

## “Red Alert for the Planet” - Moving from Awareness to Outrage

Patricia M. DeMarco, Ph.D.

August 25, 2021

For most of human history, dominating Nature has been the goal of mankind to enhance survival, to control land as a form of wealth and to expand the capacity for growth. Since the Industrial Revolution, humans have been liberated from the bounds of nature- we can heat and cool buildings, run machines and engines, manufacture materials never found in nature all using fossil fuels extracted from the depths of the earth. We grow food in vast monocultures using petrochemical-based fertilizers, herbicides and pesticides to the extent that surpluses accumulate in some places while people starve in other places, and 40% of what we produce goes to waste. We move with impunity from place to place about the globe, even just for the sake of adventure into the stratosphere. We can call anything we want from the ends of the earth to our doorstep through the wonders of internet shopping. But we are killing our life support system. We are killing ourselves and dooming our children because of greed.

The United Nations Sixth IPCC report “Making Peace with Nature” calls for an end to our war on Nature: “The current mode of development degrades the Earth’s finite capacity to sustain human well-being”<sup>1</sup> We must work together to reach a condition that will sustain humanity in harmony with Nature.

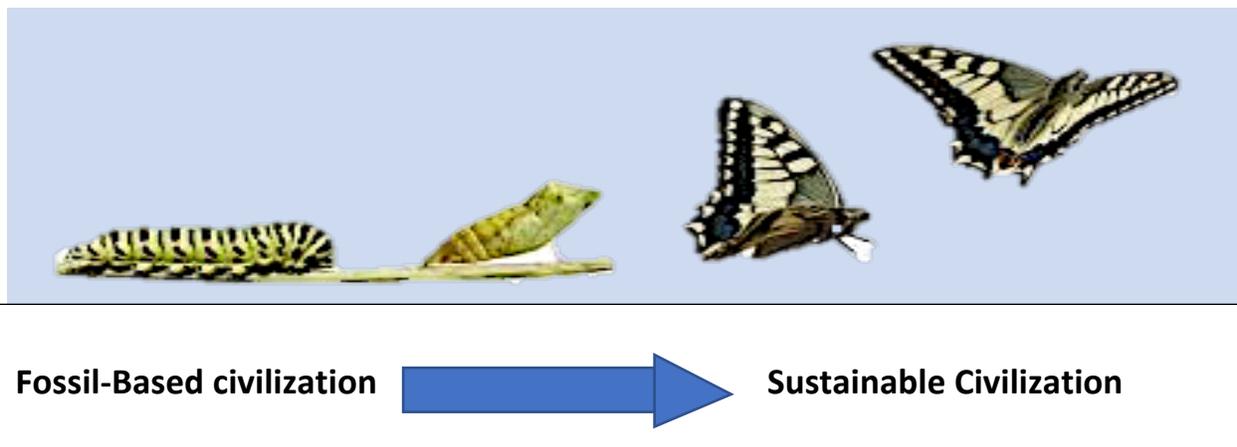
### The Top Key Findings of the Report Are:

- Environmental changes are undermining hard-won development gains by causing economic costs and **millions of premature deaths annually**. They are impeding progress towards ending poverty and hunger, reducing inequalities and promoting sustainable economic growth, work for all and peaceful and inclusive societies.
- The well-being of today’s youth and future generations depends on an urgent and clear break with current trends of environmental decline. **The coming decade is crucial**. Society needs to reduce carbon dioxide emissions by 45 per cent by 2030 compared to 2010 levels and reach net-zero emissions by 2050 to limit warming to 1.5 °C as aspired to in the Paris Agreement, while at the same time conserving and restoring biodiversity and minimizing pollution and waste.
- **Earth’s environmental emergencies and human well-being need to be addressed together to achieve sustainability**. The development of the goals, targets, commitments and mechanisms under the key environmental conventions and their implementation need to be aligned to become more synergistic and effective.
- The economic, financial and productive systems can and should be transformed to lead and power the shift to sustainability. **Society needs to include natural capital in decision-making, eliminate environmentally harmful subsidies and invest in the transition to a sustainable future**.
- **Everyone has a role to play** in ensuring that human knowledge, ingenuity, technology and cooperation are redeployed from transforming nature to transforming humankind’s relationship with nature. Polycentric governance is key to empowering people to express themselves and act environmentally responsibly without undue difficulty or self-sacrifice.<sup>2</sup>

