The commercial development and sustainability of the South African photovoltaic market

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PV Project Development Africa 2014

PV Insider recently conducted an industry survey of over 100 leading professionals to get their view on the commercial development and sustainability of the South African PV market. The survey addressed issues regarding regulatory barriers for projects, the sustainability of the industry and which markets in Sub-Saharan Africa are regarded as the best development opportunity.

So you can effectively evolve your business strategy PV Insider has collated these results into a single defining guide giving you the feedback and expert analysis on the survey results. Read on to find out where the industry experts really think the market is heading and if the way you are developing your business is a viable strategy.

This guide has been produced in conjunction with **PV Project Development Africa 2014** (9-10 September, Johannesburg). The summit will be bringing together all the key industry stakeholders to discuss the commercial evolution and sustainability of the PV market in South Africa. There will be the opportunity to hear from multinational developers and EPC's who have entered the market as well as local manufacturers and developers with exceptional market expertise.

For more details on PV Project Development Africa 2014 visit: **www.pv-insider.com/africa**

Overview

The photovoltaic market in South Africa holds huge potential for developers with a cumulative target of 9,770MW worth of PV deployments by 2030. Recent alterations to the Integrated Resource Plan (IRP) have seen the targets for PV deployment continue to increase only further. The market has shown tremendous growth as a result of the REIPPP and it seems likely that this growth is going to continue in the next 5 years.

There is however an underlying worry within the market that the current process of development isn't commercially sustainable. In order to address the nature of this concern PV Insider surveyed the views of over 100 industry experts about the commercial development of the market and has collated the results below complete with full in depth analysis

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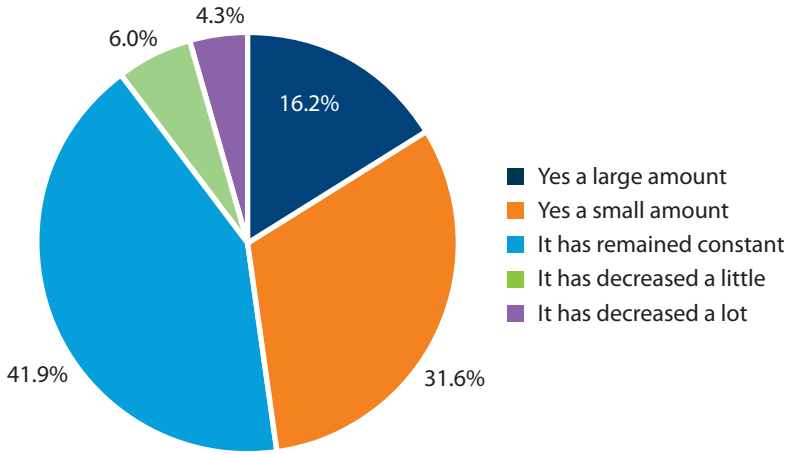
Photovoltaics in South Africa: Sustainability and market development survey

In the past 12 months have you seen revenues grow as a result of your commercial activity in the South African PV market?



Market Revenues

This question examined the revenue patterns of industry stakeholders in the past 12 months. The responses to this question were overwhelmingly positive with 47.8% of respondents reporting a revenue increase in the past year. The signs for growth are strong and the 41.9% of respondents who said their revenue streams had remained constant show that currently there is a strong stable income being derived from the industry. Only 10.3% of those surveyed said that they had experienced a revenue decrease in the past 12 months.

The results are entirely consistent with the widely perceived growth in the market in the past year and the fruits of the REIPPP are clearly filtering through to the budgets of those active in the market. With just under 90% of respondents reporting constant or increasing revenue streams as a product of their activities in the South African PV market it is clear that the market is providing ample opportunities and growth for those involved in the market.

The results of this question reveal that despite an increasingly competitive landscape which has seen new firms enter the market revenues across the industry have been sustained and grown in the past year. With the guarantee of REIPPP driving overall capacity growth the space has been there for companies to enter the market and to not necessarily be competing away revenue streams. As long as there is an under-supply of power in the market this will continue to be the case, however as the production deficiency void shrinks firms will have to be increasingly competitive to secure consistent revenue streams.

