and ethical transformation of their business sectors (Isaak 1998).

Anderson and Leal (1997) define ecopreneurship as:

entrepreneurs using business tools to preserve open space, develop wildlife habitat, save endangered species and generally improve environmental quality.

Schuyler (1998) provides a more generic definition by stating that:

the term of ecopreneurs has been coined for entrepreneurs whose business efforts are not only driven by profit but also by a concern for the environment.

Isaak (2002) reaffirms with his “ideal type of ecopreneur” being “one who creates green-green businesses in order to radically transform the economic sector in which he or she operates.” These analyses seem to suggest that the ecopreneur must score on both environmental and “big business” parameters to be a valid concept, i.e., to be not only successfully green but also “successful” in the traditional economic sense.

1.4.1 Typologies of Ecopreneurs

Several researchers have developed different classifications for the environmental entrepreneurs because every ecopreneur is not the same. Table 1.2 presents the different classifications of the environmental entrepreneurs from the literature, by authors and criteria for orientation.

All types of ecopreneurs, except one, can be categorized into two groups, e.g., companies that consistently adopt environmentally friendly practices (sustainability orientation), companies that discover the advantages of greening after start-up (economic orientation), and those that adopt environmentally friendly practices only to comply with regulations (Schick et al. 2002).

According to the opinions of Schick et al. (2002) the main reason for the difference in the orientation is the attitude of the ecopreneurs. The eco-dedicated entrepreneurs (sustainability orientation) have a very strong attachment to environmental

Table 1.2 Classification of the ecopreneur

Author	Types of ecopreneur	Criteria for the adoption friendly of ecological practices		
		Consistently	Partially	Only to comply with regulations
	<p>1. <i>Social</i>. Entrepreneur seeks to promote an eco-friendly idea/product / technology through market or nonmarket routes</p> <p>2. <i>Commercial</i>. They maximize the personal gain through identification and exploitation of green business opportunities</p>	Social	Commercial	
Isaak (2002)	<p>1. <i>Green business</i>. Entrepreneur did not start green business from scratch, but later discovered the advantages of greening their existing businesses</p> <p>2. <i>Green-green business</i>. Entrepreneurs designed business to be green in its products and processes from scratch</p>	Green-green business	Green business	
Linnanen (2002)	<p>1. <i>Self-employer</i>. Advocates nature-oriented enterprises, e.g., wildlife habitat preservation, ecotourism, etc.; low desire to change the world and low financial drive</p> <p>2. <i>Opportunist</i>. Involved in environmental technology to help businesses and communities reduce environmental load on water, air, and soil. They have a low desire to change the world and high financial drive</p> <p>3. <i>Nonprofit business</i>. Entrepreneurs have high desire to change the world and low financial drive</p> <p>4. <i>Successful idealist</i>. Entrepreneurs have high desire to change the world and high financial drive. They want to make money and the world better</p>	Opportunist Nonprofit Successful idealist	Self-employer	
Walley and Taylor (2002)	<p>1. <i>Innovative opportunist</i>. Financially oriented entrepreneur who spots a green niche or business opportunity that happens to be green</p> <p>2. <i>Ad hoc or accidental entrepreneur</i>. Spots opportunities that are green, rather than seek out a niche in green spaces</p> <p>3. <i>Visionary entrepreneur</i>. Built their businesses based on sustainability principles</p>	Visionary and ethical rebel	Opportunist ad hoc or accidental	

(continued)

Table 1.2 (continued)

Author	Types of ecopreneur	Criteria for the adoption friendly of ecological practices		
		Consistently	Partially	Only to comply with regulations
	4. <i>Ethical maverick</i> . Sets up alternative style business on the fringes of society			
Schick et al. (2002)	1. <i>Eco-dedicated</i> . Consistently adopts environmentally friendly business practices 2. <i>Eco-open</i> . Partially adopts environmentally friendly business practice 3. <i>Eco-hesitate</i> . Adopts environmentally friendly business practices only when they are forced by regulations	Eco-dedicated	Eco-open	Eco-hesitate

Table 1.3 Drivers of eco-business sectors (Linnanen 2002)

Desire to change the world	Desire to make money		
		Low	High
	Low	Non-profit business	Successful idealist
	High	Self-employer	Opportunist

issues than the others. The reason for the strong commitment is because, since their childhood, environmental awareness had been developed within their families, and it has remained an integral part of their lives and further their businesses.

Given the considerations outlined in the above discussion, ecopreneurs can be classified according to two criteria as shown in Table 1.3:

1. Ecopreneurs with desire to change the world and to improve the quality of the environment and life
2. Ecopreneurs with desire to make money and grow as a business venture.

Linnanen typifies ecopreneurs along these conflicting axes and notably a high “desire to change the world” coupled with a low “desire to make money” results, in this typology at least, in a “nonprofit business.” From this he differentiates four types of ecopreneurs:

- Nonprofit business. High desire to change the world, low financial drive
- Self-employer. Low desire to change the world, low financial drive
- Opportunist. Low desire to change the world, high financial drive
- Successful idealist. High desire to change the world and high financial drive.

Linnanen (2002) continues on to say these two dimensions seem to be independent. The first dimension of pursuing the “good life,” like sustainability, is an acceptable goal as such but it is primarily an inefficient business concept. The second dimension emerges from a reasonable assumption that the economic success factors are no different in eco-businesses than they are in any other businesses.

Isaak (1998) argued that the various types of ecopreneurs are not pure forms but represent reference points for broad changes within businesses. The process theory of entrepreneurship supports Isaak’s “viewpoint, which emphasizes the fact that “you can’t pin people down to one type, because entrepreneurs are always in the process of ‘becoming’” (Steyaert 2004: 6). Entrepreneurs are distinguished from one another by the wisdom applied in practice, knowing how and when to apply it.

In a dynamic market, prosperous ecopreneurs have been expected to move fast, take risks with prospective gains, pull the whole market toward more environmental progress, motivate others, and anticipate the consumers’ desires; their motives may not be solely green but are a combination of green, ethical, and social motives.

1.4.2 *Determinations of the Barriers to Ecopreneurship*

A successful entrepreneur in its activity faces the several critical problems. Table 1.4 has presented the barriers of ecopreneurship based on geographical location, those that can be tested in activities to the adoption of ecopreneurship practices for large corporations.

There are various types of the ecopreneur problems in rural and urban areas. Rural areas are lacking in technology, knowledge, government support, and innovation, existence of financial risks, and unstable business development. As for those which are located in urban areas, they might face the barriers such as the existence of many competitions, incentives, lack of consumer support, and lack of awareness of environment. For both locations is common the absence of the willingness to innovate.

L. Linnanen (2002) asserts there are few critical issues that the successful ecopreneurs must address such as the challenge of market creation, the finance barrier, and the ethical justification for existence:

Table 1.4 Ecopreneurship barriers based on geographical location

No.	Rural areas	Urban areas
1.	Limited technology	Lack of awareness of environment sustainability
2.	Lack of knowledge	Lack of consumer support
3.	Lack of government support	Lack of incentives
4.	Too much financial risks	Lack of willingness to innovate
5.	Lack of willingness to innovate	Too many competitors

1. **Market creation.** Environmental management and sustainable development have been still fairly discredited concepts in public discourse, and it is on driving eco-business development by working out original and credible business plans for new products, services, brands, and processes or radical modification of existing plans or creating new business models. It requires to create a market for eco-business by the way of enacting a creative market based on the oriented approach of the ecopreneurship and innovation management. Many ecopreneurs manifest the needed time of product development to reach a market breakthrough, a period to find its niche on the market that is longer than the period sought by typical venture capitalists who may return the investment after 2–3 years of its activity. It needs more than this time for innovations in ecopreneurship to become commercially on the one market viable.
2. **Financial barrier.** When partners have the different objectives and ideals, it is difficult to get a consensus, and the planned eco-business can't be sustained financially and can't have a prosperous future. Ecopreneurs with actions and ideas often face the difficulties to find investors who share their thoughts. In mentality of investors and eco-businessmen exist differences related to knowledge, ways of thinking about the environmental protection and getting profit, about the realities of financial markets and environment. From the beginning, business conditions should be clear to both involved sides; through bilateral cooperation, such obstacles can be minimized or completely removed, and they can earn the best capital.
3. **Ethical justification for existence.** Ethics can't be a separate word. Either the company acts ethically or not. Ethics in business is about people doing jobs everyday and thinking about their values and principles of life and asking hard questions about those priorities and living by them.

Ethics in eco-business is how a company works as a whole, not just an individual. It's not a matter of an unethical corporation and an ethical saint trying to do the right thing. For eco-business ethics, it needs to go through the same process as an individual. Many of the eco-companies with a high ethical profile seem to resemble nonprofit associations more than the business organizations in their governance.

4. **Human greed.** This is one of the major barriers of ecopreneurship. A. Smith considered that the greed depends on human nature, of its essence. If greed is related to our personality, certainly, it is very difficult to fight against it. Followers of the multidimensional solutions put their hope in educating the young generation. Through educating the ecopreneur spirit of people, it is possible to inoculate love to the environment like love to the mother. The education and training in ecopreneurship will find the explanations and justifications of ethical and moral nature at these questions: "What do you need to do," "how do you need to do it," and "why do we need to do it?"

A wonderful link can be found between established family enterprises and environmental enterprises. The family business characteristics identified by Mustakallio (2002) may be grouped in:

1. Low mobility of shares and controlled ownership
2. An emotional dimension with mixed self-interested and altruistic behaviors.

Most of the ecopreneurs share these characteristics.

Generally, eco-businesses have limited capital resources. The finances for supporting the business can be obtained from equity, results of its market activity, various investors, government grants, and credits and by selling a part of the business.

The limited availability of the capital may hamper making optimal the investment decisions, constrain the company growth, and have a low mobility of shares. The competing needs of the ownership and governmental control, capital needed in business, and liquidity of ownership constitute a special challenge to ecopreneur. Being always controlled, ecopreneurs must fulfill the conditions of the environmental laws and satisfy the requirements of customers and investors.

Agency theory presumes that individuals are self-interested and aim at maximizing their own utility. The adoption of self-interested behavior is not inconsistent with altruistic behavior (Jensen 1994). Jensen argued that there are no “perfect agents” who will exclude their own preferences when they act in the interests of others. Frequently, the companies’ problems have been caused by the managerial self-interested behavior which is a part of the game, and it is unwanted behavior controlled by external and internal governance mechanisms as well as by norms of professional management.

The agency hazards in eco-business may be caused by a lack of a market for corporate control, self-control problems, adverse selection, and biased incentive structures due to altruism. Self-interested and altruistic behaviors have been considered as rational behaviors (Jensen 1994). Therefore, the ecopreneurs must combine these behaviors in such way for the company and the environment to be in gain.

The link between financial-sector values and ecopreneurial values deserve a special mention. Sometimes it is unclear whether entry of the venture capitalists into eco-businesses is only a positive phenomenon.

In some poorly developed countries, the industry of biological products can cause the various environmental damages such as the water used for processing of raw materials is not cleaned completely and used again, but it is discharged into the open reservoirs, and after this it poisons the earth, whereon it cannot grow anything.

The waste of different plastics such as phenoplast and aminoplast which are not subject to the recycling process often can be used as a filler to obtain different hobs used in the construction of walls for residential houses. In Russia, it was the case when a house was built of such materials, and as a result one part of residents has become ill. The toxic gases of material eliminated from the house walls have influenced the health of people and have caused the different consequences of physical, material, and psychological nature.

Another example is the old industrial enterprises from Moldova. A factory, in its construction, has a big pipe in which are installed air purification filters that must be changed regularly. The penalty, for companies that exceeded the permissible

deviations of toxic gases, was small, and for these companies, it was cheaper to pay the fine than to invest in the filter change. In Moldova should be realized the periodic environmental audits at factories; there must be change in the law that provides the regulation of such damages to be included in various items such as:

1. Award of subsidies for entrepreneurs who invest in buying the different filters and equipment for cleaning the water and air used in the production processes; the release of some taxes
2. Establishment of high fines for those who do not respect the requirements specified in standards. In this way, the fear of paying high fines will impose them to change their mentality toward the environmental protection and health of its clients, help them to create some personal values in the business world, and be able to take responsibility for changes in their personal life, in their company, and the environment in which they operate.

These are some examples, but in each country there is a large range. Therefore, each State must do a review of existing laws, do the changes that would help the regulation of these activities with minimal damage to environment and population, and do the different changes in curriculum of the business education for extending the knowledge of the young people in the eco-entrepreneurship field.

1.4.3 Strategies to Foster Ecopreneurship

The legislation, the government regulation, and the industry-support agencies have an important role in the eco-business development. Businesses alone cannot bring about sustainability without tax support and other government incentives, which make them more advantageous. According to Isaak R. (2002), some public strategies to foster ecopreneurship might be to:

- Change tax incentives to reward the creation of green jobs and to punish resource use
 - Build creativity and ecopreneurship incentives into standards for public-sector management
 - Use ecopreneurship as a strategy for boosting civic competence and social capital
 - Start a public campaign to delegitimize non-sustainable business results
1. Changing tax incentives to reward the creation of green jobs and to punish resource use.

In the twenty-first century, in most countries, job creation is priority number one. Morally, the public finances would be best managed to sustain and create, to fund and encourage, the green jobs. Green jobs can include housekeepers who use environmentally safe products, like cleaning products and bicycle repair technicians, workers who install solar panels, refurbishment factories, invention of

biofuels, construction of amalgam cars, manufacture the energy-efficient fixtures and putting into practice of the wind turbines, etc.

As such, the public incentives will contribute at the creation of “green alliances” to help companies comply with laws and address the green problems before their market positions will be blighted by rigid and costly government mandates. Many states have adopted a legislation intended to help green businesses and to ensure that these employers have access to the workforce.

To foster ecopreneurship, governments can create various projects; can use grants and subsidies to influence consumer behavior and to protect the environment; create opportunities for the elaboration of the environmental innovation, investment ways, employment, and green growth; construct green industry partnerships; and integrate green job initiatives into existing workforce systems.

In the resources category is included the “used” resource defined in the classical sense of this term and the industrial and domestic waste. A tax imposed by the State in this direction is intended to preserve the existence of scarce resources, nonrenewable, or to encourage a waste treatment service, to give them an economic use or neutralize unwanted effects. Similar effects have, in the same direction, the royalties – the concession of the right to use a public good (deposits of ore, oil, gas, etc., and some public roads). In this way, the taxes collected can be used for good promotion of ecopreneurship.

2. Building creativity and ecopreneurship incentives into standards for public-sector management.

Creativity and entrepreneurship can be built into the public-sector management standards, encouraging people in public organizations to mobilize their idealism in order to bring profitable ventures into being that benefit social needs and can clearly target ecopreneurship (Isaak 2002). Habitually, the public incentives from the budget often lead to proposals promising to reduce risks rather than to embrace proposals that can target risk taking and create solutions to public problems in a sustainable manner and various measures for anticipating the problems that can occur in the environment. Governments can sponsor the competitions for the best green start-up business plan and provide seed capital for the winning projects during the period of launch.

3. Using ecopreneurship as a strategy for boosting civic competence and social capital.

In a globalized era of increasing the “democratic deficits,” it is necessary to find a simple, targeted means to bring people together for a common cause in a way that builds social capital (e.g., through networks of collective learning and solidarity) and the economic development while raising the environmental consciousness. Ecopreneurship is such a strategy.

Nonprofit organizations or NGOs can be called for support ideas and stimulation of networking for the sake of sustainability. Media can attract the positive attention to local communities and find the new green ways of doing things that a community needs to do, to be educational and financially rewarding.

4. Starting a public campaign to delegitimize non-sustainable business results.

The corporate managers are moved on the market by threats and the positive incentives. Proponents argue that there are three different domains of environmental damage: damage to human health, ecosystem quality, and depletion of resources. The environmental damage was done to the environment by corporate neglect or actions must be uncovered and heavily fined. Public institutions should make clear the collective perceptions that pollution will be exposed and punished while positive steps toward sustainability such as ecopreneurship will be praised and rewarded (Isaak 2002).

1.4.4 Conclusion

Ecopreneurship is a very interesting area to be involved in. Ecopreneurship is an uncommon mix of entrepreneurial spirit, passion, and humility combined with a sense of personal obligation to environmental and social progress. It relates to carrying out activities that keep the environment clean as well as meet the business objective.

By the opinion of many investigators, ecopreneurs can be classified as ecopreneurs with a desire to change the world and to improve the quality of the environment and life and ecopreneurs with a desire to make money and grow as a business venture. From this point of view, we can differentiate four types of ecopreneurs: (1) nonprofit business, with a high desire to change the world and low financial drive; (2) self-employer, with a low desire to change the world and low financial drive; (3) opportunist, with a low desire to change the world and high financial drive; and (4) successful idealist, with a high desire to change the world and high financial drive. In a dynamic market, prosperous ecopreneurs must move fast, take risks with prospective gains, pull the whole market toward more environmental progress, motivate others, and anticipate the consumers' desires; their motives may not be solely green but are a combination of green, ethical, and social motives.

According to rural and urban areas, there are various types of ecopreneur problems. Rural areas are lacking in technology, knowledge, government support, and innovation, existence of financial risks and unstable business development. As for those which were located in urban areas, they might face the barriers such as the existence of many competitions, incentives, lack of consumer support, and lack of awareness of the environment. By L. Linnanen, there are the few critical issues that the successful ecopreneurs must address such as the challenge of market creation, the finance barrier, and the ethical justification for existence. The link between financial-sector values and ecopreneurial values deserves a special mention. Sometimes it is unclear whether entry of the venture capitalists into eco-businesses is only a positive phenomenon.

Drawing from Isaak’s ideas, to promote ecopreneurship, several strategies can be used such as to change tax incentives to reward the creation of green jobs and to punish resource use, build creativity and ecopreneurship incentives into standards for public-sector management, use ecopreneurship as a strategy for boosting civic competence and social capital, and start a public campaign to delegitimize non-sustainable business results. To promote ecopreneurship, governments can create various projects; can use grants and subsidies to influence consumer behavior and to protect the environment; create opportunities for the elaboration of the environmental innovation, investment ways, employment, and green growth; construct green industry partnerships; and integrate green job initiatives into existing workforce systems.

At its best, entrepreneurship is about harnessing the enthusiasm, innovation, initiative, and creative energy of individuals (Schaper 2002a, b). An entrepreneur is an innovator who implements the market changes through the carrying out of the new combinations related to new good or standard of quality, new method of production, new market, new source of new materials’ supply, and new forms of organization in any industry. An ecopreneur is an entrepreneur who has a passion to address the environmental issues and work toward making a “greener” economy. When this dynamism of personality will be applied in the eco-business development, participants and the other spectators will observe that the results of this activity have the potential to be truly fascinating and rewarding.

1.5 The Scheme of Analysis

This part of the work intends to focus on the information system that enterprises require, in orienting the process for both internal and external reporting. Sustainability is defined as the combination of economic, social, and environmental issues, in view of transparent external communication and respecting eco-efficiency (Matacena 1984) and eco-justice (Bebbington 2007; Alford et al. 2006; Compagnoni and Alford 2008).

Sustainable development can be analyzed according to two different but related points of view. The first point of view is economic and defines the means by which the economic system and the company are organized. Therefore, it involves the economic, social, and environmental impact of the various components of the economic system and also involves enterprises.

The second is an accounting point of view, and we will consider mainly this second one. This point of view focuses on enterprise sustainability, which can be implemented using different intensities (weak and strong).

Many evolutionary steps occur at an international level. These steps result in a strong bias in this direction. Representatives erroneously thought that development, once achieved, could be spread automatically to the benefit of everyone.

Among the milestones that have marked this position, we must mention the Stockholm Conference of 1972. At this conference the concept of ecological

development was mentioned, which joined the previous one linked to sustainable growth only in terms of population.

Another important step concerns the year 1987 when the UN World Commission on Environment and Development published the report “Our Common Future,” also known as “the Brundtland Report.” For the first time, in this report, the two terms, “sustainability” and “development,” were used together. Indeed, the term “sustainable development” was coined, which was defined as “development that meets the needs of present generations without compromising the ability of future generations to do the same.”

This important point would lead to the development of that aspect of sustainability that can involve intragenerational and intergenerational sections and which would then characterize all further stages.

Furthermore, sustainable development can be analyzed as having the following two meanings: The first, i.e., the “rational,” aims at preserving the social and environmental aspects in favor of future generations and thus to involve mainly an economic and political organization.

The second concerns the “integral” development of the enterprise, in which sustainability represents one side and involves social and environmental dimensions too.

The integral development involves all aspects of the enterprise, such as the size of economic development. Another dimension concerns the “professional growth of people, both individual and in groups.” The third concerns the dimension of social and environmental impact of the enterprise (Sorci 2007: 17). According to this view, development activates the growth of the enterprise, but the process is not necessarily two-directional. In fact, the term growth, that is understood in this sense, does not automatically imply the type of development that has been defined as being integral, because integral development involves qualitative dimensions of growth and not only quantitative dimensions. A quantitative dimension refers, for example, to the increase in turnover from investments and the number of employees but is not able to guarantee the quality of human and professional development of staff, which is based on a system of shared corporate and anthropological values.

In this sense, some authors suggest that the enterprise must be “global,” emphasizing the multiplicity of aspects to be taken into consideration in the sustainable growth of the enterprise (Catturi 2003). In this sense, the enterprise needs performance measurement tools that must involve quantitative variables as well as qualitative ones.

Further to the matters mentioned above, we can define the following dimensions, which can show corporate sustainable development. These dimensions are derived from the concept of weak and strong sustainability, eco-efficiency, and eco-justice and are shown in Table 1.5.

Weak sustainability concerns the reduction of strategical and operational “unsustainability.” Weak sustainability aims at considering eco-efficiency when measuring and calculating the impact on the ecological environment (Bebbington 2007: 26). The practical interpretation of this type of sustainability is, for example,

Table 1.5 Sustainability dimensions and measurement tools

Sustainability measurement and communication tools	Type of sustainability	
	Weak sustainability	Strong sustainability
Eco-efficiency	EMAS, Ecolabel, Weak environmental reporting	Calculation and communication of sustainable costs; full cost accounting; Social and environmental accounting and sustainability reporting
Eco-justice		Accountability tools; external social auditing

when enterprises participate in projects such as EMAS (Eco Management Audit Scheme).

Weak sustainability may also concern eco-justice, which consists in examining, in particular, the intra- and intergenerational distribution of resources, including social and environmental performance. The origin of this type of sustainability is represented by the satisfaction of basic human needs and is achieved when the enterprise develops a decision-making process and reports documents that summarize the sustainability conduct of employees and other stakeholders.

Instead, the enterprise which is geared to considering strong sustainability includes more stringent responsibility aspects, affecting eco-efficiency and eco-justice. In fact, Table 1.1 shows that this enterprise considers the calculation of sustainable costs and detailed environmental, social, and sustainability reporting. With regard to strong eco-justice, the enterprise must prepare sophisticated social reporting documents and start a social and environmental auditing process (Bebbington and Contrafatto 2006).

We deal with strong sustainability when the enterprise has really understood the dimensions of sustainability, and it is demonstrated by measuring the findings of the impact on the environment, as well as by investing for the preservation of the same.

Having clarified the meaning of sustainability that we will use in our paper, we will show the impact on the information system of the enterprise.

The information system consists of a set of information, procedures, data, and technical tools that satisfy the internal and external requirements of information for the enterprise (Marchi 2003), while the concept of accountability refers to the disclosure process considering qualitative and quantitative data (Gray et al. 2014). The process for the production of information is supported by the new concept of enterprise that we identified in this paper, and it involves different phases.

These phases are the detection, classification, representation, and communication of data processing and interpretation.

Now, if the production of accounting results is geared to external communication, it is necessary to define, in the said stages, the features that postmodern enterprises require.

The detection phase involves the data-collecting process. In relation to this, it seems useful to use new information technologies including the social, environmental, and sustainable dimensions.

Even at the stage of classification, we can underline significant changes in the sense that it is necessary to consider the other dimensions mentioned, in addition to cost-efficiency and cost-effectiveness.

Classification is followed by processing, in which we must define the model, the method, and the proper tools to pass useful information to the decision-maker of the enterprise and its stakeholders. The processing model consists of a multidimensional model, which involves economic and financial results but is enriched by adequate information to all stakeholders (Rusconi 1988).

As shown before, the information system ought to involve economic (expense/costs and revenues) and financial (financial/monetary/cash) inflows and outflows, physical-technical inflows and outflows (Marchi 2014), and also sustainability dimensions. In Tables 1.6 and 1.7, we are going to show the passage from the “traditional” way of observing enterprise operations to the “modern” way involving sustainability dimensions.

Social, environmental, and sustainability dimensions of enterprise activities are partially involved in double-entry bookkeeping, so the enterprise must insert other statistical and qualitative measures in the information system, which are still oriented to integrating financial accounting.

Moreover, we must consider some classifications of accounting which are financial accounting which considers the general ledger and the recording of external market exchanges of the enterprise; managerial accounting that involves records about internal activities of the enterprise such as costs, revenues, and profit; and finally, social, environmental, and sustainability accounting that involves all other information about the social and environmental impact on the enterprise.

Social, environmental, and sustainability accounting should develop at an early stage of enterprise planning using tools, namely, plans and budgets, to be established in the decision-making process and in the final reports that must be

Table 1.6 The general model of observing enterprise activities

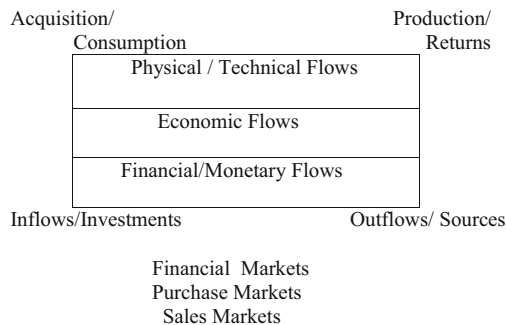
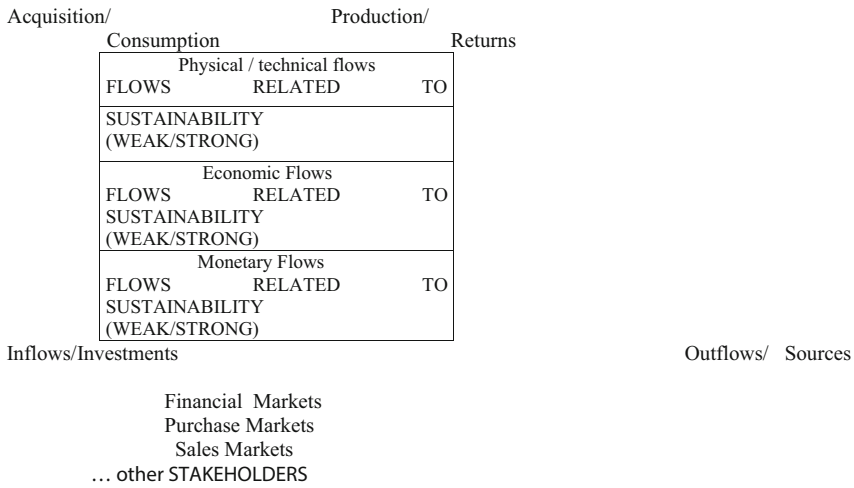


Table 1.7 The “modern” model of observing enterprise activities



verified by an external auditor. The entire process is necessary in order to spread this culture throughout the organization.

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Chapter 2

Environmental Accounting: Conceptual Framework

Maria-Gabriella Baldarelli and Ninel Nesheva-Kiosseva

2.1 Emergence of Environmental Accounting and Reporting

With the rise of industrial facilities in the world, increased the costs and losses for activities related to environmental protection. Their value is already hundreds of billions of dollars. For this reason in the 70s of the twentieth century, many industrialized countries are beginning to involve in calculation enterprises the environmental performance indicators.

The turning point was in 1987, with the book by Rob Gray, David Owen and Kate Maunders, *Corporate Social Reporting*:¹ “No, that resistance is gone at this point—or actually disappeared as active hostility to environmental issues in the field of accounting until 1990, but the passive hostility or, at best,” a sweeping indifference “(Gray)—with which we are faced in Bulgaria, in an attempt to hold seminars on EA [Environmental Accounting]—still persists in the profession and academia.”

Until the early 1990s, social accounting was applied and developed mainly in non-profit organizations, and then started going into powerful corporations.

In the first 90 years of the twentieth century, large manufacturing companies already fell into the network of governmental environmental regulations, consisting of multiple orders, judgments, decrees, laws and acts. The law in some countries required a number of environmental and nature conservation activities, which in turn triggered the need to collect information about them, to establish a system for recording them and, ultimately, for disclosure—because they were not reflected in the financial statements, these funds were not reported. Many businesses do not like to show environmental accountability to the public, do not recognize the scale of the pollution produced from their activity, do not like to disclose the amounts of the salaries of their employees and management, working conditions, morbidity among

¹Gray et al. (1987).

staff, the state of family relationships, which often suffered from excessive workload of employees, the opinion of their workers of management and condition of the companies.

Traditional tools of economic analysis did not and do not allow management to determine how effectively they carry out environmental activities.

Environmental costs—costs that must be compensated for the maintenance of natural resources at the level that corresponds to the reference period for traditional accounting—are excluded from conventional economic analysis.

By the early twenty-first century, social and environmental accounting had become almost a major destination (mainstream) of economics practiced and developed by professional accountants, by theorists of economics and management, accounting historians of and scholars in the field of applied economic disciplines like tourism.

A turning point in the adoption of environmental accounting is 1992 with the United Nations (UN) Conference in Rio de Janeiro on the environment, which adopt Epistle to the twenty-first century for sustainable development. In connection with it is accepted concept for environmental accounts as a major instrument for carrying out research and development of a consistent policy of sustainability.

2.1.1 European Commission for the Approaches and the Future of Environmental Accounting

2.1.1.1 Extending National Accounts to Environmental and Social Issues

Integrated Environmental and Economic Accounting²

The first strategy for “green accounting” was presented by the European Commission in 1994. Since then, Eurostat and Member States, in cooperation with the UN and the Organisation for Economic Co-operation and Development (OECD), have developed and tested accounting methods to an extent that currently allows several Member States to provide the first sets of environmental statements.

²Report from the Commission to the Council and the European Parliament (2009).

The most common are physical flow accounts on air emissions (including greenhouse gases) and on material consumption, and the monetary accounts of costs and fees in connection with the environment.

As a next step, the Commission began collecting data in these areas from all Member States. Began compiling the physical and monetary accounts for energy consumption, waste generation and treatment of waste, and for environmental costs. The Commission aims these accounts to be fully available for policy analysis by 2013. To ensure the implementation of these accounts, the Commission intends early next year to propose a legal framework for 'green accounting.'

A second category of environmental reports refers to natural capital, in particular changes in stocks; the most important among them are the accounts on forests and fish stocks. The Commission will contribute to the work currently undertaken at UN level.

The next challenge in the development of environmental accounting is complementing reports physically with monetary values based on valuation of the damage caused and prevented, changes in natural resources and the products and services of the ecosystem, so as to obtain representative, robust, comparable and reliable monetary measures at national and European level.³ Valuation of the costs of environmental damage and the benefits of environmental protection can help to focus policy debate onto the idea that prosperity and well-being depend on the nature of the available products and services. At micro level such valuation is reasonable. It is covered by several studies devoted to the Economics of Ecosystems and Biodiversity, ongoing wide-ranging valuation services in connection with the ecosystem, conducted jointly by the UN program for the environment, some countries and the Commission. Valuation is widely used in assessing the impact of the Commission. The European Environment Agency intends to continue its work on valuation and reporting products and services in connection with the ecosystem in order to create an internationally recognized method. The Commission intends to step up work on monetary valuation and the further development of conceptual frameworks.

2.1.2 Basic Theoretical and Research Characteristic: Institutional Framework of Environmental Accounting and the Problem of Social Cost

For the first time the problem of social cost is theoretically defined and discussed in the environmental sense in the article by Professor Ronald Coase, "The problem of

³The EXIOPOL research project (an integrated project funded by the European Commission under the 6th framework programme, priority 6.3 Global Change and Ecosystems) aims to create an expanded framework of incoming and outgoing information for the assessment of environmental impacts and external costs of economic sectors of final consumption and resource use in the EU: <http://www.feem-project.net/exiopol/>

See also: Handbook on estimation of external costs in the transport sector, February 2008 http://ec.europa.eu/transport/sustainable/doc/2008_costs_handbook.pdf

social cost”.⁴ The social cost is also called “external cost” or “externality”,⁵ as well as “external not—savings”—or “*Diseconomy*”.⁶

There are many studies on the problem of social cost and many definitions have been suggested, but generally speaking, in this case, we must understand by this term and concept of social cost largely located on public issues due to the environmental impact of specific activities of certain companies and other organizations or other unidentified units.

For example, damage to health suffered by third persons, or damage to forests or agriculture due to the impact on the environment as a result of the business of the company or other organization, does not lead to the direct economic burden of such a company or organization, provided that there is no evidence of a causal link. Nevertheless, the society may consider that it has suffered losses because it pays for these damages, and the company passes them on to society, taking for itself only the profit.

This situation occurs if there is no released system by which to identify the effects that companies and organizations have on the environment and society as a whole, and to identify which impacts should be paid for by the public, if they do not pay the damaging side (causative).

For this reason and sense, environmental accounting is a part of social accounting. It demonstrates who causes injury or damage and require disability to pay for it and not transfer it back to society, appropriating only benefits. This concept is precisely set by Ronald Coase and developed in many other studies of neo-institutional theory.

Environmental data that are reported are not linked to financial data and the system of collecting and reporting of financial data.

Environmental accounting highlights errors and deficiencies in the data collection in the organizations.

2.1.3 Types of Academic Study

2.1.3.1 Study of Organization

Environmental accounting is part of the academic study of the organization. It develops in two directions:

1. Development of the theory
2. Improving practice

⁴Coase (1960).

⁵The problem of external effects or “externalities” is put in science for the first time by Arthur Cecil Pigou, but the solution is treated by him in the neo-classical sense.

⁶Diseconomy—contrary to the economy (of scale): economic disadvantage, such as increased costs resulting from the increase in the size of the organization or due to damages caused by a business. In an ideal world, non-savings should be minimized.

Problems that have arisen from this are:

1. Academic research with a theoretical nature does not include information derived from the practice within the organization.
2. Academic research that does not engage in the practice of the organization cannot show us how to change the organization because change is a major problem facing the neo-institutional economy. Desire to see how to really change the organization environmentally and socially has led to research into social and environmental accounting.⁷

2.1.3.2 Neo-Institutional Framework of Environmental Accounting

Environmental accounting is an extension and application of accounting theory and the practice of the theory of neo-institutionalism. Development of institutional theory helps to achieve uniformity and stability in environmental accounting and reporting.

Institutional theory provides the link between understanding and learning institutions, institutional change and organizational change. This relationship is better systematized by Larrinaga-González (2001).

It provides a framework for the study of institutionalization, and the development of institutional theory is due to the assumption of homogeneity and stability studies in the field of social and environmental accounting.

It provides a framework to understand both institutionalization and change (see: Adams 1999).

2.1.3.3 Engaged Research

“Engaged research”⁸ is a term used in accounting disciplines such as management accounting, social and environmental accounting and others, mainly to illustrate the ways in which research is approaching and studying organizations.

The term “engagement”—with the meaning of the French word “*engager*”—dates from the early seventeenth century, when it was used to define a “legal or moral obligation” to something or someone. In other words, engagement—from the verb “to engage” and the suffix “-ment” (as in “environment”)—shows “the act of making or participation”. In particular, from this perspective, the commitment to the study outlines a specific approach to studying organizational practice, including social and environmental accounting, which requires the “reflexivity and empathic

⁷Adams and Larrinaga-González (2007).

⁸Contrafatto (2011).

engagement of the researcher with the organization and with members of the surveyed organization in the course of its research”.⁹

In the context of social and environmental accounting, research has the potential to provide valuable resources to enhance the descriptive and theoretical understanding of the processes and dynamics of social and environmental issues.

As Adams and Larrinaga-González note, “engaged research” is a “privileged” approach that can be used to study the social and environmental aspects of the organization and its interaction with other organizational processes.¹⁰

If so, they are not just searching strategy for instrumental solution in order to satisfy to the needs of the researcher. Through this approach, researchers and scientists can actively participate in the process of organizational change to less unsustainable way of operation and business.

In recent years, there have been increased calls (Adams 2002; Gray 2002; Parker 2005; Dey 2007) for more fieldwork in social and environmental accounting research by engaging with the participation of people from organizations, and these are being explored as a means to study the deficits and conflicts in some of these explanations. In response to these arguments, more researchers are engaging members of organizations to study various aspects of social and environmental accounting and its environment.

2.1.4 Why Is It Important to Conduct Environmental Accounting?

The environmental performance of a company is an important measure of business success for the following main reasons:

1. Many costs associated with the environment can be significantly reduced or eliminated as a result of business solutions for environment-friendly production based on investments in “green” technology in the production process, and adjustment or modification of processes and/or products. For example, savings can be realized by the replacement of toxic materials with non-toxic substituents used in manufacture, thus eliminating the high and increasing costs of processing hazardous waste and the costs associated with the use of toxic materials.
2. There are potential cost savings that are neglected in cost management and are mainly expenses related to the environment. These are costs that are included in the group overhead costs. For example, energy and water utility costs are included in the overhead costs of conventional accounting.

⁹Oxford Dictionary of Advanced Learners.

¹⁰Adams and Larrinaga-González (2007).

3. Opportunities exist to generate revenue for the company, such as through the sale of waste by-products.
4. Through environmental accounting and reporting, competitive advantage can be achieved by greening design of manufactured goods, while greening manufacturing processes, products and services, which are increasingly preferred by customers. Companies can demonstrate that they offer environmentally preferable products and services by adhering to certification systems and proving their ecology.
5. Accounting for costs associated with the environmental and natural line performance of the company can support its development and establish the functioning of a comprehensive system for environmental management, such as ISO 14001, EMAs and others; this can lead to significant benefits for human health. Therefore, environmental accounting is part of social accounting.

2.2 Environmental Accounting and Social Accounting Relationships

Social, Environmental Accounting Research (SEAR) is an important current of research that involves relations in society and social, environmental and economic systems (Gray et al. 1996, 2014). It has been directed towards studying the processes and instruments to account and disclose to stakeholders and others.

In a system in which SEAR is involved, some evolutionary philosophical currents are progressively emerging. Among them we propose the following.

The first philosophical current regards the limits of stakeholder theory (Freeman et al. 2010) that does not involve subjects that do not have a stake in the enterprise, but that are at the same time important and involved in terms of damage (e.g. when in one part of the world there is waste and others cannot eat or have clothes because the economic system is not able to grant this) (Alford and Compagnoni 2008).

The second current is that people are more and more strictly connected to each other. For society to survive, it is required that everybody becomes responsible and, at the same time, people must understand that their actions are deeply correlated to each other and they must learn to act for the benefit of the other (MacIntyre 2001, p. 148).

The following ways of thinking more immediately interest SEAR processes.

The first way of thinking regards the boundaries of the system of society: in other words, that it is not possible to talk about sustainability without actively involving—in the economic/social/environmental systems and thus in the company system that is within it—some subjects that have different abilities (e.g. blindness, disabilities) (Nussbaum 2007).

The second current of thought is that there is not only one direction of responsible action, but a double-direction of how to find key subjects for the SEAR process, key persons who can sustain disclosure and go on to revitalize society.

When these key persons leave the business world, this creates great damage and the disclosure process risks stopping.

The third philosophical school concerns the contribution of SEAR to important research that actively turns the situation around and places all the different reasoning into a single whole. In Italy, one general research scheme helped researchers in these fields find evolutionary ideas and deeper integrated analysis among various disciplines.

Later, the organizational processes and key factors of accountability motivations influenced the attributes of SEAR, underlining transparency first of all, then democracy and, finally, sustainability.

Beginning in 1996, Gray, Owen and Adams traced the urgent need to pass from accounting to accountability, which is a larger process that is oriented to relate to economics and social system relationships and to try to change them in a future challenge concerning sustainability direction (Gray et al. 1996, p. 292; 2014).

In the past, Gray et al. (1993, p. 21) reminded us of the importance of accounting for the construction of social reality and the need for a cultural change to drive a better world.¹¹ The author considered the subject of environmental issues and how to manage these issues and to face the challenges that derive from this.¹²

Our attention is focused on one aspect: sustainability, and in particular that of eco-efficiency, which is measured through environmental costs.

This perspective fully incorporates environmental accounting, which can be defined as the set of surveys regarding the use of natural resources, which fall within the sphere of influence of the company. Environmental accounting is for the measurement and evaluation of natural resources and includes assigning an economic value to environmental goods and services, which are appreciated and recognized as important in society.

The environmental information can be found either from surveys conducted in the sphere of external communications, and therefore managed by the general ledger, including: the environmental costs, cost of provisions for environmental risks and environmental investments.

¹¹Regarding this: “the ‘tone from the top’ is as important in environmental matters as it is in ethical ones. . .this becomes even more apparent when it is realized that what is needed is a cultural change” (Gray et al. 1993, p. 45).

¹²“If the business and accounting environmental agenda are the only games in town, one can choose to play or not to play” (Gray et al. 1993, p.305). Again: “But such incremental change will mean little without fundamental systemic change. Only a complete change of paradigm is likely to allow humanity to become part of ‘environment’ rather than its exploiter” (Gray et al. 1993, p. 307).

The dimensions on which to base the environmental impact have been enriched over time by new aspects that have made more and more complex the treatment of this type of problem. In fact, while initially recorded aspects of pollution and sewage stress the importance of corrective action, the case study of the ecological impact has assumed some new but increasingly important as that of the human health (Miolo Vitali 1978) and energy (Burrit and Shaltegger 2001, p. 11).

2.3 The Historical Development of Institutional Factors Influencing Environmental Accounting in Italy

The Italian historical background is very different in the respect of Bulgaria, because the national Unity, 1861, oriented Italy toward a common base of institutional and environmental factors that orient to economic development (Baldarelli and Nesheva Kioseva 2012).

After the Second World War, Italy solved some problems adhering to the Marshal Plan and then became one of the most important developed countries in the world; the intervention of the state in the market and organizations was very important after the war. Twenty years ago the state left to private ownership a lot of enterprises (e.g. banks), leaving more freedom for the product, service and financial markets.

Italy developed under civil law orientation, freedom and good political behavior, thanks to some large enterprises and numerous small and medium enterprises that faced a lot of economic challenges during that time.

But we think that Italy grew up because there were some people—politicians, economists, entrepreneurs and civil citizens—who sacrificed their lives for the quality of life of others and “the common good”.

The expanding economic wealth and relative political stability were some important factors that oriented toward a sensitivity in the respect of accountability and transparency in publishing enterprise information.

Financial accounting and reporting regulations followed different steps, as you can see:

- 1882: The Code of Commerce named the publication of the financial statement without considering analytical, clear content.
- 1942: The Italian Civil Code was printed and contained only the assets and liabilities accounts and the income statement without any analytical content.
- 1974: Law 136/1975, the reform of limited companies specified the minimum content of income statements too.
- 1991:127-and 503/94-Low act of receipting the IV EU directive (Giannessi, 1960; Ceccherelli, 1968; Amodeo 1970; Campanini 1979; Paganelli 1974; Amaduzzi & Paolone, 1986; Maticena 1993).
- 2003: The reform of enterprise rules
- 2003: IFRS (International Financial Reporting Standards) adoption (Baldarelli et al. 2007).

Along with Law rules, from the 1970s, accounting professions made some “standards”/principles to fill up the gap between the abstract law and operative praxis for each element of the financial statement (D’Ippolito 1975). The present organization that is invested in this role is the Italian Accounting Organization, by which accounting professions continue to adapt IFRS to Italian culture and praxis.¹³

The last document of 2010 that the accounting professions made, regarding for-profit enterprises, was about the Administration Report, and includes a section in which the enterprise can explain its impact on the environment.

In Italy there are some important factors that sustain the need for social and environmental accounting and reporting to emancipate economic and social relationships and democracy.

Following Contrafatto and Rusconi’s idea (2005, p. 3), SEAR theory in Italy had its origins in the 1970s (Miolo Vitali 1978), but we didn’t find empirical social and environmental reporting until the 1990s, excluding the Merloni-Battelle experience. The reason for the interest in this theory was that financial accounting and reporting law was not so exhaustive, so there was an open space to cover with social and environmental accounting theory.

In the 1980s there were a lot of publications about this subject (De Santis and Ventrella 1980; Bandettini 1981; Matacena 1984; Vermiglio 1984; Rusconi 1988; Catturi 1993), but organizational culture was not yet ready to involve these subjects, as we can read: “This was partly, at least, a result of mutual distrust between corporations, public authorities and trades unions” (Contrafatto and Rusconi 2005, p. 4).

A further reason for theoretical interest in SEAR was the difficult socio-political situation and its many conflicts: “Fear of transparency was set within a climate of mistrust between capital and labour” (*Ibidem*, p. 4).

Despite these difficulties, there are some important factors that are in favor of SEAR; among them is a common platform of “Economia Aziendale” (Contrafatto and Rusconi 2005), where financial accountants and social and environmental accountancy scholars can have dialogue without as many problems.

The concept of an organization following institutional theory (Lai 2004) opens a holistic view of it and involves social and environmental subjects too.

The involvement in the economic system of different organizations—such as the state with public organizations, for-profit organizations and private, not-for-profit ones—pushed transparency to face a crisis and to go on globalization challenges. This evolution made it more and more important to have one common platform of information for dialogue, and so all economic partners were more oriented to disclose their behavior in the respect of stakeholders.

In the following years, SEAR developed in theory (Buscarini 2005; Molteni 2004; Bagnoli 2004; Buscarini 2005; Rusconi and Dorigatti 2006; Arena et al. 2006; Del Baldo 2007; Baldarelli 2010), but above all in practice, because of a lot of European initiatives (Stakeholder forum and Green papers 2001 and subsequent).

¹³<http://www.fondazioneoic.eu/>

There are two important SEAR projects we must remember among the others. The first project had its origins on 1988 and the name is GBS–SBG (Gruppo di Studio per il Bilancio Sociale/Social Balance Group) that stated and it is stating some principles to made SEAR.¹⁴

The second important initiative was CSR–SC (Corporate Social Responsibility–Social Commitment). 2003, for Italy, represented the year of the progressive spread of the debate about corporate social responsibility, both because the Italian government placed it among the top five priorities of its European semester, and because the European Campaign, promoted by the European Commission, the CSR Europe and the Copenhagen Centre, realized events and actions (EC 2001, 2002).

Following that, the durable action was proposed by which a series of dispositions could be summarized in the sentence, “Nevertheless, new forms of social and commercial pressure induce the companies to progressively modify their values and horizons”.¹⁵

The Commission in question identifies some guiding trains of thought regarding socially responsible conduct, like the codes of conduct, managerial rules and regulations, accounting, auditing and the drawing up of reports, labels and socially responsible investments.

From the point of view of provisions and policies by the government, the partial Italian response was also substantiated in the CSR–SC project promoted by the Italian Ministry for Labour and Social Policy.¹⁶

SEAR implementation in Italy was voluntary until the introduction of the Italian law 24 March 2006, n. 155: “The discipline of social enterprise” and at the art. 10 required the compulsory making of social reports. This was the first time that Italy stated a compulsory rule about SEAR.

Summarizing some orientation derived from this excursus concerning social and environmental accounting can be synthesized in:

1. Financial statements are not completed separately from SEAR thanks to the common scientific base of the *Economia Aziendale* (Signori and Rusconi 2009).
2. There are different models of SEAR in Italy such as GRI (Global Reporting Initiative) and GBS (Gruppo di Studio per il Bilancio Sociale) model (Rusconi 2006). In Italy started immediately social auditing activities to guarantee the quality of information in SEAR (Hinna 2009).
3. In Italian SEAR there are qualitative such as quantitative elements in accountability. Consequently, accountant are facing the theory and empirical problems.

Following Hofstede (1980) and Gray (1988), we can try to understand Italian cultural factors that orient to disclose social and environmental information in theory and (eventually) in practice.

¹⁴<http://www.gruppobilanciosociale.org/>

¹⁵EU documents, European Commission, Green Paper 2002, p. 5.

¹⁶<http://www.camcom.gov.it/cdc/>

Following Hofstede:

1. Individualism versus collectivism: in Italy there are both dimensions, because the firm orientation is to think to oneself, but the small prevailing dimensions of entities push to create networks (and so to develop transparency instead of secrecy) so we can observe a good presence of collective interest. This favored, thanks to institutional theory too (Lai 1991), disclosure about social and environmental accounting subjects.
2. Large versus small power distance: in our opinion, in Italy there is a small power distance and so there is an open mind about disclosure.
3. Strong versus weak uncertainty avoidance: Italy is in the middle, because it is a civil law-based country and regulation and weak uncertainty avoidance, because professions and enterprises face the present crisis with creativity and not only with rigid regulation.
4. Masculinity versus femininity: Italy is in the middle, because there are all the characteristics that orient enterprises, such as heroism, modesty, material success, quality of life and so on.

Following Gray:

1. Uniformity versus flexibility: more developed Latin countries are nearer to uniformity because civil law countries push in this direction. In Italy there is not so much flexibility, at least at the time of writing.
2. Statutory control versus professionalism: Italy is more about professionalism, because accounting professions have an autonomous code of conduct and, thanks to the Italian Organization of Accounting, the accounting professions suggest the content of reporting.
3. Conservative versus optimism is another paradox, because on financial accounting there is conservative perspective that is prevailing as Gray told. About social and environmental accounting and reporting there is optimism and transparency, that are more important to joint new doors to implement information tools.
4. Secrecy versus transparency: at present we have some paradoxes. Different dimensions of Italian entities are publishing too much information—financial, social and environmental—at the same time, making it very difficult for readers to find useful information quickly.

2.4 The Historical Development of Institutional Factors Influencing Environmental Accounting in Bulgaria

The modern Bulgarian state was founded in 681 by the union of three ethnic groups: proto-Bulgarians who imposed their Eastern state tradition; Slavic tribes from the Southern group of Slavs living in the territory of the Eastern Roman Empire (Byzantium); and the older indigenous population, known as Romanized Thracians, known to inhabit the lands of modern day Bulgaria since deep antiquity.

Since its inception in 681, Bulgaria has been situated at the junction of the Balkan Peninsula between Europe and Asia. The state has lost its independence twice. The first time, from 1018 to 1185, Bulgaria was conquered by the Byzantine Empire; the second time, from 1393/1396 until 1878, Bulgaria was under Ottoman rule. Bulgaria was liberated as a result of the Seventh Russian–Turkish War of 1877/1878. From then until 1944, Bulgaria was integrated into the European world economy, and in 1944 became a member of the Soviet Bloc.

This historical experience strongly influences the present condition of Bulgaria and the institutional factors of its development. As Bulgarians say, “we weigh too much history”. Economically, frequent changes in the foreign policy orientation of the state under the influence of powerful countries, and changing economic models under the influence of foreign powers, have had a negative impact on the ability of state and society to make stable and progressive self-development. Bulgarian economic system is generally inert or low-activity economic system. Frequent changes of style and economic order have not allowed economic evolution to foster creativity, which is essential in order to promote innovation, which favors growth. Alexander Gershenkron, a famous researcher into economic development, called the economic growth of Bulgaria “growth without development (Gershenkron 1978)”. The main reason for this is precisely the impossibility of stable continuous institutional evolution in order for Bulgaria to foster its development, as it is often interrupted by radical, drastic change. With these radical changes in Bulgaria came the destruction of the existing formal institutions and the importation, imposition and intrusion of new institutions which were alien to the established traditions, manners, customs and religion of the country. For example, Christianity was imposed during the ninth century, the Ottoman economic model was imposed in the fourteenth century, the socialist model was imposed from 1944 to 1989, and in 1989 a sharp turn was made in the direction of liberal Western society. This new Western paradigm, with its changes to the economic model—representative electoral democracy with its multi-party and multi-candidate system—resulted in distrust by Bulgarians for a number of reasons. These included the forcible imposition of foreign institutions, high inflation, high unemployment and reduced living standards. This occurred against the will of many people within Bulgarian society. As a result, this was another historical example of the continuing negative reaction Bulgarian society has had to changes in their economic and social paradigms, and resulted in deep suspicion and mistrust of its political system.

It is against this backdrop, as well as the recent accession of Bulgaria to NATO and the European Union (EU), that we now find Bulgaria taking strides to develop a market economy that is competitive within Europe and globally.

The first book on accounting (accounting services) in Bulgaria was “Diplografiya¹⁷ or how to keep the books”, written by the brothers Hristo and Stoyan Karaminkov (participants in the Bulgarian national liberation revolution in the nineteenth century) and published in 1850 in Constantinople (Spasov 1999). In 1884, the curriculum of the trade school in the town of Svishtov began including the discipline of accounting (accounting services).¹⁸

For the first time in 1898, accounts in Bulgaria were regulated by legislation, when the first Bulgarian Commercial Law was enacted. In that enactment, there was a chapter titled “Commercial Paper”, which set out the essential requirements which must be respected by traders in the regular maintenance of their accounts.

According to Trifon Trifonov, the famous Bulgarian researcher of the development of accounting in Bulgaria, “Up to the Second World War in capitalist Bulgaria there was the development of manufacturing accounting in full accordance with the European accounting school (mainly in France and Germany)”.¹⁹

After the victory of socialism in Bulgaria in 1944, accounting was reorganized on a socialist basis. Some socialist countries, such as Bulgaria and Romania, inherited a rather low standard of accounting (Mackevicius 2005, p. 49).

The first Bulgarian Accountancy Act entered into force in early 1948, but unfortunately accounting was regulated by legislation for a period of only about two years. At the beginning of 1950, the Accounting Act was repealed and transferred to the legal regulation of accounting, through administrative regulations, decrees, rules, regulations and letters from the Council of Ministers.

One of the most important works in the sphere of the reorganization of accounting on a socialist basis was the writing of governmental documents that regulated the strengthening of the socialist accounting system. The most significant of these documents were the Decree on Calculation (1946) and the Law on Financial Accounting (1948). Bulgaria then became a member of the Council for Mutual Economic Assistance (CMEA). In all the CMEA countries, the process for improving the charts of accounts was set to continue. In Bulgaria, a number of measures were accepted, including: a common plan of accounts; individual charts of accounts of enterprises; and the common charts of the accounts of the national economy, on the basis of which branch/departmental group charts of accounts were worked out. The stage of creation for a common model of accounting for the socialist camp started in the year 1970. International symposiums were held from 1972 to 1985 and occurred in Bulgaria (1972), the GDR (German Democratic Republic) (1974), the Soviet Union (1975, 1981), Hungary (1978) and Czechoslovakia (1983). At these symposiums, issues of a common model of accounting were dealt with (Mackevicius 2005, p. 50).

¹⁷Diplografiya = dual accounting.

¹⁸Spasov (1999).

¹⁹Trifonov (2010).

In 1989, there was a government takeover in Bulgaria, which removed from power the leader of the Bulgarian Communist Party, who had ruled the country for 32 years under an authoritarian regime. With this started the change from a centrally planned economy to a market economy.

From the beginning of 1991, the legal framework of accounting in Bulgaria was restored. Adopted on January 3rd, 1991, the Accounting Act enabled companies to develop and implement accounting policy whereby the management of each company would set its own principles, rules and procedures for the accounting treatment of returning objects and their presentation in financial statements. From early 1998 until the end of 2001, a very substantial change in national accounting law was made, which was aimed at harmonization with the requirements of International Accounting Standards (IAS) rather than the requirements of EU directives.

The third stage of reform in accounting legislation in Bulgaria started in early 2002 and continues today. With the amendments to the accounts by the end of 2001, IAS was adopted for direct application in the country. Since the beginning of 2002, Bulgaria adopted new accounting regulations governing the application of IAS. In a new Accounting Act, the problems of independent financial audits were governed. As a result, all national accounting standards have been aligned with IAS. Since early 2005, the compilation and presentation of financial statements of companies has been based on IAS. This has eliminated the mandatory nature of the national chart.

The main document in Bulgarian accounting law is the Law of Accounting, which came into effect from January 1, 2002 and is the third line in the history of the Third Bulgarian State. From January 1, 2007 up to this moment, in the Law of Accounting are made substantial changes and amendments that affected the organization and methods of accounting. This resulted from the reflection of the Council Directives of the European Community and in particular the Fourth Council Directive on the structure and content of annual financial statements, and the Seventh Directive on consolidated financial statements. Each enterprise accounting system built its own individual plan.

Bulgaria currently applies three accounting bases for the preparation and presentation of financial statements including IAS, national standards for financial statements of SMEs (Small and Medium-Sized Enterprises) and national accounting standards for preparing and presenting reports of companies terminated by liquidation or bankruptcy.

IAS applies to the following groups of companies: companies that are issuers under the law for the public offering of securities, credit institutions, insurance companies, investment companies and companies for additional social security funds managed by them. Large enterprises are enterprises that do not meet the criteria for small and medium-sized enterprises under accountancy law. IAS is applied by small and medium-sized enterprises that have selected IAS as their own guidelines in the compilation of financial statements. Basic regulations for companies include IAS Regulation 1606 from 2002 and Regulation 1725 from 2003, as well as many subsequent regulations.

According to renowned Bulgarian economist Professor Garabed Minassian, Bulgarian social and economic development is key to improving the quality of institutions. He has stated that:

1. Basically, the imbalance in our contemporary socio-economic development results from the gap between the quality of institutions on the one hand and the degree of development of productive forces and society on the other.
2. There is an imbalance and disparity between current expenditure and consumption on the one hand, and capabilities (qualitative and quantitative capacity) of the economy on the other.
3. There is an impossible triad of low taxes, the need for an acceptable quality of public services and the inefficient functioning of institutions. The government is persistently distracted when it comes to improving the institutions, and the reasons are understandable—increasing the efficiency of the functioning of the institutions builds interests (both collective and personal).
4. There is an imbalance between short- and long-term effects in macro-economic management (Minasian 2009).

The transformation of the economic system, as in the case of Bulgaria, inevitably entails the modification of basic institutes. Accordingly, the transition from an industrial to an information economy—which is now held by scientists in the field of economic development to be the key to overcoming the negative externalities of globalization—relies on market institutions and with them the conditions of competition change. The transition to an information society brings with it an increased demand for information on socio-economic-ecological processes.

Management authorities, including state and local administrations, carry out the transformation of the existing external institutions through institutional policy and regulation.

The institutional policies in this work are those conducted by the state and its actions in the formation of new modes of action—removing or transforming the existing institutions of property, labor, financial, social and economic institutions (i.e. economic elements of social structure, characterized structure, forms of organization and regulation of economic life). The transformation of the economic institutions has a place in the process of economic reform, including the transition from traditional forms of accounting to new, which may be based on environmental accounting estimates and the new understanding of the value and full cost accounting. The socio-economic-ecological system is not self-organizing.

The essence of the institutional regulation of the economy is done by adopting different rules and patterns of behavior that are defined in the legal standards and public institutions.

Institutional elements of socio-environmental-economic regulation include the perfection of the state governance system in the following areas:

1. Macro and micro economic indicators, taking into account the environmental factor specification of property rights on resources.
2. The formation of policy for the protection and preservation of natural resources aimed at the introduction and implementation of tools for the economic impact of green production.
3. The stimulation of the development of the market for environmental services.

The introduction of environmental accounting and reporting concerns directly to 1.3 and 4 institutional elements of regulation and the requirements of the transition toward an increased demand for information at this stage of development.

The institutional aspects of state environmental regulation concern solving the problems at the macro and micro level:

1. Macro-level policy in environmental protection includes the development of the institution of environmental entrepreneurship and the formation of market-oriented environmentally friendly products, technologies and so on.
2. The micro level includes the selection and adoption of decisions on limited environmental goods and environmental quality, assessment of externalities and their internalization, and so on.

Particularly important is that the role of institutional regulation is determined by a number of specific factors in Bulgaria:

1. Externality: failure of the market mechanism to deal with market failures that are associated with externalities.
2. Price: absence of a clear vision for the economic category, price of resources and the consequent lack of assessment of their value.
3. An accounting system in which the benefits of resource use are easily measurable, but the benefits of natural protective actions are not reflected in the analysis of cost-benefit ratios and therefore not evaluated.
4. An accounting system which does not take into account the impact of business on the living conditions of people.
5. A vicious system of exploitation of resources as public goods. Many natural resources are “public goods” and a system of inefficient use is currently in effect. This issue is related to the problem of improper pricing for profit (e.g. the pricing of water, heating and electricity). This leads to uncontrollable mountain rivers and tributaries with intermittent high water. This often leads to their complete or intermittent drying and the disturbance of ecological balance in all areas. This results in a deficit of water resources for the respective areas, the disappearance of animal and plant species, as well as permanent destruction of river habitats. Meanwhile, Water Power Plants (WPPs) are profitable, as are investments with a fast payback because of the commitment of the government to produce and buy renewable energy.
6. Outdated perceptions of management for economic growth: they are narrowly expressed in the use of methods for increasing production which do not include environmental considerations. These were typical during the early years of the Industrial Revolution in England during the eighteenth century. As a result, there are anomalies in the measurement of national production due to a lack of indicators in the system of national accounts to measure the characteristics and impacts of the socio-economic-ecological system.

Anomalies in productivity led to hypertrophied targeting of resources and manpower to two areas: construction of houses, hotels and buildings for the tourism industry (which is expressed mainly in hotels and restaurants), and logging. This led

to a 20-year expansion of the construction of homes and hotels in Bulgaria, which caused irreversible destruction of the environment and nature in the Bulgarian Black Sea coast, mountains and urban systems. Along with this was an increase in the extraction of inert materials, including those from river waterways. Over the past 10 years, there has been a sharp increase in the exploitation of aggregates along the Maritsa River, Tunja River and other Bulgarian rivers. This in turn leads to many negative consequences, such as the destruction of riparian habitats, the extinction of species, the reduction of groundwater, the danger of flooding and the destruction of roads and buildings. Open mining and extraction of aggregates, such as gold mining with cyanide, resulted from shortsighted government policy during the period 1992–2008. By this time, 12–15% of Bulgarian forests had been destroyed because of predatory exploitation and indiscriminate logging. Bulgaria is one of the few countries in Central and Eastern Europe where forest areas are decreasing at an alarming rate. In some areas such as river valleys, 80% of forest area has been destroyed over the past 15 years. Along with this are whole depopulated areas in Bulgaria resulting from the concentration of construction in the capital and tourist areas. Bulgaria is the EU country with the lowest population density outside the capital and an overall population density comparable only with the Scandinavian countries.

These disparities require more consideration of environmental factors that constitute sustainable economic development through state intervention, and also rethinking the system of values and institutional change.

The legal system of Bulgaria belongs to the Roman–German legal tradition. The legal culture of the country was formed for centuries under the influence of the Byzantine legal system and is therefore comparable and close to the legal systems of Russia, Serbia and others. The modern legal system in Bulgaria began to form after the Liberation in 1878 and the first laws were adopted based on samples from Belgium, Hungary, Germany and Russia. The first Bulgarian constitution was drawn up by Russian lawyers using the Belgian model.

2.4.1 Institutional Policies of Governments for the Transformation of State Property into Private Property and the Protection of Property Rights: The Privatization of State Assets—The Greatest Externality

After 1989, Bulgaria started the process of the privatization of state property. This is a variant of the so-called “shock therapy”.

As a result of privatization, in 1996 the private sector produced about 45–50% of GDP. Unfortunately, the method of privatization does not appear to have been the best way to form a stable market and entrepreneurial class of owners. Many strategic industries that were not originally scheduled for privatization were

owned by foreign companies who were attracted by promises of lower production and payroll costs, and people who have entrepreneurial skills and a working spirit.

The practice of privatization in Bulgaria (as in Romania) resulted in extremely negative consequences. In terms of economic liberalization, the state lost the ability to control the company. Change in the property owner actually lost became the subject of abuse. In Bulgaria there is a characteristic tendency to sell businesses as quickly as possible and to buy them much cheaper. Bulgaria is the only country in Eastern Europe to resume the practice of the privatization scheme “Brady bonds”, which provides for the sale of state-owned enterprises to foreign investors and the implementation of environmental events of international importance in exchange for repayment of its external debt. (At the end of 1995, government debt exceeded the amount of 1000 milliards Euro, representing 122.3% of GDP.)

Statistics show that for 13 years during privatization in Bulgaria, property sold for 6.8 milliards BGN,²⁰ and contractual payments were over 8 milliards BGN. In private growing hands proved 89.2% of state assets. The state received only 3.5 milliards BGN and 3.3 billion was paid in compensatory notes and “compensation vouchers” which very quickly lost any value. A number of companies, such as the huge metallurgical company Kremikovtzi, were sold for \$1 or 1 BGN and then resold for much higher amounts. For example, Kremikovtzi was sold (privatized) for \$1 696 and then resold by its new owner for \$ 600 million. For a long time Kremikovtzi was draw off from business groups using the scheme of “input and output”. Due to systematic exploitation on these sheme, without environmental regulations, as well 20 years mismanagement, it may not meet environmental requirements due to failure to invest in environmental-benefits activities and facilities.

Thus, privatization in Bulgaria happened essentially as a process of the enrichment of a small group of people through their acquisition of valuable public resources created by generations of Bulgarian citizens. Thus, privatization in Bulgaria caused huge negative externalities on society and benefited a small group of well-connected people.

The amount of “informal privatization” is underestimated. The illegal privatization of long-term assets and income in the real economy and the banking system reached epic proportions. The institutional defects of privatization in Bulgaria, and the economic structure created as a result, deeply influence the current state of the economy and society in Bulgaria.

The de facto plundering of the assets of the state, and their concentration in a limited range of people, resulted in high unemployment which was caused by the inefficient management of enterprises by the new private owners. It also resulted in the deindustrialization of the country and the decline in living standards. These issues are associated in the minds of Bulgarians with the requirements of Brady scheme deindustrialization that was required in order to meet environmental criteria.

The development of energy-intensive industries and environmentally acceptable technologies in Bulgaria results from a whole range of reasons, but is mainly due to the irrational economic policy of Bulgaria after World War Two.

²⁰BGN (lev) = 1.95583 EU (fixed course in situation of Currency Board from July 1st, 1997).

In the early 1990s, all this led to lower volumes of material production and an increasing share of services. This is another embedded risk. The positive effects of the development of the tertiary sector are not sustainable when there is an undeveloped real sector of the economy. Under such a scenario the rapid development of the tertiary sector loses all meaning, as it has no economic foundations unless it is severely internationalized.

In Bulgaria in the early 1990s there was a rapid decline in GDP. In 1991 it was 44% lower compared to 1989, real income fell by more than 50% and there was high inflation (“gozishniyat”, the index of consumer prices, increased by 438%). As a result of privatization, there was the emergence of strong social stratification. This especially impacted young people, pensioners, people with low levels of professional qualifications and minority groups.

Since 60% of Bulgarian production was exported to Russian markets, there was a significant fall in trade due to the collapse of the Soviet Union and the privatization issues there. Russian production in the areas of electronics, electrical goods for agriculture, the military–industrial complex, oil processing and computing declined significantly.

The foreign economic policy of governments is directed towards new trading partners and in particular to the countries in Western Europe. Of all the former socialist countries, Bulgaria is currently the most disadvantaged within the restrictive measures of the EU. Along with this, Bulgarian goods themselves are uncompetitive in the European markets due to lower quality and the lack of marketing capacity. Bulgaria appears to have a large external debt, primarily to private external creditors (the maximum amount was reached in 1995: \$12.5 billion). The repayment of about \$1 billion annually deprived the Bulgarian economy of important financial resources for modernization, including measures needed to meet the requirements of environmentally friendly production. This is the main reason for the lack of environmental accountability. Any requirement for ecological sustainability requires that investments be paid by the “polluter pays” principle. The common practice is for the private owners not to invest in ecology but rather to transform their profits into the personal consumption of consumer goods such as cars, luxury holidays and property in the country or prestigious locations around the world. On the streets of Bulgaria there are luxury cars, while the production system is depreciated and aging and few new green technologies are being developed.

Privatization and the institutional understandings of capitalism and the free market system mean that profit is becoming the most important goal for most new capitalists in the country, rather than the consideration of other negative externalities. This enables them to eliminate from their accounting costs all “unnecessary” social costs, known as socialist enterprises, which were mandatory under the centrally planned system.

Meanwhile, foreign investors and participants in privatization, seeking lower costs, are less involved in the approach to introduce corporate social responsibility. Bulgaria is promoted to foreign investors as the country with the lowest labor costs and promises to attract the country’s state institutions as shown in Table 2.1. Commitments to carry out company policies of corporate social responsibility and the introduction of social and environmental accounting are not enforced.

Table 2.1 GDP—output method—national. Time series 1995–2009 at constant prices of 2000^a

Economic sectors and groups in economic activities	Gross value added at prices of 2000 BGN														
	Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agriculture and forestry, fishing and hunting	3,882,962	2,477,853	3,367,080	3,455,937	3641	3251	3271	3440	3357	3475	3168	3153	2292	2971	2866
Mining and manufacturing, production and distribution of electricity, gas and water	22,746,020	4,997,300	4,759,882	4,991,442	4562	5113	5372	5670	6137	6368	6647	7107	7953	8164	7508
Construction	2,654,938	890,437	787,938	1,059,908	1085	1095	1163	1194	1225	1299	1437	1651	1884	2069	1968
Trade, repair of motor vehicles and household appliances, hotels, hostels and catering, transport and communications	8,479,661	4,931,432	4,614,828	4,645,732	5207	5634	6209	6714	7070	7641	8309	8868	9404	9812	9641
Finance, credit, insurance, real and personal property, business services	2,371,035	5,533,660	4,861,904	4,424,403	4413	4638	4796	5147	5461	5810	6276	7010	7798	8532	8562
Government, education, health, other services and activities of NGOs	5,605,691	3,534,208	3,271,603	3,728,283	3915	4251	4184	4394	4426	4518	4878	4942	5213	5193	5217

(continued)

Table 2.1 (continued)

Economic sectors and groups in economic activities	Gross value added at prices of 2000 BGN														
	24,340,022	22,006,391	21,694,275	22,317,406	22,825	23,983	24,995	26,560	27,711	29,152	30,812	32,875	34,971	37,169	36,167
Total for the economy	2,726,203	2,601,064	2,512,714	3,093,855	3085	3416	3541	3295	3782	4425	4874	5142	5493	5805	4867
Adjustments (taxes less subsidies on products)	27,088,979	24,642,830	24,237,324	25,415,589	25,915	27,399	28,536	29,863	31,507	33,633	35,772	38,101	40,558	43,068	40,938
GDP															

^aSource: National Institute of Statistics, <http://www.nsi.bg/otrasal.php?otf=10>

Table 2.2 Structure of private enterprises in Bulgaria in terms of size and some of their economic indicators (2007)^a

2007 year	Micro-enterprises (1–9 employed)	Small enterprises (10–49 employed)	Medium enterprises (50–249 employed)	Large enterprises (more than 250 employed)	Total
Number	225,550	22,937	4738	746	253,971
Share	88.81	9.03	1.87	0.29	100
Fixed assets (thousand BGN)	16,023,277	11,296,588	12,310,359	12,310,359	
Fixed assets per company (thousand BGN)	71.04	492.51	2598.22	26,840.34	
Turnover per employee (thousand BGN)	67	90	85	129	
Value added (thousand BGN)	4,678,788	6,001,455	6,850,562	9,849,864	

^aSource: Annual report on the status and development of SMEs in Bulgaria in 2008; Ministry of Economics, Energy and Tourism, pp. 9, 25, 26 and 35.

The size of the business economy in Bulgaria equalled 1.5% of the EU-25 total in terms of employment, 1.3% in terms of number of enterprises, but only 0.3% in terms of turnover. The value added generated per person employed (apparent labor productivity) in Bulgaria (EUR 4700) was also around one tenth of the EU-25 average.

The structure of the business economy in Bulgaria is quite different from the average in the EU-25. The largest difference is in textiles manufacturing, which employs over 10% of the business economy workforce in Bulgaria, over five times the EU-25 average. Mining and quarrying of energy and non-energy products, electricity, gas, steam and hot water supply and collection, purification and distribution of water are other activities which account for a much larger part of the business economy in Bulgaria than in the EU-25.²¹

Bulgarian enterprises are smaller than those of developed countries. Micro-enterprises in Bulgaria have 1–9 employees; small businesses have 10–49 employees, medium-sized enterprises have 50–249 employees, and large enterprises have 250 or more employees, as shown in Table 2.2.

Typically, small businesses with relatively low value added have no motivation and few opportunities to train their accountants for implementing social and environmental accounting.

Competition is the key institution of a market economy. Bulgaria has still not solved the problem of increasing the competitiveness of its economy and it is

²¹Johansson (2007)

unlikely that an institutional program will achieve this in the near future. The main reason for this is the inadequate protection and specification of property rights, stemming mainly from the way in which privatization was carried out.

The low competitiveness of the Bulgarian economy would be reversed if it included the costs of ecological damage and internalized externalities. This would improve the competitiveness of Bulgarian production of goods and services and the openness of the economy to foreign markets.

The reasons for this are rooted in the ways in which privatization was carried out and in the creation of private property. The assets state fell into the hands of a limited a group of persons from the former oligarchy of the Communist Party and secret police them privatized. There was favoritism under socialism towards Bulgarian athletes, including wrestlers, boxers and representatives of other strength sports. The Bulgarian society called them “goons” and spoke of a “mugging economy”. These “new capitalists”, coming from the circles of the Communist Party, do not have the entrepreneurial style, education, skills or knowledge for the effective management of property. This results in profits being invested in expensive cars and luxurious houses instead of modernization and development projects.

This privatization creates problems with the specification of property rights and contract enforcement. These problems relate directly to the efficiency of the judicial system. The judiciary is still not independent and free from the influence of political and business groups. This is known and indicated by the European Commission in many annual reports on Bulgaria. These reports mention that reforms in creating a healthy democracy have still not been fully implemented. (There is no optimization time of the court ruling, leading to dilution of property rights. There is no complete information on legal judgments and the reasoning and accountability of the judiciary. There is no real copyright protection and enforcement. There is no transparency and information about the actions of law enforcement, judicial authorities and the various ministries on corruption.)

The influence of various business and social groups on administrative decisions is widespread at all levels and leads to corruption and inefficiency in government spending.

The Index of Economic Freedom²² also measures the inviolability of private property. With a score of 7.31, Bulgaria ranked 36th on this metric between 125 issued countries. The legislative structure and integrity of private property was 5.21 (compared to 5.29 in 2007), showing that this is the most problematic area for the country. The impartiality of the judiciary is assessed only at 3.0 and its independence at 3.2 in the scale of Index of Economic Freedom between 5 (max) and 0 (min). This shows that the courts are amenable to pressure from the government, special legal and illegal business groups and those of the countries concerned.

The International Property Rights Index for 2010 is a comparative analysis between the protection of property rights and the economic development of countries.

²²International Property Index Report 2010, <http://www.internationalpropertyrightsindex.org/>

Table 2.3 The main indicators and the placement of Bulgaria among other countries

Index of competitiveness in 2010	Author	Result of Bulgaria	Place of Bulgaria
Global competitiveness	World Economic Forum	4 (out of 7)	71 st (out of 139)
Readiness for e-government	UN	0.6 (out of 1)	44 th (out of 192)
Perception of corruption (2009)	Transparency International	3.8 (out of 10)	71 st (out of 180)
Economic freedom of the world	Fraser Institute and the Economic Freedom Network	7.3 (out of 10)	36 th (out of 141)
Property rights	World Economic Forum	5.2 (out of 10)	59 th (out of 125)
Economic freedom	Heritage Foundation and <i>Wall Street Journal</i> newspaper	63 (out of 100)	75 th (out of 183)
Conditions for doing business	World Bank	–	44 th (out of 183)

Its purpose is to examine the effects of a stable legal and political environment and respect for the physical and intellectual property rights necessary for economic development. The report covers 125 economies representing 97% of global GDP. The results range from 0 (lack of protection of property rights) to 10 (high protection of property rights). The index focuses on the relationship between effective protection regimes of property rights and their importance for economic development. Countries with more strongly protected property rights have higher income per capita. Bulgaria's place in this ranking represents the average score for Central and Eastern Europe, and in the world is equal to the outcomes of Turkey, Trinidad and Tobago, Ghana and Thailand. Therefore, with 5.2 points out of 10, the country was ranked 59th out of 125 surveyed countries and 10th out of 25 countries in the region. In 2009, when ranking covered 10 countries at least, Bulgaria was again in the same position but with a score of 5.1 points.²³ Table 2.3 shows some indicators.

One of the most problematic areas in Bulgaria is its institutions. The worst results were seen for Bulgaria in the Global Competitiveness Index in the following indicators (Table 2.4: 7 is the highest rating and 1 the lowest).

The specifics of institutional factors are directly related to the peculiarities of information as an economic good. Intangible nature of information products makes them closer to the definition of public good as "not excludable."

Information products generate high transaction costs related to clarification of property rights, sale of goods, high environmental and social costs. The high transaction costs significantly restricts the competitiveness of entrepreneurs. This is characteristic of the economic environment in Bulgaria (Table 2.5).

²³Source: World Economic Forum 2009, <http://www.weforum.org/404.html#network1>

Table 2.4 Some indicators and the placement of Bulgaria among other countries

Polls	Result of Bulgaria (2010–2011)	Place of Bulgaria (out of 139)
Basic requirements	4.4	72
Institutions	3.3	114
Property rights	–	121

Table 2.5 Corruption

Country	Corruption Index 2006	The Control of Corruption Index 2008
Bulgaria, “BGR”	4.0*	–0.17**

*Units: Index units, 10 = least corrupt, 0 = most corrupt [Source: EarthTrends (<http://earthtrends.wri.org>), searchable database results, provided by the World Resources Institute (<http://www.wri.org>), Environmental Governance and Institutions—Corruption: Corruption Perceptions Index (Transparency International)].

**Units: Index values are indexed to have a mean of 0; positive scores indicate better governance [Source: EarthTrends (<http://earthtrends.wri.org>), searchable database results, provided by the World Resources Institute (<http://www.wri.org>), Environmental Governance and Institutions—Politics and Freedom: Control of Corruption Index, Source: Governance Matters VIII: Aggregate and Individual Governance Indicators, 1996–2008. D. Kaufmann, A. Kraay and M. Mastruzzi (2009), World Bank Policy Research Working Paper 4978. Available online at: <http://info.worldbank.org/governance/wgi/index.asp>].

The Control of Corruption Index is a measure of “perceptions of corruption, conventionally defined as the exercise of public power for private gain”. The authors of the paper argue that corruption stems from a lack of respect for the country and its institutions by both government officials and the private sector, thus representing a failure in governance.

Corruption in Bulgaria is still high and the situation is not improving. As that study and the data for previous years shows, corruption remains a major problem for Bulgaria. It erodes the functionality of important domestic institutions and values. This reflects the attitude of the national administrative workers and society as a whole to vital issues, such as those of corporate social responsibility as well as the environment.

In Bulgaria before 1989 discontent with the communist regime was at first publicly announced in the public space and was centered on environmental problems. This led to the emergence of an organized opposition and dissidents in the creation of the Club for Glasnost and Perestroika, “Eco-publicity”. It was connected with the problems of air pollution in the Danube city of Ruse, but grew in opposition to the ruling Communist Party. Now, 20 years later, this club has lost its social and civic importance and is inactive for various reasons and therefore does not participate in political life. Today in Bulgaria there are two “green” political parties. There is the political party “Greens”, which first participated in elections for the Bulgarian parliament in 2009 (Table 2.6).

Only about 0.5% of the votes cast in the 2009 elections for national parliament were given to the Greens.

Table 2.6 Election results for the Bulgarian parliament in 2009: the Greens^a

	Number of votes in elections for National Parliament (2009)	Percentage of all actual votes
The Greens	21,841	0.52%

^aSource: Republic of Bulgaria, Central Election Commission, <http://www.is-bg.net/cik2005/index.php>

The pre-existing political party, the “Green Party”, and the political party “Green Bulgaria–Bulgarian Green” joined forces. The new unified political entity is called “Nature Green Party/Bulgarian Green”. The party is a member of the European Green Party but has not registered for parliamentary elections.

In the country there are non-political movements with environmental objectives, but these have a small staff and no significant public presence. The biggest of these is the network “Green Balkans”, which as of 2008 had 4500 individual members who are united in four regional offices and 25 correspondent centers.

In these parties’ public documents, it is indicated that their green movements will programmatically *not* request for the introduction of environmental accounting in Bulgaria.

2.5 Public Attitudes

The Institute of Sociology at the Bulgarian Academy of Sciences conducted three studies (in 1992, 2004 and 2007) concerning the evaluation of Bulgarian society and the importance of environmental issues.

The comparison between these years is given in Table 2.7.

However, the fear of the Bulgarians from the effects of contamination of the environment on their health increases (Table 2.8).

Studies have shown a very strange picture. The first Bulgarian estimates show that the environment is a significant problem, but when it comes to the impact of the environment on health, the issue seems less severe. In 2007 only about 20% of respondents showed very strong concerns about pollution, but about 20% also did not fear for their health because of the impact of pollution.

According to the “Eurobarometer” poll of 2007, the average EU citizen indicated that solving environmental problems is a primary concern. One third (34%) of European citizens indicated the environment as a priority problem. For Bulgarians the most important focus of the work of public institutions should be tackling social problems, and the environment is only in fourth place.

Fears among Bulgarians of environmental pollution increase but do not translate into preservation and active citizenship. The reasons for this are a limited

Table 2.7 What is your assessment of the environmental situation? (%)

Scaling	1992	2004	2007
1. No problem	1.7	7.6	2.7
2. Slightly important problem	3.1	15.9	8.6
3. Relatively significant problem	19.2	29.5	23.8
4. Particularly significant problem	27.8	21.1	24.5
5. Very serious problem	39.1	18.8	33.6
6. Do not know	8.9	7.2	6.8

Table 2.8 How afraid are you that environmental pollution is dangerous for your health? (%)

Scaling	2004	2007
1. Very seriously afraid	8.2	21.1
2. Especially significant fear	12.3	15.8
3. Significantly afraid	18.9	21.1
4. Low	19.2	17.0
5. No fear	35.6	20.9
6. Do not know	5.8	4.0

knowledge of the concept of sustainable development and especially the low empowerment of citizens.²⁴

A statistical comparison showed no major differences; the results of 2007 confirmed the existence of a passive consumer model of citizenship, registered in the earlier study.

A study by the UN Global Compact and the Charities Aid in Bulgaria in 2007 on “Corporate Responsibility in the Bulgarian context” found that giving and socially responsible practices have evolved slowly due to activities of limited scope, unclear focus and their fragmentation. Major companies show some beginnings of socially responsible activities. In smaller Bulgarian companies, such activities are still fragmented and mostly motivated by the personal characteristics of their managers and not by companies making a clear distinction between sponsorship and social responsibility in their mission statements. When a distinction is made, it is often for accounting purposes and not for the determination of corporate policy (Gancheva 2007).

In 2006, Bulgaria held its first national conference on corporate social responsibility. It was represented by state institutions, social partners, business representatives and experts from NGOs and from other Member States of the EU.

For only the fifth time, the Bulgarian Donors’ Forum awarded the following prizes for donations in 2010:

- The “largest volume of financial donations” was won by mobile operator M-Tel, with donations totalling 707,015 Euro.
- The “largest volume of non-financial donations” was won by television station bTV (5,052,431 BGN).

²⁴European Commission, Eurobarometer, 67, 2007, p. 35.

- The “biggest contribution through volunteer work of employees” was won by VIVACOM. 3300 employees volunteered and this was valued at 62,386 BGN.
- The “most generous donor” was won by cosmetics company Rosa Impex. This was estimated by the volume of donations, calculated as a percentage of profit before tax. The financial support volume was 189000 BGN, while profit before tax was 5.358 million BGN.
- The “best charity program” was awarded to a combined effort by DANONE Bulgaria and the Foundation of Dimitar Berbatov (a Bulgarian footballer of the English first division club Manchester United) called “Active and Healthy”. Within this project the sports facilities in nine schools in the country were built or refurbished.
- The award for the “most transparent donation program” was awarded to Raiffeisenbank (Bulgaria) for their campaign “Choose to Help”, which was a fundraising platform that promoted and raised funds for more than 20 causes.²⁵

The biggest social activity took place, however, in Caritas Bulgaria, a part of the international confederation of Catholic organizations, Caritas Internationalis. The total operating expenses for 2008 were 1283 million BGN, and for 2009 were 1080 BGN.²⁶

At the state level, the draft of the National Sustainable Development Strategy in Bulgaria was created in 2007. The draft identifies project objectives, priorities and measures to improve the quality of life in Bulgaria for present and future generations, as well as trying to give a vision for the medium- and long-term development of the country. The strategy is based on the renewed Sustainable Development Strategy of the EU and the renewed Lisbon Strategy.

The framework of the draft national strategy consists of three main sets of issues: environmental problems associated with maintaining a state of natural balance, economic and social problems. The main challenges for the strategy are:

1. Climate change and clean energy
2. Sustainable transport
3. Sustainable consumption and production
4. Conservation and management of natural resources
5. Public health
6. Social inclusion and demography
7. Good governance

The new (and current) government of Bulgaria came to power on July 27, 2009 and adopted a new “Strategy for corporate social responsibility for the period 2009–2013”, as well as a plan for its implementation by 2010. According to the government, “The strategy aims at creating and strengthening an enabling environment for socially responsible practices for active voluntary participation of all

²⁵Foundation “Charities Aid for Bulgaria”: <http://bcaf.bg/Bulgarian/NewsArticles2.aspx?article=25392>

²⁶Annual financial statements, profit and loss account, Caritas Bulgaria for 2009.

stakeholders—government institutions, businesses, organizations, social partners, NGOs, academia, media and others.” The strategy refers to the objectives of the renewed Lisbon Strategy, as well as many other documents of the European Commission in providing guidance for the implementation of corporate social practices in the Member States in which companies integrate voluntary activities for the conservation of the environment and social initiatives into their business strategies and interactions with all stakeholders.²⁷

The first plan for implementing the strategy for corporate social responsibility covers the period 2009–2010 and includes measures to raise the awareness and capacity of stakeholders regarding the nature of the concept of collective social responsibility and its implementation, as well as creating a supportive legal and institutional environment for initiatives in transparency.

The new government adopted a new National Environmental Strategy 2009–2018 g.i Action Plan approved by the Council of Ministers Decree No. 353 of May 15, 2009.

None of these documents include a recommendation, order or requirement to conduct social and environmental accounting. This clearly shows that central government management institutions have not placed the issue of social accountability on the agenda.

In Bulgaria, the Constitution itself, the main external institution, can be seen as an ineffective document or a “dead letter”.

Since the accounting service is physically the embodiment of the results of the company, its quality is evaluated by the customer through comparisons with actual services received in such a way as it is the expectation of the customer to be received. Therefore, in Bulgaria the orientation of the accounting service is to respond to the expectations of the company to pay fewer taxes (as mentioned above in relation to the characteristics of the class of “new capitalists” in Bulgaria).

The accounting community in Bulgaria, which is concentrated mainly in two centers (Sofia and Svishtov), will not be able to take action on the introduction of social and environmental reporting and accounting in the country.

The Bulgarian accountancy community has not separately developed a code of ethics. It will likely adopt the “Code of Ethics for Professional Accountants”, revised from the International Ethics Standards Board for Accountants in July 2009; the Code enters into force on January 1, 2011.

The major institutional factor impeding the development of practices of social and environmental accounting in Bulgaria is the abandonment of government requirements on its part to introduce social and environmental accountability, and the lack of laws and government regulations for the regulation of accounting firms with regard to social and environmental accounting.

These institutional factors reflect the specific institutional environment in which economic actors operate.

²⁷Republic of Bulgaria, Ministry Council, Government has adopted a strategy for corporate social responsibility, <http://www.government.bg/cgi-bin/e-cms/vis/vis.pl?s=001&p=0228&n=362&g=>

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Chapter 3

Measurement and Communication of Environmental Variable

Maria-Gabriella Baldarelli

3.1 Financial Crisis and Measurement: New Challenges

As we mentioned before, especially in these times of financial crisis, the processes of corporate measurement and accounting have partially shown they are not totally able to consider all the operations. Particularly those ones which aim at giving an account of actions of solidarity promoted by the enterprise on an international level.

This is often due to giving excessive importance to technicalities which are part of accounting procedures and which do not focus on a satisfactory overview of what is present at the basis, as well as on which considerable quantities attention must be placed in order to measure corporate operations both qualitatively and quantitatively.

Furthermore, alternative approaches to measurement are required, because it is also necessary to measure “state” enterprise values; therefore, measurement problems are spread to other components, not only (albeit very important) economic, property, and financial ones.