The time for limits to uncontrolled growth has arrived. Major Earth system components are showing measurable signs of reaching irreversible thresholds.<sup>3</sup> For example, observations and measurements of the Atlantic Meridional Overturning Circulation temperature and salinity give empirical evidence that the relatively stable circulation has reached a point close to a critical transition to instability.<sup>4</sup> This has serious implications for the global climate system and all of life on Earth that depends on the oceans. We must transform our society from one based on extractive industries that destroy the natural systems of the Earth to one based on regenerative and conserving practices that support the natural systems of the Earth. The laws of Nature- physics, chemistry, physiology and ecology- are not negotiable. We must adapt our society to live within the constraints of the laws of Nature and restore balance to our co-existence in the natural world.

*“In spite of the truly marvelous inventions of the human brain, we are beginning to wonder whether our power to change the face of nature should not have been tempered with wisdom for our own good, and with a greater sense of responsibility for the welfare of future generations.” Rachel Carson<sup>5</sup>*

Rachel Carson’s words of precaution written shortly before her death of breast cancer in 1963 are no longer speculative. We have certainty of the disastrous consequences of our industrial age. It is time for a transformation to a new age of living in balance with Nature. We face a coalescing of existential crises as we see global pollution from man-made materials, loss of biodiversity making pandemic events more likely, and the self-sustaining forces that shape our climate reach tipping point thresholds. We are creatures of the natural world, more alike as humans than different in gender, religion, culture, national or political affiliation.



Transformation to a post- fossil resourced economy seems frightening and impossible to imagine from our position here at the culmination of over 100 years of industrial civilization. All the “progress” of the industrial revolution has brought us to the brink of disaster, but also has given us the tools to move forward to a more sustainable mode of existence. The transformation to a fossil-free economy holds great promise for shared prosperity with good union jobs, better social justice, and restored quality of the environment. Numerous reports and policy blueprints have put forward such solutions for over two decades.<sup>6</sup> The most important transformations fall in to three categories:

*First- transform the energy system* from one dependent on fossil fuels to systems based on renewable and sustainable energy sources. That means all new buildings and major renovations use passive solar design with geothermal heat pump systems and photovoltaic roof arrays; vehicles shift to electric operation powered by renewable energy; and industrial operations shift to cogeneration, mechanical shaft power, and electric operations powered by renewable energy systems and green hydrogen (produced from anaerobic digestion of municipal waste or other renewable energy sources.)

*Second. Transform the food production system* from industrial scale monocultures dependent on petrochemical based and fossil fueled fertilizers, pesticides, herbicides and irrigation to regenerative agriculture practices based on permaculture, crop diversity and soil restoration with drought resistance and water conservation. Develop more robust local food production and distribution systems to reduce transportation and packaging resource use and to restore the diversity of local food cultures. Move food consumption patterns to waste less food; consume foods lower on the carbon intensity scale; and use less packaging and processing.

*Third, convert the materials management system* from one that depends on fossil raw material designed mostly for single use to a system of circular materials management with higher value on re-use and long life for products. The modern throw- away society is not compatible with a sustainable future.

These transformations entail fundamental shifts in policy, regulations, market subsidies, and public education. These changes do not require major technology discoveries to begin advancing to a sustainable economic system; they do require the political will to act. None of the necessary changes can occur in the face of entrenched resistance and sustained obstruction from the fossil extractive industries. The oil, gas and coal companies have relied on taxpayer subsidies for the entirety of their operations since the late 1800s. The largest subsidizers are China (\$1.4 trillion in 2015), the United States (\$649 billion) and Russia (\$551 billion).<sup>7</sup> But absent the regular infusion of subsidies, 50% of fracking operations and 98% of coal operations would not be economically viable.<sup>8</sup> The five largest publicly owned oil and gas companies spend an average of \$200 million a year to lobby in opposition to climate action, pollution prevention and public health and worker protections.<sup>9</sup> Making significant policy changes in the face of this entrenched opposition compounds the difficulties. Only a massive grassroots movement to demonstrate the public demand for change will bolster political will to make the necessary changes.

