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The Seven-Point Plan

A Framework to address a Deep Planetary Emergency

By Randy Hayes July 2019 *Version: 4.6*

The Bottom Line

In "End Game" economic ecologist William E. Rees writes that "There is certainly no easy solution to humanity's econo-ecological predicament and without an agreed emergency plan for cooperative action there may be no solution at all." He lists what he sees that needs to be done[1]. Summarized and adjusted, these points stand out:

- **Degrow the Economy 6%/year:** Begin the public cultural, social, and economic discussions and formal planning necessary to reduce fossil energy and material consumption (economic throughput) by up to about 70 percent globally (80 in higher-income and 50 in lower-income countries respectively)[2]. This is consistent with achieving the IPCC (2018) goal of almost 50 percent fewer carbon emissions by 2030 and requires 6 percent per year reductions beginning immediately.
- **Overconsumption Reduction**: A one-earth lifestyle for today's population requires that humans living like contemporary North America learn to thrive with about 80% less strain on the biocapacity of productive land[3].
- **Numbers Reduction:** Recognize that Earth is over-populated even at average material consumption. Implement a global fertility strategy to reduce the human population to the 2-3 billion people that might be able to live in material comfort on this already much-damaged planet Earth.

Implementation of the above objectives requires ending of much of the current market economy and today's style of consumption. Internalizing such a disruptive shift, if carried out effectively, is testing. Yet, this is where we are at. Expect that many more will embrace this reality over the next 3-7 years. Hand in hand with the above goals, quite small economies powered by renewables with judicious use of fossil fuels for agriculture, key industries and first responder transport is a worthy pursuit. If things unravel fast, community-led bioregional survivalism and compassion to neighbors may be needed. Remember, preparation counters fear. Happy talk solutions are not helpful.

Live kindly with your neighbors -- close and far. The web of life is your closest neighbor.

Introduction

A deep planetary emergency exists! Leaving a near-dead planet would be the ultimate disservice and tragedy for all future people and fellow creatures. This is the global situation we address.

Catherine Ingram, in her "Facing Extinction[4]," essay states, "…the reality is that there is not one country that I know of doing everything it can in [the right] direction. Certainly none of the major emitters—Russia, the US, China, and India—are doing anything of significance; all four are just stomping on the gas. There is nothing to indicate that a change of course will happen. Nothing. Not now. Not next year. Not in ten years." She is not wrong, but that said windows of opportunity not seen now can open up from time to time. We must be ready with bold pragmatic ideas to jam them through to the better world side.

This rare livable planet has fostered, over geologic time, the perfect conditions to sustain a diverse, orbiting laboratory of life. Two hundred or so years back, humans developed an industrial civilization with consequences that have proven both good and bad. Despite the good (improved food supplies, health, technological advances, etc.), negative

[1] Rees, William E. (March 2019). "End Game: The economy as eco-catastrophe and what needs to change" *Real-World Economics Review.*

[2] This is technically achievable (von Weizsäcker, et al. 2009).

[3] A one-earth lifestyle for 7.3 billion people requires that humans learn to thrive on the biocapacity represented by an average of 1.7 productive global hectares (gha) per person (compared to the 8 gha per capita required by contemporary North America).

[4] "Facing Extinction", published at http://www.catherineingram.com/FacingExtinction/.

consequences like societal tensions, economic spasms, failed states, shifting climate, ecological destruction, and wildlife die-offs are on the rise. Our life-giving biosphere is threatened. Simple common sense requires that we maintain the natural systems that support life. National, continental, and global mobilization plans are needed. This paper is intended as a starting point to help outline such a plan.

Arguably, every human and every community have the solemn duty to protect the diversity and integrity of the whole. There is no healthy part without a healthy whole. These seven points are offered to provide a more holistic approach to survival and responsible planetary living now or for a post-collapse rebuild, should that occur:

1. **Promote a True-Cost Economy**[5] by replacing the polluting model with a circular steady-state one.
2. **Shift to 100% renewable energy** while using much less energy and wasting none.
3. **Shift to 100% ecological farming** with a plant-based food focus.
4. **Protect the web of life** and restore damaged natural systems to halt the extinction crisis.
5. **Shift to low-impact lifestyles** of ecologically literate citizenry and a declining population.
6. **Ensure appropriate technology policy** by studying and acting upon unintended consequences.
7. **Other** - This list can't account for all that is needed. We trust you will address additional vital issues.