REIPPP in numbers

- 33 PV projects already awarded under the program
- Over 1GW of PV deployed
- 1330MW to proposed increase in PV allocation in changes to the Integrated Resource Plan

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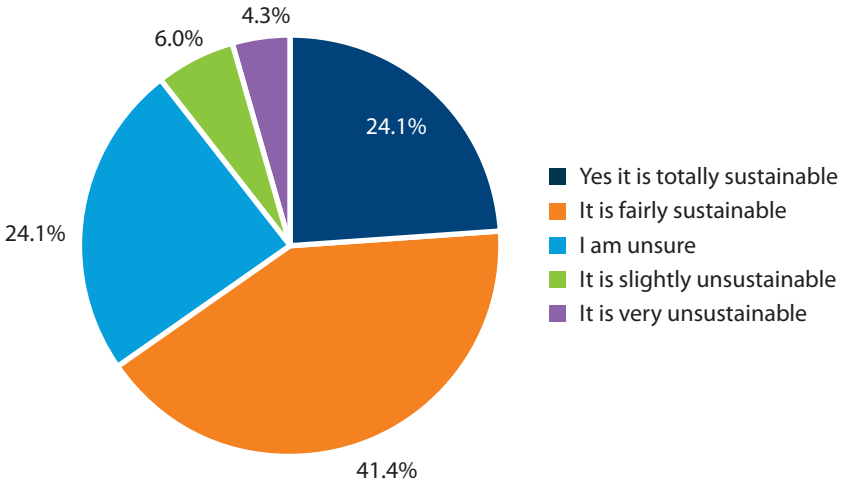
Is the current pattern of development in the PV industry in South Africa sustainable for the next 3-7 years?



Sustainable Development?

PV Insider then examined the current sustainability of the current development pattern for the South African PV industry. 65.5% of respondents replied stating that they believed the market to be either 'fairly sustainable' or 'totally sustainable'; this shows a very good degree of confidence in the ability of the market to develop in the next 3-7 years. While the mood was generally very positive it is clear that there is also an underbelly of uncertainty in the market, with 24.1% stating that they were unsure about how the market would develop and 10.3% going as far as to say the development of the market was either 'slightly unsustainable' or 'very unsustainable'.

This underbelly of uncertainty can be derived from several factors, firstly can it be guaranteed that throughout the next 3-7 years REIPPP will continue to provide the project pipeline which has sustained so many in the industry? Further to this competition in the industry is increasing and price points have become increasingly squeezed as a result – making it harder for firms to stay active in the market. These results show there is certainly not industry panic, the mood for the most part is buoyant on increasing revenues, however there is an underlying uncertainty about the direction the industry could take in the next 3-7 years.

The results from this question show a general level of faith in the development of the market which is hugely important for continual investment into the industry. Along with the results from the revenue question in question 1 it is clear that for many companies they have found great profitability in the market and continue to expect this to be the case. While there is an undercurrent of uncertainty about the continual development of the market it is far from a situation of panic. Spare capacity in the grid, demand growth and the supply deficiency previously mentioned are the justifications for this general level of optimism. The continued roll out of REIPPP guarantees demand and firms are aware that this continues to make their presence in the market profitable and sustainable.

Opportunity to learn more:

At PV Project Development Africa 2014 (9-10 September, Johannesburg) speakers from developers and leading financiers will be speaking about how via alternative procurement and financing methods a sustainable model for development can be created.

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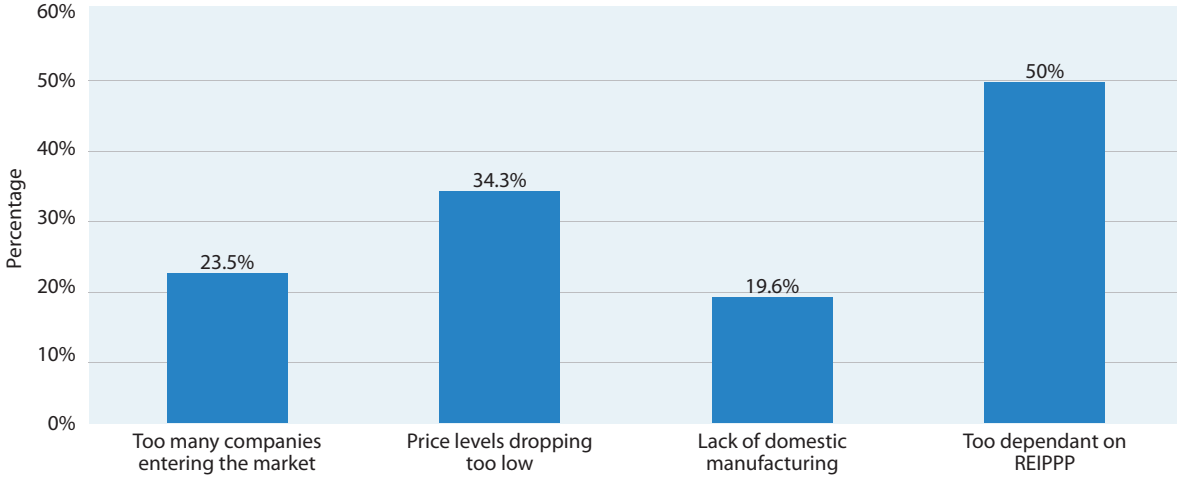
Which of these is the most significant factor likely to make the South African PV market unsustainable to successfully operate in?