Moreover Zadeck states that social balance represents and directs corporate decisions as to stakeholders (Zadeck 1998: 1428). On this subject the so-called “educationalists” (Gray et al. 1996). Bebbington (2007) considers accounting and reporting as a process that has, among its functions as communication and auditing, also the function of a change in culture, passing through a business culture.

Furthermore, Gray et al. (1996) stress the importance of information considered as being a system, in a kind of multidimension, which is also cited by Matacena: “Accounting is too often considered in a perspective of a severely constrained system, but accounting is not a system which operates in isolation . . . Accounting also interacts with systems that we might call ‘social’, ‘political’, and ‘ethical’ . . .” (Gray et al. 2000, p.14).

For Gray, accounting and outward communication (accountability) are firmly connected; in the second, the enterprise takes its responsibility also on account of actions not only traditionally undertaken. For this reason, we chose to put social

relationships at the center, considering that the role of accounting concerns the responsibility of accounting toward the environment (generally considered), and as we can see in the following quotation, “We choose to believe that accounting can be in the public interest but that only by placing the theoretical model of accountability at its centre and the resultant development of social and environmental accounting, can this be achieved” (Ibidem, p. 76).

Greater open-mindedness about subjects concerning in-depth examination also in a moral point of view is seen in this passage: “some means must be found to reverse the ethical and intellectual atrophy that accounting education and training appears to encourage. The evidence is increasing at an alarming rate. Accountants seem capable of, for example, taking new initiatives, considering issues at an abstract and theoretical level and/or examining the moral impact of their activities. . .” (Ibidem, pp. 76–77).

Authors continuously stress the role of communication through accounting tools, as accounting makes sense only if considered as external accounting, which allows guiding relationships and increasing confidence between enterprises and organizations.

Accounting, understood as a survey process, has a great responsibility toward political and business choices, so we cannot and we must not underestimate it.

It also very important that accountants educate students about accounting tools, to enable them to open their minds through aspects concerning ethics and morals, as we can clearly read: “Accountability is a profoundly moral concept. In an increasingly amoral (or immoral?) world dominated by explicitly amoral (immoral?) disciplines of thought such as conventional economics, accounting and finance, the call for morally based development seems highly attractive” (Gray et al. 2000, p. 293) by recollecting the common good, that is, “Those of you who are the future of the profession owe it to yourselves-as well as to the society that has afforded you the privileges you currently enjoy-to explore your future profession as carefully as possible and to think what ‘serving the public interest’ will mean to you.”

In this sense, Zadeck stresses the importance of accounting renewal that would be able to manage change toward a better social reporting. This confirms that after principles, measurement is a growth opportunity or “Measurement is not a passive neutral activity. . .” (Zadeck 1998, p. 1439).

3.2 Environmental Accounting Tools: Meaning and Classification

In the logic of the transition to a progressive internalization into the corporate culture of the environmental variable in this section, we will analyze how the environmental variable can be measured to provide information for management control.

In this sense, eco-efficiency can be measured following this different dimension where, progressively, we can have financial measures and intermediate measures that can involve some indicators about ecological impact and other indicators and integrated measures such as ecological contribution margin, ecological payback period, ecological rate of return, and finally physical indicators.

Regarding financial measures, these can be considered financial instruments that detect the environmental variable *ex post*, such as environmental accounting and eco-accounting.

The dimensions of eco-efficiency are based on the approach that the enterprise uses to face the environmental variable (Mio 2002).

This approach goes from a passive consideration of the environmental variable to the proactive behavior (Mio 2002) relating to it.

Therefore, we can identify two poles, where one includes enterprises that consider the environmental variable only as an *ex post* intervention to comply with the provisions of the law or to repair the most serious environmental damages, while at the opposite pole, there are enterprises that consider the environmental variable as essential for operating and the strategic management decision-making process as progressively becoming a key element of the corporate culture (Catturi 2004). The same authors in the past wrote about the direction that enterprises will take (Catturi 1993). The first one is that enterprises must have the strategic objective to satisfy people's needs in respecting the ecological environment. The second direction is that enterprises need laws to regulate the management of the ecological variable. The third direction is that the environmental variable must be regulated by international agreements also. Finally, what is required is an environmental audit of the conduct of enterprises (Catturi 1993), in order to check results and the procedures dealing with it. The same author underlines that corporate culture is at the basis of the accounting culture (Catturi 1992, p. 4) and that there are interesting relationships between the enterprise culture and the anthropological culture concerning the enterprise venue. These two cultures influence each other (Catturi 1992, p. 4).

In the transition from the first to the second pole, the enterprise defines its behavior with respect to the environment variable by considering three aspects, namely, the definition of objectives (what), behavior management (as), and identifying the destination of the information (who the information will be aimed at) (Mio 2002, p. 27).

Moving from one pole to the other, the enterprise becomes aware of, and progressively inserts, the environmental variable into the decision-making process and in organizational mechanisms, at the same time entering measurement tools of environmental performance even if these are included in the traditional instruments considered.

Only by permeating, through eco-efficiency in the corporate culture, it is possible to say that the enterprise will use the environment variable in all the aspects of the decision-making process and also in all the activities of management control, with related tools, which will be carried out.

In this imaginary line, which links the two opposing poles, we can identify the case studies of companies that are progressively resorting to eco-efficiency in their management.

According to Mio (2002), we can identify different levels of “internalization” of the environmental variable, especially when inserting it into the strategy of the enterprise.

In fact, the author identifies several phases: awareness, management, consistency, and “widespread internalization” (Mio 2002, p. 211).

In the transition from one stage to another, there is a growing awareness of the importance of the environmental variable and its integration within the decision-making process of the enterprise. We can place the size of eco-efficiency within this extended logic, and we are going to investigate the measurement tools.

Firstly, we must distinguish between *environmental accounting* (in general) and *ecological accounting* (Ec. Ac.).

Environmental accounting “. . . can be defined as the set of disclosures regarding the use of natural resources within the sphere of influence of the enterprise” (Mio 2002, p. 31).

Environmental accounting is the measurement and evaluation of natural resources and includes assigning an economic value to environmental goods and services, which are appreciated and recognized as important in society.

Ecological accounting “. . . is about evaluation and measurement of natural resources” (Mio 2002, p. 31).

Eco-accounting contains a system of surveys exclusively intended for environmental reporting. This type of accounting records non-accounting or statistics, which represents a very strong interest in environmental issues and is separate from the more general environmental accounting. Also it indicates an ecological interest in the decision-making process of enterprises and above all a business orientation to measure and control environmental performance with a specific sub-information system.

According to this definition then, environmental accounting concerns the records and measurements that are at the service of the information system of the enterprise but are often “hidden” in the general ledger of financial accounting.

Environmental accounting, if adopted without an ecological accounting, as illustrated above, is a symptom of a lack of interest on the part of the enterprise in the environment variable.

Environmental accounting may provide different aggregates, including “manufacturing processes; stages of production; products; sites; geographical areas; etc.” (Mio 2002, p. 35).

To continue the analysis, we can mention some interesting thoughts that, in the past, have involved the measurement of the environmental variable. These analyses come from Miolo Vitali, Maticena, Catturi, and Mio.

In chronological order, Miolo Vitali (1978) focuses mainly on the analysis of business costs for management control. She uses the perspective of the insertion of purification costs also. Therefore, there is the problem of the more general impact

on the environment, but the enterprise focuses on measurement, in terms of the economic and quantitative activity of the enterprise.

The analysis focuses on the measurement of pollution and the investments that the enterprise makes in order to solve this problem (Miolo Vitali 1978, p. 51). Very interesting is the distinction that the author makes between “space” (related to the nature of the activity) and “time” (linked to the performance, even a seasonal production cycle) (Miolo Vitali 1978).

Subsequently Matacena (1984) proposes the ecological variable, as inserted within the development of the enterprise. The enterprise is both part of the economic system and of the socio-environmental system. Finally, the enterprise can be seen as a subsystem of the ecosystem (i.e., involving all the systems mentioned above). The author then identifies the importance of the social aspect of the enterprise incorporating the ecological variable but focusing mainly on the social one. He introduces the concept of social costs (Matacena 1984, cap.VII). Moreover, within a classification, the author also considers the meaning of light pollution and the use of nonrenewable resources that the enterprise must carefully consider.

Catturi (1993) argues, however, that the ecological variable in enterprises has scientific relevance. In fact, the enterprise must account for all the resources it uses, including the environmental ones. This discipline is called enterprise ecology. In this way, the enterprise has to sanction the damage caused to the environment and must be able to highlight the external diseconomies that the same has caused. Therefore, its activity requires incurring internal and “external” costs (such as pollution).

He emphasizes therefore that the size that best expresses the net income obtained by the enterprise is not profit but is value added. In calculating the value added, it must also consider the cost of waste disposal, which is produced by the enterprise, and the cost of using natural resources, which is highlighted in Table 3.1.

Catturi (1993) seems to have stated this same concept “in advance,” separating the ecological part within the enterprise.

Burrit and Shaltegger (2001) define the measurement of eco-efficiency as the combination of the numerator which is given by the economic and financial measurements and the denominator, instead of taking measurements that are quantitative. Also they stress the importance of relating eco-efficiency with the budgeting process.

So alongside accounting tools, we can also include integrated measures, such as ecological contribution margin and ecological payback period and ecological rate of return (Epp and Err), whose function is to balance the pursuit of economic efficiency and eco-efficiency (Mio 2002, p. 142).

These indicators are meant to provide information on the environmental impact of the enterprise and fall within ecological accounting.

We should move from a logic of ex post measurement of this impact to a logic of forecast measurement of it. The real challenge is to develop a process with which we relate traditional instruments with those of environmental accounting by changing the management decision-making process.

Table 3.1 Representation of the production value

Key
PD: Production value purified
PT: Total production value
CSR: Cost of waste disposal
CI: Intermediate consumption
VA*: Added value
VAN: Added value less environmental impact
CCF: Costs incurred in the production
CRN: Cost for the use of natural resources
$PD = PT - CSR$
$VA^* = PD - CI$ $VA^* + CI = PT$
$CSR = aPT$
$a = CSR/PT$
$PD = PT(1 - a)$ $PD = PT - aPT$
$CRN = bPT$
$VAN = VA^* - CRN - CCF$
$VAN = PD - CI - CRN - CCF$
$VAN = PT(1 - a) - CI - bPT - CCF$
$VAN = PT(1 - (a + b)) - (CI + CCF)$
Ecological component enterprise

Moreover, the contribution margin must involve the environmental variable (Donato 1998) as we show in the following example using an equation (Table 3.2).

Another tool is the life-cycle assessment (LCA), which measures the environmental impact of product, process, and activity in terms of internal or external, such as communication geared to improve the environmental impact.

After identifying integrated indicators, we analyze the environmental budget of the enterprise (Mio 2002, p. 179).

The budget is the result of a quantitative environmental impact of the environmental variable on the economy of the enterprise and consists of:

- Environmental revenues (revenue arising from the “sale” of goods/materials that were previously regarded as disposal costs)
- Environmental costs (derived from the attention paid by the enterprise in various areas of eco-compatible materials, renewable energy)
- Costs of environmental management (costs for recruitment of internal responsibilities and costs for environmental damages that have been caused)
- Environmental investments (Mio 2002, p. 180)

An example of an environmental budget is in Table 3.3.

We end the discussion with a first proposal for indicators of non-accounting-related ecological environment. It is important that the enterprise uses at least uniform calculation criteria and try to set standardization over time. It would be

Table 3.2 Environmental ratios

Environmental contribution margin equation (Mio 2002, p. 147)
MCA = Contribution margin per unit at first level/unit of output by product = 50/10 = 5
Unit contribution margin by product = 50
Emission units for product = 10
In the pursuit of economic efficiency, equity and eco-efficiency must take into consideration some tools that can be a big “balanced” decision in support of the enterprise (De Simone and Popoff 2000)
Eco-efficiency equation = Objective/Environmental impact that defines efficiency for unity of environmental impact
This indicator is useful for monitoring a plant, and its degree of environmental impact must also use other tools, which are: the Epp-Ecological Payback Period; the Err-Ecological Rate of Return. The Epp-Ecological Payback Period “that is the evaluation of the time needed to reduce the environmental impact caused by the investment” (Mio 2002, pp. 153–154) namely:
$E_{pp} = \frac{\text{Environmental impact generated by the investment}}{\text{Annual reduction of environmental impact through investment}}$
Err-Ecological Rate of Return “measures the ability of an investment to save natural resources, as it relates to the expected benefit in terms of the environment from an investment to consumption of natural resources caused by the investment” (Mio 2002, p. 154)
$E_{rr} = \frac{\text{Environmental impact saved from your investment}}{\text{Environmental impact caused by the investment}}$

Table 3.3 Environmental budget

Environmental Revenues
– costs of environmental management
= Intermediate result of environmental management
+ Environmental value created (environmental costs – environmental investments part of accrual basis and economic competence)
= Result of Environmental Management
– environmental value destroyed by the
= Result social environmental management

Mio (2002, p. 181), Shrivastava (1995), and Porter and Van der Linde (1995)

appropriate that such standardization be extended to all companies to facilitate the comparison of data.

The system of indicators includes information mainly of a quantity that is not balanced, both in monetary and in physical terms. The analysis thereof is used to see the attitude (or lack thereof) of the enterprise to improving the quality of life and quantifying the damage and the improvements made to the environment. In more strictly economic terms, attempting, in this case, to measure the externals, and even if the indicators are inaccurate, the acceptance of their existence, is already a good “test” of their completion. One should build a subsystem of indicators for each area in which the enterprise operates, showing the results obtained in comparison to the efforts made.

It should be noted that there are considerable difficulties in quantifying social spending, but the measurement of social benefits is even more problematic if we

think that this can be expressed, sometimes, just in percentage terms compared to the industry average or that of previous years. This can be expressed in various ways: nominal, ordinal, etc. We will use the information expressed as indexes. The indicators expressed in this way can connect different levels of certain phenomena, such as the status of a factor and its behavior in the enterprise, the relationship between the resources used to achieve certain ends, and the results obtained. They are defined as follows: indicators of means-ends, status indicators, and attitude and specific indicators.

The first group identifies the state and behavior of certain resources within a structure.

The second binds the resources used to perform a certain action on the results that have been achieved with it.

For each of the first two groups studied, one can identify subgroups in relation to certain specific programs that are then defined by specific indicators. The indicators serve to highlight the willingness of the enterprise to improve the level of welfare or the nonexistence thereof. They are a good base with which to explore the level of acceptance of social responsibility and to research the reasons for consent or rejection shown by the enterprise.

To express all this, certain attributes are required, such as the ability to highlight the variations of the phenomenon that we aim to quantify.

Another important attribute is to detect the texture and the ability to remain valid without distortion, as the meter, through time.

The last is the characteristic of expressing the findings with clarity.

The lists of indicators should be provided by law or by collective agreements, such as the Global Reporting Initiative (GRI), reconciling two conflicting requirements, the first of which is the clarity and completeness of the information and the second is to avoid excessive sub-enterprise information systems.

However, this should be the result of mediation among the enterprise, the third party, and the government, and the value depends on the manner in which they are presented and the special features arising from the phenomenon represented.

The descriptive treatment developed as above is accompanied by a list of indicators that, in our opinion, are the most significant.

We cannot be so presumptuous as to believe to have stated the analysis of the indicators, because their in-depth discussion would require a specific thesis, but we are providing a summary tool to assess what, until recently, was considered as being "impossible."

Once it is clear what constitutes a system of indicators (Table 3.4), we can show some observations.

With the indicators, the enterprise opens to a more incisive internal and external control, as it now has the information that could not find the substance using traditional methods, since the magnitudes subject to analysis do not have a value determined by the market.

For the enterprise, the indicators trigger an internal control for the socio-economic activities that it has carried out and are also a means to "reunify" the economic and environmental fields.

Table 3.4 Examples of indicators about physical environment

Amount of short-term impact
(a) Cubic meters, liters, kilograms of waste released directly into the air, water, and soil
(b) Analysis of the polluted material at the beginning of the period and at the end of the period (maximum one year):
Toxic substances in excess of the tolerance of man (legal or not)
Unit of measure unit (lmc, etc. . . .)
Extent of long-term impact (in this case the analysis for the short term is repeated, with only the amount of time under consideration that varies
Rate of degradation of the surrounding flora:
Number of trees showing visible/invisible consequences
Total number of surrounding trees (100 m, 1 km, etc.)
Number of activities that take into account the consequences on the environment
No actions taken
Impact on the urban environment
Number of houses which have changes in the external color
Total number of surrounding homes (100 m, 1 km, etc. . . .)
Any unusual smells in the air (through a questionnaire that can show people who perceive the smell versus the total of those in the area around the enterprise)
Reductive or compensation measures
Environmental situation after the establishment of a purification plant (the amount of toxic waste in the unit of measurement)
Waste disposed of by the state
Previous situation
Total waste
Waste treated to prevent pollution
Total waste
Recycled waste
Total waste (assuming the obligations that are imposed by law are respected)

They also represent an encouragement for an external audit but, at the same time, have a basis on which to interact and collaborate with the “stakeholders.”

Their validity, especially as regards internal control, is supported if they are calculated at budget and accountability, detecting deviations and evaluating the causes that may have generated them.

In terms of external control, they become a tool to see if certain laws have been complied with or not.

While presenting the different tools separately, their progressive integration is necessary to give the decision-maker the possibility to take into account the economic, financial, and environmental variables as several authors have pointed out (Burrit and Shaltegger 2001).

3.3 Environmental Costs: Meaning, Measurement, and Classification

Environmental information, in particular related to environmental costs, may be prepared using instruments already existing in the enterprise, including the general ledger and cost accounting. This information is also generated by an information system, which is designed specifically for the detection and measurement of the environmental variable. There are two methods of exposure and measurement of environmental costs: the traditional and environmental accounting as such that allows the enterprise to communicate, inside and outside, the information concerning the environment.

In this section, we focus on environmental costs, postponing the discussion of other information, while important for external reporting, involving the general ledger and include some environmental costs and provisions for environmental risks and environmental investments.

The information, in support of the management, which is generated by analytical accounting, is divided into (a) environmental costs of the product, (b) environmental costs of the site, and (c) cost of environmental activities. They are intended as specific objects of recognition and measurement to be attached to other tools, which are used in the enterprise. Therefore, they do not constitute part of environmental accounting in a stricter sense, as they represent the effort made by the information systems of the enterprise to measure the ecological variable using general accounting and cost accounting.

Furthermore, environmental accounting, in addition to the specifications of preexisting accounting, also includes its own surveys, which are generated by the specific sub-management system and are related to measurements of environmental impact and the physical and technical measures of environmental performance within the enterprise, as we have mentioned in previous paragraphs.

The result is an integrated information system (Paternostro 2012), including environmental accounting, that becomes one of the tools available to management

for making decisions and for evaluating different alternatives, balancing the financial aspects and the environmental ones.

In order to give meaning to the term “environmental cost,” we can give the following definition: “The resources used to assess, prevent and correct” shortcomings “from activities that potentially generate a negative effect on human, animal and plant”. Another interesting definition of environmental costs is as follows: “Within the enterprise, the environmental cost is the value of the resources and activities dedicated to improving the environmental impact of business processes, that is designed to prevent, break down or eliminate pollution, and to monitor the environmental impact of business processes” (Mio 2002, p. 40).

To be considered an environmental cost, it must have the characteristic of being identifiable and must be “additional,” i.e., it must exceed the proportion of overheads that may be contained (Mio 2002, pp. 43–44).

These costs, relating to an active enterprise approach toward the protection of the environment, are different from those arising from compensation for damages caused. The latter in fact, despite being identifiable as a cost relating to environmental management, does not provide for future benefits and, as such, can be identified as an environmental loss or the cost of environmental inefficiency.

Those damages resulting from incorrect corporate behavior are at the limit of the definition of environmental costs.

Mio stresses (Mio 2002, p. 48) that environmental costs must be part of a guidance and a strategic project guidance to prepare appropriate measures and the instruments to calculate them separately from other costs.

Economic efforts, which fall under the definition outlined in the environmental costs of enterprise for the evaluation, are called internal. They are distinguished, furthermore, by those which can be identified as external environmental costs.

Those within the enterprise determining financial performance and financial enterprise, with a time span not limited to the current year, refer to the historical result and to the current and prospective one.

The internalization of environmental costs depends, according to Mio (2002, p. 60), also on factors such as legislation, technology, decision-making, and strategic objectives that the enterprise defines.

According to our point of view, this is a restrictive classification, because if one considers that the enterprise has not only financial targets but has more objectives to be achieved, the internal environmental costs become more numerous.

External environmental costs are considered to be in reference to the external body, which takes care of the same in terms of the responsibilities of the government, both in economic and financial terms.

For clarity, Table 3.5 shows some examples of internal and external environmental costs.

To sum up, external environmental costs are “depletion of natural resources, noise and visual impact, waste disposal, health effects, changes in the quality of life” (Mio 2002, p. 59).

Table 3.5 Examples of internal and external environmental costs

External environmental factors that generate environmental costs	
– Depletion of natural resources	
– Noise and visual impact	
– Air and water emissions	
– Garbage disposal	
– Effects on health	
– Changes in the quality of life	
Environmental factors that create internal environmental costs	
<i>Direct or indirect environmental costs examples</i>	<i>Environmental provisions examples</i>
– Waste management	– Provisions for future
– Compensation to third parties	– Payments to third parties (probable)
– Cost	– Risk of complaints determined by future legislative changes
– Costs for permits	
– Training on environmental issues	– Quality of products
– R&D related to environment	– Safety of employees and their satisfaction

Environmental costs can be further classified depending on the natural resources to which they are addressed; this is known as costs related to the protection of water, air, soil, waste management, and noise reduction.

Implicit environmental costs and explicit environmental cost are differentiated depending on the mode of collection. Explicit costs are recorded in the general ledger and are analytical in relation to the law, because you use advanced systems of accounting, and the orientation of programming and control is directed to these ends (Mio 2002, p. 67).

Implicit (potentially hidden) costs “... are the environmental costs that the enterprise might bear upon the occurrence of certain conditions, explore the simulation of various paths and/or decision-making” (Mio 2002, p. 67).

According to the Environmental Protection Agency (EPA), implicit environmental costs are divided into the following categories:

a. Conventional costs

These are the costs of raw materials and services that might “hide” environmental costs, and in this way, the enterprise would develop a non-sensitivity to the environmental variable.

b. Potentially hidden costs (start-up costs of a project, cost of “structure” linked voluntary to the application of certain rules – these are hidden environmental costs – and costs of “disposal” that are even more difficult to single out (Mio 2002, p. 69)).

c. Contingent costs

These are costs related to future events and likely to fall into the category of risk provisions, e.g., risk of damages.

d. Image and relationship costs

These are costs to improve the ecological image of the enterprise; they also refer to the marketing function.

According to Mio (2002), there is a close link between the strategy used by the enterprise and environmental costs; in fact if the enterprise has a strategy geared only to the aspects linked to profit, the tendency is to ignore the environmental costs and thus to intervene later to restore/repair the damage caused to the environment. If the strategy takes into account the environment and plans the production cycle by including the environmental costs, in the long run, it will reduce overall costs for the environment and respect the environment from the beginning. In this context, there will be the costs of prevention and verification (for the environmental conduct of the enterprise) that represent the real environmental costs (Mio 2002, p. 80). These costs differ from the costs of prevention, but the following are related: the design, implementation of products/eco-friendly services, costs for environmental impact assessment and procedures for such control, and costs for staff training.

According to the responsibilities, one identifies the costs of internal and external responsibilities that instead represent all the operations to “keep track of” environmental damage, and environmental costs are not considered but fall under the categories of common costs. These are listed below:

- Internal responsibility: Cost of waste materials, energy dispersion, etc.
- External: Replacement costs of pollutants, costs for damages, fines, costs related to the restoration of natural resources, etc.

It should however be clarified that there are environmental costs related to errors of past business management (Mio 2002, p. 85). They are not accounted for as environmental costs: costs that are incurred for compliance with the law and other costs related to past decisions.

Environmental costs are all related to a proactive enterprise.

The components that go into determining environmental costs may result from different operations and business processes, sometimes very different, whose common denominator is an influence, direct or indirect, of the natural environment.

Some helpful classification criteria are listed below.

The first criterion of classification is based on the usefulness of economic cost.

It should, in fact, distinguish between operating costs and investments, of which the operating costs relate to cost components aimed at preventing, reducing, or repairing damage to the environment or for the conservation of renewable and nonrenewable resources. They correspond to all current expenditure carried out under environmental management (e.g., waste disposal, energy costs, labor costs, etc.) to which the “consumed” amount of durable goods is added.

There are also costs for the periods that are linked to the environmental variable, which may originate primarily from structural costs, relating to the operation, repair, and maintenance of facilities and equipment for environmental protection; the second can concern costs related to service (e.g., coordination activities, soil improvement, etc.).

While environmental investment represents the economic components with the same aim of protecting the environment, the utility is long-lasting. These are the costs of goods which, by their characteristic of long-term use, are considered fixed assets.

Environmental investments can be divided into tangible assets (e.g., sewage treatment plants, production and process equipments, etc.) and intangible assets (e.g., patents, deferred charges, etc.).

The second criterion of classification is based on the discretion with which it is incurred.

The economic component in question, for the purpose of business, may be further classified according to the degree of discretion when they are incurred as discretionary costs and unavoidable costs. The former are voluntarily incurred by the enterprise to prevent, reduce, or repair damage to the environment or to preserve renewable and nonrenewable resources.

Unavoidable costs are incurred instead, in compliance with legal provisions that impose conducts that must be respected, the violation of which may result in penalties or fines.

The third criterion relates to the time when costs were incurred. Concerning this, we can consider the different times they refer to, as costs related to environmental damage caused in the past and not related to current operations. In this case we can consider: costs for environmental liabilities; costs relating to environmental influences produced at present and due to current operations; finally costs relating to environmental influences, which will be produced in the future, but due to current operations.

A final criterion of classification refers to the nature of the same. In fact, special attention must be directed to environmental investments, which can be distinguished, according to their nature, in:

- a. Physical investments: The investment materials found within the structural elements of the environmental management relate to land and buildings, plant and equipment, and other assets.
- b. Intangible investment: Costs of research and development supported under the protection of the environment, patent rights and rights to use, and others.

Finally, the operating costs relating to environmental management can be distinguished according to their nature, in the following categories: material costs, cost of services, costs for leasehold, personnel costs, depreciation, financial charges, and extraordinary charges.

In recording environmental costs, the degree of detail should be taken into account and also for measuring the environmental costs if these are regarded as costs that can be measured by market prices or if they are a result of estimates. Also there may be different requirements for their detection, including a restrictive approach, which requires the presence of environmental costs as a fraction of the costs that are detected; it recognizes environmental costs as "pure," caused entirely by the environmental and mixed components, which have a partial component of the environmental type and are not detected as such. The approach is considered

better than pro-rata, which notes a share of environmental costs in addition to the pure mixed costs. Finally, one can also use a broader approach, in which all costs are considered environmental, even mixed costs.

Concerning approaches of computing, it is better to use the integrated information system with the planning and control systems (Burrit and Shaltegger 2001).

3.4 Environmental Accountability: An Overview of Meaning and Models

In this section, we want to treat external communication of the environmental variable. In this context, it seems particularly useful to highlight the trend to a measurement system and integrated communication (Eccles and Krzus 2010; Paternostro 2012; Busco et al. 2013). This idea is not shared by all, as can be seen from the following words: “These are not the only attempts to offer a new integration of the economic, the social and the environmental (Mathews 1997) but they should provide a taste of the admirable intentions that motivate integration: even if the results remain largely unsatisfactory. What is important, as we stressed earlier, is that these categories of approaches in combining the economic, the social and the environmental, are by no means fair. Indeed, it is probably a very fine line, more of an intention than a fact, which separates these attempts at an integrated accounting for social, financial and environmental issues from the attempts (in our mind more realistic and transparent) at producing a multiple of accounts” (Gray et al. 2014, p. 220).

In addition to the different positions, which are treated in a special chapter, we want to analyze accountability, in the light of external communication, which is revealed mainly to contain the environmental variable. With regard to a definition of accountability, you can read “Accountability expresses the information responsibility of the same enterprise, substantiates that system of internal and external communication which finds its place in full transparency and outcome control” (Matacena 2005, p. 146). Rusconi, too, on this matter: “. . . accountability may be understood as the duty and the responsibility of explaining and justifying, to all concerned, that which is being done in order to comply with income, economic and other kinds of commitments undertaken with business interlocutors” (Rusconi 2002, p. 229).

The following is a summary of mandatory and voluntary accountability tools, as can be seen in Table 3.6.

In addition, to clarify the type of beneficiaries to whom the information is directed as primarily voluntary, Table 3.7 shows the distinction between stakeholders and stockholders including some tools that are best suited to meet their needs.

Table 3.6 Mainly voluntary accountability tools

Type of instrument	Mandatory	
	Compulsory instruments	Mainly voluntary instruments
Traditional instrument		
New instruments about social, environmental, and ethical reporting		<ul style="list-style-type: none"> – Environmental report – Sustainability report – Social report – Integrated report

Table 3.7 Accountability instruments/tools

Subject(s)	Tools
Stockholders	Financial statement
Stakeholders	Financial statement Environmental, social, and sustainable report

Table 3.6 shows what may seem clear at first glance and which sometimes lead to quite sketchy and not very truthful interpretations, so we feel obliged to explain the meaning of the said table.

First of all it is not to marginalize the shareholders, to whom only the information derived from the financial statements is aimed, but it is intended as a way to include everybody in the external communications of the enterprise.

In fact the statement “good ethics is good business” must be connected to globalization, which is changing many aspects of the context in which the enterprise operates, so the focus could shift from the internalization of social responsibility to its exclusive demonstration outside, through accountability.

Other problematic situations are envisaged by this author, such as “One could even argue that highly competitive markets provide greater opportunities for illegal and non ethical behaviour” and again “It would be first the economic imperative, and only secondarily the societal concerns, that would largely define both the nature and extent of good corporate conduct” (Sethi 2003, p. 24).

It is in consideration of this point of view that we approach the subject of the environmental report with a nod to other types of instruments.

To extricate the panacea patterns that emerge on social issues, and environmental sustainability, we narrow the scope of observation to some of those, which is very interesting.

The first type of tool that we analyze is the environmental report, supported by a number of national and international standards, which began, particularly in Europe, in 2001, because of concerns generated by high-profile ecological disasters.

Among the sources, indicating a certain cogency to this tool, we can mention the EU Commission’s recommendation of 30 May 2001/453/EC, which advises,

among other things, highlighting separate environmental information (Article 11) in the financial statements, although it should remain connected to the same. It is also necessary to take IFRS recommendations into account, highlighting this information in the financial statements and the framework law on accounting – Italian environmental bill No 900 – where, as from the 2004 budget, the regions, the provinces, the States, and municipalities must approve the “environmental accounting documents” (Art. 2) together with other planning documents and also private companies, if they draw up budgets and have access to many facilities in terms of tax credits.

Another approach to this type of budget comes from the “White Paper on the Labor Market in Italy” – October 2001 – the basis for the reform of the labor market laid out by Professor Biagi, where in the second part, he sets out the share of the European Green Book, with the hope that we can “develop a culture toward social responsibility” by adopting codes of ethics and standards of conduct that are “ethical” for the enterprise.

The environmental balance differs from the environmental statement, which is closely and exclusively linked to voluntary access to the EMAS project, which was sponsored by the EU and has been set up to inform external parties, through a series of documents, including the flows of physical quantities generated to and from the ecological environment; the second includes a report of the expenses and environmental investments, and the third concerns the system of environmental indicators (Cisi 2003, p. 60).

In addition there are other operating models which apply, more or less faithfully, the model of environmental balance presented, and there are also processes for the management of environmental resource (Cavicchi et al. 2003, p. 141).

In this regard, we want to emphasize how the attention for the environment variable seems to be oriented to large targets, such as the survival of future generations, or goals regarding sustainability policies, hence the sustainability report. But it seems that we have missed the point of putting the person at the center of the environment and man’s relationship with the environment, which, in my opinion, is recovered with the social and ethical aspects.

Also of interest is the Paris discussion (2003), which proposes a model of accountability “environmental ethics”; in doing so, no doubt, it is at the forefront as regards aspects of reporting defined as modern, although we note an excessive imbalance on the environmental question, understood in an ecological sense. Moreover, also as regards the author of the above, it is important that communication, the internal and external parts of the feedback within the enterprise, is capable of generating circuits of learning and positive development of the culture, for the enterprise to develop in the most suitable environment, and finally the enterprise must communicate how it is creating a social value, as well as an economic one (Paris 2003, p. 20).

The sustainability report, however, is the result of quality and quantity, which is designated as a result of the attention on climate change, the survival of the planet, and the equitable distribution of resources globally. Hence, the World Commission for Environment and Development initially (the World Council for Economic

Development), established in 1983 by the UN, whose final report was issued in 1987 under the name of the same Committee Chair and the “Brundtland Report” thereafter, outlined a concept for a relatively new development, which takes into account the aspects listed above (Baldarelli 2010).

This was followed by a series of lectures, which focused on the survival of planet Earth in the light of climate change and the hole in the ozone layer. The main points of the Kyoto agreement in 1997 and later the conference of the Hague, and final definitive agreements which were signed during the Bonn meeting in 2001, required agreements between the countries for development in the light of sustainability, where each has promised to respect rather rigid parameters for the preservation of the planet.

The sustainability report, in its most recent version, is the result of the integration of economic, financial, social, and environmental information and also responds to the principle of equity among and between generations, maintaining an appropriate balance between local and global development, satisfying, at the same time, the needs of the community. Lastly, qualifying this model is the integration of the enterprise’s policies with regional, national, and supranational authorities.

It is in the light of this that the GRI has been established, in order to improve, from the inside, the relationships between companies and stakeholders.

The GRI has its roots in CERES (the Coalition for Environmentally Responsible Economies) which, at the request of UNEP (United Nations Environment Programme – a body within the UN) in 1997, gave rise to the GRI, revised later, and which will be the subject of discussion in a special paragraph.

Its latest version was launched internationally; here the GRI (Global Reporting Initiative), through the G4 exam “Sustainability Reporting Guidelines,” seeks to combine economic, social, and environmental issues through a series of indicators and a process management and auditing of relations with the environment and with stakeholders and identifies a standard statement of “sustainability.”

Let us consider the company budget, which is a document whose components can be non-accounting, alongside what is traditionally set as the aim to give information on the results of company management, which also operates considering the objectives of a good environmental and ethically acceptable values.

It is, more precisely, a “diagnostic tool of the social climate in which the enterprise is experienced” and a “tool quantifier in the final balance of the effects of social policies and strategies taken by it” (Matacena 1984, p. 101).

The discussion that follows examines the objectives of the current state of the art, which it considers as being a minimum content of the social report. Ruston’s “open” model is taken as a reference, which has ethical and regulatory foundations that are at the basis of the social report (Rusconi 1988, p. 46).

We consider Table 3.8 that shows the combination of compulsory and voluntary information.

The literature, where Gray (2000) is one of the leading exponents, considers social accounting as having the same weight as conventional accounting and not

relegated to a minority resemblance of other authors (Fadey and Yamey 1974, p. 131).

An interesting contribution to the effective validity of the documents of accountability depends on the people who are appointed to compile them. This can be seen in the subdivision into four quadrants as suggested by Gray, in which the two dimensions of analysis are the subjects to whom to disclose information about social and environmental accounting.

The subdivision, which the author promises, explains many ideas, so we list in Table 3.9 and then comment on it, which is always according to the same authors.

Let us explain the different quadrants. In the first, the production of information is carried out by the enterprise and only for the enterprise, so it is part of the normal activities of the entity without having an external significance.

In the second quadrant instead, external experts are called on, who provide information about the aspects in question, without seeking the consent of the enterprise itself, which is seen as being almost forced to provide this type of process, even when they do not feel the need for this.

The third quadrant, which is the social audit itself, instead views the checks and reports prepared by external parties, to be allocated to the external environment, with which the enterprise interacts. We refer directly to the author’s statements in order to understand his opinion: “Their importance cannot be overestimated in that they, in the simplest sense, represent the society’s response to a failure of accountability” (Gray 2000, p. 11), thus emphasizing that the presence of independent

Table 3.8 Accountability tools

Type of instrument	Mandatory	
	Compulsory information and instruments	Mainly voluntary instruments
Traditional instrument	Financial and economic information – financial statement	
New instruments about social, environmental, and ethical reporting		– Environmental report – Sustainability report – Social report – Integrated report

Table 3.9 Social and environmental accounting and reporting

Destination	Makers	
	Internal	External
Internal	1 EMAS	2
External	4	3

Source: Gray (2000, p. 9)

external auditors forces the organization to work toward them and to attract consensus and attention, both for the enterprise that is being revised, but above all for their good work, exploiting the enterprise itself and decreeing the complete failure of the autonomous process initiated by the external reporting of the enterprise. In fact, what is of importance is, above all, the balance of data, information accuracy, and neutrality, while the actual information is set aside and this is a process that, at its conclusion, remains an end unto itself.

The fourth quadrant is instead the expression of the ongoing commitment by the enterprise to a systematic external communication of the results produced internally by the same and therefore a realization of a long process aimed at meeting the needs of external as well as internal stakeholders (Gray 2000, p. 12), compared to solutions of image, that penetrate more easily in the first three hypotheses presented.

Hence, the need for new forms of orientation and measurement requires attention in theoretical research and experimentation.

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Chapter 4

Toward the Future Perspectives of Business Integrated Measurement and Communication

Mara Del Baldo and Ninel Nesheva-Kiosseva

4.1 The IR: Integrated Report and Integrated Reporting

This chapter introduces the topic of integrated reporting (IR) and integrated report (IR), which is one of the new frontiers with implications both in terms of academic researches and management applications, on which the scholars who contribute to the development of the Social and Environmental Accounting Research (SEAR) have been confronted in the recent years. This frontier marks the transition from the financial reporting system to the IR systems, involving new trajectories and theoretical and political processes.

There is a growing international interest in the concept of integrated (financial and non-financial) reporting, as evidenced by the recent release of the International Integrated Reporting Framework which represents the world's first International Integrated Reporting Framework, released in December 2013 (IIRC 2013b). Such an interest arises from a deep need, as synthesized by the following words: "The world needs a comprehensive reassessment of our understanding of value—its parameters and its effects—to restore trust in economic and business decision-making, and achieve investment that contributes towards financial stability and sustainable development. We must ensure that business models sing to the tune of a value creation model fit for the Twenty-First Century" (Jonathan Labrey, Chief Strategy Office, International Integrated Reporting Council—IIRC, Paris, 6 May 2015).

Stemming from this premise, the chapter is structured as follows: in the first part, it explains the concept of integrating reporting and integrated report, its genesis, and its evolution; in the second one, it presents the theoretical framework in which the theme falls; in the third part, it explains the work done by the IIRC (International Integrated Reporting Council) and the main parts of the Consultation Draft of the International IR Framework (April 2013a) and IR Framework (December 2013b). Moreover, attention will address the WICI (World Intellectual Capital

Initiative) and the NIBR (Italian Network on Business Reporting)¹ activities as well as the working groups activities focused on small- and medium-sized (SMEs) companies. Finally, the chapter ends with concluding remarks, insights, and summary.

As one can read in the glossary of the Consultation Draft of the International <IR> Framework, “Integrated Reporting is a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation” (IIRC 2013a: 34). IReporting can be conceived as “a process of communication, of value creation over time and a periodic integrated report” (Consultation Draft of the International <IR> Framework, 2013a: 8). “A corporate reporting system that encourages integrated thinking, connecting the management of multiple resources—from financial and physical resources to intangibles such as human, social and intellectual capital—to the strategy and performance of the business, is an essential part of this new model. We call it Integrated Reporting” (J. Labrey, CSO IIRC, 2015).

At the same time, an integrated report (IR) is a document that embeds both financial and non-financial information, typically on environmental, social, and governance issues. IR represents a form of voluntary disclosure and has been defined as “A concise communication about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term” (IIRC 2013: 34 Consultation Draft of the International <IR> Framework, 2013a: 8).

One Report doesn’t mean only one report. It simply means that there should be one report that integrates the company’s key financial and non-financial information (. . .) One report has two meanings: the first and narrow meaning is a single document, either in paper or electronic form (. . .) The second and broader meaning is reporting financial and non-financial information (Eccles and Krzus 2010: 10–11).

While no single, agreed-upon definitions of integrated or combined report and reporting exist yet, below are some representative samples.

According to the Integrated Reporting Committee of South Africa “An integrated report tells the overall story of the organization. It is a report to stakeholders on the strategy, performance and activities of the organization in a manner that allows stakeholders to assess the ability of the organization to create and sustain value over the short, medium, and long term, which is based on financial social, economic and environmental systems and on the quality of its relationships with stakeholders.”² In other words, it is a report on the value story of the company and on the drivers of its value.

According to the International Integrated Reporting Council (IIRC), integrated reporting demonstrates the linkages between an organization’s strategy,

¹See www.nibr.it

²Integrated Reporting Committee (IRC) – South Africa (<http://www.sustainability.sa.org>; www.saica.co.za)

governance, and financial performance and the social, environmental, and economic context within which it operates. By reinforcing these connections, integrated reporting can help businesses to take more sustainable decisions and enable investors and other stakeholders to understand how an organization is really performing. And yet, we can read: an IR (integrated report) brings together material information about an organization's strategy, governance, performance, and prospects in a way that reflects the commercial, social, and environmental context within which it operates. It provides a clear and concise representation of how an organization demonstrates stewardship and how it creates and sustains value (IIRC 2011a, b, 2012a, b).

IR reporting aims to catalyze a more cohesive and efficient approach to corporate reporting that communicates the full range of factors that materially affect the ability of an organization to create value over time and draws together other reporting strands. Coherently, integrated reporting objectives are:

- To inform the allocation of financial capital that supports value creation over the short, medium, and long term
- To enhance accountability and stewardship with respect to the broad base of capitals (financial, manufactured, intellectual, human, social and relationship, and natural) and promote understanding of the interdependencies between them
- To support integrated thinking, decision-making, and actions that focus on the creation of value over the short, medium, and long term.

With regard to audience for integrated reporting, an integrated report should be prepared primarily for providers of financial capital in order to support their financial capital allocation assessments. Nevertheless, an integrated report and other communications resulting from integrating reporting are of benefit to all stakeholders interested in an organization's ability to create value over time, including employees, customers, suppliers, business partners, local communities, legislators, regulators, and policy-makers.

Today, more and more companies are publishing corporate social responsibility or sustainable reports to supplement their annual report. Many companies voluntarily produce integrated reports in various formats, but few jurisdictions mandate this type of reporting (Deloitte 2011; Deloitte and Touche 2011). However, the problem of how to integrate the financial reporting with the non-financial reporting has not yet been solved. The presence of different frameworks for financial reporting (IAS, International Accounting Standards, and IFRS, International Financial Reporting Standards, principles), as well as the presence of several standards for non-financial reporting (GRI, PwC Value Reporting Initiative), makes the process of integration difficult.

In recent decades, several contributions have addressed the issue of the relationship between financial and non-financial reporting and focused the limits (transparency, incompleteness, redundancy) of these different approaches and communication tools. At the same time, there is an increasing speculation that integrated reporting constitutes an affective and preferred solution. Moreover, studies and empirical research in this area have, however, mainly focused on

large enterprises, neglecting the integrated reporting of small- and medium-sized business (SMEs) and the factors that may facilitate its adoption and effectiveness.

Thus, among the number of initiatives developed by governmental and nongovernmental groups, the IIRC holds the promise of increased collaboration, convergence, and conformance among the emerging frameworks of standards in the new perspective of integrating reporting (IIRC). Even if only one country has mandated comprehensive, fully integrated reprint to date (South Africa), other countries (Denmark, Sweden, and the UK and, more recently, Australia, Brazil, India, and the EU) and several international organizations such as the Global Reporting Initiative (GRI), the Carbon Disclosure Project (CDP), and the Climate Disclosure Standards Board (CDSB) have adopted reporting requirements to various extents, expecting companies therefore to disclose with complete transparency non-financial information.

Nevertheless “despite the lack of widespread mandatory reporting on ESG issues, the integrated reporting movement continues to gain momentum” (Deloitte 2011: 6). In contrast to intangible assets and KPIs separate ESG (environmental, social, and governance) or CSR (corporate social responsibility), reports are being issued by an increasing number of companies in different countries for the period 1992–2008. A 2007/2008 survey by KPMG and SustainAbility of more than 2000 business people, NGO members, labor leaders, investors, consultants, and academics provides conclusive evidence that broad public opinion across different stakeholders strongly supports the idea of “one report”: 70% of respondents agreed with the statement “Future sustainability reporting should be integrated with the annual report” (Eccles and Krzus 2010: 167; Eccles and Serafeim 2011; Krzus 2011).

Departing from these premises, the arising questions are: Do companies move toward integrating reports? Is this the coming age of Integrated Reporting? These questions are the focus of the debate that in recent years is affecting the academic, business, and consulting world, and they seem to find a positive response, in parallel to the spread that integrated reporting is having in large enterprises (Di Piazza and Eccles 2002; Eccles and Krzus 2010; Eccles and Serafeim 2011; Arnold et al. 2012; Zambon 2015). This spread is the result of a process that began in the last decade, of which an important first step occurred on 2 August 2010, when the Prince’s Accounting for Sustainability Project (A4S) and the Global Reporting Initiative (GRI) formed the International Integrated Reporting Council (IIRC). The principal objective of IIRC was “to create a globally accepted framework for integrated reporting. Such a framework will seek to bring together financial, environmental, social and governance information in a clear, concise, consistent and comparable format.”

After a “long (and not yet complete) journey” begun some years ago,³ on April 2013a, the IIRC issues the “Consultation Draft of the International IR Framework”:

³IIRC started its work at first producing a discussion paper, then a Prototype Framework, up to the Consultation Draft that from 16 April to 15 July 2013 has been subjected to comments and suggestions for the definition of the Framework.

the final version had been published within December 2013 with the aim to “help businesses communicate value in the twenty-first century.” Moreover, the IIRC launches a “pilot program” for IR adopters to catch structured feedback on key building blocks of the Framework and to inform its development and practical application (IIRC 2013c, 2014a, d).

The IR adopters are firms that are members of the IIRC pilot program on IR. The members of this pilot program are strongly engaged with the IIRC and other community members through individual meetings, webinars, regional and sector networks, conferences, and a dedicated pilot program community website. This wide-ranging interaction provides the opportunity to discuss and challenge developing technical material, test its application, and share learning and experiences on IR (IIRC 2012b).

The interest on IR by regulators and practitioners (Deloitte 2011; Ernst and Young 2012; KPMG 2012; PwC 2009, 2010) is significantly increasing: since the establishment of the IIRC in October 2011, over 85 companies and more than 30 investors have officially joined the IIRC pilot program on IR; moreover, in February 2013, the International Accounting Standards Board (IASB) and the IIRC signed a Memorandum of Understanding to develop the international “Integrated Reporting Framework” (IASB and IIRC 2013). Other important steps in the continuing path toward integrated reporting will be outlined in subsequent sections.

4.2 The Theoretical Framework: Financial and Non-Financial Information

Non-financial information comprises three main categories: intangible assets (intellectual capital and other intangibles), key performance indicators (KPIs), and environmental, social, and governance (ESG) parameters (Perrini 2006; Perrini and Vurro 2010; Bontis 2001; Kianto 2007; Zambon 2011, 2013; Zambon 2014a; Labrey 2015; ICGN 2008). Non-financial information is strictly related to accountability. Nevertheless, we cannot ignore that “Accountability can be simply defined as the duty to provide an account (by no means necessarily a financial account) or reckoning of those actions for which one is held responsible. This involves two streams of responsibility: the responsibility to undertake certain actions and the responsibility to provide an account for these actions” (Gray et al. 1996: 38).

In recent years, awareness has increased concerning the difficulty traditional systems of financial reporting have in thoroughly representing the complexity which typifies companies (Andriessen and Tissen 2001; Lev 2001, 2004; Pike et al. 2001), as well as justifying the stock value attributed to them (Andriessen 2002) and supporting the judgment of stakeholders regarding their performances (Elkington 1997; Kaptein and Wempe 2002).

The financial report does not reflect the real strengths of a company since financial information does not provide an understanding of the origin of

competitiveness, the value chain as a combination of peculiar intangibles, the sustainability of strengths, and the long-term value of a company. In this situation, financial analysts cannot properly evaluate a company.

The growing inadequacy of traditional systems of financial reporting in answering increasingly structured requests for information has been revealed in a loss of trust in the reliability of information presented in the financial report, too much of a focus on economic performance, and an insufficient consideration of financial, operational, strategic, and reputational risks (Slywotzky and Drzik 2005; Fombrun and Gardberg 2000; Rayner 2003). Enron and WorldCom in the USA; HiH, Ansett, and Harris Scarfe in Australia; and Swissair and Parmalat in Europe are just some examples which demonstrate the failure of international standards (IAS and IFRS) in ensuring the reliability of information contained in the financial report (Satava et al. 2006). In traditional systems of financial reporting, weak points seem to remain despite the tightening of regulations. Furthermore, there has been an intensification in the efforts of national and international organizations to improve the quality of information contained in the financial report (Archambault and Archambault 2005). In particular, the IFRS practice statement on management commentary uses KPIs (key performance indicators) to best represent the system of the company's risks and resources and to visualize intangible resources.

Against such a gradual loss of informational power, there has been a rising demand in information requested by investors (Wasly and Shuang Wu 2006) and an increase in the interests of managers to make available a system of information necessary for guiding increasingly complex organizations (Mendoza and Bescos 2001).

The need to observe and account for the effects generated by corporate management on the globality of performance, sustained by the stakeholders view (Freeman et al. 2010), has stimulated the managers' interests in extending the range of observation to the perspective of the triple bottom line (Elkington 1997; Clarkson 1995; Davempont 2000). Only the monitoring of performances in a broad sense (the so-called holistic view) allows the measurement and management of corporate sustainability (Funk 2003; Kiernam 2001; Wheeler et al. 2003). The financial reporting represents a limited response in this sense, as it does not allow for a complete vision of economic, financial, social, and environmental performance and is therefore considered an insufficient tool for guiding corporate and stakeholder decisions (Jensen 2001; Reynold et al. 2006; Winn 2001). Furthermore, it is limited in expressing judgment on resources which determine prospects of future performance (Barney et al. 2001) and on intangible resources (Aaker 1989).

Over the past decade, companies have in fact been facing growing pressures—and consequently, they have been making growing efforts—to address social and environmental issues (Young and Marais 2012; Arvidsson 2010; Basu and Palazzo 2008; Kolk 2008; Kolk and Pinkse 2010) and to take into account the conformance to economic, social, and ethical expectations from diverse stakeholders groups (Freeman et al. 2010) as well as their impact on society (Lee 2011). Civil society's awareness of the need for CSR has rapidly increased in the last years. CSR—defined as the extent to which firms have integrated on a voluntary basis social and

environmental concerns into their ongoing operations and interactions with stakeholders (Godoz-Diez et al. 2011; Uhlaner et al. 2004)—is “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary bases” (EC 2001). “Each of these diverse efforts shares the common aim: the attempt to broaden the obligations of firms to include more than financial considerations” (Freeman et al. 2010: 235). Such a broad theme has in the past decade attracted the attention of researchers from diverse disciplines, as well as policy-makers and economic operators (Garriga and Melé 2004).

According to companies’ strategy of transparency, financial and non-financial information can be the basis for corporate sustainability reporting (Cisi and Bechis 2007). Recently, there has been a substantial increase in corporate awareness of environmental and social performance and a concomitant desire to publicly report such results (Murphy 2005) that derive from a variety of reasons: to comply with regulations, to reduce the cost of future compliance, to comply with industry environmental codes, and to improve the relations with the stakeholders. Moreover, reasons of social and environmental reporting are related to expected improvements in competitive advantage, in a company’s legitimacy and reputation, and are connected to a sense of social responsibility and desire to adhere to societal standards (Morhardt et al. 2002). As a result, companies, and especially multinational corporations, are increasingly adopting CSR and sustainability reporting practices (Conley and Williams 2005; Cooper and Owen 2007). A KPMG survey has revealed that in 2011, 95% of the 250 largest global companies now report on their CSR activities.

The growth in ESG reporting is testified by different empirical surveys (Eccles and Krzus 2010: 97). At the same time, CSR reports are being issued by an increasing number of companies, for the period 1992–2008. With specific reference to Italy (which lies at the sixth place), about 1000 companies adopt it. The first place is occupied by the UK (3000 companies), followed by the USA, Japan, Germany, and Australia. In most countries, today, assurance of non-financial information is completely voluntary. However, a 2008 study by KPMG found a clear trend in the number of companies getting an assurance opinion on their CSR report, with more than 50% of 2008 reports in France, Italy, Spain, and the UK having one. The USA had the lowest percentage, at 14%, but it was up from 2% in 2002; the mean for the Global Fortune 250 was 40% (KPMG 2008: 56–58). The increase in ESG reporting reflects the growing understanding on the part of major corporations around the world of the crucial relevance of this information not only to the financial community.

While extensive research exists on the interrelationship of ESG disclosure and performance (e.g., Margolis et al. 2007; Orlitzky et al. 2003), few studies so far have addressed the question of how financial statement users process ESG information and integrate them into their judgments. In a recent study, Arnold et al. (2012) found that users of stand-alone sustainability reports fully adjust their valuations to the level of integrated (financial and sustainability) report users following information about *bad* ESG performance. However, none of the stand-

alone report users adjust their valuations following information about *good* ESG performance. Thus, financial statement users asymmetrically anchor on their financial value judgments when assessing ESG information provided in a stand-alone report.

Even if accurate financial information remains extremely important, it is becoming a less and less complete story in a knowledge economy where an increasing percentage of a company's intangible assets are not shown and included in the balance sheet (Healy and Palepu 2001; Gelb and Zarowin 2002; Lundholm and Myers 2002). On the one hand, increasingly more managers, analysts, and investors are directing their attention toward KPIs to make projections about future financial performance. On the other hand, environmental and social metrics have become more important to investors. "At the same time that the complexity of financial reporting has increased, the need for non-financial information has increased" (Eccles and Krzus 2010: 79).

Both these tendencies—the need to recognize and assess the economic and financial performance—as well as the willingness to include the repercussion of corporate activity within the profile of ethical, social, and environmental performance, and therefore the responsible conduct of companies and their leaning toward responsibility, explain the increasing need for new tools and methods of accounting (social reports, environmental reports, sustainability reports, codes of conduct and ethical codes, intellectual capital reports).

Different frameworks have been proposed on how to use non-financial information to supplement financial reporting. Among the models reviewed in the ICAEW report of the Institute of Chartered Accountants in England and Wales (ICAEW 2003)—in which report 11 proposed business reporting models were included—the most widespread are the balanced scorecard (Kaplan and Norton 1996), the sustainability report guidelines developed by the GRI (GRI 2014—G4), and the Value-Reporting Framework developed by PwC (2009). The first one was developed mainly for internal management and reporting purposes, although it is relevant for external reporting as well. The GRI and PwC began their work in the late 1990s. The goal of GRI was to produce a reporting framework for providing stakeholders with relevant information on a company's economic, social, and environmental performances. In contrast, the PwC Value Reporting Initiative (the so-called corporate reporting) was focused on identifying information in which analysts, investors, and chief financial officers were interested in making investment decisions that went beyond the required financial information, but with a little attention to ESG (environmental, social, and governance) factors and introducing industry-specific frameworks, the KPIs, and associated XBRL (extensible business reporting language) taxonomies, developed on the basis of global surveys of analysts, investors, and executives of different industries (Eccles and Krzus 2010).

The response companies have shown to the loss of the informative power of traditional annual reports has been through the development of the aforementioned complementary systems of reporting. These provide management with the opportunity to make available information which is of use in assessing the effectiveness and efficiency of the company with regard to areas of performance not considered

in the financial report as well as to add a voluntary communication tool in the disclosure practices of the company.

Initially, the need to make available information essential for responsible management capable of contributing to the creation of corporate value favored the start of complementary accountability systems in the form of environmental and social reports. Subsequently, these two documents came together to form a single statement seeking a homogenous vision of economic-financial, environmental, and social results (Higgins 2002) and played a part in the development of sustainability reports. The complementary informational systems are included in both sustainability and intellectual reporting. The former system accounts for the company's sustainability over time and represents in a linked form economic, social, and environmental performance. The latter system aims at offering a representation of intangible resources available to the company (Pedrini 2007). The intangibles are the main value drivers (Edvinsson 1997) and are referred to the concept of intellectual capital (IC) which embraces human, organizational, and relational capital (IFAC 1998, 2013, 2015; WICI, World Intellectual Capital Initiative⁴) (Sveiby 1997a, b; Nahapiet and Ghoshal 1998).

Since the 1990s, instruments for measuring the companies' intangible resources have been developed (Carrol and Tansey 2000; Sullivan and Sullivan 2000; Zambon and Marzo 2007) as well as systems which on one hand tend to attribute a monetary value to the intangible resources of a company based both on financial quantitative methods (founded on market values) and time discounting of cash flows generated by intangible resources (Lev and Zarowin 1997) and non-financial ones (Roos and Roos 1997; Lev 2001; Edvinsson 1997; IFAC 1998). Such paths have however highlighted numerous elements of convergence between sustainability and intangibles reports as well as between financial and non-financial reporting (Molteni 2004; Pedrini 2007; Eccles et al. 1999; Eccles and Krzus 2010: 10). However, there are still many difficulties tied to the lack of homogeneity in the standards of drafting the two documents.

On the one hand, the hypothesis of a single integrated report is supported by the existence of elements which pool together experiences of sustainability reporting and intellectual capital reporting. A first element is that for both the methodology envisages the use of non-financial quantitative indicators. A second element concerns the attention divided between the management of human capital and the management of relational capital which find space both in sustainability and intangibles reports.

On the other hand, the complete observation of performance in terms of tangible and intangible resources and stakeholder management is essential to verify the strategic approach to responsibility and sustainability and to create "holistic" value (economic, social, and environmental value). A system of integrated reporting does indeed offer an informational heritage far superior to the one provided by the separate drafting of the two reporting systems as it allows a simultaneous

⁴See www.worldwici.com

monitoring of the results of stakeholder management activities and the performance obtained by a management of tangible and intangible resources. It also allows for an understanding of the relationships between them.

Different empirical researches reveal that there is growing commitment to integration between the financial and sustainability report and that a gradual integration between sustainability report and intellectual capital report is already happening.

The first trend is confirmed both by the use of a model for calculating distributed and created added value (a model which enables the use of information in the financial report to indirectly measure the level of satisfaction of stakeholders' economic expectations and to understand the level of distributional equity on the part of the company) and by the publication of the two documents in a single moment using a single channel of communication.

With regard to the second trend, the process of integration between sustainability and intangibles reporting manifests itself in the introduction of a synthesis of results obtained relative to intangible resources in the financial report.

The frequency with which such processes of convergence have been observed reveals that there is a level of descriptive and strategic integration which is gradually developing. The main factors which favor integration are the attempt to manage the company in the perspective of the bottom line and the willingness to respond to corporate responsibility as a dimension of the strategy.

Firstly, attention to the triple bottom line is revealed as a factor capable of stimulating the development of integrated reporting systems, corroborating the hypothesis of a greater benefit in observing performance in an extended (holistic) way through a combined accountability of economic, financial, social, environmental, and ethnic performance, which allows for a homogenous vision of the company and a complete judgment of corporate competitiveness.

Secondly, companies have a greater tendency to develop a system of integrated reporting in which the undertaking of responsibility is a dimension of the strategy and in which the activities of stakeholder engagement (detailed in the sustainability reports) are considered essential in order to generate competitive advantages and to integrate the results of intangible resources management within the sustainability reports.

Thirdly, the tendency toward a system of integrated reporting is stronger in companies in which responsibility is a dimension of the strategy.

In fourth place, a feature which joins the companies committed to the development of systems of integrated reporting is the attempt to predominantly use narrative (qualitative) indicators compared to quantitative types.

Finally, companies are exploring integration and interpreting the development of an integrated accountability system as an opportunity to understand whether the practices of responsibility are contributing to the development of intangible resources.

To complete this discourse on the premises and the causes of the integrated reporting diffusion, Fig. 4.1 provides a synthetic representation of the IR's evolution.

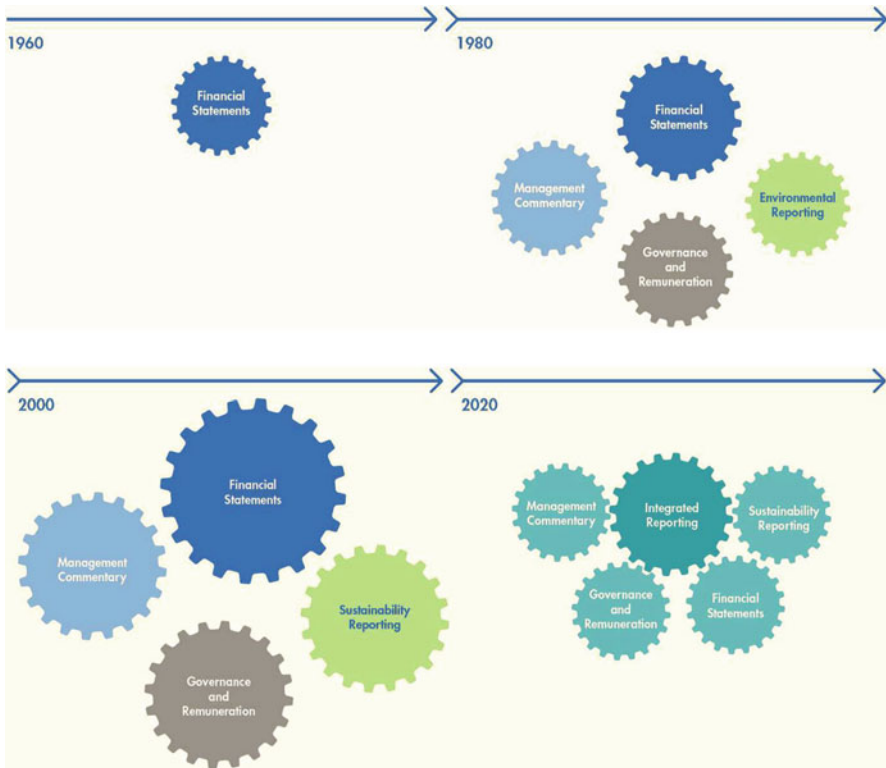


Fig. 4.1 The evolution of reporting. Source: Zambon (2015)

4.3 Premises, Origins, and Strengths of Integrated Reporting

Integrated reporting originates from two distinct fields of accounting practice that are financial and sustainability reporting⁵ which, until recently, developed along parallel tracks, addressing their respective attention to different performance indicators and users, leading practitioners to often use two different languages, formats, and reports.

The formation of the IIRC with representatives from the worlds of both financial and sustainability reporting is exploring whether these two strands can, in some manner, be merged (Eccles and Krzus 2010).

⁵The term sustainability report is here used as a synonym for corporate social responsibility (CSR) report; environmental, social, and governance (ESG) report; triple bottom line report; and other similar terms.

There is a wide and established literature on the topic of voluntary disclosure of non-financial information (Gray et al. 1995a; Guthrie and Parker 1990; Healy and Palepu 2001) that have highlighted that firms may use voluntary reports as a signal of their superior commitment to sustainability but also to pose as “good” citizens even when they do not have a strong engagement to social and environmental issues. By contrast, there is still a lack of academic studies on IR, with very few exceptions (Eccles et al. 2010, 2011; Eccles and Krzus 2010; Jensen and Berg 2012). Moreover, there is a recent call to more empirical investigation on legitimating the role of corporate ESG disclosure (Cho et al. 2012).

Starting from the 1990s, social and environmental accounting has drawn increasing attention by accounting scholars (Burritt and Schaltegger 2010; Gray et al. 1995a, b; 1996). Nevertheless, although with very few recent exceptions (Dhaliwal et al. 2011, 2012; Kim et al. 2012), many “leading schools”—i.e., mainstream positive accounting scholars—did not embrace such research stream (Deegan 2002).

At the same time, while the interest in social and environmental accounting research has been rising, the concern of a lack of true commitment to sustainability issues by sustainability reporters has drawn the attention of a growing number of researchers, particularly in the realm of interpretative and critical streams (Gray et al. 1995c; Lodhia and Jacobs 2013; Parker 2005; Owen 2008; Tinker et al. 1991).

Hopwood (2009) raises the concern that corporations can use environmental disclosure not for a greater transparency but to reduce the “question being asked to the company.” Owen et al. (2000: 85) define managerial capture as the idea of “management strategically connecting and disseminating only the information it deems appropriate to advance corporate image.” Some authors define this behavior as “greenwashing” (Mahoney et al. 2013; Neu et al. 1998) and argue that the increase in social disclosures represents a strategy to alter the public’s perception about the legitimacy of the organization. In other words, this means that firms may use social and environmental disclosures in response to public pressure and to pose as “good” corporate citizens even when they do not have a strong social and environmental commitment.

Specifically, two competing theories have emerged: on one hand, voluntary disclosure theory (VDT) (Dye 1985), focusing on motivations behind social and environmental disclosure (Fifka 2013), and, on the other hand, legitimacy theory (LT) explanation, since there is considerable evidence of the corporate use of CSR disclosure as a tool of legitimization (Cho et al. 2012; Cho and Patten 2007; Patten 2002).

The majority of corporate social and environmental disclosure studies have employed LT as the main interpretative focus and provide support to its assumptions (Aerts and Cormier 2009; Cho et al. 2012; Cho and Patten 2007; Deegan and Gordon 1996; Patten 2002). However, over the past decades, other researchers have provided mixed evidence (Al-Tuwaijri et al. 2004; Clarkson et al. 2008; Cho 2009; Fekrat et al. 1996; Freedman and Wasley 1990; Hughes et al. 2001; Ingram and Frazier 1980; Wiseman 1982). Some of these findings are consistent with voluntary

disclosure theory (VDT) (Al-Tuwaijri et al. 2004; Berthelot et al. 2003; Brammer and Pavelin 2004; Clarkson et al. 2008; Mahoney et al. 2013).

Recently, Gray et al. (2014) underlined that “reporting by US companies of the financial impact of the environment on their operations is irregular and limited” (Gray et al. 2014: 177). Specifically, Gray et al. (2014) identified four different approaches, the fully monetized account, the integrated accounts, the multiple account, and the sustainability accounts,⁶ which produce a “plethora of potential social, environmental and sustainability account of which none is ‘correct’, all have strengths and all have weaknesses” (Gray et al. 2014: 214).

Cho et al. (2012) further affirm that similar situations have occurred in other countries in Europe and conclude that whether or not the investors are much affected by environmental issues, they are not likely to be especially well informed on the subject. Nevertheless we can read: “perhaps this will change as integrated reporting gathers momentum and a more nuanced understanding of risk opportunity (for the organization if not for nature) is increasingly reflected in corporate reporting and their supporting notes” (Percy 2013; Gray et al. 2014: 178). In the early years of the twenty-first century through the direct involvement with leading global professional accounting bodies and the International Federation of Accountants (IFA), the Prince of Wales’ Accounting for Sustainability Project (A4S)⁷ has been a key factor in the collaboration with GRI that has led to the integrated reporting (IR) initiative (Hopwood et al. 2010).

The integrated accounts perspective aims to integrate all the data that encompasses interactions in some composite form of communication which might use financial expression, as well as other means—some of which might be additive and some which might not. Examples of this approach include Schaltegger and Burritt’s application (2000) of Kaplan and Norton’s (1996) balanced scorecard approach, aimed at integrating the environment into decision-making, planning, and control by offering both financial and non-financial strategic targets against which management performance will be measured and rewarded; Guthrie’s suggestion for “extended performance reporting” (Yongvanich and Guthrie 2005) and the integrated reporting framework developed in the UK following the Prince of Wales’s initiative that leads to the aforementioned formation of the Integrating Reporting Committee (Fries et al. 2010; Hopwood et al. 2010).

Although IR embeds both financial and non-financial information that are, respectively, mandatory and voluntary, the choice to adopt an IR in compliance with the IIRC pilot program is completely discretionary. Previous studies argue that companies with poorer sustainability performance have an incentive to use sustainability reporting to alter public perception about their actual behavior (Cho et al. 2012; Cho and Patten 2007; Neu et al. 1998; Patten 2002). Firms with a low ranking may have incentives to use disclosure strategically to alter public perception of their actual degree of transparency around ESG performance and policies.

⁶See Gray et al. (2014, Chap. 9: 213–236).

⁷<http://www.accountingforsustainability.org>

Eccles et al. (2012) show that there is a large and growing market interested in non-financial information, typically environmental, social, and governance aspects. They used data based on three bimonthly periods (starting with November 2010 and ending with April 2011) which take the form of the almost 44 million total hits to the 247 non-financial metrics in the Bloomberg database (a “hit” is defined as every time a user accesses one of the data points). Using data from Bloomberg,⁸ they analyze market interest in more than 247 non-financial metrics available on the database. Focusing on the type of information that users access, they show that the one of the greatest interests is ESG disclosure score. This study highlights that the market is particularly interested in non-financial information and, in particular, in knowing a company’s sustainability ranking as proxy by ESG disclosure score. This metric represents Bloomberg’s ranking of level of a company’s degree of transparency about firm’s environmental, social, and governance (ESG) performance.

Previous studies identified size, leverage, industry, and profitability as factors that affect the level and the quality of CSR disclosure (Cho et al. 2012; Waddock and Graves 1997; Jensens and Berg 2012).

One factor that impacts the level of social exposure is represented by firm size. Larger firms tend to make more extensive environmental disclosures than smaller companies due to a larger public visibility (Cho et al. 2012; Cho and Patten 2007; Cowen et al. 1987; Deegan and Gordon 1996; Gray et al. 1995b; Hackston and Milne 1996; Lang and Lundholm 1996; Patten 1992, 2002).

Another factor is represented by the type of industry and the relative public pressure that characterize it. Prior studies on LT show that firms from industries that are environmental sensitive (e.g., chemicals, metals, papers, and petroleum) tend to disclose more than companies with less exposure (Cho et al. 2012; Cowen et al. 1987; Deegan and Gordon 1996; Hackston and Milne 1996; Patten 1992, 2002).

Other studies propose that firms’ specific characteristics such as *leverage* and *profitability* play a role in explaining voluntary disclosure choices (Aerts and Cormier 2009; Leftwich et al. 1981; Mahoney et al. 2013). Leftwich et al. (1981) argue that social and environmental disclosure may be determined by lending institutions requiring borrowers to periodically provide this type of information. Thus, IR disclosure could be done to comply with borrowing requirements about their social and environmental policies and performance. However, financial distress may reduce a firm’s ability to engage in CSR activity and related disclosure. Dhaliwal et al. (2011) posit that firms with better financial performance likely have more resources to practice CSR activities and produce CSR reports. Nevertheless, firms with worse performance can try to gain legitimacy by deflecting attention from the issue of concern by highlighting other accomplishments (Lindblom 1994). Jensen and Berg (2012) find that IR adoption is influenced by institutional pressures like the one exerted by the financial, educational, and labor system, cultural system, and economic system of a country.

⁸The Blumberg online database provides current and historical financial quotes, business newswires, and descriptive information, research, and statistics on over 52,000 companies worldwide.

Among the recent studies on this issue, we can mention the work of Lai et al. (2013) who investigated why companies are currently embarking on this innovative reporting practice with the attempt to understand whether firms that participate in the “pilot program”—and thus adopt an IIRC compliant integrated reporting—have particular legitimacy needs on social, environmental, and governance issues. Authors argue that the question of what drives differences in the corporate choice to disclose ESG information deserves further investigation and it is, ultimately, an empirical issue. Their works have enriched accounting research on voluntary disclosure as a tool of legitimization (Deegan 2002) and contributed to the literature by extending the traditional focus on non-financial disclosure in annual or sustainability reports (Dhaliwal et al. 2011, 2012; Kim et al. 2012) and providing first insights into potential explanations for corporate choice to adopt the innovative reporting format of IR and purposing Bloomberg’s ESG ratings⁹ as a proxy of the firm’s public pressure. Through the analysis of firm-specific determinants of integrated reporting adoption, their results are consistent with Al-Tuwaijri et al. (2004), Clarkson et al. (2008), and Mahoney et al. (2013), which found a positive and significant relation between environmental disclosure and environmental ratings, and, about the *industry* effect, are strongly related to other studies on environmental disclosure (Cho et al. 2012; Cho and Patten 2007; Patten 2002). Particularly, they demonstrate that studying the determinants of IR adoption is especially important for managers as it helps them to understand under which conditions IReporting will be more expected, as suggested by Jensen and Berg (2012).

Other important insights on these issues come from the work of Zambon (2013) who underlines how accounting was in the past (and is also in the present) through two different orientations: historic(al) accounting and fair and fair value accounting. As shown below, he traces the evolutionary path toward the IR focusing on the contribution from the diffusion of the concept of sustainability and the spread of forms of reporting in order to monitor and report the value of intangible assets, in addition to dwelling on the role of EU and international bodies (WICI and IIRC) that are the main promoters of the IR.

4.3.1 From Historical Accounting to Sustainability Reporting and Intangibles Reporting

Hystoric(al) accounting (typical of the Italian tradition) is characterized by the following aspects: (a) it was born to record economic transactions; (b) double-entry book-keeping has been seen as a determinant of the rise and success of capitalism; and (c) historical cost is the logical choice when reporting is about what happened

⁹Using archival data from a sample of firms that are members of the IIRC pilot program on IR, the research aims to understand if the decision to adopt an IR stems from particular legitimacy needs such as the poor ESG rating being given by one of the most important rating agencies, Bloomberg.

and equally, while value is linked to what has been done (stewardship and prudence).

On the other hand, fair and fair value accounting is based on the “true and fair view” (TFV), a general, overriding principle for accounts in force in the UK since 1947 that has been diffused in European member state legislations via fourth and seventh EC directives. From the 1990s, growing pressure by financial markets and finance studies on accountants to better represent (market) value has stimulated a future-oriented and holistic notion. Fair value has been considered the best option by FASB/IASB (IASB 2011) to represent the value of financial assets and liabilities (Zambon 2015).

Today in financial reporting, we have a mixed valuation model (historic and fair value) but contrasting meanings: one is the value to the entity and one the value to the market.¹⁰

4.3.1.1 Sustainability Reporting

In the second half of the 1990s, a new concept of sustainability putting together environmental, social, and financial aspects (“triple bottom line”) linked also to the emergence of the corporate social responsibility (CSR), developing the idea that sustainable, responsible, and ethical behavior by companies should be demonstrated by an ad hoc report (Fig. 4.2).

“Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance toward a goal of sustainable development” (KPMG 2008). Sustainability reporting is driven by the following main factors: a growing recognition that sustainability-related issues can materially affect a company’s performance; demands from various stakeholder groups for increased levels of transparency and disclosure; and the need for companies, and, more generally, for the business community, to appropriately respond to issues of sustainable development (socio-environmental, socio-economic, and eco-efficiency performances).

The term Social and Environmental Accounting and Reporting (SEAR or SER) is widely used to refer to corporate accounting and self-reporting processes through which quantitative and qualitative information about social and environmental effects are accounted and disclosed (Gray et al. 1995a, b, 1996; Hibbit 2004; Contrafatto 2011). Different media (annual reports, stand-alone social and environmental accounts, websites, etc.) are used to communicate this information to a broader group of stakeholders. SEAR has attracted the attention of academic accounting research since the mid-1970s (Gray 2002; Rusconi 2006). Originally,

¹⁰As a consequence of fair value accounting, the size and frequency of estimates in financial reports have hugely increased. Yet, strategy is not considered. Recently, a newly redesigned international body has been put in place (International Valuation Standards Council – IVSC) to deal also with accounting-related valuations.

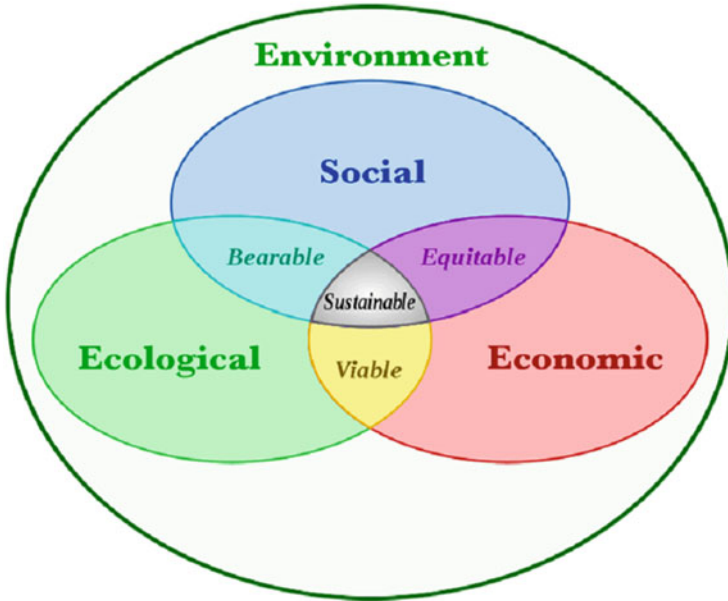


Fig. 4.2 Company sustainable behavior and reporting. Source: Zambon (2015)

this attention represented an initial interest for what appeared to be a “new topic” worthy of consideration. By the mid-1990s, social and environmental issues gained their relevance. Arguably, since then, research in the field of SEAR has experienced steady growth with attention being particularly paid to issues in the field of external reporting (Deegan 2002). In addition, there has been a significant increase in the number of academic researchers embracing the issues, in the level of consideration being given by governmental institutions (i.e., the EU and UN) and professional (accounting) bodies, and, indeed, in the amount of organizations producing different kinds of social and environmental reports (Contrafatto 2011). According to Bebbington et al. (2009), SEAR “has moved from a fringe activity pioneered by socially conscious but non-mainstream companies into a credible and serious practice embraced by a number of major corporations” (Bebbington et al. 2009: 51). In the last decade, SEAR literature has been constantly enriched with the contributions provided by more systematic and extensive empirical research projects which have been conducted, via several methodological and theoretical frameworks, to explore social and environmental accounting and reporting practices in different sectors and/or industries across the world (Mathews 1997; Bebbington 2001; Gray 2002; Thomson 2007).

Many bodies at national and international level have issued standards and guidelines in this area, and there is actually a vast system of rules, recommendations, and entities, also linked to the rise of the ethical finance. Among the most important bodies, we can mention the Global Reporting Initiative (GRI), which issues the widest adopted Sustainability Reporting Guideline (GRI 2013; G4—May 2013), and the United Nations Global Compact (Fig. 4.2).

Table 4.1 EU intervention on corporate reporting

1978	EC IV Directive on individual company accounts
1983	EC VII Directive on consolidated accounts
1991	EC IV/VII Directives for banks (1986) and insurers
2001	EC Directive no. 65/2001
2002	Regulation (EC) no. 1606/2002
2003	EC Directive no. 51/2003 (“Modernization Directive”)
2006	EC Directive no. 46/2006
2001	Commission Recommendation no. 453/2001 of 30.5.2001 on “Recognition, measurement and disclosure of environmental issues in the annual accounts of companies,” recognition of environmental liabilities and expenditures
2013	EU Directive no. 2013/34/EU (dated 26.6.2013) on the annual financial statements, consolidated financial statements, and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC. Text with EEA relevance
2014	EU Directive no. 2014/95/EU of the European Parliament and of the Council (dated 22.10.2014; finally published in the EU Official Journal on 15 November 2014) on “Non-financial and Diversity information by certain large undertakings and groups” amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups (Text with EEA relevance)

Source: Zambon (2015: 17)

With specific reference to the European context, there’s a long tradition of EU intervention in the field of corporate reporting (Table 4.1).

The sustainability information prescribed by the IV EC Directive on annual accounts of individual companies re-proposed in the 2013/34/UE Directive stated that according to art. 46(1)(b) of the Fourth Directive (as amended in 2003), to the extent necessary for an understanding of the company’s development, performance, or position, the analysis shall include both financial and, where appropriate, non-financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters. The European Commission explored these questions with stakeholders in a series of workshops organized in 2009–2010.

More recently, the new EU Directive on non-financial information (approved on 15 April 2014 by the EU Parliament with a large consensus) will integrate the EU Accounting Directive 2013/34/UE. Its scope is relative to about 6000 large entities of “public interest”: all listed companies, banks, and insurances with more than 500 employees (300–400 Italian entities are estimated) with the freedom for member states to extend it to non-listed companies. The Directive envisages that there should be flexibility both on modalities (separated report, internet site) and the framework (UN Global Compact; GRI; ISO 26000; German Sustainability Code) to be utilized. Consequently, the compatibility with other initiatives, and in particular IReporting (or UK “strategic report”), is allowed, without explicitly favoring any of them. Moreover, auditing/verification is not foreseen in the Directive, but auditors have to control that information prescribed has been provided. Auditing can be imposed by member states. Its application will begin from the 2016 annual reports (i.e., 2017), but a general request for comparative data implies that also the 2015

annual report will have to show this data. After 4 years, the EC will run a review of the Directive effects (probably linked also to IReporting).

Specifically, the contents regard information on (a) environmental, social (labor) respect of human rights and anticorruption policies aspects with a particular focus on disclosure of the policies, the results (indicators) of those policies, and the management of the risks linked to those aspects and (b) diversity policies in the company board (gender, age, geographical balance). Information must be “reliable, concise, and useful in order to understand the activities, the development, and the impact of the company.” Other relevant aspects are related to the rule of comply-or-explain applies, the “safe harbor” clause (companies are exempted from disclosing commercially sensitive information), the publication (by December 2016) by the European Commission of nonbinding guidelines with suggested indicators articulated by sector, and the fact that the publication of the taxes paid “country by country” has not been included in the final text of the Directive and postponed to a further EU text.

Although the publication of the last EC Directive represents a significant step toward the integration of financial and non-financial information, some critical issues still remain, related in particular to the following aspects:

The correspondence between non-financial and CSR/ESG only (Table 4.2) (the Directive does not specify whether the non-financial information corresponds to the CSR/ESG information)

The role and contents of IReporting (it does not clarify whether it should be voluntary or mandatory)

The risk of “soft transformation” (since it is not clearly defined whether it is an EU Regulation or EU Directive)

The scope of application in various national jurisdictions (the scope of the intervention is not clear as well as whether it be expected to lie inside or outside the IV EC Directive)

Finally, the uncertainty about the fact that the desired effects and outcomes could be in line with the actual practices (due to the fact that the timing of implementation is not defined).

Table 4.2 National legislations implementing CSR/ESG issues in corporate reporting

France	2001/2009 (more prescriptive)
Denmark	From 2009 disclose CSR policies on a “comply or explain” basis (quite “mild”)
Sweden	Mandatory sustainability report for 55 state-owned companies from Jan 2008
Netherlands	From 2008 listed companies (and now all companies) to report on CSR issues
UK	Government to publish guidance on how companies should measure and report their emissions
	More in general, implementation of the IV Directive requirement on employees and environmental issues into national accounting legislations

Source: Zambon (2015: 20)

4.3.1.2 Intellectual Capital (Intangibles) Reporting (ICR)

As mentioned in the previous section, a second aspect related to the spread of the IReporting is the growth, in the last decade, of the intellectual capital (intangibles) reporting (ICR).

The new concept of intellectual capital (IC) is the internal (competencies, skills, leadership, procedures, know-how, etc.) and external (image, brands, alliances, customer satisfaction, etc.) stock of intangibles “available” to an organization, which allows this entity to transform a set of tangible, financial, and human resources into a system capable of creating stakeholder value through the pursuit of sustainable competitive advantages (Zambon 2001; Zambon and Marzo 2007; Zambon and Guenther 2011).¹¹

From the comparison of the investments in intangible versus tangible assets made in the USA in the past 60 years (from 1947 to 2007) (Carol and Hulten 2010), it is noted that intangible assets account for 50–65% of corporate value and generate most of its earnings and growth. In other words, “intangible investment dominates,” in terms of knowledge investment by firms for future returns such as software, creative works, R&D, designs, business organization/processes, workplace skills, and reputation/brands (Goodridge et al. 2014).

Nevertheless, due to restrictive accounting rules, intangibles are not yet recognized as assets. Similarly, intangible value accounts for a large part of corporate value in US markets too (Krzus 2011).

There are different negative consequences deriving from this situation: value measures (e.g., market-to-book ratio) are biased, performance measures (ROE, ROA, EVA) are deceiving, the prediction of future earnings and cash flows is largely flawed, and internal corporate resource allocation is seriously distorted by deficient information about intangibles.

As one can see in the previous graph, intangible assets account for 50–65% of corporate value and generate most of its earnings and growth. Nevertheless, due to restrictive accounting rules, intangibles are not yet recognized as assets and earnings are really misstated too (intangible investments as expenses). The negative consequences impact on value measures (e.g., market-to-book ratio), which are biased; on performance measures (ROE, ROA, EVA) that are deceiving, and the prediction of future earnings and cash flows is largely flawed; and on internal corporate resource allocation, which is seriously distorted by deficient information about intangibles.

Departing from these premises and underling the urgency to assess and include IC among company financial and non-financial information, Zambon (2001) suggests a new concept of IC considered as the internal (competencies, skills, leadership, procedures, know-how, etc.) and external (image, brands, alliances, customer satisfaction, etc.) stock of intangibles “available” to an organization, which allows this entity to transform a set of tangible, financial, and human resources into a

¹¹On the theoretical roots and framework of the concept of intellectual capital, see Zambon (2003: 155, 2004).

Table 4.3 Principal guidelines on IC reporting

IFAC, Study no. 7 (1998)
Danish Agency for Trade and Industry (DATI) Guidelines (2000; latest edition 2003)
Nordika Project Guidelines (2001)
Meritum Project Guidelines (2002)
German Ministry of Labour (2004, 2006, 2008)
Japanese Ministry of Economy (METI) (2005–2008)
Australian IC Guidelines (2002 e 2005)
Putting IC into Practice Guidelines (PIP) by Nordic countries (2006)
Référentiel français de mesure de la valeur extra financière du capital immatériel des entreprises by Observatoire de l’Immatériel (Oct. 2011)
IASB’s Management Commentary (December 2010)

Source: Zambon (2015, p. 32)

system capable of creating stakeholder value through the pursuit of sustainable competitive advantages. Accordingly, intangibles can be considered IC only when they are durably and effectively internalized or appropriated by an organization. Table 4.3 summarizes the different guidelines on IC reporting.

In December 2010, the IASB published the first IFRS practice statement on management commentary (MC) which sets out principles, qualitative characteristics, and content elements to provide capital providers with decision-making useful information focusing on the nature of the business, management objectives and strategies, main resources-risks relationships, results of operations and prospects, and critical performance measures and indicators. This document provides forward-looking (future-oriented) information in order to understand how non-financial factors have influenced (and will be able to influence) financial performance. It includes therefore financial and non-financial information (key performance indicators, KPIs) for the industry to which the entity belongs, and it clearly underlines/remarks the necessity to include information on human and IC (IFRS Statement on Management Commentary, 2010, see section 30: 13).

In addition to IFRS, a number of international and national organizations which propose non-financial KPIs are synthesized in Table 4.4. In the following sections, attention will mainly be focused on KPIs suggested by IIRC and WICI.

4.3.1.3 The Convergence Between IC Reporting and Sustainability Reporting and the Path Toward IReporting

Social and environmental issues can be seen as part of the management of IC (image/reputation/risk management). Therefore, social and environmental capital can be considered as particular intangibles to be managed by companies for achieving long-term business sustainability and preserving income generation capacity through reputation (Zambon 2011) (Fig. 4.3). Already several information included into IC and social/environmental reports are common (Cordazzo 2005).

