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The Three Faces of Sustainability

by Paul Driessen*

Confusion over the meaning of sustainable development causes many people to choose political sustainability instead of truly sustainable increases in economic productivity and standards of living.

Introduction

One can hardly open a newspaper or magazine without finding a story about sustainable development, sustainable business practices, or sustainability as an essential component of a company's "corporate culture." Companies and communities, hotels and restaurants, and even colleges and religious institutions extol their commitment to it. Sustainability underpins, drives, and justifies activist campaigns, United Nations conferences and initiatives, and U.S. Environmental Protection Agency (EPA) policies and programs.

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The National Research Council of the National Academies released a report in 2010 titled *Sustainability and the U.S. EPA* in which it proposed "sustainable development" as a new mission for the agency. The report states:

Sustainable development ... raises questions that are not fully or directly addressed in U.S. law or policy, including how to define and control unsustainable patterns of production and consumption and how to encourage the development of sustainable communities, biodiversity protection, clean energy, environmentally sustainable

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economic development, and climate change controls. Each of these questions needs to be addressed across government agencies.¹

Lisa Jackson, serving at the time as EPA administrator, said the report would help to usher in “the next phase of environmental protection” and the study’s findings would affect “every aspect” of EPA’s work.² According to Jackson, this new central-planning framework would allow the agency to tackle diverse issues such as developing renewable fuels without affecting food supplies and clean water, or deployment of large-scale solar facilities without depleting rare or scarce minerals.³ To effect such change, EPA’s jurisdiction would necessarily penetrate even further into Americans’ daily lives, as the agency seeks to control every individual and corporate action that does not fit within its sustainability paradigm.

All of this raises several fundamental questions. What exactly is sustainability? What is – or isn’t – sustainable? Who decides, and on what basis?

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Defining the Concept

There is no single accepted definition of sustainability. This ambiguity allows people and organizations to make claims about what is or is not sustainable without those assertions being scientifically testable, thus presumably rendering them beyond dispute. That works to the advantage of those making claims about sustainability in any particular area, because it disarms opponents by preventing identification of the actual costs and benefits of the proposed policy.

There are, however, some things we do know about the concept. Sustainability has two main components: science and economics. When we talk about the sustainability of a human activity, we are being asked to judge whether that activity can continue for as long as human beings want. To be sure, that has a foundation in physical science. For example, if there is truly a limited amount of something in the world, we can use it only for a limited duration determined by the particular rate of consumption.

¹ National Research Council, *Sustainability and the U.S. EPA* (Washington, DC: National Academy of Sciences, 2011).

² George Russell, “EPA Ponders Expanded Regulatory Power In Name of ‘Sustainable Development,’” Fox News.com, December 19, 2011, <http://www.foxnews.com/politics/2011/12/19/epa-ponders-expanded-regulatory-power-in-name-sustainable-development/#ixzz1pmaxi47w>.

³ Lisa Jackson, Remarks to the National Academies of Science [sic], November 30, 2010, <http://yosemite.epa.gov/opa/admpress.nsf/8d49f7ad4bbcf4ef852573590040b7f6/1c893e457b3cbb25852577ec0054048c!OpenDocument>.

It is a mistake to stop there, however. Humans use natural resources to add value to the natural world. Coal, for example, is worthless to us under the ground, but it has much value when used to produce electricity and fuel factories. When people find a new tool or resource that does a job more efficiently and with fewer negative side effects, they turn away from current tools or resources. This is true of any resource. Value is based on usefulness, and highly valued resources tend to be replaced when increasing demand pushes their prices higher than available substitutes.

Rising prices also can spur innovation in the production or use of existing resources. That is what increased the supply of recoverable oil and natural gas in the United States in recent years: As oil and gas prices rose, previously uneconomical sources were pursued and technological advances were found. For instance, smart horizontal drilling used in combination with hydraulic fracturing made production competitive economically. Prices then dropped as supplies increased.

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Thus, a valuable and economically important way of using a resource need not be sustainable in perpetuity, but instead only until another method emerges to take its place. That means the sustainability of each natural resource is constantly changing as rates of consumption change and new sources, methods of production or use, or substitutes are discovered. That is why sustainability is fundamentally an economic issue, in addition to having a physical science component.