What could cause uncertainty?

This question examined what future challenges could cause market uncertainty and affect the capacity businesses to operate successfully in the market. 50% of respondents considered their business being too dependent of the REIPPP and that this could be the biggest cause of the market being unsustainable for them. Interestingly another major concern for those surveyed was that 34.3% of them felt that prices levels were dropping too low in order for them to be competitive. This is fear is certainly backed up by the figures with the average price of awarded projects in Round 1 of REIPPP ~270c and the average price in Round 3 about ~95c. If price levels drop any lower than they currently are at it is clear that some in the industry would no longer be able to be competitive.

For commercial development it is clear there is not a single overriding factor which may cause an unsustainable market. While REIPPP has been a tremendous driver for the industry there is a large fear acknowledged that the PV industry could currently be too dependent on it and companies may begin to start taking steps to mitigate against this risk by sourcing a private client base.

19.6% of respondents said that a lack of domestic manufacturing developing would be a substantial problem as the industry developed and 23.5% felt there were too many companies entering the market causing unsustainability. The question specifically asked respondents to name only one reason; however for many firms it may be the case that a mixture of factors would cumulatively constitute unsustainable market conditions.

Selected 'Other' Responses

"Unfavourable Exchange Rate, Insecure political ambience"

"Lack of skills and support infrastructure"

"Limited supply of long term finance for non REIPPP projects"

"Eskom does not have the ability to pay for what is available"

"Ongoing problems with small-scale feed-in domestic and commercial installations"

"None, PV market is growing in SA"

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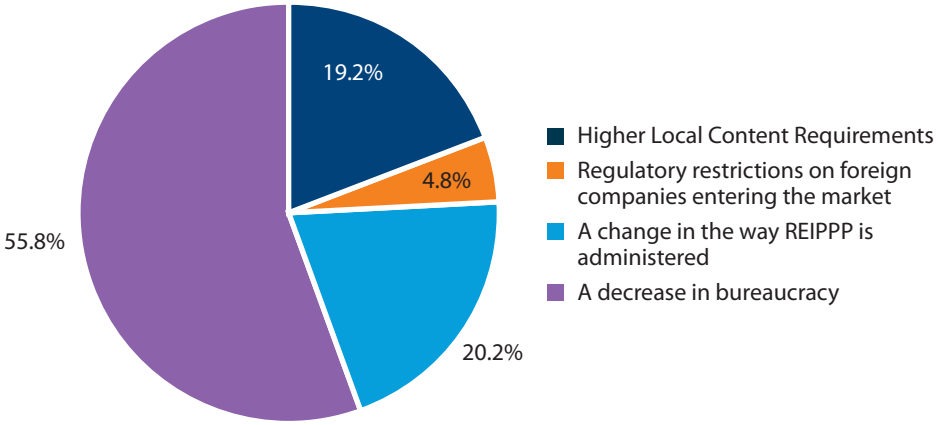
Which of these is the most important step which South African regulators should take in order to facilitate sustainable development over the next 3-7 years?



What regulators can do to develop a sustainable industry?

This question examined the issue of what regulators could do in order to facilitate the development of a sustainable solar industry. Only 4.8% of respondents cited restrictions on foreign companies entering the market as being of benefit to the development of the industry. From this it is clear that South Africa will continue to benefit from keeping its doors open to investment and expertise from foreign companies as the market continues to grow.

The majority (55.8%) believed that a decrease in bureaucracy would be the regulatory measure which would allow them to commercially develop the most effectively. The process for development is currently notoriously arduous and makes it extremely difficult for firms without a large capital base to stay active in the market – especially as competition for projects continues to get tougher. 20.2% cited a change in the way REIPPP is administered as something which would be the most beneficial to them and is perhaps indicative of the extent firms are dependent on the process, despite the increasingly tough conditions of remaining active within the program. While 19.2% felt that higher local content requirements are something which regulators need to take in order to develop the industry sustainability.

