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## The New Green Deal: A Seven-Point Plan For A Deep Planetary Emergency

By Randy Hayes

Version: 4.1

### Introduction

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

Arguably, every human and every community has 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 planetary living now or for a rebuild post-collapse should that occur.

1. **Promote a *True Cost Economy*<sup>1</sup>.** Replace 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 100% ecological farming**, with a plant-based food focus.
4. **Protect the web of life.** Also restore damaged natural systems to halt the extinction crisis.
5. **Shift to low-impact lifestyles of ecologically literate citizenry with declining population.**
6. **Ensure appropriate technology policy.** Study and act 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 climate change and economic recovery focus. This plan is a Green Deal not a New Deal. It looks at the accomplishments of past environmental movements and expands the original mandate by proposing solutions that put Planet First—i.e., We can only save ourselves by saving our planetary home.

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. Alarmingly, it typically takes deep crisis 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. Yet, Catherine Ingram in her paper ***Facing Extinction*** 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."

The biggest weakness in the above seven point plan is the lack of a strategy to generate sufficient political will to scale up powerful solutions. United Nations scientists have warned 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 much of our foot off of the planet's neck and rebuild differently. Every sector of society must engage. All must speak out and call for high level action. The hour is late, and we only have time for big steps in the right direction. This paper ends with

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<sup>1</sup> **True Cost Economy:** A True Cost Economy is a holistic economy in that it operates within Earth's carrying capacity, especially 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 cost 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.

the following sentences. 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. Generate political will. This is the path to authentic hope.

## Overarching Goal

This rare, livable planet has fostered, over geologic time, the perfect conditions to sustain a diverse, orbiting laboratory of life. A few hundred 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), societal tensions, economic spasms, failed states, climate instability and ecological destruction are on the increase. Our life-giving biosphere is threatened. Simple common sense requires that we maintain the natural systems that support life. Both national and global mobilization plans are needed. This paper is intended as a starting point to help outline such a plan.

*The overarching goal of **The New Green Deal** 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-rich with management-for-the-many; 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. The Pentagon's goal in a nutshell: "We fight foreign wars for oil so that we have the oil needed to fight foreign wars for oil." The Pentagon is one of—if not the top—emitter of global warming gasses.

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 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.

1. It is too late for an elegant transition to a more socially just and ecologically sustainable world, but not too late to mitigate the damage. We must still pursue a Great Transition to a more socially just and ecologically sustainable society.
2. Should collapse of civilization and some aspects of the planet's bio-geophysical systems occur, we must still rebuild in fundamentally better ways.

The extreme weather disruptions (ecological-spasms) we currently experience are from the past damage done, 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 biospheric life support. The attempted solutions over the next few decades will be pursued under duress due to more turbulent conditions. Disruptions of food growing may be enormous.

To do so this 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-catastrophe recovery.

Of the several key aspects of a livable planet, reversing habitat loss and halting species extinction is important to maintaining humanity's viability. How is that so? The 6<sup>th</sup> Great Extinction and the destruction of the biosphere's natural systems and processes results in:

- 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 absorbing of atmospheric heat
- 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 results in maintaining the conditions of life, helping all survive, filtering our air and water, replenishing healthy soils, pollinating crops, and moderating weather patterns.

Scientists have determined that nature needs at least half of a given unique ecological region to be protected and interconnected with other such 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 ensure 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 New Green Deal: maintaining what is required to sustain life on earth, feed the world via ecological farming, and jobs to build a vibrant bioregionally-based, true cost, circular economy!***

### **Objective #1 -- Address Nature's Needs<sup>2</sup>.**

Protect, connect, and restore half or more of the [846 terrestrial ecoregions](#)<sup>3</sup> and half of the oceans. The *Nature Needs Half* program and the newly emerging *Global Deal for Nature* together would help halt the 6<sup>th</sup> Great Extinction by calling for targets of 30% of earth formally protected and an additional 20% designated as climate stabilization areas, by 2030. This helps to stay below 1.5°Celsius.