Table 4.4 Worldwide organizations which recommend non-financial KPIs

Global Reporting Initiative (GRI)
Carbon Disclosure Project (CDP)
Climate Disclosure Standards Board (CDSB)
Sustainability Accounting Standards Board (SASB)
Accountability—AA1000 ^a
European Federation of Financial Analysts Societies (EFFAS)
International Organization for Standardization (ISO)—ISO 26000
United Nations—Global Compact + Principles for Responsible Investment
OCSE—“Guidelines for Multinational Enterprises”
EU Directive on “non-financial information”
National Governments (i.e., German Sustainability Code)
Chartered Institute of Management Accountants (CIMA)
Gruppo Bilancio Sociale (GBS)
World Intellectual Capital Initiative (WICI)—NIBR Italy
International Integrated Reporting Council (IIRC)

Source: Our elaboration from Zambon (2014b, p. 4, Milan November 17)

^aAccountAbility (AA) 1000 Series. <http://www.accountability.org.uk/aa1000/default.asp>. Accessed 2 February 2015

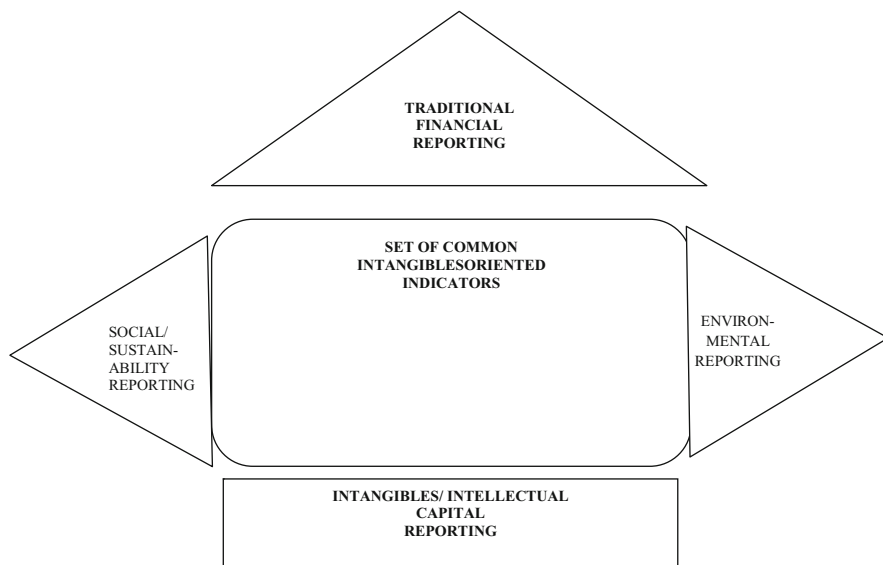


Fig. 4.3 Toward the integrated reporting system. Source: Zambon (2013: 60) and Zambon (2003) study for the European Commission

Consequently, there is a conceptual affinity between IC and CSR and a convergence of IC reporting and sustainability reporting which, together with financial reporting, forms the comprehensive “picture” of international reporting.

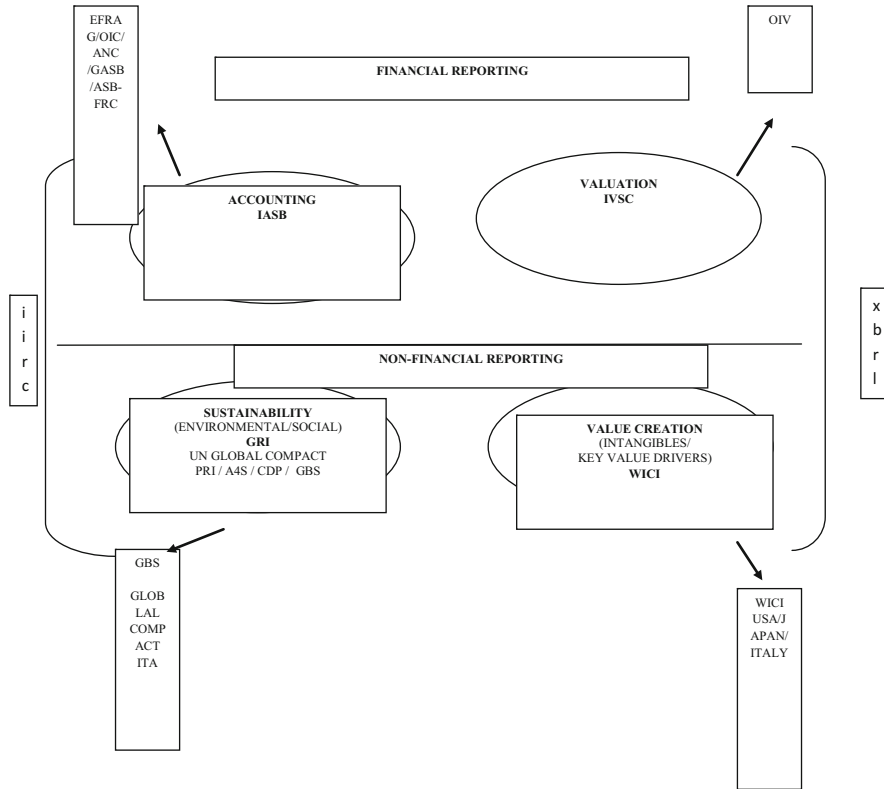


Fig. 4.4 International picture of company reporting. Source: Zambon (2013: 67)

A comprehensive picture of a company reporting, following international standard and including financial and non-financial reporting, is provided in Fig. 4.4.

4.4 The IIRC Vision of Integrated Reporting

On 2 August 2010, the Prince’s Accounting for Sustainability Project (A4S) and the Global Reporting Initiative (GRI) formed the International Integrated Reporting Council (IIRC). The IIRC vision is to develop and diffuse corporate reporting norm addressed to organizations, their investors, and other stakeholders, aimed at attaining informed decision-making, an efficient capital allocation, as well as the creation and preservation of value, and to contribute to a more sustainable global economy. The principal objective of IIRC is “to create a globally accepted framework for integrated reporting. Such a framework will seek to bring together financial, environmental, social and governance information in a clear, concise,

consistent and comparable format,” in other words, a sort of “framework of frameworks.”

The action of IIRC initially found concrete expression through the publication of the discussion paper *Towards Integrated Reporting: Communicating Value in the Twenty-First Century* in September 2011 (IIRC 2011a). Subsequently, in October 2011, the *pilot program* was launched, with the aim of producing an *International <IR> Framework*, that is, an international matrix for *integrated reporting* (IIRC 2012b, 2014d). The project, which concluded in September 2014, involved a working group consisting of 25 international investors and around 80 multinational companies belonging to a variety of sectors and from 23 countries. Various companies represented Italy including Enel, Eni (whose case is presented in the second part of the volume), Generali Group, PwC Italia, and the National Council of Registered and Chartered Accountants (CNDCEC). The experiences, advice, and recommendations of companies and investors who experimented with integrated reporting and who contributed to its implementation are gathered in the *Yearbooks* (IIRC 2012b, 2013b, 2014a). On 13 December 2014, the latest “*Yearbook 2014*” was released, and this was the first completely interactive version (IIRC 2014d).

Firstly, a preliminary “Consultation Draft of the International <IR> Framework” was published, followed by the Prototype of the International <IR> Framework (IIRC 2012a). Secondly, the “release 1.0” of the International <IR> Framework was published in December 2013. This document (available online and translated in nine languages) represents the main reference point for all organizations seeking to pursue the path of integrated reporting by overcoming the “reporting mismatch” which businesses have to face: issues central to long-term business value aren’t getting the attention they deserve, capital markets compensate by pricing in risks that may well be adequately managed, and investors focus on the short term because they can’t get a clear picture of the long term.

The Framework is articulated in two main parts containing four chapters, which will be briefly presented as follows:

1. Using the framework (objective, purpose, and users of an integrated report, form of report and relationship with other information, application of the Framework, responsibility for an integrated report).
2. Fundamental concepts (the capitals, the value creation process).
3. The guiding principles.
4. The content elements, followed by Glossary e Appendices. The IReporting Framework provides the top level structure for the whole reporting pyramid which is composed by the management commentary, the governance and remuneration, the environmental and social and financial information.

4.4.1 Objective of the Framework

The purpose of the Framework is to assist organizations with the process of IR.¹² The Framework establishes guiding principles and content elements that govern the overall content of an integrated report, helping organizations determine how best to express their unique value creation story in a meaningful and transparent way. The Framework does not, however, set benchmarks for such things as the quality of an organization's strategy or the level of its performance.

The Framework is intended primarily for application by private sector and for-profit companies of any size, but it can also be applied, adapted as necessary, by public sector and not-for-profit organizations¹³(IIRC 2013b: 7).

4.4.2 Interaction with Other Reports and Communications

The IReporting process is intended to be applied continuously to all relevant reports and communications, including analyst calls and the investor relations section of an organization's website. In addition, it is anticipated that a stand-alone integrated report will be prepared annually in line with the statutory financial reporting cycle. Organizations may provide additional reports and communications (e.g., financial statements and sustainability reports) for compliance purposes or to satisfy the particular information needs of a range of stakeholders. The integrated report may include links to these other reports and communications. The Framework does not prescribe specific indicators or measurement methods to be used in an integrated report. The IIRC aims to complement material developed by established reporting standard setters and others, such as industry bodies, and does not intend to develop duplicate content. Nonetheless, the IIRC may reference examples of indicators and measurement methods developed by others (IIRC Consultation Draft, 2013a: 9).

Although IReporting builds on developments in financial and other reporting, an integrated report differs from other reports and communications in a number of ways. In particular, it has a combined emphasis on conciseness, strategic focus, and future orientation; connectivity of information; capitals; business model; ability to create value in the short, medium, and long term; and providers of financial capital as the primary audience.¹⁴

¹²See Consultation Draft (2013a, section 1.9; 1.10: 9) and following.

¹³See Consultation Draft (2013a: 8).

¹⁴See Consultation Draft (2013a, section 1.20: 9).

4.4.3 *Integrated Thinking*

One innovative aspect to point out is the fact that IR is guided by integrated thinking. Integrated thinking is the active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses and affects. “Understanding the consequences and implications of decisions across the organization’s important capitals can be described as integrated thinking” (Integrated Reporting Committee of South Africa—IRCSA 2014: 3). This leads to integrated decision-making and actions that consider the creation of value over the short, medium, and long term. In contrast with traditional “silo thinking,” it takes into account the connectivity and interdependencies between the range of factors that have a material effect on an organization’s ability to create value over time.

The fundamental concepts of IR (presented in Chap. 2 of the Framework) focus on the various capitals (financial, manufactured, intellectual, human, social and relationship, and natural) that an organization uses and affects, the organization’s business model, and the creation of value over time.

Value creation and the capitals are two fundamental connected concepts. Value creation emphasizes value that is not created by or within the organization alone but is influenced by the external environment, the organization’s relationships with others, and the resources used and affected. Value creation can best be understood as the change in value of the capitals over time (IRCSA 2014: 3).

4.4.4 *The Capitals*

The concept of capitals seeks to assist an organization in identifying all the resources and relationships it uses and affects to report in a comprehensive manner. The capitals (Fig. 4.5) are stores of value that, in one form or another, become inputs to an organization’s business model. They are increased, decreased, or transformed through the activities and outputs of the organization in that they are enhanced, consumed, modified, destroyed, or otherwise affected by those activities and outputs.¹⁵

The six capitals include:

- *Financial capital*, which includes the pool of funds that is available to an organization’s activity, obtained through financing, such as debt, equity, or grants, or generated through operations or investments.

¹⁵For a complete description of the various capitals content, see Consultation Draft of the International <IR> Framework (2013a), pp. 12–13, “Categories and descriptions of the capitals” and IIRC IR Framework (2013b).

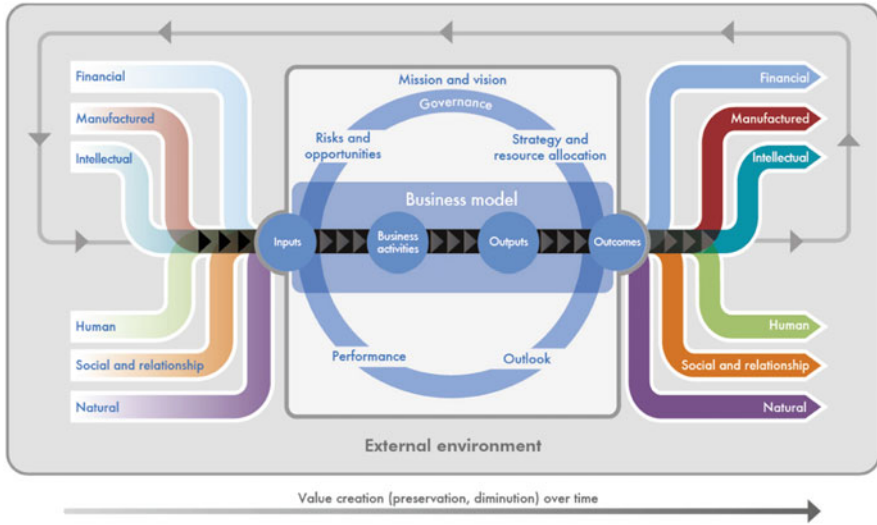


Fig. 4.5 The capitals. Source: IR Framework (2013b: 13). See: www.theiirc.org

- *Manufactured capital*, which includes physical objects (as distinct from natural physical objects) that are available to an organization for use in the production of goods or the provision of services, including equipment, buildings, and public infrastructure.
- *Intellectual capital*, intended as organizational knowledge-based intangibles such as intellectual property (patents, copyrights, software, rights, and licenses) and “organizational capital” such as tacit knowledge, systems, procedures, and protocols.
- *Human capital*, which refers to people’s competencies, capabilities, and experience and their motivations to innovate, including their alignment with and support for an organization’s governance framework, risk management approach, and ethical values; the ability to understand, develop, and implement an organization’s strategy; and loyalties and motivations for improving processes, goods, and services, including their ability to lead, manage, and collaborate.
- *Social and relationship capital*, in terms of the institutions and the relationships within and between communities, groups of stakeholders and other networks, and the ability to share information to enhance individual and collective well-being. Specifically, social and relational capital include shared norms and common values and behaviors, key stakeholder relationships and the trust and willingness to engage that an organization has developed and strives to build and protect with external stakeholders, intangibles associated with the brand and reputation that an organization has, and an organization’s social license to operate.

- *Natural capital*, conceived as all renewable and nonrenewable environmental resources and processes that provide goods or services that support the past, current, or future prosperity of an organization, including air, water, land, minerals, and forests; biodiversity; and ecosystem health such as water, land, and minerals.

4.4.5 *The Business Model*

An organization's business model is the vehicle through which it creates value. That value is embodied in the capitals that it uses and affects. The assessment of an organization's ability to create value in the short, medium and long term depends on an understanding of the connectivity between its business model and a wide range of internal and external factors. Those factors are disclosed in an integrated report prepared in accordance with the Framework. (IR Consultation Draft, 2013a: 6).

In recent years, clarity about an organization's business model has become a critical element in corporate reporting (Afuah 2004; Johnson et al. 2008; Beattie and Smith 2013; Cinquini and Tenucci 2011; EFRAG, ANC & FRC 2013; George and Bock 2009; Casadesus-Masanell and Ricart 2010; Page 2014; Zott and Amitt 2013; Lambert and Davidson 2013). The Framework states that an organization's business model "is its system of transforming inputs, through its business activities, into outputs and outcomes that aims to fulfill the organization's strategic purposes and create value over the short, medium and long term" (The International <IR> Framework, paragraph 4.11; IRCSA 2014: 30; IIRC, CIMA, IFAC & PWC, 2013). Moreover, "value is created through an organisation's *business model*, which takes inputs from the capitals and transforms them through business activities and interactions to produce outputs and outcomes that, over the short, medium and long term, create or destroy value for the organisation, its stakeholders, society and the environment" (IRCSA 2014, Starter's Guide: 10).

4.4.6 *Creating Value (Value Creation)*

IR explains how an organization creates value over time. Value is not created by or within an organization alone: it is influenced by the external environment, created through relationships with stakeholders, and it is dependent on various resources. Particularly, the value creation depends on serving the interests of, and working with, all key stakeholders (employees, customers, suppliers, business partners, local communities, legislators, regulators, and policy-makers); the capability to increase, decrease, or transform the capitals; the capability to manage a wide range of interactions, activities, relationships, and causes and effects; and the fact that the awareness that financial returns affect other capitals and other stakeholders.

The value created manifests itself in financial returns to providers of financial capital and also in positive or negative effects on other capitals and other stakeholders.

Traditionally, the meaning of value has been associated with the present value of expected future cash flows, and value creation has been understood as the change in that measure of value due to an organization's financial performance. On the other hand, IReporting is based on the understanding that future cash flows and other conceptions of value are dependent on a wider range of capitals, interactions, activities, causes and effects, and relationships than those directly associated with changes in financial capital. Thus, IR considers the broader context of the value created in all the capitals. In other terms, IR considers the value drivers that affect an organization's ability to create value over time: the capabilities or variables that give an organization competitive advantage and over which it has some degree of control. The type and combination of each organization's value drivers are unique. They may include, for example, financial drivers (e.g., growth in sales or market share, pricing strategy, operational efficiency, brand equity, and the cost of financial capital); customer relations, responses to societal expectations and environmental concerns, innovation, and corporate governance; and values such as integrity, trust, and teamwork.

4.4.7 The Guiding Principles

The guiding principles (IR Framework, 2013b, Chap. 3) inform the content of an integrated report and how information is presented (Table 4.5).

4.4.8 Content Elements

The content elements to be included in an integrated report are explained in Chap. 4. An integrated report should stand alone as a concise communication, linked to other reports and communications for those stakeholders who want additional information (paragraph 4.4). It should answer the questions summarized in Table 4.6.¹⁶

Chapter 4 of the IR Framework further identifies the following required disclosures (paragraph 4.5): the organization's materiality determination process, the reporting boundary¹⁷ and how it has been determined, the governance body with oversight responsibilities for IR, the nature and magnitude of the material trade-offs

¹⁶For a deep analysis of the single content elements, see Consultation Draft (2013a: 24–29) and IR Framework (2013b: 24–32).

¹⁷See IIRC Framework (2013b: 19).

Table 4.5 IIRC guiding principles

A—Strategic focus and future orientation	An integrated report should provide insight into the organization’s strategy and how that relates to its ability to create value in the short, medium, and long term and its use of and effects on the capitals
B—Connectivity of information	An integrated report should show, as a comprehensive value creation story, the combination, interrelatedness, and dependencies between the components that are material to the organization’s ability to create value over time
C—Stakeholders responsiveness	An integrated report should provide insight into the quality of the organization’s relationships with its key stakeholders and how and to what extent the organization understands, takes into account, and responds to their legitimate needs, interests, and expectations
D—Materiality and conciseness	An integrated report should provide concise information that is material to assessing the organization’s ability to create value in the short, medium, and long term. This requires that the main themes be classified according to the relevance of their impact on the creation of business value and the probability of the theme occurring ^a
E—Reliability and completeness	An integrated report should include all material matters, both positive and negative, in a balanced way and without material error
F—Consistency and compatibility	The information in an integrated report should be presented on a basis that is consistent over time and in a way that enables comparison with other organizations to the extent it is material to the organization’s own value creation story

Source: Our elaboration from Consultation Draft (2013a) and IR Framework (2013b)

^aAccording to the GRI principle of materiality, themes are classified on the basis of their business and stakeholder value

that influence value creation over time, and the reason why the organization considers any of the capitals identified in the Framework to be immaterial given its particular circumstances, if that is the case. Finally, Chap. 5 of the Consultation Draft provides guidance, with no additional requirements, on the preparation and presentation of an integrated report. Topics include the materiality determination process, the disclosure of material matters, involvement of those charged with governance, frequency of reporting, reporting boundary, and the use of technology.¹⁸

¹⁸For a complete analysis, see IIRC Consultation Draft (2013a: 30–35).

Table 4.6 IIRC content elements

What does the organization do and what are the circumstances under which it operates (paragraph 4.6)?	A—Organizational overview and external environment
How does the organization’s governance structure support its ability to create value in the short, medium, and long term (paragraph 4.10)?	B—Governance
What is the organization’s business model and to what extent is it resilient (paragraph 4.21)?	C—Business model
What are the specific opportunities and risks that affect the organization’s ability to create value over the short, medium, and long term and how is the organization dealing with them (paragraph 4.13)?	D—Opportunities and risks
Where does the organization want to go and how does it intend to get there (paragraph 4.18)?	E—Strategies and resource allocation
To what extent has the organization achieved its strategic objectives and what are its outcomes in terms of effects on the capitals (paragraph 4.27)?	F—Performance
What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and its future performance (paragraph 4.33)?	G—Future outlook
How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated?	H—Basis of preparation and presentation and in doing so, takes account of I general reporting guidance

Source: Consultation draft of the International <IR> Framework (2013a, p. 7), IR Framework (2013b, p. 5)

4.4.9 Structure and Content of the Integrated Report

An integrated report describes the business model, including key inputs (see paragraphs 4.14–4.15), business activities (see paragraphs 4.16), outputs (see paragraph 4.18), and outcomes (see paragraphs 4.19–4.20) (IIRC Framework 2013b). *Inputs* are conceived in terms of the capitals (resources and relationships) that the organization draws upon for its business activities. Accordingly, an integrated report shows how key inputs relate to the capitals on which the organization depends or that provide a source of differentiation for the organization, to the extent they are material to understanding the robustness and resilience of the business model.

Outputs are represented by organization’s products and services and any by-products and waste. Accordingly, an integrated report identifies an organization’s key products and services, including outputs, such as by-products and waste

(including emissions), that need to be discussed within the business model disclosure.

Outcomes represent the internal and external consequences (positive and negative) for the capitals as a result of an organization's business activities and outputs. An integrated report describes key outcomes, including both internal outcomes (e.g., employee morale, organizational reputation, revenue, and cash flows) and external outcomes (e.g., customer satisfaction, tax payments, brand loyalty, and social and environmental effects). Moreover, it includes both positive outcomes (i.e., those that result in a net increase in the capitals and thereby create value) and negative outcomes (i.e., those that result in a net decrease in the capitals and thereby diminish value).

Following the IR Framework, it includes the aforementioned eight content elements (Table 4.6) which are fundamentally linked to each other and are not mutually exclusive (IR Framework 2013b: 25).

When material, it discusses the contribution made to the organization's long-term success by initiatives such as process improvement, employee training, and relationships management. A matter is material (materiality) if it could substantively affect the organization's ability to create value in the short, medium, or long term.

4.4.10 KPIs and KRIs

The Framework offers a useful list of the common characteristics of suitable quantitative indicators (KPIs) which are to be¹⁹:

- Relevant to the circumstances of the organization
- Consistent with indicators used internally by those charged with governance
- Connected (e.g., they display connectivity between financial and other information)
- Focused on the matters identified by the organization's materiality determination process
- Presented with the corresponding targets, forecasts, or projections for two or more future periods
- Presented for multiple periods (e.g., three or more periods) to provide an appreciation of trends
- Presented against previously reported targets, forecasts, or projections for the purpose of accountability
- Consistent with generally accepted industry or regional benchmarks to provide a basis for comparison
- Reported consistently over successive periods, regardless of whether the resulting trends and comparisons are favorable or unfavorable

¹⁹See IR Framework (2013b, paragraph 4.53: 31).

- Presented with qualitative information to provide context and improve meaningfulness.

The organization should also identify its key risk indicators (KRIs) which reflect the key risks and challenges faced and that should be linked to the KPIs. In other words, KPIs and KRIs can reflect the significant non-financial and financial aspects of the organization. In many cases, these are closely linked to each other: non-financial aspects can have a significant financial impact and vice versa. Many of the organization's KPIs and KRIs fall under both financial and non-financial aspects (IRCSA 2011, 2014: 37).

In particular, practitioners believe that KPIs should follow a SMART criterion, that is, specific (to that business); measurable: it must be possible to attain that KPI value; achievable (the defined standards must be achievable); relevant (improvement must be important for the success of the company); and time phased (the value of results achieved must refer to the relevant and defined period).

There are still many doubts concerning KPIs and the following aspects:

1. The strong institutional competition between bodies and proposals
2. The coherence/adequacy of various models and KPIs proposed compared to the pursued objectives of corporate reporting
3. The intercorporate comparison/comparability
4. The materiality of data
5. The confusion over concepts and terminology (i.e., sustainability versus ESG versus CSR versus SRI or intellectual capital versus intangibles versus human capital)
6. The sometimes weak link between theories/concepts/objectives (CSR, business ethics, value creation) and their traditions in KPIs
7. The not always clear relationship between KPIs for the purposes of external reporting and those for internal audit and strategic planning

A possible criterion for interpreting KPIs occasionally provided by various bodies allows for their classification on the basis of the following aspects (Zambon 2014b: 1 and 7): (1) the level of KPIs generality, (2) objectives prioritized by the company, and (3) the concept of the adopted value.

As far as the first aspect is concerned, KPIs can be divided into three levels: general, by sector, and corporate or specific (the so-called inverted pyramid concept). At the bottom, there is the general level, and the use of basic intangibles indicators (3 up to 5 maximum) is opportune. In the middle of the pyramid lies the sector level, which is industry specific and requires intangibles indicators (20–40 max.); at the top, there is the enterprise level which is company specific and for which intangibles indicators without limits can be used. In order to combine comparability and specificity, only the first two levels may be subject to standardization.

Finally, the various concepts of values pursuable with corporate reporting determine the proposal of equally distinct KPIs:

1. *Shareholder value*

These are typically financial KPIs bound to returns and comparisons with capital markets.

2. *Stakeholder value*

These are typically KPIs which measure the satisfaction of identified groups of individuals/bodies (i.e., suppliers and clients): customer satisfaction, complaint rates, degree of stakeholder engagement, etc.

3. *Societal values in a broad sense and environmental values*

Typically, these are KPIs concerning environmental emissions and human rights.

4. *Business values*

These are financial and non-financial KPIs normally used in business management and the governance of short-, medium-, and long-term economic value creation.

4.4.11 The Assurance of the Integrated Report

The organization's board may seek a level of oversight from various sources to ensure the reliability of information in the integrated report. It may seek assurance over the integrated reporting process and/or specified material information, and/or KPIs in the report. This is often referred to as the assurance approach and should be put in place as part of the governance process for the report. In determining the assurance approach, the board may consider assurance already obtained on financial and non-financial information, as well as the evidence processes supporting other information. The board may require relevant reports from internal auditors, external auditors, and other external assurance providers such as assurance reports on sustainability KPIs and ISO certification.

Assurance of the integrated report is currently being discussed internationally with much debate on the form and extent of external assurance (IAASB 2013; ICAS 2015; IIRC 2014b, c, 2015). However, several aspects still need to be resolved as the traditional methods of financial statement audit alone will not suffice in enabling meaningful assurance of IR. There is the need for a new approach to assurance to match IR's new approach to reporting, as well as some of the technical challenges that must be taken into consideration in the development of an assurance methodology that works for IR (e.g., with regard to the determination of materiality, the connectivity of information, the inclusion of non-financial information, and electronic Internet delivery).

Assurance on IR requires new skills and competencies that complement and build on the core assurance skill set of financial statement auditors, and synergies can (and should be) achieved in both the reporting and assurance of financial and

non-financial information, including information delivered electronically (PWC 2014).

4.4.12 Leading Examples of IR and International Updates

Leading examples of aspects of integrated reports are available on the IIRC website.²⁰ The latest updates are outlined in Table 4.7.

4.5 Integrated Reporting for SMEs?

In the vast literature on non-financial and integrated reporting, very few studies have been addressed to SMEs (small- and medium-sized enterprises). Only recently, some contributions have provided insights regarding the current trend toward sustainability reporting, the status of global sustainability and integrated reporting guidelines, and explored opportunities that arise for small and midsize entities considering an integrated reporting approach. Among these, James (2013) states that integrated reporting may provide significant benefits for small and midsize companies and may, in the long run, enhance a company's economic success. The principles of integrated reporting are applicable regardless of size. SMEs are likely to have a greater degree of integrated thinking. Even the application of the principle of connectivity should be easier. Although the integrated report is primarily aimed at investors, it is of benefit to other stakeholders significantly affected by the company's activities, products, and services and entities/individuals whose actions affect the entity's ability to successfully implement its strategies (Del Baldo 2015).

Through integrated reporting, SMEs will enhance strategies and understand how strategy is affected by environmental, social, financial, and economic issues. They also enhance risk management; explore new and innovative opportunities in their products, services, processes, and markets; and improve strategic decision-making and performances (James 2013). Finally, through integrated reporting, SMEs can enhance reputation among stakeholders, gain trust from funders, lower cost of capital, become more competitive in the market place, enhance brand value, improve customer support, and experience better employee loyalty, as the following case demonstrates.

These considerations and statements are partly confirmed by the working group recently created within the NIBR (Italian Network Business Reporting) that produced a first document, currently under review, containing specific guidelines for the preparation of a SME's business report (NIBR 2014). A similar document has

²⁰<http://examples.theiirc.org/home>

Table 4.7 Latest international updates

July 2014	The IIRC launched an international public consultation on the discussion paper “Assurance on <IR>: An Exploration of Issues” The WICI Global issued its comments at the beginning of December 2014
December 2014	The IRCSA published its volume “Preparing an Integrated Report: A Starter’s Guide” based on the best practices of South African companies www.integratedreportingsa.co.za The Singapore Accountancy Commission has published its first integrated report, and it will publish a roadmap setting out a route toward Singapore’s adoption of <IR> The Malaysian Securities Commission has embedded <IR> within its capital markets plan
June 2014	The Japanese Prime Minister Shinzō Abe published his “Japan Revitalization Strategy” (JRS) The new strategy called for a market dialogue to understand how corporate reporting reform, and integrated reporting specifically, can help to refocus businesses and investors on long-term value creation
August 2014	The Securities and Exchange Board of India requested an industry-led roadmap setting out the plan for business adoption of <IR>, and the Indian <IR> Lab was launched
July 2014	The Australian G100, the main CFO forum in Australia, published a paper offering broad support for <IR>. The paper’s authors recognized the opportunities offered by <IR> to enable “directors and management to clearly articulate and better communicate performance and value-adding activities to shareholders”
April 2014	The Brazilian Stock Exchange BM&FBOVESPA backed <IR> by encouraging listed companies to produce integrated reports
June 2014	The UK guidance on strategic report consistent with <IR> • In June 2014 the UK Financial Reporting Council (FRC) announced this reports that follow the FRC’s guidance on the strategic report should “result in reporting that is consistent with the International <IR> Framework • The FRC’s statement was part of its guidance aimed at helping companies comply with new rules that came into effect in October 2013 requiring them to publish a strategic report as part of their annual report. The Governor of the Bank of England endorses <IR>
<i>IIRC activities and recent initiatives</i>	
September 2014 October 2014	Conclusion of the pilot program Launch of the <IR> Business Network in companies and organizations committed to the adoption of <IR> Implementation of the Framework Learning from the leaders, the support of “leading practices”
June 2014	Recommendation by B20 to G20 on <IR> In a June 2014 report commissioned by the B20, the business forum that advises G20 governments, the six largest global accounting networks have endorsed <IR> as a key innovation that will make corporate reporting more conducive to long-term investment The B20 called upon G20 Finance Ministers to “assess and address any practical, legal or statutory barriers to improved corporate reporting [. . .] in order to make corporate reporting more conducive to infrastructure and other long-term investment”

(continued)

Table 4.7 (continued)

April 2015	<p>B20/G20: the six <u>principal</u> accounting networks had endorsed <IR> in a report commissioned by B20 (consultation body of G20 in the business sector) This year's objective is to recommend <IR> and UN Global Compact which are "crosscutting themes" for the recommendations to the G20 on the part of B20</p> <p>The Task Forces of B20 held meetings in Washington</p> <hr/> <p>EAP (European Action Plan Europe 2020) developed by GRI, WBCSD, CSR Europe, IIRC, and CDSB (Climate Disclosure Standard Board) as European Hub on Non-Financial Reporting and Integrated Performance with the aim of facilitating implementation of the Directive of the 28 member states and contributing to an efficient and effective EU Directive and an EU guide through aligning joint assets by e.g.:</p> <ol style="list-style-type: none"> 1. Mobilizing all partners in European member states 2. Mapping out local needs 3. Promoting the use of quality global best practice
July 2014	<p>The IIRC published two documents aimed at stimulating the debate concerning the practical and technical challenges of guaranteeing credibility and trust in integrated reporting:</p> <ol style="list-style-type: none"> 1. "Assurance on IR. An introduction to the discussion": it provides support to stakeholders with the aim of understanding the role of assurance with respect to <IR> 2. "Assurance on IR. An exploration of issues": it provides an analysis of specific themes, such as dealing with future-oriented information, providing "soft narrative" assurance and how to assess "materiality" <p>Documents have been prepared by the Assurance Technical Collaboration Group, coordinated by the Independent Regulatory Board for Auditors (South Africa) and made up of international experts</p>
13 December 2014	<p>Launch of Yearbook 2014 (http://www.theiirc.org/yearbook2014/timeline-assets/timeline.html)</p> <p>It is an interactive version which aims at highlighting the experiences and recommendations of businesses and investors that have contributed to developing, testing, and implementing integrated reporting</p> <ul style="list-style-type: none"> • Presence of Italian experiences <p>Italian initiatives: several conferences and workshops have been organized. The actions of IIRC in Italy will this year be focused on spreading and developing <IR> in terms of "integrated thinking," by participating in and contributing to initiatives aimed at such a scope</p> <ul style="list-style-type: none"> • In particular, a tight collaboration with the Network Italiano Business Reporting (NIBR), even in consideration of the Memorandum of Understanding between the IIRC and WICI Global (of which the NIBR is a part)
21 April 2015 November 2014 March 2015	<p>US Summit held in New York: the AICPA hosted the <IR> US Summit, during which discussions took place concerning the strategies to pursue in the USA over the next few years for the development of IR in that region</p> <p>The renewal of the MoU (Memorandum Renewal of Understandings) for 2 years between IIRC and WICI</p> <p>The renewal of MoU IIRC with GRI</p>

<IR> Business networks

- The <IR> Networks have over 750 participants on a global level
- Such networks are open to companies of all dimensions and sectors that intend to pursue the implementation of <IR>

(continued)

Table 4.7 (continued)

-
- The aim of the network is to provide guides and in-depth information and facilitate collaboration and learning among the participating organizations
 - Such networks are facilitated by several countries and organizations such as the Japanese stock market and the JICPA, the Brazilian Commission on <IR> together with the Brazilian Development Bank (BNDES), Indian Industrial Federation
-

Industry networks

Banking (since 2013)
 Pension funds, public sector, insurance (since 2014)

Public sector pioneer network

IIRC's response to the public consultation of the French Public Sector Accounting Standards Council (CNOCP) in relation to the conceptual framework of public reporting

Insurance network

- Publication of a document which demonstrates how integrated thinking and <IR> may help insurance companies to create stakeholder value (coleader: Assicurazioni Generali) B20/G20: as early as June 2014, the six principal accounting networks had endorsed <IR> in a report commissioned by B20 (consultation body of G20 in the business sector)
 - The Task Forces of B20 held meetings in Washington in April 2015
-

Source: Our elaboration from 11th plenary NIBR meeting in Milan on 16 January 2015; 12th plenary meeting in Milan, on 29 May 2015 (NIBR 2015)

been produced by GRI (2014). The SMEs' business report should include the following elements: the presentation of the organization, the governance, the strategies and the business model, the opportunities and risks, the performance, the future perspectives, and the key performance indicators (KPIs) and key risk indicators (KRIs). Moreover, as well as the GRI (2014), the Chartered Institute of Management Accountants (CIMA) has produced a report on this theme as a participant in the "Task Force SMEs" of the B20 (business forum that advises G20), and in the realm of the example database of the IIRC, a new section will be included, entitled "<IR> Reporters," which will also incorporate the integrated reports of PMI.

The Italian NIBR document also states that business reporting is conceived as a set of activities, processes, and initiatives of technical, managerial, and organizational nature, aimed at preparing a business report. This latter is designed to represent, measure, and illustrate all the operative, strategic, and financial activities of an organization. The integrated report is therefore part of the wider "family" of the business report.

Particularly, there is the possibility to adopt different levels of KPIs: base KPIs (general level)—these include up to 8–12 indicators representative of the dimensions of the company with the main economic, financial, and market data (turnover, EBIDTA, employees). Secondly, industry-specific KPIs (10–20) are envisaged relative to networks of which SMEs are a part (i.e., customer satisfaction index, customer loyalty index) and, finally, a set of specific KPIs (relative to organizational and structural capital, human capital).

4.6 World Intellectual Capital Initiative (WICI)

As mentioned in the previous paragraphs, an important role in promoting the implementation of ICR and IReporting is played by the world's business reporting network, a global network that contributes to the twenty-first-century knowledge-based business management era is the founder of WICI (World Intellectual Capital Initiative),²¹ set up in November 2007 by relevant private and public sector organizations in Europe, the USA, Australia, and Japan. Through a private/public collaboration, it aims at improving capital allocation through better business reporting information acting in close collaboration with the IIRC (Table 4.8).

WICI vision can be summarized in the following aspects. First, organizations recognize and manage their intellectual capital/assets (composed of human capital, organizational capital, and relational capital) which are the source of their strategic and financial strength over time. Organizations utilize both the intellectual capital/assets, monetary/financial capital, and physical capital to realize their own value creation story and processes. Through the implementation of an intellectual capital/assets-based management (IAbM), organizations support the establishment of a business context where intellectual capital/assets and IAbM can be developed and appropriately evaluated. Accordingly, the value created through the utilization by organizations of their unique (intangible) resources in the most efficient way could be maximized also for the entire society and economy, while the value creation cycle can be made more sustainable as a result of their specific management styles.

WICI proposes a new business reporting system aimed at identifying sources of differentiation and explain material issues, including non-financial elements; making clear the mid- and long-term value creation mechanism of the company; presenting an integrated picture of the company's activities; providing clues for stakeholders to predict future performance; allowing companies to freely choose the substance without requiring "tick the box" response; reducing the total cost of reporting through summarizing a comprehensive and integrated report; and supporting company's total sustainability including but going beyond environmental and social sustainability.

To attain these goals, WICI presents the "skeleton" of a narrative story of the value creation and strategy without regulating the substance of disclosure and asks companies to include measurable KPIs²² (key performance indicators) to support the narrative story, as well as the concept paper of KPIs to avoid misunderstanding

²¹www.wici-global.com. In October 2008, WICI Japan started as the WICI first jurisdiction. EBRC took the role of WICI US. WICI Europe was established in May 2009 (seat in Frankfurt at EFFAS). The European Commission, OECD, and Brazilian Development Bank (BNDES) were Observers. In 2008, WICI issued a new business reporting framework for integrating financial and non-financial information, based on the METI guideline and EBRC input, and developed its own XBRL taxonomies in line with the Framework. WICI has published draft industry-specific KPIs as examples of frequently used KPIs in many industries. As a collaborative organization to IIRC, WICI has made substantive input to IIRC activities since 2010.

²²See www.wici-global.com.

Table 4.8 The WICI's promoting parties

<ul style="list-style-type: none"> • The US Enhanced Business Reporting Consortium, which is formed by the American Institute of Certified Public Accountants (AICPA), Microsoft Corporation, and PricewaterhouseCoopers • The European Federation of Financial Analysts Societies (EFFAS) • The Japanese Ministry of Economy, Trade, and Industry (METI) • The Organization for Economic Cooperation and Development (OECD) • The Society for Knowledge Economics (Australia) • The University of Ferrara (Italy) • The Waseda University, Tokyo
<hr/> <p>The European Commission participates in WICI as an Observer</p> <hr/>

on the nature of KPIs and to allow the company to choose the most material KPIs by itself. Finally, it recommends companies to use the XBRL format to improve comparability and making reports more easily utilized by stakeholders.

“The primary objective of WICI is to establish a framework of industry-specific KPIs that enables corporate management to express their company’s own way of using intellectual/intangible assets and other non-financial elements for the purpose of creating value, by also pointing out how past and future financial performance connect to non-financial elements” (WICI Comments on the ESMA’s Consultation Paper on 21 May 2014: 2). To date, the members of the WICI network have supported the development of a business reporting framework combining financial and non-financial information that informed the development of the International Integrated Reporting Framework, as well as the elaboration of industry-specific KPIs for explaining company value creation, which are publicly available on the WICI website.

As stated in this document, WICI does not completely agree with ESMA guidelines,²³ as we can read (see pages 2 and 3): “We also believe, however, that the current definition and scope of Alternative Performance Measures (APMs) is too narrow in the sense that it almost exclusively refers only to measures coming from financial statements regulated reports, whilst on the contrary the most important trends in today’s corporate reporting go in the direction of widening information towards the financial, but especially non-financial, measurement and/or disclosure of key-value drivers and KPIs, which are mostly intangibles-related. Financial analysts and investors appear to be more and more interested not only in the historical financial statements, but also in understanding the way business is and will be run, with a full awareness that factors such as strategy, business model, governance, risks, research and development, innovation, customer/relational, organizational and human capital, for example, are critical to understanding a

²³Specifically, APMs include (i) all measures of financial performance not specifically defined by the applicable financial reporting framework (e.g., EBIT, EBITDA, free cash flow, underlying profit, net debt etc.), (ii) all measures designed to illustrate the physical performance of the activity of an issuer’s business (e.g., sales per square meter), and (iii) all measures disclosed to fulfill other disclosure requirements (e.g., pro-forma financial information or a profit forecast) included in public documents containing regulated information.

Table 4.9 WICI-KPIs for industries^a

Electronic components (WICI Japan)
Pharmaceutical (WICI Japan)
Automotive/automobile (WICI Japan)
Telecommunications (WICI Europe + EFFAS CIC)
Software and IT services (EBRC + Gartner)
Mining and Extractive (EBRC + Gartner)
Fashion and Luxury (WICI Europe + EFFAS CIC)
Electricity (WICI Europe + WICI Italy)

^aAll KPIs are available for free download in the WICI website: www.wici-global.com; www.wici-global.com/kpis

company and its value creation prospects.” “WICI supports the view that a correct usage of non-financial APMs should be encouraged through clear guidance and verification. The corporate world appears to be moving in this direction (toward the “conceptual company model”); users want to understand value creation processes in the short, medium and long-term, and need information consistent with that. We live in a knowledge-based society and intangible investments in many cases now exceed tangible investments. In this context, it is difficult to imagine that the disclosure of non-financial information and KPIs will not become more and more important and prominent (e.g. Integrated Reporting)” (WICI 2014, Comment Letter: 6).

As previously mentioned, in the last few years, WICI has started developing benchmarks centered on long-term value drivers for specific industries (Table 4.9). Moreover, it is currently developing the KPIs of the oil and gas industry.

In many industry-specific WICI-KPIs, socio-environmental sustainability indicators are also included. The KPIs have been developed with the support of company managers and financial analysts from various countries around the world.

The WICI concept²⁴ is based on the following premises: a company is conceived as a value creation mechanism. Consequently, business reporting should focus on the core substance of the company by addressing the specific value creation mechanism, specific resources including non-financial ones, perspective on the future, and strategy. Then it can well connect a company and its stakeholders.

WICI-KPI concept is reflected in the IIRC discussion paper: KPIs are numerical figures (including those quantified through rating methods) related to critical factors of value creation, different attributes from indicators required for a specific purpose by a certain civil society, an informative set of indicators frequently used, and subset of internal decision-making process. Expected attributes of KPIs are to reinforce the narrative description of a company’s value creation mechanism and make visible the value creation story in a given timeline of past-present-future. Each KPI cannot be applicable to all companies in general nor to a specific industry; companies can choose or add their own indicators.

²⁴http://www.wici-global.com/wp-content/uploads/2012/06/wici_concept_jan_2011.pdf

WICI-KPIs are not to be disclosed on a mandatory basis, but companies may choose among them those that better describe their own value creation story. Finally, they are developed by market-driven, industries-based initiatives, with a bottom-up approach, internationally agreed and translated in a digital, computer-readable language, called eXtensible Business Reporting Language (XBRL).

4.6.1 WICI and IIRC: Common Approach and Elements

The WICI Framework is one of the seven references of IIRC's work. Different parts contain similar elements to those contained in the IIRC Consultation Draft. Basic approach and main elements are overlapping (Tables 4.10 and 4.11).

In particular, it should be mentioned the WICI-IIRC collaboration on the connectivity project. Connectivity is the core part of integrated reporting, which describes a company's value creation story. Main issues in connectivity are two cycles (past to present, present to future) and the big picture of value creation story, rather than silo-type analysis. The volume of information is the same, but the value of information is different with or without connectivity. This means to connect material elements into a value creation story as well as in close-up pictures, financial information with non-financial one, narrative story and numerical indicators, intention of a company with understanding by users, and each element with established definition.

Table 4.10 WICI and IIRC common approach

1	Focus on corporate strategy for sustainable value creation as well as how to recognize a company
2	Forward looking with a special attention on future performance
3	Long-term perspective
4	Respect on non-financial capitals or resources, including intellectual capital, human capital, and social capital, and interconnection between those and financial factors
5	Flexibility in choice of material elements by companies

Table 4.11 Common factors/elements

IIRC guiding principles	IIRC content elements
Strategic focus and future orientation	Organizational overview and external environment
Connectivity of information	Governance
Stakeholders responsiveness	Opportunities and risks
Materiality and conciseness	Strategies and resource allocation
Reliability and completeness	Business model
Consistency and compatibility	Performance
	Future outlook

Source: Zambon (2013, p. 47)

4.7 Final Remarks and Conclusions About IR

In this last paragraph, the following aspects are presented, in order: the advantages and disadvantages of the IR; the basic reasons why IReporting can be considered a future prospect emerging in companies' reporting; the elements that distinguish the IR, compared to traditional systems of reporting; and main benefits of the IR. Finally, the section presents some concluding remarks and general trends, as well as some comments of the operators and insights on IR future direction, taking into account the open issues with IReporting disclosure. In particular, we briefly recall the outstanding issues regarding the future of the IR, which revolve around them and the challenges need to be addressed, concluding with the future prospects of development.

4.7.1 *Objections, Advantages, and Benefits of IR*

The objections and arguments against one report can be summarized into three main arguments based on deeply held theories and beliefs:

1. Following a capital market perspective, the market's efficiency means there is no reason for companies to change their reporting practices.
2. Following a company perspective, if there was a clear benefit, companies would already be doing it since they are optimally managed.
3. Adhering to a stakeholder perspective, doing so will actually hurt the development of a sustainable society.

Nevertheless, as Eccles and Krzus state (2010), markets are not completely efficient, and opportunities always exist to improve capital allocation through better information. Secondly, management practices can always be improved through innovation, which involves risks and costs but, at the same time, can achieve some long-lasting benefits as well. Thirdly, shareholders' and other stakeholders' interest are neither completely congruent nor completely at odds with each other, and all stakeholders have an obligation to take a broad view as the context of their own particular interest.

If one considers the benefits of this forthcoming trend in corporate reporting, first, an integrated report enables the reader to better understand the cause and effect relationships between, for example, financial and sustainability performance (Krzus 2011).

IReporting serves as a platform to furnish more detailed data than what is available only in a paper or PDF report. It also leverages the Internet and Web 2.0 tools and technologies, such as wikis, blogs, podcasts, and forums, in a way that facilitates the readers' ability both to perform their own analysis of financial and non-financial information and to communicate thoughts and opinions with other stakeholders. It is a management tool capable to improve the companies' success,

intended as the ability to simultaneously create value for shareholders and society, when and where companies have learned to balance the imperative for long-term viability²⁵ with the demands for short-term competitiveness and profitability.

Moreover, IReporting, because of its focus on transparency,²⁶ should be considered a critical element of market reform to underpin financial stability. Transparency in reporting is an important vehicle for rebuilding public trust. Reporting provides insights into how a company views itself and its role in society, communicating a company's performance, both good and bad. "It creates commitments to improve future performance and establishes accountability for meeting objectives. In addition to the traditional measures of business performance, integrated reporting focuses on the business implications of sustainability issues such as carbon emissions and usage of water and other resources, including human capital and intangible assets" (Krzus 2011: 272).

Secondly, reflecting on the question "Why integrated reporting matters?" different aspects should be considered departing from the fact that companies operate in a multidimensional world, the global economy, the environment, and the society on which business relies to create value. More and more businesses consider economic, environmental, and societal factors to be inextricably linked.²⁷ "The processes required to publish a truly integrated report will provide management and boards of directors with the tools necessary to understand the dependencies between financial and non-financial performance and answer the questions around the environmental challenge" (Krzus 2011: 272).

The reply provided by Krzus to the question "Do business leaders view the societal, legislation and regulation challenges (human rights, governance) and the environmental challenges (climate change, water scarcity) as a risk or as an opportunity?" is the following: "Companies that have already started their journey towards integrated reporting in anticipation of regulatory requirements will have a robust platform on which they can build and meet new or changing environmental or even integrated reporting requirements. Those companies that have done nothing to prepare for integrated reporting will have to rush to meet any requirements, resulting in higher costs, lower quality, and fewer benefits" (Krzus 2011: 274).

Therefore, we can as follows highlight and summarize why IReporting can be considered a future prospect emerging in companies' reporting.

First, the current financial reporting model was developed in the 1930s for an industrial world. In general, it provides a backward-looking review of performance and does not provide relevant information for decision-making today. The current reporting model does not focus on critical twenty-first-century issues and lacks an orientation toward the future. In many corporate annual reports, there is little

²⁵Viability is defined as "capable of working successfully; capable of surviving," New Oxford American Dictionary, April 2005: 271.

²⁶Transparency is intended as "accessibility of information to stakeholders of institutions regarding matters that might affect their interests" (Tapscott and Ticoll 2003: 272).

²⁷See the study by the MIT Sloan Management Review and The Boston Consulting Group (2011).

Table 4.12 How “is” integrated reporting different?

Attributes	Financial reporting	Integrated reporting
Thinking	Disconnected	Integrated
Stewardship	Financial capital	All forms of capital
Focus	Past, financial	Past and future, connected, strategic
Timeframe	Short term	Short, medium, and long term
Trust	Narrow disclosures	Greater transparency
Adaptive	Rule bound	Responsive to individual circumstances
Concise	Long and complex	Concise and material
Technology enabled	Paper based	Technology enabled

Source: Zambon (2013, p. 101)

substantive disclosure about strategy, innovation, people, customer loyalty, and business risks related to climate change, water scarcity, and evolving public policy and regulatory issues. They fail to connect environmental, social, and governance issues to business strategy and financial performance.

Secondly, we must consider the information relevance: to make successful decisions, management, investors, and other stakeholders need information about companies’ value drivers that can be measured numerically through KPIs or may be qualitative factors such as business opportunities, risks, strategies, and plans.

Thirdly, it is necessary to take into account the information complexity: decades of adding ever-increasing and more complex disclosure requirements have produced complex disclosures that are often hard for even the most sophisticated users to understand. Companies are faced with multiple reporting requirements under US GAAP, IFRS, and national securities regulations. These redundancies create confusion and waste both company and investor resources. Even if IReporting per se does not address the issue of complexity, it should be part of broader regulatory initiatives to rethink the objectives of business reporting and make required disclosures more relevant and useful (Krzus 2011: 275).

Considering all these aspects, IR has many elements of differentiation with respect to current reporting systems (Table 4.12) and represents a challenge for the benefits it provides in terms of greater clarity, better decision, deeper engagement, and lower reputational risk (Eccles et al. 2007) as summarized in Fig. 4.6.

With reference to the first benefit, at the heart of IReporting, there is the management’s ability to coherently describe the relationships between financial and non-financial information. Consequently, monitoring and review controls will be improved, and systems and business processes will likely see increased efficiencies and effectiveness, allowing modeling and analysis to reevaluate categories of risks, opportunities, and choices.

With reference to the second benefit, IReporting discloses and explains the relationship between the financial, social, environmental, and governance issues a company faces. The limitations to its presentation communicated only in paper form can be overcome through the use of the Internet (and associated Web 2.0 tools) that makes it possible to shift from a one-way push of information to an

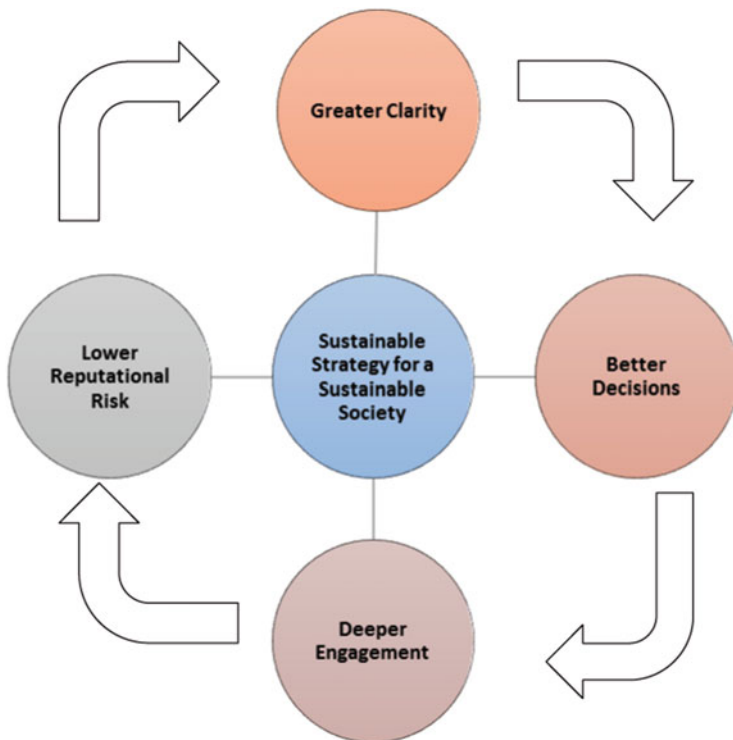


Fig. 4.6 The benefits of one report. Source: Eccles and Krzus (2010: 155)

ongoing dialogue between a company and stakeholders and permits visitors to perform their own analysis of information provided by the company. Moreover, social media platforms, discussion forums, and blogs are likely to lead to richer stakeholder engagement, including user-generated content, comments, and suggestions. As management develops this deeper engagement process, shareholders will gain a more holistic perspective of a company.

With reference to the third benefit, just as there is no globally accepted standard for integrated reporting today, companies should engage in the analytical work necessary to specify and validate the relationships between financial and non-financial performances. The better response is to improve poor measurement methodologies and invent new ones since business survival demands full consideration of environmental and social issues as much as of economic and financial matters. This involves significant cultural change to drive collaboration between accounting, finance, communications, investor relations, public policy, legal and regulatory affairs, sustainability, safety, marketing, and line operations teams; this improved collaboration leads to a better appreciation by each function or unit of the consequences its decisions have on other parts of an organization (Krzus 2011: 276).

Some of the benefits of IReporting cited by experienced South African reporters are:

1. Increased internal awareness of key environmental, social, and governance matters.
2. Breaking down of internal silos and promoting sharing of information in the organization.
3. Improved knowledge-management processes.
4. Focused integration of key performance indicators (KPIs), risks, and strategic objectives within the context of the six capitals.
5. Clear depiction of the business model articulates and increases understanding of how value is created over time.
6. Greater alignment of internal and external reporting, i.e., one version of the truth.
7. Succinct and connected reporting which is easier to interpret and analyze.
8. Improvement in balanced reporting and transparency through inclusion of both positive and negative information, addressing both historic performance and future outlook and a strategic focus.
9. Improved quality of communication between the organization and stakeholders (IRCSA 2014: 9).

Finally, we have to remark that not only IR is the catalyst for incorporating economic, environmental, financial, and social issues into business strategy; nevertheless, IR can push a company toward more integrated risk management processes. IR drives a chain of events that can help companies more effectively focus on risk, thus helping a company understand the effect of its strategic and tactical choices on society because internal and external dialogue ensures that a company's strategy is attuned to society's needs as a whole.

In other words, the shift from sustainability reporting to the sustainability of reporting requires a complete revamping of the reporting model and new regulatory requirements. IReporting will accelerate the process of learning how to measure business success in new ways, which is a positive development in the evolution of a more accountable form of capitalism.

Even if in the current state financial reporting continues "to dominate the scene," surely, IReporting cannot be simply considered a new reporting tool but the driver to a new enterprise theory of enterprise based on different and connected capitals, a new concept of performance, innovative metrics, holistic/systemic vision, and process-based approach. Moreover, it is not—and it should not be—a merely compliance exercise, because IReporting is principle based and it provides a reply to new information needs and an answer to the following emerging questions: Why do firms create value? Which metrics and information are suitable to disclose the "value creation history" of a company? For which reasons the process of value can continue over time? Which tools can improve accountability addressed to stakeholders? Is the business sustainability (including financial sustainability) the fruit of the coherence among the business model, the knowledge/intellectual capital, and the natural and societal capitals?

Table 4.13 A “picture” of conclusions

More market value and less transaction-based value	More future and less history
More estimates and more non-financial info, i.e., on strategy	New tensions between relevance and reliability
Contradicting treatments/recognition rules arising from the “tangibility” of the resources	
Proliferation of information and reports, rules, and rule-makers enlargement of the scope of reports	From financial to business reporting
Progressive enlargement also of the “enterprise capitals” considered by reporting	From monetary to financial to economic to intellectual to contextual capital
Lessening of the importance of profit as an individual and exclusive measure of performance	

Source: Zambon (2013, p. 148)

The challenge to develop and promote a globally accepted framework for IReporting has already been accepted by the IIRC, a global organization which includes “leaders from the corporate, investment, accounting, securities, regulatory, academic and standard-setting sectors as well as civil society” (IIRC, Mission Statement).²⁸ IReporting will be judged on whether its principles and framework drive the development of sustainable business strategies and integrated thinking and decision-making. If successfully implemented around the world, integrated reporting will advance the urgent vision for business to create value for both the company and society, thereby contributing to lasting prosperity on a healthy planet. Some concluding remarks and general trends are summarized in Table 4.13.

Below, with specific reference to Italy, we report some statements made by managers, scholars, and practitioners on the theme of IR.

The adoption of a unique report should be the result of an increase in awareness of the business risks that management should monitor and which are not limited to financial risks. The “one report” gives an opportunity to the management to communicate not only financial data and to creating a positive exchange with all stakeholders. The paradigm shift involves an extension of the competencies and activities also of the organs of internal and external audit of companies. (M. Boella, President of ASSIREVI—Associazione Italiana Revisori Contabili—Italian Association of Auditors; GRI stakeholder council member)

We welcome, as a tool for better financial reporting, a complete, exhaustive and standardized integrated report, which contributes to aligning the point of view of listed companies and investors. (S. Giussani, President of AIR—Italian Association of Investor Relators)

The goal of a single, integrated report comes from far away, but its relevance is linked to the dilemmas brought to light by the crisis: the search for truth is an uphill road that only transparency can help to walk. (C. Luison, partner I-Report.ite; founding member of GBS—Gruppo di studio Bilancio Sociale)

²⁸<http://www.theiirc.org/theiirc/>

The harmonization, comparability, clarity and transparency of corporate financial statements are the key elements of a slow but strong international process and technology and the adoption of standards impose themselves as enablers to achieve this ambitious purpose. But the financial aspect is not exhaustive, albeit important for a real understanding of the overall phenomena, and the businesses sustainability in the medium and long-term. For this reason the markets and operators are clamoring for information integration, as far as possible, structured and organized in a “unifying” framework of global reference. (S. Mattiuz, Director of XBRL ITALIA—Italian Association for the development of taxonomies and technological standards in the economic-financial field)

CNDCEC wishes to express its appreciation for IIRC Discussion Paper, its structure and contents. It considers it essential to design and develop reporting models in order to achieve the right balance between providing complete, transparent and clear information and, at the same time, expressing it concisely in the Integrated Report (considered as one of the means available to organizations to develop their stakeholder engagement strategy). The world has changed and reporting must too. In view of enhancing effectiveness and accessibility for stakeholders, the availability and disclosure of information, revealed through a single Integrated Reporting process (thus analyzing both financial and non-financial aspects of business management), should achieve a balance based on the principles of information relevance and materiality. (CNDCEC, 2013—Consiglio Nazionale dei Commercialisti e degli Esperti Contabili; CNDCEC Italian National Board of Accountants and Auditors—comments and remarks on the discussion paper *Towards Integrated Reporting: Communicating Value in the Twenty-First Century, answers to consultation questions*)

4.7.2 Future Direction and Open Issues with IReporting Disclosure

In this final subsection we present the outstanding issues regarding the future of the IR, which revolve around the following four aspects.

First, IReporting is intended to represent a new form of reporting based on most material information about value creation and preservation over the long term. It is not an “enhanced” sustainability report, but it entails a new theory of the firm.

Second, IReporting is about business and investors and less about all the stakeholders, and this has an impact on what are relevant and material disclosures (e.g., customer satisfaction). Some questions relating to this aspect are still open, such as the following: are the IR disclosures part of management commentary? Or are something else? Can IR be “captured by the cage” of financial reporting? Are these disclosures inside or outside the boundaries of financial statements?²⁹ If these disclosures convey such information, should they be regulated by authorities? The principle of connectivity of information requires a rethinking and development of new ad hoc IR disclosures and not just a “cherry picking” of the present disclosures.

Third, a critical aspect is represented by comparability. IR pushes toward entity-specific disclosures. A delicate element of IR disclosures regards the definition of

²⁹In many European countries, management commentary is legally outside financial statements (e.g., legal litigation on financial statements can address also these disclosures).

the six capitals, e.g., from established intangibles literature, intellectual capital refers to human capital, organizational capital, and relational capital. Why change that with the risk of conceptual confusion? Also, performance relative to the six capitals should be defined if a relevant disclosure should be developed.

Therefore, the journey has not ended, and some further challenges need to be addressed, both conceptual challenges (relative to the detailed content of IR), procedural challenges (such as the auditing of IR), and challenges from IReporting (relative to the integration of differentiated measures and the sustainability issues). Emerging issues are thus the following.

First, there is a need for a synthesis, but it is not so clear how: integration needs new concepts, procedures, and notions; consequently, it should therefore emphasize the role of academics and scholars in reinterpreting traditional concepts and postulates. These issues can be expressed in the form of questions that should still give a clear and complete answer. For example, what is “materiality” in sustainability or in integrated reporting? What will be the role of auditing? What is the democratic legitimization of the new standard setting bodies? Who are the users? Will they cope with this new type of information? Is the reporting burden affordable by companies (such as SMEs)?

Second, this last aspect is particularly highlighted in the comments to the Framework formulated by the Italian National Council of Accountants (CNDCEC 2013). The Council considers it appropriate to involve straightaway small- and medium-sized entities in the IReporting project and invites IIRC to consider the adoption of a bottom-up or layered (or scalability) model for the framework. In fact, taking into account the fact that according to data provided by the European Commission, small- and medium-sized enterprises (SMEs)³⁰ have been the backbone of economic development in most European countries, providing a primary source of employment and economic growth, the actual concept of “integration” may not exclude SMEs, as their presence impacts on a series of extremely relevant socio-economic variables. On the whole, CNDCEC agrees with it, as far as the framework and general principles are concerned. However, the model should clearly take into account the underlying differences between the abovementioned

³⁰SMEs are defined as enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro and/or an annual balance sheet total not exceeding 43 million euro. In 2008, SMEs accounted for 99.8% of non-financial business activities and over two thirds of total employment in the 27 countries of the European Union. In particular, in Italy, SMEs account for 97% of the production sector overall as well as locally. Nine SMEs out of ten did not exceed ten occupied persons and an annual turnover of 2 million euro and were therefore considered as microenterprises. Data issued by the European Commission indicate that SMEs have been the main driver of European economic growth between 2002 and 2008: SMEs have constantly grown in number at a faster rate than large enterprises in the same period. The number of persons employed has increased more than twice as much in SMEs (+1.9%) than in large enterprises (+0.8%) over the same period. The share of added value at factor costs by SMEs has achieved an annual growth averaging 4.2% in the period from 2002 to 2008, whereas the contribution of large enterprises has increased at a slightly lower rate, annually averaging 3.9%. In particular, in Italy, SMEs account for 97% of the production sector overall as well as locally.

categories. In particular, as for the relationship between large enterprises and SMEs, the Council would like to stress again the need to develop a model based on a bottom-up approach, rather than on a top-down one. This would consist in initially building a basis for the IReporting process in SMEs and subsequently adding further guidelines or aspects related to the larger structure and complexity of each (goods and services) production system.

Consequently, the Council agrees that the concepts underlying IReporting could be equally applicable to small and medium enterprises, the public sector and not-for-profit organizations, while it does not agree that the initial focus of IReporting should be on reporting by larger companies and on the needs of their investors since it holds the view that integrated reporting is extremely relevant to smaller entities, as well as it is for larger ones. It also underlines that it is necessary to consider their peculiarities in relation to decision-making, information gathering, differences in stakeholders, impact of reporting costs, and reporting addressees.

Among the other comments made, some touch IR issues that are to be improved.

The first concerns the definition of IReporting. The Council believed that the definition is appropriate and well structured in principle. It is however necessary to make a distinction between the process—appropriate behavior—and the final report. The Council places importance on clearly distinguishing, right from the start, between the process—*integration*— and the document, *integrated report*, and deems it essential that this distinction be adopted to define appropriate stakeholder engagement policies in the reporting process. Moreover, the Council maintains that in developing the framework, priority is to be given to the dynamic reporting process and to integration of company policies (such as policies on governance and sustainable financial, social, and environmental management) and the integrated report shall fulfill the function of documenting this process thereafter. Within the IReporting process, it is then advisable to promote, beforehand, the coordination of those corporate functions which, together with other value-related elements (intangible, reputation, etc.), variously affect financial, environmental, and sustainability aspects.

A second aspect is related to the resources and relationships or “capitals.” The Council finds the concept of multiple capitals very useful in explaining how an organization creates and sustains value. This categorization is worth being further considered and developed and is to be part of a wider consideration of non-financial values. In view of extending integrated reporting to nonprofit organizations and the public sector, CNDCEC suggests that further types of capitals, such as cultural capital, could be included in the existing categorization.

A third issue relates to the fact that the Council considers it appropriate to extend mandatory assurance to all areas of integrated reporting.

A fourth aspect concerns the building blocks and content elements. The Council takes the view that the content elements identified in the discussion paper provide a sound foundation for preparing an integrated report and that they are collectively and individually appropriate. Nonetheless, CNDCEC considers it essential to explicitly and scrupulously define the concepts of *governance*, *risk*, and *responsibility* within the context of integrated reporting, in order to design and develop

specific measurement instruments or indicators for their monitoring and assessment (risk map/liability map, etc.).

As for the concept of governance, CNDCEC considers it appropriate to conduct an in-depth analysis, including remuneration only as one of the issues to be examined. For the purposes of IReporting, the governance concept should be framed in the context of sustainability and referred to the value that a stable governance structure (through instruments such as the board of auditors) may add to a business organization and to its operating context in terms of (also social and environmental) risk management and compliance. Apart from disclosing information on remuneration of executives or others charged with governance, IReporting should also outline how additional functions to management (such as corporate control) may contribute to governance effectiveness, both in large- and in small- and medium-sized enterprises.

As for the element governance, CNDCEC also suggests including an analysis of the control systems adopted by enterprises, as well as their functioning, effectiveness, and efficiency. In addition to business strategy, it should describe risk management and control systems; in addition to remuneration, it should examine executives and supervisors recruitment policies and criteria, as well as the actual board composition.³¹

Finally, we can make the following brief considerations. In the future, accounting will not and cannot only be about financial numbers and double-entry. Also the traditional division between financial accountants and management accountants seems to be “in danger.” Today’s objective of corporate reporting is not clear (representing value historically realized, capacity of creating value, general impact on society and context, strategy achievements, risks, or a combination of them). The pace of innovation in corporate reporting has certainly accelerated in the last 15 years compared to the past. It remains to be seen whether these changes are sustainable in terms of concepts, users, and social legitimization.

Nevertheless, IReporting is not “easy to digest” and implement. Its positioning among the corporate reporting system still remains unclear: “does it represent a new layer of reporting which should be added to other reporting tools, as IFRS recently stated? Will it ‘merely’ enrich the management commentary?” (NIBR-WICI 2015). Moreover, suitable metrics for sustainability and intangible are necessary, in order to tie them to the value creation by the principles of connectivity and integrated thinking.

We can then conclude the chapter section with this message: “Integrated reporting is a journey. It’s unlikely that all objectives for your integrated report will be met in the first year, but reporting will improve as the organization remains committed to the journey” (IRCSA 2014).

³¹See also the critical points highlighted in the Green Paper “the EU corporate governance framework” and the subsequent discussions on composition and diversification criteria for boards of directors, such as the issue on gender diversity.

4.8 Other Economic Measures of Environmental Issues: Material Flow Cost Accounting

4.9 Emergence of the Method “Material Flow Cost Accounting”

The application of accounting of material flow by Eurostat starts at a regional and national level, for statistical purposes, in 2001. The material flow cost accounting (MFCA) method is the study of material flows on a national and/or regional level.

The aim of material flow cost accounting is to provide information to national planning, focusing on the scarceness of resources and enabling forecasting at a national and regional level. It allows also to assess the gravity exerted on the environment by the economic activities of a nation or region and to determine how material intensive a given national economy is.

The fundamental concept upon which MFCA is based is a simple model of the relationship that exists between the economy and the environment in which the economy is seen as an embedded subsystem of the environment.

The logic of MFCA is as follows: raw materials, water, and air are extracted from the natural system as inputs; they are then converted into products in the manufacturing process and finally transferred back to the natural system as outputs (waste and emissions). Thus, the philosophy of this accounting is based on the principals of the organisms’ natural life processes in nature. This is why terminology has come to use such terms as “industrial” and “public” “metabolism.”

The cost calculation method in material flow in manufacturing—material flow cost Accounting—is a method of management accounting of the environment (EMA), which aims to achieve a balance between economic efficiency and the effective use of resources. It was created in Germany in the 1990s, and later, Japan greatly contributes to the development of environmental accounting. It was included as a method in ISO 14051 in 2011.

4.9.1 Characteristics of the Method Material Flow Cost Accounting

The production process generates considerable costs from materials discarded, lost in processing and in recycling. ISO 14051, which regulates material flow cost accounting, allows the company to develop a manual based on commonly accepted principles as well as a structure stating the losses in material flow. Thus, MFCA becomes a tool for effective management of resource use, especially in production and distribution, for the purpose of reducing the relative consumption of resources and material losses.

The aim of the study of material flow through the MFCA method is to downsize the costs by including all material costs along the chain, including those of lost, scrapped, and recycled materials. It can be used for the complete calculation of the costs of materials and for the purpose of analysis.

Material flow cost accounting measures not only the flow but the stock of materials and energy resources within the enterprise as well. The measurement is performed in physical units (mass, power, volume, etc.), and their assessment is carried out in accordance with production losses, including recycling. Usually, in conventional production loss accounting, these factors are omitted. MFCA is one of the main tools for accounting in the system of environmental management accounting (EMA) and is designed for use within the organization.

As a method of cost calculation and analysis, MFCA has the following characteristics:

- The costs include those for recycled and waste products also. The cost calculation included the negative values also—the so-called negative product.
- Positive material costs are calculated. The positive material costs isolate (neutralize) the negative costs.

Positive material costs are used in calculating the costs throughout the production process and are calculated so as to include the cost of input (such as costs for the previous step) in their transfer to the next stage.

- Energy costs, fuel costs, labor costs, depreciation of equipment and indirect labor costs, and the cost of waste disposal and recycling are included in the calculation.
- Indicators such as the degree of default and yield rate are important indicators for the management of production, but the indicator product negative price contained in the MFCA can clarify important losses for the company and could make its production more effective, as well as support the efforts of improving the quality of the manufactured products (Fig. 4.7).

4.9.2 Matter and Benefit of MFCA

The meaning of the implementation of MFCA (calculating costs in material flow) can be described in three items:

1. Improving the efficiency of resource use
2. Improving the efficiency of business management
3. Updating the technical possibilities

Therefore, it can be said that MFCA is a management tool for management of resource efficiency activities.

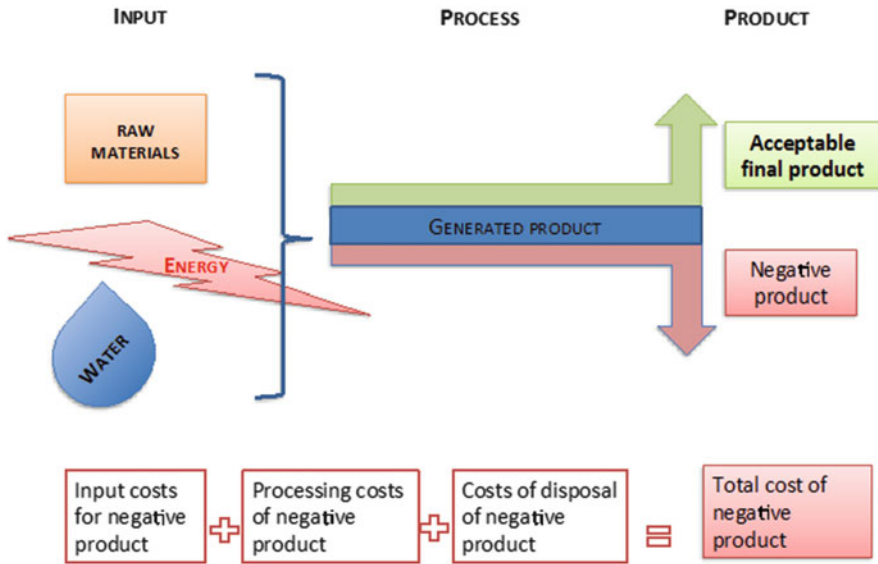


Fig. 4.7 Simple scheme of MFCA

4.9.2.1 Improvement of the Efficiency of Resource Use

In our time, companies are required to treat the raw material use, production, logistics, and sales in terms of environmental protection. In particular, of great importance are the stages of production, logistics, sales, reduction of emissions and waste, and the use of materials that have a large impact on the environment.

The method focuses precisely on the ability to reduce waste, i.e., to improve resource efficiency. It has been tested in a number of companies that have set themselves the aim of zero emissions.

4.9.2.2 Improving the Efficiency of Business Management

The method of calculating the costs in material flow as calculated losses, including operating losses, loss of resources, if any, those resulting from defective products, even in a multiparticulate and small volume production. Thus, the method helps to quantify and determine the size of the effects of these losses and improve production management.

The method can help diminish the cost of raw materials, equipment, and losses of time.

4.9.2.3 Construction of Model of Calculation of MFCA

Basic MFCA Types

Three main types of tools costing in the material flow (MFCA) have been developed for the calculation of material costs for single units of manufactured products consecutively produced on one line, for the calculation of material costs of various products produced on several production lines, and for the permanent calculation of the costs of all products (Table 4.14).

It is certainly possible to apply modifications to these instruments.

4.9.2.4 Logical Structure of Calculation

1. Objects of calculation: the objects of calculation are the products as they are holders of matter.
2. Source and method procedures: this method is inspired by Lavoisier's law of conservation of matter. Sequencing of calculation should be adhered to when it comes to the centers of responsibility (departments, units) as the product passes through these in sequence—the material flow of a product. Data should be collected systematically, and the principle of completeness and clarity of presentation should be respected.

Instrument for simplified calculation of MFCA ordered by the Ministry of Economy, Trade and Industry of Japan. The presented scheme is a spreadsheet MFCA

Table 4.14 Types of tools for calculating the cost of the material flow

Type MFCA	Features of the use of type	MFCA calculators tools
1. Indicators of production of single units of manufactured products consecutively produced on one line	Studies the improvement of the cost-effectiveness of resources in the product line	In most cases, the use of a spreadsheet to calculate is sufficient
2. Indicators of several products manufactured on several production lines	Comparison of losses in efficiency in the quantity of the resource in more than one product, line, machine—for setting targets and target priorities—to improve the efficiency of use of material resources	The use of a spreadsheet to calculate is possible but needs to be part of a computer system
3. The use of MFCA to continuously improve the efficiency of material flow of all products	Used as a mechanism for early detection of abnormalities in resource efficiency (losses) on a definite line, which carries out continuous activities and to improve early detection of problems and early prevention	The use of a computer system for calculation of MFCA is necessary

simplified calculation tool (ver.4) MFCA-format 200,903.xls version of March 2009.

An imitation of a real object, intended to be used as a practical model. Input and output type of material per definition MC (raw materials), its amount defines the cost of raw materials (Table 4.15).

Thus, MFCA enables the cost of a negative product to become explicit as shown in Table 4.16.

The necessary data for calculation are shown in Table 4.17.

In order for the model of calculation to be fully and properly constructed, collected data should be homogenized in the same units. As we know, environmental accounting uses monetary and physical units. Data are collected and presented in both measures—monetary and physical.

After data is prepared, the calculation instrument selected, and the model for calculation created, the next steps in the application of MFCA must be followed—calculation, depending on the characteristics of the business, the stage of implementing the method, and the objectives of the company management. The sequence of application of MFCA can be systematized in three steps.

The first step is the research phase. It develops the strategy for the MFCA, the company policy, and the possibility of conducting research in the company for the implementation of the method. This phase should explore:

- The production, trade to create an overview of waste
- The intentions of improving the product for which the MFCA applies and the characteristics of the production process, production lines, and production technology
- The capacity of the different types of production, products, and production lines in order to define the direction of use of MFCA

The second step is the experimental phase. It uses the theoretical model in the actual environment. The knowledge accumulated in the experimental phase is applied, and the benefits derived from the effect of the application of the MFCA method are defined.

- The data collected by MFCA from the calculations must be organized with the help of software calculation according to product
- The logic of calculation of MFCA should be identified in accordance with the products and technology, for which MFCA will apply
- Definition and organization of material costs used in the calculation of MFCA, system costs, and energy costs
- Ensuring the possibility of using the model of organization and implementation of MFCA know-how

Within step 3 (step C), the application of MFCA is expanded and an entire system of MFCA, which encompasses the whole enterprise. The MFCA model is initially solely applied to one production line. The application of the model is expanded for a second product on a second production line. The aim is for all departments of the company to use MFCA.

Table 4.15 Simple scheme of MFCA for calculation of the material costs of a single product; March 2009 version

Price of materials (unit)	1.0	1.0	1.0	1.0	1.0
Quantity of newly loaded in production materials	100.0	0.0	0.0	0.0	0.0
Unfinished quantity transmuted from the previous step	0.0	60.0	60.0	60.0	54.0
Total quantity of loaded materials	100.0	60.0	60.0	60.0	54.0
– Quantity (negative) of waste material	10.0	6.0	6.0	6.0	5.4
– Quantity of material embedded in the prepared product (positive product)	60.0	54.0	54.0	54.0	48.6
Material cost of the new incoming material	100.0	0.0	0.0	0.0	0.0
– Material costs for waste materials (product MC negative)	10.0	6.0	6.0	6.0	5.4
– Material costs for materials transformed into products (MC product positive)	60.0	54.0	54.0	54.0	48.6
Production costs by processes (such as labor costs, depreciation)	50.0	50.0	50.0	50.0	50.0
Energy for each process, costs recovered (EC)	2.0	2.0	2.0	2.0	2.0
Price for unit waste disposal	1.0	1.0	1.0	1.0	1.0
Steps		Input of raw materials	Processing elements	Final processing	Total MFCA cost
A. New input costs	Total	Sum 1 + 2 + 3	52.0	52.0	New incoming cost total
	New input costs (MC)	1	0.0	0.0	100.0
	New input costs (SC)	2	50.0	50.0	150.0
	New input costs (EC)	3	2.0	2.0	6.0
B. Previous step in the production process	Total	Sum 1 + 2 + 3	136.8	176.2	
	New input costs (MC)	1	90.0	84.0	
	New input costs (SC)	2	45.0	88.7	
	New input costs (EC)	3	1.8	3.5	

C. Total cost of inputs in all processes	Total	Sum 1 + 2 + 3	152.0	188.8	228.2							
	MC new input costs total	1	100.0	90.0	84.0							
	SC new input costs total	2	50.0	95.0	138.7							
	EC new input costs total	3	2.0	3.8	5.5							
Percentage of quantity of negative product		10%	10%									
Percentage of quantity positive product			90%	90%	90%							
Cost price of production with positive metrics	Total	Sum 1 + 2 + 3	136.8	176.2	213.5							
	MC-positive product	1	90.0	84.0	78.6							
	SC-positive product	2	45.0	88.7	129.8							
	EC-positive product	3	1.8	3.5	5.2							
Cost price of production with negative metrics	Total	Sum 1 + 2 + 3	15.2									
	MC-negative product	1	10.0		14.7							
	SC-negative product	2	5.0		5.4							
	EC-negative product	3	0.2		0.4							
Source: http://www.jmac.co.jp/mfca/thinking/07.php												

Table 4.16 Objectives and calculation model

Specification of the objects of calculation	Elements of building the calculation model
Objects (products)	Sometimes, it is better, for the products subject to calculation, to be presented as a single product (per unit of product)
Sequencing of calculation of the objects	Number of centers of responsibility for the objects of calculation in the process of MFCA Waste—depending on who disposes it, when calculating waste, the center is determined by changing the creator of the waste There is a possibility in some cases to include a separate process conducted in production, such as logistics
Collecting the necessary data	These can be derived from current data management, if they exist, and be organized in the appropriate way of calculating MFCA. The data must be recalculated so that this method of calculation proves suitable

Table 4.17 Data that are necessary for the calculation of MFCA

Data	Content
Data for material flow on volume	Presented in physical units such as weight in a unified measure, introduced material for each process, including waste, the amount of their volume. The generated amount of waste is particularly important (to calculate or measure). Classification is carried out for each process
Data for material flow on prices	Unit price of cost of material of any material (optional) If processing of generated waste is to be assigned to the distributor, the unit cost of service fees is also required to be reported
Data for system costs, energy	Required data for the energy costs, labor costs, depreciation of equipment, as well as indirect costs such as fuel and energy costs

A system of calculation of MFCA is created and an analysis of the efficiency is made. In practice, as a result of MFCA's calculations, it may turn out that a large part of the production costs are negative costs for the product (loss). The factors influencing the model of the MFCA should be analyzed within the components of the variable costs (VC). The company should create its own computational tools.

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Chapter 5

Some Tools and Standards for Reporting

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5.1 The Report Following GBS Standard (Italy)

5.1.1 Introduction

In the field of environmental and ethical-social accountability models present in Italy, it is possible to distinguish between process standards (SA 8000; Accountability model 1000, Q-RES project, Copenhagen Charter) and product standards (Bagnoli 2010). The latter include the GRI model; the GBS model, which is the subject of this chapter; the unified standard ABI/IBS; the Federcasse model; and the Italian Ministry of Labor and Social Policy (CSR-SC Project 2003) (see Baldarelli 2007; Biglietti 2004). The management systems are placed alongside the accountability models¹ and integrated reporting models (see Chap. 4).²

Having made these preliminary comments, this chapter will focus on the environmental accountability model proposed by GBS, that is, the study group which represents the main Italian association of scientific research for the provision of principles for drafting the social report (www.gruppobilanciosociale.org). The GBS Study Group was born in Milan on 15 October 1998.³ The initiative was previously launched in Taormina, during an international seminar (attended by professors and experts from different countries such as France, England, Spain, and Belgium)

¹Management systems include quality standards ISO 9000 and VISION 2000, environmental standards ISO 14000 and the EMAS 761/2001 regulation, the standard for information safety ISO 27001:2005, the standard for social responsibility ISO 26000, and the standard for safety and health in the workplace, OHSAS 18000.

²The integrated sustainability reporting models have become more widespread and include sustainability evaluation and reporting system realized by SPACE (SERS-SPACE) and the IIRC model (International Integrated Reporting Committee).

³The establishment of the group was promoted by Prof. R. Marziantonio together with the consulting company KPMG, SMAER, and Strategia d'Immagine. See Marziantonio and Tagliente (2003).

sponsored and organized by the Institute of Business Administration, University of Messina, and the Fondazione Bonino-Pulejo.

The GBS Study Group has institutional partners who are leading figures in the academic world (members of the main Italian universities), professionals, consultants, and as partners supporters of the CNDCEC (National Council of Chartered Accountants and Professional Accountants) and the ASSIREVI (Italian Association of Auditors).

For 3 years, the GBS Study Group has carried out an intensive study, and research has concluded with the definition of the Principles of the Social Reporting, presented in Rome at the CNEL 3 May 2001. In October of the same year, it was formally established as an association of nonprofit research (GBS 2013: 2). Its mission is:

- To develop and promote scientific research on social reporting and on the issues related to its representation and spreading
- To study, examine, and develop a corporate culture meant as an ensemble of factors including economic and social legitimization parameters for human resources effectiveness, as well as factors concerning the respect of industrial relations, within a values background which builds on the centrality of people
- To spread and diffuse research on social reporting models suitable to companies which operate in specific sectors, including the public and the cooperative ones, as well as the study and spread of the companies' Codes of Ethics, as a prevention tool for irresponsible behaviors.

Since its foundation, the main object of the GBS has been to identify uniform criteria (comparability) for the drafting of the social report referring to different periods and companies; to guarantee reliability, transparency, and publicity; and to enable stakeholders to develop sound judgments (see GBS Standard di base 2007a: 14).

Since the first publication of the GBS Standard (2001), an increased number of social and sustainability reports have been published along with a significant improvement in their format, emphasis, and content, leading GBS to publish updated guidelines for reporting the social and environmental impacts of organizations. The growing awareness of the critical role that organizations play in pursuing sustainable development has in fact led to a growth in interest – on the part of institutions and stakeholders, such as investors and the community – in greater transparency of the impacts that organizations' choices and actions have on society and the environment and produced significant developments in legislation (accounting and reporting) standards, academia, and practice (EC 2001a, b, 2002). In particular, this has brought about two main aspects and processes: (1) an extension of the scope of financial reporting and emergence and consolidation of new tools and methodologies for measuring and evaluating organizational performance which is not derived from traditional accounting (i.e., socially responsible investment rating, balanced scorecard, intangibles accounts, integrated reporting) and (2) a need for compatibility and convergence between several types and models of reporting and disclosure.

With regard to the first aspect, the Directive 2003/51 of the Parliament and European Council (note No. 1, Art. 14) represented a crucial turning point in the

regulatory evolution of the financial reporting framework, specifically in relation to socio-environmental impacts. The directive required a “fair, balanced and comprehensive analysis of the development and performance of a company’s business and its position, together with a description of the principal risks” to be included in the annual report. In addition, financial and – where appropriate – non-financial key performance indicators, including environmental and employee-related information, are also required in order to understand the company’s position. The European Union (Communication No. 2004/725) required listed companies to include in the annual report a distinct and easily identifiable section relating to their corporate governance (i.e., a reference to the code which a corporation has eventually decided to adopt or is obliged to follow by law, an explanation of the extent to which the code has been applied, and a description of the systems for internal control and risk management). In addition to the existing European legislation, an extension in the scope of financial reporting has also been suggested by accounting standard setting bodies, such as IASB, which published an “International Financial Reporting Standard (IFRS) Practice Statement Management Commentary” in December 2011. Moreover, European institutions have assigned growing importance to the issues related to reporting environmental performance (Recommendation 2001/453/CE concerning the “Recognition, measurement and disclosure of environmental issues in annual accounts and annual reports of companies”). In addition, in the context of the debate on topics related to a European “corporate governance framework,” the EU Commission launched a wide consultation about the “disclosure of non-financial information” and has submitted to the EU Parliament and Council a “legislative proposal about transparency of social and environmental information” that is provided by companies of all sectors. The EU Commission’s endorsement of the “integrated financial and non-financial reporting” represents a goal in the medium-long term which has produced the new Directive 2014/95/UE of 22 October 2014 that modified the 2013/34/UE Directive concerning the communication of non-financial information and diversity information by certain companies and certain groups of large dimensions (see Chap. 4).

With regard to the second aspect, issuers and users have strongly recognized the need to improve compatibility and convergence among several standards and reporting instruments in order to reduce confusion and redundancy. To this end for several years, companies, especially if listed, began to identify an organic framework within which to consider the different forms of disclosure and reporting, which is capable of producing synergies attempting to link both financial reporting and social and sustainable reporting under a unique framework (see Chap. 4).

In accordance to this national and international trend aimed at improving financial and non-financial information and developing new effective accountability tools, the GBS has produced 12 research documents and 2 “product

Table 5.1 GBS research documents

Document number	Year of publication	Title and content
1	2007	Guidelines for social reporting audit
2	2007	Performance metrics/indicators for reporting and sustainability rating
3	2007	Environmental report and added value
4	2007	Corporate governance and social responsibility
5	2007	Performance metrics for social reporting
6	2007	Social reporting for the regions
7	2008	Social reporting for universities
8	2008	Social reporting for intangibles
9	2008	Social reporting for healthcare companies and health authorities
10	2009	Social reporting for nonprofit organizations
11	2010	Social and environmental reporting for corporate groups
12	2011	Territorial reporting: aims, process, and indicators (territorial social reporting)

Table 5.2 Standards generated by GBS

Number	Year	Title/content
1	Produced in 2001 and published in 2007	The Social Report. Basic Standard. Guiding principles for drafting the social report
	2013	Renewed Version – Principles and Standard for Social Reporting
2	2005	Social accountability in the public sector

standards” (or content standards) (see: GBS 2005, 2007a, b, c, d, e, f, g, 2008a, b, c; 2009; 2010; 2011) as summarized in the following tables (Tables 5.1 and 5.2).⁴

The drafting principles make reference to shared values of public and economic ethics, sanctioned by the constitution, by national and community legislation, by the fundamental principles of human rights (United Nations Human Rights Charter), and by national and international accounting principles (OIC – Italian Board of Accounting, IASC/IFAC; Framework IASB).⁵ Moreover, they refer to more specific ethical,

⁴Both research and standard documents are available online, in addition to paper versions. The revised Standard (2013) is available in the English language.