'Other' responses revealed that many companies are craving very specific legislation which provides a clear framework for the growth of roof top PV or an effective framework to conclude private power deals.

Selected 'Other' Responses

"Tax incentives for Local Content"

"Pricing needs to change with volumes, local content could help that but given the labour market and demands being made in that area it might not help"

"Create effective pathways for IPPs to contribute to national supply"

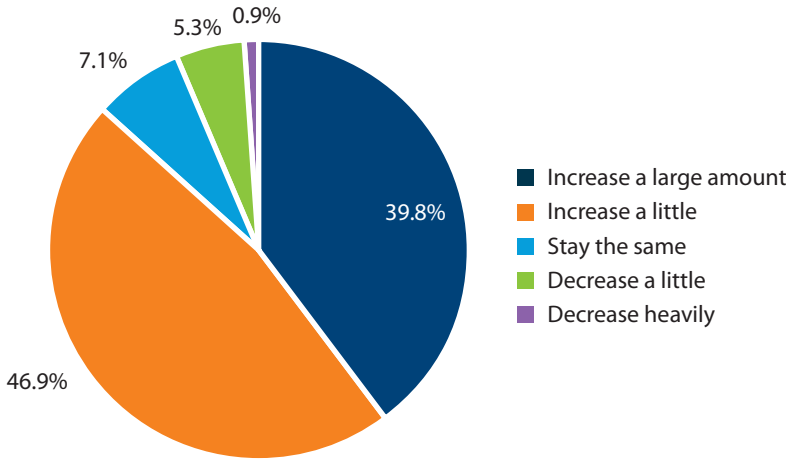
"A suitable roof top programme"

"Enabling Roof top market"

"Focus on rooftop PV industry"

Photovoltaics in South Africa: Sustainability and market development survey

Do you expect your budget for PV focused business development in Africa to increase or decrease over the next three years?



Business Development Budgets

The survey asked respondents if they expected their business development budget to be increase or decrease in the next three years. A staggering 86.7% of respondents stated that they were expecting to see an increase in their business development budget over the next three years.

This is a clear signal of intent that companies are looking to expand their operations in Sub-Saharan African and view it as a growth market of high potential. 39.8% of those asked went as far to say their budget would be growing a large amount in the next three years. This level of response is indicative of this rising revenues and continued view of profitability which has been previously stated and is investment which is only being made as businesses believe there are still huge gains to be made in the market.

Only 6.2% of respondents were expecting a decrease in their business development budget and 7.1% were expecting their budget to stay the same. Perhaps telling about the increased competition in the market is 86.7% stating they expected to see an increase in their business development budget however only 47.8% had seen a revenue increase in the past year, perhaps indicative of companies having to invest more to potentially get less out.

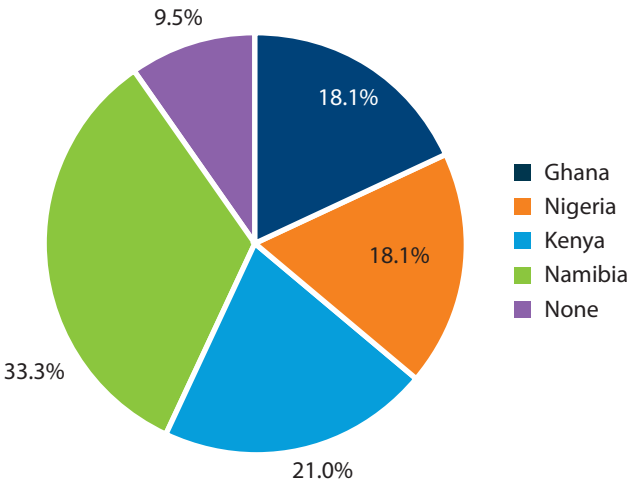
With budgets increasing this is clear empirical evidence of the potential for growth which companies believe the PV market in South Africa has. It is also consistent with the growth cited previously to revenue streams (Question 1) and the general view of sustainability and growth which companies have (Question 2).