### **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. By promoting (1) a flourishing "protected half" and (2) a responsibly used human-dominated half we can better assure a viable, healthy whole. A ground-breaking [report](#) launched in early 2019 by the EAT-Lancet Commission shows we can feed ten billion people on existing agricultural land while and still set 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%, 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 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<sub>2</sub> 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<sub>2</sub> PPMs 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 sync 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 much of the planet humanity can responsibly

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

<sup>3</sup> Ecoregions: There are 846 terrestrial ecoregions. Ecoregions are subsets of larger units called biomes. For example, the country of Nepal has 11 ecoregions which 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% as protected national parks or corridors connecting reserves. It plans to maintain 60% of the country under forest cover, currently estimated at 72%.

use in an ecological economy, clarified in point number one below. Simply put, we need to shoulder our responsibility to protect one another and our shared future—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](#) for a True Cost Circular Economy. Without both parts in synch, we will not have a healthy whole.

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

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

1. **Promote a True Cost Circular Economy**, which is a holistic economy in that it operates within earth's carrying capacity, especially by recognizing and avoiding ecological impacts (also known as shifted costs or externalities). It maintains the biosphere's life-support systems. It is one-planet living. The use of "Cost" in this phrase is not a financial term. If something cost 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.
  - a. **A True Cost Circular Economy** is embedded in nature's nine life-supporting systems<sup>4</sup> ([Planetary Boundaries](#))
  - b. The current economy could best be called **Cheater Economics**<sup>5</sup>. It is hiding or ignoring pollution externalities and shifting those problems to the backs of others. That is the cheat of our current corporate-led globalized industrial economy. We must fight that cheat 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. 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 in order to quit abusing nature.
  - e. How to start?<sup>6</sup>
    - i. Get rid of 90% of fossil fuel/nuke/logging/mining subsidies in less than 5 years.
    - ii. "[Mandatory Corporate Ecological Impact Disclosure](#)" Start by declaring the externalities.
    - iii. Localization: Foster local ecological economies and 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. Pollution should be fined not taxed just 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 a services would be the cheapest. When that is the case we may have a chance to save the planet.

### 2. Quickly achieve 100% 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% renewable energy.

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<sup>4</sup> The Nine Planetary Boundaries or Life Support Systems of the Biosphere listed: Stratospheric ozone depletion; Loss of biosphere integrity (biodiversity loss and extinctions); 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 flows to the biosphere and oceans; Atmospheric aerosol loading.

<sup>5</sup> Cheater Economics: An economic model where company owners get to profit handsomely, with little or no regulation, while depleting or destroying natural systems via abused and underpaid workers. They typically control most major political parties and eventually the courts via lobbyists and campaign donations. They privatize profit, while socializing risks and costs. This leads to economic systems where the "side effects" or shifted costs are not transparent. Unregulated free-market economics shift or socialize costs onto future generations of humans and other parts of the web of life.

<sup>6</sup> Ecological Farming eliminates use of toxic chemicals and conserves vital resources like soil, water, and a biologically-diverse soil life. *Agroecology* is ecological farming and it is necessary to protect the web of life.

- a. [Keep fossil fuels in the ground](#). This helps keep CO2 pollution from rising beyond the critical "tipping point".
  - b. Again, get rid of 90% of fossil fuel and nuclear subsidies in less than 5 years.
  - c. A robust tax or fine on carbon will help create a more authentic, level playing field pushing to internalize pollution externalities.
  - d. There is no credible future scenario in which society can maintain current per capita [energy use](#), let alone current levels of energy use. (See Low-impact Lifestyles below).
- 3. Quickly achieve 100% Ecological Farming and Agroecology**
- Shift out of a globalized industrial agriculture into regionally-based [biosphere-smart ecological farming](#)
- a. This scrubs CO2 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 PPM "climate catastrophe trigger" and approach the pre-industrial CO2 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.
    - i. Seek 50% or more of fruits and vegetables from within city limits. Investigate vertical gardens.
    - ii. Maximise 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 protecting the important corridors between habitat-rich ecoregions to help stop the 6<sup>th</sup> Great Extinction. Such maps are being generated (2018).
  - d. Growing annual crops with chemical fertilizers produces a lot of nitrogen pollution. We can reduce nitrogen pollution by shifting to perennial crops.