The 1930s' New Deal dealt primarily with human, economic, and social needs within one country. The recent Green New Deal is a campaign by Democratic progressives to merge FDR's Four Freedoms campaign with modern calls for free healthcare and education along with a focus to reduce climate change and increase economic recovery. This Seven Point Plan is a green deal not an economic growth new deal. It expands typical expressions and puts our planet first; we can only save ourselves by saving our planetary home.

Alarmingly, it takes deep crises to awaken meaningful responses. The deepening emergency of these historic times is generating additional wind at our social-change-seeking backs (quite literally) that we have not had before. Papers with robust sets of plans, solutions, and ideas have come and gone. They are of little consequence without successful, sustained action—locally and globally—to generate the necessary societal or political will to accomplish fundamental, lasting change. The biggest weakness in the above Seven-Point Plan is the lack of a strategy to harness the better aspects of our human nature to generate sufficient will and scale up powerful solutions. Yet the United Nations scientists warned in 2019 that we have less than 12 years left to radically transform our economies, technologies, and lifestyles to avoid a planetary catastrophe.

We must rise to the challenge to get our foot off the planet's neck and rebuild a better world differently. Every sector of society must engage. All must speak out and call for high-level action. The hour is late, and we have time only for big steps in the right direction. We must shoulder the task of rapidly stopping damaging activities as we assert a positive vision of the future on an ever-healthy planet. We must build political will around an agreed-upon emergency plan for cooperative action. That is the path to authentic hope.

Overarching Goal

The overarching goal of the Seven Point Plan is to maintain what is required to sustain life on earth, feed the world via ecological farming, and generate good jobs to build a vibrant, bioregionally based, ecological economy! We have no magic wand, but we must work to do this as we reduce poverty, replace rule-by-the-self-interested-rich with management-for-the-many, and put an end to the scourge of militarism by taking the profit out of war. The ecological impact of war and militarism—including the fact that the Pentagon is the largest consumer of oil—is extensive.

Scientists have made headway in determining what a safe operating space for humanity is with several of the major life support systems. Unfortunately, we have already rammed past three of the guardrails. Climate change is one. Biological diversity loss (think wildlife and pollinating plants) via habitat destruction and ocean deterioration via 600 dead zones are two more. How much time do we have?
We believe these two things to be true:

[5] **True-Cost Economy**: A True-Cost Economy is a holistic economy in that it operates within Earth's carrying capacity, specifically by recognizing and avoiding ecological impacts (also known as shifted costs or externalities). It maintains the biosphere's life-support systems. It is a circular, steady-state economy. It is one-planet living. The use of "cost" in this phrase is not a financial term. If something costs you your life, it would not be primarily a financial concern. If an economy were to cause a near-dead planet, it would hardly be of financial concern to desperate people or near-extinct species. Note: Economist Herman Daly has written extensively about a steady-state economy and shifted costs.

1. It is too late for an elegant transition to a more socially just and ecologically sustainable world, but it is not too late to diminish the damage done daily and lay the foundation. We must still pursue a Great Transition to a more just and ecologically sustainable society.
2. Collapse of parts of civilization and some aspects of the planet's bio-geophysical systems may occur. We must still plan to rebuild, but in fundamentally wiser ways.

The extreme weather event disruptions (ecological spasms) we currently experience are from past damage, particularly greenhouse gas (GHG) emissions over the last 30 or so years. Recent higher GHG emissions lock us into even more eco-spasms and reduced planetary life support. The attempted solutions over the next few decades will be pursued under duress due to more turbulent conditions. For example, disruptions of food growth may be enormous.

To address this, the Seven-Point Plan calls for a major shift in economic rules as they effect the biosphere's life-support systems and a comprehensive set of activities to remove industrial civilization's foot off the throat of our planet. This plan is a comprehensive deep green plan and is offered to provide a more holistic approach for the transition through turbulent times, catastrophic disruptions, and post-collapse recovery.