The transformation to a sustainable future offers the opportunity to redress the harms of the concentration of wealth and power in the hands of the few. Readjusting the social safety net to care for the education, health and welfare of all citizens can help advance the transformation of our society to one less dependent on accumulation of goods and more interdependent among people. We can reclaim the value proposition of treasuring things made to last, rather than to be used once and discarded along with the embodied resources. We must cultivate a culture of “Enough!” rather than a culture of “Buy More Stuff!” The environmental and social justice inequities inherent in our current societal structure cry out for redress as we shape a better way forward.

*International inequities:* The unequal effects of the harms from climate warming fall most heavily on the poorest nations, and people who have had the least contribution to the greenhouse gas emissions that caused the problem in the first place.<sup>10</sup> This differential has

occurred both because of the substantial economic declines due to climate change in poorer countries where drought and water unavailability has had devastating effects, and from the increased economic activity in developed countries such as India and China where increased energy use has occurred. The ethical obligation of the industrialized countries to assist the less industrialized nations must be addressed as part of the climate solution. The United Nations Sustainable Development Goals begin to approach the global effort to address these inequities.<sup>11</sup>

*Intergenerational inequities:* The pleas of children and young people for immediate and substantive response to climate warming have become increasingly strident and urgent. An estimated 850 million children – 1 in 3 worldwide – live in areas where at least four major climate and environmental shocks overlap. One billion children are at an “extremely high risk” of the impacts of the climate crisis, according to UNICEF.<sup>12</sup> From internationally recognized youth leaders like Greta Thunberg to local high school climate activists like the Woodland Hills Climate Action Team have taken initiative to challenge the power holders to act. It is becoming clearer every day that the worst effects of climate warming will fall on the children of the 21<sup>st</sup> century. Too many young people are feeling despair and frustration at the failure of the adults in control of the political and economic operations.

The sustainable pathways still are glimpsed as through a keyhole into a beautiful, locked garden where the gates are guarded by the 20 multi-national corporations whose wealth exceeds that of many entire nations: the fossil extractive industries and their petrochemical production companies that hold our future in abeyance. As long as the companies whose business models depend on extracting fossil resources as raw material for fuel and products control the Congress and many state legislatures, the necessary policy changes will be impossible. The laws and policies put in place to support and encourage these industries over the last 100 years now stand as impediments to the transformation that must take place if we are to survive and thrive as a species. It is not enough to feel frustration and despair. Now is the time for mobilizing and taking strong action.

Demand accountability from elected representatives in Congress and in state and local legislative bodies. Make your voice heard calling for these three priorities:

1. **Stop subsidies to fossil extractive industries.** Change the laws. Put taxpayer funds to work on the new solutions. To continue subsidies to the fossil industries is to try filling a bucket with a huge hole in the bottom.
2. **Use the power of government procurement to promote sustainable solutions.** Adopting federal and state and local government procurement for renewable energy, passive solar design in buildings, re-usable materials and food sourced from regenerative growing practice will help drive markets in the right direction.
3. **Establish the regulatory infrastructure to support and promote sustainable practices-** building codes, utility tariffs and microgrid requirements, restrictions on producing toxic materials, manufacturer accountability laws for plastics, rescinding the supremacy of mineral rights over surface rights to protect watersheds and fertile lands and forests, require rapid regulatory action. The precedent of 150 years of property law must be revisited to eliminate impediments to sustainable practices to control climate warming.

4. **Invest in communities**, especially those most harmed by the extractive industries. See the ReImagine Appalachia Blueprint for the jobs impact of the investment in union jobs. <https://reimagineappalachia.org>

Everyone has a role to play in making the policy U-Turn we need in the United States of America. Every person has a responsibility to act, to use all resources available to reduce the carbon footprint. We who are at the top of the greenhouse gas production causers must take responsibility to change ourselves.

1. **Find out what your own carbon footprint is** and make a plan to reduce it every day. You can start here <https://www.carbonfootprint.com/calculator.aspx>
2. **Talk about the reality of climate warming** to your family, friends and business associates. Involve others in your climate action plan. Be sure your community has a Climate Action Plan to identify the best way forward. Get involved in creating one, and help to promote climate action in your own town.
3. **Call your elected representatives and demand action on climate.** This is not the time for half-way measures or token responses. Our survival is at stake. Find out how to contact your elected officials here <https://www.usa.gov/elected-officials>
4. **VOTE in every election**, every time. Find out where your candidates stand on climate and equity issues and work to elect strong agents of change. It is critical that we empower people to be heard.