**4. Halt the Species Extinction Crisis**

Employ the [Nature Needs Half](#) program to halt the 6<sup>th</sup> Great Extinction.

- a. We must protect our planet's 846 ecological regions. [Note that 113 have already exceeded 50% protection. The goal is achievable.](#)
  - i. We must double the native forest canopy and halt all deforestation. About 2/3s of all species are forest dependent. Wildlife needs habitat.
  - ii. Reforestation scrubs CO2 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 will be impossible to stay below 1.5°C.
- b. Protect the Oceans
  - i. Half of the oceans should be closed to fishing. 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 CO2 from the atmosphere and help restore diversity.

With half of earth's lands and oceans set aside for natural systems that support all life—and with the human-dominated parts living responsibly in a [True Cost Circular Economy](#) via its 12 Principles, we will have a winning vision.

**5. Shift to Low-Impact Lifestyles, 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. Smaller Numbers: 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. Biospheric Literacy: Develop a broad understanding of how the biosphere works. Develop a five-star certification of systems thinking. Infuse 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<sup>7</sup> along with honoring a sense of earth citizenship. See [Earth Pledge](#).

Ecologist William E. Rees wrote recently that there is certainly no solution to humanity's predicament "without an agreed emergency plan for cooperative action there may be no solution at all." In that piece he lists what needs to be done ending with these three points<sup>8</sup>:

- Recognize that Earth is over-populated even at average material standards. A one-earth life-style for 7.3 billion people requires that humans learn to thrive on the biocapacity represented by 1.7 global average productive hectares per capita (compared to the eight gha/capita require by contemporary North America);
- Begin the public cultural, social and economic discussions and formal planning necessary to reduce fossil energy and material consumption (economic throughput) by up to 69% globally (at least 80% in high-income countries)<sup>9</sup>. This is consistent with achieving the IPCC (2018) goal of almost 50% fewer carbon emissions by 2030 and requires six percent per year reductions beginning immediately;
- Conceive and 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 single planet Earth.

## 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 rewrites how your brain works. 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.

Set up ***Continental Carrying Capacity and Technology Policy Centers*** on the five populated continents with a sixth for the oceans/islands. This **Center** would have a mandate to advise on the effects of technologies on bioregional, continental, and global life-support systems. It would help develop and implement sound technology policies, educational programs, and work with the commercial sector, and governments at all levels. The science and higher education communities would be deeply involved. The objectives of the ***Continental Carrying Capacity & Technology Policy Center*** might include:

- a. Ensure that anticipated and unanticipated consequences are studied and reported on.
- b. Provide elected officials and senior staff with accurate, relevant, and timely advice on all matters of consequence regarding technology.
- c. Identify emerging technologies from a perspective of (1) usefulness, (2) ecological sustainability, (3) beauty and (4) nurturing of human spirit.

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<sup>7</sup> 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 ecoregion). 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.

<sup>8</sup> Rees, William E. (March 2019). "End Game: The economy as eco-catastrophe and what needs to change" *Real-World Economics Review*

<sup>9</sup> This is technically achievable (von Weizsäcker, et al. 2009).