Of the several key aspects of a livable planet, reversing habitat loss and halting species extinction are some of the most important to maintaining humanity's viability. How is that so? The Sixth Great Extinction and the destruction of the biosphere's natural systems and processes have the following results:

- Loss of vital functions, such as ecosystem services that filter our air, deepen healthy soils, and clean water;
- Loss of pollination of food crops due to the accelerating "insect apocalypse";
- Loss of planetary resilience to weather pattern change;
- More rapid global warming from less carbon absorbed and stored;
- More rapid global warming from greater GHG emissions and less absorption of atmospheric heat; and
- Loss of ocean productivity and dangerous damage to the bottom of the food chain.

These same loss statements can be turned around into positive statements on why each of us worldwide needs nature. The health of the biosphere's natural systems helps maintain the conditions of life by filtering our air and water, replenishing healthy soils, pollinating crops, and moderating weather patterns.

Scientists have determined that nature needs at least half of the native flora and fauna of a given unique region to be protected and interconnected with other related areas. This helps maintain a full range of life-supporting ecological and evolutionary processes, the long-term survival of the species that live there, and the system's resilience in the face of environmental change. Some ecoregions will require safeguarding more than half.

Two Objectives for the Overarching Goal

Two approaches will help to achieve the overarching goal of the Seven Point Plan, which is maintain what is required to sustain life on earth, feed the world via ecological farming, and generate good jobs to build a vibrant, bioregionally based, ecological economy!

Objective #1 - Address Nature's Needs[6]

Protect, connect, and restore half or more of the 846 terrestrial ecoregions[7] and half of the oceans. The Nature Needs Half program and the newly emerging Global Deal for Nature together would help halt the Sixth Great Extinction by calling for targets of 30 percent of Earth to be formally protected and an additional 20 percent to be designated as climate-stabilization areas by 2030. This would help annual temperatures to stay closer to a somewhat tolerable average 1.5 degrees Celsius rise.

Objective #2 - Build Responsible Communities and Economies

Shift the economy and society in specific ways (detailed in seven points below) to better provide for humanity.

[6] Protecting nature is key to any pathway to prevent catastrophic climate change. While areas like the Amazon may need 90 percent protected, we cannot keep the global temperatures to a 1.5-degree Celsius rise without our natural systems actively sequestering GHGs. Just 2 percent could be civilization-ending. If we go to 2 or 3 or 4 degrees Celsius, we are all TOAST!

[7] Ecoregions: There are 846 terrestrial ecoregions. Ecoregions are subsets of larger units called biomes. For example, the country of Nepal has 11 ecoregions that overlap and extend beyond its borders. Twenty percent is already protected. Conservation plans will assess connected ecological corridors to allow for environmental flows. The government of Bhutan has set aside 51 percent as protected national parks or corridors connecting reserves. It plans to maintain 60 percent of the country under forest cover, currently estimated at 72 percent.

By promoting (1) a flourishing protected little used half and (2) a responsibly used, human-dominated half we can better ensure a viable, healthy whole. A ground-breaking report launched in early 2019 by the EAT-Lancet Commission[8] shows we can feed ten billion people on existing agricultural land while still setting aside half the planet's natural systems to conserve species and ecosystem services for all. That is good news.

About Nature's Needs

To quote conservation biologist Reed Noss, "Nature needs at least 50 percent, and it is time we said so" (Noss et al. 2012). Citizens and policymakers globally should fearlessly embrace a global goal of protecting at least half of the planet's lands and waters, region by region, in interconnected protected areas. We have a duty to speak frankly about nature's needs. Failure to do so would be the ultimate disservice to people and planet alike. Groups are already adopting a goal of protecting half the planet. In 2010, inspired conservation biologists launched Nature Needs Half. Additional efforts include the London Zoological Society (2014) and Half-Earth Project by the Wilson Biodiversity Foundation (2016). Bold initiatives on every continent exist to protect and restore, and they can be built upon. There is a compelling need for a new vision for how much of the planet can and should be protected.

Toward resolving climate change, we should double the native forest canopy and halt all deforestation. Forests and woodlands naturally scrub CO^2 out of the atmosphere and promote biological diversity. It is vital that we protect the oceans by restoring significant coastal mangroves and marine seagrass beds. This would also naturally scrub CO^2 out of the atmosphere and help restore diversity. The more detailed rationale and metrics to protect half are contained in a paper in *BioScience* called "An Ecoregion-based Approach to Protecting Half the Terrestrial Realm" (Eric Dinerstein et al. 2016). Plans to accomplish this bold goal are being written by a number of groups.