⁵In particular, the reference to international accounting principles is relative to qualitative characteristics envisaged by the IASB Framework (essential or compulsory prerequisites) of voluntary applications of socio-environmental reporting. IAS 1 highlights the importance of voluntary documents although they do not fall within the disciplined system of the IFRS, particularly in the realm of specific sectors and the environmental context of reference. Some principles can be extended to voluntary documents: understandability, relevance, reliability (which includes prudence, neutrality, completeness, and focus on form), and comparability. Such principles are to be found both in the GRI (principles of guarantee in quality reporting) and in GBS (drafting principles of social reporting). See Cardillo and Molina (2011).

regulatory, and professional domains. The respect for principles guarantees the quality of the social reporting process and the information contained in the report.

Currently the GBS has three active working groups focused on the following lines of research: (a) social accountability and reporting of great cultural events, (b) social accountability and reporting in schools, and (c) accountability and sustainable reporting in universities. Moreover, it collaborates with the Network for Integrated Business Reporting (NIBR) on the theme of integrated reporting (IR) together with the National Council of Chartered and Professional Accountants (now known as OIC, the Italian Body of Accounting). The latter promotes and develops interest in and awareness of such themes, through the diffusion of numerous explanatory documents and guidelines for chartered accountants.⁶ However, professional accountants in Italy do not yet seem particularly active in disseminating accountability instruments and also in seeing them as an opportunity to diversify their own sphere of activity, despite the fact that legislative reforms of the profession (D. Lgs. 139/2005) have for many years established specific responsibilities in the drafting and asseveration of informative reports concerning environmental, social, and sustainability issues for private and public organizations, as well as for the certification of environmental investments for the purposes of obtaining financial incentives envisaged by the law.

As in other countries, it is also important in Italy therefore that the value of ethical, social, and environmental accountability (the SEAR issues) is increasingly understood and diffused in diverse spheres (educational, professional, and corporate), starting from university education, in which our research work is placed, to then continue into the scientific and professional arena. Practicing and future accountants, likewise future managers and entrepreneurs, have in fact a central role to play, alongside academics, in the diffusion of the philosophy and instruments through which corporate responsibility and sustainability are expressed, as the following reads: “Those of you who are the future of the profession owe it to yourselves as well as to the society that has offered you the privileges you currently enjoy to explore your future profession as carefully as possible and to think what ‘serving the public interest’ will mean to you”⁷ (Gray et al. 1996: 299).

After these premises, the subjects dealt with in the following pages will be organized as follows: First, the social report will be presented, with a description of its origins and diffusion in Italy and a focus on its aims and contents. This will be followed by a brief presentation of the drafting standards and subsequently a focus on environmental accountability envisaged by GBS through the analysis of the base standard contents (2013) and of the following GBS documents: No. 2, performance

⁶Among these can be cited the document which supplies guidelines on presenting information about personnel and the environment to be provided within a management report, in accordance with the new draft of Art. 2428 of the Italian Civil Code.

⁷Gray, Owen, and Adams define CSR as a process of communicating the social and environmental effect of organizations’ economic action to particular interest groups within society and society at large. As such, it involves extending the accountability of organizations beyond the traditional role of providing a financial account to the owner of capital, in particular shareholders (accounting) (Gray et al. 1996).

indicators for sustainability reporting and rating; No. 3, environmental reporting and added value; and No. 5, performance indicators for social accountability.

5.1.2 *Origins and Diffusion of Social Reporting in Italy*

In Italy, the interest in social accountability and social reporting developed from the second half of the 1970s, and for over a decade, these themes have generated considerable attention (Matacena 1984; Rusconi 1988; Gabrovec Mei 1993; 1999; 2002; Viviani 1999; Vermiglio 2000; Hinna 2002; Cattaneo 2003; Campedelli 2005; Pulejo 1996, 2002; Ricci et al. 2014; Chiesi 2000; Campedelli and Cantele 2004), although they have not yet been clearly defined. In fact, there are still many differences in terminology (i.e., social report, societal report, social balance, socio-economic report, and so on⁸), as well as in the informative content and the functions carried out.

The first case of producing a social report dates back to 1978 with the Merloni Group (headquartered in the Marches region and specializing in domestic appliances), on the initiative of the “Istituto Battelle of Geneva,” the promoter of a research project which envisaged experimentation with social reporting in four great for-profit Italian companies.⁹ Some years later, an attempt was made to make social reporting compulsory by law (Government Bill No. 1571 of 22 July 1981), by proposing the introduction, within a corporate information system, of social reporting containing information about employees’ quality of life and actions to improve safety and hygiene in the workplace. Such an initiative however was not followed up. Social reporting still remains voluntary in nature.

In the last 20 years, the diffusion of social reporting has been on the increase, however, especially in listed companies and medium to large-sized corporations, whereas it is not so widespread among small-sized companies, although there is no lack of excellent cases.

Of the research produced to verify the diffusion level of social information, a study may be cited (Fossati et al. 2009) relative to a sample of 349 listed Italian companies (annual 2006 report): 21% of companies published their social report (especially starting from 2000), and, in about half of the cases (43%), the report was submitted to external certification. The same frequency is revealed, from other international surveys, in the certification of social reports of foreign companies on the part of specialized bodies including KPMG, PricewaterhouseCoopers, Ernst & Young, Deloitte & Touche, Duodo & Ass,¹⁰ and Rga.¹¹ The sectors which are most concerned are bank sectors (31%) and insurance (13%), while social reporting that

⁸Regarding social reporting models, see also Chiesi et al. (2000), Hinna (2002), Rusconi and Dorigatti (2005), Rusconi (2006a, b), and Costa (2007).

⁹In 1994, the State Railway published its own social report, followed in 1997 by Agip Petroli.

¹⁰www.duodo.it/It/homepage.htm

¹¹www.rgassociati.it/

is less widespread is the furniture sector (2%) and automobile sector (2%). In a minority of cases (14%), it makes up an integral part of financial statements and not an autonomous document. The document has several names: although “social report” is the most common name, other frequently used denominations are sustainability report; economic, social, and environmental performance (part of the financial statement); social accounting, human resources, and corporate social responsibility; sustainable development report; responsibility report; and socio-environmental report. The models specifically mentioned are prevalently GRI international content model (GRI-G3 version) and the GBS and ABI (Associazione Bancaria Italiana – Italian Bank Association) national ones; there follow the AA1000 process standard, the CSR-SC document (enacted by the Ministry of Labor and Social Policies)¹², and the LBG model.¹³ Many companies make reference to several content standards at the same time.

A second study on the “state of the art” of CSR in Italy concerns the third report on corporate social responsibility (Molteni 2006). The survey was carried out in 2005 and involved 354 Italian companies. The study revealed that 87.8% of mainly large-sized companies use the social report as the principle instrument of CSR.

A further survey conducted among 80 large national and multinational listed and non-listed companies (of the 323 contacted) allowed us to identify a hard core of companies in which investment in social/sustainability reporting (54%) is and will be a strategic priority (Osservatorio Istud-Dnv),¹⁴ followed by the ethical code (52%), certification (50.8%), and audit activities (38%).

An international study (KPMG International Survey of Corporate Responsibility Reporting 2011), carried out on 34,000 company leaders in 34 countries and 16 world sectors, including 250 global corporations from the Fortune Global 500 Index, sees Italy among the nations with the greatest diffusion of sustainability reporting among listed companies. Seventy-four percent of companies adopted a document of social responsibility in 2011 as opposed to 62% recorded in the previous 2008 study, registering a 19% increase in 3 years. Of the companies listed, 52% in the FTSE MIB index of the Italian stock exchange produced a social report even in the English language. The gradual diffusion of sustainability reporting has been furthermore documented by other surveys. GRI was aware of 1002

¹²With this document, presented in 2003, the Italian Ministry of Labor and Political Sciences contributed to defining the definition process of a CSR standard for the evaluation of CSR and the measurement of performance in this sphere, with particular attention to SMEs. The standard proposed by the government seeks to develop a voluntary instrument, designed to guide companies in improving their social behaviors; favor a process of model and data collection standardization, as well as the measurement and communication of CSR performance; and guarantee greater credibility of corporate communication to protect consumers and benefit collectivity.

¹³The London Benchmarking Group is a project developed in 1994 by the Corporate Citizenship Company to design a model which allows companies to measure and evaluate the impact and support of activity for the development of the local community through three important areas: donations, social investment, trading initiatives. For more details, see www.lbg-online.net.

¹⁴www.istud.it/up_media/ricerche/agenda.pdf

organizations worldwide that issued sustainability reports based on the GRI G3 Guidelines in 2008, with an increase of 46% over the 6685 organizations that issued reports using the GRI G3 in 2007 (GRI 2009).

Finally, the ISVI-ALTIS Social Reporting Observatory,¹⁵ a nonprofit association founded in 1990 with the aim of promoting Italian entrepreneurial and managerial sustainable and responsible competitive behaviors in the world, has, since 2003, made available online information about social reports in Italian companies, categorized according to macro-sectors (industry, services, banks and finance, trade associations, utilities, nonprofit companies, representative associations, and territorial public bodies). The observatory therefore represents a driver for the diffusion and monitoring of best practices in social accountability.

5.1.3 Objects and Aims of the Social Report

The social report is a tool of accountability through which an organization answers to and holds to account the stakeholders concerning its activities and results attained to allow them to verify and “share” the value produced through the accounting and reporting of economic, ethical, social, and environmental performance (Porter and Kramer 2011).

In literature, there is a distinction between direct and indirect accountability (Rusconi 2006a, b). The first concerns documents which are exclusively published to provide a final account of the fulfillment of responsibilities. The second concerns documents which, like ethical codes, explain to stakeholders what the company intends to do to meet commitments (Freeman and Evan 1990; Freeman et al. 2007, 2010; Manetti 2006).

The term social report is used to indicate a public (addressed to all stakeholders who are directly or indirectly involved in corporate activities) and synthetic document that includes qualitative information, which is published periodically (drafted at the end of each financial year) on the basis of preestablished guidelines and procedures, and it presents specific characteristics which differentiate it from other instruments of communication, accountability, and management (Vermiglio 2005; Beda and Bodo 2004). It is an independent document, which is adept at representing the overall impact of corporate activities on civil society, although in synergy with other accounting reports. Therefore, the information included in the social report must be strongly coupled with reliable and verifiable sources and with clearly defined procedures in order to avoid the risk of appearing to be simple declarations of intent and, as such, devoid of any spatial and temporal control and comparability.

The social report can represent a document in its own right, or it can be included in a separate section of the annual report (i.e., in the management report) or, more recently, in the integrated reporting. It is a general model, which can be used with

¹⁵www.isvi.org

necessary adjustments, by any company (for-profit, nonprofit, public, and private organizations). The preparation of a social report may require the commitment of the governing body of the organization for several accounting periods to proceed through several evolutionary steps and the progressive involvement of human and technical resources.

The social report is coupled with the financial statement as it supplements and completes the information. In particular, the prospect of calculation and distribution of the value added¹⁶ constitutes the main link with the financial statement and makes clear the economic effects that organizational activities have on stakeholders both in terms of production and distribution of the economic value. However, the informative content of the social report is broader: the financial report does not talk of air, exhaustion, time, light, pain, pleasure, illness, fairness, the future, or solidarity. It does not talk about what the company does not see or pretends not to see (see Viviani 1999). As opposed to the former, the social report offers stakeholders the opportunity to make a motivated judgment about the company's behavior. It involves them in the process of producing a social report and allows users to understand the process of information collection, processing, and presentation.

Specifically, the social report aims to achieve the following objectives:

- To provide all stakeholders with a comprehensive picture of an organization's performance, by activating an interactive process of social communication
- To provide useful information about the quality of organizational activities in order to expand and improve knowledge and possibilities of evaluation and choice of stakeholders, also from a social and ethical point of view.

Particularly, this means to:

- Give an account of the identity of the organization as well as of its value systems and strategies, managerial behaviors, results, and effects.
- Provide a description of the way in which an organization balances stakeholders' expectations and indicates the commitments adopted with regard to them.
- Give an account of the extent to which the organization fulfills its commitments toward stakeholders
- Describe the organization's commitments for improvement.
- Provide information about the relationship between the organization and the environment in which it operates.
- Represent the value added generated in the accounting period and its distribution.

¹⁶By added value is meant the surplus of value, which compared to the means initially adopted, the company is able to create thanks to its activity. This concept will be picked up again in the following paragraphs. For greater detail, see Rusconi (1988), Matacena (1984), and Gabrovec Mei (2002).

The social report therefore has a variety of meanings which can be summed in Table 5.3:

- It is a voluntary report which gives prominence to the company's mission, management criteria, and commitment to human resources, the whole community, the environment, safety, and innovation.
- It is an instrument which demonstrates that the aim of a company is not just to obtain an economic advantage but also to create and distribute the value added.
- It is an investment which creates value for a company and reinforces its legitimization and reputation as it testifies to the responsibility and reliability of the economic subject in the social, ethical, and environmental context.
- It is an instrument which makes available to management the necessary information for the evaluation and control of generated results and for the definition of strategies to carry out in the social, ethical, and environmental fields.

From what has been said, it may be deduced that the social report can be considered as an instrument of communication, a collection of reports, a relational and strategic tool, an organizational and management lever, an instrument of institutional verification, a social strategic processing base, an instrument of internal governance, and a driver of mutuality.

In the light of these varied meanings, there is additionally a large variety of methodologies concerning the drafting of a social report, which can be classified on the basis of the behavioral approach adopted, the respective characteristics, and context of application (Table 5.4).

Similarly, social reporting covers a multitude of themes (Table 5.5).

In the following paragraph, we will deal with the principles of drafting a social report laid down by the GBS.

Table 5.3 The social balance's declinations

Social strategies toward stakeholders
Public report
Documented defense and anti-regulation
Evaluation of wealth produced and distributed
Improvement of industrial relations
Overall evaluation of the company's contribution to collective well-being
Measurement of non-financial performance
Activation and management of social capital and, more generally, of intangibles (trust, reputation, relational capital)

Source: our elaboration of Rusconi (1988)

Table 5.4 Classification of the methodologies for the preparation of the social report

Behavioral approaches	Area of origin/context of application	Main characteristics and focus
Account approach	Profit-oriented companies and business economists	Classification of the value created for categories of stakeholders
Environmental approach	Companies at high risk of pollution and consulting agencies	Focus on accountability
Social communicative approach	Large companies, consulting agencies, researchers of the sociology of business	Focus on language and attention to the sensitivity of the stakeholder
Cooperative approach	Cooperatives and dedicated consulting agencies	Emphasis on process and chart of accounts
Nonprofit approach	The world of nonprofit business, consulting agencies, business economists	Emphasis on ethical work and on the matrix of stakeholder activities

Source: Hinna (2002)

Table 5.5 Social reporting themes

Workplace climate	100%
Environment	100%
Marketplace	100%
Mission, vision, values	98%
Economic development	93%
Community involvement	91%
Ethics	67%
Social dialogue	53%
Human rights	44%

Source: CSR Europe (EC 2001b)

5.1.4 The GBS Basic Standard (2013)

The GBS content standard is the main reference source in Italy for the drafting of the social report. It provides and illustrates principles and guidelines that are deemed essential to ensuring reliability, transparency, neutrality, coherence, and publicity. These principles and guidelines have been partly taken from practice and academic contributions as well as developed through debate and comparison with internationally accredited models of accountability: Accountability 1000, 1999, ISEA (Institute for Social and Ethical Accountability); The Copenhagen Charter, a Management Guide to Stakeholder Reporting, 1999, Ernst & Young, PricewaterhouseCoopers, KPMG, Huset Mandag Morgen; Sustainability Reporting Guidelines, 2000 (Sustainability 2004), GRI (Global Reporting Initiative); and Voluntary Guidelines for CSR Reporting & Communication, 2000, CSR Europe (GBS 2013: 13).

The document is organized in two main parts. The first describes the objectives and principles that guide the drafting of a social report. The second one illustrates the contents of the sections in which the report has been divided, as follows:

1. The identity of the organization and context.
2. The reclassification of financial accounting data and calculation of the value added.
3. The social and environmental report, which illustrates the results achieved in relation to commitments, programs, and effects on stakeholders. This section is divided into two basic parts (report contents, identification of the stakeholders, improvement of the social report) and supplementary (the judgment and opinion of stakeholders, comments and statements, improvement of the social report).
4. Additional sections.
5. Appendix: It presents the information for determining the value added and its links with the financial statement (profit and loss account).

5.1.4.1 The Principles

Writing principles for the social report refer to the ethical domain (Melé 2009, 2012; Argandoña 2003, 2008; Rusconi 1997; Marchini and Tibiletti 2004; Sacconi 2005; Sciarelli 2007; Marchini and Tibiletti 2004) to the judicial doctrine, and to the practices of professional accounting (OIC (Organismo Italiano di Contabilità) Italian Accounting Standard Setter¹⁷; IASC/IFAC). They recall the shared values of public and economic ethics contained in the national constitution and community legislation, as well as the fundamental principles of the rights of man (United Nations Human Rights Charter).

The quality of the social report writing process and the information it contains are guaranteed in particular by compliance to the 17 principles (Table 5.6).

5.1.4.2 The Sections of the Social Report: Corporate Identity

The identity of the organization is concerned with the following aspects:

1. The scenario and context of reference
2. Principles and values inspiring the mission, targets, and behaviors
3. Governance and organization structure
4. Strategies and policies.

First, it is necessary to preliminarily describe the salient aspects of the socio-environmental context in a concise but thorough way.

Second, the values, the ethical principles, and the code of conduct, which are actually followed and adopted by an organization to determine the strategies,

¹⁷The standard setters include several organizations, i.e., ABI-Istituto Europeo per il Bilancio Sociale, Amnesty International, Business Impact Task Force-Business in the Community, Center of Ethics Law and Economics, Centre des Jeunes Dirigeants et des acteurs de l'Economie Sociale, Coalition for Environmentally Responsible Economies, Deutch Accounting Standard Board, Global Reporting Initiative, OCSE, and ONU.

Table 5.6 Principles for writing a social report

1. Responsibility	The different stakeholder groups must be identifiable or must have the possibility to make themselves identifiable
2. Identification	The ethical framework (values, principles, rules, and general objectives – mission) needs to be highlighted, as well as complete information about corporate ownership and governance, in order to provide third parties with a clear description of related responsibilities
3. Transparency	All recipients of the social report must be placed in a position to understand the logics behind the process of accounting, reclassification, and formation of the document, with reference to its procedural and technical components as well as to the discretionary choices adopted
4. Inclusion	All identified stakeholders will be – directly or indirectly – given a voice, by illustrating the methodology adopted for accounting and reporting. Any exclusion and limitation must be explained
5. Coherence	An explicit description of how policies and management choices comply with the explicated values must be produced
6. Neutrality	The social report must be impartial and independent of any interest group or particular coalitions
7. Third parties' autonomy	Where third parties are appointed to prepare specific sections of a social report or to ensure the quality of reporting or to provide evaluations and comments, complete autonomy and independence of judgment must be requested and guaranteed
8. Accruals basis of accounting	Social effects must be recorded when they occur and not just when there is an actual cash flow related to operations from which they originate
9. Prudence	Positive and negative social effects must be recorded and represented in such a way as not to overestimate an organization's results. Those results that refer to accounting items must be sorted by cost
10. Comparability	The comparison between social (accounts and) reports of the same organization from one period to another or those of other companies in the same context or sector must be allowed
11. Comprehensibility, clarity, and intelligibility	Information included in the social report must be clear and comprehensible. The disclosing approach must ensure a fair balance between form and substance. The structure and content of the social report must make an organization's choices and followed procedures understandable
12. Periodicity and continuity	The social report, because it is complementary to the financial statements, must coincide with the accounting period of the latter
13. Homogeneity	All quantitative measures must be expressed by the same currency units (euros)
14. Utility	Information must contain only those data which are useful to meet the expectations of the stakeholders in terms of reliability and completeness.

(continued)

Table 5.6 (continued)

15. Significance and relevance	The actual impacts of the economic and noneconomic events on stakeholders must be taken into account. Any subjective assessments or estimates should be based on explicit and congruent assumptions
16. Verifiability of information	The additional information of the social report must be verifiable through reconstruction of the procedure followed to collect and report data and information
17. Reliability and fair representation	Information must be devoid of errors and biases and provide a fair description of the object to which it refers. To be reliable, the information must be represented in a complete and truthful way, with a preponderance of substantial aspects over the formal

Source: GBS (2013): 14

policies, and operations of those who are responsible for the management, must be made explicit. The presence of a Code of Ethics should be mentioned. The reference values include guidance values, ethical principles, and deontological codes which are effectively followed and which guide strategic choices and operative behaviors and characterize the corporate culture (Catturi and Di Toro 1999; Catturi 2003, 2007; Coda 1988). Formal criteria to ensure comprehension of such values are prescriptiveness, compliance, stability, generality, impartiality, and universality.

The mission describes the main economic, social, and environmental purposes an organization intends to pursue (Matacena 2010). Social purposes include contributions to stakeholders in terms of specific benefits or contributions to the community with regard to welfare enhancement, quality of life, innovation, social integration, mutuality, and solidarity.

Third, the users of the social report must be provided with information that facilitates an objective identification of an organization, such as ownership and corporate governance; history, culture, and development; size; market position; and organizational structure.

Both corporate culture and practices cannot be separated from implementing governance which is extended to the wider governing of the relationship with stakeholders. In this sense, the aforementioned principles can be concerned with the definition of roles and responsibilities of the Board; the executive committees and the auditors; the fiduciary duties toward associates and other stakeholders that administrators have to fulfill; the forms of participation in the governance by partners, employees, and other stakeholders; the constitution of ad hoc executive committees within the Board; the definition of roles and responsibilities of managers; the operational mechanisms; and the corporate culture.¹⁸

¹⁸The social report must describe the system of governance adopted by the organization; the role, position (as well as functions, nomination, and compensation), and tasks of the board, chairman, and CEO; the presence and number of independent and/or nonexecutive directors; the adoption of

Stakeholders should be involved, to a certain degree, in the process of reporting through initiatives such as periodic focus groups, panels with stakeholders, or a permanent multi-stakeholder forum.

Finally, the medium- and long-term objectives that an organization aims to pursue as well as the programs, initiatives, actions, and resources have to be illustrated by listing and describing all policies (social, financial, and environmental policies) an organization intends to put in place for sustainable development.

5.1.4.3 The Social Balance Sections: The Reclassification of Financial Accounting Data and Calculation of the Value Added

Value added is calculated both at macro- and microeconomic level.¹⁹ From a microeconomic perspective, it represents the value that an economic institution generates through the combination of several assets and factors of production and distributes to its stakeholders.²⁰ In other words, it measures the (economic-financial) wealth produced by an organization in the accounting period, by referring to the stakeholders who are involved in its distribution (Matacena 1984; Gabrovec Mei 2002, 2004).

Its determination and distribution are carried out from two integrated perspectives, the production of the valued added and the remuneration of stakeholder's reports, and it requires the reclassification of economic and financial accounting data reported in the financial accounts and statements. The former is concerned with the determination of the value added as the difference between the revenues and the intermediate costs of production; the result of which is the performance in the accounting period that can be distributed. The latter assimilates the value added to a fund that is needed to compensate stakeholders. Consequently, it requires the preparation of a "statement of destination of the value added."

The value added is a quantity that has a social informative value, and it is relevant to varying degrees depending on whether the organization produces goods and services or simply redistributes wealth (i.e., nonprofit organizations).

Value added can be represented in three different statements: the aforementioned statements of calculation and distribution of the value added and the statement of the value added for areas of intervention. The first two statements are

codes of conduct; the description of the internal auditing and control system; the description of the organizational process that has led to the definition of the mission and ethical framework; and the identification of the stakeholders and relative expectations and their integration in the strategic plan.

¹⁹At a macroeconomic level, the value added represents a comprehensive measure of national income.

²⁰For more details, see GBS (2013): 17–23.

balanced. Two prospectuses will be presented (Tables 5.7 and 5.8). Subsequently a brief explanation of the single components of remuneration of stakeholder groups will be given.

The value added may represent various configurations depending on the level of aggregation of the economic components:

- (a) Typical value added (TVA)
- (b) Standard value added (SVA)
- (c) Global value added (GVA)

The configuration chosen for the GBS Standard is the global value added, which can be considered before or after depreciations.

Environmental information of a financial nature is implicitly included for the determination of the value added produced. If the guidelines provided by the

Table 5.7 Statement of calculation of the value added

Value added	Fiscal years		
	(n)	(n-1)	(n-2)
<i>(A) Production/output value</i>			
1. Revenues/income due to sales or supply			
Corrections of revenues/incomes			
2. Increase/decrease in stock inventory of semifinished, in progress, and finished products (goods)			
3. Increase/decrease for working orders			
4. Revenue/income from normal operations			
5. Revenues/incomes from other sources			
<i>(B) Intermediate costs of production</i>			
6. Raw materials consumption, subsidiary materials consumption, consumption of other materials			
7. Cost of services			
8. Cost for leases			
9. Allocation of funds for risks			
10. Other allocations			
11. Other costs and charges			
$A - B = \text{Typical value added}$			
<i>(C) Incidental and extraordinary components</i>			
12. \pm Balance of the incidental components:			
Incidental revenues/incomes			
– Incidental costs			
13. \pm Balance of extraordinary components:			
Extraordinary revenues/incomes			
– Extraordinary costs			
<i>Typical value added – C = Gross value added</i>			
– Depreciations of the year divided into homogeneous groups of items			
<i>Global net value added</i>			

Source: GBS Standard (2013): 26

Table 5.8 Revenue and costs of environmental nature that can be derived from the income statement

<i>Revenues</i>
A1. Sales revenues related to management of environmental issues
A4. Increase for working orders related to environmental product/goods
A5. Other revenues/incomes related to management of environmental issues
A6. Environmental contributions
E. Extraordinary revenues/incomes related to the management of environmental issues
<i>Costs</i>
B6+B11. Raw materials' consumption related to the management of environmental issues
B7. Cost of services related to the management of environmental issues
B8. Costs for leases related to the management of environmental issues
B9. Cost of employees related to the management of environmental issues
B10. Amortizations and depreciation of environmental assets
B12. Allocation of funds for environmental risks
B13. Other allocations for the management of environmental issues
B14. Other environmental costs and charges
C17. Expenses for interest due to management of environmental issues
E. Extraordinary costs/expenses due to management of environmental issues

Source: GBS Standard (2013): 27

Recommendation 2001/453/EC were to be followed, environmental information of a financial nature would be separated from single costs and revenues. The revenue and costs of environmental nature that can be derived from the income statement are included in Table 5.8. A detailed analysis is provided in the first part of the GBS research document No. 3: *Environmental Reporting and Value Added* (2007b).

The balance of these components contributes to determining the impact of the management of environmental aspects on the results of a fiscal year. A detailed analysis of these components must be included and commented in the socio-environmental report, where data may also be used to calculate appropriate indicators of efficiency.

From the data used to determine the value added produced in the accounting period, the environmental quota will be thus subtracted. The revenues related to the management of environmental issues will not always be present. Subsidies for current expenses related to environmental contributions must be accounted as a deduction of the payments to public administration (PA). The balance of the management of environmental issues, therefore, must be considered as a component of the global value added. In the analysis of the value added distributed, the environment is consequently represented as an internal stakeholder.

“It has been considered as inappropriate to deduct environmental subsidies from the total cost of the management of environmental issues. Nevertheless, information about this compensation can be disclosed in the Socio-Environmental report where data are commented on and analysed. However, it seems clear that such compensation influences the results of the payments to P.A. to the extent to which, de facto, this is bearing the cost of the management of environmental issues” (GBS Standard 2013: 28).

Table 5.9 Statement of the value added distribution

Value added distribution	Fiscal years (%)		
	(n)	(n-1)	(n-2)
<i>A. Payments to human resources</i>			
Self-employed and freelance personnel			
Employed personnel			
(a) Direct wages			
(b) Indirect wages			
(c) Profit sharing			
<i>B. Payments to public administration</i>			
Direct taxes			
Indirect taxes			
– Grants and subsidies			
<i>C. Payment for liabilities/loan</i>			
Interest paid on short-term loans			
Interest paid on long-term loans			
<i>D. Remuneration of equity capital</i>			
Dividends (paid out to stockholders)			
<i>E. Value destined to keeping and implementation of the value equity</i>			
± Changes in reserves			
(Amortizations)			
<i>F. Donations</i>			
<i>G. Environment net global value added</i>			

Source: GBS Standard (2013): 28

As aforementioned, the statement of the value added distribution is illustrated in Table 5.9.

While one can refer to the document for a detailed description of the macroclasses from A to F which compete in the distribution of the value added (GBS Standard 2013: 29–30), subsequently attention will be focused on the environment.

When the approach of hiving off environmental costs and revenues of a financial nature is followed, the calculated balance is included in the statement of distribution. This measures the benefits to the environment generated in the accounting period. It includes only financial components, while investment and disinvestment components are excluded. All this data, combined with environmental indicators, are included in the environmental section of the report.

5.1.5 The Social Report Sections: The Socio-environmental Report

The section of the social report called socio-environmental report contains a qualitative and quantitative description of the results that an organization has

achieved, compared with its commitments, the actions undertaken, and the effects produced on individual stakeholders (Table 5.9). Information is identified and described by using measurements and comparisons, narrative reports, descriptions, evidence and opinions, and any other means to provide a comprehensive account of the organizational activities.

The fundamental elements of a socio-environmental report are:

- The specification of the commitments and rules of conduct (i.e., code of conduct, corporate policies, operational procedures, quality manuals) that derive from the corporate identity.
- The identification of stakeholders whom the social report is addressed to (and justification of possible relevant exclusions).
- Disclosure of the policies related to each category of stakeholders, of the expected results, and of their coherence with declared values.
- Quantitative and qualitative information, comparisons, evaluations, and, in general, data useful to describe the relationships between targets and achieved results.
- The comparisons that enable the reader to better evaluate organizational performance. These benchmarks should be undertaken on the basis of official and publicly available data, whose sources should be clearly and fully identified.

In the new version of the GBS Standard (GBS 2013), the concept of sustainable development (WCED 1987) is included to give more evidence of the greater importance attributed to the environmental impacts of activities carried out by organizations, to which a specific part of the report is dedicated. The report is therefore organized in two distinct parts: the social dimension (related to employees and human resources, partners and shareholders, financial institutions, Public Administration, community, consumers, and suppliers of goods and services)²¹ and the environmental dimension (Table 5.10).

5.1.5.1 The Environmental Dimension

With regard to the environment communication system, the following elements need to be taken into account: economic and financial information, qualitative information, and quantitative data and indicators that represent the dimension related to the environmental performance of the period.

Economic-Financial Information

According to Recommendation 2001/453/EC on recognition, measurement, and disclosure of environmental issues in annual accounts and annual reports of companies, *environment* are meant to indicate the surrounding natural physical space that includes the air, water, land, flora, fauna, and nonrenewable resources (such as fossil fuels, minerals, etc.).

²¹For a detailed description of the aspects and indicators referred to each stakeholder category, see GBS (2013): 35–51.

Table 5.10 Synthesis of the information relative to the social report (per category of stakeholders)

Stakeholder category	Information
Employees and human resources	Category, gender, age, seniority, type of contract, region qualification Work organization Turnover Social activities Recruitments Organizational climate Absenteeism Disciplinary actions and litigations Equal opportunities Training Employee development programs Remuneration and benefits Health and safety Trade union relationships Communication Volunteering Funds raised
Partners and shareholders	Remuneration Value of the investment Exercise of voting right Shareholding Types of shareholders Investor relations Geographical areas Characteristics of individual Shareholders Investor relations and Communication Benefits for shareholders New shareholders Seniority of shareholders Support to the decisions of Board of Administration Litigation Ethical Finance Stock market indices of Sustainability Ethical rating
Financial institutions	Remuneration Repayment of debt Category of financing subjects and institutions Typology of funding Concentration of debt Continuity of financing and credit facility Communication New financing subjects and institutions Amount of credit facilities which are available

(continued)

Table 5.10 (continued)

Stakeholder category	Information
	Litigation Access to funding through social and environmental requirements
Consumers	Economic dimension of the relationship Features of products/services: quality, innovation, customization, safety Region Category of customer Category of products/services Dimension Concentration Customer retention Communication and information Contractual conditions Image and reputation Customer acquisition Quality Customer satisfaction Complaints and litigation Social and environmental features of the products
Suppliers	Economic dimension of the relationship Features of purchased goods/services and quality Region Category of purchased goods/services Dimension Concentration Contractual agreements Retention Transfer of technological knowledge/codesign Conformity to quality standard New contacts with suppliers Ways in which suppliers are selected Complaints and litigation Adherence to the existing ethical and social standards
Public administration	Taxation Contributions, tax benefits, and/or subsidized funding Internal norms and control systems aimed to ensure law compliance Support initiatives for public Policies Contractual relationships, activities with Public Administration Litigation Joint projects undertaken with Public Administrations
Community	Social and economic well-being: number of jobs created, business related to activity of the organization that has been created, initiatives and activities for the community Respect of human rights Categories of beneficiaries of the benefits and initiatives of the organization Donations Sponsorships

(continued)

Table 5.10 (continued)

Stakeholder category	Information
	Promotional initiatives with social impact (cause-related marketing) External communication Relations with schools and universities Litigation

Source: Our elaboration from GBS (2013): 34–51

Environmental expenditures include the costs of initiatives undertaken by an organization to prevent, reduce, or repair damages to the environment which result from its operating activities and in particular disposal and avoidance of waste, protection of the environment noise reduction, and protection of biodiversity and landscape.

The costs related to initiatives that may produce favorable effects on the environment and have a primary purpose to achieve business improvement targets cannot be included within environmental expenditure (“finalization” criterion). In accounting terms, the environmental expenditures should maintain the characteristic of *specificity*. If expenditures are common to more than one object or purpose, the pro rata criterion should be applied.

Costs, incurred as a result of fines or compensation due to environmental pollution-related damage, are excluded from the definition of environmental expenditure.²² The costs of the initiatives taken voluntarily by a company to prevent, reduce, or repair damage to the environment caused by other subjects or those which do not result from its operating activities are not included in the definition of environment expenditure.

The criterion of “operative responsibility,” which has been mentioned in the European recommendations to delimit the extent of corporate obligation even when damage is caused by several “agents” – thus excluding joint and several liabilities between them – is applied. The recommendation urges the use of detailed definitions provided by Eurostat in disclosing environmental expenditures. “When the Recommendation 2001/453/EC has been adopted, these data should already be accounted in the income and financial statements. The impact on the income statement allows the management effects to be made explicit, even in terms of value added. Other data, related to investments, finances, risk funds, etc. should be included in the Socio-Environmental report” (see *Direct Environmental Aspects*) (GBS 2013: 52).

Qualitative Information

The definition of the environmental policy, in terms of identification of the framework of reference to establish and review environmental targets and goals, represents a fundamental step to stating the organization’s philosophy and values related to environmental protection. In most cases, the process of policy definition provides the organization with an opportunity to critically rethink its own business by

²²These costs are related to the impact of a company’s operations on the environment; they do not actually prevent, reduce, or repair damage to the environment.

highlighting the ways in which its values and environmental-related motives are elaborated. The context of reference may include both the *organizational dimension* (site, multisite, holding, subholding) and the *productive/operating dimension* (the most relevant productive sector or sectors and other business activities, such as real estate activities or logistics).

In particular, the following aspect should be considered:

- The existence of environmental management systems
- The presence of environmental certifications
- The realization of specific environmental studies (i.e., life-cycle assessment (LCA) studies)
- Whether the organization is adopting the emission trading scheme
- The practical application of the principle establishing that an organization, which drafts the social report, must adopt a governance structure in order to promptly embrace the best available technology (BAT) and guarantee sustainable development in line with rapid technological (and regulatory) evolution in the environmental field
- Information about any projects that are subjected to the EIA (environmental impact assessment), as well as information about substantial modifications of the work and interventions falling within the area of applicability of the EIA (e.g., description of the expected initiatives to avoid, reduce, and possibly compensate the relevant negative effects of the project on the environment; description of the expected initiatives regarding the monitoring and control of significant environmental effects that derive from the implementation of the proposed plan or project).

All this information is part of the *environmental identity* of the organization.

Quantitative Information

Information and data should be comparable with the information related to corporate expenditures and pertain to the production, consumption, and impacts produced by organizational activities. Data on air, soil, subsoil, and water emissions must be aggregated by categories of pollutants, and, for each data provided, it is suggested mentioning the measurement methodologies that have adopted environmental performance (i.e., direct measurements and samplings.). Moreover, it is important to calculate indicators regarding environmental-related training provided to employees as well as the procedures and results of internal auditing activities.

5.1.5.2 The Environmental Report

When companies operating in high environmental impact sectors opt for developing a specific report which is focused exclusively on environmental communication, the decision to proceed with environmental reporting can result in drafting an independent environmental report. In this case, both qualitative and quantitative

Table 5.11 The environmental identity

The production site
The organizational activities subjected to environmental control
The technological plants
Production processes/products subjected to environmental control
The existing controversy
The existing types of monitoring
The main environmental problems of the organization and the types of damage generated
The existing (or planned) environmental policies and programs (in addition, information related to the safety management system of employment)

information should be transposed in a sequence that takes on the guise of a Chart of Environmental Accounts (CEA).²³

When the environmental dimension is disclosed in the form of a section of the socio-environmental report, the communication is more limited. Elements about environmental identity are already included in the section of the document related to the identity. However, it is suggested grouping together all this information in the environmental section, which should include three fundamental categories of analysis (see GBS 2013: 55–56):

1. Environmental identity (Table 5.11)
2. Direct environmental aspects (Table 5.12)
3. Indirect environmental aspects (Table 5.13)

The indirect environmental aspects category accounts for environmental impacts which are indirectly related to organizational activities and thus related to the production chain.

Table 5.14 synthesizes the environmental, economic-financial, qualitative, and quantitative information.

If they were not already included in the identity section, data included in Table 5.15 are reported in addition to the indicators provided in the table above.

“Data should be presented through summary sheets which are easily accessible. The amount of funding and specific investment should be mentioned if they were not already explicated in the financial accounts and statements” (GBS 2013: 58).

After having presented the content of the social report and having focused on the environmental information, the social report includes the so-called additional sections which are relative, respectively, to the judgments and opinions of stakeholders and the improvement of social report. The engagement of stakeholders (Gao and Zhang 2001, 2006) represents in fact one of the most important aspects of the social report considered as reporting and dialogue tools, such as bilateral or dialogue and stakeholder network (Chiesi 2005). Stakeholders may be consulted either directly or through sampling or representatives. The opinion of stakeholders

²³In this respect, see GBS (2013), Appendix 5.3 (p. 59 and following).

Table 5.12 Direct environmental aspects

Information about costs, revenues, funds, and investments	
Analysis of resource consumption ^a	<ol style="list-style-type: none"> 1. Raw materials and other subsidiary material consumption (Consumed raw materials by category) 2. Energy consumption by type of energy source (electricity, gas, fuel, and others) 3. Water consumption
Analysis of emissions, waste, and liquid effluents ^b	<ol style="list-style-type: none"> 1. Dust and gas 2. Liquid effluents and waste (of water or significant spills of chemicals, fuels, and oils expressed in terms of total number or volume, by indicating also the magnitude of the environmental impact) 3. Noise pollution 4. Olfactory pollution 5. Soil and subsoil pollution
Analysis of generation and disposal of waste ^c	<ol style="list-style-type: none"> 1. A synthesis of waste generation 2. Analysis of trend in waste generation 3. Classification of waste by destination (landfill, incineration, recycling, reusing)
Corporate behaviors regarding landscape (fauna, flora, aesthetic), ecosystem, and biodiversity.	

^aFor each of these resources, the analysis should be undertaken on the basis of the quantity of consumption, by indicating also the % of recycling. The analysis of trend of consumption will be estimated also in relative terms, to disclose the efficiency of the production

^bThe indicators are in relation to tolerable thresholds, which have been imposed by regulatory bodies, in terms of time period, trend, and benchmarking

^cWaste generation should be analyzed by typology, in relation to the European Waste Catalogue (EWC), by distinguishing between municipal waste and others (hazardous and nonhazardous). The relating quantity is expressed in tons. The trend analysis is represented in absolute and percentage terms by making reference also to production volumes

Table 5.13 Indirect environmental aspects

Key suppliers, considered in relation to their position in the production chain
Carriers “to and from the organization”
Suppliers of subsidiary services
Customers and consumers, through the analysis of the life cycle of the product and related environmental impact

may regard the values of the organization, but mainly the managerial outcomes and social performance that are the object of the social report.

Finally, the company must express its position concerning expected improvements and clarify to the stakeholders the way in which integrity, transparency, and inclusion will be increased. In the following edition of the social report, the organization should take into consideration the comments and suggestions of stakeholders in order to enhance the completeness, transparency, and proactivity of the document.

Table 5.14 Environmental indicators

Aspects	Indicators	Notes
<i>Direct environmental aspects</i>		
Consumption of raw materials and other subsidiary materials	Consumption indicators by weight and volume of materials used	Information about the % of recycled materials
Energy consumption by type of energy source	Consumption indicators Development and characteristics of “energy-efficient” products	Information about % of savings due to efficient initiatives
Water consumption	Consumption indicators by sources used	The % of reused water
Dust and greenhouse gas	Indicators of the total, direct, and indirect emissions by category (CO ₂ , CH ₄ , N ₂ O) and other substances which are considered by existing laws and regulations and international conventions	Initiatives and achieved results to reduce these emissions
Liquid effluents and waste	Indicators of the total number or total volume of water, chemicals spills, oils, and fuels	Indicators are in relation to tolerable thresholds in terms of time period, trend, and benchmarking that have been identified by regulatory bodies
Waste	Classification of waste by destination and quantity indicators	Waste generation is analyzed by typology, in relation to the European Waste Catalogue (EWC)
	Indicators of waste generation by category and methodology of disposal	With regard to hazardous waste, data about treatment, and eventual export are indicated
Noise and olfactory pollution	Specific indicators	The indicators refer to tolerable thresholds in terms of time period, trend, and benchmarking that have been identified by regulatory bodies
Corporate behaviors with regard to landscape and protected areas (fauna, flora, aesthetics), ecosystems, and biodiversity	<ul style="list-style-type: none"> – Location and dimension of the industrial plants that are managed in or near by protected areas – Program for managing and safeguarding ecosystem and biodiversity – Water sources and related habitats that are significantly influenced by waste and spills 	<ul style="list-style-type: none"> – Assessment of the industrial plants – Recovered areas – Analysis with regard to species included in the “IUCN Red List”

(continued)

Table 5.14 (continued)

Aspects	Indicators	Notes
<i>Indirect environmental aspects</i>		
Key suppliers of goods and subsidiary services	Specific indicators also analyzed by trend in relation to environmental effects caused by supply relationship	Communication and assessment of the effects
Transport	Specific indicators also analyzed by trend	Significant environmental impacts related to: – Transport of raw materials and products – Staff travel
Impacts due to products and services produced (customers and consumers)	Specific indicators also analyzed by trend with particular reference to packaging	Communication and assessment of the effects
Compliance	Fines paid for not abiding to the existing environmental laws and regulations	Number, value, and context

Table 5.15 Additional information

The industrial site
The organizational activities which are subjected to environmental control
The technological plants
The production processes/products subjected to environmental control
The existing controversy
The existing types of monitoring
The existing (or planned) environmental policies and programs in environmental critical aspects of the organization
The estimation of environmental damage, even if calculated with considerable approximation (by also proposing several evaluations that may be assessed by stakeholders), i.e., illness/disease and related consequences.

5.1.6 The Chart of Environmental Accounts

As previously mentioned, the Chart of Environmental Accounts (CEA) (which is included both inside the GBS, Document of Research No 3, *Environmental Reporting and Value Added*, and in the GBS Standard 2013: 61–68) describes in detail the three main environmental categories: environmental identity, direct environmental aspects, and indirect environmental aspects (Table 5.16). The chart has been designed to elaborate a complete and autonomous environmental report that includes data and information about the environmental identity of the organization. In the case of preparing an environmental section of a social report or of other similar documents, it is possible to include within the identity section information related to environmental identity.

Moreover, the analysis should follow a progressive hierarchical schema “categories/aspects/indicators” which is already largely adopted both in the GRI

Table 5.16 Content of the Chart of Environmental Accounts

1. Environmental identity (general information)
1.1. The information document about the production site
1.2. Information document of the existing organizational activities (e.g., general administration, research, laboratory, meals, handling and internal transport, repair workshop)
1.3. <i>Information document about technological plants</i>
Description and information about distinctive features (e.g., power generators, thermal power plant, compressors and dryers, power pumps, resin transformers)
1.4. <i>Information document about production process and finished and working products</i>
1.4.1. Analysis of processes/products
1.4.2. Trend analysis of finished products, working progress (expressed in value and quantity)
1.4.3. Trend analysis of consumption of raw materials and subsidiary materials (expressed in value and quantity)
1.5. <i>Existing controversy</i>
1.6. <i>Monitoring and control</i> (Description of the existing process and in particular information about the adherence to environmental risk management systems)
1.7. <i>Identification of the key environmental critical aspects related to organizational business</i>
1.8. <i>Environmental policies and programs (EPP) undertaken or planned</i>
1.8.1 EPP of training and education
1.8.2 EPP to reduce consumption and to reuse recycled materials
1.8.3 EPP to increase energy efficiency
1.8.4 EPP to reduce consumption or reuse of resources (indicate which ones)
1.8.5 EPP for reducing and controlling emissions (indicate which ones)
1.8.6 EPP for storage of hazardous waste (indicate which ones)
1.8.7 EPP for selection, involvement, and control of suppliers
1.8.8 EPP for reducing environmental impacts of logistics and transport
2. Direct environmental aspects
2.1. <i>Costs, revenue, financing, and investments</i>
2.2. <i>Matrix of the phases of process/variables</i>
2.3. <i>Analysis chart of resource consumption</i>
2.3.1. Raw materials and other subsidiary materials consumption (used materials classified by type)
2.3.2. Energy consumption by type of source (electricity, methane, fuel, and others)
2.3.3. Water consumption
2.4. <i>Analysis chart of emissions, waste, and effluents of liquid substances</i>
2.4.1. Dust and gas
2.4.2. Effluents of liquid substances and disposal (of water or significant loss of chemicals, oils, and fuels by reporting the total number or volume and by indicating the magnitude of environmental impact)
2.4.3. Noise pollution
2.4.4. Olfactory pollution
2.4.5. Soil and subsoil pollution
2.5. <i>Analysis chart of production and disposal of waste</i>
2.5.1. Summary of waste produced
2.5.2. Analysis of trend of production

(continued)

Table 5.16 (continued)

2.5.3. Classification table of waste in relation to their destination (landfill, incineration, recycling, and reuse)
2.6. <i>Corporate behavior with regard to landscape (fauna, flora, aesthetic), ecosystem, and biodiversity</i>
3. Indirect environmental aspects
3.1 Key strategic suppliers who are taken into consideration
3.2 Transport
3.3 Suppliers of auxiliary services
3.4 Corporate impacts of products and services that are provided (customers and consumers)

Source: GBS (2013): 61–63

framework and the Italian Ministerial CSR-SC Model. The numbering of variables, which have been included, follows an orderly progression from categories to sub-categories, from aspects to sub-aspects up until the specific indicators that are related to the last tier variables. In the simplest form, this classification would follow the following model:

1. Category
 - 1.1. Aspect
 - 1.1.1. Indicator

The environmental identity is illustrated through the provision of the data related to:

- Production site: CEA 1.1
- Organizational activities that are subjected to environmental control: CEA 1.2
- Technological plants: CEA 1.3
- Production processes/products that are subjected to environmental control: CEA 1.4
- Existing controversy: CEA 1.5
- Existing types of monitoring: CEA 1.6
- Main critical environmental aspects of the organization: CEA 1.7
- Existing or planned Environmental policies and programs: CEA 1.8

Moreover, it is possible to add a position regarding information related to the management system of employees' safety. The data and information should be presented through easy readable information documents. For example, the information document about the production site (CEA 1.1) should summarize the production activities and locations; provide a plan as well as the total area of the site by indicating the areas that are built up and those which are green; provide information about changes in the ratio between built-up areas and green areas along with information about future plans; provide other general information about energy sources, number of employees, number of employees' shifts, working days per week, and working days per year; and provide a list of raw materials and other materials that have been used.

The other two environmental categories follow the traditional classification that distinguishes the analysis of an organization's environmental impacts between direct and indirect impacts.

The category of direct environmental aspect is structured into six items that are briefly described below.

Costs, Revenue, Financing, and Investments (CEA 2.1)

The information about environmental costs and revenues are taken from the financial accounting ledger. The analytic tables taken into consideration will balance with the data included in the statement of value added. Similarly, a detailed table of the environmental investments and specific financing sources, derived from the annual balance sheet (adapted to the Recommendation 2001/453/EC), will be produced.

Matrix of the Phases of Process/Variables (CEA 2.2)

The information document CEA 1.4.1 of the operative processes is aimed to identify the environmentally relevant phases with regard to resources and pollutants (raw materials and other subsidiary materials consumption; energy and water consumption; effluents of liquid substances; emissions to air; waste production; soil, subsoil, and noise pollution; olfactory pollution; etc.). This information may be presented in terms of physical quantities, but it is also possible to identify a link with data from the accounting and management accounting.

Analysis Chart of Resource Consumption (CEA 2.3)

This information is reported in detail in the following categories: consumption of raw materials and other subsidiary materials (used materials classified by type), energy consumption by type of source (electricity, methane, fuel, and others), and water consumption. For each resource, the analysis should be undertaken in terms of quantity of consumption, by also indicating the % of recycled resources. The trend analysis should also be carried out in relative terms with the aim of illustrating production efficiency.

Analysis Chart of Emissions, Waste, and Effluents of Liquid Substances (CEA 2.4)

Emissions, which need to be controlled, are analyzed by making reference to the threshold limit designed by regulatory bodies and authorities and be analyzed by trend. The list must include all the substances that are laid down by laws, regulations, or conventions (local, national, or international) relative to dust and gas, effluents of liquid substances and disposal, noise pollution, olfactory pollution, and soil/subsoil pollution. The indicators will make reference to the permissiveness thresholds that are identified by authorities in terms of time period of analysis, trend, and benchmarking.

Analysis Chart of Production and Disposal of Waste (CEA 2.5)

In this section, information is reported under three levels of analysis: summary of waste produced, trend analysis of the production, and classification table of waste in relation to their destination (landfill, incineration, recycling, and reuse). The

production of waste should be analyzed by type, in relation to the CER code, and distinguished between municipal waste and other waste (hazardous and nonhazardous).

Information about quantity should be expressed in tons. The analysis of the trend should be carried out in absolute and percentage terms by also making reference to production volume.

Corporate Behavior with Regard to Landscape (Fauna, Flora, Aesthetic), Ecosystem, and Biodiversity (CEA 2.6)

The category of indirect environmental aspects accounts for environmental impacts that are indirectly linked to the organizational production processes. Thus, it links back to the production chain. Information about the effects that are attributable to transport, suppliers of auxiliary services, customers, and consumers are included.

5.1.7 The GBS Research Document No. 2: The Performance Indicators for the Sustainability Reporting and the Sustainability Rating

The guidelines contained in this GBS document (GBS 2007d) have arisen from the need, indicated by companies, organizations, and economic operators in the last 10 years, to deepen the theme of social and environmental indicators utilization in three distinct domains, which pursue different objectives.²⁴ The GBS has therefore provided shared guidelines on the use of indicators (of policy and quantitative indicators) in order to measure, account for, and verify the company's own socio-environmental performance, at the same time satisfying the need for reporting (accountability/reporting) and sustainability rating (with the aim of achieving evaluation/sustainability research-screening-rating).

The first domain is the result of the socio-environmental (or sustainability) report, aimed at accounting to stakeholders on the economic, social, and environmental impact of company activities.

²⁴Actions and proposals include UNEP (<http://www.unep.org/eon/Annual-evalls/index.asp>; PERI (Public Environmental Reporting Initiative); ICC (International Chamber of Commerce) – <http://iccwbo.org/iccffj/index.html>, in collaboration with WICE (World Industry Council for the Environment – <http://www.iisd.org> <http://www.iisd.org>), Deloitte Touche, and KPMG. We also have to cite FEEM (Fondazione Eni Enrico Mattei – <http://www.feem.it>), which has drawn up the national guidelines for the corporate environmental report, and ERNST & YOUNG (www.ey.com) which has released guidelines for the certification of environmental reports and activities carried out by the chemical sector both at a European level (CEFIC – <http://www.cefic.be/Files/publications/OIFR/Guidancepublication.doc>) and national one (FERDERCHIMICA – www.federchimica.it). In Italy, the main promoters of these tools are the Italian Ministry for Environmental and territorial protection (<http://www.minambiente.it>), ANPA (now APAT <http://www.apat.gov.it>), ENEA (<http://www.enea.it>), and the EMAS committee.

The second domain concerns the socially responsible investment (SRI) rating, that is to say the activities of specialized advisors who use indexes to allow investors to make choices which reconcile financial considerations with social and environmental criteria.

Finally, the third domain concerns intangible reporting aimed at measuring and optimizing intellectual capital and intangibles which are sources of long-term competitive advantages and the guidelines for which are contained in the GRI 2002 and subsequent versions.

In the sustainability report, performance indicators have two important functions: (1) as management instruments, as they make up a “tableau de bord” (scorecard) with a series of critical variables to measure, monitor, and improve, and (2) as external communication instruments, to give and ask for clarifications regarding the created value.

Corporate sustainability (in terms of image, policies, and practices) is therefore transmitted through the presentation of a multiplicity of indicators which provide the economic, social, and environmental progress of the company itself. Despite the diverse aims of the three domains, it has been noted that there is often an overlap of aspects dealt with and relative indicators and a duplication of work between corporate functions which produce information for the sustainability and intangibles report and that represents one of the motives which drives the company to produce integrated reporting (Pedrini 2007a, b; Veltri 2007a, b, 2012; Veltri and Nardo 2013).

The sustainability indicators recommended by GBS are the outcome of a comparative analysis of indicators used by the most important models of social and environmental accountability (GRI, GBS, Social Statement CSR-SC) and of screening/rating of the specialized SRI indexes (SAM for Dow Jones Sustainability, E. Capital Partners for Ethical Indexes, Avanzi for SiRi and FTSE4Good).²⁵ The indicator set has been selected on the basis of the recurrence of the indicators in different models, confirming their coverage of aspects of greatest social and environmental impact and organized into classified prospectuses for stakeholders in order to facilitate consultation.

The research document dedicates the first part to the presentation in table format of possible combinations between qualitative and quantitative indicators. A choice has been made to dedicate a suitable prospectus to the environment (called future environment/generations) among the stakeholders.

The second part is organized into two paragraphs. The first outlines the specific nature and convergence areas of reporting and rating, by aims, principles, and processes. The second, made up of six tables, – of which we consider those concerning collectivity (interests of a social and environmental nature) – highlights the result of benchmarking analysis and relative indicators. The identification of indicators must be based on multi-stakeholder consultation.

²⁵GRI, www.globalreporting.org; CRS-SC, www.welfare.gov.it; SAM, www.sam-group.com; E-CAPITAL PARTNERS, www.e-partners.com; AVANZI, www.avanzi.org; ACCOUNTABILITY, www.accountability.org.uk/; UNEP, www.unep.org

As far as the first aspect is concerned (aims and the function of reporting), the key concept of accountability is common to that of Accountability AA1000²⁶ and GRI reporting which give considerable importance to the principles underpinning them.

With regard to objectives, sustainability rating must allow investors to make choices which take into account both financial considerations and performance concerning the social and environmental responsibility of the company. Corporate rating criteria include independence, objectivity, credibility, neutrality, periodicity and recurrence, disclosure, and dynamics of continuous improvement.

With reference to evaluation, over time processes and methodologies have evolved leading to a differentiation in the styles adopted in the sustainability reporting (SR). Positive criteria have been added to negative ones, and absolute judgments have changed to contextualized judgments. Finally, with regard to the creation of SRI indexes/benchmark (sustainability reporting investment and ethical screening methodology), both business sectors and the single companies are evaluated. There are three steps involved: negative screening (compliance, excluding companies operating in damaging sectors), positive screening (awarding companies which demonstrate high social and environmental performance), and “best in class” approach (companies operating in risk sectors which demonstrate good social and environmental performance). By evaluating corporate performance according to a set of social and environmental criteria, it is possible to obtain distinct ratings which can be combined into a single standard of equal significance.

The classification of performance indicators recommended by GBS is among the most widespread in Italy and distinguishes among qualitative indicators (policies, management systems issues) and quantitative indicators (measures of absolute values – dimensions of impact and respective factors of distribution, comparability, effectiveness, and intensity).²⁷

Other possible distinctions in the sphere of intangible reporting concern “lagging indicators” (result or outcome indicators) and the “leading indicators” (trend and drivers indicators) or else indicators referring to a mix of resources and activities/processes to develop intellectual training (training, performance reviews, etc.) and their effects (i.e., satisfaction, productivity).

Every company can choose the set of indicators considered the most significant in relation to its needs and its stakeholders’ expectations. The indicators are preceded by a general section which explains the environmental policy (with reference to international principles, i.e., Global Compact ONU, ICC Business Charter Sustainable Development, Guidelines OCSE, Responsible Care, UNEP Financial Initiative) and management systems (levels of responsibility, identification and the evaluation of key impacts, definition of priorities and improvement

²⁶The AA 1000 is used for reporting as it is a process standard and gives the most systematic description of phases and their sequence (planning, accounting, auditing, and reporting).

²⁷The document contains (see page No. 28) models of reporting accountability comparisons (AA1000, GRI, GBS) through synoptic tables of homogenous stakeholder groups.

Table 5.17 Qualitative indicators and relative quantitative indicators: future environmental/generations stakeholder

Aspects Qualitative indicators: policies, processes, and issues	Possible quantitative indicators
Materials Policies and programs to reduce consumption and reuse recycled materials and external industrial waste	Consumption of different kinds of materials varying in weight and volume – % of material recycled and of waste
Energy Policies and programs to increase energy efficiency, use sources of renewable energy, and reduce the consumption of products in the life cycle	Direct and indirect consumption for primary sources in joules (see GRI Energy Consumption Protocol) % of energy from renewable sources – % reduction of consumption
Water Policies and programs to reduce consumption, reuse and recycle water, and avoid pollution	Consumption in m ³ – % of reduction, reuse, recycling
Emissions and waste Reduction policies and programs, in compliance with international protocols (i.e., Montreal), prevention of oil infiltration, chemical products, etc.	CO ₂ emissions in tons CO ₂ equivalents – CFC equivalent emissions in tons
Waste Management policies and programs: waste sorting, hazardous waste treatment, etc.	Quantity of refuse per type in tons – % refuse for: dumpsite, incineration, recycling, and reuse
Suppliers Selection policies and programs, involvement, control	Number of suppliers involved % of total
Products and services Environmental impact reduction policies and programs: design for environment, packaging, end of life cycle, etc.	% of the weight of reusable products at end of life cycle
Transport Policies and programs for the environmental impact reduction of logistics and mobility	% of the products weight which are reusable at end of life
Investments and costs Prevention policies and programs	Total cost and per type – Accidents and fines for nonconformity

goals, staff training, the selection and control of suppliers, audit, management reviews, and attained certifications – ISO 14001, Eco-Management and Audit Scheme (EMAS)).

The aspects of qualitative indicators (policies, processes,) referring to future environment/generations stakeholders concern materials, energy, water, emission and waste, refuse, suppliers, products and services, transport, and investments and costs. Reference can be made to the document (GBS 2007b: 16–28) for a list of quantitative indicators, of which the most important are summarized in Table 5.17. Finally, there follows a comparative analysis of indicators envisaged by the different standards with a focus on stakeholder collectivity (interests of an environmental nature) (Table 5.18).

Table 5.18 Collectivity: interests of an environmental nature – comparative analysis^a

GRI environmental performance	GBS collectivity: interests of an environmental nature	SAM/Dow Jones environmental dimension	E-capital partners (ethical screening) environmental criteria	SiRi Environment Statement of vision and strategy
<p><i>Statement of vision and strategy</i> Regarding contribution to sustainable development</p>		<p><i>Strategic planning</i> Three most important trends which could affect your company</p>	<p><i>Environmental strategy</i>, quality, field of application, hierarchical level of responsibility, involvement of external subject</p>	<p><i>Principle and policies</i> Formal policy statement</p>
<p><i>Policies and management systems</i> Committees responsible for setting strategy and oversight of organization Subscription of environmental charters (Global Compact, ICC, etc.) programs and procedures pertaining to environmental performance: priority/target setting, improvement programs, internal communication and training, monitoring, auditing, senior management review Status of certification <i>Environmental performance indicators</i></p>	<p><i>Systems of environmental management and risk management</i> <i>Training and communication</i> <i>Performance Indicators</i> Use and consumption of energy and nonrecyclable materials</p>	<p><i>Environmental management</i>, Policies, quantified targets Advanced environmental management <i>Public reporting</i> Certification ISO 14001, EMAS, Types of audits</p>	<p><i>Environmental management</i> Definition of corporate objectives Implementation of management system certified as risk management of environmental emergency. Training and communication for the public and employees EMAS, ISO 14001 Certifications <i>Productive processes</i> Measurement of consumption reduction, dependence on natural resources (cogeneration), and atmospheric emissions and refuse</p>	<p><i>Management systems</i> Board management level responsibility department. Management system: monitoring, performance targets, internal party audits, employee training and communication, formal stakeholders engagement. Programs to reduce impact and improve efficiency and performance <i>Public reports and communications</i> separate, website in Annual Report Facilities with Certification <i>Key data</i></p>

(continued)

Table 5.18 (continued)

GRI environmental performance	GBS collectivity: interests of an environmental nature	SAM/Dow Jones environmental dimension	E-capital partners (ethical screening) environmental criteria	SiRi Environment Statement of vision and strategy
<i>Energy use by primary source (renewables, life cycle)</i> <i>Water use (recycling)</i> <i>Emissions, effluents, waste (greenhouse, ozone)</i> <i>Suppliers performance</i> <i>Products and services impact, weight of reclaimable, at the end of useful life</i> <i>Transport – logistic significant impact</i> <i>Biodiversity</i> <i>Compliance – incidents and fines</i> <i>Total environmental expenditure by type</i>		<i>Energy consumption, renewable</i> <i>Water use, generation</i> <i>emissions trading</i> <i>Suppliers selection, evaluation</i> <i>Product design for environment, product take back programs</i>	<i>Selection of suppliers, respect for standard</i> <i>Environmental impact products throughout entire life cycle</i> <i>Development of low-impact products</i> <i>Form of transport</i> <i>Accounting of costs and environmental passivity</i>	<i>Suppliers selection</i> <i>Products beneficial to the environment</i> <i>Improve environmental performance of logistics</i> <i>Major controversies: fines, penalties</i> <i>Accruals for environmental remediation</i>

Source: GBS, Research document No. 2, 2007d: 34–35

^aSee GBS document No. 2 (2007d), Table No. 2.2.4: 33

5.1.8 The GBS Research Document No. 3: Environmental Reporting and Value Added

This document (GBS 2007b) is the outcome of a deepening of research data concerning environmental accountability. On 30 May 2001, the European Commission issued the 2001/453/CE Recommendation on the “accounting, evaluation and disclosure of environmental information in annual accounts and company reports on corporate management,” a nonbinding act applicable to both the financial statement and the consolidated financial statement.

The GBS has verified the effects on ordinary financial accountability of this recommendation and has proposed changes to be made to the first base standard in order to insert the environmental stakeholder in the calculation of value added and its distribution. It has furthermore defined the guidelines on the basis of a comparative synthesis with GRI (differences between the guidelines G3 *Draft, Version for public comments*, and G3) and national (Consiglio Nazionale dei Dottori Commercialisti and Ragionieri Commercialisti; CSR-SC, FEM (Fondazione Enrico Mattei) model) and international documents (FEE (Fédération des Experts Comptables Européens))²⁸ and new instruments of self-regulation and control, such as environmental certification (EMAS) and ISO 14001.

Specifically, the first part of the document contains an analysis of the EU recommendations (aims and field of application) and the extension of the financial statement as a result of the input of environmental data.

The reasons for the commission's intervention can be summed up as follows:

- The evaluation of environmental costs and risks in the annual reports increases the companies' awareness concerning the environment.
- The integration of needs connected to safeguarding the environment into other community policies is considered essential for promoting sustainable development.
- The absence of explicit rules does not favor the dissemination and quality of environmental information in annual accounts, whereas the request for environmental impact accountability increases.
- The absence of guidelines makes a comparison of the way environmental issues are treated in the annual reports of a company difficult.
- The end users of annual reports must be able to make information available about risk impact and the costs of environmental strategies which influence the economic-financial position of the company.

The recommendation has therefore sought to improve the importance, quality, transparency, and comparability of environmental information contained in annual reports and provide a guide for the disclosure of environmental information in the financial statement (income statement, balance sheet, and management report) regulated by states subsequent to the transposal of Regulation n. 78/660/CEE e n. 83/349/CEE.

The field of application is identified in all the companies that have to produce the report, although the incidence of environmental issues differs according to corporate size and business activities carried out. The indications provided by the

²⁸On 10 July 2000, the FEE published the position paper "Towards a Generally Accepted Treatment for Environmental Reporting." In Italy in 2004, the National Council of Chartered Accountants published the paper "Communication and the Environment" which illustrates the content of the "Sustainability Report" according to the GRI model and implementation guidelines to follow in the drafting and audit of the document. In March 2005, the National Council of Chartered Accountants published the document entitled "Environmental Communication in the Financial Statement."

recommendations are applied only to the information regarding environmental issues contained in the financial statement, even the consolidated statement, without wanting to introduce the obligation to have separate accounts in environmental subjects, except when it is considered opportune to carry out a link between the statement and distinct environmental reports. The recommendation envisages the explanation of data collection criteria, evaluation of environmental costs and risks and activities deriving from development which influence or could influence the company's economic-financial situations and results.

The recommendation specifies the meaning of the terms environment and environmental costs and provides indications concerning data collection and evaluation of environmental costs.

In particular, the *environment* implies a natural physical space which surrounds us and which includes air, water, the earth, flora, fauna, and nonrenewable resources (fossil fuels, minerals, etc.).

Environmental cost includes the cost of interventions carried out by a company in order to prevent, reduce, or repair damages to the environment caused by the company's operating activities. Costs incurred include those for the waste disposal and prevention of waste formation, the protection of the environment (soil, water, air, climate), the reduction of noise pollution, and the protection of biodiversity and of the landscape. Environmental costs cannot include those connected to interventions which, despite being able to produce some positive effects on the environment, are mainly aimed at attaining objectives of corporate improvement (criteria of finalization). In accounting terms, environmental costs must have the characteristic of specificity. In the case of joint costs, the pro quota criterion is applied. Costs incurred for fines and indemnities due to damages caused by environmental pollution are excluded as they do not prevent, reduce, or repair damages to the environment.

As far as data collection is concerned, the information contained is divided into three sections:

- I. Data on environmental costs (Art. 1–9)
- II. Accounts data on environmental costs (Art. 10–21)
- III. Evaluation of environmental costs (Art. 22–34)

The following issues are dealt with in the first section:

- (a) When environmental liability gives rise to accounts data, the recommendation specifies that the nature of the environmental debt may be legal or contractual. If it depends on a public assumption of responsibility to impede, reduce, or repair damage caused to the environment, the obligation can be measured as an environmental debt only to the extent the company is responsible, if possible where the quantification is reliable and if the disbursement corresponds to a future economic benefit.
- (b) The contingent liability which is environmental in nature and therefore the likelihood of repairing damage in the future (revelation of presumptive environmental debts). An appropriation of suitable funds is necessary at the closure

of accounts. Bonds are not included in the budget in the eventuality it is not possible to estimate costs.

- (c) The prohibition of reparation of costs and envisaged recovery (for instance, deriving from the sale of assets relative to the event which produced the environmental debt and the relative environmental liability).

In the second section, the principles are defined concerning account data of environmental costs with particular reference to the following aspects:

- (a) The attribution of environmental costs to the financial statement: costs are attributed to the statement in which they are incurred, even if connected to damage which took place in a previous period (denial of amendment).
- (b) The capitalization of environmental costs: this may occur if costs are incurred in order to impede or reduce future damage or conserve resources, if they are used to serve the company's activities for a long period of time, and if the costs are connected to future economic advantages or reduce/impede future environmental contamination. This includes the purchase of plants and machinery for environmental purposes (for instance, technical plants for the control and prevention of pollution).
- (c) The long-term reduction of activity value: capitalized environmental costs and material and intangible environmental goods must be amortized during their service life starting from the period in which capitalization began. Finally, if events of an environmental nature determine a long-term reduction in the value of assets, the amount of devaluation will be ascribed to the income statement.

In the third part of the recommendation, the evaluation of environmental costs is dealt with:

- (a) General criteria of data collection and evaluation: environmental liability gives rise to accounts data when a reliable evaluation can be made of the necessary costs for carrying out obligations, and its value must correspond to the best estimate at the date of budget closure taking into account the existing situation and expected future legislative and technological developments. For the purposes of evaluating environmental liability, the following factors need to be considered: the additional direct costs for redevelopment, the quota of labor costs for employees directly employed in redevelopment activities, the costs of subsequent controls, and technological innovations provided they have been approved by governing bodies.
- (b) Funding for site redevelopment and phasing out costs: environmental liability concerning redevelopment/elimination/closure of the site is registered on the date in which the company's activities begin. The estimated cost may be capitalized and subsequently amortized; otherwise, the amount may be gradually set aside.
- (c) Long-term discounting back of future environmental costs: it is possible (and advisable) but not mandatory to proceed along the lines of time discounting.

5.1.8.1 Changes to Make to the Annual and Consolidated Report

As pointed out above, the recommendation affects the following accounts:

- The balance sheet: tangible and intangible investments, short- and long-term debts, risk funds and expense funds, and credit and debit correlatives.
- The income statement: environmental running costs of a financial nature, amortization, provision, and depreciation.

When environmental issues are relevant to the financial situation of a company, the management report must describe environmental protection strategies and programs, improvements attained in the key sectors of environmental protection, the implementation stage of environmental protection measures already adopted (or in the process of implementation), quantitative data on the degree of corporate environmental efficiency, and the call for a possible environmental report published separately. The information must offer a “true and fair view” of the influence environmental aspects have on the development of business activities and on their position in the company’s reference market.

With reference to the disclosure of information in the balance sheet and income statement, it is necessary to indicate the funding for environmental issues in the section entitled “other funding.” It is possible to subdivide in detail all the items envisaged by the frameworks in Art. 9 and 10 of the balance sheet and Art. 23–26 of the income statement.

Furthermore, the following information must be given in the explanatory notes to financial statements:

1. The description of evaluation methods concerning environmental issues.
2. Explanations regarding the amount and nature of extraordinary environmental costs registered in the income statement.
3. Environmental contingent liabilities.
4. For each one of the significant environmental liabilities, clarification must be given regarding their nature, time scale, and conditions for their liquidation.
5. Accounting policy of long-term site redevelopment/phasing out and if the company opts for a gradual setting aside of the amount, an indication must be given of the entire amount necessary.
6. The value of environmental costs registered in the income statement and the calculation basis, cost articulation, the volume of activities, and the type of environmental impact.
7. The amount of capitalized environmental costs in the financial year (distinguishing the quota related to the elimination of polluting agents, from the quota corresponding to the additional costs needed for the adaptation of plants and productive processes aimed at reducing pollution).
8. The distribution of capitalized costs in accordance with Eurostat indicators (if possible).
9. Costs incurred due to sanctions for the violation of environmental regulations.

10. Third-party compensation in the eventuality the costs have not been included among the extraordinary costs registered in the income statement.
11. Received public incentives or those to which the company has a right aimed at protecting the environment and their accounting treatment.

In the light of such information, the income statement and balance sheet frameworks are adequate and adapted to the 2001/453/CE Recommendation. The statutory classification is to be maintained in its original rankings, with the content split into two parts: (a) non-environmental and (b) environmental.

Therefore, intangibles investments are divided. In current assets, the entries connected to environmental analysis are those of the inventory rimanenze e anche conti (and even deposits), as well as deferred assets of environmental costs. In the assets section of the balance sheet, the risk analysis for taxes and other presumptive debts is entered, in addition to possible severance pay risconti attivi di costi ambinetali for those employees whose work deals with the environment. The greatest modifications concern debts which are divided into non-environmental and environmental sections. Finally, indication should be made of deferred environmental revenue or liabilities for environmental costs, as well as of possible funds in the capital account of an environmental nature, to be entered in the additional reserves or, better still, in a new category of net capital-denominated subsidy funds in the capital account.

As far as the income statement is concerned, in addition to environmental costs, the environmental returns must be distinguished, for instance, the revenue from the sale of recycled or recovered products, of scrap from reworked products, from the processing or recovery of tertiary scrap, or environmental returns deriving from the production in economics internal (produzione in economia) of environmental investments, both of tangibles and intangibles. The possible profits generated from investments are in fact an example of extraordinary components of environmental revenue. Even contributions in the financial statement are to be divided into environmental and non-environmental. Finally, as far as costs are concerned, all the categories envisaged by the provisions of civil law can all be affected by the distinction between environmental and non-environmental.²⁹

5.1.8.2 Changes to Be Made to the Prospectus of Determination and Distribution of VA

In the balance sheet, the following items of environmental revenue and cost must be highlighted: the “environmental management balance” usually presents a surplus of costs over revenue which measures social transfers carried out by the company to the benefit of collectivity and therefore the remuneration attained by collectivity through the environmental management of the company. The community/

²⁹For more details, see GBS, Research Document No. 3, [2007b](#): 31–32.

collectivity and the collectivity/environment (environmental interests) fall within the analysis of value added as internal stakeholder, and this implies a modification concerning the indications contained within the base standard, in particular with reference to the prospect of value added distribution. The adjustment of the recommendation implies that the income components relative to environmental costs are subtracted in the determination of value added.

As aforementioned, environmental data (items of environmental revenue and cost distinguishable derived from the income statement) influences the prospects of the produced and distributed value added.³⁰ The balance among these components expresses environmental management impact on the result of the financial year. The detailed analysis of these components must be entered in the social report, and the data may be used even for the establishment of suitable efficiency indicators.

As previously mentioned, the collective stakeholder includes the environmental variable. The environment is divided into two essential components: the internal work environment (stakeholder employees and human resources) and external environmental impact.

As far as the internal environment is concerned, the reference stakeholder is human resources.

Social contribution is identified as the sum total of benefits and social costs and includes positive and negative externality.

The third part of the GBS No. 3 document develops in details the concept of the environment which is present in the performance analysis toward collectivity, distinguished by two categories of interest, those of a social nature and those of an environmental nature. The minimum content of environmental interests concerns, on the other hand, the following aspects: (a) environmental management and risk management systems, (b) environmental training and education, (c) environmental performance indicators, and (d) the use or consumption of energy and nonrecyclable materials.

In dealing with an environmental communication system, the information includes (a) a core of qualitative information and (b) quantitative data and indicators. With regard to quantitative content, the information and data considered essential concern production, consumption, and impact engendered by corporate activity.

Qualitative and quantitative content is interpreted in the environmental costs plan (PCA) and formulated in such a way as to produce an environmental report which is complete and independent and consisting of three fundamental environmental categories: environmental identity, direct environmental aspects, and indirect environmental aspects, for which the indications formulated in the previous chapter apply (GBS Standard 2013).

³⁰See GBS, Research Document No. 3 (2007b): 47–49, Tab. 7, on page 12.

5.1.8.3 Environmental Communication and the Concept of Environment According to Different National and European Accounting Bodies

In the last part of the GBS No. 2 Document (GBS 2007d), there is a section which describes and analyzes environmental processes and certification (i.e., ISO 14001, EMAS, Ecolabel, and LCA (life-cycle assessment) and emission trading) as well as a section which presents the concept of environment according to different national and international accounting bodies, which will subsequently be summarized at the end of the chapter.³¹

The Environment According to the National Council of Public Accountants and the National Council of Chartered Accountants

Of the actions carried out by the CNDC concerning the environment, mention must be made of the following publications: *Investimenti ambientali* (Environmental Investments) in 2001, *Aspetti ambientali e principi contabili nazionali* (Environmental Aspects and National Accounting Principles) in 2002, and the much quoted *Quaderno Comunicazione e Ambiente* (Communication and Environment Paper) in 2004. The latter does not propose a model of accountability and environmental performance indexes, but does however focus in particular on small and medium companies and recommends to small-sized companies to adopt a gradual approach to environmental accountability. Furthermore, the document underlines the role of public accountants in the preparation of the sustainability report.

The study of the Council of National Chartered Accountants entitled *La comunicazione ambientale nel bilancio di esercizio* (*Environmental Communication in the Financial Statement*) focuses on environmental investments (especially tangible investments) and specifies that:

- Environmental cost implies the economic value of measures undertaken by a company or others on behalf of the same, in order to prevent, reduce, eliminate, or repair damages caused to the environment by the company itself or for the conservation of natural environmental resources which are either renewable or nonrenewable.
- The environmental cost must refer to an investment destined to a long-term use in the company's activity.
- In order to highlight the environmental cost in the financial statement, it is necessary that the investment produces positive environmental impact compared to the threshold imposed by specific norms of reference. Therefore, only if these characteristics are present, is it possible to consider investments of environmental significance and indicate them separately in the financial statement. The costs of environmental significance enrich company information by highlighting the company's commitment to environmental protection.

³¹See www.cndc.it, www.consrag.it, Federation des Experts Comptables www.fee.be, and IFAC www.ifac.org.

The Environment According to the FEE (Fédération des Experts Comptables Européens)

Since the 1990s, the Federation has focused its attention on the environmental report and its verification, and created a working group (Sustainability Working Party) which collaborates with GRI and AccountAbility. Of the documents produced, “Towards a Generally Accepted Framework for Environmental Reporting” – *Position Paper* (June 2000) deals with environmental accountability emphasizing not what has to be reported but how it must be reported. The environmental report is defined as a document written by a company in order to provide information about its operations in keeping with environmental legislation and the impact of its activity on the ecosystem, which is useful to the various stakeholder groups. Such principles of drafting are divided into *underlying assumptions* (identification of the company, environmental competence, corporate continuity, significance) and qualitative characteristics (relevance, reliability, clarity, completeness, prudence, comparability, frequency, and credibility), as envisaged by the IASC in the 1989 *Framework for the Preparation of Financial Statements*.

The document entitled *Providing Assurance on Sustainability Reports* recalls and comments on the environmental indicators.

The Environment of the Cantieri (Site) Project

In the context of the “Cantieri” initiative, the Italian Department of Public Administration of the Presidency of the Council of Ministers has set up a workshop on accountability and social reporting in the Public Administration sector. The Manual of the Cantieri proposes a model of an environmental accountability system, with a focus on three principal elements: the definition of an environmental policy; the establishment of an accounting system; and reporting, which makes up the conclusive stage of the environmental accountability process, in which the results of environmental policies are communicated and on the basis of which the actions of management may be evaluated and subsequent actions planned. The environmental report is furthermore a document of intersectional value, as it allows users to evaluate the impact of environmental policies on other sectors. The involvement of stakeholders gives value to the environmental accounting system making it a guarantor of transparency.

The Environmental Report as an Independent Document in the FEM (Fondazione Enrico Mattei) Model and Practices

In January 1994, the Fondazione Enrico Mattei (FEM) promoted a working group to develop voluntary guidelines for the drafting of corporate environmental reports. The working group defines programs and objectives, the minimum quantitative and qualitative requisites, as well as information relative to company descriptions, environmental policy, environmental management systems, risk management, product policies, and rapport with legislation. In the following years, a methodology for organizing and reclassifying environmental information through software was perfected into a true environmental report made up of three parts: the first two

refer to physical environmental accountability and the third to economic environmental accountability.

The first frame (or resource account) highlights the physical flux of goods utilized by the company as input in the productive processes revealing information concerning the consumption of “natural capital” in terms of extraction of materials, resources, and energy. The second frame (or pollutant account) reveals the production of polluting gases, liquids, and solids and presents the data on different kinds of waste (hazardous or nonhazardous, treatable as urban waste), polluting emissions in the atmosphere (carried or disseminated and categorized into the principal groups of pollutants), and waste in superficial waters, soil, and subsoil (distinguished by typology of pollutant) and on external noise. The last frame (or environmental protection expense account) reveals the expenses incurred by companies to prevent, control, reduce, or eliminate the environmental impact of the productive process. The data contained in the accounting frames can be collected into an integrated presentation comparable to the environmental report and applicable to different corporate realities.

The Environment of the CSR-SC Perspective

In 2002, the Italian Ministry of Labour and Social Policies, in collaboration with the Bocconi University, sets up a working group committed to the development and promotion of corporate social responsibility known as the CSR-SC Project, which developed an instrument, the Social Statement, usable by all companies and aimed in particular at small and medium businesses.

The Social Statement includes the identity record (which describes the general characteristics of the company) and the set of indicators (which monitors the company’s commitment in terms of social responsibility).

The set of indicators is made up of common indicators, usable by all companies, and additional indicators, applicable to larger-sized companies. Single indicators are organized into three levels: (a) categories (each category makes up a reference point or stakeholder: human resources, partners/shareholders, financial community, clients, suppliers, financial partners, state, local bodies, public administration, communities, and environment), (b) aspects (each aspect represents an explanatory thematic area of the category, and (c) indicators (quantitative measures or qualitative expressions which provide information concerning a specific aspect).

Category 8 – Community and environment includes the following aspects and indicators (referring to the last 3 years): energy consumption and material consumption and emissions (energy indicators, water indicators, raw materials indicators, auxiliary and packaging materials, emissions indicators in the atmosphere, waste water indicators, refuse indicators, environmental strategies and relations with the community).

The Environment According to CERES (Coalition for Environmentally Responsible Economies)

The Coalition for Environmentally Responsible Economies (CERES) is a network of investment funds, environmental associations, and other bodies that work to promote environmental management in the field of corporate activity. It has been

active in the USA since 1989. In 1997, it promoted the United Nations Environment Program (UNEP) – the Global Reporting Initiative, which has become since 2002 an independent institution and which in 2003 launched the *Facility Reporting Project* (FRP) in collaboration with the GRI to develop a guide for the accountability of sustainability at a productive site level.

5.1.9 Final Remarks and Insights

After having presented in detail how the environment is currently conceived and represented according to the GBS indications and those of other international bodies, the question can be asked as to what are the evolutionary prospects of the environmental and social reports in the development of the contents relative to the environmental community. Some brief reflections are presented below to answer this question.

Firstly, from the comparative analysis carried out by GBS on documents dealing with environmental reporting, two fundamental approaches emerge: on the one hand, there are documents concerned with framing the problem and providing a theoretical construct to orientate the writers, users, and editors; on the other hand, some documents analyze in detail the contents which environmental reports should have.

Secondly, the environmental report is an informative voluntary document which describes the main relations between companies and the environment and the efforts made to improve efficiency in the use of environmental resources as well as pursue objectives through specific programs. Overseas, as in Italy, large companies that operate in sectors having the biggest environmental impact (the chemical, petrochemical, and energy industries) are among the first and over time have sought to improve contents and form. The majority of multinationals have made the environmental report part of their habitual practice for years. The same situation is happening even in the service sector, such as telecommunications and air transport, gas and water distribution, and in particular those companies operating in waste management. However, despite increasing attention to aspects of process, form, and content, the primary problem remains concerning authentic orientation to environmental sustainability and awareness of corporate responsibility toward the environment (Gray et al. 2014).

Thirdly, the environmental report is often created as an internal instrument of analysis of critical areas and of the impact of productive models, to then become an instrument of management allowing users to plan improvements to several productive sites until it becomes integrated with other instruments of corporate external communication. Significant data for the creation of an environmental report are often already available in the company but in the majority of cases must be retrieved, organized, reclassified, and collected in order to become information which is useful for decision-making.

In conclusion, it can be stated that the environmental report is a dynamic instrument which must evolve in time along a path of improvements which range

from the quality and completeness of information to the clarity of presentation, procedures for collecting and processing data, graphic presentation and chosen format, and adopted modes of dissemination and communication. This gradual development must be guided by doctrine and practice, also through greater attention to educating students and more generally the new generations.

5.2 GRI Standard Presentation

The GRI is an emanation of CERES (Coalition for Environmentally Responsible Economies) that, at the request of UNEP (United Nations Environment Program – constituted body within the UN), in 1997 gave rise to the GRI,³² and revised sometimes.³³

Its latest version, which is spreading internationally, is that of the GRI (Global Reporting Initiative) through the “out Sustainability Reporting Guidelines-G4,” which seeks to combine economic, social, and environmental issues through a series of indicators and a process management and auditing of relations with the environment and with stakeholders, identifying a standard statement of “sustainability,”³⁴ This statement has a structure that can be adapted to any company, depending on the size, and this also allows some comparability.³⁵

In the GRI guidelines, we can identify some key aspects, including firstly, that of being oriented with investment decisions sustainable; secondly, to provide a series of indicators for the assessment of sustainable investments; and finally, something quite obvious, uses exclusively, statistical tools that is intended as accounting.³⁶

In the transition from one version to another, it has gradually integrated part viability with social and environmental indicators.

³²Willis, “The role,” cit, page 233

³³Infatti si legga: “ A Boston, Massachusetts coalition of over 50 investor, environmental, religious, labor and public interest groups with over 50 corporate subscribers to its (CERES) principles for environmentally responsible conduct (Willis, “The role,” cit, page 237, nota (1)). Per ulteriori approfondimenti si rinvia alla più recente versione del: *Sustainability Reporting Guidelines-G4* – www.globalreporting.org/reporting/g4/

³⁴Il GRI è un modello: “. . .che segue l’impostazione di trattare con uguale dignità, in un unico contesto, le dimensioni economica, sociale ed ecologica dell’attività aziendale” . . . “Insomma, è un documento che rappresenta un’evoluzione dei rendiconti sociali ed ambientali e che risponde alla missione dell’azienda contemporanea di creare valore prestando costante attenzione alla dignità dell’uomo ed alla qualità della vita.” (Paris, *rendiconto*, cit, page 159).

³⁵Ci sembra in passato, di aver già letto qualcosa di simile, in merito all’Istituto Battelle di Ginevra, in merito si rinvia a: Juan Bonal, “Le tableaux de bord du bilan social de Battelle,” *Revue Francaise de gestion*, nov.dèc, 1977, pp. 180–185.

³⁶“Infatti si legga: Early in 1998, the decision had been taken to strive for an even more ambitious goal: to address not just environmental performance reporting as had been the original aim, but also the social and economic (excluding financial accounting). Ancora nota (2):” The GRI has no intention of getting into the business of setting accounting standards dimensions of sustainability” (Willis, “The role,” cit, page 234).

Without doubt, however, the advantage of this model is that it has brought together many international organizations and therefore have triggered a constructive debate on this issue, also with a production of standards to follow internationally, making this attempt, perhaps one of the most important international level.

It is based on framework (guideline) and it is sustained and accepted by enterprises and associations, not for profit enterprises and institutions all over the world.

We can analyze the advantages of GRI model that are based at first on the stakeholder approach. The second advantage is that it is an international model and it is strictly connected to practice and finally generated a long debate about the integration of financial statements information.

The general principles are about the mission that is to develop, to promote, and to spread “Sustainability Reporting Guidelines” and to make a common structure of sustainability reporting. Then the other orientation is to make the sustainability reporting following perspective principles: comparability, credibility, and auditing. The latest orientation is to satisfy the information needs of wide area of stakeholders respecting the following pillars: inclusion, transparency, and technical excellence.

The framework of GRI is involving the report guidelines, the indicators that are divided in core indicators and additional indicators and the most important the sources of information.

The sustainability reporting following GRI must be made at first to disclose information about organization, governance, and management of the enterprise. The GRI report must contain an index of GRI contents and the connection with financial statement information. It must show the fundamental indicators, or managers of the enterprise must motivate their absence. The enterprise must insert in sustainable report the declaration of the Board about the implementation of GRI guidelines and that it represents sustainability results of the enterprise activity and at different levels there are some GRI auditors that verify the degree of standards implementation.

The first peculiarity of GRI is that it is a general model. The second one is about that it connected to financial accounting and financial statement and it is involving stakeholder engagement process. The last peculiarity is that it shows to all users the capability to collect, elaborate, understand and present information of the sustainable of enterprise.