Develop your business and find clients

If you are looking to source new business opportunities and find new clients then sponsoring or exhibiting at PV Project Development Africa 2014 is the perfect opportunity for you. You will have the opportunity to meet developers, EPC's and financiers all in one place. PV Insider has the proven track record of helping businesses expand their client base. If you would like to speak about the potential opportunities available to you at email Neil Da Costa at: **neil@pv-insider.com**

Photovoltaics in South Africa: Sustainability and market development survey

Which Sub-Saharan African market (outside of South Africa) has the most credible prospects for growth in the next 5 years?



Which Sub-Saharan African market looks the most promising?

The survey then asked respondents to identify which market they regard as having the most credible prospects for growth in the next five years. Namibia topped the polling with 33.3% and was a clear leader of the countries listed. Ghana, Nigeria and Kenya all polled very similarly with 18.1%, 18.1% and 21% respectively suggesting that amongst these nations there is a lack of a consensus on which is the best investment opportunity.

Only 9.5% of respondents stated that no other market outside of South Africa was a credible investment opportunity. This is consistent with the huge level of optimism which has been previously highlighted which has seen both revenues and business development budgets increasing. Development within the region is viewed as a huge opportunity for growth despite there being no consensus on which market will be the best vehicle for it.

It is clear that South Africa has the potential to act as a centre of excellence for the development of the PV industry in Sub-Saharan Africa and this could be a prevailing trend which is seen over the next 5 years. Although there is no general consensus on which market is the best opportunity it is clear that South African PV companies are viewing markets in the region as an opportunity.

Selected 'Other' Responses

Botswana

Mozambique

Tanzania

Zambia

Zimbabwe

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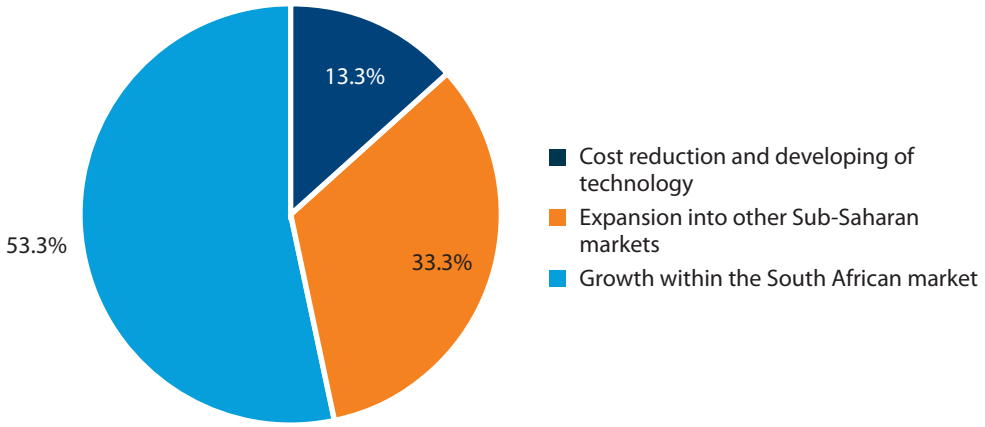
Which of the following will form the largest part of your business development spend in Africa in the next 5 years?over the next 3-7 years?



Where can business develop?

This question examined what companies business development focus would be in Sub-Saharan Africa in the next 5 years. The responses reveal that many companies see the highest potential for growth in the South African market with 53.3% of the surveyed audience stating this as their business development priority for the next 5 years. This is perhaps reflective of companies waiting for demand markets to mature further in the region or for a stronger set of regulatory incentives in neighbouring countries to be set out to incentivise development. South Africa is currently able to guarantee both of these key factors are therefore forms the most attractive opportunity for continued investment.

33.3% of respondents suggested that expanding into other Sub-Saharan African markets would be their business development priority for the next 5 years. As seen in the previous question however there is no clear consensus on which specific market this is. It does suggest however that there are a substantial amount of companies looking beyond the South African market to further their commercial opportunities.

Only 13.3% of respondents stated that cost reduction or technological development was their development focus. This does suggest that most companies are content with the technology at their disposal and their primary focus is concerned with market opportunities than research and development.

The results from this question rather demonstrate that most companies still view development within South Africa as the most credible commercial vehicle for deploying their technologies, and they are more concerned with routes to do this than expanding into other countries or technological evolution.