About a Responsible Human Half

Citizens and policymakers should rapidly embrace a goal of bringing the human-dominated areas in synch with Earth Systems Science (i.e., the ways of nature), region by region with green infrastructure systems. There is a compelling need for a new vision for how humanity's economy relates responsibly, clarified in point number one below. Simply put, humanity needs to a healthy whole earth—and it is time we said so.

If half of Earth's surface is set aside to preserve the natural world that supports all living things, the human-dominated part would do well to abide by the principles of a True-Cost Circular Economy. Without both parts in sync, we will not have a healthy whole.

The Seven-Point Plan – A Framework for the Green New Deal

This Seven-Point Plan is offered to provide a more holistic approach for the transition -- be that via turbulent times, catastrophic disruptions, or post-collapse rebuilding.

1. **Promote a circular True-Cost Economy**, which is a holistic, steady-state economy. It operates within earth's carrying capacity, especially by recognizing and avoiding ecological impacts (also known as shifted costs). It maintains the biosphere's life-support systems. It is one-planet living.

   Ecological impacts, like pollution, are also called externalities. As we know, they get swept under the rug. That's where the current economic model is cheating. The task at hand is not to just internalize externalities into a profit equation, but to systematically eliminate externalities that destroy natural life-support systems. Because of regional and global carrying-capacity limits, we must also create governing agencies powerful enough to ratchet down economic activity whenever it threatens ecological stability.

   a. A circular True-Cost Economy is embedded in nature's nine life-supporting systems[9].
   b. The current economy could rightfully be called Cheater Economics[10]. It hides or ignores pollution

[8] https://eatforum.org/eat-lancet-commission/

[9] The nine planetary boundaries or life support systems of the biosphere are as follows: stratospheric ozone depletion; loss of biosphere integrity (biodiversity loss and extinction); chemical pollution and the release of novel entities; climate change; ocean acidification; freshwater consumption and the global hydrological cycle; land system change; nitrogen and phosphorus flowing to the biosphere and oceans; and atmospheric aerosol loading (Planetary Boundaries).

[10] Cheater Economics: A 20th and 21st Century economic model that privatizes profit while socializing risks and costs. The "side effects" or shifted costs are not transparent. An economic model where unregulated free-markets shift (socialize) costs onto future generations of humans and other parts of the web of life. Cheaters get to profit handsomely, while depleting or destroying natural systems (often via abused and underpaid

externalities and shifts those problems to the backs of others. That is how our current corporate-led, globalized industrial economy is cheating. We must fight that cheating and end it.

c. Build the replacement model: a True-Cost Circular Economy that promotes regionally-based, zero-waste, closed-loop, sustainable production-and-consumption systems.
d. A principle for a new economy: NO OWNERSHIP OF NATURAL RESOURCES.
e. In a steady-state circular economy, products made from non-renewable resources must be kept in constant circulation or be banned. Some can be made increasingly more expensive to price them out of the market. This is necessary to stop humans from abusing nature.
f. How to start?
    i. Get rid of 90 percent of fossil fuel/nuclear/logging/mining subsidies in less than five years.
    ii. Declare the externalities (Mandatory Corporate Ecological Impact Disclosure).
    iii. Foster local ecological economies in a way that reduces inequality; envision continental networks of regional economies.
    iv. Rapidly establish a robust price on carbon that escalates over time.
    v. Fine, instead of just taxing, pollution (as we fine people for speeding in a school zone). Fines need to go beyond carbon to all nonrenewable energy, materials, and waste. This will help get us to the closed-loop sustainable production/consumption economy. Such fines need to be applied to local and nonlocal goods, including imported goods.

Everyone likes a bargain. In a True-Cost Economy, the ecologically cleanest goods and services would be the cheapest. When that is the case, we may have a chance to save the planet.

2. **Shift to 100 percent renewable energy.** Two fundamental energy shifts are needed to protect the biosphere: a significant reduction in overall energy use and a speedy transition to 100 percent renewable energy.
    a. Keep fossil fuels in the ground. This helps prevent CO^2 pollution from rising beyond the critical "tipping point."
    b. Again, get rid of 90 percent of fossil fuel and nuclear subsidies in less than five years.
    c. Create a robust tax or fine on carbon, which will help create a more authentic, level playing field and internalize pollution externalities.