The content of sustainable report is involving five sections, such as:

1. Vision and strategy: illustration of sustainability strategy of the organizations
2. Profile of the enterprise: the description of operations, stakeholders, and the objectives of the report
3. Governance structure and managerial systems description and stakeholder engagement
4. Index of GRI contents: one table with references of data sourcing to show the degree of reception of GRI guidelines
5. Indicators of results: measures about economic, environmental, and social dimensions

About indicators, they are divided in fundamental indicators and additional indicators. The first are more general and the second ones are more analytical.

The typologies of indicators are as follows: economics indicators, environmental indicators, and social indicators (such as workers' conditions; human rights; social description of buyers, local community, and other stakeholders).

The sustainability GRI report has some objective to achieve.

It is the tool for reporting and communication with the primary objective representation of the choices made by the company and of the effects of corporate activity on the environment and involves all categories of stakeholders.

It aims to highlight the socio-relational meanings of the subject – actor company – alongside those of a purely economic nature, to make visible the actual contribution, in quality and quantity, of the enterprise context.

It aims to transmit an independent information on the quality of the company to expand ethical and social opportunities for assessment, and it underlines values of the enterprises. Values are based on the centrality of the person, on legality, and on social legitimacy.

The report has the objective to describe how and to what extent the company has pursued together profit and environmental conditions in which it operates.

Then it makes the public aware of the resources used for the enhancement of the centrality of the person, protection and respect for the environment, and hygiene and safety at work.

The entire path of sustainability as a monitoring and reporting of responsible management for sustainable development evaluates to improve intensity and quality of the development, taking them as indicators of the degree of civilization of the real context (www.globalreporting.org/reporting/g4/).

5.3 Energy Saving and OIC (Organismo Italiano di Contabilità/Italian Accounting Committee) Standard 7 and 8 in Italy

On the 7 February 2013, the Management Board of the OIC (Italian Accounting Committee)³⁷ definitively approved, exactly 1 year from the publication of the drafts, two new national accounting principles concerning the accounting treatment and evaluation of environmental certificates.

³⁷The OIC (Organismo Italiano di Contabilità – Italian Accounting Committee) is an organization made up of both private and public subjects which finds its origins in the need to cohesively express national requests in accounting matters. Constituted in November 2001 as a foundation, the OIC, in carrying out its functions, provides for:

- Issuing the accounting principles for the drawing up of financial statements for which application of the international accounting principles is not foreseen (the private, public, and not-for-profit sectors)

These certifications have affirmed themselves throughout Europe and later in Italy following the adoption of policies aimed at fostering the development of renewable sources of energy and promoting the reduction of greenhouse gases.

The objective of the OIC has been that of defining a way through which the companies included in this discipline must report the environmental certifications as well as greenhouse gases in their financial statements. In every case, such principles are directed toward the Italian corporations who draw up the financial statements on the basis of the regulations of the Italian Civil Code and of national accounting principles.

Later, we will analyze the accounting principles: OIC 7 “the green certificates” and OIC 8 “greenhouse gas emission quotas.”³⁸ As regards the Energy Efficiency Certificates (white certificates), there is currently no official accounting reference, and for this reason, they have not been considered in this chapter. For the purposes of greater clarity of the topics treated, for each accounting principle analyzed, examples of accounting entries relating to the most significant cases will be referred to.

5.3.1 OIC 7 Accounting Principle: “The Green Certificates”

With reference to the green certificates (OIC 7), their accounting treatment will be examined distinguishing between:

- Producers/importers of electric energy from renewable sources
- Producers of electric energy from nonrenewable sources
- Trading companies

-
- Taking part in activities of processing the international accounting principles, by providing technical support to the competent international organizations and by coordinating its own work with the activities of other European standard setters
 - Assisting the legislator in issuing legislation as regards accounting and related matters
 - Promoting accounting culture

(For further details, please visit www.fondazioneoic.eu.)

³⁸On the 5 December 2012, EFRAG (European Financial Reporting Advisory Group) issued a draft comment paper regarding “emission trading schemes” in answer to the document up for consultation by the French standard setter (ANC) which tackles the accounting aspects of gray certificates even for those companies which apply IAS/IFRS principles. Such an initiative is included in the re-sparking of the debate concerning the emission of a specific international accounting principle regarding emission rights. Considering what has been said beforehand, we clarify here that the OIC 8 Accounting Principle on gray certificates may not be taken as reference by companies who draw up their financial statements on the basis of the IAS/IFRS principles (www.fondazioneoic.eu).

5.3.1.1 Accounting Treatment for Companies Which Produce/Import Electric Energy from Renewable Sources

Legislation in this area provides for free-of-charge granting of a number of green certificates which corresponds with a certain quantity of energy from a renewable source generated by IAFR plants during their activity in the financial year. This permits the producers/importers of energy from renewable sources to have a margin comparable to that which may be obtained by the enterprise which generates energy using fossil sources. In this sense, the mechanism of green certificates represents an incentive, a sort of contribution toward operating expenses recognized in exchange for the greater costs which the “green” company has in comparison with an enterprise that uses nonrenewable sources of energy and which can be monetized by way of their exchange. Whenever this contribution is lacking, indeed, costs connected with production of clean energy would make it barely profitable.

Survey and Data Classification

As disclosed beforehand throughout Chap. 2, the producers of electrical energy from renewable energy sources may request the issuing of two types of green certificates to GSE (Gestore Servizi Energetici/Energy Service Manager):

1. *On the basis of real production at the end of financial year (a consuntivo)* or rather on the basis of the effective annual energy produced by the plant in the preceding year (x) compared with that produced in the year of certificate issuing ($x + 1$)
2. *On the basis of estimated production (a preventivo)* or rather on the basis of expected net energy production capacity of the plant

The method of accounting green certificates varies according to their issuing types; here below, they will be outlined individually considering the most meaningful cases in point.

- Issuing on the basis of real production at the end of financial year – income tracking.

Income for green certificates is tracked at the end of the financial year during which the production of electric energy from renewable sources took place and in proportion to the production itself. It is quantified on the basis of the unit value as defined by GSE for the guaranteed collection in the year of reference (the so-called guaranteed economic value); as a consequence, the amount recorded in the financial statements has to be equal to the product obtained multiplying the unit value for the guaranteed price, as established by GSE, by the number of green certificates which the company is entitled to gain and which are calculated on the basis of the effective production of electric energy from renewable sources for the year of reference.

Table 5.19 15/05/20XX+1 – Sale of GCs which were obtained on the basis of real production at the end of financial year: *hypothesis of asset contingency*

D/ Commercial receivables (invoices issued) (CII.1 – Receivables from customers)	A/ Various A/ Receivables from GSE for GCs matured (CII.5 – Receivables from others) A/ Ordinary asset contingencies (A5 – Other revenues and income) A/ VAT on the sale of green certificates (D12 – Tax payables)
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Table 5.20 15/05/20XX+1 – Sale of GCs which were obtained on the basis of real production at the end of financial year: *hypothesis of liability contingency*

A/ Various	A/ Various
D/ Commercial receivables (invoices issued) (CII.1 – Receivables from customers)	
A/ Ordinary liability contingencies (B14 – Other operating expenses)	A/ Receivables from GSE for GCs matured (CII.5 – Receivables from others) A/ VAT on the sale of green certificates (D12 – Tax payables)

Table 5.21 Date of issuing on the basis of estimated production (a preventivo) – initial assessment

D/ Commitments for GCs issued on the basis of estimated production	A/ Commitments toward GSE for green certificates issued on the basis of estimated production
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Tables 5.19 and 5.20 represent the accounting entry relating to the sale of green certificates received on the basis of real production at the end of financial year and ascertainment of an asset and liability contingency.

- Issuing on the basis of estimated production – initial assessment and reversal at December 31. Unlike the issuing on the basis of real production at the end of financial year, the issuing on the basis of estimated production requires an obligation/commitment on the part of the company toward GSE to produce a certain amount of “green” energy which is proportional to certificates received. Such obligation implies the need to record, in the memorandum accounts, the abovementioned production commitment for the entire amount corresponding to the number of green certificates obtained on the basis of estimated production multiplied by the price guaranteed by GSE for their simplified purchase and resale arrangements. Within the memorandum accounts, we therefore have to record the accounting entry in Tables 5.20 and 5.21.

At the end of financial year, the “monetary” *amount effectively produced* in terms of alternative energy will be transferred from the memorandum accounts, leaving the eventual production deficit which will be equal to the difference, in monetary terms, between that estimated (expected production) and that

Table 5.22 31/12/20XX – Reversal of GCs matured and received in relation to effective production

D/ Commitments toward GSE for GCs issued on the basis of estimated production (a preventivo)	A/ Commitments for GCs issued on the basis of estimated production (a preventivo)
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Table 5.23 31/05/20XX – Sale of the GCs throughout the course of the same year

D/ Commercial credits (invoices issued) (<i>CII.1 – Receivables from customers</i>)	A/ Various A/ Revenues for the sale of GCs (<i>A5 – Other revenues and income</i>) A/ VAT on the sale of green certificates (<i>D12 – Tax payables</i>)
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Table 5.24 31/12/20XX – Tracking of revenues: issuing on the basis of estimated production (a preventivo)

D/ Receivables from GSE for GCs matured (<i>CII.5 – Receivables from others</i>)	A/ Revenues for GCs matured (<i>A5 – Other revenues and income</i>)
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effectively produced (effective production) written into the memorandum accounts (Table 5.22).

- Issue on the basis of estimated production – *sale of green certificates*. During the financial year of reference (20XX), relatively to the sale of the green certificates, the following cases may verify:
 1. The green certificates are ceded during the course of the same year (20XX).
 2. The green certificates are the subject of purchase in the year following emission date (20XX+1).

In the first instance, the accounting entry and the identification of the civil law court jurisdiction will be subject to the classic legislation regarding transferal of fungible, intangible assets. Particularly, at the moment of sale, we will have to record entire revenues produced thanks to the exchange in the income statement at entry *A5) Other revenues and income*; while in the balance sheet assets, we will have a credit which will be recorded at the entry *CII.1 – Receivables from customers*. It will thus be in Tables 5.23, 5.24, 5.25, and 5.26.

In the latter case, instead, we have to carry out a series of accounting data surveys:

- Above all, at 31/12 of financial year 20XX, we will track the revenues and relative receivables from GSE which represent the right to demand a monetary payment from the latter, according to the legislation that provides for simplified purchase and resale arrangements at a minimum established price. The amount to register in the accounting books will be equal to the number of green certificates which correspond to the energy effectively produced in the year

Table 5.25 15/05/20XX+1 – Sale of GCs received on the basis of estimated production (a preventivo)

D/ Commercial credits (invoices issued) (CII.1 – <i>Receivables from customers</i>)	A/ Various A/ Receivables from GSE for GCs matured (CII.5 – <i>Receivables from others</i>) A/ Ordinary asset contingencies (A5 – <i>Other revenues and income</i>) A/ VAT on the sale of green certificates (D12 – <i>Tax payables</i>)
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Table 5.26 1/12/20XX – Tracking of revenues: issuing on the basis of estimated production (a preventivo)

D/ Receivables from GSE for GCs matured (CII.5 – <i>Receivables from others</i>)	A/ Revenues for GCs matured (A5 – <i>Other revenues and income</i>)
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multiplied by the minimum price guaranteed by the same GSE. In accounting, we will have:

- Later, in the financial year of effective sale of green certificates, the company will assess the eventual difference (usually, a positive one) between minimum evaluation of GSE and how much was actually raised from the sale of the certificates on the market. From an accounting point of view, analogously to the case seen above concerning the issuing on the basis of real production at the end of financial year (a consuntivo), an ordinary asset contingency which can be recorded under entry A5) *Other revenues and income* will come to the fore.

– Issuing on the basis of estimated production – production surplus and deficit.
A case which may come about is that where effective production of energy from renewable sources is different – higher or lower – to that which was initially estimated (a preventivo). Particularly, in the case where a positive differential (*surplus*) comes to the fore, the company will have the right to the issuing of extra green certificates and, at the end of the financial year, will have to record the greater revenues relating to the surplus production, on the basis of the unit value established by the legislation for the simplified purchase and resale arrangement guaranteed by GSE. From an accounting point of view, the company will have to assess an increase of the revenues relating to the certificates received on the basis of estimated production (a preventivo), while in the balance sheet receivables from GSE must be entered.

Should, however, the effective production be less than that estimated (*deficit*), the difference should be accounted as follows:

- In the sole memorandum accounts, the commitment of the company to return the green certificates that were received extra will be recorded. At the time of the balance, or rather by March 31, the green certificates which were received from

Table 5.27 31/03/20XX+1 – Reversal of GCs received from and to be returned to GSE since not yet matured and 31/12/20XX, adjustment of revenues

D/ Commitments toward GSE for GCs issued on the basis of estimated production (a preventivo)	A/ Commitments for GCs issued on the basis of estimated production (a preventivo)
31/12/20XX D/ Revenues for the sale of green certificates (A5 – <i>Receivables from others</i>)	31/12/20XX A/ Deferred incomes (E – <i>Accruals and deferrals</i>)

Table 5.28 01/01/20XX+1 – Reversal

D/ Deferred incomes (E – <i>Accruals and deferrals</i>)	A/ Revenues for the sale of green certificates (A5 – <i>Receivables from others</i>)
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and have to be returned to GSE since they were not matured with reference to the effective production of energy from renewable sources must be deleted from the memorandum accounts (Table 5.27).

- In its own accounting books, the company has to register the adjustment of the revenues tracked for the sale of the green certificates received and not yet matured. Particularly, it will record a deferred income which may be catalogued in the balance sheet under the entry *E) Accruals and deferrals* at a degree that is equal to the quota of revenues whose tracking is postponed to the next financial year. In Table 5.28, the accounting entry at 31/12/20XX and the relative reverse entry at 01/01/20XX+1.

In any case, we should remember that the green certificates which are in excess in comparison to effective production (the so-called not-matured green certificates) are never purchased by GSE, but they constitute a mere down payment which will be paid by it upon the first useful issuing of GCs. In other words, they remain at the availability of the company which, the following year, will receive a number of green certificates lower than that due, because of the adjustment to be made with GSE.

Evaluation

As for the financial statement entries, the following criteria apply:

- *Receivables*: according to that established by Art. 2426 of the Italian Civil Code, point 8, these have to be recorded in the financial statement according to their current fair market value³⁹.
- *Receivables from GSE*: their entry value is equal to the value recognized by the same management in the case of the green certificates.

³⁹Credit evaluation is regulated by the *OIC 15 Accounting Principle – Payables* to which we refer you for further deeper details, viewing the website www.fondazioneoic.eu.

- *Not-yet matured green certificates*: in the case of issuing on the basis of estimated production (a preventivo) and of production deficit of electrical energy from renewable sources, in the memorandum accounts, the commitment that remains regarding the received extra green certificates continues to be recorded. Such a commitment will have to be registered in the financial statement, and its amount will be equal to the value foreseen for the guaranteed purchase and resale arrangements of the green certificates by GSE.

5.3.1.2 Accounting Treatment for Companies Producing Electrical Energy from Nonrenewable Sources

In accordance with that established by legislation on the subject, the producers/importers of electrical energy from fossil sources are obliged to inject a certain quantity of electrical energy into the power system upon the basis of an obligation quota expressly established by law.⁴⁰ Alternatively, they may fulfill their obligation by the purchasing, and consequent delivery to GSE, of a number of green certificates proportional to the production/importation of energy in the preceding year. For this reason, for those agents obliged, the green certificates represent a “penalizing system” in that they mean a further additional cost for energy production and therefore an increase in production costs.

Data Collection and Cataloguing

For a clear examination of the accounting treatment, the most significant cases will be shown:

- *Green certificate purchase*. The agents obliged have the chance to purchase the green certificates needed for fulfilling their obligation till the 31st of March of the year following the year of reference or, rather, until the delivery date of the certificates to GSE.

If the purchase comes about before the end of the financial year to which they refer, from an accounting point of view, it will result in an entry in the income statement of the entire cost borne which represents a “system expense” and, as such, will be registered under the entry *B14 – Other operating expenses*. While in the balance sheet, a debt of a commercial nature will result which will be recorded among the liabilities under the entry *D7 – Payables to suppliers* (Table 5.29).

⁴⁰Concerning this aspect, see Chap. 2.

If, instead, purchase of green certificates comes about following the end of the financial year, upon the sale, the eventual liability/asset contingency will have to be shown, which is equal to the difference between the value of the liability registered in the financial statement of the relevant financial year and the market purchase value. It will be entered in the income statement under the entry *B14) Other operating expenses/A5 – Other revenues and income*. Accounting wise, in the hypothesis of liability contingency, we will have in Table 5.30 the following entries:

- *Tracking of the obligation connected to production/importation*: since the agents obliged have the opportunity to fulfill their delivery obligation till the 30th of March of the following year, at year's end, they need to carry out the tracking of the obligation connected with production/importation of the year of reference. In other words, they need to compare the overall number of green certificates which must be presented to GSE in order to be nullified and the green certificates already in possession, in that they were purchased previously.

From this comparison, the following may come out:

1. Deficit: the number of green certificates in the hands of the company is *lower* than the amount needed to fully comply with the law.
2. Surplus: the quantity of green certificates purchased by the company is *greater* than the amount needed to fully comply with the law.

In the first case, the company has to report, in the statement of accounts of the financial year, those green certificates still to buy for complying, valuing them to their market price on December 31. From the accounting point of view, the company records a cost corresponding to that of the financial year for the certificates not yet purchased; in the balance sheet a liability toward

Table 5.29 31/05/20XX – Purchase of green certificates referring to current year

D/ Various D/ Expenses for green certificates (<i>B14 – Other operating expenses</i>) VAT on green certificates purchase (<i>CII.4bis – Tax receivables</i>)	A/ Commercial payables (invoices issued) (<i>D7 – Payables to suppliers</i>)
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Table 5.30 28/02/20XX+1 – Purchase of green certificates referring to the previous year: *liability contingency hypothesis*

D/ Various D/ Payables to GSE for GCs to purchase (<i>D14 – Other payables</i>) D/ Ordinary liability contingencies (<i>B14 – Other operating expenses</i>) D/VAT on green certificates purchase (<i>CII.4bis – Tax receivables</i>)	A/ Commercial payables (invoices received) (<i>D7 – Payables to suppliers</i>)
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Table 5.31 31/12/20XX – Deficit

D/ Expenses for green certificates (<i>B14 – Other operating expenses</i>)	A/ Payables to GSE for GCs to purchase (<i>D14 – Other payables</i>)
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Table 5.32 31/12/20XX – Cost adjustment

D/ Prepaid expenses (<i>E – Accruals and prepayments</i>)	A/ Expenses for green certificates (<i>B14 – Other operating expenses</i>)
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Table 5.33 01/01/20XX+1 – Cost adjustment

D/ Expenses for green certificates (<i>B14 – Other operating expenses</i>)	A/ Prepaid expenses (<i>E – Accruals and prepayments</i>)
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GSE will be registered under the entry *D14) Other payables*. This latter represents a payable in kind and reproduces the obligation to deliver goods different from liquid funds (the green certificates) to GSE, deriving from a current obligation, whose existence is certain and which is determined in its amount (i.e., the number of GCs to be given back) and in its compliance timeframe (coinciding with delivery date to GSE)⁴¹ (Table 5.31).

In the second case, however, the company finds itself with an excess of purchased green certificates and has to enter cost adjustment, valuing it at purchase price. Particularly, the company will enter on 31/12/20XX+1 prepaid expense equal to the surplus which emerged, in that it is relevant to the following financial year. On 01/01/20XX+1, the cost sustained in the preceding year for the purchase of excess green certificates shall be recorded in the income statement; this will determine lesser purchases of certificates for compliance of the 20XX+1 obligation.

From the accounting viewpoint, we will thus have in Tables 5.32 and 5.33 the following entries:

- *Delivery of green certificates*: by 31st of March of the following year (20XX+1), the company must deliver green certificates to GSE relative to obligation of preceding year (20XX) without carrying out any accounting report in that all income and asset impacts are already reflected, by competency, in the financial statement of accounts of the financial year wherein the obligation arose.

The OIC 7 Accounting Principle, as regards the evaluation of the green certificates for the companies that produce electrical energy from nonrenewable sources, establishes the criteria relatively to payables and payables in kind.

⁴¹As regards the accounting recording of a payable, point 58 of the accounting principle in question establishes that wherever the requirements for certainly defining the liability to be recorded in the balance sheet, the company must estimate a value, recording it at entry *B3) Provisions*.

Table 5.34 15/05/20XX – Purchase of green certificates for trading companies

D/ Various D/ Costs for purchase of green certificates (B6 – Production cost of raw materials, consumables, and merchandise) D/VAT on purchase of green certifications (CII.4bis – Tax receivables)	A/ Commercial debts (invoices received) (D7 – Payables to suppliers)
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Particularly, the former will be recorded in the statement of accounts at their extinction value⁴²; the latter will be evaluated considering the current value of the goods to which they refer. As a result, the payables to GSE will be registered in the statement of accounts at the market value of the green certificates at the end of the financial year.

5.3.1.3 Accounting Treatment for Trading Companies

Trading companies are intermediary agents who buy, upon payment, the green certificates with the purpose of selling them again on the market in order to provide themselves with revenues at the end of the financial year. They do not carry out, therefore, industrial activities in relation to which the issue or obligation of delivery of green certificates is recognized. For this reason, purchases and sales of green certificates fall under the characteristic management of the activity carried out.

Data Collection and Cataloguing

In Table 5.34 are the principal accounting operations of trading companies concerning the green certificates.

- Purchase and sale of green certificates. Not being producer/importer of the energy, the trader agent will record, in accordance with the ordinary rules, revenues or costs deriving from the purchase or sale of the green certificates. Particularly, the purchase will mean the entry of a cost which will be written in the income statement at B6) *Production cost of raw materials, consumables, and merchandise*. In the balance sheet, we will have a liability of commercial nature which will be recorded in the entry D7) *Payables to suppliers*.

Analogously, the sale will require the recording of a revenue in the income statement at entry A1) *Revenues from sales and services*, while in the balance sheet a receivable of commercial nature will be registered under the current assets entry CII.1 – *Receivables from customers* (Tables 5.34, 5.35, and 5.36).

⁴²The evaluation of payables is disciplined in the *Principio Contabile OIC 19* “I fondi per rischi e oneri – Il trattamento di fine rapporto di lavoro subordinato – I debiti” (OIC 19 Accounting Principle entitled “Provisions – Employees’ termination benefits provision – Payables”) to which we refer for further details; please see the website www.fondazioneoic.eu.

Table 5.35 31/08/20XX – Sale of green certificates for trading companies

D/ Commercial credits (invoices issued) (<i>CI.1 – Receivables from customers</i>)	A/ Various A/ Revenues for the sale of green certificates (<i>A1 – Revenues from sales and services</i>) A/ VAT on the sale of green certificates (<i>D12 – Tax payables</i>)
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Table 5.36 31/12/20XX+1 – Assessment of green certificates in stock

D/ Inventory of green certificates (<i>CI.4 – Inventory of finished goods and merchandise</i>)	A/ Change in green certificates in stock (<i>B11 – Change in raw materials, consumables, and merchandise</i>)
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- The surplus of green certificates. On the date of drawing up the statement of accounts, the green certificates previously purchased by the trader and not yet sold represent part of the inventory. They will be recorded in the current assets of the balance sheet at entry *CI.4) Inventory of finished goods and merchandise*, and the relative adjustments will be recorded at entry *B11 – Change in raw materials, consumables, and merchandise* of the income statement. On December 31, we therefore record the following entry:

Evaluation

The following evaluation rules go for trading companies:

- Payables will be recorded in the statement of accounts at their extinction value.
- Receivables: in compliance with Article 2426 Italian Civil Code, point 8, “they must be entered into the statement of accounts in accordance with the presumed current market value.”
- Inventory: goods are valued according to the smaller amount between purchase cost and current market value inferable from market trends.⁴³ Basically, the initial entry value (purchase costs) must be compared with the current market value inferable from market trends in order to verify if there are the conditions to carry on devaluations.

⁴³The legislator disciplines the evaluation of inventory sub Art. 2426, point 9, which says: “le rimanenze, i titoli e le attività finanziarie che non costituiscono immobilizzazioni sono iscritti al costo di acquisto o di produzione, calcolato il n. 1), ovvero al valore di realizzazione desumibile dall’andamento del mercato, se minore; tale minor valore non può essere mantenuto nei successivi bilanci se sono venuti meno i motivi” (*the inventory, bonds, and financial activities which do not constitute fixed assets are reported according to the cost of purchase or production, calculated the No. 1) or according to the current market value inferable from market trend, if less; such lesser value cannot be kept in the following statement of accounts if reasons for maintaining it are lacking*).

As regards the cost to compare, the cost configuration,⁴⁴ which is technically most correct, is that of specific cost, which requires singling out and attributing, to each green certificate, those costs specifically sustained to purchase them. Singling out and attributing costs, however, cannot often be done, due to the great amount of traded quotas of issuing and to the elevated revolving speed. Therefore, since the green certificates constitute fungible goods, as an alternative to the specific cost one of the following methods of cost configuration may be used: weighted average, Lifo (last in, first out), and Fifo (first in, first out).⁴⁵

As for the current market value, which can be deduced from market trends, the regulation of the Civil Code does not provide any indication with regard to the identifying of the market and to the market trends. We need, therefore, to refer to that provided for by the *OIC 20* “Bonds and shares” accounting principle which, in Chapter I, Section 7.2., it establishes that “the market value, to compare with the cost, is constituted by the stock-exchange listing for bonds quoted in organised markets, whether official or not, providing that these latter, as regards traded amounts and reliability, may effectively express sufficiently trustworthy quotations.” The markets of the green certificates are structured in such a way as to be characterized by volumes and number of transactions such that they are to be considered normally liquid and therefore worthy of trust. For this reason, for green certificates production value tends to coincide with market value.⁴⁶

5.3.2 *OIC 8 Accounting Principle: “Greenhouse Gas Emissions Quotas”*

As regards gray certificates, accounting treatment will be illustrated by articulating the exposition between industrial company that produces greenhouse gases and trading companies.

⁴⁴Concerning the method to calculate cost, point 10 of Article 2426 of the Italian Civil Code states that the cost of fungible goods may be calculated using the method of the weighted average or using those “first in, first out” or “last in, first out”; if the value, thus obtained, notably differs from current costs at the end of the financial year, the difference must be indicated, by category of goods, in the accompanying note.

⁴⁵The aforementioned cost configurations are dealt with in the Principio Contabile OIC 13 “Le rimanenze di magazzino” (*OIC 13 Accounting Principle – The inventory*) to which we refer for further details; www.fondazioneoic.eu.

⁴⁶The OIC 20 Accounting Principle, Chapter I, Section 7.2., also provides for what here follows: “The market, as is defined above, expresses values that are different throughout the course of time. We need, therefore, to establish the temporal reference point which expresses a ‘trend’ in the market at the date of drawing up the statement of accounts.”

5.3.2.1 Accounting Treatment for Industrial Companies That Produce Greenhouse Gases

As was thoroughly illustrated in Chap. 1, legislation provides for free granting of a number of gray certificates commensurate to a certain level of emissions during company activity in the financial year. The objective of this granting of certificates is, therefore, that of allowing the company to fulfill, without being subject to any economic burden, its obligation of returning the gray certificates corresponding to the real emissions generated. At the end of the year, the company may, therefore, determine the final position (whether an asset or liability) as regards emission quotas. The quotas received free, therefore, give rise to a benefit which counterbalances a burden which matures throughout the course of the year upon the plant functioning.

Concerning how it is recorded in the statement of accounts, in virtue of the principle of compensation and therefore of the prevalence of substance over form, only the economic net effect matured at such date will be recorded. Nevertheless, information relating to the number of quotas received and to return to the amount of the surplus or deficit matured at year's end will, anyway, be specified in the subsidiary note.

Data Collection Cataloguing

For greater clarity, it is possible to divide this section considering some of the most significant elements:

- *Free allocation of emission quotas*: The accounting treatment of the gray certificates begins at the reporting, in the memorandum accounts, of the quotas allocated free. Actually, those companies subject to the discipline have to report, in the memorandum accounts, “the commitment to produce a certain amount of greenhouse gas emissions proportional to the emission quotas received. Such a commitment is recorded at the market value of emission quotas at the moment of allocation and... [it will be reversed]... at the end of the financial year in relation to effective greenhouse gas emission”.⁴⁷

From the accounting point of view, in the memorandum accounts, we have the following entries (Table 5.37):

- *Purchase and sale of quotas before the end of the financial year*: Till the moment foreseen by the pertinent legislation, the companies coming under the discipline may buy the emission quotas for fulfilling the obligation of delivering them to the competent authority (by the 30th of April of the following year).

The gray certificates purchased during the year represent costs to be ascribed in the income statement; they constitute a system expense deriving from existing

⁴⁷OIC – Organismo Italiano di Contabilità/Italian Accounting Committee (2013), *Principio contabile OIC 8 – Le quote di emissione di gas ad effetto serra (OIC 8 Accounting Principle – Quotas of greenhouse gas emission)*, p. 7, Sections 23 and 24 (www.fondazioneoic.eu).

Table 5.37 28/02/20XX – Recording of free allocation of emission quotas and 31/12/20XX – Transfer of memorandum accounts relating to emission quotas assigned

D/ Commitments for emission quotas assigned free	A/ Commitments toward Minister of Environment for emission quotas assigned free
31/12/20XX	31/12/20XX
D/ Commitments toward Minister of Environment for emission quotas allocated free	A/ Commitments for emission quotas allocated free

Table 5.38 15/05/20XX – Purchase of emission quotas before the end of the financial year

D/ Various D/ Expenses for emission quotas (<i>B14 – Other operating expenses</i>) D/VAT on the purchase of emission quotas (<i>CII.4bis – Tax receivables</i>)	A/ Commercial payables (invoices received) (<i>D7 – Payables to suppliers</i>)
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Table 5.39 31/08/20XX – Sale of emission quotas before the end of the financial year

D/ Commercial receivables (invoices issued) (<i>CII.1 – Receivables from customers</i>)	A/ Various A/ Revenues from emission quota sale (<i>A5 – Other revenues and income</i>) A/ VAT on the sale of emission quotas (<i>D12 – Tax payables</i>)
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legislation and so are entered at *B14) Other operating expenses*. The cost of purchase is made up of the price paid throughout the year, to which must be added all relating costs directly ascribable to the purchase operation (e.g., intermediation and transaction costs). On the contrary, the certificates sold represent ordinary revenues of an accessory nature which will be ascribable in the income statement at entry *A5) Other revenues and income*. The payables and receivables deriving from the purchase and sale, being of commercial nature, will be registered in the balance sheet, respectively, at the entry of liability and current assets and will concern entries *D7) Payables to suppliers* and *CII.1) Receivables from customers*.

Sections 27 and 29 of OIC 8 Accounting Principle relate to the purchase/sale of the gray certificates during the relevant financial year. In these cases, at the moment of the exchange (purchase or sale), we need to show the entire cost sustained/revenue produced because of the transfer.

Accounting wise, at the moment of the purchase and of the sale in the relevant financial year, there will have in Tables 5.38 and 5.39 the following entries:

- *Emission quota deficit and surplus*: The most important indications provided by the Accounting Principle in question are relative to the adjustment entries to be entered at the end of the financial year. Here, the objective is that of tracking the income components relative to the obligations imposed by the Kyoto Protocol. In order to obtain this information, at the end of the administrative period, we

Table 5.40 31/12/20XX – Deficit of emission quotas

D/ Expenses for emission quotas (B14 – Other operating expenses)	A/ Payables to Ministry for emission quotas to be purchased (D14 – Other payables)
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will need to compare the amount of quotas which must be given back to the Ministry of the Environment and which depends, in turn, on the quantity of emissions released into the atmosphere, with what results from the following calculation: certificates obtained free plus/minus the quotas purchased/sold on the market before the end of the financial year.

Two cases may then be verified:

1. *Deficit of emission quotas*: comes to the fore when “at the end of the financial year, the algebraic sum of the quotas allocated/purchased extra in the preceding years and carried forward, plus the quotas allocated free during the year, plus/minus those quotas purchased/sold on the market in the same year results as being lower than the amount of quotas needed for fulfilling the obligations of the law.⁴⁸”

The deficit thus obtained may be covered by way of the purchase of quotas on the market or through the use of quotas already received (via free allocation) in the following year with regard to that one of obligation.

From the accounting point of view, the company has to report in B14) *Other operating expenses* a residual expense to be sustained which will be determined by considering market value of gray certificates at the end of the financial year. In the balance sheet, we will have the entry D14) *Other payables* which represents the liability toward the Ministry of the Environment. It constitutes a payable in kind, representative of the obligation to deliver goods (rather, the emission quotas) to the competent authority, coming from a current obligation, whose existence is certain and whose fulfillment time (coinciding with the delivery date of the quotas to the competent national authority) and amount (in terms of emission quotas to return) are determined. In place of the latter, wherever the requested requirements of recording a payable in the balance sheet are not verified, entry B3) *Provisions* will be increased.

From an accounting viewpoint, the entry will be in Table 5.40.

2. *Surplus of emission quotas*: contrary to the previous case, this emerges when, “at the end of the financial year, the algebraic sum of quotas allocated/purchased extra in preceding years and carried forward, plus the quotas allocated free throughout the year, plus/minus the quotas purchased/sold on the market in the same year results as being greater than the amount of quotas

⁴⁸OIC – Italian Accounting Committee (2013), Principio contabile OIC 8 (Le quote di emissione di gas ad effetto serra, p. 7, Section 31) (*OIC 8 Accounting Principle – Emission quotas of greenhouse gases*) (www.fondazioneoic.eu).

Table 5.41 31/12/20XX – Adjustment of quotas purchased extra

D/ Prepaid expenses (D – Accruals and prepayments)	A/ Expenses for emission quotas (B14 – Other operating expenses)
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Table 5.42 01/01/20XX+1 – Data collection in the Income Statement 20XX+1 of the excess quotas compared with the obligation of year 20XX

D/ Expenses for emission quotas (B14 – Other operating expenses)	A/ Prepaid expenses (D – Accruals and prepayments)
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needed for fulfilling the obligation of the law.”⁴⁹ It may be destined to provisions for future financial years or for eventual sale.

Should such a surplus be due to an excess of quotas purchased on the market, as regards the obligation of the reference year, the company must enter a prepaid expense⁵⁰ of an amount equal to the cost to be postponed to the future, in that it belongs to the following financial year. Accounting wise, we will need to adjust the cost borne as shown in the Tables 5.41 and 5.42.

- *Purchase of emission quotas following the end of financial year*: in this case, at the time of purchase, we have to report the eventual asset or liability contingency⁵¹ which will be entered into the income statement, respectively, under A5) *Other revenues and income* or B14) *Other operating expenses*. Specifically, the contingency will be “equal to the difference between the value of the liability recorded in the statement of accounts of the relevant financial year and the purchase value on the market.”⁵² We will, therefore, see the following entries in the hypothesis of asset or liability contingency (Tables 5.43 and 5.44).
- *Delivery of emission quotas to the competent authority*: The discipline on gray certificates establishes that emission quotas have to be delivered to the Ministry of the Environment by the 30th of April of the following year with respect to that one taken into consideration. As far as the accounting treatment is concerned,

⁴⁹OIC – Italian Accounting Committee (2013), *Principio contabile OIC 8 (Le quote di emissione di gas ad effetto serra, p. 7, Section 32)* (OIC 8 Accounting Principle – Emission quotas of greenhouse gases) (www.fondazioneoic.eu)

⁵⁰The prepaid expenses/deferred income are a quota of cost/revenues which, even though it has been reported in accounting in the just-ended financial year, it regards the future financial year. Prepaid expense = suspended cost = cost that regards the future financial year.

⁵¹Contingencies are those extraordinary income components, that is, costs and revenues which are not of a recurrent nature and are not generated by the everyday activity carried on by the company.

⁵²OIC – Organismo Italiano di Contabilità (2013), *Principio contabile OIC 8 – Le quote di emissione di gas ad effetto serra (OIC 8 Accounting Principle – Emission quotas of greenhouse gases)* p. 8, Section 33 (www.fondazioneoic.eu)

Table 5.43 15/04/20XX – Purchase of emission quotas in the next business as regards fulfillment of obligation of the previous year: *hypothesis of asset contingency*

D/ Various	A/ Various
D/ Payables to Ministry for emission quotas to be purchased (D14 – Other payables)	
D/ VAT on the purchase of emission quotas (D12 – Tax payables)	
	A/ Commercial payables (invoices received) (A7 – Payables to suppliers) A/ Ordinary asset contingency (A5 – Other revenues and income)

Table 5.44 15/04/20XX – Purchase of emission quotas in the following financial year for fulfillment of previous year obligation: *hypothesis of liability contingency*

D/ Various	A/ Commercial payables (invoices received)
D/ Payables to Ministry for emission quotas to be purchased (D14 – Other payables)	(A7 – Payables to suppliers)
D/ VAT on the purchase of emission quotas (D12 – Tax payables)	
A/ Ordinary liability contingencies (B14 – Other operating expenses)	

“the fulfilment of the obligation referring to the previous year means no accounting registering [...] given that all assets and income impacts are already reflected, by relevance, in the statement of accounts of the financial year wherein the obligation arose.”⁵³

Evaluation

As regards evaluation of entries of the statement of accounts, the following criteria matter:

- Payables will be recorded in the statement of accounts at their extinction value; payables in kind will, instead, be evaluated at market value of the emission quotas at the end of financial year.

⁵³OIC—Italian Accounting Committee (2013), *OIC 8 Accounting Principle – Emission quotas of greenhouse gases* p. 8, Section 34 (www.fondazioneoic.eu)

Table 5.45 15/07/20XX – Purchase of emission quotas for trading companies

D/ Various D/ Costs for purchase of emission quotas (B6 – Production cost of raw materials, consumables, and merchandise) D/VAT on the sale of emission quotas (CII.4bis – Tax receivables)	A/ Commercial payables (invoices received) (D7 – Payables to suppliers)
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- Receivables, in compliance with Art. 2426 of the Italian Civil Code, point 8, must be recorded in the statement of accounts according to their current market value.⁵⁴

5.3.2.2 Accounting Treatment for Trading Companies⁵⁵

Trading companies are businesses that do not carry out industrial-type activities, in relation to which the free allocation of and obligation to deliver emission quotas are recognized. They are, however, agents who purchase the quotas in order to then sell them on the market. This determines that the purchases are always upon payment and that the operations of purchase and sale fall within their typical activity.

Data Collection and Cataloguing

- Purchase and sale of emission quotas: given the particular nature of the activity carried on, at the time of purchasing the emission quotas, the trading companies will report in the income statement a cost which will be recorded under entry B6) *Production cost of raw materials, consumables, and merchandise*. In the balance sheet, we would have payable of commercial nature which will be registered at entry D7) *Payables to suppliers*. Parallel to this, on the act of sale, the trader will report a revenue in the income statement at entry A1) *Revenues from sales and services*; while in the balance sheet, we will have, instead, a receivable of commercial nature which will be recorded in the current assets at entry CII.1) *Receivables from customers*. From an accounting point of view, we will have the following entries as shown in Tables 5.45 and 5.46.

⁵⁴The evaluation of payables and receivables is disciplined, respectively, in the *OIC 19 Accounting Principle* “Provisions – Employees’ termination benefits provision – Payables” and in the *OIC 15 Accounting Principle* “Receivables” where we suggest to refer for further detailed information, visiting the website www.fondazioneoic.eu.

⁵⁵Evaluation criteria of emission quotas for trading companies are identical to those foreseen for green certificates. For closer examination, see Sect. 4.2.3.

Table 5.46 25/09/20XX – Sale of emission quotas for trading companies

D/ Commercial receivables (invoices issued) (<i>CII.1 – Receivables from customers</i>)	A/ Various A/ Revenues for the sale of emission quotas (<i>A1 – Revenues from sales and services</i>) A/ VAT on the sale of emission quotas (<i>D12 – Tax payables</i>)
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Table 5.47 31/12/20XX+1 – Data collection of final inventory of emission quotas

D/ Inventory of emission quotas (<i>CI.4 – Inventory of finished goods and merchandise</i>)	A/ Changes of inventory of emission quotas (<i>B11 – Change in raw materials, consumables, and merchandise</i>)
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- The inventory of emission quotas. At the end of the financial year, emission quotas purchased and still available to the company make up remnant inventory. These will be recorded in current assets of the balance sheet at entry *CI.4 Inventory of finished goods, and merchandise*, and the relative changes will be recorded at entry *B11) Change in raw materials, consumables, and merchandise* of the income statement.

At the end of the financial year, we will register, therefore, the following entry as shown in Table 5.47:

5.4 Eco-management and Audit Scheme

Europe's first national standard for environmental management was introduced in 1992 in the UK – BS-7750 – British standard of environmental management system.

BS-7750 is taken as an example and a partial basis for the development of European Union law on environmental management and environmental auditing.⁵⁶

These rules were adopted by the Council of Europe in 1993⁵⁷ and called Eco-Management and Audit Scheme (EMAS), which is the first version of this system, valid for the member states of the EU.⁵⁸

Standard EMAS is designed for the EU countries, Norway and Iceland. Official permission to join the EMAS scheme was provided to firms in 1995. Initially EMAS was designed for industrial enterprises. Later it was extended to businesses in agriculture, forestry, and the public sector. The introduction of the Eco-Management and Audit Scheme (EMAS) is preceded by the introduction of the International Standard for Environmental Management 14001 (ISO 14001) in

⁵⁶BSI (1992) "BSI 7750, Specification for environmental management systems," British Standards Institution, London

⁵⁷Council Regulation No. 1836/93, 29 June 1993

⁵⁸COUNCIL REGULATION (EEC) No. 1836/93 of 29 June 1993; Official Journal of the European Communities No. L 168/ 1; 10. 7. 93

1993, which is valid for the whole world. EMAS is a voluntary system with focus on the permanent improvement of the organization's environmental performance.

There are three stages in the development of EMAS:

1. Regulation EMAS I, adopted in 1993 in force from 1995
2. Regulation EMAS II, from 2001

(a) Decision of the European Commission (2002)

3. Regulation EMAS III adopted in 2009⁵⁹

EMAS Global is based on "Decision 2011/832/EC concerning a guide on EU corporate registration, registration in a third country and global registration under Regulation (EC) № 1221/2009 of the European Parliament and of the Council on the voluntary participation by organizations in a Community for environmental management and auditing (EMAS)."⁶⁰

EMAS III is accessible to all sectors of economic activity and all organizations whatever their size and sector and is complementary with ISO 14001.

Eco-Management and Audit Scheme (EMAS) represents a prescription (regulation) of the EU, which requires a systematic introduction of environmental measures and environmental communication based on the accountability of companies. Its legal basis at the present time is the European Regulation (EC) No 1221/2009.

The management system to be created in organizations applying for EMAS contains specific requirements for the continuous perfection of environmental protection; increased efficiency in the use of natural resources, for public information on the environmental aspects of the organizations' activities and their amendment, taking into account the interests of stakeholders and their need for information on the production; and measures taken for the conservation of the environment as well as annual publications on the environmental performance of the organization.

Organizations that have successfully certified under EMAS and have received the sign of EMAS should:

- Voluntarily accept to make efforts to perfect their environmental activities, as these liabilities exceed the current legal framework of a number of countries. EMAS does not require only the inactive attitude of organizations to formally comply with the minimum legal requirements for environmental protection but also makes them an active part in the expansion of environmental objectives and improves their activities for environmental protection.
- Volunteer to maintain a system of environmental management to achieve the environmental targets set.
- Guarantee for the accuracy of the information presented in its environmental or ecological balances accounts.

⁵⁹Council Regulation No. 761/2001 (EU 2001)

⁶⁰<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32009R1221&from=EN>

- Undergo an environmental audit and verify environmental performance.

The basic principle of EMAS is “the polluter pays.” According to this principle, the economic damage should be charged to the person or persons causing the damage.

EMAS has higher requirements for certification of companies in comparison with ISO 14001 which can be summarized as follows:

- Continuous perfection of the ecological production
- Government monitoring of compliance with environmental legislation
- Periodic environmental audits and publication of audit results
- Participation of entire company staff in environmental activities

A key requirement for organizations is the availability of systematic communication with stakeholders. For this purpose, enterprises should provide the public data about their system of environmental management and environmental results. In such a way, EMAS creates a basis for the preparation and disclosure of public environmental reports, which goes beyond the legislation of many countries.

The main requirements of EMAS coincide with the ISO 14001 standard.

The main difference between them is the requirement of EMAS for organizations to conduct environmental accounting and publicly presented their environmental parameters in statements. Another requirement of EMAS is the requirement for the constant perfection and development of environmental reporting with reference to its current amendments, as well as taking into account the economic feasibility of the companies’ environmental activities.

EMAS has not provided solid prescriptions for what should be the content of the environmental report. The reason for this is the lack of a single European standard for environmental reporting and accounting and the fact that countries such as Bulgaria, for example, have not adopted national standards for environmental accounting and reporting.

The EMAS model follows the cycle “Plan-Do-Check-Act.” EMAS has the following components:

- Formulation of an organization’s environmental policy.
- Creation of managerial staff responsible for maintaining the organization’s ecological management.
- Internal control within the organization for compliance with legal environmental requirements.
- Establishing procedures for evaluation and identification of environmental aspects at organizational level.
- Adoption of goals and objectives in environmental protection.
- Creating an environmental program.
- Creating a system for documenting and document turnover serving the needs of environmental policy and control.

Documenting of:

- Management of operations
- Staff training
- Monitoring
- Adjustments in conservancy activities
- Periodic evaluation of environmental activities through internal audit.
- Analysis and management review.
- Ecological declaration. The organization undertakes to publish an environmental statement that confirms its commitment to EMAS and to make public the environmental performance of the organization. (Information, which constitutes a trade secret according to the respective country's legislation is not to be published.)

In order for the organization to be included in EMAS, it has to pass a primary environmental review for assessment of its impact on the environment. After receiving the certificate of membership in EMAS, the organization has the right to use the EMAS logo in advertising and labeling its products as well as in its branding.

Direct benefits to organizations that are registered under EMAS are provided for in national legislation and may consist in obtaining various concessions, if such have been envisaged.

In many countries, there are examples of such concessions: reduction by 50% of waste fee and reduction of 20–30% and in some cases to 100% of the fees for administrative procedures and for public services.⁶¹

According to studies, the reasons for the inclusion of organizations in the EMAS scheme may be the desire of companies to reduce environmental impact, energy savings, and unrecoverable resources; improvement of presentation in society, acquiring regulatory relief response to user requirements, mergers, and acquisitions; better risk management; competitive advantages; etc.⁶²

In the preparatory phase of certification to EMAS, a review of the impact of the organization on the environment should be made.

Eco-mapping is a tool for environmental review a method to identify the area of the system of environmental management. This allows identifying the areas in which an organization creates environmental effects.⁶³

Eco-mapping only deals with environmental impact and does not focus on the social and economic impacts, unless they directly affect the environment.

⁶¹Commission decision of 4 March 2013 establishing a user's guide setting out steps needed to participate in EMAS (EC) No. 1221/2009 of the European Parliament and of the Council on the voluntary participation by organizations in a community Eco-Management Environment and Audit (EMAS) (notified under document number C (2013) 1114); L 76/4, 5

⁶²Draft Final Report by Milieu Ltd. and Risk and Policy Analysis Ltd. for DG, Environment of the European Commission p. 31, October 2009

⁶³<http://www.ec.org/en/presentation/portal.html>

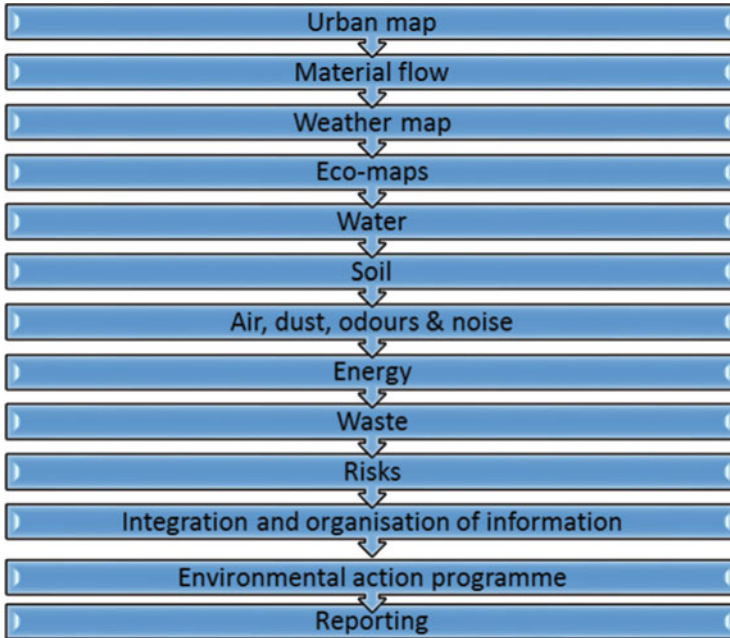


Fig. 5.1 Building up environmental information with eco-mapping (Source: EMAS “easy” for small and medium enterprises, p. 18)

Eco-mapping has several functions such as:

- Creating an inventory of environmental practices and problems.
- Establishment of a systematic method for conducting environmental review on the site and audit.
- It is a tool that gives opportunities for the participation of staff and other stakeholders.
- Support for training and awareness and help with internal and external communication.
- It is an easy way to record and investigate environmental progress.
- Index of positive examples from practice.⁶⁴

Eco-mapping (Fig. 5.1) helps to identify environmental impacts caused by the activities of organizations.

“EMAS easy for small business” has been created by Heinz Werner Engel with the support of Directorate General “Environment” of EC. It is intended primarily for small and medium enterprises. It aims at helping small companies to introduce environmental management, ISO 14001 and EMAS.

⁶⁴<http://www.ecomapping.com/en/tools-methodes/pros-cons.html>

“EMAS easy” includes four activities for which an organization has to be prepared and has to realize:

1. Review and localization of environmental impact
2. Collection of information in localized areas of impact
3. Assessment and forecast of the impact
4. Indicators that show the effects of the company on the environment, in absolute terms
 - (a) As well as the company’s turnover in monetary measure

EMAS easy provides a simplified model for reporting material flows and resource use of the organization.

- Energy input (on the left side) and output (on the right side), flow of greenhouse gases as a result of annual energy spent
- Inflow and outflow of water used – the quantity of water the organization received and the waste water output – from a public utility water supplier as well as from its own wells
- Inflow of materials and outflow of the amount of waste these have created
- The right side is recorded as outflow and manufactured products (separately finished products, semifinished products) and services

EMAS easy provides a simplified scheme for reporting emissions of carbon dioxide (CO₂) and sulfur dioxide (SO₂).⁶⁵

Thanks to EMAS III, the scheme is available to firms and nonprofit organizations outside the EU or European companies operating in countries outside the EU.⁶⁶

EMAS III is new in the establishment of the cycles of verification for small businesses (Table 5.48).

Under Article 7, small- and medium-sized enterprises and organizations (that are responsible for less than 10,000 inhabitants or employing less than 250 people) are allowed extended validation cycles. The review is made of 4 (not of 3 years) and endorsement of the updated environmental statement every 2 years (not of every year).

There are has “six key areas” in EMAS III for appraisal of environmental performance (compiled from EMAS III Annex IV C):

1. Energy efficiency
2. Material efficiency
3. Water
4. Biodiversity

⁶⁵EMAS “easy” for small and medium enterprises – EMAS guide, p. 9; http://eco-forces-bgtr.eu/documents/ecomapping/GUIDE_maps_emas-easy-en.pdf

⁶⁶COMMISSION DECISION of 4 March 2013 establishing a user’s guide setting out steps needed to participate in EMAS (EC) No. 1221/2009 of the European Parliament and of the Council on the voluntary participation by organizations in a community eco-management environment and audit (EMAS) (notified under document number C (2013) 1114); L 76/4, 5

Table 5.48 Core indicators for environmental reporting

Key areas	Input or impacts
Energy efficiency	1. Total direct energy use (expressed in MWh or GJ) 2. Total renewable energy use (percentage of total annual energy consumption (electricity and heat) from renewable energy sources)
Material efficiency	Annual mass flow of different materials used (excl. energy carriers and water) Expressed in tons
Water	Total annual water consumption expressed in m ³
Waste	1. Total annual generation of waste broken down by type, expressed in tons 2. Total annual generation of hazardous waste expressed in kg or tons
Biodiversity	Land use (expressed in m ² of built-up area)
Emissions	1. Total annual emission of greenhouse gases Incl. at least emissions of CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, and SF ₆ Expressed in tons of CO ₂ equivalent 2. Total annual air emission Incl. at least emissions of SO ₂ , NOX, and PM, Expressed in kg or tons

Source: EMAS INFO Information about the European Environmental Management System published by the Office of the German EMAS Advisory Board Office of the German EMAS Advisory Board (UGA) Status: August 2010

5. Waste

6. Emissions⁶⁷

5.4.1 Environmental Statement (Declaration)

Current requirements for environmental statement are contained in Regulation (EO) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation of organizations in community Eco-Management and Audit Scheme (EMAS) and repealing Regulation (EC) No. 761/2001 and Council Decisions 2001/681/ EC and 2006/193/EC, Annex IV reporting on environmental issues.

It requires the organization to demonstrate its infringement.

Environmental information may be submitted in electronic or printed form.

The environmental statement must contain the next minimum information and the following minimum requirements:

- (a) Profile of the organization, description of the organization, and brief description of its activities, products, and services, as well as its links with other mother organizations

⁶⁷EMAS INFO Information about the European Environmental Management System published by the Office of the German EMAS Advisory Board Office of the German EMAS Advisory Board (UGA) Status: August 2010

- (b) Environmental policy of the organization and description of its system of environmental management
- (c) Description of all significant direct and indirect environmental aspects which have been the cause of the organization's considerable impact on the environment and explanation of the nature of the impacts with reference to these aspects (Annex I.2).

5.4.1.1 Direct and Indirect Environmental Aspects

- “Direct environmental aspects” are activities of the organization over which it has direct management control.
- “Indirect environmental aspect” means an environmental aspect which can result from the interaction of an organization with third parties and which can reasonably be influenced by the organization.⁶⁸

Examples of direct environmental aspects are land use, direct emissions from production and transportation, the use of nonrenewable raw materials and resources, noise caused by the activities of the organization, waste, and polluted water.

Examples of indirect environmental effects are selecting suppliers, subcontractors, and environmental performance of suppliers and subcontractors; problems associated with the life cycle of products; etc.

- The general and specific environmental objectives adopted by the organization in relation to the significant environmental aspects and impacts of its activities
- Environmental performance – a summary of data on the performance of the organization against its environmental objectives and targets
- Other factors regarding environmental performance
- Implementation of applicable legal requirements relating to the environment
- The name and accreditation number or license number of the environmental verifier and the date of validation

The information in the declaration must be updated by the European Commission within a determined period of time.

5.4.1.2 The Six Key Indicators

The six key indicators are related to the presentation of “input-output inventory” of environmental impacts of production processes and products of the organization.

⁶⁸Decision of the European Commission on 4 March 2013 for the creation of a user's guide setting out steps needed to participate in EMAS (EC) No. 1221/2009 of the European Parliament and the Council on the voluntary participation of organizations in a community eco-management environmental and audit (EMAS) (notified under document number C (2013) 1114) (Text with EEA relevance) (2013/131/EU) L 76/10

Table 5.49 Example for presenting key indicator “energy efficiency” of production and administrative activities

	A	B	C = A/B
For manufacturing enterprise	Annual energy consumption (in MWh, GJ), for example, 8531 GWh = 8,531,000 MWh	Total annual gross value added (millions of euros) or total annual physical production (tons), for example, 9143.5 million euros	Annual energy consumption (in MWh, GJ)/ total annual gross value added in 1 million euros or MWh/total annual physical output ton of product, for example, C = 0.9330 or C = consumption in kWh per hl of drink produced = 40.15
For public administration	Annual energy consumption (KWh MWh, GJ), for example, 733 KWh	Number of employees, for example, three people	KWh/person GJ/person, for example, 733/3 = 244.3

The main indicators are applicable to all types of organizations. These should reflect:

- Energy efficiency
- Efficient use of materials
- Water
- Waste
- Biodiversity
- Emissions

According to the documents of EC, each key indicator is presented by:

1. Figure A indicating the total annual input element or influence. This is an absolute indicator, measured in physical units.
2. Figure B indicating the overall annual output accounting item. It is also an absolute indicator, measured in monetary value.
3. Figure C indicating the ratio A/B.

Organizations must report all three elements for each key indicator (Table 5.49).

As shown in the Table 5.48, the ratio $C = A/B$ shows the power consumption for the production of produce or what power consumption is needed to obtain or create value added products.

This ratio shows no energy losses that are vented and no energy savings.

Also not treated separately are the internal needs of the organization and the needs of the production itself to produce the output.

Therefore, the organization should conduct its own accountability in relation to the objectives it has set alongside the optimization of the production and other energy needs it might have.

“Gross value added” at basic prices according to the regulation is the sum of revenues minus nonlabor costs of inputs or output (presented in fiscal units).⁶⁹

The presentation of the overall annual output of the organization including B is adapted for different types of organizations according to their type of activity and is reported as follows:

- For organizations working in the production sectors (industry) can be given the total gross value added in monetary value or total annual physical output expressed in tons and for small organizations – the total annual turnover or number of employees.
- Organizations from the administration or/and services may be linked to the size of the organization expressed in number of employees.⁷⁰

In summary, all these measurements and descriptions represent the actual sustainability report, which is the main communication tool of the organization with stakeholders, through the declaration of EMAS certification of the organization.

5.4.1.3 Indicators of Nonsignificant (Minor) Importance

In the event that an organization objectively assesses that one or more core indicators are not relevant to its significant direct environmental aspects, it may not report these key indicators. However, the organization must justify its decision in doing so.

The assessment of this indicator, which is an essential and which immaterial, should be subject to environmental policy of the organization.

The significance of the environmental impact can be assessed by examining:

1. Potential to cause environmental harm
2. Fragility of the local, regional, and global environment
3. Size, number, frequency, and reversibility of the aspect or impact
4. Existence and requirements of relevant environmental legislation
5. Importance to the stakeholders and employees of the organization⁷¹

⁶⁹Official Journal of the European Union, 12.10.2006, L 281/17, ANNEX I DEFINITION OF OBJECTIVES AND CHARACTERISTICS OF VARIABLES

⁷⁰Official Journal of the European Union, 12.10.2006, L 281/17, ANNEX I DEFINITION OF OBJECTIVES AND CHARACTERISTICS OF VARIABLES

⁷¹COMMISSION DECISION of 4 March 2013 establishing a user’s guide setting out steps needed to participate in EMAS (EC) No. 1221/2009 of the European Parliament and of the Council on the voluntary participation by organizations in a community eco-management environment and audit (EMAS) (notified under document number C (2013) 1114) (text with EEA relevance) (2013/131/

Table 5.50 Assessment of the significance of the environmental aspect

Scale	Description	Criteria
1	Negligible	Very small environmental impact Low probability of occurrence
2	Minor	Abnormal conditions would cause breach of legislation Impact and probability of occurrence both small
3	Significant	The activity has an impact under normal operating conditions and results in a breach of legislation under abnormal operating conditions. Effect and probability of occurrence are moderate
4	Major	The activity under abnormal conditions is a breach of legislation Impact is extensive

Source: Hunt, D., & Johnson, C. (1995). *Environmental management systems: Principles and practice*. New York: McGraw-Hill. quoted under Environmental management tools for SMEs: A handbook. The Centre for Corporate Environmental Management (CCEM), March 1998.

Hunt and Johnson propose the following methodology for evaluating the significance of the environmental aspects, based on the requirements of the commission, with the use of a technique assessing the risk of these aspects as shown in Table 5.50.

Each environmental aspect is assessed on a scale from 1 to 5 depending on the three main parameters:

1. Frequency of occurrence (F)
2. Likelihood of control loss (L)
3. Severity of consequences (S)

Product assessments from 1 to 5 of these three elements represent the overall criticality factor (C):

$$C = F \times L \times S$$

The position of C values can give an idea of the importance of aspects (Table 5.50).⁷²

5.4.1.4 Environmental Statement (Declaration)

Environmental accounting is used in compiling the environmental statement. Management environmental accounting tools are most useful for the environmental accounting in the company. It renders in monetary form the resources used, the

EU) L 76/11; Baxter, Martin, Environmental Management Systems, The Institute of Environmental Management and Assessment available at https://www.iema.net/system/files/ebriefingems_0.doc

⁷²Hunt, D and Johnson, C (1995) *Environmental Management Systems: Principles and Practice*, McGraw-Hill, 1995, quoted under Environmental Management Tools for SMEs: A Handbook, The Centre for Corporate Environmental Management (CCEM), March 1998

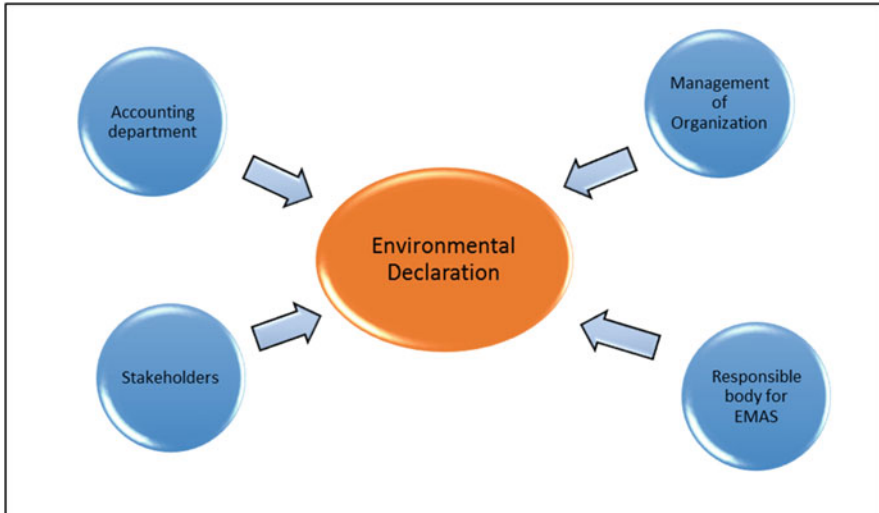


Fig. 5.2 Commonly environmental statement

occurrence of emissions, etc. and in physical form (MEMA and PEMA). The declaration may also take the form of an environmental report and be based on integrated accounting. Germany, for example, has adopted such criteria in drafting the declaration.

Environmental management accounting combines financial and physical data and calculates the environmental costs of companies:

- Physical data on material and energy input, material flows, products, waste, and emissions (PEMA)
- Financial data on expenditures, costs, earnings, and savings related to company activities with potential environmental aspects or impacts (MEMA)

EMEA is external environmental accounting and reporting, expressed in monetary units, and external physical environmental accounting (EPEA) as external environmental accounting in physical units (Fig. 5.2).

5.4.1.5 Structure of the Declaration

Environmental statement (declaration) must be based on EC Regulation 1221/2009 of the European Parliament and of the Council from 25 November 2009.

The declaration may have the following sample structure:

1. Presentation of the organization.

2. Environmental policy – “An environmental policy is a document prepared by the company which clearly sets out its overall aims and intentions with respect to the environment.”⁷³
 - (a) The application of environmental policy goals, presence of a system of environmental management, involvement of management and staff in the implementation of environmental policy, and accountability
3. Environmental management system: environmental management system responsibilities, procedures, and forms. “Environmental management is the management of those activities of a firm that have or can have an impact on the environment.”⁷⁴
4. Production and products and environmental aspects.
 - (a) Direct environmental aspects
 - Primary air pollutants
 - Secondary air pollutants
 - (b) Indirect environmental aspects
 - (c) Carbon footprint report
5. Objectives.
6. Actions.
7. Indicators.
 - (a) Environmental management indicators like environment-related investments for a year or the share of environmental investment in the total investment.
 - (b) Environmental absolute indicators – energy and water consumption, waste water, etc.
 - (c) Environmental performance indicators. They show the environmental performance of the organization in relation to the volume of its production or, for example, how many tons of CO₂ are released during the production of a unit.
 - (d) Environmental effect indicators.⁷⁵

Eco-mapping may be used as the basis of these indicators (Fig. 5.3).
Indicators are usually compared with the benchmark or base year or base value.
8. Best practices of the organization.
9. Communication activities.

⁷³Environmental Management Tools for SMEs: A Handbook, The Centre for Corporate Environmental Management (CCEM), European Environment Agency, 1998 p. 34

⁷⁴Environmental Management Tools for SMEs: A Handbook, The Centre for Corporate Environmental Management (CCEM), European Environment Agency, 1998 p.12

⁷⁵Marsanich, Andrea, Environmental Indicators in EMAS Environmental Statements, p. 6.; <http://www.feem.it/userfiles/attach/Publication/NDL1998/NDL1998-026.pdf>

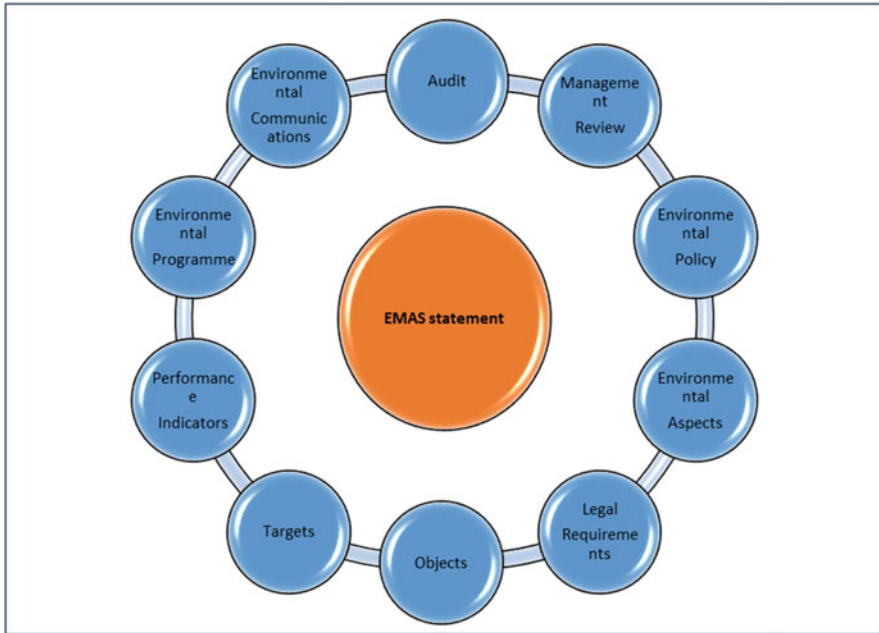


Fig. 5.3 Structure of environmental statement

10. Legal compliance. EMAS requires full implementation of applicable legal requirements.
11. Environmental program – objectives.
12. Conclusions of audit validation/verified by the competent bodies

5.4.1.6 Environmental Audit in EMAS

“An environmental audit is a tool that is used to check whether a company is doing what it should be doing.”⁷⁶

The concept for revision of the environmental activities of organizations (environmental audit) was developed in the USA in the late 1970s of the twentieth century. Its practical application was to check whether enterprises complied with the requirements of environmental laws and regulations. Businesses were required to bring their activities into compliance with environmental legislation and implementation of environmental legislation by businesses which began to control the environmental audit.⁷⁷

⁷⁶Environmental Management Tools for SMEs: A Handbook, The Centre for Corporate Environmental Management (CCEM), European Environment Agency, 1998 p. 69

⁷⁷Серов Г.П. Экологический аудит. Концептуальные и организационно-правовые основы. – М.: Экзамен, 2000, с.448

Table 5.51 Stages of EMAS audit^a

Internal audit	External audit	
First-party audit	Second-party audit	Third-party audit
Self-organization auditing	Supplier auditing	Verification

^aISO 19011:2011 Plain English Introduction, available on <http://www.praxiom.com/iso-19011-intro.htm>

Businesses were required to bring their activities into compliance with environmental legislation, while the implementation of environmental legislation by businesses was being controlled by the environmental audit.

The environmental audit system follows the cycle:

- Audit of the implementation of environmental policy
- Audit of planning system
- Audit of the implementation of environmental policies and internal controls
- Checking the adjustments
- Audit of management report

The environmental audit under EMAS is not an evaluation of compliance. Auditors can adhere to the standards given as a minimum by ISO 19011:2011 Guidelines for Quality and/or Environmental Management Systems Auditing.

ISO 19011:2011 provides guidance on the principles of auditing, managing audit programs, conducting audits of the system for quality management and audit system for environmental management, as well as guidance on the competence of the environmental auditors of the quality management system. It is applicable to all organizations, internal and external audits of quality systems, and/or environmental management.⁷⁸

The main purpose of auditors is to check and verify the environmental activities of the organization and the requirements of EMAS.

Audit evidence is qualitative and quantitative. This is gathered in the usual manner.

The environmental audit system has two main objectives (Table 5.51):

1. To determine whether the environment management system of an organization is in compliance with the criteria of the environment management system, determined by the organization
2. To communicate the results of this process to management and stakeholders

The audit can be carried out by three countries:

1. First party – audit by the company certified to EMAS as the audit is carried out by persons of the company itself or by consultants. This audit is also called internal audit.

⁷⁸ISO 19011:2011 Guidelines for quality and/or environmental management systems auditing available on http://www.iso.org/iso/home/store/catalogue_ics/catalogue_detail_ics.htm?csnumber=50675

2. Second party – by external auditors and by an interested party, a client and a NGO.
3. Third party – for regulatory, legal, and other needs, to be carried out by an independent registered auditor who has performed the verification.

Certification that evaluates correlation ISO/IEC 17021: 2011 is used.
EMAS requires third-party audit.

The audit that verifies performance under EMAS primarily concerns:

- Compliance with environmental law
- Direct and indirect aspects and impacts
- Environmental policy and performance
- Participation of the organization’s staff in the implementation of the objectives of EMAS
- Accuracy of information⁷⁹

5.4.1.7 Kinds of Control and Audit

- Operational control: Operational control is performed with respect to the tasks of the company related to significant environmental aspects. It is subjected to an internal audit.
- Internal audit: “Internal environmental audit” means a systematic, documented, periodic, and objective evaluation of the environmental performance of an organization, a management system and processes designed to protect the environment.⁸⁰
- Management review: The management of the company shall periodically review the system of environmental management, to ensure that it continues to meet the needs of the company. The revision aims to address the possible need for changes in company policy, objectives, and other elements of the system for environmental management in the light of:

Audit results

Changing circumstances

Commitment to company’s continuous improvement

- Commitment to continuous improvement and prevention of pollution means that new goals and objectives will need to be defined and the changing

⁷⁹An Introductory Guide to EMAS, DEFRA 2010, UK, p. 12

⁸⁰COMMISSION DECISION of 4 March 2013 establishing a user’s guide setting out steps needed to participate in EMAS (EC) No. 1221/2009 of the European Parliament and of the Council on the voluntary participation by organizations in a community eco-management environment and audit (EMAS) (notified under document number C (2013) 1114) (Text with EEA relevance) (2013/131/EU) L 76/20

- circumstances, such as the introduction of new products and processes, will mean that new procedures shall be written and new roles and responsibilities set.
- External audit from second and third parties.

5.5 UNI ISO 26000

5.5.1 *The ISO International Standards*

This section is structured as follows: the first part presents the path that led to the issuance of UNI ISO 26000 in the context of international standards; the second part describes the structure of the “norm,” its themes and principles; and the third one briefly shows some comments made by practitioners and institutional operators and concrete business cases of application. The chapter closes with final reflections.

ISO (International Organization for Standardization)⁸¹ is a worldwide federation of national standards bodies (ISO member bodies).⁸² ISO closely collaborates with the International Electrotechnical Commission (IEC) on all matters of standardization. International standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

International ISO standards are management systems studied and introduced in the second half of the last century by international standardization bodies (ISO) in the areas of quality and the environment. Over time, norms have been integrated which were initially orientated to the quality of the product/service offered. Subsequently, social and environmental impacts were identified and assessed, management methods analyzed, operational performance improved, and relative risks prevented (Burh and Gray 2012).

The main standards recognized at an international level are the following:

- In terms of quality: ISO 9000, reviewed and improved through Vision 2000, which provides an appropriate section concerning social impact.
- In terms of the environment: the ISO 14000 series and the standard Eco-Management and Audit Scheme (EMAS) fall within this section.

⁸¹International Organization for Standardization is the most important global organization for the definition of technical standards. It is headquartered in Geneva, Switzerland, and its members are the national organisms of standardization. In Italy, the ISO standards are diffused by UNI (Italian National Body of Unification), which takes part in representing Italy in ISO activities. See <http://www.iso.org/iso/home.html>.

⁸²The work of preparing international standards is normally carried out through ISO technical committees. Draft international standards adopted by the technical committees are circulated to the member bodies for voting. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International standard requires approval by at least 75% of the member bodies casting a vote. International organizations, governmental and nongovernmental, in liaison with ISO, also take part in the work.

- Information security: ISO 27001:2005 against the violation of data, defined to ensure the integrity, confidentiality, and availability of information.
- Concerning social responsibility: ISO 26000:2005, promoted by the ISO working group on social responsibility with the support of interest groups belonging to different socio-economic and political sectors (government, workers, consumers, nongovernmental organizations and services, as well as research entities).
- Regarding safety and health in the work environment, the OHSAS 18000 standard has been established which fixes the requirement of the management system to protect the safety and health of workers.

ISO standards series – notably the 14000 (environmental) and 26000 (social responsibility) – are predominantly management standards and not designed for accountability (Gray et al. 2014: 313). EMAS has both management and disclosure elements but is relatively limited. Both sets of standards talk more generally about improvement rather than absolute impact (Gray et al. 2014: 313). As Gray et al. underline, there is a rich range of sources of guidance for managers on how their organization might go about responding to social, environmental, and sustainability issues (Brady et al. 2011; Adams and Frost 2008). The guidance tends to examine how to develop appropriate information systems (i.e., environmental management systems) and may be embedded in or directly oriented toward standards like ISO14000 or the ISO26000 norm that are principally designed to engage managers and to support them in their understanding of – and response to – social, environmental, and sustainability issues. ISO have been very influential in the matter of environmental management systems (Buhr and Gray 2012).

The ISO guidance document 26000 concerns organizations and their adoption/management of social responsibility (ISO 2010a)⁸³, and it aims to be a first step in helping all types of organization in both the public and private sectors to achieve the benefits of operating in a socially responsible manner, since the adoption of CSR influence competitive advantage and reputation.

The ISO 26000 offers a practical framework for CSR executives who face the challenge of responding in an effective manner to stakeholders (O’Riordan and Fairbrass 2008: 745). Nevertheless, it should be noted that “organisation need guidance, but it is not obvious that stakeholders are at all convinced that the two key principles of responsibility and accountability espoused by the standard have been much advanced in practice” (Moratis and Cochius 2011; Gray et al. 2014: 114).

⁸³http://www.iso.org/iso_catalogue/managment_and_leadership_standards_responsibility/sr_discovering_iso260000.htm (sampled 24 August 2011)

5.5.2 *Origins and Aims of the “Standard” for Social Responsibility: ISO 26000*

In 2010, social responsibility was defined at an international level as the responsibility on the part of an organization for the impact of its decisions and activities (which imply products, services, and processes) on society and the environment, through ethical and transparent behavior which contributes to sustainable development, including the health and the well-being of society; takes into consideration stakeholder expectations; conforms to laws which are coherent with international norms of conduct; and is integrated in the whole organization and put into practice through the activities of the company (Mattana 2011: 7).

This definition can be found in the ISO 26000 General Guidelines (www.iso.org) on social responsibility published on 1 November 2010 (Mattana 2010),⁸⁴ in order to “help organizations contribute to sustainable development, to encourage them to go beyond the mere respect of the law, to promote a common understanding of social responsibility and to integrate other tools and initiatives concerning social responsibility but not to take its place.”⁸⁵

“An organization’s engagement with its communities—especially amongst the larger companies—is increasingly approached as one part of business decision-making and considered as corporate community investment” (Gray et al. 2014: 119). Corporate community investment explicitly features in ISO 26000’s understanding of CSR (Moratis and Cochius 2011).

The main bodies active in the sector took part in drawing up the standards. These included AccountAbility (2008), GRI (Global Reporting Initiative), ILO (International Labour Organization), OECD (Organization for Economic Cooperation and Development), SAI (Social Accountability International), United Nations Global Compact, and World Business Council on Sustainable Development.

ISO 26000 was prepared by ISO/TMB Working Group on Social Responsibility. It was developed using a multi-stakeholder approach involving experts (436 experts and 195 observers) from 99 countries (of which 69 belonging to emerging countries) and 42 international or broadly based regional organizations involved in different aspects of social responsibility. These experts gathered in the working group ISO/WG SR were from six different stakeholder groups: consumers, government, industry, labor, and nongovernmental organizations (NGOs) and service, support, research, academics, and others. In addition, specific provision was made to achieve a balance between developing and developed countries as well as a gender balance in drafting groups.

⁸⁴More than a month later the UNI (Italian National Body of Unification) published the translation of ISO 26000 which became a national guideline. The Italian delegation has been present since the beginning, when the Technical Management Board ISO decided to start its work on the subject. See www.uni.com, “La ISO 26000 sulla responsabilità sociale in pubblicazione a Novembre.”

⁸⁵See http://www.iso.org/iso/social_responsibility.

In February 2010, the ISO 26000 draft obtained a favorable vote and became the Final Draft International Standard, the last stage before becoming an international “norm.” The long process allowed all the ISO members and connected organizations to express their comments despite not having the right to vote. After approval, the working group focused on 2650 comments received during the phases of voting. These comments facilitated the identification of the main themes dealt with during the May meeting in Copenhagen, in which the new version of ISO 26000 emerged, submitted to a final vote on 12 September 2010 which resulted in a 94% consensus, after about 5 years work.

Commenting on the final vote, the president of the working group, Jorge E.R. Cajazeira, declared “One day the organizations will look at the ISO 26000 and say: how could they have survived without social responsibility? This is because a group of dreamers tried to imagine what the future would be like and worked hard to achieve their objective” (Mattana 2011: 5).

On 1 November 2010, the new ISO 26000 Guidelines were published as international technical norm.

In the intentions of the authors, ISO 26000:2010 accompanies existing guidelines and standards, without however replacing them, and pursues a multitude of general aims including (Bagnoli 2010):

- Assisting the organizations to comply to their own social responsibilities concerning cultural, social, environmental, and legal differences.
- Making the guidelines available for an operational and concrete implementation of social responsibility-driven actions.
- Focusing attention on results and improvements.
- Increasing confidence in organizations on the part of clients and other stakeholders.
- Spreading greater awareness concerning social responsibility.

In Italy, an entire session of the 2011 edition of the CSR Forum “Sustainability and core business: integration which gives value,” has been dedicated to reflections and discussions on the earliest experiences of applying the international UNI ISO 26000 regulation among the companies which have adopted the standard including, for instance, the multi-utility leader of the Italian market (the Hera group).

5.5.3 Spheres of Application

There are three main elements which differentiate ISO 26000 from other regulations and norms of social responsibility and are as follows:

1. The multi-stakeholder approach: the guidelines have been drawn up on the basis of consensus among the various actors. Each line of the text has been approved by all the six categories of stakeholder represented.

2. The “globality”: the working group is made up of experts coming from all over the world, including developing countries. This means that the “norm” does not have a “North-Central” vision as it also takes into account the needs of the South of the world.
3. The social dialogue and negotiation: the norm insists on the fact that the organization has a positive and central role in the training of employees and in the development of skills and professional competence. For instance, it ensures that redundant workers are supported in their efforts to obtain other employment through training courses and personal consultancy.

The last version of the norm has extended the scope of application: ISO 26000 is intended to be useful to all types of organizations in the private, public, and nonprofit sectors, whether large or small and whether operating in developed or developing countries. In particular, small organizations can also benefit from it, thanks to greater flexibility and to the close relations with people and territory.

Compared to other tools of social responsibility, the UNI ISO 26000 is based on already existing good practices, initiatives, and specific tools, with which it integrates, thereby extending the range and perspective (Henriques 2011, 2012).

The fundamental themes concern the environment, relations and work conditions, as well as consumers. The most significant aspects regard the prevention of pollution, health, and security in the workplace and the involvement of the community.

The UNI ISO 26000 norm opens a new and extraordinary route both for the processing system and the highly innovative contents. In fact, it is not properly a management system standard; moreover, it is not intended and appropriate for certification, regulatory, or contractual uses because it does not contain requirements. Written in the form of recommendations, the ISO 26000 provides guidance to users and is neither intended nor appropriate for certification purposes. Any offer to certify to ISO 26000, or any claim to be certified to ISO 26000 would be a misrepresentation of the intent and purpose of this international norm. Rather, it is a set of guidelines written for organizations which integrate and do not replace the SA 8000 Certification. ISO 26000 recalls the principles of the new ISO9004⁸⁶ in that it states that in order to assess the performance of the organization and judge its sustainability for the future, a detailed analysis of its responsibility toward the environment and the society in which it operates cannot be excluded. Social equity, work environments attentive to health and safety, governance, and balanced ecosystems make up the principles of social responsibility integrated into the vision, the policies, the objectives, and daily processes of an organization. It is a useful instrument to orientate and transform the organizational framework, by assessing which themes and aspects to apply, as UNI ISO 26000 social responsibility must be part of the strategy and governance of the organization and not of a formal contractual enforcement (Adams and Mc Nicholas 2007). The norm therefore

⁸⁶See www.qualitiamocom/incantiere/nuova9400html.

proposes an approach aimed at involving those who have an interest in the decisions and activities of the organization, in order to understand the impact and study (and then adopt) ways of handling it (Monteverdi 2011).

ISO 26000:2010 is then intended to assist the organization in contributing to sustainable development and encouraging it to go beyond legal compliance which is a fundamental duty of any organization, to promote a common understanding in the field of social responsibility, and to complement other instruments and initiatives for social responsibility, without replacing them. In applying ISO an organization take into consideration societal, environmental, legal, cultural political and organizational diversity, as well as differences in economic conditions, while being consistent with international norms of behavior.

As mentioned in the previous section, ISO 26000 appears to be strongly in line with the renewed concept of CSR proposed and promoted at a European level⁸⁷ which states that “through CSR, companies can contribute in a significant way to the attainment of European Union objectives for sustainable development and a highly competitive social market economy. The CSR supports the objectives of the European 2020 strategy for “intelligent, sustainable and inclusive growth” (EC 2011). In its statement, the European Commission highlights the fact that compliance with applicable legislation and collective contracts among the social partners is a necessary requirement of CSR.

Recently (on 15 April 2014), the European Parliament adopted the directive on disclosure of non-financial and diversity information by large companies and groups. Member states shall bring into force the laws, regulations, and administrative provisions necessary to comply with this directive by 2016. First reports in accordance with these requirements will be issued in 2017. Approximately 6000 large companies and groups across the EU will be affected by the new directive on non-financial reporting. The directive suggests the use of international or national guidelines, recommending in particular the UN Global Compact and ISO 26000.

To create a shared value (Porter and Kramer 2011), companies are in fact encouraged to adopt a long-term strategic approach with regard to social responsibility and to explore the opportunities for the development of products, services, and innovative business models which contribute to the well-being of society and result in a greater quality and productivity jobs. The European Commission therefore places strong emphasis on the need for companies to integrate CSR into its strategies, making it a driver in competitiveness. The statement particularly specifies that a strategic approach with regard to the social responsibility of companies can bring benefits in terms of risk management, cost reduction, access to capital, client relations, human resources management, and the capacity for innovation. As it requires a commitment with other internal and external agents, the CSR enables companies to provide for and develop corporate expectations by developing new markets and creating opportunities for growth as it creates and reinforces trust

⁸⁷European Commission Statement “Renewed Strategy of the European Union for the period 2011–2014 in terms of corporate social responsibility”, 25 October 2011

among workers, consumers, and citizens and allows for the experimentation of sustainable business models. Therefore, the European Commission underlines the relationship between business competitiveness and the well-being of the community in the territory within which the business operates.

Organizations around the world, and their stakeholders, are becoming increasingly aware of the need for and benefits of socially responsible behavior. The objective of social responsibility is to contribute to sustainable development. An organization's performance in relation to the society in which it operates and to its impact on the environment has become a critical part of measuring its overall performance and its ability to continue operating effectively. In the long run, all organizations' activities depend on the health of the world's ecosystems and social equity. Organizations are subject to greater scrutiny by their various stakeholders. The perception and reality of an organization's performance on social responsibility can influence, among other things:

- Its competitive advantage
- Its reputation
- Its ability to attract and retain workers or members, customers, clients, or users
- The maintenance of employees' morale, commitment, and productivity
- The view of investors, owners, donors, sponsors, and the financial community
- Its relationship with companies, governments, the media, suppliers, peers, customers, and the community in which it operates

5.5.4 The Contents and Structure of ISO 26000

ISO 26000 provides guidance on the underlying principles of social responsibility, recognizing social responsibility and engaging stakeholders, the core subjects and issues pertaining to social responsibility and on ways to integrate socially responsible behavior into the organization. It emphasizes the importance of results and improvements in performance on social responsibility. More precisely, ISO 26000:2010 provides guidance to all types of organizations, regardless of their size or location, on:

- Concepts, terms, and definitions related to social responsibility
- The background, trends, and characteristics of social responsibility
- Principle and practices relating to social responsibility
- Integrating, implementing, and promoting socially responsible behavior throughout the organizations and, through its policies and practices, within its sphere of influence
- Identifying and engaging with stakeholders
- Communicating commitments, performance, and other information related to social responsibility.

While not all parts of the norm will be of equal use to all types of organizations, all core subjects are relevant to every organization that is encouraged to become more socially responsible by using it. ISO 26000 is in fact meant to be read and used as a whole and provides a summary information to assist users.

All core subjects comprise a number of issues; every organization (including governmental organization) can identify which issues are relevant and significant to address, through its own considerations and through dialogue with stakeholders. However, it is not intended to replace, alter, or in any way change the obligations of the state.

Recognizing that organizations are at various stages of understanding and integrating social responsibility (Walker 2014; Walker and Beranek 2015; Walker and Schmidpeter 2015), ISO 26000 is intended for use by those beginning to address social responsibility, as well as those more experienced with its implementation. The beginner may find it useful to read and apply it as a primer on social responsibility, while the experienced user may wish to use it to improve existing practices and to further integrate social responsibility into the organization. Reference to any voluntary initiative or tool (included in Annex A of the standard) does not imply that ISO endorses or gives special status to that initiative or tool.

The ISO 26000 document consists of six chapters (Table 5.52).

The first specifies the objective and its range of application, whereas the second contains the definition of the most important terms concerning social responsibility (a glossary).

The third chapter describes the factors and conditions which have influenced the development of social responsibility and contains a guide on how small- and medium-sized companies may apply the “standard.”

The fourth chapter lists and explains the seven core subjects of social responsibility (Table 5.53).

Starting from Chap. 5, ISO 26000 focuses on practical aspects of application: (1) how an organization can recognize its own social responsibility and (2) how stakeholders can be identified and engaged. In particular, an organization should include three kinds of relationships: (1) between the organization and the company, which should recognize how its activities impact on the environment and have responsible behaviors as far as such impacts are concerned; (2) between the organization and its stakeholders, that is recognizing its own stakeholders and their interests which may be influenced by their decisions; and (3) between the stakeholders and the company, that is, the organization must identify the possible relations between the interests of the parties concerned and the company’s expectations (Mattana 2011: 9–10).

Chapter 6 deals in depth with the seven principal themes related to social responsibility. The final section contains a guide on how to apply social responsibility within an organization by promoting the CSR culture, highlighting relations between the characteristics of the organization and CSR and aspects of communication (i.e., the reporting), by reexamining and improving CSR actions and credibility.