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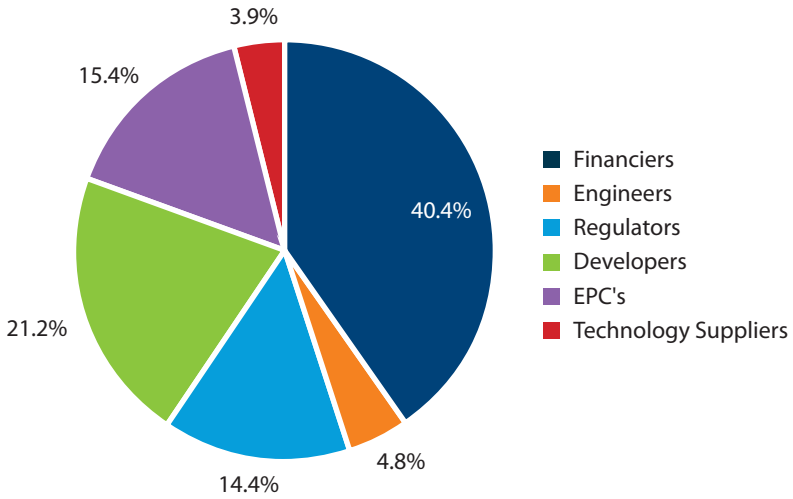
At present, which type of company is most important for you to meet to expand your business in Africa?



Who is needed to develop business?

This question asked respondents to identify who they needed to meet in order to most effectively develop their business strategy. Who companies want to meet in order to develop their business is also a good indicator of what problems they are currently facing in their business development strategy.

Financiers polled top with 40.4% of respondents stating that meeting with financiers would best help them develop their business. This suggests that many companies in the market may have issues getting cheap/quick access to capital in order to expand their operations. While financiers do have faith in the viability of the technology they are still reluctant to invest in projects which will have a slow return on their investment. This means that while many in the industry do have access to capital they are seeking to do so on more preferable terms than they currently have.

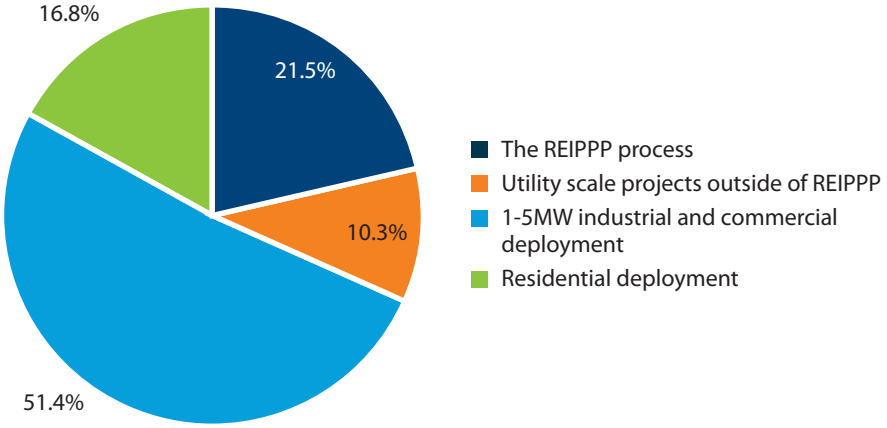
Polling second with 21.2% were developers, this suggests that many of the suppliers in the industry are still seeking closer relationships with those who are developing projects. For components suppliers this is particularly essential in order to sustain and grow their revenue streams.

Only 14.4% of respondents felt that regulators would be the most effective people to meet to expand their business, so while over 54% felt that a decrease in bureaucracy would help their business development actually meeting with regulators is not a high priority for many companies.

If you want to hear from and be networking with leading financiers then PV Project Development Africa 2014 is the solution to your business need. Leading financiers will be speaking in an exclusive panel about how project finance can best be sourced. To find out more details about this panel see the thought leading agenda and speaker line-up as well as other event features at: **www.pv-insider.com/africa**

Photovoltaics in South Africa: Sustainability and market development survey

Within South Africa, which of the following markets do you think has the most credible prospects for the next 5-10 years?



Market evolution?

This question examined which PV market is viewed as the most credible prospect for growth in the next 5-10 years. Despite being the current driver of growth in the market the REIPPP only polled 21.5% as the most credible prospect for growth in the next 5-10 years. However, perhaps this is more indicative of the lack of faith of development of utility scale generation as a whole with only 10.3% of those surveyed identifying utility scale generation outside of REIPPP as something they viewed as the most credible area for growth.