    There is no credible future scenario in which society can maintain or increase its current per person energy use. (See low-impact lifestyles below).

3. **Quickly achieve 100 percent ecological farming and agroecology.**[11] Shift out of globalized industrial agriculture into regionally-based biosphere-smart ecological farming.
    a. This scrubs CO^2 out of the atmosphere, returns carbon to the soil, promotes biological diversity, and stops creation of ocean dead zones (created by chemical run-off from industrial farms and factories). We need to retreat from our current just over 400 parts per million (ppm) "climate catastrophe trigger" and approach the pre-industrial CO^2 level of 280 ppm.
    b. Local food markets matter. They produce less transportation pollution and you can see the social and environmental results of local production. You can't assess working conditions when the labor is being done on the other side of the planet. We can achieve this through the following strategies:
        i. Purchase 50 percent or more of fruits and vegetables from within city limits. Investigate vertical gardens.
        ii. Maximize plant-based diets. End large-quantity crops. Diversify production of nutritious crops.
        iii. Maximize relations with farmers within a 100-150 mile radius of every city.
        iv. Redesign cities with an ecological footprint to reduce the culture of overconsumption, starting with energy-efficiency retrofits of homes, offices, and transportation. This requires us to double or quadruple walkability, bikeability, and affordable/efficient mass transit.
    c. We need to protect enough agricultural land to feed everyone on earth, while also protecting the important corridors between habitat-rich ecoregions to help stop the Sixth Great Extinction.
    d. Growing annual crops with chemical fertilizers produces a lot of nitrogen pollution. We can reduce

workers). Control of major political parties (and eventually the courts) via lobbyists and campaign donations stabilizes the model.

[11] Ecological Farming eliminates the use of toxic chemicals and conserves vital resources like soil, water, and a biologically-diverse soil life. ***Agroecology*** is ecological farming, which is necessary to protect the web of life.

nitrogen pollution by shifting to perennial crops.

4. **Halt the species extinction crisis** by employing the **Nature Needs Half** program.
    a. We must protect our planet's 846 ecological regions. Note that 113 have already exceeded 50 percent protection. The goal is achievable.
        i. We must double the native forest canopy and halt all deforestation. Wildlife needs habitat—about two-thirds of all species are forest dependent. We must allow primary forests to flourish.
        ii. Reforestation scrubs CO^2 from the atmosphere and promotes biological diversity.
        iii. Reforestation will help meet the Million Acre Pledge. Save the rainforests; save the woodlands! If habitat conversion does not peak before 2030, it may be impossible to stay below 1.5 degrees Celsius average temperature rise.
    b. Protect the oceans.
        i. Half of the oceans should be closed to fishing. We should radically decrease industrial-scale ocean fishing while protecting sustainable fishing practiced by communities for local use.
        ii. Restoring significant stands of coastal mangroves and seagrass beds can capture CO^2 from the atmosphere and help restore diversity.

    With half of Earth's lands & oceans set aside for natural systems that support all life, and with the human-dominated parts living responsibly in a circular True-Cost Economy via its Twelve Principles, we will have a winning vision.

5. **Shift to low-impact lifestyles** that include smaller numbers and biosphere-literate education.
    a. Redesign cities with low ecological footprints, reduced consumption, energy efficiency, and low-impact transportation. Oppose advertising that turns children into mindless over-consumers. Shift to low-carbon, plant-based diets.
    b. All our solutions may be for naught if the human population reaches 12-15 billion. Provide accessible family planning information and services worldwide. Large family size is a major driver of poverty. Strive to stabilize the planet's human population at 8.5 billion people—and work to humanistically reduce that number over time.
    c. Develop a broad understanding of how the biosphere works. Develop a five-star certification of systems thinking. Infuse this into the education system, especially business schools and economics programs. MBAs and Economics graduates should achieve at least a three-star rating. Reinvigorate the concept of the bioregion[12] and honor a sense of Earth citizenship. (See Earth Pledge.)

    One earth low-impact living has many web site resources.