Table 5.52 Clauses and contents of ISO 26000

ISO 26000 clauses	Description of clauses contents
<i>Clause 1</i> Scope	Defines the scope of ISO 26000 and identifies certain limitations and exclusions
<i>Clause 2</i> Terms and definitions	Identifies and provides the definition of key terms that are of fundamental importance for understanding social responsibility and for using ISO 26000
<i>Clause 3</i> Understanding social responsibility	Describes the important factors and conditions for the development of social responsibility and the conditions that affect its nature and practices. It also describes the concept of social responsibility and how it applies to organizations. The clause includes guidance for small- and medium-sized organizations on the use of ISO 26000
<i>Clause 4</i> Principles of social responsibility	Introduces and explains the principles of social responsibility
<i>Clause 5</i> Recognizing social responsibility and engaging stakeholders	Addresses two practices of social responsibility. It provides guidance on the relationship with its stakeholders and on their identification. Moreover, it provides guidance on recognizing the core subjects and issues of social responsibility and on an organization's sphere of influence
<i>Clause 6</i> Guidance on social responsibility core subjects	Explains the core subjects and associated responsibility, providing for each core subject information on its scope, its relationship to social responsibility and related actions and expectations
<i>Clause 7</i> Guidance on integrating social responsibility throughout an organization	Provides guidance on putting social responsibility into practice: integrating social responsibility throughout an organization, communication, improving the credibility of an organization regarding social responsibility, reviewing progress, and improving performance and evaluating voluntary initiatives for social responsibility
<i>Annex A</i> Examples of voluntary initiatives and tools for social responsibility	Presents a non-exhaustive list related to social responsibility that addresses core subjects or the integration of an organization
<i>Annex B</i> Abbreviated terms	Contains abbreviated terms used in ISO 26000
<i>Bibliography</i>	Includes references to international instruments and ISO standards that are referenced in ISO 26000 as source material

Source: Our elaboration from UNI&Sodalitas (2014): 11 and ISO 26000 (2014)

Table 5.53 Outline of ISO 26000 – core subjects and issues of social responsibility addressed in ISO 26000

Core subjects and issues	Addressed in subclause
<i>Core subject: organizational governance</i>	6.2
<i>Core subject: human rights</i>	6.3
Issue 1: Due diligence	6.3.3
Issue 2: Human rights risk situations	6.3.4
Issue 3: Avoidance of complicity	6.3.5
Issue 4: Resolving grievances	6.3.6
Issue 5: Discrimination and vulnerable groups	6.3.7
Issue 6: Civil and political rights	6.3.8
Issue 7: Economic, social, and cultural rights	6.3.9
Issue 8: Fundamental principles and rights at work	6.3.10
<i>Core subject: labor practices</i>	6.4
Issue 1: Employment and employment relationships	6.4.3
Issue 2: Conditions of work and social protection	6.4.4
Issue 3: Social dialogue	6.4.5
Issue 4: Health and safety at work	6.4.6
Issue 5: Human development and training in the workplace	6.4.7
<i>Core subject: the environment</i>	6.5
Issue 1: Prevention of pollution	6.5.3
Issue 2: Sustainable resource use	6.5.4
Issue 3: Climate change mitigation and adaptation	6.5.5
Issue 4: Protection of the environment, biodiversity, and restoration of natural habitats	6.5.6
<i>Core subject: fair operating practices</i>	6.6
Issue 1: Anti-corruption	6.6.3
Issue 2: Responsible political involvement	6.6.4
Issue 3: Fair competition	6.6.5
Issue 4: Promoting social responsibility in the value chain	6.6.6
Issue 5: Respect for property rights	6.6.7
<i>Core subject: consumer issues</i>	6.7
Issue 1: Fair marketing, factual and unbiased information, and fair contractual practices	6.7.3
Issue 2: Protecting consumers' health and safety	6.7.4
Issue 3: Sustainable consumption	6.7.5
Issue 4: Consumer service, support, and complaint and dispute resolution	6.7.6
Issue 5: Consumer data protection and privacy	6.7.7
Issue 6: Access to essential services	6.7.8
Issue 7: Education and awareness	6.7.9
<i>Core subject: Community involvement and development</i>	6.8
Issue 1: Community involvement	6.8.3
Issue 2: Education and culture	6.8.4
Issue 3: Employment creation and skills development	6.8.5

(continued)

Table 5.53 (continued)

Core subjects and issues	Addressed in subclause
Issue 4: Technology development and access	6.8.6
Issue 5: Wealth and income creation	6.8.7
Issue 6: Health	6.8.8
Issue 7: Social investment	6.8.9

Source: ISO 26000 (2010a): viii

5.5.5 *The Seven Principles of Social Responsibility*

The following table contains a description of the seven principles of social responsibility included in Sect. 5.4 (Table 5.54).

5.5.6 *The Seven Core Subjects of ISO 26000*

The seventh chapter addresses seven core subjects of social responsibility defined in the standard and portrayed in Fig. 5.4. Moreover, an overview of ISO 26000 outlining the relationship between the various clauses of the standard is shown in Fig. 5.5.

The standard states that the core subjects must be dealt with in a holistic manner as they are complimentary. They place the organization at the center of attention and concern the internal structure, the organizational chain, and external relations (environment and society).

Such themes are summarized and commented in Table 5.55.

5.5.6.1 Governance

Governance might be defined as “a process of supervision and control (of “governing”)” intended to ensure that an entity’s management acts in accordance with the interest of its “constituents” (Parkinson 1993: 159; Gray et al. 2014: 258). This definition reflects a wider range of issues and organizations and takes into consideration a wide range of stakeholders. More conventional governance definitions recognize that governance arose predominantly in the large corporate sector and is mainly intended to protect the shareholders (Solomon 2007; Blowfield and Murray 2011).⁸⁸

According to the definition given by the UNI ISO 26000 – 2010 norm, governance is “the system through which an organization takes its own decisions and

⁸⁸See Gray et al. (2014), Chapter 11.

Table 5.54 The seven principles of social responsibility

Principle	Meaning/content
Accountability	This implies the responsibility to account for the company’s own impact on the society, the economy, and the environment. An organization should accept appropriate examinations as well as respond to such examinations and assume responsibility in the case of inappropriate actions, by adopting all the necessary measures to rectify the situation and avoid a repetition of such actions
Transparency	Transparency should be evident in all decisions and activities, in particular those concerning nature, objectives, and results in terms of social responsibility and the origin of financial resources An organization should clearly, accurately, and thoroughly disclose the policies, decisions, and activities it is responsible for, including their known and probable impact on society and the environment. The principle of transparency does not imply that information be made public, but be clear, comprehensible, and easily accessible so that anyone can benefit from it
Ethical behavior	An organization must always conduct itself in an honest, fair, and morally incorruptible manner. This conduct must include respect for people, environment, and animals as well as respect for the needs of all those involved in the company’s activities
Respect for stakeholders interest	An organization must respect, take into consideration, and respond to the interests of all groups of stakeholders who can have rights, requests, and specific interests which must be considered
Respect for the rule of the law	This means a respect for legality, that is, respect for laws and their application in all aspects. The principle of legality contrasts to the random exercise of power and implies that laws and regulations be written, introduced to the public, and respected
Respect for international norms of behavior	It implies the compliance with and respect for norms and principles established at an international level In situations in which the national laws do not provide adequate environmental and social guarantees, an organization should seek in all ways to at least respect the international norms of conduct
Respect for human rights	It implies the recognition of the importance and universality of human rights An organization must respect, and where possible promote, the rights defined in the International Bill of Human Rights and the fact that they are applicable in an unbreakable way in all countries, cultures, and situations. Where human rights are not protected, the organization must adopt the necessary measures and adhere to the principle of respect for international norms of conduct and avoid taking advantage of such situations

Source: Our elaboration from UNI&Sodalitas (2014) and ISO 26000 (2010a, b)

Social responsibility: 7 core subjects



* The figures denote the corresponding clause numbers in ISO 26000.

Fig. 5.4 ISO 26000 core subjects. Source: ISO 26000 (2010b): 4

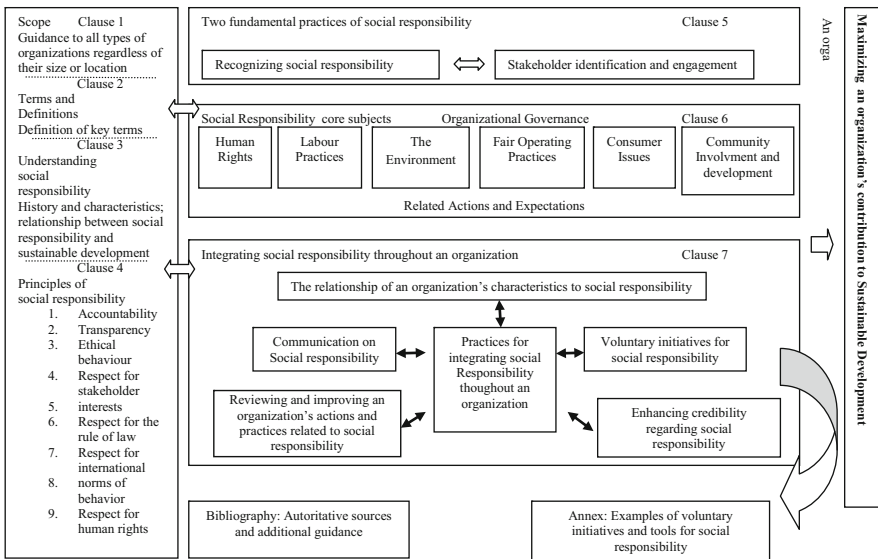


Fig. 5.5 Schematic overview of the ISO 26000. Source: ISO 26000 (2010a): ix

Table 5.55 The fundamental issues of ISO 26000

Issues	Brief description/content
<i>Governance</i>	Governance, company structure, and decisional mechanisms
<i>Human rights</i>	Respect and safeguarding of human rights, including civil, political, economic, social, and cultural rights, as well as fundamental principles and the rights of the worker
<i>Labor practices</i>	Employment and work relations, working conditions and social protection, social dialogue, health and safety in the workplace, development of human resources, and in-company training programs
<i>The environment</i>	Prevention of pollution, sustainable use of resources, reduction of climactic changes and adaptation, protection of the environment, biodiversity, and restoration of natural habitats
<i>Fair operating practices</i>	Fight against corruption, responsible politics, loyal competition, promotion of social responsibility in the value chain, and respect for the rights of ownership
<i>Consumer issues</i>	Fair sales communication, protection of consumers' health, sustainable consumption, services and support for consumers, settlement of complaints, privacy, access to services, education, and awareness
<i>Community involvement and development</i>	Community involvement, education and culture, creation of new employment and skills development, technological development and access to technology, creation of wealth, health, and social investment

Source: Our elaboration from UNI ISO 26000 (2010a, b) and ISO 26000 (2014)

carries them out in order to pursue established objectives. The word “organization” implies anybody or group of persons and structures, with an order of responsibility, authority and relations and with identifiable objectives.” The governance of an organization includes both mechanisms of formal governance, based on structures and well-defined processes, and informal mechanisms which are the product of the culture and value systems of the organization and which are influenced by the top management. Systems of governance vary depending on size, type of organization, and the environmental, economic, political, cultural, and social contexts in which the company operates. They are directed by one person or a group of people (owners, members, partners, or others) having authority and responsibility for the pursuit of company objectives.

Among the seven subjects, governance is the starting point as it is the closest to top management, leadership, and the decision-making level and therefore influences either positively or negatively all the other core subjects. Leadership which believes in social responsibility must be able to motivate employees and show responsible behavior; create and develop an environment in which principles of social responsibility can be practiced; use financial, natural, and above all human resources correctly and efficiently; and manifest responsible and virtuous conduct (Burns 1978; Brown 2005; Collier and Esteban 2000; Oreg and Berson 2011; Sibilio 2011a: 11–12).

5.5.6.2 Human Rights

Human rights are the basic rights which all human beings have, being rooted in an intrinsic desire for liberty, peace, health, and happiness. These rights are intrinsic as they belong to everyone; inalienable, because no one can deprive another person of their rights; universal, because they are applicable to everyone; indivisible, because not one of them can be ignored; and interdependent, because the creation of one involves the creation of others (Cilona 2009: 40).

They can be subdivided into two broad categories. The first includes civil and political rights such as the right to live and to freedom, to equality before the law, and liberty of expression. The second category concerns economic, social, and cultural rights and includes the right to work, to have food, to the best possible standard of health, to education, and to social security.⁸⁹ Many moral, legal, and intellectual norms are based on the premise that human rights transcend laws or cultural traditions. The supremacy of human rights has been underlined by the international community in the International Bill of Human Rights and by other instruments. Organizations benefit from an international and social order in which rights and freedom are completely fulfilled. While the majority of laws on human rights deal with the relations between the State and individuals, it is widely acknowledged that private organizations can influence the human rights of individuals and therefore have a responsibility to respect them.

5.5.6.3 Industrial Relations and Working Conditions

The industrial relations and working conditions of an organization incorporate all the policies and practices concerning work carried out within the organization, by means of and on behalf of the organization, including subcontracted work as these go beyond the relations of an organization with its direct employees or the responsibilities that an organization has in the workplace or which it controls directly (Parker 1977; Mellahai et al. 2010). Industrial relations and working conditions include the hiring and promotion of employees; disciplinary actions and dispute settlement; employee transfer and relocation; employment termination; training and skills development; health, safety, and hygiene in the workplace; and any policy or practice which influences working conditions, in particular working hours and pay. Industrial relations and working conditions also include the recognition of workers' organizations as well as representation and participation of organizations from both workers and employers in collective negotiation, social

⁸⁹ISO 26000 condemns every form of discrimination concerning race, language, color, age, sex, religion, nationality, ethnic and social background, disability, pregnancy, trade union or political party membership, family status, and health and economic conditions. Those having the greatest protection are women, the disabled, and immigrants. See Sibilio (2011c): 6–7.

dialogue, and tripartite consultations to tackle social issues concerning employment.

ISO 26000 clearly states the following principles: the principle of legality (and therefore condemns the “black economy”), social protection (i.e., the collection of guarantees and safeguards in the case of workplace injuries, illnesses, unemployment, disability, protection for pregnant female workers), the development of human resources, and in-company training (Sibilio 2011d: 12–13). Moreover, a responsible way of acting which every company can enact is also proposed through the definition and development of policies to ensure safety and health in the workplace; educating, informing, and training to provide workers with a knowledge of professional risks; attention to strategies to adopt according to gender and ability differences; actions of protection and prevention; and the active participation of workers (Mercadante 2009: 42).

5.5.6.4 The Environment

The decisions and activities of organizations invariably have an impact on the environment, irrespective of the location. The environmental theme is one of the components of sustainability, the economy, the society, and the environment, and its importance is fundamental both for social responsibility and sustainable development. During the last two decades, many scholars have addressed attention to the issue of environmental reporting, and the nascent literature on organizational environmental impact measurement is still increasing as well as the practices of sustainability performance measurement and reporting (see Gray et al. 2014, Chapter 7, p. 160; Adams and Mc Nicholas 2007; Unerman et al. 2007).

The environmental theme is closely linked to many aspects of the ISO 26000. In the first part, a list is made of the principles to respect concerning the macro-environment: the principle of legality (not just the respect for legislation but taking responsibility for environmental impact and the improvement of performance), the precautionary principle, promotion principle (an organization should carry out an assessment on possible environmental risks and carry out programs to reduce them), and the “polluter pays” principle (Sibilio 2011b: 15).

In the second part of the norm, an identification is made of approaches and strategies aimed at reducing ecosystem environmental impact: the life-cycle approach (reduction of environmental impact along the entire life cycle of products and services), the assessment of environmental impact (in the planning stages), clean and eco-efficient production (the satisfaction of consumers’ needs using resources efficiently and introducing improvements following on from the productive process), an approach based on the offer of products and services aimed at reducing materials and involving stakeholders in the process of production/supply, use of technologies and practices compatible with the environment, sustainable products (the buying of products and services which respect environmental, social,

and ethical performance), and learning and awareness (promotion of learning and awareness both internally and externally).

In the last and third part, a list is made of the principle environmental aspects to act upon which are described as follows:

1. Prevention of air, water, and soil pollution and waste production management. In waste management, the organization should follow the order of source reduction, reuse, recycling and regeneration, treatment, and disposal.
2. The sustainable use of resources: renewable resources must be used at a greater or lesser speed than their recovery, while nonrenewable resources should be used at a lesser speed to their replacement. The key areas for improvement are energy efficiency, water conservation, efficient use of materials, and reduction of the resources necessary for each product.
3. Climate change mitigation and adaptation: there should be a reduction in the production of greenhouse gases.
4. Protection of the environment, biodiversity, and recovery of natural habitats. The recovery of ecosystems and natural habitats through activities of nature maintenance and protection.

5.5.6.5 Best Management Practices

Best management practices refers to the ethical conduct of an organization in its relations with other organizations including relations between organizations and governmental agencies, between organizations and their partners, suppliers, clients, competitors, and associations of which they are members.

The specific aspects of best management practices abide by the areas of the fight against corruption, responsible involvement in the public sphere, loyal competition, socially responsible conduct, relations with other organizations, and respect for the rights of ownership. All these elements are important for the lasting success of an organization which has to share its values and ethical principles internally with various activities and therefore with each member of the company in order to reach the objectives previously established through choices and daily behaviors aimed at favoring the organization's sustainability through dialogue and motivation (Tanno 2009: 38–40).

5.5.6.6 Specific Aspects Concerning Consumers

The ISO 26000 norm states that organizations which provide products and services to consumers, as well as other clients, have responsibility toward them. Such responsibility implies the offer of education and accurate information, the use of marketing information and appropriate transparent and useful negotiation processes, the promotion of sustainable consumption, and the planning of products and services accessible to everyone. The consumer category includes any person who uses the result of the decision or activity of organizations, beyond just how

they are paid. Such principles are applicable to all organizations albeit they may have different scales of importance according to the context (i.e., whether they are private organizations, public services, social companies) (UNI ISO 26000 2011: 38).

Responsibilities include even the reduction of risks deriving from the use of products and services, through planning, production, distribution and diffusion of information, support services, and procedures of recall and withdrawal. Many organizations collect and manage personal information and have the responsibility to protect the security of such information and guarantee consumer privacy. The organizations have significant opportunities to contribute to sustainable consumption and sustainable development through products and services which offer information on instructions, repair, and disposal (Valota 2009: 37).

5.5.6.7 Community Involvement and Development

It is already widely recognized that organizations interact with communities in which they operate and such interactions are based on community involvement. The interactions between an organization and society are many and complex (Gray et al. 2014: 105).⁹⁰ Community involvement, both at an individual level and through associations aimed at improving the public good, contributes to reinforcing civil society (Zamagni 1995; Bruni 2009; Bruni and Zamagni 2004).

According to the ISO 26000, community is intended as a group of people who have particular characteristics in common. It refers to residential settlements or other social settlements situated in a geographic area which is close to an organization or within its impact area, but it also includes the “virtual” community concerning specific aspects.

Community involvement and community development are essential parts of sustainable development (see Ferrante 2009: 36–37). He goes beyond the identification and involvement of stakeholders and includes the support and construction of a relationship with the community with which common interests can be shared.

The contribution of an organization to community development is a long-term process and the result of social, political, economic, and cultural components, which depend on the characteristics of the social forces involved. Shared responsibility is necessary to promote community well-being as a common objective and to overcome conflicts.

The specific aspects of community development, to which an organization can contribute, include the creation of employment through the extension and diversification of economic activity, technological development, the creation of social investments and local economic development initiatives, the extension of education programs and skills development, the promotion and safeguarding of culture and

⁹⁰For a comprehensive discussion on social and community issues, see Gray et al. (2014), Chapter 5 (104–133).

the arts, the availability and/or promotion of health services for the community, and the strengthening of institutions, their groups and collective forums, and cultural, social, and environmental programs and local networks which involve several institutions.

Community development is reinforced by the socially responsible conduct which differentiates to charitable activities (Cowton 1987; Carroll 1991). Social investments which contribute to community development can be more or less associated with the fundamental operational activities of an organization and generate processes and instruments of social innovation (Osburg and Schmidpeter 2013).

5.5.7 Benefits and Criticalities Deriving from the Implementation of ISO 26000

As mentioned in the previous sections, ISO 26000 is meant to offer a practical framework for CSR executives, who face the challenge of responding in an effective manner to stakeholders (O’Riordan and Fairbrass 2008). Nevertheless, it should be noted that “organizations need guidance, but it is not obvious that stakeholders are at all convinced that the two key principles of responsibility and accountability espoused by the standard have been much advanced in practice” (Moratis and Cochius 2011; Gray et al. 2014: 114). The problem is that organizations are at various stages of understanding and integrating social responsibility into their processes (Walker and Beranek 2015; Walker and Schmidpeter 2015) and sometimes have difficulties in practical implementation.

To solve this problem, recently, on April 2016, the *Guidance to the application of UNI ISO 26000* (UNI/Pdr 18:2016) has been released, aimed at promoting the effective implementation of the ISO’s principles and to put them into practice. The guidance is made of different parts which help organizations to implement an effective social responsibility approach and contains several practical tools, such as the checklist for the governance assessment (see Appendix B) and practical examples to support the materiality process (i.e., the questionnaire for the materiality analysis; see Appendix C). It promotes a holistic and synergistic approach to social responsibility while putting governance at the center. Moreover, as the related standard, the practice of reference is intended for use by organizations beginning to address social responsibility, as well as those more experienced with its implementation.

In particular, in addition to the guidelines provided by the ISO 26000 (ISO 26000 2010a First Edition, Section “5.2.2 Recognizing the core subjects and relevant issues of social responsibility: 25–26), a check analysis for the governance assessment is proposed by the recently issued *Guidance to the application of UNI ISO 26000* (ISO/UNI PdR 18:2016) aimed to verify and assess how the company “fit” the ISO Guidelines for the effectiveness of its SR approach. Notably,

the self-assessment is crucial for measuring the process of stakeholder's engagement and for improving both the internal and external engagement using different methods (i.e., workshops, forum, round tables) and steps, starting from listening, consultation, and involvement of stakeholders to partnership and empowerment end engagement of the same. This last step includes the delegation to stakeholders of key strategic issues and presupposes the full commitment of the top management and the involvement of the entire organization.

The ISO 26000 self-assessment poses a set of questions that compare the main aspects of ISO 26000 relative to the governance system with how concretely an organization deals with. The gap analysis is aimed to highlight variances from expectations and then identify areas for further improvement. The tools (checklist) assign a score in terms of requirements "to be fulfilled" (must-have; in progress or partially implemented; present and fully implemented and "nice to have") and a total score which marks the outcome of the assessment (the grid of totally or in progress achievements) and the basic, coherent, and totally filled results up to the excellence in term of consistency and commitment.

Despite its guidance nature, ISO 26000 is considered and termed as standard for social responsibility by both the literature and the International Standard Organization that issued it (Balzarova and Castka 2012; ISO 26000 2010a, b, 2014). However, its goal is not to provide rules for reporting and certification as in the case of GRI guidelines and SA 8000. ISO 26000 is a principle-based and guidance-based standard, which tries to translate seven principles of social responsibility into suggestions for implementation. Like other CSR standards and frameworks, ISO 26000 believes that embracing social responsibility leads to several benefits like improving company reputation, obtaining a competitive advantage, retaining talented employees as well as customers, reducing the cost of capital thanks to the increased transparency, and improving relationships with suppliers, governments, and other subjects (ISO 26000 2010a; Hemphill 2013). At the same time, it differs from other standards for being less oriented in supporting organization's external accountability and more focused on providing companies with a practical tool to measure and nurture the governance of the organization (Hemphill 2013) as it indicates how to achieve certain sustainability goals (Katamba et al. 2014). In other terms, it has the potential to guide companies on their path to sustainability and contribute to their strategic management processes (Hahn 2013).

While sustainability standards have been mainly developed for increasing company's transparency toward stakeholders, improving their internal governance, and engaging stakeholders (Gray et al. 2014), ISO 26000 seems to be more concentrated on encouraging company executive leadership to make a thematic reflection on its management and related results. Its goal is to embed a deeper understanding of CSR into the organization (von Weltzien Hoivik 2011). Thus, it should not be considered an unnecessary repetition of previous standards (Zinenko et al. 2015) nor a separate alternative of UNGC, GRI, or other standards. These tools are complementary to each other because they have different goals and are useful in different parts of one organization's CSR infrastructure. Moreover, although the concrete application and the results are expected to be different in

the case of more experience companies that already implemented other sustainability frameworks or codes of conduct (companies may use the standard as a simple “check tool” to identify possible gaps in current practices or as a “holistic reference” to address minor issues related to policies and practices) than in companies that are new to social responsibility (which may use it to introduce social responsibility into business and get greater benefits) (Hemphill 2013), the adaptability of the standard to different context claimed by ISO itself is probably one of the main reasons for the growing uptake of ISO 26000 implementation in different types of companies all over the world (ISO 2012).

Among the additional reasons, the following should be mentioned: the positive image of ISO as a globally reputable and credible organization for establishing international technical standards (Hemphill 2013); its broad-based and multi-stakeholder development process (Hahn and Weidtmann 2016), which gives the standard a high international consensus on how it defines social responsibility, a considerable degree of legitimacy (Balzarova and Castka 2012), and the potential to become an important guidance document for firms worldwide (Mueckenberger and Jastram 2010); and its nature of standard developed on the basis of ISO participants’ best practices which makes it look as feasible and reliable by management teams interested in integrating social responsibility principles into enterprise operations.

Despite the aforementioned benefits, several obstacles may hinder its diffusion (UNI-Sodalitas 2014; De Deus et al. 2014).

First, some authors have highlighted that the standard is not concretely adaptable to every business regardless its claim of being useful to all types of organizations because industry representatives had a major role in the discussion process during the definition of the standard, while other stakeholders had not the possibility to participate to international meetings, so that their voices have not been included (Balzarova and Castka 2012; Boström and Hallström 2013). In addition, ISO has a history of involving large multinationals in former processes of standardization devoted to create management system standards like ISO 9000 and ISO 14000 (Balzarova and Castka 2012). All these aspects suggest that ISO 26000 has been designed to better suit large corporations instead of small- and medium-sized enterprises (SMEs). Accordingly, Perera (2008) and Hemphill (2013) demonstrate that ISO 26000 has several limitations that can make its application problematic in SMEs. One of the major obstacles is represented by the great amount of time and resources required for the standard implementation, which is not counterbalanced by the benefit of obtaining and communicating a CSR certification to the public. Thus, SMEs may prefer adopting GRI Guidelines which can be certified by a third party and increase the company reputation.

Second, the standard is considered to be too broad in scope and poorly detailed to be useful in the context of specific industries and sectors (Hemphill 2013; Toppinen et al. 2015a, b).

An additional critique refers to its limited benefits for companies with a long history of sustainable practices and related process. Some authors believe the standard is more useful for beginners while it does not bring much added value to sustainability frontrunners (Hahn 2013; Toppinen et al. 2015a).

Moreover, it being a guidance document whose adoption cannot be certified and the fact that it is not a management system standard (Moratis 2016a, b) make ISO 26000 not suitable for contractual or regulatory use and hinder it to become a proper instrument to signal CSR commitments and performance of firms, possibly compromising the standard's further adoption (Moratis 2016b).

Finally, a “gap” has been pointed out in relation to the absence of specific requirements for managers to identify solutions for negative impacts of company decisions and activities on the society and the environment (Johnston 2011). The standard helps companies to learn about the “externalities” their operations create and therefore what social responsibility entails in a particular context, but it does not require to indicate how companies should bridge the gap between identifying social and environmental impacts and making decisions which are authentically sustainable (Johnston 2011).

5.5.8 Some of the Actors' Comments on ISO 26000: A Brief Look

With specific reference to the enforcement of the ISO 26000 norm in Italy, there follow some opinions expressed by agents of promoting organizations and in particular of UNI, ABI (Italian Bank Association), and GRI.

The UNI has believed since the beginning in the role and importance of the stakeholders in enforcing the norm, that it justifies the long process of elaboration. As far as contents are concerned, the involvement of stakeholders is considered an essential practice. Worth appreciating is the value of several new definitions contained in the UNI ISO 26000, in particular that of the “sphere of influence”, that is the extension of political, contractual, economic and other kinds of relations through which an organization has the chance to influence the decisions or activities of other organizations or individuals, and which the European Commission intends to take into consideration in its own future activities. Finally, aspects which differentiate the ISO 26000 from other documents are worth underlining: in the first place consensus, then the fact that it is not considered as a means to obtaining certification. Other strong points concern the global vision, rather than being a “Northern Centralized” vision, that is belonging to the developed world, it is significantly given to social dialogue and negotiation (Cilona O., President of the Technical Commission of UNI Italy, “Social Responsibility in Organizations” CGIL Nazionale) (see Monteverdi 2011: 37).

The ABI intends to help companies by spreading the experiences of their associates and stakeholders, to then assess the extension of the multi-stakeholders approach even to other subjects and interested parties (Tanno A., Industrial Representative of the Italian Delegation of the ISO “Social Responsibility” working group”—ABI) (see Monteverdi 2011: 38).

GRI (Global Reporting Initiative) has participated in the process of forming ISO in the 2002–2004 strategic group which preceded the working group as an organization “in *liaison*”, submitting comments and writing drafts of the document, participating also in discussions with the two representatives. With reference to reporting activity (taken from ISO 26000 points 7.5—Communication concerning social responsibility and

7.6—Increasing the credibility of social responsibility), we believe that the GRI guides can be ideal instruments for applying the principles contained in the document and therefore we have created a *liason* document. The synergies between the GRI guides and UNI ISO 26000 are numerous. The first regards the end users: the organization’s management team and the stakeholders; the second concerns reporting activity: UNI ISO 26000 recommends that organizations communicate their own social responsibility as envisaged by GRI’s information management approach. The third concerns the subjects of communication: the ISO themes mainly make reference to the social theme area, albeit with mention of economic and environmental themes; furthermore the principles of the norm are strongly tied to GRI’s principles in terms of stakeholder engagement, and similarly to those of sustainability and completeness fund approach. Finally, as far as the indicators are concerned, the norm underlines many times the need to use them in order to measure performance, although it does not provide specific indications not even for the areas and subjects of greatest importance. Finally, the “*liason* document”, published soon after the ISO standard/norm, is an extremely simple text which synthetically makes a connection between the contents of the two documents (that are complementary, but very different) to facilitate the work of reporting professionals who want to apply the ISO 26000, showing how this can be done by using the GRI principles (A. Rutten-Hjaltadottir, Senior manager—Report Services Programs GRI Global Reporting Initiative) (see Monteverdi 2011: 39).

5.5.9 Some Concrete Examples of Applications

5.5.9.1 Hera Group (Italy)

Hera is considered a company on the leading edge of social responsibility matters. The Hera group is a multi-utility national market leader, listed on the official market, which provides public local services such as gas, electric energy, and water. It was one of the first companies in Italy to experiment with the application of the ISO 26000 norm, supported by DNV Business Assurance, the leading body for certification at a global level (Principato and Astone 2011: 14–17).

Hera has been testing its own management system since 2007 following the guidelines which are not yet definitive, with particular attention to the environment. With the approval of the ISO 26000, the Hera group has started a project to understand the relevance of the various themes concerning the business and to check the coherence of management systems with regard to the recommendations and specific aspects of the standard itself. The seven core subjects have been taken into consideration as well as the specific topics of each theme in order to have a global vision of the company’s position and apply them in all the different activities of the group. From the analysis of the materiality, it has emerged that some of the specific subjects of a number of UNI ISO 26000 themes are crucial for the company, whereas others are not.⁹¹ Therefore, Chap. 6 of the norm has been carefully “filtered” involving the stakeholders in the selection process. The most

⁹¹Of the 200 recommendations contained in the standard/norm, for Hera, 50 are applicable and extremely significant, another 100 are relevant, and over two thirds of the total are significant, while the remainder have low relevance and are not applicable.

significant themes concern the environment, industrial relations, and working conditions and the specific aspects relevant to consumers (the prevention of pollution, health and safety in the workplace, and community involvement). On the other hand, the aspects which are less applicable concern the risks of planning products and guarantees of the product beyond what is expected by the law. From the examination on the coherence of internal management concerning the ISO 26000 recommendations, it has emerged that virtually all the areas were nearly all covered, both in terms of the presence in Italy of laws regulating the numerous aspects (in particular Authority) and in terms of the transparency imposed by market listings. DNV has identified for each theme and principle the necessary recommendations envisaged by the norm.

In addition to corporate social responsibility, the Hera group applies environmental, quality, and management system certifications according to the OHSAS 18001 Standard.

The national standards have contributed to the adoption of social responsibility policies, but from Hera's experience, an awareness has emerged that conformity to law must not become an alibi for "feeling confident that everything is running smoothly." It is necessary however to raise awareness and recognition of social responsibility and stakeholder involvement (Chap. 5) and integrate responsibility in the life and daily decisions of the entire organization (Chap. 7) (Principato 2011: 36).

5.5.9.2 Danone

The fundamental themes of social responsibility have always been rooted in the Danone company and are considered an additional value which has favored the development of the company itself by involving the internal personnel and the end user. The founder once stated that "the company's responsibility does not end at the factory or office doors. The energy and raw material which we use has an impact on our planet. Public opinion reminds us of this responsibility every day" (Ceruti S., External Relations Director of Danone).

Danone has always committed itself to the fundamental theme of the environment, reducing over the years the use of water, energy consumption, and carbon dioxide emissions. Furthermore, community involvement and development as well as relations with external stakeholders are of fundamental importance. To this end, the company has involved the food bank in giving concrete assistance in the fight against starvation and in a reconstruction plan in Haiti following the devastating 2010 earthquake.

The ISO 26000 norm, introduced in 2010 to define the framework, the limits, and the field of application of social responsibility, has become the instrument which has enabled a company to have a credible and recognized comparison at an international level.

The positive results obtained have highlighted that the analyses carried out by means of the old self-referential instruments are much closer to ISO 26000,

therefore giving prominence to the work carried out previously (Ceruti 2011), thus supporting the benefits of social responsible practices by checking the fairness of the strategy and company investments even in the interests of stakeholders.

In addition to the company's ability to monitor economic and financial performance (turnover, costs, profitability, competition, productivity, market, competitive position), the UNI ISO 26000 represents the ideal instrument which can be used in a simple way in relation to corporate strategies and to give rise to *soft* (intangible) aspects important for company success. The standard/norm has allowed concreteness to be given to these intangible factors, to quantify relative performances and their contribution to *core business* through a partial and targeted application, focused on two fundamental themes (the environment and community involvement and development) (Ceruti 2011: 35).

5.5.10 *Final Remarks*

This last section contains final actions which concern the following aspects: the advantages resulting from the adoption of ISO 26000, points to be improved and weak points, and some critical comments about its application.

5.5.10.1 **The Advantages of ISO 26000**

The advantages of ISO 26000 can be classified into competitive and ethical factors. Both have positive repercussions both within and outside the organization. The competitive and strategic factors arise from the following considerations:

- Companies following social responsibility-driven strategies and seen as socially responsible have a greater probability of being appreciated by the market and responding to consumer expectations (client satisfaction) and are more attractive to the labor market, thereby attracting more highly qualified personnel.
- Actions and social programs carried out by the companies can anticipate normative forecasting (technical and legislative).
- A positive contribution given to society and assessed as a long-term investment which generates positive effects in terms of trust and consensus.

Relative to moral and ethical factors, these benefits derive from the considerations that:

- Companies can produce social problems and therefore have the responsibility and duty to resolve them.
- They are social actors able to influence social and cultural dynamics, which generate the obligation to use their power and resources in a responsible manner.
- Any action carried out through products/services rendered has a social impact.

- Companies base their own actions on the support of several stakeholders and are therefore responsible with regard to them.

5.5.10.2 Improvements and Limits of ISO 26000

Two aspects which, according to some practitioners, have been neglected, concern of the suitability of ISO 26000 to PMI and its importance in public tenders.

With reference to the first aspect, it must be said that ISO 26000 is a manual considered rather unsuitable for PMIs which are mainly micro-dimensioned, family run, and often managed by entrepreneurs who have a poor knowledge of the English language, especially in Italy, where SMEs' predominantly adopt informal approaches to CSR (the so-called sunken or silent CSR; Perrini et al. 2006). The ISO 26000 is a 100 page document, complex in nature and difficult to consult by an entrepreneur who would find a slimmer volume more useful and which can be well recognized and understood even by their main representatives (i.e., accountant, labor consultant, trade union representative).

As far as the second aspect is concerned, ISO 26000 is not certifiable, whereas all the tenders in the public sector require certifications especially for access to funding.

5.5.10.3 Some Reflections on the Application of ISO 26000

Further reflections can be made as a reply to a key question: Why is UNI ISO 26000 a different standard to the others and what is its real value?

With specific reference to Italy, an element which makes the norm different is due to the fact that it has been translated into Italian without any changes⁹² and is applicable on a voluntary basis on the part of each organization. Furthermore, its "non-certifiability" constitutes a strong point in its diffusion and application.

As far as the value of the norm is concerned, this is linked to the fact that it is an ISO document, that is drawn up by an organization recognized the world over, which is a driver in globalization for concepts of social responsibility aimed at creating common cultural basis. Hence, the norm contributes significantly to spreading the culture of social responsibility, and its integration in the core-business. The UNI ISO 26000 indeed helps to tackle the many themes of CSR in a structured and global manner, thanks to the involvement of different kinds of stakeholders. The first part of the norm (containing the definitions of the "fundamental principles") is specifically aimed at creating a common world language on fundamental themes and specific aspects of social responsibility, including all the relevant subjects.

⁹²The right of each single country to modify the ISO standard is recognized in order to make it more fitting to national needs.

Furthermore, the norm allows for a critical reexamination of choices made by an organization and set up a reflection on strategic choices already adopted. For the organizations which are however approaching the theme for the first time, the UNI ISO 26000 is effective as an instrument of guidance and measurement, as it allows a report on social responsibility to be produced which provides an additional value compared with other reporting practices and other instruments of communication concerning social responsibility and sustainability.

A further important practical aspect comes from the fact that it is possible to use the norm even in partial mode, even if it proposes a global and integrated concept of responsibility. The complete norm could in fact “frighten” the less structured organizations such as the SMEs, although cases reported show that the selection of the most significant and suitable subjects is effective and makes implementation simple.

Finally, to conclude this chapter, it must be said that a “weak” point of some importance is tied to the fact that the ISO 26000 lends itself (like other instruments of accountability) to an opportunistic use and to deceptive imaging (the so-called green-washing). Basically, it might not “undermine” the essence of a tendency to social responsibility, notwithstanding that the stakeholder consultation can be considered an essential component of a proper discharge of accountability. We cannot ignore the fact that “Indeed, it is quite apparent that stakeholders have a need for accountability and, despite the language of initiatives such as ISO 26000, stakeholder engagement process continues to lack robustness” (Gray et al. 2014: 117).

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Chapter 6

Case Studies and Best Practices

Mara Del Baldo

6.1 The Case of ENI: Sustainability and Integrated Report

6.1.1 Introduction

In this paragraph, we present the case of Eni, a large-sized listed and globalized Italian company which since 2011 has chosen to implement its integrated report. It is also part of the panel of companies that have adopted the Global Report and that participate in the pilot program launched by the International Integrated Reporting Council (IIRC). The main research questions which oriented the empirical study are the following: Why does a company decide to combine financial, social, and environmental performance into a single report? Does the integrated report represent the best tool of accountability and the best solution for reporting? If so, why and for which companies? A further case study (see Sect. 6.2) in fact presents the analysis of BoxMarche's integrated reporting process. BoxMarche is a small company which had adopted integrated reporting even before Eni. The case study then proposes an interpretation of the phenomenon in comparative terms, highlighting aspects and factors which characterize the orientation toward integrated reporting in companies varying considerably in terms of their dimension, sector, and governance structure (two extreme case studies).

6.1.2 Methodology

The study was developed using a qualitative approach and a methodology based on a single case study (which constitutes an explorative and exemplary case; see: Yin 1994; Eisenhardt 1989; Eisenhardt and Graebner 2007). The fieldwork approach, as suggested in the SEAR literature (Adams 2002), consists of identifying the internal factors (organizational structures, internal microprocesses, attitudes, points of view,

and perceptions) that, together with the corporate characteristics (size, sector, age of the business, etc.) and the general contextual factors (economic, political, cultural, etc.), explain the complexity of the social/sustainability/environmental/intellectual report statements and impact the system of governance.

Specifically, we adopted an action research approach (Adams and McNicholas 2007) to undertake the empirical study in order to investigate, among others, factors that might impact (hinder or inhibit) the development of the integrated report and its potential to produce effects on the organizational context and to act as a catalyst for change in organizations' performances and practices. The action research approach uses interviews as a primary means to gather data and information. In addition, other research methods (such as observations, visits and meeting participations, document analysis, and questionnaires) are largely adopted to supplement and enrich the information and data gathered through interviews. The research was developed across a multiyear period, beginning in 2011 and continuing today, and was based on information acquired during several in-depth semi-structured interviews with different managers and on the analysis of documentary sources (social reports, global reports, statement of values) as well as information posted on the company's Internet sites. The scope of this triangulated approach was to make use of advantages and strengths offered by the various method of data collection. Specifically, the different methods used to gather data focused on the motivations for adopting the integrated report, the process of implementation, the standard used, as well as the benefits, the criticalities, and aspects of improvement. In addition, a participant observation approach has been used, involving managers and their collaborators in laboratories, conferences, and workshop promoted by WICI and NIBR in Italy.

6.1.3 Company Profile

The mission of Eni is described as follows: "We are a major integrated energy company, committed to growth in the activities of finding, producing, transporting, transforming and marketing oil and gas. Eni men and women have a passion for challenges, continuous improvement, excellence and particularly value people, the environment and integrity" (source: Eni Integrated Report 2015: 2).

Eni engages in the exploration and production of oil and natural gas; processing, transportation, and refining of crude oil; transport of natural gas; and storage and distribution of petroleum products. By their nature, the group's operations expose Eni to a wide range of significant health, safety, security, and environmental risks. Eni businesses include E&P (Exploration and Production), G&P (Gas and Power), and R&M (Refining and Marketing).

Eni has a large presence in the gas and LNG (liquefied natural gas) markets and boasts a relevant world position (Europe, Africa, Asia and Oceania, and the Americas) in the oil and gas value chain, from the hydrocarbon exploration phase to the product marketing. Eni engages in oil and natural gas exploration, field

development, and production, mainly in Italy, Algeria, Angola, Congo, Egypt, Ghana, Libya, Mozambique, Nigeria, Norway, Kazakhstan, the UK, the USA, and Venezuela, overall in 42 countries. Eni sells in the European market basing on the portfolio availability of equity gas and long-term contracts, sells LNG on a global scale, and produces and sells electricity through gas plants. Through refineries, it processes crude oil to produce fuels, lubricants that are supplied to wholesalers or through retail networks or distributors.

Eni was confirmed for the ninth consecutive year within one of the main sustainability indexes, the Dow Jones Sustainability World index, which features companies that distinguished by their excellent performance in all the fields of sustainability. Eni's inclusion was also confirmed for the ninth consecutive year (starting from 2006) on the FTSE4Good, which is one of the world's most prestigious corporate social responsibility stock market indexes. Eni is also included among the ROB & Co Silver class 2014, the ECPI Sense in sustainability, and the STOXX ESG leaders' indices member 2013/2014.

Moreover, in 2010 it was sent by the Global Compact of the United Nations to be part of the LEAD Program, reserved to companies which have distinguished themselves for their commitment to sustainability. This reflects Eni's excellent performance in environmental sustainability, respect for human rights, corporate governance, and transparency and relationships with stakeholders.

A brief profile of main ENI financial performance, as well as operating and sustainability data, is summarized in Tables 6.1 and 6.2.

Eni's business model targets long-term value creation for its stakeholders by delivering on profitability and growth, efficiency and operational excellence and handling operational risks of its businesses, as well as environmental conservation and local communities relationships, preserving health and safety of people working in Eni and with Eni, in respect of human rights, ethics, and transparency (see Eni Integrated Report 2015: 16).

Eni's stakeholders include Eni's people; financial community; local communities; domestic, European, and international institutions; international organizations; the United Nations System; national and international NGOs; suppliers; consumers and customers; universities and research centers; and other sustainability organizations.

Eni's capability for delivering sustainable value¹ lies on the following elements of its business model: distinctive assets, capitals, strategic guidelines, drivers (principles), governance, and integrated risk management.

Eni distinctive assets are represented by skills in exploration activities and upstream operations, solid and competitive resource base, giant or supergiant projects, gas supply portfolio aligned to market conditions, large and loyal customer base, biorefineries, and Eni brand.

Among the strategic guidelines used to develop Eni assets, one can mention partnership with NOGs, profitable and selective upstream growth, efficiency and

¹For the infographic representation of Eni's business model, see: Eni Integrated Report (2016): 16.

Table 6.1 ENI financial highlights and summary of financial data

Years	2013	2014	2015
Net sales from operations (million €)	98,547	93,187	67,740
Operating profit (loss)	7,867	7,585	(2,781)
Net profit (loss)	3,472	101	(7680)
Net cash flow from operating activities on a standalone basis (non-GAAP measures)	10,818	14,387	12,189
Capital expenditures	11,584	11,264	10,775
Total assets at year end	138,341	146,207	134,792
Net borrowings at year end	14,963	13,685	16,863
Net capital employed at year end	76,012	75,894	70,532
Market capitalization (billion €)	63	52	50
Net profit			
Per share (€)	0.96	0.03	(2.13)
Leverage	0.25	0.22	0.31
Current ratio	1.5	1.5	1.4
Debt coverage	77.4	96.2	66.3
Dividends to Eni's shareholders pertaining to the year (the amount of dividends for the year 2015 is based on the Board's proposal)	3,494	4,006	3,457
Payout (%)	80	313	(33)
Dividend yield (ratio of dividend for the period and the average price of Eni shares as recorded in December)	6.5	7.6	5.7

Source: Our elaboration from ENI Integrated Report (2015): 11–12

cost control, focus on near-field exploration, reduction of time to market, operatorship, gas supply contract renegotiation, logistic and capacity rationalization/optimization, customer retention in gas and fuel markets, competitiveness of sale networks, and development of green fuels.

The core principles for delivering sustainable value are integrity in business management, support countries' development, excellence in conducting operations, innovation in developing competitive solutions to face complexity, know-how and skills sharing and equal opportunities for all Eni's people, and integration of financial and non-financial issues in the company's decisions and processes.

Eni's corporate governance is based on a framework of stringent and clear rules. Its governance structure is based on the traditional Italian model, which – without prejudice to the role of the shareholders' meeting – assigns the management of the company to the Board of Directors, supervisory functions to the Board of Statutory Auditors, and statutory auditing to the audit firm.

With regard to the integrated risk management control, Eni has adopted an integrated and comprehensive internal control and risk management system based on reporting tools and flows that, involving all Eni personnel, reach all the way up to the top management of the company and its subsidiaries. The members of the Board, as well as the members of the other corporate bodies and all Eni personnel, are required to comply with Eni's Code of Ethics (as an essential part of the

Table 6.2 Operating and sustainability data

Years	2013	2014	2015
Employees at period end (number)	30,970	29,403	29,053
Of which women	7,504	7,370	7,254
Outside Italy	13,343	12,672	12,333
Female managers (%)	23.5	23.8	24.2
Training hours (thousand hours)	1,493	1,032	915
Employee injury frequency rate (No. of accidents per million hours worked)	0.28	0.29	0.21
Contractor injury frequency rate	0.49	0.35	0.18
Oil spills (barrels)	1,762	1,161	1,603
Direct GHG emission (mm tons CO ₂ equiv.)	43.9	38.9	38.5
R&D expenditures (a) (million €)	142	134	139
Expenditures for territory (investments for local communities, charities, association fees, sponsorships, payments to Fondazione Eni Enrico Mattei and Eni Foundation)	100	96	97
<i>Exploration and production</i>			
Net proved reserves of hydrocarbon (mmboe)	6,535	6,602	6,890
Average reserve life index (years)	11.1	11.3	10.7
Hydrocarbon production (kboe/d)	1,619	1,598	1,760
Direct GHG emissions (mm tons CO ₂ equiv.)	27.4	23.4	22.8
Produced water reinjected (%)	55	56	56
Community investment (million €)	53	63	71
<i>Gas and power</i>			
Worldwide gas sales (bcm)	93.17	89.17	90.88
Customers in Italy (million)	8.00	7.93	7.88
Electricity sold (TWh)	35.05	33.58	34.88
Water withdrawals per KWhequiv. produced (cm/KWhequiv.)	0.017	0.017	0.015
Customer satisfaction rate (scale from 0 to 100)	80.0	81.4	85.6
<i>Refining and marketing</i>			
Refinery throughputs on own account (mm tons)	27.38	25.03	26.41
Retail market share in Italy (%)	27.5	25.5	24.5
Retail sales of refined products in Europe (mm tons)	9.69	9.21	8.89
Service stations in Europe at year end (number)	6,386	6,220	5,846
Average throughput of service stations in Europe (kl)	1,828	1,725	1,754
SOx emissions (sulfur oxide) (ktons SO ₂ equiv.)	10.80	5.70	5.97
Customer satisfaction index (Likert scale)	8.1	8.2	8.3

Source: Our elaboration from ENI Integrated Report (2015): 12

company's Model 231 – Italian legislative decree No. 231, November 21st 2007 for the implementation of the Directive 2005/60/EC on the prevention of the use of the financial system for the purpose of money laundering deriving from criminal activities and terrorist financing as well as the Directive 2006/70/EC, which contains implementing measures), which sets out the rules of conduct for the fair and proper management of the company's business.

Finally, Eni's capitals, which are classified in accordance with the criteria included in the International IR Framework (IIRC 2013a), include financial capital, productive capital, intellectual capital, human capital, social and relationship capital, and natural capital. For each capital Eni clearly describes the stock and the value creation for the company and for its stakeholders (for more details, see Eni Integrated Report 2015: 17).

6.1.4 Eni's Sustainability Path

Over the last 20 years, the concept of sustainability, which has always been a part of Eni's operating way, has systematically been integrated throughout the company processes: from planning, monitoring, and control to risk prevention and management and from operations to reporting and external communication of social and environmental performances. Eni has contributed to the activity of the Global Compact in relation to human rights by actively participating in both national and international conferences and various working groups concerned with the matter. Eni was one of the few private companies (and the only Italian company) to participate in the United Nations Conference on the Environment and Development held in Rio de Janeiro in June 1992 (Earth Summit Rio+20) and to take part in the foundation of the Business Council for Sustainable Development (now the World Business Council for Sustainable Development). It was through the contribution of the WBCSD that the term "eco-efficiency" was coined.

Eni has developed tools able to convert the principles defined within the Earth Summit into real commitments and results. Examples are the Carbon Management Strategy which, supported by specific objectives, aims to minimize the impact of climate change; the mapping of operational areas characterized by biodiversity and international political process, the development of management plans and the adoption of a Corporate Ecosystem Valuation (CEV) tool developed in cooperation with WBCSD, IUCN, and 13 other multinational companies; and the adoption of the Global Water Tool developed by the WBCSD that has led to the mapping of areas of water stress in which Eni operates.

Eni also supported the Rio Conference through its independent research center established in 1989, the Eni Foundation "Enrico Mattei" (FEEM), which supported the Italian Delegation by providing skills for a wide range of topics and collaborating in drafting the "Carbon Tax, Technology Cooperation, and Global Warming" document. The relationship between FEEM and the Italian Delegation has remained strong over time, especially the work performed for the United Nations Commission on Sustainable Development, the negotiations for the Kyoto Protocol in terms of the United Nations Framework Convention on Climate Change, and the activities of the Intergovernmental Panel on Climate Change (IPCC). In the same period, FEEM transferred this experience to industry by preparing a procedural handbook for environmental reporting. EniChem and Snam were the first companies to produce an environmental report adopting the FEEM model which gave an

important push toward this type of reporting in Italy. Throughout the years, in fact, FEEM has developed a set of tools that provide a solid scientific base for setting and evaluating sustainability policies. From this point of view, the models developed – the World Induced Technical Change Hybrid Model (WITCH, which allows the costs and efficiency of climate change mitigation policies to be evaluated) and the Intertemporal Computable Equilibrium System (ICES, which measures the impact of climate change on welfare) – play a fundamental role.

Following the Earth Summit, Eni intensified its path of sustainability implementing the concept according to which environmental sustainability ensures economic and social well-being) and developed a unique system of skills, solutions, and technology for sustainable development. Eni has established “Energythink,” a joint project with Legambiente (the leading Italian environmental protection association) that has been exploring energy sustainability with young researchers and students at Italian universities since 2009 and has organized different events (workshops and conference in Italian universities on different topics, i.e., Energy Poverty and Access to Energy in Developing Countries).

The experience Eni has gained over the years has led the company to develop a strategy for “Sustainable Energy for All” that calls for innovative solutions in terms of access to energy, energy efficiency, and renewable energy. Where it operates, Eni provides partner countries with three solutions: (1) production of electric power through associated gas, (2) distribution of gas to aid the development of the local markets, and (3) implementation of solutions for energy distribution. Accordingly, the lines of action adopted to improve its own energy efficiency include (1) reducing the energy consumption of processes, plants, and buildings, (2) providing consumers with products to improve the efficiency of their energy consumption, and (3) spreading a culture of responsible and sustainable energy use. Specifically, Eni’s commitment in the field of renewable energy develops through supporting research partnerships with universities, producing photovoltaic systems that meet standards of excellence, and innovating and converting industrial processes and products.

6.1.5 The Concept of Environment in ENI

The concept of environmental protection is tightly interwoven with sustainable development. Eni assigns an important value to the environment explicitly citing it in its corporate mission, and the protection of the environment is an essential part of its operations and goes beyond mere regulatory compliance. Particularly, Eni addresses attention to three environmental issues: greenhouse gas emissions and climate change, water quality and scarcity, and the key role of the ecosystems. The three themes are particularly relevant for energy companies and require the implementation of actions strictly connected with industrial operations.

Eni manages health, safety, and environmental issues in an integrated way by means of the principles of precaution, prevention, protection, and continuous improvement at all levels of the company. Operations are conducted with minimal

environmental impact and optimal use of energy and natural resources. Eni also invests in technological research and innovation to create eco-compatible products and processes, including collaborating in the development of new technologies. The company also promotes the production of safe and eco-compatible products and provides its clients with all the information required to use them properly.

Ensuring the growth of sustainable energy consumption; reducing the environmental impact of fossil fuel exploitation; accessing new sources of hydrocarbons, often in remote areas; and producing high quality fuels – these are just some of Eni's major challenges.

Eni is developing technologies, instrumentation, software, and workflows to improve and support its activities such as drilling and operation completion in extreme environments. Special attention is being dedicated to operational and environmental safety issues, especially in relation to deepwater, high pressure, and temperature wells (HTHP), and to the monitoring and mitigation of the environmental risks associated with E&P, especially in fragile environments.

Other activities focus on the detection and monitoring in real time of toxic gases (H₂S); on the prevention, containment, and recovery of oil spills; and on technologies and models to predict and quantify subsidence. Furthermore, Eni intends to develop and optimize technologies for the valorization of nonconventional gases and develop marginal fields and resources at the limit of cost efficiency, both offshore and on shore. The application of the most advanced technologies, training of staff and contractors, and effective monitoring of operations enable us not only to reduce the risks for the environment but also to make resources available which are not safely accessible for people and populations.

Companies operating in energy business have to face with challenges arisen from COP21 such as climate change and gradual decarbonization process. In this context, natural gas represents an opportunity for a strategic repositioning, thanks to gas low carbon intensity and the integration with renewable sources in order to produce electricity. To achieve these targets, the promotion of policies aimed to replace coal in electricity generation will be crucial. Accordingly to the transition toward a low-carbon energy mix, Eni's objective is also to develop methods and technologies to reduce GHG emissions derived from its operations by means of CO₂ sequestering in sites which are mineralogically exhausted, reuse of CO₂ (enhanced oil recovery (EOR) or enhanced gas recovery (EGR)), and reductions at source (studies in the use of solar and alternative energy in surface facilities). To this end, it has developed several strategic alliances with universities and other research centers.

Eni's 2016–2019 targets relative to natural capital include increase of oil and gas reserves, oil spill reduction, reduction of GHG emissions, blowout reduction through optimization of upstream operations, gas valorization targeting for zero gas flaring, biodiversity protection and sensible areas, energy efficiency initiatives, and promotion of energy efficiency among customers (for more details, see integrated performances, Eni Integrated Report 2015: 97).

6.1.5.1 Water

Eni is aware that access to water resources is a major theme in development and is committed to optimizing the use of freshwater in its production cycle in order to limit the impact on its availability for local communities. To evaluate the impact of its activities in areas under hydrological stress, where even limited consumption of freshwater may be in competition with primary necessities, Eni has decided to apply the Global Water Tool developed by WBCSD and adapted to the oil and gas industry with IPIECA in 2011. The tool also enables a forecasting of the impact of climate change on water resources to 2025 and 2050.

Eni's integrated report contains different indexes used by the company to measure and monitor the reinjected water, water withdrawal, percentage of freshwater reused, as well as the environmental impact of transporting petrochemical products in the network.

6.1.5.2 Climate Change

Eni has defined a Carbon Management Strategy to reduce its climate-altering emissions with the principles expressed in international conventions, including the principles of the United Nations Framework Convention on Climate Change and the Kyoto Protocol. Different indexes are used to monitor direct emissions (i.e., mGHG emission index, NO_x (nitrogen oxide) emissions, SO_x – sulfur oxide – emissions). For years Eni has adhered to the initiative of the Carbon Disclosure Project (CDP) aimed at combating climate change and promoting climate change mitigation activities in the supply chain. The project provides for an analysis of carbon management strategies, greenhouse gas (GHG) reduction strategies, reporting, and improvement/best practice programs implemented by Eni's principal vendors. In addition to the commitment to reduce gas flaring, Eni has initiated energy efficiency programs and research into the best process solutions. With specific reference to the research into low-impact fuels, the company is constantly involved in R&D in cutting-edge products for the transport sector and has for years been working to develop advanced fuels and lubricants, to optimize engine efficiency and reduce polluting emissions.

Furthermore, Eni considers the conservation of biodiversity, ecosystems, and natural resources to be strategic objectives. Eni working methods are in line with the principles of the Convention on Biological Diversity (CBD), ratified during the Summit of Heads of State at Rio de Janeiro in 1992.

The company has also run specific projects, such as those launched by WBCSD together with the International Union for the Conservation of Nature and the Eni Foundation "Enrico Mattei." Eni has already run projects by developing site-specific management methods aimed at safeguarding protected local species and their habitat.

6.1.6 ENI's Environmental Management System

Eni's environmental management system, integrated with safety and health management systems, is the landmark for all production activities and provides systematic integrated audits. To monitor and mitigate the principal environmental impacts, the company periodically monitors numerous performance indicators including direct and indirect GHG emissions, energy consumption, NOx and SOx emissions, water withdrawal and discharge, oil spills, and waste production. An environment, health, and safety coordination committee guarantees the diffusion and application of best practices and periodically gathers together all relevant Eni business managers. To manage emergencies, Eni has set up action plans to minimize and contain the impact on health, the population, and the environment. The emergency plans define the roles, responsibilities, and procedures for workers in charge of implementing the emergency response measures. During the years the overall number of ISO 14001 certifications has grown, in confirmation of the company's commitment to extending coverage to all sites of operation. Existing EMAS registrations have also been reconfirmed, as well as ISO 50001. Specifically, the Eni's CEO objectives set for the year 2016 are focused on environmental matters as well as on human capital aspects.

6.1.7 ENI's Commitment to Local Development

Eni believes that the participation and involvement of stakeholders in the business choices are the key elements which contribute to the development of the territories where Eni is engaged. Eni contributed (and contributes) to the creation of growth opportunities for people, communities, and businesses in the territories in which it operates, above all through creating employment opportunities and by transferring skills to develop professionals locally.

The company worked to improve life conditions in many developing countries within the framework of the Millennium Development Goals defined on a global level by the United Nations. Specifically, with regard to the local content, Eni promotes the employment of local businesses and the direct purchase of local goods and services, contributing to the growth of markets that operate within the value chain of the energy industry and strengthening the local supply chain. It also provides its technical and managerial skills, as well as training activities, to promote the local growth of knowledge and skills in many countries where it operates and to create foundations for the development of future managers. Over the years, Eni Corporate University has increased its collaboration with the universities of countries in which it operates, creating a network of about 40 institutions (Academia Network).

In relation to the agricultural and socio-economic development, Eni contributes to strengthening agriculture and rural industry, key factors for the development of countries through significant investment in agricultural projects.

With regard to health, Eni contributes to the promotion of health of the local communities in the countries in which it operates, supporting and executing projects and initiatives in collaboration with governments, ministries, and local partners, to improve health and quality of life among local populations.

With reference to the environment, water, and hygiene health services, Eni is engaged in ensuring access to clean water sources to safeguard the health of the local population, improving their ability to actively participate in their own growth and, thereby, in the development of the country.

Finally, with regard to education, Eni supports projects which aim to increase access to primary and higher education in collaboration with local stakeholders in the countries in which it operates. According to UNICEF (2012), educational progress of the human resources of a country is critical to its long-term development.

6.1.8 Reporting Principles and Criteria

Eni's reporting system is structured with a multichannel approach, allowing for different levels of analysis and communication methods to reach all stakeholders in an effective and immediate way.

Pursuing its commitment toward an integrated reporting, a prospect of integrated performance indicators has been included in Eni Annual Report 2015. This prospect includes, for each strategic objective, the most significant indicators of capitals used by Eni (see Eni's Integrated Report 2015: 94).

Eni's 2015 integrated annual report has been prepared in accordance with principles included in the "international framework," published by International Integrated Reporting Council (IIRC 2013a, b) aimed at representing financial and sustainability performance, underlining the existing connections between competitive environment, group strategy, business model, integrated risk management, and a stringent corporate governance system. Since 2011, Eni takes part in the IIRC pilot program, whose aim is to define an international framework for integrated reporting. The structure of the Eni Integrated Annual Report is represented in Table 6.3.

6.1.9 Eni's Materiality Definition Process

Materiality is the result of the identification and prioritization of the relevant sustainability issues that impact significantly the company's ability to create value. "Eni's materiality definition process aims to ensure that the relevant issues

Table 6.3 Eni integrated report structure

Sections	Page number
Letter to shareholders	4
Profile of the year	8
Materiality and stakeholder engagement	13
Business model	16
Targets and performance drivers	18
Connectivity of performances	20
Strategy	21
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<i>Other information</i>	93
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Source: Our elaboration from Eni Integrated Report (2015): 7

are shared with the highest decision levels and taken into account in all the company processes.

The first step of the materiality definition process is the identification of relevant issues implemented on the base of the top management's strategic vision, the results of the risk assessment and the stakeholders' perspective" (Eni Integrated Report 2015: 13).

In 2015, the vision of top management has arisen in the phase of the definition of 4-year strategic plan: in the guidelines defined by the Chief Executive Officer, preceding the definition of the 4-year plan, were highlighted the most important sustainability issues for the business. Through the risk assessment carried out in 2015, the sustainability issues on which could emerge environmental, social, and governance potential risks (ESG) were highlighted. The stakeholders' perspective has been defined through the collection of their expectations, gathered and managed by using a specific web-based platform. The integrated report clearly describes the engagement procedures and actions addressed to each category of stakeholders. Following the identification of the most relevant issues, the assessment of their

relative importance has been performed. The combination of the results of the three previous assessments has allowed to prioritize the relevant issues. At the end of this review, sustainability issues identified as material are (Eni Integrated Report 2015: 13):

- Integrity in business management (transparency, anti-corruption, human rights)
- Safety and asset integrity
- Equal opportunities for all people
- Combating climate change (GHG reduction, energy efficiency) and reduction of environmental impact (protection of water resources and biodiversity, oil spill prevention and response)
- Local development/local content and promoting access to energy
- Technological innovation

6.1.10 ENI's Journey Toward the Integrated Reporting

The drawing up of an integrated report was initiated by Eni in 2010, after 4 years of publication of the sustainability report. In 2011 Eni was ranked third in the Fourth CSR Online Awards, the first detailed European study of online communications in the area of corporate social responsibility (CSR). In the same year, following the inclusion in the pilot program launched by the International Integrated Reporting Council (IIRC 2012, 2013a, b, 2014a, b, 2015), Eni continued the process of drawing up an integrated balance sheet, with substantial modifications to its annual report with the introduction of new sections: strategy, frame of reference, integrated business model, and operating method. The significance of the issues and initiatives illustrated in the integrated balanced sheet was reviewed in terms of the Millennium Development Goals, the basic elements of reporting on the tenth principle issued by Transparency International and the Global Compact in 2009, and the UN's "Sustainable Energy for All" initiative (IBLF 2008; UNDP 2010; Nelson and Prescott 2008). In order to implement the integrated report, a cross functional working group was created, made up of managers belonging to different company offices, such as administration, strategic planning, investor relation, governance, and sustainability. The integrated reporting process has been developed through a series of steps, starting from 2006 – through the creation of the sustainability function under the domain of the institutional relations and communications director who reported directly to the CEO and the assurance of the first sustainability report by an external and independent company and continuing in 2007 through the adoption of the sustainability management model, the introduction of a management by objectives systems for sustainable objectives, and a sustainability section inside the strategic plan approved by the Board of Directors who assumed a central role in the policies of the group's sustainability (strategy and communication) as well as in themes including sustainability and ethics of corporate management in the past few years.

Moreover, the website eni.com has been developed in order to include exhaustive sustainability information: descriptions of major projects and sector performance reviews, with an interactive interface and suitable levels of detail. Browsing by subject matter enables quick reference to information, along with access to further levels of detail.

During the years, Eni's integrated report has been improved, and it is currently conceived as a principal document aimed at demonstrating how the company creates medium- and long-term sustainable value through a holistic approach and an integrated business management. It reflects on the connections between financial and non-financial factors and their impact on the long-term performance of the company and allows for results to be correlated to the final plans and objectives, offering a description of the scenario and a strategic vision of the business to highlight the creation of a time value. In other words, it is finalized to demonstrate the ENI "value creation history."

Of the modifications proposed to the first integrated report, released in 2012 (Eni Annual Report 2011), the following aspects have been highlighted:

1. The need for a greater integration and focus on strategies, reference scenario, business model, and the inclusion of additional KPIs of sustainability.
2. The need to introduce a "hierarchical" modification to the document: the order and content of single sections were reviewed to facilitate a more effective and direct communication which takes into account the several possibilities of an in-depth examination for investors.
3. The inclusion of a consolidated sustainability reports (relative to sustainability reports of the Eni world-local reports) containing all the performance data for the financial year.

The subsequent steps therefore concern the integration of ESG risk aspects, the launch of a study to verify the possibility of connections between economic indicators and sustainability in terms of cost saving and/or revenue generation, the identification of specific materiality for integrated report, and the experimentation of integrated communication models.

The reasons for change that lead to the adoption of the integrated report prepared according to the IIRC framework are to be summed up in Eni's wish to (1) demonstrate that sustainability and corporate profitability are not separable; (2) illustrate the correlation between sustainability objectives and business objectives, even though the identification of indicators which demonstrate how the attainment of sustainability objectives has implications for company results; and (3) raise internal and external awareness, especially among investors, concerning integrated business management models.

6.1.11 *Final Remarks*

The reflections which follow focus on Eni's reasons for choosing to adopt integrated reporting, on benefits attained, as well as critical aspects and paths for improvement.

With reference to the reasons for choosing integrated reporting in Eni, the process was triggered by primarily internal motives as, since the beginning, sustainability in Eni had been integrated into all business processes as was consistent with the business model.

The primary values which have guided the choice concern transparency and the will to communicate holistically and completely the economic, financial, social, and environmental value engendered through the management of the group's activities. However, an interplay among institutional, contextual, and organizational drivers created the conditions for the "ignition" of the integrated reporting process (Bansal 2005; Bebbington et al. 2009), and a mixture of mechanisms and structures of institutionalization can be identified (Di Maggio and Powell 1983, 1991; Powell 1991; Larrinaga-González and Bebbington 2001; Larrinaga-González 2007; Scott 2008; Jensen and Berg 2012; Lai et al. 2013). There follows the statements issued by a responsible sustainability planning, reporting, and professional community in Eni, concerning the integrated reporting process:

- "I would call it an objective and not a value, what has motivated our company to undertake a process of integrated reporting, precisely that of communicating in an integrated manner the commitment and results of the company in diverse terms in which they are expressed: from economic to social terms, in the conviction that a company produces not just economic value but also social, cultural and environmental value (if it assumes behaviors aimed at a responsible use of environmental resources). In this sense providing information which is as complete, organic and comprehensible as possible also serves an objective correlated to the transparency of communication with the stakeholder." (March 21st, 2013)
- "We started this path in 2010. We have never had obstacles but have met difficulties and still today, in the third year of integrated reporting, we have not managed to resolve all the problems, solutions are not even forthcoming from the outside. This is a "work in progress" and we feel a bit like pioneers. One of the difficulties encountered on the operational front consists in the "dismantling" of the sustainability reporting system, which was based on the sustainability report and on the website of sustainability, and thinking up a new one. During the first year we released various publications concerning sustainability through diverse communicative instruments, and our stakeholders had difficulty retrieving the information. We had the integrated report (annual financial statements) which presented information about sustainability and the most relevant data for the financial world. The accurate and complete sustainability report which was extremely concise and quantitative in nature, was attached to the financial statement. We had produced a strongly communicative publication to

demonstrate our commitment to sustainable development. Finally, the website contained the complete information. Now the reporting system, as much as it relates to sustainability, has become consolidated and is characterized by greater overall clarity.” (March 21st, 2013)

- “From the internal perspective the recommendation for integrated reporting soon found the approval of our CEO who helped us carry it forward. A working group was set up composed of all the areas interested in the reporting process: administration, the owner of the annual financial statement, the unit which examines strategic scenarios, planning, corporate governance, investor relations, in addition to sustainability. Specifically, under the organizational profile, sustainability involves different managers who together with the sustainability senior vice President, are responsible for stakeholders engagement and community relations, sustainability planning, reporting and professional community, sustainability reporting, local sustainable development and community relations, sustainability stakeholders’ management system, international sustainability stakeholders. A high level steering committee was entrusted with analyzing and approving the operative work group’s recommendations. For this year’s report a new unit managing the integrated risk management system was involved in the work group.” (March 21st, 2013)

Eni’s integrated reporting process has produced several benefits:

- “At the end of the second year of integrated reporting, we made a call with a group of our investors to assess their feedback concerning this new method of reporting and to verify the “usability” and degree of recognition on the part of this qualified target. Everyone gave a positive evaluation of the work done, as a greater connection and relation among the various aspects of corporate performance, as well as between results and future prospects, made the company’s commitment and objectives of future development much clearer. Obviously we also received a series of questions and warnings which helped us this year in the implementation of the new Integrated Report that we hope will answer such doubts adequately with the new document which is in the process of being released. The production of the integrated report helps everyone to think in an integrated manner, both within the company, that is, managers and everyone who works there, as well as outside the company, that is, investors and all those stakeholders who wish to know about our way of working in creating sustainable value. I believe this to be the most significant result of this process.” (March 21st, 2013)

With regard to the main problems and criticisms that have arisen, the interviewed manager points out that:

- “The process is complex as sustainability, which is an integral part of business, is often made up of a different “subjects” to the tangible matter of finance and economy. The difficulty lies in “marrying” the logic of tangibles with that of intangibles. Another real problem to face is the temporal dimension, typically of

a long period of time as far as sustainability is concerned and the shorter period related to economic-financial reporting.” (March 21st, 2013)

Finally, as far as future improvements are concerned, Eni is actively involved, together with other pioneering companies in Italy and in the world, in meetings organized by the IIRC for company members of the Pilot Project but has also developed a deep reflection on the internal front, activating a considerable change in corporate culture and a concrete organizational change (Baldarelli et al. 2014):

- “We are also working a great deal internally with all the sections dedicated to the sustainability working group. This year we have managed to clarify some important connections between the competitive context and our strategies, providing them with the relative operative and economic results and sustainability of the activity. We have furthermore included a section on risk management. Things have certainly improved since the first year. Now there is more clarity as to where to find information: sustainability performance has completely become an integral part of the Annual Financial Statement which also currently contains, alongside the consolidated economic report, a consolidated sustainability report. In the entire report on management on the other hand, the principal themes of sustainability are presented together with operative and economic themes to which they are connected. In addition we publish a document which outlines Eni’s commitment as a sustainable company to global and local development in the territories it operates in. In this document, entitled “Eni for” (and relative year of reporting) there is both a perspective of reporting and a perspective of narration, which favors greater usability for a wider public. We will produce a printed version which will be slimmer and more communicative, and a web based version, enriched with videos, interviews, links and so on.” (March 21st, 2013)

Finally, we conclude with a brief reflection on ENI’s integrated reporting, which is considered as an end and a means, which perceives Eni has half way along the path. The interviewee’s answer to the question “can the integrated reporting be considered as an end or a mean?” is presented below:

“I would say both. It is an end because right now it is the most advanced way of reporting on a company’s ability to create sustainable value; it is a means as it brings the themes of sustainability into the more traditional areas of business and gives them value even in the perspective of business which is that of value creation” (March 21st, 2013).

Despite factors tied to sector, company size, and governance structure (Young and Marais 2012) which lead to considering the ENI’s choice to implement the integrated reporting as a result of a “mimetic” approach (Di Maggio and Powell 1983) or “cognitive” structures” (Scott 1995)² tied to the external factors which

²Mechanisms/structures of institutionalization considered by Scott (1995) include regulative structures (the law or the market involves the capacity to establish rules, inspect conformity), normative structures (based on social values and norms, leading individuals to act according to

prevail in the coercive structure – unlike what occurs in small enterprises – Eni Group is progressing toward sustainability and change. In fact in Eni’s integrated process, both forces which push toward institutionalization and forces which orientate toward innovation generating institutional and organizational changes are present.

Therefore, it may be considered that the integrated reporting is a fundamental journey for Eni, since it represents its own way of reporting.

6.2 BoxMarche’s Global Report

6.2.1 Introduction

The following empirical analysis is related to an unlisted Italian SME (small- and medium-sized enterprise), which is among the first in Italy to have introduced the Global Report (intended as integrated report).³ The main research question that orients the case study is “Does IR (integrated reporting and integrated report) represent an opportunity only for large and global firms or does it involve small- and medium-sized companies?”

Studies and empirical research in this area have been mainly addressed to large enterprises neglecting the integrated reporting of (and for) small- and medium-sized business (SMEs) and the factors that may hinder or facilitate its adoption and effectiveness. Accordingly, the aim of this section is to offer lines of reflection on the benefits (greater clarity about relationships and commitments; deeper engagement with all stakeholders; better decisions with economic, social, and environmental merit; lower reputational risks) deriving from the adoption of integrated report and their relationship with specific attributes of SMEs. The case study aims to fill the aforementioned gap and to offer insights and reflections on the benefits capable of being derived from the adoption of integrated reporting and their relationship with specific SMEs’ attributes. Findings allow us to identify the benefits of integrated reporting and verify how these stem from the orientation to

societal expectations of organizations; legitimate authority of norms and values; in the context of sustainability reporting, normative structures refer to rules that are followed on moral/ethical grounds or in order to conform to norms established by referential bodies, i.e., Eco Management and Audit Scheme (EMAS), Global Reporting Initiative (GRI), and cognitive structures which form conceptual support of legitimacy (the waves in the use of some concepts and techniques by organizations are associated with vogues (imitation) rather than rationality). Similarly, Di Maggio and Powell (1983) consider coercive mechanisms (the law or the market leads organizations to comply and align with the norms in order to gain legitimacy and survive), normative mechanisms (diffused through professionalization, formal education, and professional networks, leading individuals to act according to shared social values and norms), and mimetic mechanisms (organizations imitate, following a mimetic process, those peer organizations that seem to be more successful and legitimate).

³See Chap. 4.

sustainability, to transparency, and to the level of responsibility of the entrepreneur, showing that when an authentic commitment to social responsibility and sustainability and transparent disclosure exists, the integrated report improves corporate disclosure and transparency and acts as a driver for stakeholder dialogue and stakeholder commitment.

6.2.2 Methodology

The study was developed using a qualitative approach and a methodology based on a single case study (which constitutes an explorative and exemplary case) (Yin 1994; Eisenhardt 1989; Eisenhardt and Graebner 2007). The fieldwork approach, as suggested in the SEAR literature (Adams 2002), facilitates the involvement of the researchers in the actual activities of the companies with a view to studying the processes and the organizational practices of SEAR. This methodology consists of identifying the internal factors (organizational structures, internal micro-processes, attitudes, points of view, and perceptions) that, together with the corporate characteristics (size, sector, age of the business, etc.) and the general contextual factors (economic, political, cultural, etc.), explain the complexity of the social/sustainability/environmental/intellectual report statements and, in addition to influencing the nature and the extent of the corporate SEAR and of the social engagement profile, impact the system of governance. Furthermore, the case method constitutes a valuable instrument for utilizing the results to attain cognitive aims and normative substance, indicating best practices and suggesting criteria for further action (Craig 2003).

With specific regard to the methodologies and approaches used in the SEAR field, we adopted an action research approach (Adams and McNicholas 2007) to undertake the empirical study in order to investigate, among others, factors that might impact (hinder or inhibit) the development of integrated report and its potential to produce effects on the organizational context and to act as a catalyst for change in organizations' performances and practices. The action research approach uses interviews as a primary means to gather data and information. In addition, other research methods (such as observations, visits and meeting participations, document analysis, and questionnaires) are largely adopted to supplement and enrich the information and data gathered through interviews.

With reference to the research questions at the base of this study, BoxMarche was selected for its excellence relative to the CSR and sustainability orientation which is characterized by the following attributes: the presence of a socially oriented management shared by the leaders of the firm (entrepreneurial family, managing director), diffused throughout the entire organization and reflected in its mission and its governance, the adoption of processes of social and environmental certification and strategies of CSR and sustainability, the communication of CSR and development of systems of accountability (regular publication of social report and of integrated report, recently named "living report"), recognitions and awards

received for their robust activities of social responsibility, and the sensibility to the diffusion of best practices of CSR in the local and extra-local context in which they are found. The company is authentically CSR and sustainability oriented (Del Baldo 2008, 2012b) and is representative of the entrepreneurial fabric of a region typical for the diffuse presence of SMEs, mainly established in small centers, preserving the agricultural and artisan vocations and the socio-economic fabric of relationships anchored in the territory. The provinces of this regional area (called the Marche) come top in the national list for balancing economic development with social cohesion and for the diffusion of “best practices” companies listed by ISVI (the Institute for Business Values) and recognized at the national and international levels (Unioncamere 2010; Marcheian excellent companies – Istaio 2015).

The research was developed across a multiyear period, beginning in 2009 and continuing today, and was based on information acquired during several in-depth semi-structured interviews with entrepreneurs, managers, and other stakeholders (i.e., employees, customers, banks), on direct observation during visits to company and on the analysis of documentary sources (social balance, global reports, statement of values, as well as information posted on the company’s Internet site). The scope of this triangulated approach was to make use of different advantages and strengths offered by the various methods of data collection. Direct observations in the firms offered the possibility of comparing the results of the interviews with the reality inside the business. In addition, a participant observation approach has been used, involving the entrepreneur, the managers, and their collaborators in laboratories, conferences, and seminars that set the stage for the informational and interview phases.

Specifically, the different methods used to gather data – following the inductive method based on the analysis of a research case – focused on the motivations for adopting the integrated report, the process of implementation, the standard used, as well as the benefits, the criticalities, and aspects of improvement.

6.2.3 *BoxMarche’s Profile*

BoxMarche Spa is a company based in the small town of Corinaldo in the Marche region (central Italy) and is a typical example of the Italian socio-economic system based on SMEs and a historical craftsmen tradition (Fuà 1988). It is a regional leader in the design and execution of packaging for the food service housewares, small electronics, and cosmetic-pharmaceutical sectors. The firm was set up in 1969 through the initiative of the Baldassarri family, predominantly given to agriculture, people who came from the land, from solid principles – workers of few words: “One’s word is his bond” is a recurrent expression in the farmer’s world, where behaving with integrity and virtue means adhering to principles of goodness and responsibility.

In more than 40 years of history, the company has grown, and by the end of the year 2014, it had reached a total turnover of over 10 million euros providing work to

Table 6.4 BoxMarche's values and culture

1. Foster collaboration with clients offering high-value products and services through innovation and excellence
2. Partnerships
3. Centrality of the firm (which is considered an instrument to overcome individual interests and conflicts)
4. Organization improvement (continuous research of best practices, flexibility, and skills development)
5. Respect for the individual (valuing the dignity of employees, encouraging personal growth through continual training, believing in the capacity of others and respect for their work)
6. Environment and territory (become a reference point for all businesses in the region with respect to the environment, committing itself to sustainable development and going beyond the standards, instilling a relationship of trust and transparency concerning the firm's activities among the local community and public institutions)
7. Quality (operating with excellence)
8. Value of capital (optimizing economic-financial results and raise the principle value of the firm: human, relational, and structural capital)
9. Constant improvement (a culture of constant improvement throughout all levels and all contexts of the organization).

Source: Our elaboration from BoxMarche Living Report (2014): 20

52 employees. During its history, BoxMarche has always followed the principles that “competition is that of ideas and of relationships,” basing on innovations in “technology, processes, products, and relationships.”

The mission of BoxMarche is to be an excellent company of solid principles (Table 6.4), which works to enrich all of its stakeholders: customers, providers, employees, partners, the territory, and the outside community.

BoxMarche distinguishes itself for its holistic approach to CSR and sustainability and is characterized by the following attributes (Del Baldo 2010, 2012a):

- The presence of a framework of ethically connoted values, shared by the leaders of the firm (entrepreneurial proprietor/family, managing director) and diffused throughout the organization
- Adoption of CSR-oriented strategies
- Adoption of processes of social and environmental certification
- Regular publication of social, environmental, and intangible resource reports and, more recently, of integrated report and living report
- Fulfillment of ample and significant initiatives of social responsibility on the local, national, and international level
- Recognitions/awards received for different CSR and sustainability-oriented projects; sensibility to the diffusion of best practices of CSR in the local and extra-local context in which they are found

Social responsibility and sustainability orientation are not considered merely an opportunity for raising the firm's visibility and reputation, but above all as drivers which actively contribute to the construction of a better socio-economic environment, with a rich return on its tangible (economic and financial performance) and

intangible profile. BoxMarche exemplifies a strategic and structured approach to CSR and sustainability and aligns business values, purpose, and strategy with the social and economic needs of stakeholders while embedding responsible and ethical business policies and practices throughout the company. Responsibility and sustainability are experienced as a “way of doing business.” Key attributes at the basis of social commitment and engagement of BoxMarche are the following: a strong system of shared values; an orientation toward CSR and sustainability strongly desired by the owner-management team, whose own genuine values and behaviors influence such orientation; the presence of a vision and a system of values constantly reinforced through the company’s culture and continuously communicated within/beyond the organization, through relations with stakeholders; a strong embeddedness to the socio-economic environment, historically characterized by a solid rural tradition, typical expression of the Marchegian culture; a decision-making process based on collaboration, sharing, and transparency; a relational approach centered on trust; the adoption of accountability tools aimed at communicating, sharing, and reporting its socially oriented commitment; the cohesion to stakeholders, appreciated as a source of mobilizing resources; and the affiliation in local, national, and international networks aimed at promoting CSR and sustainability standards and actions. Consequently, the fronts of engagement and the forms of communication of CSR and sustainability are systematic and creative and manifest themselves in a variety of forms. The following provides a brief “picture” of several projects produced by BoxMarche and a list of some of the awards obtained by this company for its excellence in CSR (Table 6.5). With the project “The passion for improving activities for a responsible business model,” BoxMarche participated in the third edition of the “Sodalitas Social Award”⁴ and in 2005 came in first place in the SME category. A second concrete example of stakeholder engagement pertains to the Italian Prize for the Social Responsibility of Businesses given to 24 Italian companies in 2005 and awarded to BoxMarche for being “a solid reality that donates 15% of its earnings to corporate giving and pays close attention to the environment, research and development, and society.” The third example relates to the Balance Oscar 2007 (Milan, Stock Exchange), in which BoxMarche won the first prize for the category of SMEs, thanks to the 2006 Global Report (integrated report), centered on the innovation of the “3Ps”: products, processes, and people.

BoxMarche’s governance is characterized by the presence of an open family-owned economic subject: shareholders and managers are not formed exclusively by members of the entrepreneurial family but also by external subjects not tied to kinship bonds. The words of BoxMarche’s Managing Director and General Manager Tonino Dominici reveal his high esteem for the values inherited from the founding family’s culture and tradition. Entrepreneurial and managerial leadership is based on transparency, sharing of strategies and responsibility, and dialogue.

⁴The Sodalitas Social Award honors businesses that operate in Italy who are distinguished for implementing projects with high value and social content.

Table 6.5 BoxMarche's certifications, awards, CSR and sustainability-oriented tools and projects

1996	ISO Certification of Quality 9002
1999	Participation in the Quality Awards Italy
2001	ISO Certification of Quality 9001
2001	Honorable mention, regional Quality Awards Italy
2001	Certification of the Production Site according to ISO norm 14,000 – environmental certification of the production site
2002	ISO Certification 9001: Vision 2000
2003	Special Mention, environmentally friendly planning – Ecoprize
2003	Quality Award Italy for SMEs
2003/2004	OHSAS Certification 18,000 – management system of health and security in the workplace
	Certification SA8000:2001 – management system for socially responsible management
2004	Publication of the Social Balance award, 2003
2005	Winner, Sodalitas Social Award for the category “SMEs”
2005	CSR in Pole Position – BoxMarche is among the 30 Italian firms selected by the Italian Ministry of Work and Social Policies, and by Confindustria to be honored for best practices of social responsibility-CSR
2005	National Award for Social Responsibility in Business
2005	Recognition of benevolence, City of Corinaldo
2006	Official Selection at the II° European MarketPlace on CSR – “Skills and Competence Building”; it won the title of best practice: “People Care-Skills Passport Project”
2006	Publication of the first Global Report
2006	Nomination, Oscar di Bilancio 2006 (Milan, FERPI)
2006	Registration according to Regulation CE 761/01 (EMAS)
2006	Adoption of the European Roadmap on CSR
2006	Confindustria Awards for Excellence, “business champion of the valorization of the territory”
2006	Multi-stakeholder Panel (multi-stakeholder counterpart for the Italian CSR Forum)
2006	Forum “Intangible Capital”: a strategic factor for innovative businesses
2007	Winner, Oscar di Bilancio 2007 in the category of small- and medium-sized firms (Milan Stock Exchange, FERPI)
2007	International Award ECMA, Pro Carton Award, Confectionery category
2007	“Work Value” Prize for the Marches Region
2008	ECMA PRO CARTON Award – Shelf Ready and Display Packaging – All Other Non-Food
2010	ECMA PRO CARTON Award – Most Innovative Packaging
2011	ECMA PRO CARTON Award – Beverage
2012	ECMA PRO CARTON Award – Most Innovative Carton
2012 and 2013	Nomination, Oscar di Bilancio 2006 (Milan, FERPI)
2013	The transparent company: 10 years of Global Report and Next

Source: Our elaboration from BoxMarche Living Report (2014)

The Global Report (“Identity and Sustainability” section) dedicates ample space to describing the composition of the shareholders, the roles of the partners in governing the company and caring for the minority, and to the activities of investor relations. “We provide constant updates on the management of the company to our shareholders, who are an important part of our company; we have therefore provided, in addition to the annual balance sheet and budget as required by law, the illustration and audit of the triennial plans and budgets, and monthly meetings with our associates to elaborate strategies and communicate how the company is going” (*T. Dominici*, May 11, 2012). The diverse categories of stakeholders enjoy numerous collective initiatives, from the annual presentation of the social balance/Global Report to the bimonthly report to the creation of virtual communities (such as Internet forums).

6.2.4 *BoxMarche’s Global and Living Report*

The idea of a social report (adopted for the first time in 2003) was born “from the need to show the population the values of a business and the necessity of transparency for the stakeholders” (*T. Dominici*, Managing Director). From the social report, BoxMarche was added to the third edition of the Global Report in 2008, which represents an example of integrated report both published and distributed among stakeholders and available on the Internet company site. This report comprises in a unique document the asset and liability statement and the income statement (financial reporting), the sustainability and environmental reports, and – since 2006 – the analysis of intellectual capital (the reporting statement for firm’s intangibles assets – intellectual capital report). BoxMarche’s Global Report represents an instrument of accountability or, rather, an integrated system of CSR and sustainability, which instates (and, at the same time, is the fruit of) an authentic dialogue and engagement process with stakeholders born from the authentic desire to make business activities transparent, responsible, and sustainable. Such a document is a “constitutive element” of the business philosophy and is part of a system of management called “quality-security-environment-social responsibility.” The Global Report of BoxMarche is a concrete sign of a process of involvement and communication, of stakeholder relationships, engagement, and reporting. It is for this reason that in 2014 the company decided to change its name in “living report.”