- d. Ensure that technology policy is informed by the latest sound science.
- e. Ensure that technology policy work provides the greatest benefit to society, while helping protect and restore natural systems.
- f. Ensure that investments in science and technology make the greatest possible contribution to real economic prosperity, public health, environmental quality, and overall security.
- g. Energize and nurture the processes by which local programs in science and technology are resourced, evaluated, and coordinated.
- h. Programs, projects, and policies might include:
  - Developing a precautionary approach to new technology that might limit annual profits until long-term studies are done on new technologies. There need to be effective enforceable rules and mechanisms to ratchet economic activity down before it approaches carrying-capacity limits.
  - Identify false solutions—such as farming biofuels, which can substitute for fossil fuels but have a negative impact on the cost and availability of food.
  - Institute a moratorium on the genetic modification of plants and animals until ethics and testing are well developed and the risks are clearly understood.
  - Rapidly phase-out the use of most hormones and chemicals in livestock and food production.
  - Avoid technologies and policies that threaten to displace human workers. Identify options that will help humanity to maintain skills essential to live 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.

- a. Such as opposing corporate power, exploring guaranteed incomes, guaranteeing job programs that ensure a living wage, providing universal health care, free or affordable education, etc.
- b. 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. The whole matters.

## Jobs and a Return to the Holocene's 280 PPM

The above Seven-Point Plan implemented via *The New Green 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 12,000 years ago. During this period, the earth's lifeforms thrived in a world of clean blue skies containing only 280 PPM of global-warming CO<sub>2</sub>. This relatively warm interglacial period enabled agriculture to flourish. In the past few centuries, however, human deforestation, industrial pollution and foolish energy systems has pumped more than 400 PPM of CO<sub>2</sub> into the atmosphere, undercutting the equilibrium of the Holocene. There is an arrogance to just carry on and rename the epoch after human dominance, the Anthropocene.

The Great Transition mentioned earlier includes a process and plan to reduce the CO<sub>2</sub> levels in the atmosphere back towards 280 PPM. It is possible. The following three transformations are needed to attain this goal:

- **Replace Industrial Agriculture with Ecological Farming, Agroecology:**
  - Shift to soil-and-carbon-building ecological farming practices. This shift to "agroecology" would create many new sustainable jobs while removing CO<sub>2</sub> from the atmosphere and returning it to the land to enrich the soil.
- **Double the Native Forest Canopy:**
  - Halt deforestation and other habitat loss now while doubling the native forest canopy in less than 20 years. This would provide much meaningful employment, while scrubbing pollution out of our toxic sky.

- **Switch to 100% Renewable Energy via Low-Impact Lifestyles:** Stop releasing harmful chemicals into the atmosphere and turning the blue sky into a toxic furnace. The global transition to wind, wave, and solar power has the potential to create millions of new jobs.

The Holocene would have supported a farmable world for thousands of more years. If we can return toward 280 PPM levels of atmospheric CO<sub>2</sub>, 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. Ecological impacts, like pollution, are called externalities. As we know, they get swept under the rug. That is the cheat. The deeper point is not to just *internalize* externalities into a profit equation, but to systematically *eliminate* life-support/system-destroying externalities. Because of regional, as well as global carrying-capacity limits, we must also create governing agencies powerful enough to ratchet-down economic activity whenever it threatens ecological stability.

Decisions need to come from decision makers who know nature and have a humanitarian sense. This is why biosphere-literate education is essential to the plan. We have conceptualized a five star certification system.

Where to start: a rehash of the basics

1. Set off the alarm. Advance awareness 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 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. Banning heinous activities worked with 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 in the first place.

## Conclusion

There is still a great transition to pursue, but not forever. ***The New Green Deal's*** Seven-Point Plan won't be 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" will never replace 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 can clearly and loudly proclaim the Seven-point Truth and explain what needs to happen—simultaneously!—if we are to truly save the day 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. Pay attention to whole-systems thinking in the service of the whole of our planet.

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. Generate political will. It is the path to authentic hope.

*Bio: Randy Hayes is Executive Director of Foundation Earth, an environmental think tank established in 2011 to advance a big rethink the industrial economy and to propose bold, effective 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 ecological externalities and honors carrying capacity limits.*