6. **Ensure appropriate technology policy**. Technology should be used to liberate humanity, not to enrich a few. Most importantly, technology must not threaten to unravel the web of life. If a technology decreases biodiversity, *Houston, we have a problem!* Biodiversity health is a key standard for making determinations to employ new technologies.

    Heed the claims that technology is not neutral. Scientific studies have revealed that extensive use of computers changes how your brain works[13]. The prevailing paradigm of Technology Worship holds that technological evolution is invariably good and that problems caused by technology can be solved by more technology. Especially problematic is the lack of recognition of how technology does or does not fit within the cycles of nature. Unanticipated consequences of broadly distributed technologies are a current and growing problem.

    a. Set up Continental Carrying Capacity and Technology Policy Centers for the five populated continents and a sixth for the oceans/islands. These centers would have a mandate to advise on the effects of technologies on bioregional, continental, and global life-support systems. This would help develop and implement sound technology policies, educational programs, and cooperation with commercial sectors and governments at all levels. The scientific and higher-education communities should be deeply

[12] Bioregion: It is a common-sense and somewhat fungible definition of a local area that combines a natural community with a human community overlay. Its boundaries are often watersheds, valleys, mountain ranges, coastal bay areas, or certain ecoregions (see footnote 3). Picture similar soil and vegetation and other terrain characteristics such as a desert or alpine area. Typically, one can walk or bicycle across the bioregion in a few days.

[13] https://bigthink.com/mind-brain/screen-time-nih-study-60-minutes

involved.

b. The objectives of the Continental Carrying Capacity and Technology Policy Centers might include:
    - Ensuring that anticipated and unanticipated consequences of technology are studied and reported on.
    - Providing elected officials and senior governmental staff with accurate, relevant, and timely advice on all matters of consequence regarding technology.
    - Identifying emerging technologies from a perspective of (1) usefulness, (2) ecological sustainability, (3) beauty, and (4) nurture towards the human spirit.
    - Ensuring that technology policy is informed by the latest sound science.
    - Ensuring that technology policy work provides the greatest benefit to society, while helping protect and restore natural systems.
    - Ensuring that investments in science and technology make the greatest possible contribution to real economic prosperity, public health, environmental quality, and overall security.
    - Energizing and nurturing the processes by which local programs in science and technology are resourced, evaluated, and coordinated.

c. Programs, projects, and policies of the Continental Carrying Capacity and Technology Policy Centers might include:
    - Developing a precautionary approach to new technology that could limit profits until long-term studies are performed. There need to be effective, enforceable rules and mechanisms to ratchet down economic activity before it approaches carrying-capacity limits.
    - Identifying false solutions, such as farming biofuels, which can be substituted for fossil fuels but have a negative impact on the cost and availability of food.
    - Instituting a moratorium on the genetic modification of plants and animals until ethics and testing are well developed and the risks are clearly understood.
    - Rapidly phasing out the use of most hormones and chemicals in livestock and food production.
    - Avoiding technologies and policies that threaten to displace human workers and identifying options that will help humanity maintain skills essential to living low-impact, dignified lives.

7. **Other** - Do everything else that needs to be done, quickly and efficiently. We know that this plan can't account for all that is needed. We trust you will help cover other vital issues and solutions, such as
    a. Opposing corporate power;
    b. Exploring guaranteed incomes;
    c. Guaranteeing job programs that ensure a living wage;
    d. Providing universal health care and free or affordable education; and
    e. Creating new governing systems.

    We need to supplement our allegiance to the artificial boundaries of the nation state with a sense of Earth Citizenship. We can no longer govern in simple self-interest, alienated from the ecological interconnections of the biosphere. Bioregions are based on interdependent watersheds and natural land features, so the whole matters.

Jobs and a Return to the Holocene's 280 PPM

The above Seven-Point Plan implemented via the Green New Deal can help us achieve the overarching goal to maintain what is required to sustain life on earth, feed the world via ecological farming, and generate good jobs to build a vibrant, bioregionally based, ecological economy!

Return the planet to sustainable living conditions of the early Holocene, a lovely geologic epoch that began nearly 12 thousand years ago. During this period, the earth's lifeforms thrived in a world of clean blue skies containing only 280 ppm of global-warming-causing CO^2. This relatively warm interglacial period enabled agriculture to flourish. In the past few centuries, however, human deforestation, industrial pollution, and foolish energy systems have pumped us over 415 ppm of CO^2 into the atmosphere, undercutting the equilibrium of the Holocene. There is an arrogance to just carrying on and renaming the epoch— the Anthropocene—after human dominance.