We maintain that the Global Report is the most adept instrument for spreading the value of maintaining our values, that which drives us to move forward with enthusiasm and love toward all that we do. It’s a form of communication that unites numbers, images and words, and which allows us to share with every stakeholder our particular reality. (*S. Pierfederici*, Letter from the President, Global Report 2007)

The Global Report is an expression of a precise communicative strategy. It places itself alongside other instruments of communication and dialogue adopted by the company, based both on direct and personal relations (multi-stakeholders

forums at local and national level, conventions, open houses) and on indirect relations (websites, corporate newsletters, company's magazine, sector's trade magazines). It represents the synthesis of BoxMarche's value creation process in which the economic, social, environmental, and ethical performance of the company are presented in an integrated way. BoxMarche's integrated report is a "document" which emits strong entrepreneurial passions, a sense of belonging, and a sincere desire for self-representation. A notable aspect is the excellence achieved in the communication of BoxMarche's strategy and in actively incorporating interlocutors, sustained by the desire to provide tangible evidence of best practices and to spread out the ethical matrices of the firm into its surrounding territory through multiple channels. With the Global Report, BoxMarche, although small, was able to insert itself fully into the national context among businesses who better obtain and communicate their own socio-economic and environmental performances:

We here at BoxMarche like to communicate. We see relationships everywhere there's the possibility to pick out, from another part of the line, someone who shares our respect and our recognition. (*T. Dominici*, Letter from the Managing Director, Global Report 2007)

Our Global Report is not only a report of numbers, but also of values. It permits our stakeholders to have a dependable idea of how the business fulfills that sort of delegation that civil society has conferred to produce a better world for all goods, services and human relationships. (...) First CSR, which is a fact of 'faith', then good governance, which is its outcome. (*T. Dominici*, 6 July, 2012)

The national and international standards utilized as referenced are represented by the GBS (2007) and by the GRI guidelines (GRI 2013), as well as those promoted by the project Q-RES for the quality of the ethical-social responsibility of the firm⁵ and by the Italian Ministry's Project CSR-SC (2003). A panel at a multi-stakeholder forum was also held to compare the results they achieved and the proposals for improving. BoxMarche's CSR-SC framework thus rests upon the adoption of 98 - qualitative-quantitative indicators, all developed in a 3-year trend along four principal directives: structural capital, human capital, relational capital, and clients and market.

The process of accounting, reporting, and accountability is looked after by an internal coordinator and by a working team formed by the managers of the principal functions and areas of the company, which operates in close collaboration with external consultants who come from the professional and academic world. Currently, they are in the midst of diverse initiatives aimed at improvement: forecasting further indicators, introducing the detailed budget, analyzing the competitors' assessments (sector benchmarking), and enhancing the solvency of clients and of providers. Another element of innovation is the section "value chain" introduced in the 2007 version of the Global Report, which, in an additional section (called

⁵The Q-RES Project was created by the Centre for Ethics, Law, and Economics (CELE) in collaboration with associations, businesses, and nonprofit organizations, <http://nt-notes.liuc.it/ricerca/cele.nsf>.

“together with us”), gives visibility to the providers of BoxMarche and offers them the possibility to talk about their experiences with the firm and the outcomes.

As previously mentioned, BoxMarche’s integrated/living report includes the economic and financial report, the social and environmental report, and the intellectual capital report. It is structured in five macro-sections, which comply with the suggestions of external consultants, the relationship with the board of statutory auditors, and the minute of the shareholders’ meeting.

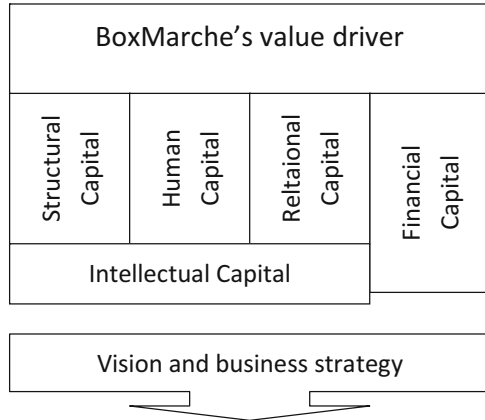
The first section describes the company’s identity and presents synthesized data concerning the principle results achieved (highlights). It contains references to the firm’s vision and its values, to its mission, to governance, and to business strategies. Letters from the Managing Director and the President of the Board are also featured. The second section contains the asset and liability statement, the profit and loss account, and a supplementary note. The third outlines the administrative relations (directors’ reports/annual statement – complete with financial accounting, cost analysis, research, and development initiatives) included in the sections of sustainability and analysis of intellectual capital and intangible assets.

The fourth section (sustainability section) is articulated in the following parts: the creation and distribution of added value, the social relations/social report (distinguished through the categories of: personnel, shareholders, financial community, clients, competitors, providers, financial partners, the State, local organizations, and Public Administration, community and territory, environment), research and development, events and awards, and proposals for improvement.

The analysis of intellectual capital (fifth section) is based on a descriptive approach and on the use of qualitative and quantitative indicators. The main references are represented by models such as the balanced scorecard (Kaplan and Norton 1992, 1996), the intangible asset monitor (Sveiby 1997a, b), and the value chain scoreboard (Lev 2001, 2004). BoxMarche groups gather the indicators into homogenous classes, referring to three categories:

- Structural capital: the analysis proposes translating the drivers of values of the firm into indicators (Fig. 6.1): “tension” to innovation, research for new solutions, problem-solving capacity, efficacy and efficiency of production processes, production flexibility, quality and efficacy of the work, focus on long-term growth over short-term profit, and attention to security.
- Human capital: the analysis integrates information about the staff supplied in the social report section and gives prominence to collaborators’ competencies and to the company’s commitment to spreading and developing competencies and know-how. Human capital is measured through indices of potential and result. These reflect both the company’s point of view and that of the collaborators (indices of satisfaction and of leadership quality with reference to managers and the managing director) obtained by the results of surveys completed in anonymity.
- Relational capital: the analysis focuses attention on the capacity of the firm to develop relationships with external interlocutors, with particular attention to clients, for assessing the coherence of the firm with respect to its vision

Fig. 6.1 BoxMarche’s business model for the creation of shared value (Source: BoxMarche Living Report (2014))



statement and to its business strategy, and to minimize the risk of informational redundancy. The information integrates the data contained in the client section of the social report. The analysis is expressed through qualitative and quantitative indicators relative to the quality of relations (i.e., customer satisfaction, customer loyalty, the percentage of turnover coming from new clients, and degree of disagreement with clients, etc.).

6.2.5 Final Remarks

The case provides many causes for reflection, and two aspects in particular should be considered with reference to the research questions posited at the base of the study.

First, BoxMarche is without a shadow of a doubt a proactive and transparent business, which denotes an evolved socio-economic-environmental commitment and which owing to its origin has tried to raise awareness of the context in which it is found and to “convert to CSR and sustainability orientation all whom it meets” through multiple relationships that the course of activity brings with it.

The second aspect pertains to the efficacy of how the company communicates its stakeholder commitment, its orientation toward socially responsible management, and the development of the intangible capital or, in other words, its value. Specifically, under the profile of communicating CSR, one can underscore the “discovery” of communication as an element that enriches the fundamental ethical energy. BoxMarche’s form of communication aims to be thick with coherent messages based on values, on human processes, and on dynamism. BoxMarche’s integrated/living report signifies its capacity for disclosure, which is rare – if not unique – among small businesses and notable for being based on an innovative reporting that

pivots on the integration of informative qualitative and quantitative content that includes sustainability assessments and intangible assets. BoxMarche believes that an ongoing dialogue, supported through integrated reporting, rather than an end-of-year conversation only based on the presentation of the financial reporting, better addresses its stakeholders' needs and the way to "give voice" to its own way of doing business. The result is greater transparency about the company's performance and how it has been achieved and greater internal and external social cohesion.

The origins of the motivations which supported the choice to produce the integrated report (shifting from the social balance, adopted in the early years) are mainly internal. The entrepreneurs, sharing this choice with managers and the responsible of different company functions, promoted this choice, and in a second step, they shared the same choice with external stakeholders (customers, providers, banks, investors, and community). We can assert that the choice is authentic and not attributable to a "mimetic" or normative processes (due to the imitation of competitors or to legal obligations), nor to a fashion (Di Maggio and Powell 1991). The values that have guided the choice are mainly of two kinds: transparency and the willingness to communicate in a consistent and complete way the economic, financial, ethical, social, and environmental value produced through the management of corporate activities.

In BoxMarche the choice of integrated reporting is developed through a shared path and a systematic process which has marked the period of adopting quality environmental and social certifications as well as the adoption of the social report in 2003 and more recently the integrated report in 2006 and continues today. The administration and finance departments were directly involved and supported by external consultants, but all the operational and strategic choices were shared and were the result of informative meetings among collaborators. Since its inception, the process of improvement has been gradual. Improvements in the forms and instruments of accountability (e.g., the enrichment of indicators in the intangible capital section) are the result of a process of review developed internally and externally (comparing itself to the choices made in other companies and between the managers of differing corporate roles).

The benefits generated by the choice have been numerous (and include the awards obtained for the quality of the integrated reporting) and in particular have affected the reinforcement of corporate culture and the process of stakeholder engagement/stakeholders dialogue.

The criticisms which have emerged have not been signaled out by the managers interviewed, nor by corporate operators or stakeholders interviewed (clients, banks, suppliers), with the exception of some comments related to informational abundance (the report is over 150 pages long and enriched by significant graphs and figures).

Finally, the analysis reveals that integrated reporting is not seen as an end, but an important driver to increase the reputation and credibility of the company and the multiple relations with stakeholders and to improve the corporate climate. Undoubtedly, this represents for BoxMarche, by nature tends to excel, an

intermediary step, a path from which, as the Managing Director asserts, “we will not turn back because this is our faith.”

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Chapter 7

Case Studies and Best Practices: Reading the SGR Sustainability Reporting in Italy and in Bulgaria Using Institutional Theory

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7.1 Reading the Sustainability Reporting Using Institutional Theory: Conceptual Network

In the Italian doctrine, Catturi and Riccaboni (2001), after having analyzed the various threads of institutionalism theory, reach a definition of a notable analogy between “Old Institutional Economics” (Commons 1934) and Business Economics (Zappa 1957; Masini 1982; Ceccherelli 1964; Costa and Ramus 2012), as it considers the non-written rules to be of fundamental importance, as being like the “genius” of organizational change, which orientates the behavior of subjects who characterize the response of the specific and particular company. From this emerges the fact that for each company, the standardized indicators only describe a limited part of the performance which is more effectively monitored also through social- and institutional-type factors (Catturi and Riccaboni 2001: 167). Among contemporary authors, who in the Italian doctrine have directly confronted the institutionalism theory, we can recall Lai who traces the evolution of business theory basing it on the explanation supporting Zappa’s (1957) theory. Indeed he asserts that the institutionalism theory “. . . does not ignore the contrast of interests, on the other hand it raises it to higher dimensions, which leads to a recognition of the rise of real economic-social institutions, within which the re-arrangement of the various subjectivities has importance not only because the live entity is able to satisfy them collectively, but above all because it is the self same entity which presents itself as a new subject, different to the mass of subjects which gave rise to it” (Lai 2004: 10).

According to the author, the institutionalism theory became widespread in Italy for several reasons, the first of which sees the company in a wide sense as the combined result of heterogeneous elements (Lai 2004: 64). The second reason regards the combination of systemics theory and the organicistic theory, which find in the definition of institution like Zappa wrote: “The definition of institution, . . . would be used only to underline the psicological elements of human resources, or to consider collectivity, public entities, and ‘social organizations’” (Zappa 1957: 41),

the entity which sums them both up. The diffusion of the institutionalism theory is not due however to the concept of institution but rather to the dynamism and openness of the company to the internal and external environment in which it operates (Catturi and Riccaboni 2001, 2003).

The point of view of institutionalism considers the company as a collection of upper subsystems, segments, and subsegments, which develop relational behaviors representing bonds of interdependence to such an extent as to require a direct approach (Lai 2004: 106). The author summarizes economics-business institutionalism concentrating the focus of the analysis on a limited field which is corporate unity following the perspective of holistic interpretation. Such a perspective contrasts to that of individualism which mainly expresses itself in the contractualist current of thought, as illustrated in Table 7.1. The author concludes by asking what are the lines of renewal for corporate measurement, as set out in the following statement:

This institutionalistic recovery on the one hand reinforces through another route the deeper nature of the business firm, and the tension towards a perspective which places it together as a unit in a social context, on the other hand the hypothesis seems to move forward that economic measurement, in the traditional form (balance) or advanced form (perception of the value produced), cannot completely account for the business firm according to the institutional concept (Lai 2004: 197).

In international literature, the research strands which have examined various aspects of SEAR/SER have been primarily focused on organizational processes and internal factors rather than on the content, nature, and extent of various social and environmental reports. Nevertheless, in more recent years, new and interesting areas of analysis have been opened up. Among these the engagement research has been put forward as a strong approach in developing theories to understand SEAR/SER (social and environmental research/social, environmental reporting) and to enhance organizational practices and performances (Adams and Larrinaga-González 2007; Contrafatto 2010) as well as to explore diverse issues, including change within organizations (Adams 2002; Cooper et al. 2005; Parker 2005).

Secondly, some scholars have gone further in investigating the reasons why some organizations undertake social and environmental reporting (SER) and what drivers exist in the external (societal) and internal (organizational) environment for reporting (Adams 2002; Solomon and Lewis 2002). Several researchers maintain that the reasons for social/environmental disclosure are primarily due to external

Table 7.1 Perspective of interpretation and analysis focus

Analysis focus	Perspective of interpretation	
	Individualism	Holism
Defined organizational field (corporate unity)	II Point of view of contractualism	IV Economics-business institutionalism
More extended organizational field (economic system)	I Neoclassical concept	III Institutionalism and neo-institutionalism

“jolts” (Laughlin 1991; Larrinaga-Gonzalez and Bebbington 2001; Mallin et al. 2012). Other hypotheses that are not one but several factors lead business firms to introduce and publish sustainability reports. These factors, in their complexity, not only influence the initiation of reporting but also the quality and substance of the activities pursued (Duncan and Thomson 1998).

However, the way in which these factors come together and influence the choice and process of sustainability reporting (SR) remains unexplored and unclear. Likewise, few contributions have been made to examining how and why SDR (sustainable development reporting) practices become institutionalized and reach an institutional status (Miller 1994; Phillips et al. 2004; Lounsbury and Crumley 2007) and/or produce effects in terms of institutional change (Larrinaga-González 2007).

To fill such a cognitive gap, which requires more consistent research approaches (Gray et al. 2001; Campbell 2000), several innovative contributions recently made (Larrinaga-González 2007; Bebbington et al. 2009) have adopted the institutionalist (Di Maggio and Powell 1983; Scott 1987, 1995) and neo-institutionalist theories (Di Maggio and Powell 1991; Powell 1991) as a theoretical framework to explain the standardization or at least the procedures of SR/SER (if that is to say the institutionalization process of SR follows a univocal and predefined path) and to understand the drivers of institutional change. In this way, they have also opened up new directions in institutional theory. As a matter of fact “Institutional approaches tend to move away from considering organizational activities as something managers purposely initiate to achieve carefully considered outcomes, and focus instead on the shaping effects of social pressure. Institutional theory downplays managerial agency, and demonstrates that organizations mimic each other when practices become widely accepted and diffused” (Bebbington et al. 2009: 589). The social context has been conceived in terms of institutions¹ – specific practices, mechanisms (i.e., laws and regulations) ideas, understandings, and cultural frameworks that have achieved a degree of social permanency (Zucker 1987).

Institutional literature focuses on institutional stability and inertia (DiMaggio and Powell 1983) contending that institutionalization brings about a homogenization of organizations. This process – called “isomorphism” – arises from the need for organizations to respond to environmental expectations, guarantee their survival, and increase their success possibilities in a particular environment. Isomorphism emerges through three different mechanisms, coercive, normative, and mimetic (DiMaggio and Powell 1983), and Scott (1995) argued that legitimacy is based on three pillars: regulative, normative, and cognitive.

¹Institutions “consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behaviour. Institutions are transported by various carriers—cultures, structures and routines—and they operate at multiple levels of jurisdiction” (Scott 1995, p. 33). Institutions circulate at a number of levels ranging from world systems (e.g., democracy) to localized interactions (e.g., certified management standards; Scott 1995) and influence the behavior and actions of those within organizations, as well as the rationale for that behavior (Friedland and Alford 1991).

Coercive factors involve political pressures and the force of the State, providing regulatory oversight and control; normative factors stem from the potent influence of the professions and the role of education; and mimetic forces draw on habitual, taken-for-granted responses to circumstances of uncertainty (DiMaggio and Powell 1983).

Similarly, Scott (1995) develops the notion of legitimacy: “from an institutional perspective, legitimacy is not a commodity to be possessed or exchanged but a condition reflecting cultural alignment, normative support, or consonance with relevant rules or laws” (Scott 1995: 45).

Scott (2008) further developed three “pillars” of the institutional order: regulative, normative, and cultural/cognitive² as you can see in Table 7.2.

Another significant concept derived from institutional theory is the concept of “field”³: the organizational activities, rather than being totally at the discretion of managers, are, thus, selected from among “a narrowly defined set of legitimate options determined by the group of actors composing the firm’s organizational field” (Hoffman 1999: 351), conceived as specific context in which institutions influence organizational behavior.

Using the institutional theory framework, Bebbington et al. (2009) – rather than point out the issue of where SDR (sustainable development reporting) contributes to or institutionalizes broader social and environmental change (Milne and Gray 2007) – explore how institutional factors combine with organizational dynamics to contribute to the initiations of SDR and the institutionalization of the reporting activity. Focusing their institutional analysis at the organizational level,⁴ they studied an organizational population (a group of members belonging to the New Zealand

²Regulative elements emphasize rule setting and sanctioning; normative elements contain an evaluative and obligatory dimension, while cultural/cognitive factors involve shared conceptions and frames through which meaning is understood. Each of Scott’s pillars offered a different rationale for legitimacy, either by virtue of being legally sanctioned, morally authorized, or culturally supported. These two key treatments of institutional mechanisms underscored that it is critical to distinguish whether an organization complies out of expedience, from a moral obligation, or because its members cannot conceive of alternative ways of acting (Bebbington et al. 2009).

³DiMaggio and Powell (1983, 1991) drew on Bourdieu and Wacquant’s conception of a field (1992), emphasizing both the relational and cultural aspects of membership. An organizational field is a community of disparate organizations, including producers, consumers, overseers, and advisors, which engage in common activities, subject to similar reputational and regulatory pressures. It is formed by those organizations that collectively constitute a recognized area of institutional life (DiMaggio and Powell 1983) ‘that partake of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field’ (Scott 1995, p. 56).

⁴“Recognizing that SDR is yet to reach institutional status, and is still evolving in complex ways in multiple fields, our focus is on institutionalization at the organizational rather than the field level (in contrast to Hoffman 1999). Our exploration of reporting practice through detailed narratives recognizes the important role that business organizations play as field participants” (Bebbington et al. 2009, p. 596).

Table 7.2 Mechanisms/structures of institutionalization

DiMaggio and Powell (1983)	Scott (1995)	Examples
<p><i>Coercive mechanisms:</i> The law or the market leads organizations to comply and to align with the norms in order to gain legitimacy and survive. Consequently behavior becomes very similar in all of them</p>	<p><i>Regulative structures:</i> The law or the market involves the capacity to establish rules, inspect conformity, and manage sanctions in order to influence future behavior</p>	<p>Consumer boycotts lead companies to change structures and practices. Environmental regulation makes companies to adopt new technologies. In the context of SR, regulative structures and activities would include reporting regulations and their enforcement, as well as the threat of regulation of reporting (i.e., European Commission recommendation) (Bebington et al. 2005)</p>
<p><i>Normative mechanisms:</i> Diffused through professionalization, formal education and professional networks lead individuals to act according to shared social values and norms</p>	<p><i>Normative structures:</i> Based on social values and norms, leading individuals to act according to societal expectations organizations: – Legitimate authority of norms and values – Organizations genuinely think that given their role in society have to acquire some structure or engage in some practices</p>	<p>Deontological codes shape practice in many professions, such as doctors or accountants. In the context of SR, normative structures refer to rules that are followed on moral/ethical grounds or in order to conform to norms established by referential bodies (i.e., EMAS; GRI; awards for best environmental, social or sustainability reports, such as ESRA, EERA, ACCA Awards)</p>
<p><i>Mimetic mechanisms:</i> Organizations imitate (mimetic process) those peer organizations that seem to be more successful and legitimate</p>	<p><i>Cognitive structures:</i> They are taken for granted symbols, meanings, and roles in social action that support the legitimacy of organizations. The social construction of roles and organizations varies over time and space and contribute to stability. Cognitive structures form a culturally supported and conceptually support of legitimacy. Their existence is very difficult to prove empirically</p>	<p>The waves in the use of some concepts and techniques by organization are associated with vogues (imitation) rather than with rationality. In the context of SR, convergence is taking place in some organizational fields where reports are evolving rapidly (from environmental to CSR (corporate social responsibility) and SR)</p>

Source: Our adaptation from Larrinaga-González (2007: 156)

Business Council for Sustainable Development) with the aim to investigate how they initiated sustainable development reporting.

Building on the work of Larrinaga-González (2007) and on Ball's (2007) exploration of Lounsbury's (1997) "institutional toolkit," they offer in-depth insights into how institutional factors combine with organizational dynamics to influence the initiating of SDR. Their analysis reveals that "rather than being a rational activity/choice, a number of different institutions interact with various organizational conditions to shape SDR as an 'appropriate' 'normal' activity or 'the right thing to do' for companies choosing to differentiate themselves according to SD or corporate responsibility."⁵ The reporting practice is due to cognitive mechanisms and to a mix of regulative, normative and cognitive factors that contribute to the SDR institutionalization. In other words, the extent to which they shape managerial decision-making to initiate SDR depends on a plurality of organizational dynamics.

Furthermore, the organizations are sensitive to what their leaders are doing and, therefore, like that identified by mimetic pressure (Jennings and Zandbergen 1995), may be more important than regulations and moral-based (i.e., accountability) arguments for encouraging (and explaining) SDR activity. The nature of this reporting was strongly influenced by prevailing practice.

Our study suggests important reflections in terms of institutional theory: First, it reveals that business organizations do not simply acquiesce to institutional pressure; second, it demonstrates that what happens inside organizations is as important as what happens outside organizations to the institutionalization process; third, by studying institutionalization at the organizational level, it provides a picture about how business organizations shape the institutionalization process and on how the activities of both innovative organizations (operating in multiple fields) and the interactions of field participants contribute to the development of institutions. Finally, it provides insights into the process of institutionalization, illustrating the balanced nature of institutional change.

Other scholars have also observed that SDR is not always considered so rationally by managers (Campbell 2000; Adams 2002; O'Dwyer 2002). SDR provides a means of resisting fundamental social change (Puxty 1986; Tinker et al. 1991) and constructing favorable legitimacy rationales. Others draw attention to the influence of the social context, suggesting that organizational actions (including SDR) are not pursued because of pressure to conform to societal expectations (Milne and Patten 2002; Scott 1995; Ball 2005, 2007). Buhr (2002) introduces structuration theory to understand both rational, managerialist behavior and structuralist, shaping accounts of reporting activity. Producing an SDR can be motivated by a deliberate attempt to

⁵"Revealing a subtle mix of normative and cognitive institutions, managers initiate SDR relatively 'automatically' if they are pursuing this positioning strategy in order to 'fit in' (...) For the most part, institutionalization influences the activity rather than the content of SDR. Whether, or the extent to which, institutional pressures were accommodated (or resisted) depended on some organizational dynamics" (Bebbington et al. 2009, p. 615).

secure legitimacy, but it may also have shaping effects on what is acceptable to pursue.

Since the institutional theory has been blamed for its failure to address change (Greenwood and Hinings 1996; Hoffman 1999), other scholars used the neo-institutional theory to develop emerging insights about how the social context influences the choice of managers to initiate SDR (Larrinaga-González 2007; Milne and Patten 2002; Ball 2005, 2007).⁶

A neo-institutional perspective has been adopted by Hoffman (1999) and Christmann (2004) who studied the corporate environmentalism, as well as by Jennings and Zandbergen (1995) and Bansal (2005) in their studies of “sustainable” organizations.

Neo-institutional theory “asks questions about how social choices are shaped, mediated, and channeled by the institutional environment” (Hoffman 1999: 351), composed of organizations and organizational fields. Hoffman studied how organizations and fields evolve as regards environmental concerns and demonstrated how coercive, normative, and cognitive pressures have different importance over time and how the organizational fields are changing. He deduced the existence of one changing field that was formed around issues that became important to the interests and objectives of the organizations in the field.

When investigating the institutionalization of environmental concerns in the US chemical industry, Hoffman (1999) found four distinctive periods in terms of the institutionalization of environmental concerns and identified SR as an element of institutionalization which usually conceived as both the process and the outcome of a process. He observed that while coercive, normative, and cognitive structures or interpretive schemes are thought to lead to inertia and stability, for some reason, organizational evolution takes place unexpectedly and produces discontinuities.

“While still concerned with legitimacy, neo-institutional approaches expand the focus from the rational, resource dependence perspective common in the SDR literature (Milne and Patten 2002; Deegan 2002), to something more subtle, and shaped by a more complex range of factors, than deliberate managerial decision-making” (Bebbington et al. 2009: 592).

While one basic proposition of institutional theory is that different pressures in one organizational field lead to convergence in organizational forms and practices (thus, the frequency and quality of reporting would converge worldwide), Kolk (2005) observed that differences in environmental reporting between the US and European/Japanese multinational corporations were increasing, suggesting that currently there is no convergence in SR internationally and hence global reporting could not be seen as being part of the same organizational field.

⁶Since organizations are immersed in a certain cultural and historical context, which is portrayed by the existence of systems of shared beliefs, symbols, and regulation requirements (Scott and Meyer 1985), the basis of neo-institutional thinking is in the scepticism toward atomistic accounts of social processes and the conviction that institutional arrangements and social processes matter (DiMaggio and Powell 1991, p. 2).

Assuming as possible explanation the existence of several organizational fields around the issue of SR the question that Larrinaga-González underlines whether there is a unique global organizational field rather than different local organizational fields for SR. Reflecting about the variance of SR practices, he pointed out the existence of locally based SR fields (i.e., Environmental Management and Audit Scheme; European Commission 2001; Triple bottom line; Global Reporting Initiative; ISO 14001, etc.).

Especially, outlining the prior research that has been conducted in sustainability management and reporting using a neo-institutional lens,⁷ Larrinaga-González (2007) uses the neo-institutional perspective (or contemporary institutional theory) to build an institutional explanation of the development of SR and to ascertain the consequences of the institutionalization of SR.⁸ He observes that the empirical studies of sustainability management and social reporting provide some evidence of the institutionalization of such practices. He also explores how different notions (organizational fields or mechanisms of institutionalization) apply to SR, and he discusses the relationships between institutionalization and change and how this affects SR and goes further to examine the relationship between institutional theory and the legitimacy theory, which is more often adopted in accounting research.

Drawing on Hoffman's (1999) propositions about issue-based fields (organizational fields), Larrinaga-González argued that around the issue of SR, there has been a growing number of interactions among companies, governmental agencies, international bodies, and NGOs.⁹ He illustrates how the coercive, normative, and mimetic mechanisms of institutionalization can explain different processes of institutionalization in SR: coercion can account for SR as a response to regulation or consumer pressure; normative mechanisms would explain SR as a response to voluntary initiatives on the grounds of social responsibility; mimicry could explain how SR could be the consequence of some trends. SR is the result of a mixture of these three mechanisms, taking different weights in different contexts. Larrinaga-González (2007) hints that SDR is not yet fully institutionalized and may be the outcome of more general social/environmental awareness being institutionalized in

⁷Neo-institutional accounts of organizational activity downplay rational managerial action and focus on how the social context influences organizational participants to behave relatively unconsciously in ways that are "normal" to "fit in" and appear "appropriate" within the contexts in which they operate. "In order to make sense of the dynamics involved in corporate practices, neo-institutional theory has been extensively used in organizational analysis. This theoretical perspective allows understanding the actions of groups of organizations, as well as individual companies" (Larrinaga-González 2007: 150).

⁸Larrinaga-González observes how, in the context of SR, these ideas suggest that reporting instead of being the outcome of a rational process of decision-making by organizations acting independently could rather become institutionalized: "... determining to some extent the choice of organizations in terms of whether or not to publish a sustainability report and how to publish it. As an institution, SR would consist of regulative, normative and cognitive structures and activities which would describe what type of reporting is produced, for who, by whom and with what assumed purpose" (Larrinaga-González 2007: 155).

⁹See Bebbington et al. (2009: 595).

some settings, rather than a distinctively institutionalized practice in its own right. Larrinaga-González also faces the overlap between institutional theory and legitimacy theory (Deegan 2002). He affirms that the institutional theory is richer than the legitimacy theory since legitimacy in the social and environmental accounting literature assumes a manipulative logic, based on self-interest, which could correspond with coercive structures. Thus, while legitimacy theory could be more useful for determining in the short term “the why” one organization is making sustainability disclosures, institutional theory could be more helpful in the explanation of why given SR practices become common in a particular context. Finally, Larrinaga-González faces the issue of change and the institutionalization of SR and identifies some research patterns: the initiating event that may alter the institutional arrangements, whether and how may fields evolve (Bansal 2005), what elements play a part in changes to coercive/normative/cognitive structures, and what relationships exist between competitive forces and institutional structures in the process of institutionalization. With this respect, he illustrates how different events served to initiate SR in different contexts, and how the evolving composition of organizational fields allowed the redefinition of the institution, with the emergence in recent years of social and ethical aspects of SR.

So far we think of the three factors that are sustaining institutional theory: coercive, normative, and mimetic. These factors are differently considered case by case to explain the process to make social, environmental, and sustainability report. We will be able to analyze these three dimensions (see Table 7.2) that had pushed to publish SGR and CityGas sustainability report or to not publish it.

We involve cultural differences between Italy and Bulgaria as we can see in Figs. 7.1, 7.2, and 7.3.

For a general assessment of internal institutions governing the behavior of Bulgarian and Italian society, we will use data from Human Development Reports (Fig. 7.2).

The data show that Bulgaria is still significantly behind the business, public, and political awareness of Italy in the field of environmental protection, as demonstrated significantly worse performance in the energy depletion, mineral depletion, and CO₂ emission PM10 that threaten human health and nature.¹⁰

Hofstede’s research about the cultural dimensions shows that Bulgaria is a kind of “halfway” between East and West created by public institutions to ensure future

¹⁰Note: Particulate matter (PM) is a mixture of particles that can adversely affect human health, damage materials, and form atmospheric haze that degrades visibility. PM is usually divided up into different classes based on size, ranging from total suspended matter (TSP) to PM-10 (particles less than 10 microns in aerodynamic diameter) to PM-2.5 (particles less than 2.5 microns). In general, the smallest particles pose the highest human health risks. PM exposure can affect breathing, aggravate existing respiratory and cardiovascular disease, alter the body’s defense systems against foreign materials, and damage lung tissue, contributing to cancer and premature death. Individuals with chronic obstructive pulmonary or cardiovascular disease, asthmatics, the elderly, and children are most sensitive to the effects of PM. See <http://scorecard.goodguide.com/env-releases/cap/pollutant-desc.tcl>.

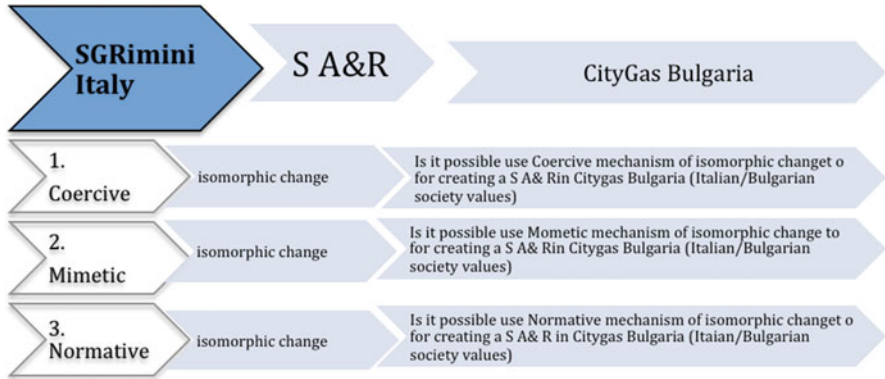


Fig. 7.1 The project

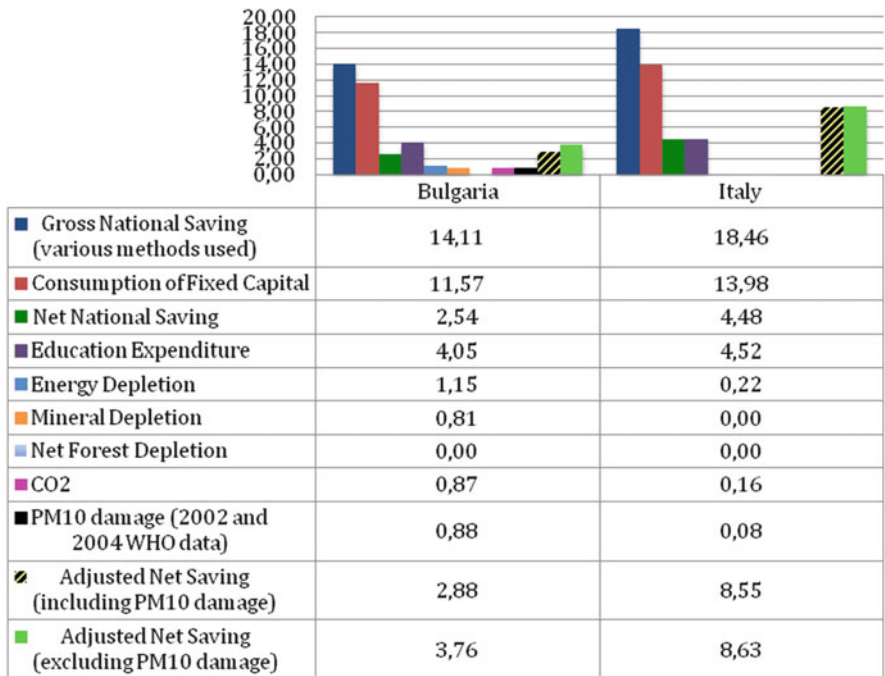


Fig. 7.2 Indicators of Human Development Index (HDI) for Italy and Bulgaria. Source: Human Development Reports; <http://hdr.undp.org/en/reports/>

risks. The study of Geert Hofstede shows greater proximity between the Bulgarians and the Italians, rather than between them and Americans and Russians. The indicator “power distance,” however, shows greater authority of government in Bulgaria than in Italy. For Bulgarians (70 points) as compared to the Italians

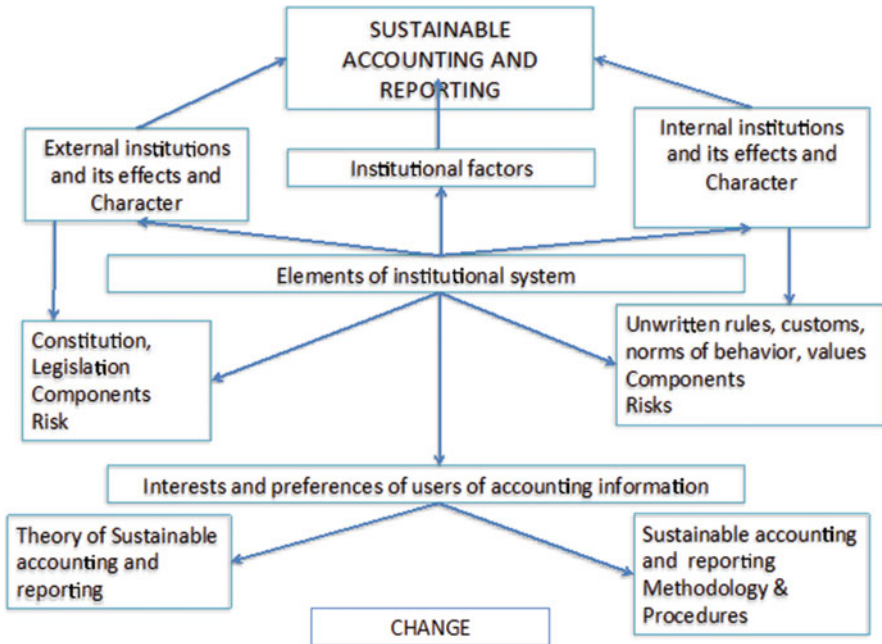


Fig. 7.3 Influence and interaction of institutional factors on sustainability accounting and reporting

(50 points), “the state is responsible.” In “socialism” “Everything belongs to the state, everything comes from the state,” and it is expected all actions and decisions.

The “socialist period” has affected negatively on the “individualism” of Bulgarians. Important from the view of long-term sustainability is the proximity between the Bulgarians and Italians indicator “uncertainty avoidance,” i.e., “The dimension Uncertainty Avoidance has to do with the way that a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? This ambiguity brings with it anxiety and different cultures have learnt to deal with this anxiety in different ways.... The extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these is reflected in the UAI score” (Hofstede 2012).

With 10 points less than the Italians, Bulgarians think they can control the future. UAI for Bulgarians is 85 and for Italians 75 in contrast with Americans and Russians. For a more thorough analysis of internal institutional factors, prevailing “rules of the game” will use the large European survey “European Values Survey” for 2008–2009 – fourth wave, covering 44 countries, including Bulgaria (European Value Survey 2009).

The study raises the question of “transit of values” between European countries. This is otherwise provided DiMaggio-Powell thesis of “institutional isomorphism”: “Isomorphism is a constraining process that forces one unit in a population to

resemble other units that face the same set of environmental conditions” (DiMaggio and Powell 1983: 149).

This is one of the conclusions for the “transit of values” in Bulgarian society at this stage: “The broad scope of previously impaired only recognized values is transported smoothly if European values in their abstract form. Transportation is soil mass aspirations for values whose contents are vaguely perceived. . . . Transit of values is not a real revaluation of values” (Fotev 2009: 14) and “In short, institutions that are “par excellence” European form and no trace of ‘Bulgarian adaptations’ function in Bulgarian conditions unsatisfactory and even stalled” (Fotev 2009: 15).

Religious values have undoubtedly a direct impact on fundamental social values such as solidarity, tolerance, and respect for the rights, freedoms and human dignity, good public moral. Religion is defined as something very important in the Bulgarian society than 18.5% of people as very important by 35.9% (Fotev 2009: 21).

About empathy, the study found “deficient social values” in Bulgarian society. An example of a direct relationship to sustainable accountability is “carrying out voluntary activities.” 98.9% of Bulgarians do not carry out voluntary activities in favor of social organizations (Koev 2009: 69).

The family is the supreme value of the Bulgarians. It is stated in the study as the primary value of 85.1% (“very important”) and by 13.3% as “very important” (Dimitrov 2009: 86). Therefore, the family would be advisable to find a place in sustainable accountability.

Responsibility, which is the mainspring of sustainability reports, is cited as an important behavior of 80.3% of Bulgarians. Tolerance and respect for others are important to 65%. Altruism is important for only 33.9%. As a result, the data lead me to agree to a conclusion by one of the authors of the study, Prof. Georgi Dimitrov, that, at the beginning of twenty-first century, Bulgarian people are “before-society state” (Dimitrov 2009: 106). There are drastic differences like this that “what in Western Europe is a critical public opinion” in Bulgaria was “public opinion.” Bulgarians do not notice “others around them.” Until Bulgarians start doing it – there is no way to change the nature of their lives.

Can be there an “institutional model” in accounting, including the field of sustainability accounting and reporting? The answer to this question for a long time had a positive answer, including in states “in East of the Elbe¹¹.” The institutional model of accounting was applied first in environmental accounting. Actually, environmental accounting arises under the influence of institutional economic theory. Why and how? It is obvious that the “organization operates in a unique geographical and environmentally sensitive location” Adams and McNicholas (2007).

¹¹It is an expression of the time the “Iron Curtain” “East of River Elbe” means “the countries of the Soviet bloc.”

Institutional paradigm¹² allows for the collection and accumulation of significant amounts of information on the functioning of various institutions that are associated with the development of sustainable accountability. It examines the society and economy as a complex nonlinear system in their entirety, as an object of research is those relationships between its component parts of the whole. The institutional environment, in which there is a subsystem, has a markedly meaning. These characteristics of the institutional approach enable it to be precisely positioned at the base of the creation of a conceptual framework for sustainable reporting of the companies. Such a framework can be used to create a report on sustainable business that serves the process of decision-making at various levels.

One of the most important roles of businesses is connected to the reception, processing, and formatting of information. Accounting plays a key role in the modern world; companies and their management structures are overwhelmed by information flows. Therefore, for companies, information is not a scarce resource. The issue is how these information flows should be handled (Simon 1955) and how this can be effected in the accounts to be used properly and in the interest of sustainability of huge information sweeping companies.

As a general theoretical basis for establishing such a framework of sustainability, the following theoretical concepts can be of use for accountability:

- Oliver Williamson's managerial theory of the firm or "managerial utility maximizing model," which is based on assumptions that the manager has "expenses preference" for maximization of utility derived from amount spent on staff, additions to managers salaries and benefits in the form of perks, and "discretionary profit" which exceed the minimum required to satisfy the shareholders – and optimization of company management, management by addressing the weakness resulting from these assumptions of management companies.
- Behavioral Theory of the Firm. The behavioral model of the firm caused a significant influence on the understanding of the firm and on the instrumental parts of economic science including accounting (Barnard 1938; Simon 1976; March and Simon 1958; Cyert and March 1963; Kahneman 2003).
- Elinor Ostrom. Basically her theoretical position, which is applicable in her study for understanding the diversity of communities and their "institutional diversity" and including the cultural communities. Understanding of "our," "Bulgarian commons," and the "Italian commons," working together within the gas group SGR. Ostrom's argument, that communities that are closest to him know the problem and manage it in the best way. Ostrom's research is important as a basic institutional methodology and the introduction of anthropological and sociological methods, combined with probability theory and

¹²The scientific paradigm includes some set of assumptions or postulates. They are characterized by a general formulation of the problem-adopted rules for analysis and terminology. The scientific paradigm is characterized by a common methodology of research.

Table 7.3 Comparison of managerial and behavioral approach

Objective	Managerial	Behavioral
Solutions	Sales – revenue or managerial utility	Satisficing (the best option available) and executable (optimization is replaced by satisfaction)
Ownership vs. management	Different	Different
Decision-making	Optimizing	Practical rule (rule of thumb)
Environment	Positive	The role of management is to achieve a “quasi-resolution” of conflict and uncertainty avoidance. Doubt/uncertainty

culture-related factors for the study of economic success and sustainable communities (Ostrom 2005).

- The Theory of Human and Intellectual Capital. The theory that valued the role of human factors and his development (Becker 1964) to the “intellectual capital,” knowledge¹³ as a value driver, and its place in the organization (Garnett 2009). This formulation has been tested for involvement in accounting theory by many authors including in social and environmental accounting (Gray et al. 1996; Gray 2001: 9–15; Pedrini 2007: 346–366; Andriessen 2001: 204–14 and others).

These four institutional approaches do not replace but complement the creation of an adequate theoretical basis for sustainability reporting (Table 7.3).

In the essence of these theories, argued by Paul DiMaggio and Walter Powell, is the thesis “that the engine of rationalization and bureaucratization has moved from the competitive marketplace to the state and the professions” (DiMaggio and Powell 1983: 147–160).

Government regulations in Italy and Bulgaria and supranational EU and the characteristics of the profession of accounting community are crucial to case studies of adoption of sustainable reporting CityGas as part of the Italian group SGR, but in the Bulgarian institutional environment.

“Institutional” literature in Bulgaria is a very scarce. After removing the absolute domination of Soviet economic paradigm in Bulgaria, it was replaced by scientific thinking and teaching of Marshall-Samuelson economic concept. The neoclassical approach invaded accounting theory as well. Thus, the Soviet paradigm in Bulgaria was replaced entirely by neoclassical economic theory, which began to carry out its role as the only one correct theoretical formulation. Institutionalism is still exotic in Bulgaria, even in the general economic theory. Research in institutional economics

¹³Human capital theory, developed primarily by Gary Becker in Human Capital, published in 1964

has been developed mainly on the basis of macroeconomics and microeconomics, as a theory. The newest summarizing work in institutional theory is the book *Institutional Economics. Possibilities and Unused Potential*, published in March 2012 (Popov and Sedlarski 2012).

A special topic for researchers in Bulgaria is the transaction costs. They can be observed on various examples of scientists across different fields (Radev 2009; Ivanov 2007; Kosuliev 2009; Gantcheva 2000).

In terms of statistical measurement of transaction costs, there is some progress (Sedlarsky and Ankova 2010: 60–80), thanks to the efforts of authors in the field of economics, agriculture, engineering, and law (Chobanov et al. 2007: 5–14).

Bulgaria still does not hold non-financial reports of companies excluding statistical reports –

neither environmental nor social nor sustainable. There are some companies that are subsidiaries of European, American, or Russian corporations which publish environmental sustainability reports, like the parent companies, or have elements of disclosure of environmental and social activities, among which is CityGas. However, no systematic account sustainable company compiles and publishes such a report.

Therefore, the institutional paradigm is ranked in the Bulgarian research in the field of accounting. The first textbook on institutional economics was published in 2007. It presented a text dealing with the place of transaction costs in accounting theory and practice from an institutional perspective (Nesheva-Kiosseva 2007). It also presents problems regarding the efficiency of transaction costs, reducing their uncertainty by defining them in the accounting matters, as well as their treatment in management accounting. Institutional researches in the field of accounting are also developed in Bulgaria and with collaboration with Italian scientists (Baldarelli and Nesheva-Kiosseva 2011).

The “society-value problem” is examined from Bulgarian team of sociologic scientists. They have highlighted the value system of the Bulgarian society and the changes in it (European Values Survey 2009).

Bulgarian accountancy profession traditionally continues to be under the influence of Russian literature. Scientific literature in Russia, exploring the problems of institutional theory is abundant. Russian scientists have already made significant contribution to the practical application of institutional theory in accounting and even in teaching accounting courses. Researches of Liubov Chaykovskaya should be noted in the area, where she developed institutional models for financial accounting (Chaikovskaia 2007a, b, 2009).

The “value problem” and the value management of a company in the sense of institutional paradigm in Russian literature are touched in the works of Timur Kramin. His works have a direct connection with the problems of accounting analysis from an institutional point of view (Kramin 2007). Kramin developed a concept for managing the company’s value. He argues the institutional nature of the formation of the value of the company. A key point in its concept is proving the key role of intellectual capital in the management of the value of the firm, founded on the principles of institutionalism, unproven nature of the institutional formation of the value of the

company. The basic concept is the position of the key role in the management of intellectual capital. Kramin developed a research methodology and management system for valuation of a company through the performances of the institutional paradigm, in which the main element is the intellectual capital of the company.

Following the basic principles of institutional theory, sustainability accounting can apply institutional model of accounting, whose main functions and principles, based on institutional theory, are the principle of innovative changes in accounting, the principle of gradual change in accounting, the principle of openness of information flow, and the functions of institutional changes in accounting as a condition for its further development (Fig. 7.3).

7.2 The Case Study of SGR Group Italy

The study of the case (Spence and Gray 2008; Bebbington et al. 2009) follows the dynamics of the research case (Naumes and Naumes 2006) as we wish to understand how the dynamics of the institutionalist theory can be applied to it.

The tools used are semi-structured interviews addressed to the entrepreneurial team and corporate management. Such interviews have been carried out by the research group during the company visits, in Italy to the SGR Group and in Bulgaria to the CityGas company, and took place on a monthly basis, lasting about 2 h each, during the years 2009–2011 and 2012. The interviews were aimed at ten corporate members considered important for the purpose of the research investigation. Finally the interviews were transcribed and compared with the interviewed members of the company.

A second source of data collection derives from the consultation of corporate websites and the analysis of corporate documentation: decisions of the board of directors, internal communications pertinent to sustainability, drafts of sustainability reporting, corporate books regarding company history, leaflets and pamphlets relating to initiatives promoted about the theme, and corporate publications relevant to the 50th anniversary of its constitution. Furthermore, we participated in focus groups in the planning of initiatives aimed at raising awareness on the theme of sustainability in schools, social groups, and local institutions including the chamber of commerce. Finally we were able to directly observe the behavior of the committee for sustainability during workshops, seminars, and thematic conventions, in which we participated during the planning and execution stages.

The SGR Group is an unlisted mixed holding company based in Rimini (Italy). It is made up of several companies, all of which are still family owned. In over 50 years of business activity, the SGR Group has left a significant mark on the history of the distribution and sale of methane gas in two Italian regions: the Marches and Emilia Romagna region. It has grown steadily through acquisitions, the winning of tenders and strategies for sector diversification.

In 2005, the SGR Group went to Bulgaria to construct a gas network for domestic and industrial use in the region of Trakia. The industrial plan for the

Table 7.4 SGR Group: business areas

Distribution of natural gas
Sale of natural gas and electric energy
Planning, construction, management and maintenance of heating plants in condominiums for which they carry out heat management
Energy service and district heating
Assembly of solar power plants and sources of renewable energy
Assembly and maintenance of heating and conditioning plants (for families, businesses and large plants)
Assistance and domestic or company emergencies intervention available 24 h a day
Global service technicians specialized in the gas sector even for assistance abroad
Utilities technology
Congress center

Table 7.5 SGR Group: company's performances

Financial highlights	2009	2010
Turnover	211,000,000	247,000,000
EBITDA	28,000,000	43,000,000
ROI (return on investments)	9.46%	13.75%
ROE (return on equity)	13.48%	15.14%
ROS (return on sales)	13.34%	18.27%
Net result	19,000,000	25,000,000
Number of employees	249	287

Table 7.6 SGR Group: technical and commercial data

Technical and commercial data	2011	2010
Gas distribution clients	180,000	169,000
Electric energy clients	6000	7000
After meter clients (heating plants, boilers, conditioners, global service domestic, and large structure clients)	40,000	22,000
Towns served	44	42
District heating clients	1400	1314
Energy service clients	1000	919
Congress center clients	91,000	40,000

next 10 years forecasts the doubling of the current catchment area, which is aimed at categories of clients and businesses specified in the Table 7.4.

In 2011, the group reached a turnover of over 251 million euros and had 328 employees. Two tables showing its performances between 2009 and 2011 follow (Tables 7.5 and 7.6).

A summary of the most significant historic milestones in the company's development is provided in Table 7.7. The figures below illustrate the group's organigram (Fig. 7.4) and its stakeholders map (Fig. 7.5).

Table 7.7 SGR Group historic milestones

1956	Aldo Domeniconi founded Società Gas Rimini S.p.A., the first company in the area dedicated to the management and distribution of gas for heating and household use
1959	Development of the distribution network from the city to the province of Rimini with the most innovative plants in Europe
1970	Connection to the national methane gas pipeline SNAM. Acquisition of new licenses and extension of the network to the Marche region
1998	ISO 9001 system for quality certification (upgraded to Vision 2000 and ISO 9001 standard in the following years)
1999	Creation of Utilia Spa, a company supplying technological services to the energy and utilities sector
2001	New administration and operative base (headquarters) and opening of congress center in Rimini
2002	Restructuring of ownership and creation of Holding GasRimini
2003	Privatization of the gas sales market: SGR aims at the quality of service and competitive prices
2005	International tender adjudication for the distribution and sale of gas in Trakia and the construction of a 1700 km gas pipeline network. During its first 3 years, the subsidiary company CityGas Bulgaria won three prestigious awards: for its contribution to the energy sector, as major investor of the year in the energy sector, and annual Award for the energy sector
2006	The SGR Group won the Milano Finanza Creatori di Valore award in the second edition of “Milano Finanza Company Awards 2006”
2007	Privatization of the electric energy market into which the SGR Group made its entrance
2008	Introduction of the ethical code and organization, management and control model in conformity to the Executive Order 231/01
2010	Acquisition of Technoterm Bulgaria and the project finance for the Trakia Project with EBRD/BERS – European Bank for Reconstruction and Development and with the Bank Intesa San Paolo
2011	Implementation of the group’s first sustainability report. Attained the ISO 14001 (Environmental Management System) and BS OHSAS 18001 (Occupational Health and Safety Management System) certifications

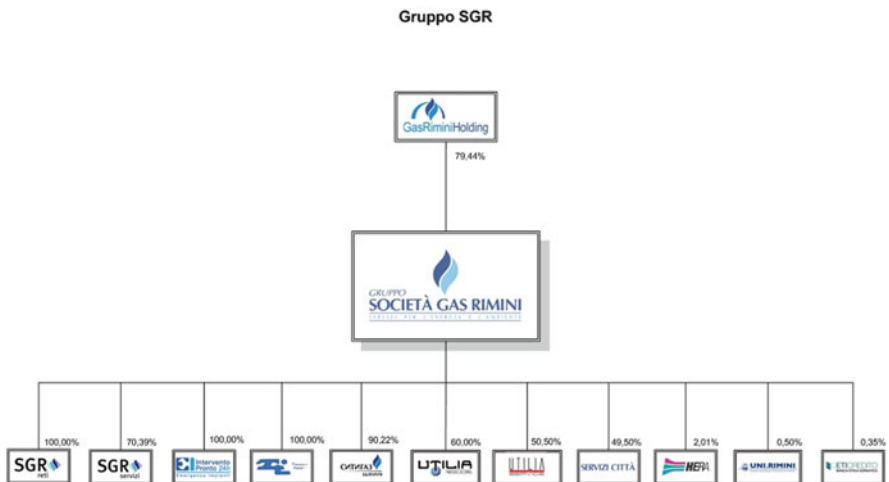


Fig. 7.4 SGR Group: organigram

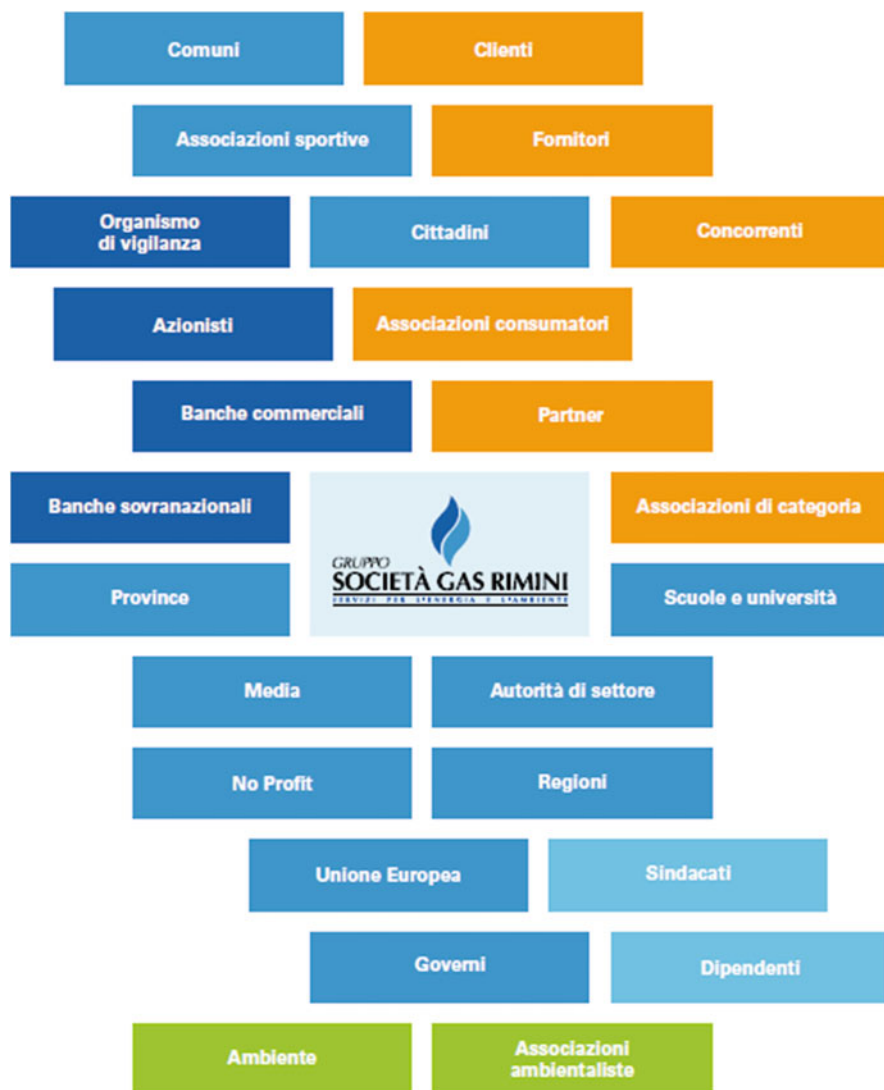


Fig. 7.5 SGR Group: stakeholders' map

Municipalities	Clients	
Sports associations	Suppliers	
Supervisory Committees	Citizens	Competitors
Shareholders	Consumer associations	
Banks	Partners	
Supranational banks	Trade associations	
Province	Schools and universities	

(continued)

Media	Sector authority	
No profit organizations	Regions	
European Union	Trade unions	
Governments	Employees	
The environment	Environmental associations	

SGR Reti is the company belonging to the ownership group of gas distribution network plants and holders of natural gas supply licenses. SGR Servizi is the company which manages sales relations with clients. Utilia is responsible for creating and developing software package management systems and application modules, specialized for the energy and utilities sectors. CityGas is the Bulgarian company controlled by SGR which was joined by Technoterm in 2010. In 2004 SGR signed an agreement with Hera, a company listed among the national leaders of the sector, to which they ceded 20% of SGR Servizi. Hera is an Italian company listed on the stock exchange for the joint procurement of bulk gas and the direct sale of electric energy (collaboration between SGR S.p.A. and Hera Comm S.p.A., trading company of the Gruppo Hera and Hera Trading). Hera Group represents the closest best practice in the sector, being the territorial corporate leader (for 10/15 years) as well as one of the most important players in the sector at a national level. The Hera Group is a huge produce of a process of concentration generated by laws and the rationalization of operators in the sector. In its hugeness, caused by the combination of several companies taken over in time, lies its managerial, coordination, organizational homogeneity, and cultural and structural weaknesses. Hera has influenced the implantation of the SGR Group's sustainability report.

The SGR Group has always considered corporate social responsibility and sustainability an integral part of its mission, its values, and its strategies. It is a foundation essential in the construction of solid relations with clients, suppliers and employees SGR (2012).

Since 2008, it has implemented processes, tools and procedures which represent pieces of a single mosaic of responsible and sustainable business management. The choice of drawing up a sustainability report is part of a process started years ago, but not always formalized. It is therefore important as a voluntary tool of management, accountability and social communication. In the hive of sustainability and corporate social responsibility, there are other already existing tools which have become an integral part of corporate processes. These include reference codes to support, both within and outside the company, the commitment to rethinking and reconstructing economic standards, by respecting the balance between individuals and between company productivity and the environment (i.e., the management and control model for the prevention of corporate crime; the ethical code; the balanced scorecard approach).

The project entitled "CSR and sustainability report" which involved all of the group's companies was presented as an insert in the 2009 report. The first sustainability report is relative to the year 2011 and will be published and presented along with the annual report and consolidated in May/June 2012. In order to better understand the phases of the sustainability report, we outline in the following tables, the process which preceded the writing of the report. This process has been called the sustainability plan and has been summed up in Tables 7.8 and 7.9.

Table 7.8 The sustainability plan of the SGR Group

Governance sustainability tools	
Commitment	Action
<i>Promote the management and control model ex D.lgs 231/01</i>	<p>2008. Adopted the new management and control model ex D.lgs 231/01.</p> <p>A supervisory committee was set up in every company of the group, in order to supervise and control the effectiveness, functioning, and observance of the model.</p> <p>Continuous training inherent to D.lgs 231/2001 and the model.</p> <p>Publication of the Model 231 on the Internet site www.sgrservizi.it and the company intranet</p>
<i>Promote the group's ethical code</i>	<p>2008. Adopted the Group's new ethical code.</p> <p>Sharing the code: The SGR Group requested all those collaborating in company activities to bring their conduct in line with the practices outlined in the current code.</p> <p>Publication of the ethical code on the Internet website www.sgrservizi.it and the company intranet</p>
<i>Publish a single sustainability report for the whole group in coherence with the initiatives of Global Reporting GRI</i>	<p>2011. Writing of the sustainability report covering all the dimensions:</p> <ul style="list-style-type: none"> • Economic sustainability • Social sustainability • Environmental sustainability
<i>Promote the sustainability report and the culture of sustainability</i>	<p>2011. Numerous internal and external initiatives to promote the culture of sustainability:</p> <ul style="list-style-type: none"> • Periodic meetings with the Association Children of the World on the theme of CSR • Collaboration with the University of Bologna, seat of Rimini and the University of Urbino to deepen the theme of CSR • Support and external consultants to start up the process of the accountability of sustainability • Creation of a CSR Committee to monitor and stimulate sustainable practices within the company <p>By 2012. Presentation of the sustainability report at the general assembly along with the presentation of the financial report. Inclusion of the sustainability report, ethical code, and management and control model in the welcome kit handed out to new employees.</p> <p>Promotion of the sustainability report on the website www.sgrservizi.it</p>

Table 7.9 Summary of stakeholders' commitment

Commitment	Action
People (employees)	
<i>Increase interviews with people</i>	2005. Introduction of a survey on the internal climate and a questionnaire to assess satisfaction. The survey is carried out every year in the month of July. These are fundamental tools in the processes of continuous improvement and the involvement and development of employees. 2010. Area meetings to discuss the results of the survey and plan actions for improvement
<i>Increase the training and awareness of employees regarding the themes of safety, to reduce the frequency and gravity of industrial accidents</i>	2010. Courses on Safety for a total of 973 h concluded
<i>Implement the training scheme and apply it to all members of the companies</i>	2010. Training activities become increasingly more important. The total number of training hours amounted to 10,441 taking into consideration both internal and external training (refresher courses, training, conventions, etc.)
<i>Develop activities to reconcile life and work</i>	2010. Two questionnaires were attached to employees' paychecks to assess the feasibility of extra courses beyond working hours and verify the degree of interest expressed in the project of life and work reconciliation promoted by legislation number 53/00
<i>Increase internal communication</i>	By 2011. Restyling company intranet and provision of an area dedicated to sustainability, which allows members to send suggestions and advice about improving corporate sustainability. 2011. The Mia Voce Project: Setting up of a wall at the Rimini seat dedicated to employees' messages. Each month, in agreement with the management, a theme is proposed and employees can express their opinions about it. Plenary meetings, which generally take place once or twice a year
<i>Diffusion of the culture of sustainability and a corporate atmosphere based on shared values</i>	2011. Initiatives regarding information and awareness about sustainability aimed at internal and external members of the group
Clients and suppliers	
<i>Define systems of periodic surveys to assess the degree of client satisfaction</i>	Half-yearly interviews conducted by the Authorities for Electric Energy and Gas A project to develop internal interviews has been launched and carried out to clients who have had recent dealings with the companies of the SGR Group

(continued)

Table 7.9 (continued)

Commitment	Action
<i>Maintain and develop the activity of information aimed at saving energy, protecting the environment and safety</i>	2010. Distribution of Water Conservation Kits to clients made up of hydraulic dampers and low energy fluorescent light bulbs
<i>Promotion of energy efficiency in the final uses</i>	2010. Making end users aware of responsible energy consumption
<i>Promoting respect from suppliers for the principles which have inspired the Organizational Model of the SGR Group</i>	2011. Requested adhesion to the same principles which inspired the Group's Management and Control Model
<i>Support where possible the development of purchasing processes with features of eco-sustainability</i>	The diffusion of electronic negotiation tools to replace, where possible, traditional paper-based processes
<i>Define and promote supplier assessment systems</i>	2011. The launch of the development of a project for <i>supplier assessment</i>
The environment	
<i>Adopt new guidelines and procedures of the group relative to environmental management</i>	2010. The start of work procedures from the attainment of the following certifications: ISO 14001 System of Environmental Management BS OHSAS 18001 Health and Safety Management Systems
<i>Increase the activity of awareness about energy saving use</i>	2011. "M'illumino di meno." National initiative aimed at making people aware of an intelligent use of electric energy in which the SGR Group participated through a symbolic action: with a gift token of one low energy consumption light bulb + a handbook of good daily habits! Raising awareness about the use of alternative energy sources. 2011. Relations with schools were strengthened through the organization and promotion of the theme of energy efficiency. Progetto ERRE, which stands for RENEWABLE ENERGY AND EMISSION REDUCTION, was promoted by the Council of Rimini
<i>Rationalize energy consumption in Bulgaria by developing a project of energy efficiency</i>	2011. CityGas Bulgaria becomes the official representative in the country in raising awareness on the theme of energy saving and energy efficiency through a communication campaign The message is the development of a culture of respect for the environment through the reduction of current polluting heating systems
Institutions and communities of reference	
<i>Make channels of communication coherent and transparent, drawing inspiration from the values of sustainable development and the</i>	2011. "La mia energia è..." institutional publicity campaign • New SGR Services website • Creation of sales leaflets, 2011 Calendar and

(continued)

Table 7.9 (continued)

Commitment	Action
<i>participation demands of all interlocutors (clients, suppliers, employees, and territory)</i>	2011 Diary <ul style="list-style-type: none"> • Creation of Company Profile • New layout of Clients' Offices • Sales letters • Creation of information areas within the bill
<i>Promotion of a dialogue with local, national and international institutions</i>	2011. Collaborative relations with public institutions on a national and international scale Proactive role in the sector and multisector to promote themes of sustainability Energy Efficiency Project in Bulgaria with the EBRD – European Bank for Reconstruction and Development and the Ministry of Bulgaria. CityGas Bulgaria becomes the spokesperson for raising awareness in the country on the theme of energy saving and efficiency through a widespread campaign of communication aimed at developing a culture of respect for the environment by means of reducing current polluting heating systems. The average natural gas consumption per capita in Bulgaria is 2.5 times lower than the EU average
<i>Management of plants in the territory and protection of the biodiversity of the landscape</i>	Improvement and conservation of the natural heritage in areas in which there are plants or green areas near plants (Progetto Natura 2000 http://www.natura.org/)
<i>Support to the community</i> <i>Commitment to the growth and development of territories through the support of initiatives, social, cultural, and sports events</i> <i>Some examples are given in the right-hand column</i>	2010. Special recognition given to Micaela Dionigi, Chairman of the SGR Group: <i>for the quality of the hosted internships</i> , from Uni. Rimini (company consortium for the University in the Rimini area), and <i>for the sensitivity shown in the support of better healthcare for everyone</i> , from Ausl Rimini 2011. Economic contribution toward the acquisition of two buses to transport the disabled and elderly and to transport schoolchildren Economic contribution toward the acquisition of garden games for the nursery school Economic contribution in favor of the Health Authority of Rimini for the purchase of a multilayer CT scanner and van for mammogram screenings Economic contribution to the Istituto Oncologico Romagnolo Purchase of a defibrillator placed inside the congress structure Economic contribution to numerous cultural

(continued)

Table 7.9 (continued)

Commitment	Action
	<p>initiatives including “International Study Day” of Pio Manzù and the painting exhibition “Paris. The marvellous years. Impressionists against the Salon as well as Caravaggio and other 17th century painters” and the Plautine Feasts</p> <p>Economic contribution in favor of Crabs, the basketball team of Rimini, and numerous other sports associations</p> <p>Economic contributions and support of events promoted and organized by the towns of Rimini, Sarsina, San Leo, Gabicce, Coriano, Talamello, and Pietrarubbia</p> <p>Other initiatives: <i>Rimini Onlus Solidale</i>, <i>Progetti Tanzania e Bangladesh</i>, and <i>Noi e l’arte</i></p>
<i>Collaborations with the university</i>	<p>2011. Inauguration at the SGR Congress Centre of the new Rimini seat of Bocconi Alumni Association (BAA) to promote initiatives for values gained to benefit various professional families operating in our area</p> <p>Dialogue with all the institutions operating in the territory (confederation of industry, universities, the Council of Rimini, the Province of Rimini, foundations and other cultural associations, high schools, local and nonlocal banks, other sector associations, etc.) with the aim of bringing, even to the province, events and informative debates which give rise to comparison and stimulation and which are usually more common in city areas</p> <p>Collaboration with the University of Bologna, the seat of Rimini, and the University of Urbino to deepen the themes of sustainability</p> <p>Collaboration with the junior schools, the University of Bologna, the seat of Rimini, and other educational bodies in work-related learning projects</p>

What follows (Table 7.9) is a summary of commitments to the diffusion of sustainability, with reference to the categories of employee stakeholders, clients and suppliers, the environment, institutions, and communities of reference.

In the process of the sustainability implementation of the SGR Group, since the early stages, the mechanisms/structures of the institutionalist theory can be found again and summed up in the following way:

- Definition of the working group, through the involvement of offices and especially processes mainly affected by data gathering

- Identification of the items of information to gather and of indicators to produce
- Writing of a commentary index
- Structuring of the “work plan” to gather data and other items of information
- Drawing up a draft of the document on the basis of the commentary index and internal diffusion of the draft document among interested persons
- Editing and validation of draft by the management
- Final drafting of the document

In particular the dynamics demonstrate an adhesion to the coercive/normative and mimetic/cognitive structures. We are able to observe the coercive aspect present since the pre-implementation stage – this is due to the management’s choice of introducing a whole series of new tools including new management and control models, certifications, the ethical code, etc. (see Tables 7.8 and 7.9). This is because both the law and the market rules force the company to adjust to the behavior of the leading companies in the sector to obtain the level of legitimation necessary for survival. These very reasons have influenced the choice of subsequently adopting the sustainability report.

At the same time, we can also observe the normative dimensions, which are highlighted in the numerous project activities aimed at the various categories of stakeholders and designed to raise awareness and to create a culture of sustainability at an internal and external organizational level through a relational network with institutions, civil collectivity, professional orders, and universities. That is in so far as the drive to activate a more “formalized” process is concretely applied, and the sustainability report is a concrete expression of such a process, based on preordained values shared by the company and key stakeholders (legitimate authority of norms and values (Scott 1995)). This aspect is observed in a profound way in the company mission.

The third structure, mimetic/cognitive, is concretized in the case in question through an attempt at social construction in the consolidation of relations with stakeholders and a reinforcement of the reputation (Baldarelli and Gigli 2014; Cho et al. 2012), which is based both on the image of a proactive company and the required path of sustainability. In this case, the fundamental motives are, in the current phase of research, difficult to identify clearly, in particular if these are based on a strategic orientation with ethical foundations, which goes beyond a simple imitation of the sector market leader (Hera Group) or if we are dealing with a simple imitation of what happens within the surrounding area.

7.3 Institutional Structures and Sustainability in SGR Group Italy

In the mission of the SGR Group, we can mainly observe the normative structure, which develops from the background of values which have led to the orientation toward the balance of sustainability.

The sustainability of the mission of the SGR Group is structured around the following “milestones”:

- The values profile of the founders and the business and management heads
- An attention to CSR, taking care of the territory, the local community and the environment, the development of human resources, service, transparency and social relations, and the centrality of dialogue with the stakeholders

The mission, which the president told about, is as follows: “We are known as an innovative and dynamic multi-utilities company, respectful of the environment which is greatly tied to the territory and the community.” The company slogan draws on some of the most important values that the company embodies, “My energy is local, loyal and social,” which are expressed in the ethical code and attributable to the so-called system of perennial values (Catturi 2007) of an anthropological nature, to which every other corporate value is connected.

In particular, coherence is seen as a commitment to the transfer of values, which define the underlying corporate governance, into everyday actions (Coda 1988).

As gathered from the interviews and meetings with various corporate heads (marketing manager, organizational, quality, safety, and environment managers), SGR puts ideas, project choices, and strategies before two questions: “Are we dealing with an effective answer with regards to the evident or latent expectations of one or more category of stakeholder?” and “Are we dealing with a choice/action capable of consolidating/fostering the competitive advantage of the company?”

Similarly, from interviews conducted with the company heads, it is evident how these values are experienced and transmitted by the owners and management and spread throughout the entire organization. In other words, they reinforce the group’s corporate culture, implying the anthropological culture which is reflected in accountability (Catturi 2003; Gray et al. 1997).

The values therefore constitute the first level in the orientation toward sustainability, foster social cohesion, and favor a pathway shared by various stakeholders which is summed up in the ethical code and sustainability report.

Another feature of sustainability in the group’s mission is the emphasis placed on reciprocal trust, transparency, and corporate reputation. SGR Group “wants to be the company of trust for its clients and the best place in which to work.” In an interview with the president of the Group, Dionigi Micaela, who is a charismatic leader and reference point for the company, values emerge which have been inherited from the founders and interpreted by the leader in coherence with the changed internal and external environmental context. Throughout difficulties and challenges, she has combined humility with tenacity, determination, the spirit of sacrifice, and energy. She started in the company from the bottom, and thanks to her passion, motivation, and a great capacity for listening and interacting, Micaela established herself as chairperson. Her relational approach can be translated into a closeness to the principle of the “door being open” to each collaborator. It can be said that the SGR Group is a sustainable company thanks also to the female genius of its chairperson, who has strongly desired the sustainability project and who has already announced it in the 2009 annual report in the management breakdown

through an insert dedicated to sustainability. This relationally behavior is expressed moreover in the ability to acknowledge each person's work value. As she said during the interview: "I acted as a friend" now "it is the company which acts as a friend." Before (but even now) we were and are still a family.

Even the words of the CFO, the chief operating and financial executive, testify to an exciting corporate development taking place in which the example of ownership is a message which shapes action, just as interviews to other key figures in the company's history (Rimondini 2009) have confirmed great entrepreneurial skills, the solidity of the partners, and the charisma and dynamism of the founder. Aldo Domeniconi laid down the necessary conditions for the construction of a "personal" service, which has created a strong sense of identification with the territory. The importance of relationships comes from the past; going back 20–30 years to the history of the group's business activities, the supply of methane gas to the area and the country represents a strong relationship with the territory. The group is a company "of the territory" (Matacena and Del Baldo 2009; Del Baldo 2010) which spreads the culture of sustainability through a wide variety of initiatives. It puts itself forward therefore as an actor in a model of sustainable local governance, promoted by a network with public and private operators (universities, institutions, nonprofit organizations) which activate mechanisms of participation in the socio-economic fabric and pathways to sustainable development aimed at the common good.

The centrality of relations is expressed in client orientation, as it is the client that SGR wants to "make happy." When SGR developed the infrastructural network of potential clients, it perceived the importance of service and decided that it "was happy," which marked a historic moment of change, like the one being currently experienced in Bulgaria. There, the group's company is working to raise awareness of the service and to create a network. SGR has a "close" approach to the client and is able to listen, and this allows the company to "explain its business activity and account for its profit." From a survey on satisfaction based on interviews conducted by the authorities of the sector in order to monitor the service level of Italian companies, it emerges that the group is seen as qualitatively superior to the national average. That is to say that it is the result of investments made to support the quality of service, safety, orientation toward social responsibility, and eco-sustainability.

The centrality of relations lies in the centrality of the person: Over the years, the organization has become less hierarchical and increasingly more orientated toward teamwork, aiming to seek a dynamic balance between singular dimension and plural dimension.

From the interviews conducted with the sales manager of the group, it is evident that values contained in the corporate mission are shared and embraced in the relationships between employees: professionalism, dedication to work, simplicity in colleague relations, and reliability. In the next paragraph, we will analyze the relationships between institutional theory and governance of the SGR Group.

In the governance of the SGR Group, the coercive/normative structure settles at the drive exerted by values (regulations), which orientate the top management toward the sustainability and the adoption of tools which are suitable to start up

Table 7.10 Rimini Holding Spa: Board of Directors' deliberations

Date of summoning of the Board of Directors	Subject of deliberation
14 July 2004	Participation in a tender for a license of natural gas distribution and sale relative to the gas region of Thrace, in Bulgaria
1 July 2008	Approval of the ethical code and organization, management and control model formulated by the work group and appointed members of the relative supervisory committee (ex D.lgs 231/01)
17 November 2009	Confirmation of the supervisory committee for 3 years 2009–2011
30 March 2010	Analysis of the project of the energy efficiency project relative to the conversion of the internal plants of national clients and of potential Bulgarian clients of CityGas Bulgaria
29 September 2011	The company's Board of Directors assesses the offers of assurance in the sustainability report for the 3-year period 2012–2014

and consolidate the process. Thus, from an analysis of the minutes of the Board of Directors of Rimini Holding Spa (made up of five Chief Executive Officers), it is possible to identify various phases which demonstrate how governance has developed the pathway toward sustainability. The most important steps are listed in Table 7.10.

The Board of Directors has exclusive jurisdiction on the defining of the company and group's strategic lines and objectives, including the policies of sustainability and the review and approval of the sustainability report. The audit committee is a collegial organ, nominated by the Board of Directors, and is made up of a president and two employees of the group's organization and quality office. It was conceived as a listening channel and presides over the functioning and observance of the organization.

The sustainability awareness raising process, launched by SGR, has produced results even at the organizational level, influencing the micro-organizational processes and the corporate structure. For about a year the figure of the CSR Manager has existed, a "corporate presidium" of sustainability, who collaborates and interacts on a daily basis with other offices and the management, notwithstanding their tendency not to set rigid boundaries of activities and to allow the freedom of individual initiative. The offices providing reference points are those of marketing and communication, quality, safety, and sustainability. A committee is being set up for sustainable development, divided into areas and conceived as an organ of coordination and the diffusion of the culture of sustainable development and social responsibility.

Both the introduction of the ethical code and the sustainability report took place on the basis of a modality of participation and are centered on forms of stakeholder dialogue which have permitted the sharing of the values, principles, objectives, and corporate choices and a reinforcement of cohesion social capital. In the last two

processes which we have described, problems emerge which could be interpreted both from a normative and mimetic structure point of view. In the first hypothesis, the specific organizational role of the head of CSR can be inserted, but such a role can also be considered tightly connected to the mimetic structure, as it depends on the level of consolidation and authenticity of the organizational culture toward sustainability, rather than the opportunism tied to the emulation of competitors' behavior.

To respond to and contemporize the interests and objectives of the various stakeholders, SGR proceeded with the analysis of the stakeholders, followed by the stakeholder engagement plan, which includes diverse tools of consultation and communication. On the internal front, mention can be made of intranet, accessible at all corporate levels; the Internet, accessible at several opening levels; an internal blog; a newsletter; employee satisfaction questionnaires; informative brochures; company notice boards; plenary meetings (once or twice a year); and company meetings for the offices with the participation of management (monthly).

SGR's SR is a tangible sign of how the principles of accountability and inclusion have been making headway (Rusconi 2006) – the latter does not only imply stakeholder involvement but also stakeholder engagement which are both the results of dialogue and the reciprocal ability to listen (Michelon and Parbonetti 2010). As the president said: "The sustainability report is the result of an analysis which renews a process of dialogue with all the protagonists of the system and the context in which the SGR Group operates and which contains challenging objectives on which we will concentrate our efforts. It is the story of a live experience with the territory, the community and our stakeholders."

From the CEO's words, a value component emerges which demonstrates the presence of the normative structure. Furthermore, the balance of sustainability has been started up by a process entirely internal to the company involving everybody in the company. Indeed, the sense and economic value of the sustainability indices are shared and recognized at all corporate levels which collaborate to identify the specific aspects connected to socio-environmental impacts of decisions and activities, accounting for them according to a unique work methodology which highlights the level of adherence to the principles of social responsibility.

From an operational-management point of view, the sustainability report, which accompanies other tools of social accountability, such as the declaration of mission and vision statements, the ethical code, and the stakeholder map, outlines a work process functional to the growth and innovation of the company with respect to its identity and to the public nature of service.

The document consists of six sections (Table 7.11) drawn up in conformity to the guidelines of the GRI-G3 Global Reporting Initiative G3 (2008) and to the Italian Study Group for Social Reporting (GBS 2007).

The reference model for identifying the indicators of analysis of the relations with stakeholders, and directing the company toward the transposition of their expectations, is identified in the accountability standard AA1000 APS. The application level of the guidelines has been verified by a consultancy firm.

Table 7.11 SGR Group’s sustainability report structure

1. The identity of the SGR Group: history, developmental stages, corporate mission, and guiding values
2. Our people
3. Clients, suppliers, and partners
4. Shareholders and other financial backers
5. The environment and future generations
6. The local community

Source: Our adaptation from Gray (2000: 9)

The sustainability report represents the first attempt of such a report, at a consolidated level, by the SGR Group. It is a tool of voluntary communication in the process of social responsibility and sustainability, drawn up on a yearly basis and in conjunction with the financial report. In the definition of the contents, the results of activities of stakeholder involvement have been considered. Particular attention has been given to the determination and distribution of the value added (Figs. 7.6 and 7.7), as a standard of measuring the wealth produced and distributed by the company to all those who have contributed either directly or indirectly to its management. The balanced scorecard management model, adopted in 2011 in order to transpose corporate strategy into daily action, will support the process of integrating strategic objectives of social and environmental sustainability with medium- to long-term economic and financial objectives.

In the SGR Group, the sustainability report is a driver and tool and at the same time provides output about a process which incorporates the principles, models, tools, and practices of management and sustainable corporate governance.

The result obtained up to now seems to go beyond the mimetic structure, although the coercive influence remains due to the tie with the company territorially close to the market leader, which in this case is the Hera Group.

7.4 Sustainability Dimensions, Institutional Theory in the Case Study of SGR Group Bulgaria

In this section, we examine the possibilities of the company CityGas Bulgaria to create sustainability reporting, consistent with sustainable reporting SGR Italy using an adopted institutional approach. We start from the view that the company is placed in a specific institutional environment which functions more complex than pure market factors, including internal and external institutions. If this environment is well understood, and if we know about the institutions that set the “rules of the game,” the right decisions could be made, including on the issue of sustainability reporting and its contents, and its cost/benefits, without ignoring the market.

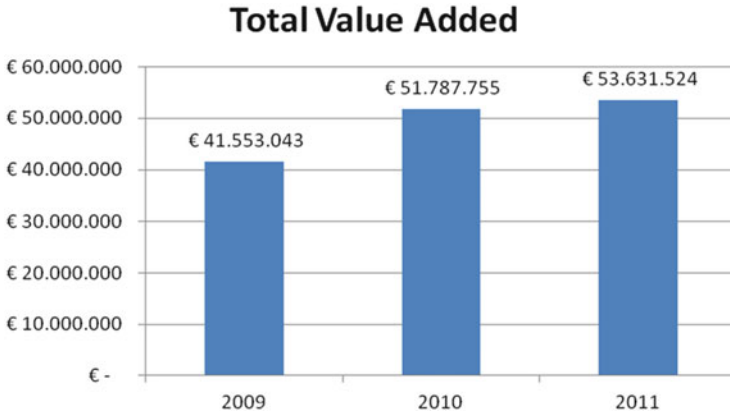


Fig. 7.6 SGR Group: value-added production

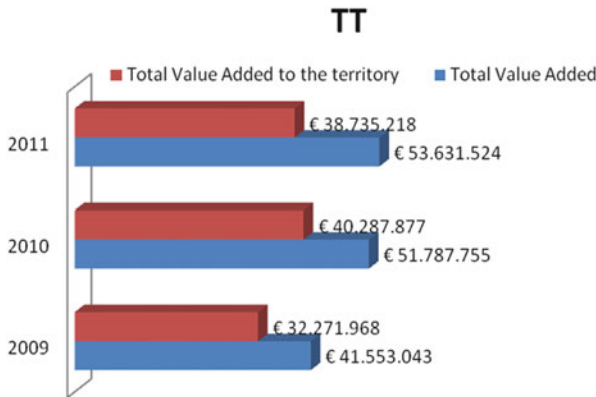


Fig. 7.7 SGR Group: value-added distribution

Sustainability may best be defined as the “capacity for continuance into the long-term future.” Anything that can go on being done on an indefinite basis is sustainable. Anything that cannot is unsustainable.

Sustainability of firms in a market environment may not be identical. In the literature long ago that speaks of “weak” and “strong” sustainability of their development, it depends on several factors (Ayres 1998: 1–16):

1. Weak sustainability

$$S_d F \frac{(H, C, N, I)}{dt} \geq 0$$

where $F(H, C, N, I)$ – the function of sustainable development

H – human capital
 C – physical capital, created by man
 N – natural capital
 I – institutional factor

2. Strong sustainability

$$S_d F \frac{(H, C, N, I)}{dt} \geq 0$$

where $N = N_{cr} + N_{mm}$

$$\frac{dN_{cr}}{dt} \geq 0$$

where:

N – natural capital
 N_{cr} – critical natural capital
 N_{mm} – natural capital that can be replaced with man-made capital

The sustainability of a company is therefore a function of the availability and efficient use of human capital, technology and means of production, organization and management created by intellectual capital, natural capital, and efficiency of institutional factors, which equally with those affecting sustainable performance companies.

Therefore, sustainability is impossible without technological, but an intellectual, social, and environmental quality of growth seen ahead.

These resilience factors are valid for the company for the distribution of gas.

Sustainability accounting and reporting, which must provide the company's management objective information for making decisions related to triple bottom line, represents a significant cost for companies that undertake the conduct and realizing. In the economic world, the costs incurred should bring benefits that are higher than them, to make them effective and to warrant such expenditure to be taken.

Firms reveal where overseas subsidiaries may be tempted to behave in that its production costs abroad are a fraction of the cost of production in the country of the company. Such behavior on short-term costs of production would be beneficial for them to have a production subsidiary abroad, which brought her quick profits, but not to invest in the sustainability of human and natural factors.

Therefore, before recommending setting up a system for sustainable accounting, CityGas must make a thorough analysis of opportunities that contribute of benefits from accountability of company that will justify the costs incurred.

The main themes included in the sustainability report are:

1. Supply chain management (and especially the security of gas delivered)
2. Economic sustainability
3. Social and ethical sustainability

4. Innovation and learning
5. Cultural change

Therefore, sustainable accountability should offer improvements on these five indicators of the state of CityGas. Then made investment would have return, and SGR would undertake the creation of sustainable accountability in its subsidiary, CityGas in Bulgaria.

In Bulgaria, where sustainability accounting and reporting from companies does not happen, the creation of investment costs for sustainability accounting and reporting is a particular risk for the company's financial success.

These questions must be answered:

1. Is it justified that there should be the creation of sustainability accounting and report of CityGas and what is its manner of creation: coercive, normative, or mimetic?
2. What specific items must it contain in order to contribute benefits to increase the sustainability of the company?

We will examine the institutional factors affecting CityGas through the prism of the risks for the company and the identification of institutions that are associated with these risks in order to answer the question – “institutionalization and/or change” and how.

7.4.1 External Institutional Factors

Institutional theory emphasizes “specification of property rights.” Property rights, which are based on private ownership, are a factor, which has greater stability in comparison with external institutional factors like the contract for management and the role of manager. Clearly specified property rights contribute to economic sustainability of growth. CityGas Bulgaria is one of the two companies created by the SGR in Bulgaria. “CityGas Bulgaria” is managed by a Board of Directors, the company's capital of 60 million levs, divided into 60,000,000 shares with nominal values of 1BG lev (a BG lev is equal to 0.5 euros) each. Shareholders of “CityGas Bulgaria” are Societa Gas Rimini and “Simen.”

SGR Group Italy holds 90.22% of the capital and 54,132,600 ordinary shares, “Simen”9.78% of the capital and 5,867,400 ordinary shares.¹⁴

Property rights of owners of CityGas are very clearly specified. This clearly states the specification of ownership gives reason to believe that there are good prerequisites for the successful creation of sustainable accountability. The risk for the good market performance of the company contained in “managerial utility” of the Williamson's model for this specification of ownership is also reduced to zero.

¹⁴*State Commission of Energy and Water Regulation (2011)*

Table 7.12 Comparison between natural gas consumption, export, and import of the world-selected data

Rank (total)	Country	Natural gas consumption (thousand cubic meters)	Per capita (cubic meters)	Date
<i>Natural gas consumption of the world</i>				
1	USA	646,600,000	2105	2009 est.
8	China	87,080,000	65	2009
9	Italy	78,120,000	1344	2009 est.
69	Bulgaria	3,350,000	461	2008
<i>Natural gas imports of the world</i>				
4	Italy	69,240,000	1191	2009 est.
38	Bulgaria	3,480,000	479	2008
<i>Natural gas exports of the world</i>				
41	Italy	124,000	2	2009 est.
46	Bulgaria	0	0	2008

Source: World by map: statistics, maps and charts <http://world.bymap.org/NaturalGasExports.html>

7.4.2 External Regulation of Consumption and Gas Sales in Italy and Bulgaria

But there is also a factor, which is very positive for the future development of CityGas.

The average natural gas consumption per capita in Bulgaria is 2.5 times lower than the EU average. In final energy consumption in Bulgaria, gas occupies about 2%, while the EU is around 45% (Ivanov 2010). This means that in Bulgaria there are great free allowances for gas consumption (Table 7.12).

7.4.3 The Investment Risk of Companies in the Gas Sector (the Importance of Institutional Factor)

Investment risk is a key indicator for the sustainability of the company at the present and in the future and shows the opportunities for its growth. It is also for these reasons that there is an important motive for choosing to have either no firm commitment and to make the costs of compiling sustainable reporting.

Many reputable scientists recommend the study of stability analysis of the company to start with the definition of financial investment risk of the company and/or industry (Bebbington et al. 2007: 337–361).

The magnitude of financial risk affects investment in the industry or firm, which affects its capacity for technological innovation and investments in intellectual capital.