What is hugely significant is that 51.4% of those surveyed stated they view 1-5MW industrial and commercial deployment as the most credible area for growth in the next 5-10 years. This is a huge signal about the current development of the industry; that the market views the small-medium scale deployment of PV as a bigger commercial opportunity than the REIPPP. The survey asked questions about the commercial development and sustainability of the PV industry in Sub-Saharan Africa and this question has identified that over half of those in the industry are seeking industrial and commercial contracts to grow their business.

It was highlighted in a previous question that companies felt that being too dependent on the REIPPP could be a big cause of unsustainability in the market and in this question it has been clearly identified that for most companies Residential and1-5MW industrial and commercial deployment are their focus for long term business development.

Looking for new commercial opportunities?

At PV Project Development Africa 2014 experts from industrial, commercial and residential sectors will be speaking about how solar deployment can be optimised to meet the needs of these sectors. Leading Municipal regulators will also be speaking about the incentives which they are putting in place to increase solar deployment.

To find out full details about the event visit: **www.pv-insider.com/africa**

Overall Summary

There are three key conclusions which can be summarised from survey. These three conclusions are:

1. **The South African market is expected to see tremendous growth:** This is perhaps a very obvious point but one which must be stated. Revenues are rising, business development budgets are expected to increase and companies are focused on how they can expand within South Africa. While it is evident that companies are looking to expand into other Sub-Saharan African markets there is certainly no homogenous strategy for growth in a particular country.
2. **While REIPPP has been a tremendous driver firms are also looking beyond it:** REIPPP has beyond repute driven growth and investment in the PV market in South Africa, however here is clear evidence that firms are wary of their dependence on it. A majority of respondents stated that being too dependent on the program could be the biggest cause of unsustainability in the industry. Not only this but most significantly only around one in five of companies viewed it as the most credible area for growth in the next 5-10 years.
3. **Companies see the future in distributed generation:** The greatest conclusion from this survey data is that companies view the potential of distributed generation over and beyond that of utility scale deployment. This is evidenced by over two thirds of respondents stating that they believed that residential, industrial and commercial deployment represented the most credible prospects for the next 5-10 years. Only just under a third viewed utility projects outside of REIPPP or the REIPPP itself as a credible prospect for growth in the next 5-10 years.

Conclusion for the commercial development and sustainability of the market

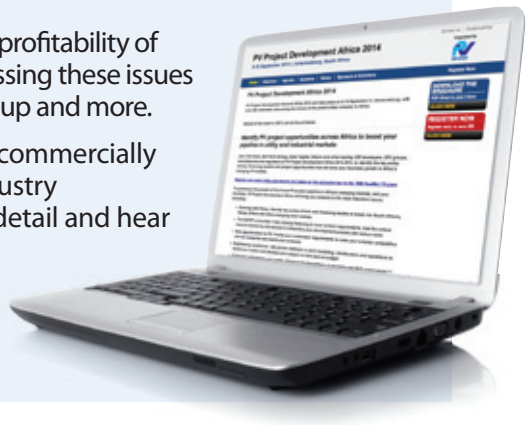
The South African PV market is currently on a steep upward curve of project development which is seeing revenues rise and business opportunities aplenty. While these profits are of course a welcome boost to company's balance sheets it is clear that companies are wary of the ability of the market to sustain this growth over the next 5 years.

Companies are putting the plans in place to look beyond the REIPPP to make sure they have a sustainable project pipeline in place if that industry lifeblood were to cut off. Companies are focusing on developing their client base amongst the industrial and commercial sectors where they can build a sustainable project pipeline where they are not reliant on the REIPPP.

This survey asked if the industry was sustainable and asked how it will continue to commercially develop. What can be concluded is that the industry does have growth prospects which can be sustainable in the long term, however it is not necessarily within the REIPPP and utility scale generation which firms are basing their commercial future on.

If you want the definitive leadership on the commercial development of the African PV market then you must attend PV Project Development South Africa 2014

This guide has briefly addressed the issues of the future sustainability and profitability of the market – however if you want to hear industry leaders first hand discussing these issues then visit **www.pv-insider.com/africa** to see agenda details, speaker line-up and more.

PV Project Development Africa is now in its 3rd year and is the most commercially focused event in South Africa providing the thought leadership on industry development. Hear some of the issues in the guide discussed in more detail and hear ideas and solutions to how your business can commercially develop.

Do not miss out on your opportunity to hear from all of the key industry stakeholders by finding out more at **www.pv-insider.com/africa**