The Great Transition mentioned earlier includes a process and plan to reduce the CO^2 levels in the atmosphere back towards 280 ppm. It is possible. A shift to agroecology would create many new sustainable jobs while removing CO^2

from the atmosphere and returning it to the land to enrich the soil. Doubling the native forest canopy would provide much meaningful employment while scrubbing toxic pollution out of our air. The global transition to wind, wave, and solar power has the potential to create millions of new jobs. As we stop releasing harmful chemicals into the atmosphere we stop turning the blue sky into a toxic furnace.

The Holocene would have supported a farmable world for thousands of more years. If we can return toward 280 ppm levels of atmospheric CO^2, the last 200 years of industrial revolution and corporate-led economic globalization will look like a regrettable speed bump in the ongoing path of time.

Returning to the Holocene requires that we "ecologize the economy," creating one based on the laws of nature. Changes need to come from decision makers who know nature and have a deep humanitarian sense. That is who you must elect.

Where to Start: A Rehash of the Basics

1. Set off the alarm. Advance awareness so broadly and powerfully that "our house is on fire." In this case, alarmists are heroes. The purpose of an alarm is to wake you up to take effective action.
2. Articulate a positive package of values and an alternative framework of solutions by using clearly defined terms. Do not perpetuate enemy language and mythical assumptions. For example, don't refer to people as "consumers," as it dehumanizes people and commodifies our spirit. Yes, we are sometimes customers buying things. Yes, we consume, but we the people are not mere commodities.
3. Call for a public mandate to act on the needed scale and timeline. The warrior energy of the youth will be important in a demand for action. Bans worked in stopping DDT, protecting the great bald eagle, halting aboveground nuclear testing, and much more.
4. Advance the building of bioregional economies as you reduce dependence on the old, unsustainable systems.
5. Establish protocols to protect half or more of the ecoregions where you live and adjacent regions.
6. If the old system collapses (think 2008, but larger—and it is coming), keep your cool and stay compassionate. Use what you have learned to construct a new order out of the global wreckage. Help your neighbors locally and globally achieve high levels of bioregional self-reliance. With that achieved, the primary things to trade globally would be art, culture, and ideas.

There you have it—we are done! We have envisioned a plan that avoids the abyss and saves the day—a plan to rebuild our lives in a post-collapse world and to do it in such a manner that we don't recreate what got us into this mess.

Conclusion

There is still a great transition to pursue. This requires major change. The window of opportunity won't last forever. We must degrow the economy hand in hand with overconsumption and numbers reduction. The Seven-Point Plan won't be a cakewalk, but hey—let's not abandon the Holocene, as some wimps would have it. To me, the futuristic idea of a human-managed robotic "garden" is an unacceptable substitute for the wild beauty of Yosemite, Yellowstone, the Yukon, or the cathedral forests of the mighty Amazon. The Holocene equilibrium was a lovely time period during which nature flourished in a stable, life-giving biosphere.

When it comes to changing (no, make that "regaining") the world, no one person can do it all. However, each of us should clearly and loudly proclaim the Seven-Point Truth and explain what needs to happen—simultaneously!—if we are to truly save the day. Clarify a holistic approach as we passionately pursue our particular part of the solution. A vibrant, healthy planet would be the ultimate service to all the people and fellow creatures who share this planet. Keep learning about whole-systems thinking to use in the service of the planet. Spawn political will. Shoulder the task of asserting a positive vision of the future on an ever healthy planet. Build around an agreed-upon emergency plan for cooperative action. It is the path to authentic hope.

Bio: Randy Hayes is Executive Director of Foundation Earth, a Washington, DC based organization established in 2011 to advance a big rethink of the industrial economy and to propose solutions. Hayes, a former filmmaker, is a veteran of many high-visibility corporate accountability campaigns and has advocated for the rights of Indigenous peoples throughout the world. He founded Rainforest Action Network. Hayes has been described in the Wall Street Journal as "an environmental pit bull." Hayes calls for a True-Cost Economy that eliminates pollution externalities, scrutinizes technology, and honors ecological carrying capacity limits.