On the other hand, measuring the degree of risk and determining risk factors give reason for making management decisions in relation to increasing the sustainability of the company.

One of the most popular indicators of financial risk is a statistical measure called “Beta” – Gauging Price Fluctuations.¹⁵

The object of the activity of CityGas is “transmission, distribution and sale of natural gas.”

CityGas Bulgaria is a company that is not listed on the stock exchange and therefore cannot directly be calculated its beta. For this reason, we will make an indirect analysis of the degree of risk CityGas, analyzing the sector beta and beta of the sector in different markets.

If we examine data from Professor Damodaran, for total beta for gas sector in Europe, we find that the total beta for European oil/gas distribution companies is 2.78. This huge volume of beta shows a different picture. It shows that European gas markets are highly volatile and they have a big impact from nonmarket factors, factors of an institutional nature (Damodaran 2012).

From the period October 2006 to the end of 2011, the investments made by CityGas amounted to 92 million levs – in the municipalities of the gas region “Thrace.” According to the company report, 450 km gas pipelines were built. These include 200 km gas pipelines connecting the distance from the national gas transmission network of “Bulgartransgaz” in the cities of Kazanlak, Haskovo, Radnevo, Galabovo, and Krichim.

Gas supply is carried out, allowing more than 800,000 people to use gas.

SEWRC (State Energy and Water Regulation Commission) approved the business plan of “CityGas Bulgaria” for region “Thrace” as separate territories for the period 2009–2013, after an analysis of reported data submitted for 2009 and 2010 by the company and forecast data for the past 2 years of the adopted business plan for 2009–2013 was found to be built by a company network in 2009 was 85% and for 2010—25%. Implementation of investments in “mechanism and gas distribution facilities” in 2009 was 77% and for 2010 27%.

The total value of the investment program for municipalities and Pavel Banya Gurkovo provided for the period 2012–2013 amounted to 827 thousand levs for the new activities of municipalities CityGas Gurkovo and Pavel Banya.

¹⁵Beta is a historical statistical measure of volatility. “Beta” is a measure of a stock’s volatility of the industry and/or company, in relation to the market. This measure is calculated using regression statistical analysis. (See Investopedia (2012).)

By definition, “the market has a beta of 1.0, and individual stocks are ranked according to how much they deviate from the market. A stock that swings more than the market over time has a beta above 1.0. If a stock moves less than the market, the stock’s beta is less than 1.0. High-beta stocks are supposed to be riskier but provide a potential for higher returns; low-beta stocks pose less risk but also lower returns” (Investopedia 2012).

The value of investments during the business plan amounts to 102,884 thousand levs. Of these, 101,930 thousand levs are for “distribution” and 954 thousand BGN are for activity “gas supply.”

In the updated business plan 2009–2013 on a specified gas area “Thrace” including common Pavel Banya and Gurkovo, the investments amounted to 102,884 thousand levs.¹⁶

CityGas must protect the return on these investments, which give direct financial risk due to its origin from the EBRD (European Bank for Reconstruction and Development) loan.

7.4.4 Direct Financial and Currency Risks

The main direct risk associated with the servicing of loans is the loan from the European Bank for Reconstruction and Development, signed by the company on 29 July 2010.

The loan will be gradually absorbed each year in accordance with the investment program. The maturity is 5 years, with 3 years free period on principal for each tranche and an interest rate of 3.8% annually. The amount of loan needed to finance investment intentions “CityGas” on the territory of “Thrace gas region” is 25,000 thousand levs.

Interest payments begin the first year on the amount withdrawn and amended annually by an amendment of the balance of the loan. Principal payments are distributed in 36 equal quarterly installments beginning on the first date for payment of interest on the tranche after the third year.

The borrowing rate is significantly lower than the interest rates on newly contracted loans granted by commercial banks to non-financial institutions. Interest rates on this debt are based on LIBOR or EURIBOR. The rising of interest thereon could adversely affect solvency and liquidity indicators.

Most of the profit of CityGas comes from gas supplies in BGN. The Bulgarian lev is stable for now because it is tied to the European Central Bank at a fixed rate. At this stage, only the volatility of the euro could lead to indirect currency risk.

Therefore, currency and monetary financial risk for CityGas is minimized as far as possible in the present situation. But it still depends on the stability of organizations such as EBRD, from currency politic of EU and ECB, in terms of a debt crisis for the EU, and the stability of the Bulgarian currency board.

¹⁶The difference in investment amounted to 827 thousand levs as much as are provided to municipalities Pavel Banya and Gurkovo.

7.4.5 Direct Production Risks Associated with Delivery of Natural Gas for the CityGas Activity

Here are the three major risk factors.

Bulgaria's gas portfolio is not diversified. The entire quantity of gas that is distributed in the country comes from Russia and is passed through Ukraine. Political instability in Ukraine, as well as certain global interests of Russian foreign policy, can generate serious risks facing the possibility of supply, including the gas crisis in Bulgaria. In the beginning of 2009, Russian gas supplies to Bulgaria in early January were completely closed and Bulgaria experienced a gas crisis.

The risk problem here is the monopoly of Bulgarian Energy Holding and its subsidiary "Bulgartransgaz." The transportation of gas in Bulgaria is done by a unified system of gas supply. CityGas owns part of the transmission network in areas where her business is carried out, but the expansion of its activity depends on the gas state distributor "Bulgartransgaz" and access to national gas transmission network, which depends on obtaining licenses and permits.

Price risk: The main risk factor of this kind is the price of gas. They depend on global markets and the fact that CityGas distributes Russian gas. In addition to price risk in the supply of monopoly Bulgargaz for CityGas, there is a risk in sales due to the low income of the Bulgarian population, which are among the lowest in the EU. As the Table 7.13 shows sale prices of "Bulgargaz" steadily rising and currently also provides a significant increase, regardless of that, incomes have not increased for 2 years, and unemployment is rising in the country (Table 7.13).

The company CityGas cannot protect itself against these risks. It can only rely on political arrangements of the Bulgarian government.

Another important factor is the institutional nature of the Bulgarian energy and water regulator, State Energy and Water Regulatory Commission, which is a weak and bad controller, which allows a number of deliberate errors in the regulation of energy and water prices and their pricing system (Nesheva-Kiosseva and Getov 2010).

This group of risks is directly related to the action of external institutional factors: the policy of Russia's gas supplies to Bulgaria for the Bulgarian government and experts to provide regular and reliable supplies and mainly from the contracts (like important external institution) between Bulgaria and Russia about supplied gas quantities and gas prices.

Another external factor of the institutional nature is the regulation of the European Commission on gas utility competition and gas prices.

Directives EU 2009/72 [Directive 2009/72/EC (2009)] and EU 2009/73 [Directive 2009/72/EC (2009)] seek to impose changes including separation of transmission and distribution networks from activities of production and delivery which eliminates an inherent risk of discrimination not only in network operation but also in the incentives for vertically integrated companies to invest adequately in their networks.

Table 7.13 Natural gas sale prices for “Bulgargaz” to consumers

Period	BGN (lev)/per cubic hexameter with VAT	
	Transmission network	Distribution network
2012 г.		
01 April 2012 г.	838.92	848.18
01 January 2012 г.	744.19	753.46
2011 г.		
01 January 2011 г.	611.26	620.52
01 April 2011 г.	638.57	647.83
01 July 2011 г.	668.66	677.93
01 October 2011 г.	713.24	722.51

Source: Overgas data. <http://www.overgas.bg/>

7.4.6 Ecological Risks

The major environmental risks are related to the environmental impact from the construction of gas transmission networks of the company. Exceeding the limit values of exposure may lead to significant payments in the form of fines and environmental taxes and cause detriment to the company.

For example, CityGas works in areas that are mostly farmland and forests. For example, the whole territory of the municipality Gurkovo is 70% forest and 24% agricultural lands and is planted with roses for industrial purposes. The activity of CityGas in Northeast Bulgaria is in the “Granary of Bulgaria” – region of Dobrudja. Bulgarian society is predominantly sensitive to the exploitation of land in Dobrudja.¹⁷ It continues to oppose the extraction of shale gas there by Chevron. It continues to oppose the mining of shale gas there by Chevron, assuming that the extraction of shale gas will harm the fertility of agricultural lands in this region.

7.4.7 Cultural, Social, and Demographics Risks

CityGas operates in “Thrace” and in Northeast Bulgaria (Dobrudja). The licensing activities of CityGas place it in 28 municipalities.

The Thrace region is a territory that has been inhabited since ancient times, and there are artifacts of one of the most ancient European civilizations, the civilization of the Thracians. There are the tombs of the Thracian kings. The Valley of Thracian Kings area is filled with about 1000 mounds and the necropolis of the kings and many other archaeological sites of ancient Thracian civilization. These have not been studied as a whole, but currently, sensational discoveries are taking place.

¹⁷Bulgarian citizens and NGOs continue to oppose the extraction of shale gas there by “Chevron.” It continues to oppose the mining of shale gas there by “Chevron,” assuming that the extraction of shale gas will harm the fertility of agricultural lands in this region.

Table 7.14 Population growth rates of the world

Population growth rates of Bulgaria and Italy			
Rank (total)	Country	Population growth rates (percent)	Date
227	Bulgaria	-0.77	2010 est.
207	Italy	-0.08	2010 est.

Source: Thomas Bringham, Population growth rates of the world. <http://world.bymap.org/PopulationGrowthRates.html>

Bulgarian society values its heritage and realizes different groups protest against the passage of infrastructure projects in archaeological sites.

Demographic forecasts for Bulgaria are unfavorable. According to them, the country's population will continue to decline. CityGas works in two regions, which have mixed populations. Bulgaria placed 227 out of 231 countries by rate of growth of population (Table 7.14).

Among the Bulgarian population, there are many Muslims, Turks-Muslims, and Roma. There is a certain risk of ethnic worry in certain political circumstances. There is a low labor mobility due to weak transport infrastructure inside the region. Another hazard is the decline of the quality of the workforce. Some of the Bulgarian minorities living in those areas traditionally do not acquire higher education. The last two factors may lead to labor shortages and, as a result, to an increase of wage discrepancies to increasing labor productivity (Table 7.15).

Cited data shows a level of risk of CityGas that cannot be ignored.

The main types of risks facing the company show that there are serious risk factors for its sustainable development. Some of them have an institutional nature, which requires institutional analysis of the sustainable development of the company.

Except in the general political and institutional terms, external institutions, which can provide risks for the sustainable development of CityGas, must be studied and investigated. Also, the influence of "internal institutions," which have core differences in Italy and Bulgaria with respect to ethics, rules of conduct, and values that govern the behavior of people in both countries, should be investigated. Such a study would provide a better understanding of the need for sustainable reporting for the holding as a whole, including its Bulgarian companies.

7.4.8 Internal Institution Factors Like "Rules of the Game"

Analysis of major external and internal institutional factors and emerging risks to the sustainability performance of the company CityGas lead to a number of conclusions.

The composition of sustainable accountability of CityGas can be successfully performed only by the Coercive Isomorphism mechanism. It will be an institutional change in domestic institutions that are significantly more stable than external.

Table 7.15 Population by districts, municipalities, and settlements and self-determination by ethnicity year to 1 February 2011

Area/ municipality/ location	Number of people who responded to the voluntary question on ethnicity (total)	Ethnical groups				Not defines itself
		Bulgarian	Turkish	Gypsies	Others	
Kardjali	130,781	39,519	86,527	1296	753	2686
Velinograd	32,644	26,055	1540	2141	1279	1629
Pavel Banya	13,525	7220	4451	1701	73	80
Village Gurkovo	369	313	4	51	–	–
Silistra	111,590	64,050	40,272	5697	974	597
Alfatar	2991	2201	453	329	8	–
Dulovo	26,310	4694	18,521	2417	468	210
Tutrakan (town)	8381	6401	1653	232	31	64
Village Glavinitsa	2185	1917	21	228	3	16

Source: National Institute of Statistics of Bulgaria

Most likely, it will first be seen by the Bulgarian society or may be adopted with confidence. According to the “European Values Survey,” trust is a “scarce commodity” in Bulgaria.

Application of normative approach is impossible, and mimetic would result only to “greenwashing.”

Due to the risks of an institutional nature, CityGas needs a compilation of records as a sustainable source of objective information as the status of these risks is minimized.

Sustainable reporting of CityGas has not copied entirely the sustainable reporting SGR but takes into account the particularities of the institutional environment in which the company operates.

When it comes to a company that has been shown an institutional opportunity to expand its scale, we think the overall analysis of Oliver Williamson should be remembered.

Williamson suggests that “diseconomies of scale” are manifested through four interrelated factors:

1. Atmospheric consequences due to specialization
2. Bureaucratic isolation from society’s problems (lack of interest)
3. Back of incentives within the labor relations
4. Distortion of communication due to bounded limited rationality (Christiaanse and Venkatraman 2002: 18)

Williamson recognized the need for a category of non-tangible asset specificity and coined the phrase “human capital asset specificity.” This includes a range of assets such as skills created through specialized training, learning-by-doing,

expertise, and new knowledge created in the context of exchange as well as standard operating procedures (Christiaanse and Venkatraman 2002: 180).

Based on everything to this point, we can offer the following composition of sustainability accounting and reporting of CityGas based on coercive mechanisms. These are inspired by the company – parent of a specific resistant sheet and under all principles of accounting with the exception of “neutrality of accounting information,” for the perception of behavioral model. Sustainability accounting and report must be engaged with identification of stakeholders:

- User groups of information of sustainability report
- Creditors (European Bank for Reconstruction and Development)
- Suppliers (Bulgarian Energy Holding and Contracts for gas supply on governmental level)
- Customers
- Investors (SGR Group)
- Internal users – managers, staff
- Tax and insurance authorities
- NGOs – environmental, social, cultural, trade union, local authorities
- State authorities of economy, social, and environment

Interests of the groups-users of sustainability report should be provided in the functions of SR:

- Functions of the sustainability report
- Information
- Monitoring
- Capitalization, accounting policy, depreciations, depletions, amortizations

The stages of accounting process can include:

Description of the facts of business

Documentary substantiation of the facts

Recording of facts based on GRI

Accumulation and systematization of information

Public verification report

Structure of sustainability report based on principals of:

- Reliability
- Safety
- Regional policy-cultural, ecological
- Investments in intellectual capital
- Social investment

7.4.9 *The Tools for CityGas's SAR*

Among the most important conditions for “isomorphism,” says Di Maggio, is “the profession.”

This requires investment in intellectual capital per employee for development of sustainability reporting.

Considering the creation of sustainability accounting, CityGas as an investment is an asset.

First, this is an investment in capital-unique knowledge of staff that will establish sustainability accounting and reporting (i.e., this is an investment in an intangible asset).

Second, this is an investment in human capital, which includes training staff and creating new jobs. (Assume that achieved high performance in CityGas who enjoy decades of experience of the SGR, and where 25 employees, profit for the tens of millions levs, an employee will be sufficient. If the company decides to use outsourcing for this purpose but Bulgaria does not have accounting firms that are able to draw sustainable reporting, and it is not advisable in this case.)

Third, it is, in Bulgarian conditions, investment in highly specified asset, rather than inherent investment.

Fourth, it is an investment that can be viewed as an investment in energy efficiency and environmental effectiveness (Table 7.16). This is because the basis of sustainability accounting can be achieved through better results in energy efficiency, which can be evaluated over time through emission trading. This is because the basis of sustainable accountability can be achieved through better results in the environmental impact of company activities and to create added value in natural resources.

“The institutional approach is closest to the market-friendly view, but it focuses on credible investment and credible contracting. It is also more expressly concerned with the attributes of human and physical assets” (Williamson 1995: 189).

So the initial investment costs per year required intellectual capital of 25, 248 levs.

That must be added to the cost of training. The eligible costs under a norm of the EC project is 15 lev/h for 60 h training, amounting to 900 levs or the total investment for the workplace and employee training that will prepare statements sustainable lev 26,248 euros or 13,170 euros.

Now, we can calculate the potential value added of intellectual capital of CityGas in this investment. VAIK is calculated in conservative accounting environments, based on data from financial reporting of CityGas. For its determination in comparison with the potential of structural capital and capital employed in the hypothetical first year of the investment, assuming all other conditions of 2011, which are (using Ricardian principle) “most unfavorable conditions” under which to explore the potential of VAIC (Table 7.17).

Legend of Table 7.17:

Table 7.16 Cost of an employee in Bulgaria in the sector production and distribution of electricity, heat, and gas lev

Economic activity	Months		
	I	II	III
Average monthly wage for employment sectors in 2012 production and distribution of electricity, heat, and gaseous fuels in Bulgaria	1648	1550	1548
Cost of employer labor an employee – production and distribution of electricity, heat, and gaseous fuels, the quarterly average in Bulgaria	1582		
Adopted by Eurostat average rate of taxation paid by the employer in Bulgaria	0.33 (on Eurostat data)		
Total average monthly cost of an employer to an employee in the sector of production and distribution of electricity, heat, and gas	1582 + 490 = 2072		
Total average annual cost to the employer for an employee in the sector of production and distribution of electricity, heat, and gas	25,248		

Source: National Statistical Institute of Bulgaria: <http://www.nsi.bg/otrasal.php?otr=26&a1=705&a2=706&a3=907&a4=908>

Eurostat: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Table_2_Tax_rate_indicators_on_low_wage_earners,2010.png&filetimestamp=20120531065443

Table 7.17 Value-added intellectual capital from investment in accountant for sustainability reporting

		Hypothetical year 201?	Year 2011	Year 2010	Year 2009
1	EBIT	4201	4201	5340	3070
2	Value added (VA)	8147	8121	8009	5141
3	Potential of human capital (HCE)	10.89	11.25	11.95	8.76
4	Potential of structural capital (SCE)	0.91	0.91	0.92	0.89
5	Potential of intellectual capital (ICE)	11.800	12.159	12.870	9.644
6	Potential of employed capital CE (CEE)	0.076	0.075	0.12	0.08
7	VAIC	11.88	12.23	12.99	9.72

Source: Annual reports and consolidated financial statements of CityGas

$$VAIC = ICE + CEE$$

$$ICE = HCE + SCE$$

$$HCE = (EBIT + DA + HC)/HC$$

$$VA = EBIT + DA + HC$$

$$SC = VA - HC$$

The test on the CityGas showed the following results:

Correlation HC/VA = 0.936 (Strong)

Correlation SC/VA = 0.999 (Strong)

Correlation CE/VA = 0.538 (Average)

The positive correlation between the value added and the three indicators showed that the investment is helpful in the value creation process.

The observed VAIC for the 20 Bulgarian companies for a 7-year period from Kasarova, Yovogan, and Dimitrova showed that studied companies have a pronounced U-shaped curve (Kasarova et al. 2011: 8).

The correlation also shows that human capital is important for CityGas such as structural.

The explanation for this situation is that U-shaped curve can be found in the restructuring of companies in connection with the crisis according to authors.

In the case of investment of intellectual capital, CityGas also experienced a slight VAIK drop in the “hypothetical year.” This is due to the fact that in this case, the proposed investment in human capital is made but has not worked like intellectual capital and has not given returns and also because the hypothesis is tested on a data from 2011. This means that investment in human capital for the needs of sustainability accounting and reporting in CityGas is not risky and can be expected to give very good returns for the company.¹⁸

The stages of institutional changes in accounting policy and adopting sustainable reporting can be in the following scheme:

- Analyses of nonformal (internal) institutions
- Self-choice rules
- Analyses of formal institutions
- Self-choose rules of sustainable reporting
- Compliance with laws
- Characterization of the regulatory authority State Commission of Energy and Water Regulation
- Corruption
- Effectiveness of the mechanisms of sanctioning
- Institutional analyses and synthesis
- Preparation of CityGas sustainable reporting for institutional changes

The function and principles of institutional changes of sustainability report can be:

- Functions of sustainability report like prerequisite of its development
- Answer the interests of users
- Balancing the interests of users
- Consistency with the amendment of rules

¹⁸Note: On this basis for future estimation of managerial decision, it can be possible to use game theory models for managerial decision-making.

- Principals of fair information
- Opportunity for correction
- Efficiency through open information
- Dependent regulator, regulations and standards
- Principle of gradualism amendments
- Rapid implementation of changes
- Opportunity for complementary and gradual shift to change the regulatory framework

Principle of innovative change:

- Stimulate innovation
- Preserving the balance of interests in the implementation of accounting innovation

7.5 Final Remarks

In the two companies – SGR Group, Italy, and CityGas, Bulgaria – the process of implementation/institutionalization of the SR seems to have two speeds. Indeed the three dimensions of the institutional theory through which we have read about the cases highlight two different approaches. In the Italian case, SGR, despite being in the presence of an approach which is still focused on weak sustainability (Contrafatto and Bebbington, (2013), p. 230), is progressing toward strong sustainability and change. In this way, forces are present which push toward institutionalization, but there are also forces which orientate toward innovation and specificity generating possible changes (institutional change).

In the case of CityGas, the external factors prevail; the diversity of culture is evident and in addition influences the process of sustainable development of the company. It also demonstrates the impact as well as the absence of a formal document (Bebbington et al. 2009) of synthesis such as the SR. Sustainability, in this case, is only an element of marketing and image, in which the mimetic dimension prevails, triggering off vicious and not virtuous mechanisms.

The first challenge is thus played in the SGR Group (Italy), which is the unit from which the institutionalization process must get its force in order to then “push” and sustain the process in the subsidiary company in Bulgaria. The resistance to change is still present even in the SGR Italy group, and so the real challenge is that there should be a shift from the “formal” document (SR) to changes in the decision-making process toward a stronger sustainability and an increased motivation that would be based on the knowledge of connected problems, which the sustainability report can only trigger off.

The second challenge will be played in CityGas, where that baggage of values, which the SGR Group carries, must be able to overcome cultural fossilization desired intentionally by part of the ruling poker in Bulgaria, where a situation of contrast exists. In fact in Bulgaria, it is “convenient” to talk about sustainability; it

Table 7.18 Synthesis of institutional mechanisms in SGR Group Italy and CityGas Bulgaria

Mechanisms (Di Maggio and Powell 1983: 164)	
<p>Coercive SGR Group produces the social report because there are coercive normative pressures as well as pressure from the consumers, end users, and competitors. – Coercive market pressures: between the competitors, Hera is a company listed on the stock exchange, with institutional investors to which it must account as well as to the end users. On the other hand, SGR is a family-managed business which had been building its own defined and cohesive corporate culture for the last 50 years, the result of a continuous family management of the business. The original values (dedication to work, attention to the end user) have been conserved in time, and with the latest generation (the third generation), the company has become enriched by other values (the positive treatment of employees, the principle of the open door and dialogue, etc.) – Coercive sector pressures: rules related to work safety, climate, environmental emissions, etc.</p>	<p>Sustainability report – institutionalization (Isnt) or (of) change (Ch)? SGR Group Italy Isnt _____ SGR _____ > Ch Even though there are coercive mechanisms which lead to standardization, there are also present seeds of change as the SGR’s sustainability report is different in form and content to Hera’s and the implementation process leads to different results compared to Hera. Such differences are necessary in part as we are dealing with the first edition, while the Hera Group is in its first edition. Furthermore, there is stakeholder commitment and dialogue in SGR, while Hera has developed stakeholder engagement</p> <hr/> <p><i>The CityGas’s SR will be an institutional change in domestic institutions that are significantly more stable than external. Most likely, it will first be seen by the Bulgarian society or may be adopted with confidence. But the study of values in Bulgarian society shows that “trust” is a “scarce commodity” in Bulgaria</i></p>
<p>Normative The SR is the answer to a background of social responsibility and possible intrinsic motivation. The values foundation, summed up in the mission and governance, leads to the process of drawing up the SR</p>	<p>SGR Group Italy Sustainability report of SGR – institutionalization (Isnt) or (of) change (Ch)? Isnt _____ SGR-it _____ > Ch This position is due to a series of decisions including the following: – SGR didn’t choose to employ an external consultant but to create an internal committee in order to develop the process over time and facilitate continuous change – SGR didn’t choose to have assurance (as on the other hand Hera did) initially for economic reasons and subsequently (or principally) because authenticity is considered important in the bottom-up-type process rather than the formality of the “pigeonhole” which could have the exclusive value of image. – SGR for the territory is the leading actor in the evolution and innovation of many small communities where previously there was no gas network. SGR wishes to be the leading actor in the improvement of the quality of life of a community – It chooses, as a partner, to facilitate the process of development of SR and sustainability process, the local universities of the</p>

(continued)

Table 7.18 (continued)

Mechanisms (Di Maggio and Powell 1983: 164)	
	<p>territory which have reinforced the intrinsic motivation and informally validated the various stages through interviews, and exchange of ideas and comparisons with other companies</p> <p>– SGR favors changes which it can develop over time</p> <hr/> <p>The CityGas’s SR <i>Application of normative approach is impossible in CityGas from “outside” – from society or external professional and regulatory sides: nor based on the state of internal nor based on the state of external institutions. “Capitalism” in Bulgaria is still at the stage of initial accumulation, which institutional environment is motivated solely by profit, no matter how it can be achieved.</i> <i>Intrinsic motivation for social responsibility can only come from the policies of its parent company</i></p>
<p>Mimetic SGR’s SR is the answer to a determined trend: – Hera and other companies in the sector who have published the SR to make management transparent and reinforce legitimation by pushing SGR to do the same in order to have the same legitimation of the other companies in the sector – It is imitation, but not “pure” (vogues imitation), and implies a rational choice and a will developed over time to make management transparent and to establish and reinforce stakeholder dialogue and engagement inside and outside the group</p>	<p>SGR Group Italy Sustainability report of SGR – institutionalization (Isnt) or (of) change? Isnt_____SGR-it_____Ch We do not have further elements to assess how much institutionalization and change is present, and hence the process is stuck in the middle</p> <hr/> <p>The CityGas’s SR <i>In “CityGas case” mimetic mechanism would lead only to “greenwashing lack of adjustment in domestic institutions”</i></p>

is part of an opportunist and instrumental approach/conduct, which panders to the expectations of a group of stakeholders.

Both challenges, in the order they have been presented, must be borne in mind until the institutionalization process is orientated toward change.

From the analysis of the literature and reflections which have emerged through the case, we can answer to the research question: “How is it possible to analyze sustainability reporting implementation in the research case using institutional theory?”

In Table 7.18 we can see one synthesis of the three mechanisms in “action” that are useful to reply to the research question. To make the table, we involved literature review results, especially Larrinaga-González’s (2007), and we are going to implement them to SGR Group and CityGas.

The reflections made are the result of a first step of analysis and lend themselves to different considerations from which the limits of the research emerge both from a theoretical and empirical point of view. In fact from a theoretical point of view, it is necessary to follow with a further in-depth study of the dimensions of institutional theory, and this must be also enriched by a comparison with the legitimacy theory (Deegan 2002).

From an empirical point of view, we can observe the scarce generalization of the results obtained and furthermore the further consolidation of analysis in order to validate them. Therefore, the orientation of future research will include both the monitoring of relational dynamics which have been started by the SGR Group's sustainability report, as well as checking how the SR translates into a change of organizational behavior. This is also through the analysis of the company of the gas sector belonging to nearby territorial contexts and institutional fields characterized by shared cultural elements (such as Multiservizi Pesaro; Hera Group).

Finally it will be fundamental to monitor the cultural and organizational evolution of CityGas Bulgaria and verify whether these seeds of induced sustainability will translate into actions and documents of sustainability implementation and check how they could be translated into logics and governance processes.

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Chapter 8

Case Studies and Best Practices: VERSO Project Model and Implementation to Small Quality Hotels, Rimini, Italy

Maria-Gabriella Baldarelli

8.1 The Model of VERSO Project

In 2008, chartered accounting professions in Rimini (Italy), during the second Italian CSEAR Conference, demonstrated their profound interest for sustaining the diffusion of social and environmental accounting and reporting.

In 2008, the next evolutionary step was to try to involve accounting professions to help the process of spreading SEAR in the direction of emancipatory change. A special commission arose to analyze the best way to support enterprise to understand the importance of SER and how to implement it in small and medium enterprises too.

From January 2009, Children of the World along with accounting professions and the university are working on a small but very interesting project to develop a social and environmental report model for small- and medium-sized enterprises (SMEs). This model would be very easy and immediately useful to SMEs and at same time improve knowledge of accounting professions and perhaps create new work opportunities for them.

The commission which we are involved in decided to use the simplified SBG (<http://www.gruppobilanciosociale.org/>) as technical model. But the interest of commission is not only about technicalities but above all about promoting and motivating CSR culture that is at the base of SER implementation. So, some small explanations of work had been produced to explain what we will do in the hypothetical enterprise and, above all, why this process is important, to let enterprise be more transparent, and to give worth to what it is just, perhaps, doing.

The interesting aspect is not the model of SER that the commission chose, but the passion used to enter a new professional field and the process used to test the social report model in the pioneer enterprises. The research interest regards the process used and the attempt, not only to have a final SER document but to create relationships that will be able to change entity culture and create new horizons to

insert into the accounting profession new mentality and work in social and environmental orientation interests.

The accounting profession project leads us to go on to emancipatory change which is the core of SEAR.

In the three enterprises involved as key test for the implementation of the “model,” we found very interesting willingness and, at the same time, some actions that, without this process, would not be communicated and therefore unknown.

At present, a research and implementation group worked on testing the model on some small enterprises, and from the results of this step, we think that CSR and the creation of networks contributed a lot to motivate social and environmental accounting and reporting disclosure.

The “VERSO” model stands for values and corporate social responsibility and consists of different sections that we use to involve enterprises and to collect information from them. We are going to show below the content of VERSO working charts and then we will see the result of implementation of this model.

The first section of the model contains the presentation of the model to the enterprises that are involved in. The second section comprises the questionnaire that we will submit to enterprises to collect information to make the final document. Finally, the third section is about the final observations that the enterprise will write as self-evaluation document.

8.1.1 Section 1 of VERSO Model: Presentation to the Enterprises That Are Involved

Every business, in pursuing statutory economic objectives, produces a certain social impact, using energy and raw materials, working them and marketing them in the form of products/services, generating wealth for itself and counterparts, and creating jobs. While doing so, it enters into contact with other entities, such as customers, suppliers, Public Administration, partners/backers, employees, and, even if less significantly, the collectivity and the environment; it’s all about a multifaceted class of subjects drawn together by the fact that everybody, one more so than another, has interests in common with the activity of the business: by a word in English, they are defined as stakeholders, which means bearers of interest.

The entrepreneur knows that a part of his success, especially over the long term, is due to the relationships that he is able to establish with these interlocutors: attention to stakeholders, when it goes beyond *the dictates set by law*, is called corporate social responsibility (CSR).

CSR represents an evolved way of conceiving the business as being an integral part of its own social fabric, not as a reduction of corporate freedom but rather the possibility of exploiting the synergies which are released by a better relationship with its own stakeholders.

Every entrepreneur has this sensitivity in his very DNA; often, he should let it be seen. To this purpose, the Ordine dei Commercialisti (the accountants' association) together with the Uni.Rimini (the University of Rimini), supported by the Chamber of Commerce, has created a new form to be attached to the report foreseen by civil law to permit, more so with words than with numbers, giving account of its own social dimension, providing for the gathering and organizing information in an organic manner. This document is a summary of the more encompassing social report produced by SBG, rendered more nimble in order to better and more easily be able to be utilized by small- and medium-sized enterprises: it is modular, presents the possibility of expanding its detail level in the case where situations of greater complexity are investigated, and can easily become a strategic resource, allowing a management of a good part of corporate intangible goods.

This activity is all part of PercoRSI (which includes the acronym of the Italian words for **CSR**), the project of the Chamber of Commerce of Rimini, originating with the intention of developing an economically responsible district in our territory, which involves various interlocutors in the area of the Province of Rimini (enterprises, trade associations, professional societies) and acts in a responsible way with one another so as to create a better environment for every one of us who live within it. Examples, are as follows:

1. Why take part in the project?

Participation in this project will help you understand that your enterprise sets in motion—albeit sometimes without you knowing it—certain initiatives in the field of social responsibility (CSR) and reflect upon which may be the advantages and benefits connected to a corporate management which is more aware of such aspects.

The document will also help you to set a more coherent management of these initiatives, in the light of systematizing the current actions, and more precisely manage social responsibility in the company.

2. How much time and commitment and what are the costs involved?

Participation in the project means:

- (a) Filling in a brief introductory questionnaire (estimated time of 15 min) which may be delegated to the company structure (e.g., to the administration officer).
- (b) Compiling a self-evaluation card (by the businessperson): estimated time 10 min.
- (c) Compiling detailed checklists relating to the various areas of survey; these too are by the company structure.
- (d) Compiling the calculation table of added value, by the administrative office of the company.
- (e) A final discussion with the entrepreneur, to examine and evaluate together the information gathered (estimated time 1 h).

Participation in the project, during this experimental phase, leads to no cost for the company.

3. What is the expected outcome?

- Taking part in the project, you will be able to get an organic list of CSR initiatives which are currently ongoing at your company.
- Some indications regarding the coherence of such initiatives with company strategy and vision.
- Basic information to be able to construct a document which is integrative to the report, which highlights such initiatives and activities, and which permits an evaluation of them as a distinctive element of your company's identity.

4. What types of future evolutions are envisaged?

The introduction of CSR may mean revisiting the method of communicating with your interlocutors, paying greater attention to issues which are more interesting and significant for company situation, till you get to modifying part of your strategies.

8.1.2 Section 2 of VERSO Model: Questionnaire Concerning CSR

8.1.2.1 Company Identity

This section includes general information about the company and its activities.

You do not have to answer all questions, only those you believe have meaning for your company. Where possible, provide specific examples.

General information on company:

1. Typology of company.
2. Legal status.
3. Owners/partners/shareholders.
4. Number of employees.
5. Last enterprise turnover.
6. Organization setup (describe).
7. Description of main activities carried on.
8. Description of main products/services.
9. Typology of markets served (consumers, public sector, other companies).
10. Geographical areas of operation.
11. Brief description of the company's history.
12. Who are the points of reference within the company who follow environmental and social issues (indicate names and mail or telephone contacts)?
13. Certification:
 - ISO 9001 vision (quality)
 - ISO 14001/EMAS (environment)
 - SA8000 (work-related corporate social responsibility)
 - OHSAS 18001 (protection safety and health of human resources)
 - _____

14. Other information:

- Introduction

To complete the following questionnaire takes no more than 10/15 min, indicating the answers that are most adequate for you and for your enterprise.

There are no right or wrong answers: the various questions will help you to simply evaluate which actions your enterprise may carry out in the field of corporate social responsibility (CSR).

Once finished, the questionnaire may be useful for future reference, in such a way as to monitor those actions carried out concerning CSR over time.

- Personnel management policy

The long-term success of your enterprise and the efficacy of your corporate management depend on the knowledge, on competencies, on talent, on creativeness, and, above all, on the motivation of the human resources you possess. The more the company grows, the more the need there is to have people available on whom you can count and to whom you can delegate certain activities, for the purpose of improving the performance of the company. Every piece of work, no matter how simple, is given value by the intervention of the employees themselves; thus, a proper relationship with your own human resources allows for an immediate improvement of company results. Should a regime of reciprocal trust result from the relationship, the lesser degree of checking needed allows the entrepreneur to dedicate more time to his core business.

Some examples of good practice relative to personnel are:

1. Do you encourage your employees to develop their competencies and do you provide incentives for long-term careers? (e.g., by education plans, recognition on the basis of obtained results, etc.)?
Yes No Don't know Not applicable In part
2. Are there protection policies against all forms of discrimination, both in the workplace and at time of employment (e.g., against women, ethnic groups, disabled persons, etc.)?
Yes No Don't know Not applicable In part
3. Do you consult with your staff on important matters?
Yes No Don't know Not applicable In part
4. Does the company adopt adequate measures regarding the norms on health and safety, which provide sufficient protection for the worker?
Yes No Don't know Not applicable In part
5. Does the company guarantee a correct balance between work and private life for its staff, for example, studying flexible working times or allowing employees to work from home?
Yes No Don't know Not applicable In part

8.1.2.2 Environmental Policies

All companies—regardless of dimension or sector—may have either a positive or negative impact on the environment. Negative impacts are derived from the direct or indirect consumption of energy and resources, from waste and pollutant generation, as well as from the destruction of the natural habitat.

Even though the potential for reducing negative impact on the environment seems somewhat limited throughout small-scale companies, each business is, nevertheless, able to reduce its energy consumption, minimizing waste and recycling materials. Even the slightest improvements may make a profound difference if combined with the efforts of other companies.

Environmental decay is an ever more important issue at both local and global levels; it is therefore important to increase the degree of awareness regarding this by the companies and, as a consequence, by the customers. The enterprise, in this sense, may guide the choices of its customers creating a culture with reference to economic sustainability combined with attention to the environment, not forgetting that the environment is a space common to us all, to enjoy even simply when we breathe in.

Some examples of good practice relating to the environment are as follows:

- Can you briefly describe the production cycle of your company with special regard to which raw materials it uses as well as eventual production waste?
- Do you believe that the attention to environmental aspects may make a contribution to improving the company image and therefore increasing the clientele?
Yes No Don't know Not applicable In part
- Is your company operating money-saving actions by way of reduction on environmental impact (e.g., recycling, reducing energy consumption, preventing pollution)?
Yes No Don't know Not applicable In part

8.1.2.3 Market Policies

The possibility of creating a special relationship with what is before or after your production process is a decisive weapon in reinforcing your leadership capacity: a relationship with your suppliers/customers which goes beyond the purely economic aspect of things allows you to be seen as privileged interlocutor, thus having a preview of their suggestions to develop together solutions to problems, helping reciprocally to overcome difficulties.

Some examples of good practice as regards customers:

- How many manufacture processes/service performances have been revised as a result of customer feedback?

- How many products/services are customized according to the needs of the customer and how much do they weigh on the overall total of products/services provided?
- What percentage of 5-year customers is there?
- How many customer complaints are there on an annual basis?
- Do you market/provide eco-friendly or social products/services (above and beyond legal requirements)?

Some examples of good practice as regards suppliers:

- How many certified suppliers are there?
- How many suppliers have you got a relationship with for more than 5 years and what is their percentage considering the total number?
- How many complaints from suppliers are there on an annual basis?
- Are there any action involving suppliers in socially responsible behavior?

8.1.2.4 Policies for the Local Community

Within their own community, do entrepreneurs live and from it do they, normally, draw on human, material, and economic resources? Being in tune with one's own local community permits being able to avail of these resources, firstly, better, and less costly.

Moreover, the activities of the enterprise make the community grow and prosper, the business being an integral part of it. Thus, growing together allows for a generally more calm climate, with less social tension and reciprocal help in the solution of social issues, therefore favoring both the success of the business and the welfare of the local community.

Some examples of good practice relating to the local community:

- Have you done something for your community lately?
Yes No Don't know Not applicable In part
- If yes, what?
- How do you think your neighbors, your fellow citizens, and your competitors see your business?

8.1.2.5 Public Administration

Normally, there are no ties with this entity beyond payment of taxes due, whether they be of a local character or not. De facto, a good relationship with it is solidified in the absence of litigation with administrations: this has (marginal) impact on the reputation of the enterprise, to which financial organs, banks first and foremost, pay attention when allocating funding.

Some examples of good practice as regards the Public Administration:

- What is of your relationship with the Public Administration?

- Do you think the Public Administration represents an obstacle to your business?
- Would you like to know and have known to others how much your company, by way of tax, contributes in terms of resources in favor of the Public Administration and of the collectivity?

8.1.2.6 Partners and Financial Backers

Ethics is not a question of good will, rather a different way of doing business, where the person comes before profit.

We have to be able to see entrepreneurial success as an element of the common welfare and the business as a useful tool for improving society.

Corporate social responsibility has to find, among its first supporters, the category of partners/backers, who through the contribution of capital and work, human, professional, and economic wealth allow the enterprise to produce wealth.

- Are the partners individuals or legal persons?
- In the last 3 years, have there been any contributions of capital made in the society?

- What level of profit has been reached in the last 3 years?
 Year.....:
 Year.....:
 Year.....:
- How much of this profit has been taken out or reinvested?
 Year.....: Taken out::
 Reinvested:
 Year.....: Taken out::
 Reinvested:
 Year.....: Taken out::
 Reinvested:

8.1.3 Section 3 of VERSO Model: Self-Evaluation Documents (by the Entrepreneur)

What are the ends pursued by your enterprise? How would you describe your “mission” (motivation)?

What are the “guiding values” of your business, which either explicitly or implicitly influence your activities, strategic choices, and relationships with the various interlocutors (employees, customers/market, suppliers, local community,

Table 8.1 Stakeholders of the enterprise

Interlocutor (stakeholder)	Importance: high/medium/low
Employees	
Customers/market	
Suppliers	
Local community	
Environment	
Financial partners	
Partners/shareholders	
State/local authorities/Public Administration	

environment, financial partners, partners/shareholders, State/local authorities/Public Administration)?

What, in your opinion, is the importance of each of the reference interlocutors, in relation to the “mission” and “guiding values” of your business as in Table 8.1?

Each entity will be included also: value added production and distribution report and relationship between CSR and reputation quotient.

8.2 VERSO Project Implementation in Small Quality Hotels, Rimini, Italy

8.2.1 *The Consortium of Small Quality Hotels, Rimini: Network of Values in Mission and Governance*

The Consortium of Small Quality Hotels of Rimini gathers together 53 members whose hotels do not go above 40 rooms.

The Consortium aims to promote and favor the hotels which participate in it with trade agreements and initiatives, and through its website, it offers the possibility of being visible online in a powerful way. It provides information relating to training courses and eventual subsidized loans, and finally, it provides organization of moments of socializing called “free time” which aim to earn customer loyalty. All these are following the quality-research criteria that are included in the UNI EN ISO 9000:2000 Certification. Many of these are family-run hotels. In all hotels, there is particular attention to spreading and maintaining local culture and traditional hospitality.

They are, besides, characterized by attention to the customer, who is still welcomed as a guest and with whom they try to found a relationship based on congeniality and on availableness. They try, as much as possible, to create a family atmosphere in such a way as to make the user feel, as much as he can, at home and make his stay comfortable and of a high standard.

In 1996, the Municipality of Rimini, intending to safeguard small, family-run hotels, decided to foster a project called “small Rimini hotels.” The Municipality of Rimini decided to invest a small part of its budget financing a marketing analysis on small hospitality businesses.

On 31 May 1999, the Consortium of Small Quality Hotels officially comes into being.

The Municipality sustained this initiative and decided to house the central office of the Consortium of Small Quality Hotels in one of its buildings in the Palazzo del Turismo (*the House of Tourism*) in Rimini.

The quality of the small hotels is made up of many factors, mainly, the human one, that knows how to transform all services into one thing more, from food recipes to a comfortable bedroom, and knows how to give its time in order to listen and to provide advice on what to do in the evening, where to go when the sky is cloudy and where better to buy things.

Human relationships are of fundamental importance, not just between hotelier and guest but also between the hoteliers themselves who in a spirit of friendship and collaboration take part in the life of the Consortium by means of meetings, training courses, work groups, etc.

The success of this formula is confirmed by the loyalty with which, for decades, the people who decide to have a holiday continue and choose them.

The working of the Consortium of Small Quality Hotels is regulated either by its statute or by its regulations and by procedural guidelines.

Besides these, UNI EN ISO 999:2000 certification provides for the use of particular procedures of recording and drafting documents which have the aim of facilitating the monitoring of activities carried out by the Consortium.

The Consortium has admission criteria for new partners, this to let all members have a certain homogeneity and optimally respond to strategies chosen by the Consortium.

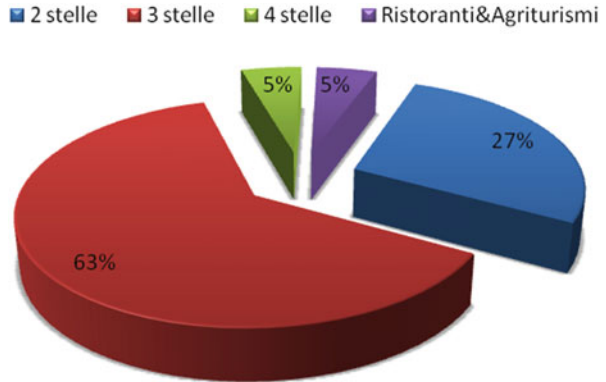
The Consortium of Small Quality Hotels is made up of the following Consortium organs:

1. General assembly of Consortium members
2. Board of Directors
3. Chair
4. Vice chair
5. Bursar
6. Trade union board
7. Ethical committee

A series of working groups who deal with the fine-tuning and implementation of specific projects refer to the Board of Directors. These groups, although they enjoy large autonomy, are coordinated by the Board of Directors which has to authorize every implementation of group proposals.

In this sense, the partners are, in turn, an integral part of the human resources in that they actively take part in the activity of the Consortium.

Fig. 8.1 Pie chart representation of associate partner subdivision



The active participation of hoteliers to the “life” of the Consortium is punctuated by meetings, training courses, and working groups, therefore, by shared actions that have the aim of bettering management, not just for the single business but also for the whole of the hotels who make it up. Coming together and mutual help between entrepreneurs have the aim of sharing experiences and providing practical answers, simple and quick, to individual issues that may come into existence during their business activity. The partners of the Consortium make (Fig. 8.1), besides their own premises, their own entrepreneurial and relationship capability, as well as their own staff in the case of particular needs, available in order to create a culture of listening and satisfaction.

The Consortium, finally, wishes to spread tools for greater environmental sustainability through the preparation of a list of ten points concerning respect for the environment.

From all this, the recognition of three values comes: partners/clients, catchment area, and institutions.

In order to analyze according to which aspects social responsibility toward the partners of the “Consortium of Small Quality Hotels” is expressed, we immediately have to highlight how, in the specific case, there is de facto a substantial coincidence of identity between partners and clients. Indeed, the legal configuration of Consortium that has been adopted, “voluntary, legally recognised aggregation which coordinates and regulates common initiatives for the carrying out of certain service activities in the common interest of those companies part of the consortium, like for example, joint purchases or the organisation of services in the interest of consortium partners, etc.,” produces the coincidence of the identity of its two stakeholders, partners and clients, paying then particular attention not to confuse them with the clients of the hotels participating in the Consortium.

Before describing, in concrete terms, the actions of social responsibility carried out toward partners/clients, we further need to specify that “socially responsible” actions are only those carried out by the entrepreneur beyond all legal and contractual obligations imposed by the company constitution. Having made these necessary specifications, we believe it is necessary to have to start from that which we

maintain is the main action of social responsibility carried out by the Consortium toward its partners and, building of their own hotel businesses in a more socially responsible way. For this reason, in the innumerable meetings of partners, which obviously take place during low-season periods, a series of principles that have been gathered into a code of behavior, the so-called services charter, is transmitted to them all. These principles aim at obviously reinforcing entrepreneurial skills, bettering the hotel services (as the Consortium statute foresees), in many cases in a light of implementing good, socially responsible practices.

It is to this aim that there is the will to create a friendly and family-like atmosphere within single hotel businesses; to develop knowledge of the area and of the opportunities it offers while proposing places where meals using typical food produce and trips to characteristic locations can be organized for the final client; to incentivize the use of typical local produce and the preparation of typical traditional local dishes they could serve in their premises; and to develop the group spirit and that of togetherness between colleagues in order to collaborate in times of need (e.g., the sudden resignation of a worker in high season which has been covered by the help of staff borrowed from another associate partner).

The Consortium, by way of its periodic meetings, aiming to exchange experiences, issues, and solutions, and also thanks to in-depth training courses reserved to partners, has managed to create a climate of collaboration and friendship between them favoring company growth and contributing to the development of the Consortium itself.

Finally, it carries out campaigns for the environment, of which an example is the project of *car sharing*, where the partners are encouraged to sensitize their clientele about the shared use between various people of cars that are put at their disposal by the Municipality and by the company which runs local public transport, discouraging the use of their own car; other examples of this ecological awareness will be further developed in the specific chapter.

In brief, we may affirm that the main form of social responsibility which the Consortium produces for the benefit of its partner is precisely that of making them aware of the fact that a management of their premises, which is also socially responsible, may lead to noticeable advantages in terms of client satisfaction.

About the local area, community, environment, and Public Administration, the Consortium includes entities located in Bellaria, Igea Marina, Rimini, Riccione, Cattolica, and Misano Adriatico.

Profitable use of the area is an intervention model pursued by the Consortium for its own associate partners and, lastly, for the final guest.

Some examples of this commitment are the agreements defined with the theme parks in the area; the relationship with Eden Park is one of these.

Moreover, training tours to the centers of Valle del Marecchia, San Marin, Valle del Conca, etc. are promoted whose first aim is to instruct the associate partners on the potentials for tourism in the inland region of Rimini with all its historical, artistic, and landscape riches.

The consequent second objective is that of organizing guided tours for the final user/tourist.

In this way, they attempt to spotlight those areas of the Romagna region which are lesser known than the seaside locations but which equally deserve to be visited and appreciated.

On these occasions, attention is placed upon traditional cuisine too, and the menus are chosen with a respect for local eating and drinking and for the typical produce of the surrounding area.

Evermore on the theme of improving cultural and historical knowledge, town routes that defined “urban trekking” are organized every year. These permit better knowing the various, different landmarks and monuments situated in Rimini as well as in other towns near Rimini.

All this defines the activities the Consortium operates with commitment in searching for new proposal tools, alternative tourist ideas of both a commercial and educational kind with nature and landscape trails, visits to landmarks, and/or places that are important in the history of the region.

The Consortium participates in and organizes conferences, like that held in 1999 entitled “Small Hotels—A Great Facet of the Rimini Landscape—Together to Improve and to Win the Challenge of Quality and Markets.” The success of this first initiative stimulated the Consortium to organize conferences on an annual basis in which many hoteliers along the coast of the Emilia-Romagna region take part in order to exchange views and find new strategies to face together the challenges of the market.

A brief list follows containing the most significant themes proposed in the last years.

One was entitled “Small and Medium-Sized Tourist Companies Today Between Tradition and Internet,” and another one was “Quality in Tourist Businesses: Management Choice and Market Opportunities.”

In 2011, the topic was “Holiday Well-Being” subtitled Tourism-Land-Tradition.

These conferences are the result of many years of collaboration with the Rimini Chamber of Commerce.

In this sense, the Consortium has represented and represents a meeting place and is an entity which tends to create a network of relationships aimed at innovating.

Some relationships are institutional ones, such as those with the Municipality of Rimini, the Provincial Authorities, about which we will discuss deeply later when dealing with the theme of Public Administration; others are those with the Sea and Adriatic Coast Product Grouping, with entrepreneurial associations or with single sector operators with whom, as much as possible, a route leading to collaboration toward a process of common growth is attempted. It is, indeed, in the interests of all agents to pass from competition to collaboration and aim together for the betterment of the other, and to come together as one system is essential within the context of globalization.

The local community is involved by the Consortium which takes part in collaborating and actively organizing events of a social nature.

Evening solidarity events have been organized for several years for collecting funds destined to help certain ONLUS (Italian voluntary organizations for the social good) associations which operate in the Rimini area.

Here are some of the initiatives and collaborative events created:

RiminiAil: together with the Italian Association for Leukemia, Lymphoma and Multiple Myeloma, to collect money in order to provide a specialist physician, available to carry out a homecare service to patients and to perform, in the most serious cases, even blood transfusions. For example, in 2009, the initiative “Sorridere per un Sorriso” (To Smile for a Smile) was undertaken, one which included a charity evening, which took place at Rimini’s Novello Theatre, and whose takings went to Rimini AIL ONLUS organization, with the participation of some comedians from the national TV show “Zelig” who were present at the Cabaret Gran Gala.

Crescere Insieme (Growing Together): in collaboration with the “Associazione genitori di persone con sindrome di Down” (Association of Parents of People with Down Syndrome), for the collection of funds destined to research activities of professionals in order to be able to include specific projects (e.g., “Percorsi abilitativi” (Enabling pathways), i.e., activating pathways aimed at children till the age of 18; “Indipendente” (Independent) aimed at children/teenagers and adults as well).

In 2009, another evening gala was undertaken, called “Coriandoli di Solidarietà” (Confetti of Solidarity), with a lottery whose takings went to both RiminiAil and the ISAL Foundation.

This last event obtained a lot of success, so much so that every year the Consortium proposes a new edition of the evening gala, by now known as “Coriandoli di Solidarietà” (Confetti of Solidarity). In 2010, the charity night was organized for the “Crescere Insieme” Association and for the Rimini Parkinson’s Association.

Another initiative the Consortium carried out in 2009, with great merit, is that called “Una vacanza per Abruzzo” (a holiday for the Abruzzo region) which saw that, in the summer of that year, the hotels participating in the Consortium set aside a week of free holiday for those families struck by the earthquake. The hoteliers declared that “offering our work and hospitality to numerous families was completely spontaneous, in order to give a week of normality and holiday following the devastating experience of the earthquake.”

The community, therefore, earns a surplus value from the Consortium’s work in that it is a responsible actor even as regards solidarity.

About the environment, the Consortium immediately realized the critical issues due to the best use of resources and, especially, to their efficacious management during that time; for this reason, it created a list of good practices of which partners are made aware and trained:

1. Waste: commitment to reduce the quantity of waste produced, through the purchase of few wrapped items, the refilling of containers of washing powders and washing-up liquids, the use of products of suppliers with the Ecolabel

certificate and, lastly, the participation in waste sorting. The Consortium takes care of the relationship with the town recycling center as regards paper and other types of waste produced, both by itself and by the associate hotels.

2. Water: commitment to adopting measures of water savings by the use of flow accelerators for showers, distribution taps, and valves which allow a better service and substantial water and energy (for hot water) savings. Commitment to promote proper behavior among its own clients.
3. Energy: promotion of energy savings and regaining energy by decreasing the amount of linen to be washed. Gradual installing of energy-saving light bulbs.
4. Food and drink: giving value to local food and drink specialties, promoting and offering, every day, typical regional produce, which are made of zero kilometer ingredients.
5. Transport: promote the use of public and private means of transport, including distribution of specific tickets set aside by the transport companies and also providing the availability of bicycles for all guests.
6. Movements: promoting the use of cycle lanes and pedestrian trails.
7. Pollution: commitment to reducing noise generated within the building and surrounding areas, especially at nighttime, even by actions aimed at inciting clients/tourists to assume suitable behavior. Commitment to support public initiatives directed toward noise reduction in those areas near the hotel premises.
8. “Car sharing,” about which we have already spoken in Chap. 2, Partners/Consortium Members. The Consortium, having stipulated an agreement with its partners, arranges it so their clients may use special, “ecological” cars made available by the Municipality and by the local transport company. Clients, in this way, may avoid using their own cars in Rimini, thus lessening polluting emissions they produce and the number of cars on the road.
9. Food produce: favoring the use of foods devoid of chemical substances (pesticides and fungicides). The commitment not to use genetically modified foods and, therefore, create awareness toward use of the fair trade circuit. The Consortium, within the policies for research on quality and well-being of its own citizens, has encouraged use of produce from organic agriculture for whose production at the region of Emilia-Romagna is at the fore front. The health of the clients of the associated hotels, in this way, associates itself with attention to nature and its by-products.

In Table 8.2 we describe the list of suppliers of which the Consortium guarantees trustworthiness to its associate members, while the other selecting factors are that of promoting local suppliers for the development and enhancement of the area and the zero kilometer viewpoint.

Concerning the Public Administration, the Consortium of Small Quality Hotels maintains numerous relationships with the Public Administration.

The Consortium, as has already been written regarding its identity, has its roots following a project advanced by the Municipality of Rimini in 1996, which had the purpose of redeveloping small-/medium-sized family-run businesses along the eastern coast of the Emilia-Romagna region. Notwithstanding the fact that the

Table 8.2 List of suppliers

Various	Foodstuffs	Detergents	Equipment
Adria web	Adriatica Acque	A.M. Manfroni	Audilio Pezzoli
BIO City	Chef Pronto Service	Garmon	Bardelli store
Cassa di Risparmio di Cesena	Marr	Deterg. Ecologica	Bellettini and Ottaviani
Centro linguistico Douglas	Fiammetta		R.C.R. Antincendio
Libreria Viale dei Ciliegi 17	Frantoio tradizionale Paganelli		
Palusoft	Gi Mare		
Poste Italiane	Le rocche Malates		
Vittoria Assicurazioni Italiana	Partesa Emilia-Romagna		
Assicurazioni Venti10Groups	Personal Zucchero		

project had come to a natural conclusion as regards the public body, the partnership continued by way of the free use of offices and rooms where the Consortium has its premises, in the Town Council's Tourism Department.

The Municipality continues to show its trust by way of entrusting management of the "Macchina Fotografica" (Camera), a historic building located on the seafront, as testimony to a legitimacy obtained by the town authorities and local institutions. Particularly, the project of enhancing the "Macchina Fotografica" will go on in the following years with the participation of the Fellini Foundation.

The Province of Rimini financed the Consortium throughout the process which led to the certification of quality and involved it in sustainable tourism projects like that that saw Trenitalia (Italian National Railways) as protagonist.

The Consortium has been receiving capital grants from the Emilia-Romagna region since 2006. They are regulated by Law No. 7 on regional tourism and have the purpose of funding projects of commercial promotion of the territory, and in order to obtain them, every year the Consortium puts a project forward, while funds from the regional authority are distributed on a two-yearly basis. In 2010, the Consortium received the sum of 29,760.73 euro.

In 2010, the Consortium also conceived and carried out a project to enhance typical, local produce with the funding assistance of the local Chamber of Commerce, for a total value of 13,000 euro. This initiative continued in 2011.

As has already been highlighted in the "Community" section, collaboration with CCIAA (Chamber of Commerce) of Rimini even includes cost sharing and organization of seminars and conferences on the themes concerning the activity of the Consortium.

8.2.2 *The Consortium of Small Quality Hotels, Rimini, Accountability*

Analysis of the wealth generated and distributed by the Consortium in a certain financial year is represented by the production and distribution of the value added. The value added constitutes the value which an economic entity generates with the use of production factors and which distributes not only to those entities which represent the production factors but also to other stakeholders, like the Public Administration and local communities.

Table 8.3 is a detailed representation of the “value added” and the outline of its production on the basis of recategorizing the income statement.

Table 8.4 and Fig. 8.2 represent the distribution of the net value added and, therefore, the wealth produced by the Consortium in favor of the stakeholders. The most consistent percentage of the net value added, equal to 88.94%, decreasing compared to 95.18% of the previous financial year, was directed toward staff, in the shape of salaries, wages, and termination benefits provision.

Revenues from debt capital represent 2.63% of net global value added, an increase compared to 1.96% of 2009, due to an increase in passive interests.

Remuneration to the company, equal to 8.43% of the value added in 2010 and represented by the income components set aside in reserves which guarantee the growth and stabilization of the Consortium, is rising compared to 2.86% of 2009.

At the end of this section, we are going to show in Table 8.5 the measurement of social responsibility through “company reputation” (RQ) index.

Social responsibility is a key element in company reputation, since it contributes, in an important way, to fuel it. Indeed, the reputation may be defined as the perception that the stakeholders have of past and future activities of the company (Fombrun 1996: 72), and social responsibility represents its bases.

Table 8.3 Account of the value added production in 2010

Production value	189,706.90
Intermediate production costs (-)	(145,167.94)
Characteristic gross added value	44,538.96
Accessory and extraordinary components	(732.92)
Gross global added value	43,806.04
Depreciation (-)	(932.96)
Net added global value	42,873.08

Table 8.4 Account of the distribution of value added in 2010

Staff wages	38,130.76
Revenues from debt capital	1,128.61
Revenues from risk capital	0.00
Remuneration to company	3,613.71
External charity donations	0.00
Net global value added	42,873.08

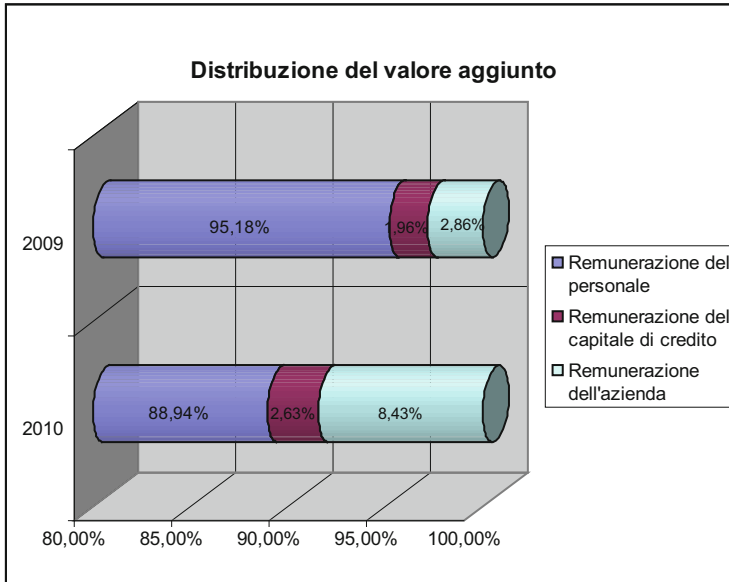


Fig. 8.2 Distribution of value added

Table 8.5 Reputation quotient and CSR comparison	<i>Social responsibility</i>	<i>91.30</i>
	<i>Reputation quotient</i>	<i>90.15</i>

We have adopted RQ (reputation quotient) as the measurement index for company reputation, using questionnaires and focus groups. Below, we give the outcomes of the analysis regarding how social responsibility, in the Consortium of Small Quality Hotels, contributes to determine company reputation.

The sample of companies under analysis in our study has reached a very high results. Indeed, social responsibility has reached 91.30 (out of 100).

To understand the importance of this measurement, we need to consider Table 8.5.

From Table 8.5, it emerges how the overall measurement of company reputation is influenced, in a positive way, by social responsibility if we consider that there are other elements of this index that, instead, place themselves around 80 out of 100. The value of 90.15 is very high if we consider that the average value of 70 has come out in a previous study in Italy concerning the RQ index.

This outcome could be an initial confirmation of the fact that the hotels, partners in the Consortium, all comply to the qualitative standards required. Indeed, the Consortium has been developing a social conduct for several years maintaining that this may be able to contribute to improve performances of individual business.

In the second part of our research, we try to establish the links between social responsibility and company reputation, for the purpose of defining responsibility from the point of view of the stakeholders.

The main players and the sources of the data in this phase of the study are the clients and employees of the Consortium.

The opinions of all 32 clients and employees were used in the qualitative analysis.

Eight groups of responsibilities have been identified by the data:

1. Communication with clients and employees
2. Type of benefits a hotel offers them
3. Behaving in a responsible manner to them
4. How the hotel makes them feel
5. How the hotel refers to the local community
6. How the hotel refers to society in general
7. How the hotel behaves with other interested parties
8. How financially stable and successful the hotel is in the long term

Thus, the hotel is responsible for however it refers to: me, others, or itself.

The most important discovery of the research is the global and total conceptualization of corporate responsibility provided by clients and employees. The results suggest that company responsibility is a concept which embraces both the social aspects connected with CSR and the wider elements associated with the practice of more traditional business.

The two categories of players considered here, clients and employees, see corporate responsibility as mirrored in similar problems. This suggests that companies may manage and demonstrate their own responsibility, using an analogous set of actions.

In the final part, we will try to compare the conceptualization of responsibility, as foreseen by the analyzed data, and the current measurement of reputation, in this sense, providing a framework for discussion on the links between responsibility and reputation.

In the first instance, we analyzed the analogies between the elements of corporate responsibility and those analyzed with the RQ model as shown in Table 8.6.

It seems that the topic of “how an organization refers to me as stakeholder” overlaps the RQ model; particularly the “products and services” space seems to strongly regard the “benefits offered to me,” while the “emotional appeal” space seems to be strongly linked to “how an organization makes me feel.”

In the sample of hotels analyzed in the first part of the research work, both points of view take on high values, precisely emotional appeal 90.39 and products and services 90.93. These values confirm that these companies did not obtain more satisfying evaluations, in terms of good reputation than those obtained in terms of corporate responsibility. It is very clear that these points of strength must be suitably managed and “exploited” by the managers of the Consortium.

The RQ model adapts well to the topic of responsibility concerning “how an organization is seen to relate to others,” though not with the same degree of synergy as the previous one. The sample of companies analyzed in our study has reached a very positive result. Indeed, the work environment has reached 91.68 and corporate responsibility has reached 91.30. Also, regarding this issue, the companies

Table 8.6 Links between corporate responsibility and corporate reputation

<i>Theme of responsibility and. . .</i>	<i>. . .</i>	<i>. . .Reputation model</i>
Theme of responsibility	Responsibility cluster	
<i>A hotel is responsible for. . .</i>		
. . .how it relates to me	By the benefits it offers me	Products and services
	By the responsible way in which it behaves	Vision and leadership
	How it makes me feel	Emotional appeal
. . .how it relates to others	To society in general	Social responsibility
	To other direct stakeholders	Work environment
. . .how it relates to itself	Long-term success in business	Financial performance

belonging to the Consortium enjoy a good reputation with stakeholders and, at the same time, register “very good corporate responsibility practices.” For the companies analyzed, this is decidedly a good asset to exploit for maintaining and strengthening their competitive advantage and potential capacity for improving their financial performances.

As for the issue of responsibility concerning “how an organization refers to itself,” the reputation model gave strong indicators. Within our sample of companies, the economic outcome is part of those elements that reached a lower value, just 88.45 (obviously, in relative terms); the absolute value may certainly be defined as being more than good (Baldarelli and Gigli 2012).

The propensity of the Consortium for collaboration is underlined by the path undertaken in this last period, wherein a network contract with other consortiums has been developed. All of which will be further studied in following works.

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Chapter 9

Case Studies and Best Practices: The Case of Casio Computer Co. Ltd

Ninel Nesheva-Kiosseva

9.1 A Brief Description of Japanese Environmental Accounting and Reporting

The Japanese experience in environmental accounting and reporting dates back to a quarter of a century. It is indicative of how corporations themselves have found the needs to create environmental accounts for more accurate accounting of costs and defining the objectives of development, for a better and more detailed management. Along with this, the Japanese experience is valuable for countries that have not yet developed their own system of environmental reporting, such as Bulgaria. The Japanese experience also shows the fruitful interaction between government, corporations, and accounting science.

It cannot be said with any precision when the compilation of environmental accounting and reporting in Japan started, but the country already has several regulations for Environmental Reporting Guidelines (hereinafter called “Guidelines”), which first came into force in 2001, followed by those in 2003, 2005, and 2007 (Environmental Reporting Guidelines 2001).

The development of environmental accounting and reporting in Japan is a complex process in which representatives of corporations and the government summarize their experience. The corporations have differences in their accounting records, depending on the sector they operate in and the specific problems that stand in front of them, as well as the different needs for information of their different stakeholders.

Environmental accounting (Table 9.1) in Japan exists in both forms – internal management accounting and external disclosure – for purposes of public information.

The last applicable standard (Guidelines for environmental reporting, for the 2007 fiscal year, issued by the Ministry of Environment) is dictated by the need for implementation of new initiatives and has been created on the basis of the concept of “management of the environment in which environmental considerations are

Table 9.1 Simple scheme of the content of environmental management disclosure in Japan

Information type	Differences in companies' environmental accounting (voluntary)	Commons (obligatory)
Qualitative information	Stakeholder inclusion	Guidelines
Quantitative information	Stakeholder inclusion	Standardized disclosure

Source: Mizuguchi et al. (2010)

integrated into corporate governance” (Guidelines 2007: 1). It is mandatory for large corporations.

New moments in Guidelines 2007 are:

1. Introduction of lists and tables of key indicators
2. Recommendations for measures to improve the reliability of Environment Reporting
3. Recommendations for environment accounting with a greater emphasis on the views of stakeholders
4. Encourage investment and financing, taking into consideration the environment
5. Encourage the biodiversity conservation and sustainable use of biological resources (Environmental Reporting Guidelines 2007: 2)

In addition to the environmental issues is also the social. Status of social initiatives (Chap. 4) describes information and indicators for reporting as well as social aspects, using (SPI = Social Performance Indicators) (Guidelines 2007: 35), and Chap. 5 describes upcoming issues involved in the environment.

The Ministry of Environment of Japan has created special Eco Guidelines for reports of systems for environmental management and environmental activities “Action 21, 2004” in order to enable SMEs to become involved and participate in environmental programs as well as to publish environmental reports more easily. (Environmental Reporting Guidelines 2007: 11).

The Guidelines are made from *Keidanren* (the Japan Business Federation) and “Ministry of International Trade and Industry” or MITI (today, it is known as the “Ministry of Economy, Trade and Industry” and is related to corporate management of the environment). The ultimate Guidelines are made by the Japanese Ministry of Environment.

Structural elements of environmental accountability (Fig. 9.1) have been fully completed in the 2005 Guidelines.

1. *Environmental Conservation Cost* (presented in monetary units). “Investments and expenses related to the prevention, reduction and/or avoidance of environmental impact, removal of such impact, restoration following the occurrence of disaster and other activities” (p.10).
2. *Environmental Conservation Benefit* (presented in physical units) – “benefits obtained from the prevention, reduction and/or avoidance of environmental impact restoration following the occurrence of disaster and other activities.”

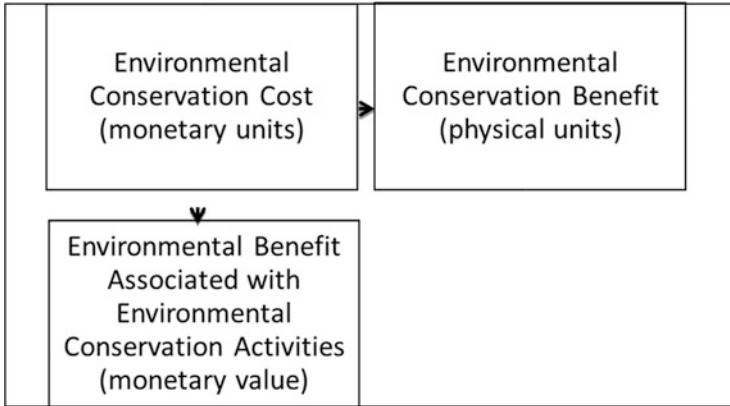


Fig. 9.1 Scheme of structural elements of environmental accounting in Japan (Guidelines, version 2005. Source: Guidelines (2005: 5))

In order to track the change in performance of the company, it is necessary to compare its current performance with that of the reference period. This is done through a method for comparing on adjusted base value. This method calculates the difference between the amount of environmental impact for the current period and the adjusted value for the base period. This method enables to compare the results of the environment conservation depending on the volume of business activity:

$$\begin{aligned}
 &\text{Environmental conservation benefit} \\
 &= \text{Volume of environmental impact in the base period} \\
 &\times (\text{Volume of business activity in the current period} / \\
 &\quad \text{Volume of business activity in the base period}) \\
 &- \text{Volume of environmental impact in the current period}
 \end{aligned}$$

$$\text{ECB} = \text{TEI}(\text{bp}) \times \text{BA}(\text{cp}) / \text{BA}(\text{bp}) - \text{TEI}(\text{cp}) \tag{9.1}$$

3. *Economic Benefit Associated with Environmental Conservation Activities* (the monetary value) – “Benefits of company’s profit as a result of carrying forward environmental conservation activities” (Environmental Reporting Guidelines 2005, p.10).

For correction adjustment is taken a base period. The base period is the previous fiscal period.

The calculation of adjustments follows in the following formula:

$$\begin{aligned}
 &\text{Economic benefit associated with environmental conservation activities} \\
 &(\text{expense reduction}) = \text{Expense in the base period} - \text{Expense in the current period}
 \end{aligned}$$

$$ECB = TEI(bp) - TEI(cp) \quad (9.2)$$

9.2 The “Casio” Case

Among the corporations that have the most extensive experience in environmental accounting and reporting, we present here the case of Casio. The Casio case representatively reflects conducting of environmental accounting by corporations in Japan. A case study on the Casio example for environmental accounting and reporting would give a good view for its development and status in Japan.

Casio is one of the companies to voluntarily and independently begin developing environmental reports before the governmental guidelines were published and before the environmental reporting became mandatory for large corporations.

Casio probably started compiling environmental accounts since 1991 (Casio, Environmental FAQ, <http://world.casio.com/csr/env/faq>). In 2010, Casio published its first sustainability report and established the biodiversity guidelines. Social initiatives are in place in Casio's report from 1999 as they are part of sustainability Casio reports to the present.

In 2000, Casio created its own “Green Standards” for the award of deliveries, which includes in the orbit of its environmental accounting and reporting and corporate social responsibility the suppliers also. In 2001, Casio established “Casio Group Guidelines for Green Product Development” and launched the “Casio Green Products 30” (CGP30) campaign (Casio, Environmental FAQ, <http://world.casio.com/csr/env/faq>).

Casio has zero-emission goals. In the year 2014, zero emissions were achieved at 8 of its 19 manufacturing locations in the country (Casio Sustainability Report 2014: 5). Casio has given a definition of zero emissions: “Final disposal waste sent to landfills is no more than 1% of the total waste generated” (Casio LTD Corporate Report 2007: 5).

The measurements that Casio made show that due to the increased production of “electronic device-manufacturing facilities,” emissions of carbon dioxide that the corporation released into the atmosphere, has been increasing in absolute terms, although it has been reduced in units of production. This is alarming for its environmental performance. For this reason, in its first public environmental report in 1999, the corporation announced to society its commitment to environmental protection and presented the system for environmental management and environmental goals, which it has developed. These goals are as follows:

1. *Target for energy conservation: by fiscal 2011, reduce CO₂ emissions per unit of production to 25% lower than in the fiscal 1991 year.*
2. *Target for industrial waste reduction: by the fiscal 2011, to reduce the volume of industrial landfill waste to zero.*
3. *Targets for abolition of toxic chemical substances: Completely discontinue the use of HCFCs at both domestic and foreign production facilities by the end of 2001 and*

- completely discontinue the use of chlorine-based solvents at both domestic and foreign production facilities by the end of 2000*
4. *Target for acquirement of ISO 14001 certification: Acquire certification for principal manufacturing and nonmanufacturing facilities in Japan and overseas by the end of fiscal 2001*
 5. *Target for Green Procurement: Adopt green procurement specifications by the end of the fiscal 2001.* (Casio LTD Environmental Report 1999, p. 6)

The environmental accountability practice of Casio has passed through some modifications, although in general the main indicators remain the same.

Let us look at some iconic statements and “samples” that are the result of the development of the Casio environmental report.

The first Casio environmental report published in 2002 after the Guidelines for state environmental reporting came into force.

In 2002, Casio makes the following groups disclosure of their activities on recycling, environmental care for consumers, and the greening of production, supply, sales, and purchases, which can be classified to the problems of:

- Recycling and waste disposal

Main details: Investment in factory waste disposal and recycling

- Use of products by consumers

Main details: Attempt to reduce the environmental impact caused by the use of Casio products through various measures such as the development of more energy-efficient products

- Development and design

Main details: Promoting environmentally compatible design and development of green products

- Delivery of materials

Main parts: Implementation of green procurement and purchasing

- Distribution and sales

Main details: Reforming the distribution network through measures such as modal shift to other modes of transport

- Society (Care of senior management)

Main details:

- Code of conduct
- Social activities – contribution to society
- Environmental communications
- History of Casio in environmental activities
- Production
- Efforts to reduce the environmental impact caused by production activities
- Economics

– Corporation data and main directions of corporate business system

In this report, Casio published its first “Casio Voluntary Plan for the Environment.” Mandatory data for the sustainability of the corporation is required by the “Guidelines for environmental accounting of the Ministry of Environment of Japan” (2002), by which the environmental report of Japanese corporations since the beginning of the regulation is not purely environmental but to a large degree is a transition to a sustainability report and report on corporate social responsibility. In 2010 all constituent components of the sustainability report have already been implemented in the sustainability report, and the environmental report is part of it.

Costs for environmental protection of Casio for 2002:

Casio rendered an account in two major groups of indicator expenses for protection of the environment, presented by departments:

1. Amount of *capital investment for environmental protection*
2. Amount of *environmental-related costs* like recycling and waste costs, *Green Product Development*.

Let us look at the most important disclosure “*capital investment for environmental protection*.” Table 9.2 shows the results for environmental investments for the fiscal 2002 compared (adjusted) with 2001.

And now let us compare with the 2014 statement.

In the comparison, the following differences were observed:

1. The report on the environmental costs for 2014 only refers to the aggregate total for the year to “environmental investment” and “environmental expenses.” Reporting by centers of responsibility is abandoned.
2. “Management activity costs” were replaced with the wider “administrative expenses.”
3. “Information disclosure/social contribution costs” in the statement of 2002 were changed to ‘social activity cost’ in the 2014 Report (Table 9.3).

9.3 Calculation of Consumer Economic Benefit

In 2008, Casio Corporation developed experiments with a separate original accounting report in which it states the economic benefit for the customers “Customer Benefit” (Table 9.4). In the following years this separate calculation and reporting is not present in the environmental statements of the corporation.

Table 9.2 Report for environmental protection Casio, 2002

Item	Electronic component division			Electronics equipment division			Total			Major details
	2001	2002	Change	2001	(¥ million)	Change	2001	2002	Change	
	63	1543	-1.48	0	24	-14	63	1557	-1404	
Business area costs										
Break down										
Pollution prevention costs	11	783	-722	0	0	-9	11	792	-781	System for removing and controlling hazardous substances
Glob environmental conservation costs	52	650	-600	24		0	50	650	-600	Cleaning system
Resource circulation costs	2	110	-108	-	5	-5	2	115	-113	Pure water recycling system
Upstream/downstream costs		0	0		-	0	0	0	0	
Management activity costs		0	0		-	0	0	0	0	
Research and development costs (R&D cost)		2	-2		13	4	8	6	2	System for research on lead-free solder
Information disclosure/social contribution costs			0		-	0	0	0	0	
Other costs			0		-					
Total	63	1545	-1.48		37	-10	71	1563	-1492	

Source: Environmental Accounting of Casio Computer Ltd., Retrieved from http://world.casio.com/file/csr/pdf/report_2003/p15-16.pdf

Table 9.3 Report for environmental protection cost, Casio, 2014

Category by business activity		Environmental investment (¥ million)	Environmental expenses (note 1) (¥ million)
	Main initiatives		
Business area costs (costs arising in the main areas of business activity—manufacturing, processing, sales, distribution, etc.)		24	270
(1) Pollution prevention cost	Preventing air and noise pollution	0	43
(2) Global environmental conservation cost	Maintenance of energy-saving systems	24	171
(3) Resource circulation cost	Processing, reducing in volume, and recycling of general and industrial waste	–	56
Upstream/downstream cost (note 2)	Collection and recycling of products, parts, supplies	–	682
Administration cost	Secretariat operation costs, environmental information disclosure	–	257
R&D cost	R&D for reduction of environmental impact	13	40
Social activity cost	Participation in, donations to, and support for environmental conservation organizations	–	13
Environmental remediation cost	Soil improvement	–	10
Total		37	1272

Source: Sustainability Report of Casio Ltd, Environmental Accounting (2014) Retrieved from <http://world.casio.com/csr/report/2014/>

Table 9.4 Method of calculating “Customer Benefit” in environmental accounting of Casio, 2008

	Fiscal 2007	Fiscal 2008	Amount of reduction		
Total units sold	150 million units	160 million units	—		
Power consumption during product use (total product power consumption)	32.4 million kWh	25.0 million kWh	7.4 million kWh	23% reduction	Customer economic benefit ¥118 million

Source: Casio, Corporate Report, 2008, p. 43, Retrieved from: http://arch.casio.com/file/csr/pdf/report_2008/Casio_CSR_ENG.pdf

^aApplies to electronic products (timepieces, calculators, label printers, electronic dictionaries, digital cameras, electronic musical instruments, cellular phones, system equipment) sold in Japan and overseas in fiscal 2007 and 2008

^bThe unit of electric power used is the fiscal 2007 meter-rate lighting B, 1st block rate of ¥16/kWh (fractions rounded off) of the Tokyo Electric Power Company

9.3.1 *Environmental Impact and Environmental Conservation Effect*

9.3.1.1 Environmental Impact

The data for Environmental impact is given in physical units, and this is the physical account. Environmental impact can be given in absolute numbers of tones by kind of production by dividing into the following groups:

1. Carbon dioxide (CO₂)
2. Nitrogen oxide and nitrogen dioxide (NO_x)
3. Sulfur oxides (SO_x)
4. Waste
5. Landfill
6. Substances under Pollutant Release and Transfer Register (PRTR) (Ministry of Environment, PRTR information Plaza Japan, <https://www.env.go.jp/en/chemi/prtr/prtr.html>; <https://www.env.go.jp/en/chemi/prtr/about/substances.html>)

9.3.1.2 Environmental Conservation Effect

The effects of environmental conservation are presented as percentage and absolute quantified compared to the previous year, which is taken as a reference in the report for the year.

This is a relative data and in comparison with the previous year shows the change in quantity and change in percent, based on the data of environmental impact as follows:

1. CO₂ – change up/down in tones and the percent change
2. NO_x – up/down in tons and the percent change
3. SO_x – up/down in tons and the percent change
4. Waste – up/down in tons and the percent change
5. Landfill – up/down in tons and the percent change
6. Substances under PRTR – up/down in tons and the percent change (Table 9.5)

To disclose the changes in the scope of accounting purposes that Casio has made setting himself broader goals and demanding results, the results for the fiscal 2001 were also duly revised in view of higher targets for 2002.

This technique shows how environmental accounting and reporting cannot be static but dynamic and is a creative accounting system contrary to conventional solid accounting practices and the routine of conventional accounting.

For environment-related capital investment, Casio is planning to provide ¥71 million. To purchase devices such as cleaning the LCD system and devices required for conducting research on the method of “lead-free soldering” in 2002 compared to the fiscal 2001, in which about ¥1.2 billion was spent on environmental measures

Table 9.5 Reporting of Casio Corporation for environmental impact and environmental conservation effects, 2002

Environmental impact (on divisions in physical units)		Effects of environmental conservation (in comparison with previous fiscal year)			
Divisions for electronic components	Divisions for electronic equipment	Divisions for electronic components		Divisions for electronic equipment	
Total for fiscal 2002	Total for fiscal 2002	Change (quantity)	Change	Change (quantity)	Change
CO ₂ – 72,250 tons	CO ₂ – 14,119 tons	4603 tons up	7% up 25% up	449 tons up	33% up 28% up
		5 tons up	31% up	0.3 tons up	10% up
		2 tons up	29% up	0.3 tons up	1%
		1115 tons up	32% down	15 tons down	45% down
		22 tons down	14% up	85 tons down	92% up
		16 tons up		1 ton up	
NO _x – 23 tons	NO _x – 2 tons				
SO _x – 8 tons	SO _x – 3 tons				
Waste volume – 4998 tons	Waste volume – 1392 tons				
Landfilling volume – 45 tons	Landfilling volume – 102 tons				
Substances under PRTR ^a – 124 tons	Substances under PRTR – 3 tons				

Source: Casio Environmental Report (2002)

^aPollutant Release and Transfer Register (PRTR) – Compiled Data 1–3, The Releases and Transfers in Japan, (Manufacture of electrical machinery, equipment and supplies) http://www2.env.go.jp/chemi/prtr/prtrinfor/contents/2013/html_en/T1_2013993000.htm

necessary after the further construction of a third plant in Kochi Casio, the amount of environmental costs of the investments decreased significantly.

In the field of environmental costs, there was a slight increase in the manufacture of electronic components and a small reduction in electronics equipment. In general, compared with the fiscal 2001, no significant changes in the size-bound environmental costs were observed.

In a statement, “other expenses” was published with the cost of ¥4 million total, which are temporary costs necessary for the implementation of measures associated with environmental laws and regulations enforced in North America for the Casio branches in the USA.

9.3.2 Economic Effects from Environmental Conservation Measures

Group of disclosures “economic effect of environmental conservation measures” includes:

- Energy savings (related cost – compared with previous year)
- Effects from promotion of energy savings
- Reduction of waste (related cost – comparison with previous year)
- Recycling of products, reuse of subsidiary materials, and income of sales of used materials

This is where the remarkable reduction in energy use compared to the fiscal 2001 appears. This is an economic benefit from the conservation of the environment. On the other hand, the reduction of the effects is derived from recycling. Overall, however, Casio achieved a slight increase in economic effects of the environment in 2002 compared to 2001.

For economic benefits (Table 9.6), derived from the measures implemented in environmental protection, an increase in the protection of energy is observed, as a remarkable reduction is present in comparison with the fiscal 2001; there is a reduction of the effects derived from the recycling of waste, for example, a decrease in the expenses. As a whole, Casio obtains a slight increase of the economic effects in 2002 compared to 2001.

9.3.3 Economic and Environmental Efficiency of Environmental Costs and Environmental Efficiency

Corporations in Japan must also consider the economic and environmental efficiency of costs.

Let us observe how Casio reported economic and environmental efficiency in its environmental costs. Economic efficiency of environmental costs represents the economic rationality of the total costs spent for environmental activities (Table 9.7). It is calculated on the basis of accounting information as part of the overall economic effects and total costs of the corporation for the environment.

Environmental efficiency (Table 9.8) is equal to the quotient of the sales of the corporation (in ¥ million). An environmental impact (CO₂ emission presented in tons CO₂) or, in other words, eco-efficiency represents the value of sales of 1 ton of CO₂ emissions.

Table 9.6 Calculation the economic effects related to the environmental measures implemented by companies in Japan (including used by Casio)

Economic effects associated with environmental measures	
Content of effects	SUM (X)
Incomes generated from recycling	x
Reducing costs achieved through energy savings	x
Reducing the costs of processing of waste, achieved by recycling	x

Source: Casio Corporate Report (2001, 2002)

Table 9.7 Economic efficiency of the environmental costs of Casio in environment report for 2002

Economic effectiveness of environmental costs = total economic effects/total environmental costs					
2002 FY			2001 FY		
Divisions for electronic components	Divisions for electronic equipment	Total	Divisions for electronic components	Divisions for electronic equipment	Total
0.07	0.53	0.34	-0.09	0.57	0.30

Source: Casio Environmental Report (2002)

Table 9.8 Environmental efficiency of Casio in the environmental report for 2002

Environmental efficiency = sales (in mil.)/impact (effect) on the environment (in issued CO ₂ emissions: tons of CO ₂) or environmental performance represents sales value of 1 ton of CO ₂ emissions					
2002 FY			2001 FY		
Divisions for electronic components	Divisions for electronic equipment	Total	Divisions for electronic components	Divisions for electronic equipment	Total
0.98	15.57	3.40	0.91	12.79	2.90

9.3.4 Reporting “Economic Benefits of Environmental Conservation”

For 2008 Economic benefits (Table 9.9) are shown as a monetary sum equivalent to the contribution to profits resulting from environmental conservation measures. Estimated benefits such as improved corporate image and risk avoidance are not included.

In 2010 Casio issued the sustainability report and established the biodiversity guidelines. The main part of it and the following sustainability reports of the corporation are environmental initiatives and environmental accountability. Thus, efforts in the establishment of environmental accountability are becoming the foundation of sustainability reports and a major element of the accountability of corporate social responsibility.

Table 9.9 Economic benefits of environmental conservation (April 2013–March 2014)

Economic benefit		Amount (¥ million)
<i>Type of benefit</i>		
Actual benefit (benefit that contributes to profits as a result of the promotion of environmental conservation measures)		971
Profits	Business revenue from recycling of used products, etc.	934
Cost reduction	Cost reduction through energy saving activities	16
	Reduction of waste processing costs arising from resource saving or recycling	21
Estimated benefit ^a	Reduction of distribution costs through environmental conservation initiatives	256
	Reduction of power consumption during product use by customers, etc.	
Total		1227

Source: Retrieved from <http://world.casio.com/csr/env/data/data02/>

^aThe estimated benefit is calculated as the CO₂ reduction amount from business activities plus the reduction from power savings during product use by customers. It also includes the environmental benefit of paperless products such as electronic dictionaries and data projectors and smaller non-mercury lamp projectors and printers, efforts to increase the longevity of the parts on these devices that require regular replacement, and distribution cost reductions achieved by a modal shift from air to sea transport. Regarding the reduction of power consumption during product use by customers, the monetary value of the environmental impact reduction effect is calculated as follows: Reduction of power consumption during product use by customers = (Annual power consumption of the previous model – Annual power consumption of the new model) × Number of units sold in the year × Electric power unit price. When calculating the estimated effects, the following coefficients are used: CO₂ unit prices are the average full-year value for fiscal 2014 based on the EU emissions trading price (¥641.7/tons). The electric power unit prices are fiscal 2014 electricity costs from the Fiscal 2014 Energy White Paper issued by Japan's Agency for Natural Resources and Energy (¥17.53/kWh) (Sustainability Report of Casio Ltd, Environmental Accounting, 2014, <http://world.casio.com/csr/report/2014/>)

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