Finally- the United Kingdom will host the 26<sup>th</sup> UN Climate Change Conference of the Parties (**COP-26**) in Glasgow on October 31 to November 12, 2021. During this time, plan to turn out in force in a demonstration of urgency for united action on climate across the globe. “Whether future generations look back at this time with admiration or despair, depends entirely on our ability to seize this moment,” according to Alok Sharma, COP-26 President-Designate. Watch for demonstrations, public actions, and calls for people’s strikes for climate justice during this time. You can see the COP-26 plans here <https://2nsbq1gn1rl23zol93eyrcj-wpengine.netdna-ssl.com/wp-content/uploads/2021/07/COP26-Explained.pdf>

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<sup>1</sup> United Nations Environment Programme (2021) Making Peace with Nature: A scientific blueprint to tackle climate, biodiversity and pollution emergencies. Nairobi. <https://www.unep.org/resources/making-peace-nature> Accessed August 13, 2021.

<sup>2</sup> Ibid. Page 13. Accessed August 15, 2021.

<sup>3</sup> Timothy M. Lenton, Johan Rockström, Owen Gaffney, Stefan Rahmstorf, Katherine Richardson, Will Steffen, Hans Joachim Schellnhuber. **Climate tipping points — too risky to bet against.** *Nature*, 2019; 575 (7784): 592 DOI: [10.1038/d41586-019-03595-0](https://doi.org/10.1038/d41586-019-03595-0) Accessed Aug 24, 2021.

<sup>4</sup> Niklas Boers. “Observation-based early warning signals for a collapse of the Atlantic Meridional Overturning Circulation.” *Nature Climate Change*. 11:680-688 (2021) <https://doi.org/10.1038/s41558-021-01097-4> Accessed August 24, 2021.

<sup>5</sup> *Rachel Carson- Lost Woods. “On the Pollution of Our Environment” p. 228*

<sup>6</sup> Amory Lovins. *Soft Energy paths to a Durable Peace.* Foreign Affairs. Publisher, date. The Limits to Growth Donella Meadows et. Al. *Drawdown. Re-inventing Fire, Pathways to Our Sustainable Future;* Hunter Lovins et. Al. *A Finer Future the ReImagine Appalachia Blueprint; the THRIVE Agenda*

<sup>7</sup> Clayton Coleman and Emma Dietz. “Fossil Fuel Subsidies: A Closer Look at Tax Breaks and Societal Costs.” Environmental and Energy Studies Institute. July 29, 2019. <https://www.eesi.org/papers/view/fact-sheet-fossil-fuel-subsidies-a-closer-look-at-tax-breaks-and-societal-costs> Accessed August 25, 2021.

<sup>8</sup> [https://legacy-assets.eenews.net/open\\_files/assets/2017/10/02/document\\_gw\\_01.pdf](https://legacy-assets.eenews.net/open_files/assets/2017/10/02/document_gw_01.pdf)

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<https://carbontracker.org/reports/no-country-for-coal-gen-below-2c-and-regulatory-risk-for-us-coal-power-owners/>

<sup>9</sup> Niall McCarthy. "Oil and Gas Giants Spend Millions Lobbying to Block Climate Change Policies." Forbes. March 25, 2019. <https://www.forbes.com/sites/niallmccarthy/2019/03/25/oil-and-gas-giants-spend-millions-lobbying-to-block-climate-change-policies-infographic/?sh=482984fc7c4f> Accessed August 15, 2021.

<sup>10</sup> Noah S. Diffenbaugh and Marshall Blake. "Global warming has increased global economic inequality." PNAS. May 14, 2019. <https://doi.org/10.1073/pnas.1816020116>

<sup>11</sup> Independent Group of Scientists appointed by the Secretary-General, *Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development*, (United Nations, New York, 2019). [https://sustainabledevelopment.un.org/content/documents/24797GSDR\\_report\\_2019.pdf](https://sustainabledevelopment.un.org/content/documents/24797GSDR_report_2019.pdf) Accessed August 23, 2021

<sup>12</sup> <https://www.unicef.org/press-releases/one-billion-children-extremely-high-risk-impacts-climate-crisis-unicef>