Combining the scientific and economic components of the matter suggests what sustainable development really means, or should mean: thoughtful, caring, responsible, and economical stewardship of land, air, water, energy, metallic, forest, wildlife, and other natural resources, as well as financial and human resources. Understood in that way, it's clear that every person, company, and institution should practice sustainable development.

Three Faces of Sustainability

In popular culture – in newspapers and magazines and on television – we often see three versions or faces of sustainability.

The first face, and the one we see most often, is typically superficial and devoid of content. Thousands (perhaps millions) of companies boast of their commitment to sustainability in ads, annual reports, and news releases. Claiming to operate sustainably may promote corporate images and inspire flattering coverage by the press, but it is often devoid of real substance.⁴ Bland assertions that a company is devoted to renewable fuels, corporate responsibility, environmental justice, reducing its carbon footprint, or (in the case of Coca-Cola's marketing

⁴ An good guide to using sustainability as more than just a public relations gimmick is E. Bruce Harrison, *Corporate Greening 2.0: Create and Communicate Your Company's Climate Change and Sustainability Strategies* (Exeter, NJ: PublishingWorks, Inc., 2009).

partnership with the hard-green World Wildlife Fund⁵) saving polar bears, are little more than transparent attempts to appease radical environmental groups. They run the risk of alienating customers who see through the puffery and resent having some of their hard-earned dollars used to subsidize overly politicized advocacy groups.

The second face of sustainability is true sustainable development. In economic and scientific terms, it represents the use of steadily improving technologies and practices to conserve resources, reduce waste and pollution, squeeze the last possible ounce out of energy and mineral deposits, and leave the world better than we found it. As an added bonus, these practices benefit consumers, help companies save money and maintain profitability, and keep employees employed.

Political sustainability is the use of concepts and ideas that arise from true sustainability to present a pseudo-scientific justification for a political agenda that extends far beyond genuine economic or scientific matters.

In agriculture, true sustainability means wisely using fertilizer, biotechnology, and other modern high-yield practices to get the most crops per acre while minimizing environmental impacts.⁶ Examples of such good practices abound, as documented below. The widespread use of sustainable practices increases a nation's agricultural productivity, resulting in more land set aside for conservation and more ample, and therefore affordable, food supplies.

The third face of sustainability is political sustainability: the use of concepts and ideas that arise from true sustainability to present a pseudo-scientific justification for a political agenda that extends far beyond genuine economic or scientific matters. The National Research Council report cited at the beginning of this policy study is an excellent example of this face, as are the statements and campaigns of many environmental groups.⁷ Political sustainability is cloaked in altruistic terms, but it invariably involves government coercion and control, forcing people to do what is not in their own best interests. The results are frequently harmful to poor and middle-income families struggling to improve their living standards. In many cases, the programs actually endanger wildlife and damage the environment.

This policy study focuses on the differences between true sustainability and political sustainability, and why those differences matter.

⁵ Eric Heidenreich, "World Wildlife Fund: Business is Good," Capital Research Center, October 21, 2008, <http://capitalresearch.org/2008/10/world-wildlife-fund-business-is-good/>.

⁶ Thomas R. DeGregori, *Bountiful Harvest: Technology, Food Safety, and the Environment* (Washington, DC: Cato Institute, 2002).

⁷ Michael Ss. Coffman, *Saviors of the earth? The politics and religion of the environmental movement* (Chicago, IL: Northfield Publishing, Inc., 1994).

True Sustainability: Adding to Human Welfare

Companies, governments, families, and other institutions should and largely do strive to use sustainable processes by conserving energy, water, and other resources when it makes economic, technological, ecological, and ethical sense to do so. Sustainability also entails reducing air and water pollutants that endanger wildlife, environmental quality, and human health and welfare.⁸ This is the principle of “stewardship of creation,” of *tikun olam* (a Hebrew phrase meaning “repair of the world”). True sustainability is the Boy Scout prescription that we must leave our world better than we found it.

Personal actions that increase sustainability include: keeping cars tuned up and tires properly inflated, using water, electricity, and insecticides and other chemicals responsibly, and disposing of chemical and other wastes properly. Worthwhile government actions include computerized traffic light sequencing that reflects road use patterns during rush hour and other times. This improves traffic flow and reduces pollution and wasted fuel caused by unnecessary idling. Governments also can support practices that reflect good stewardship, enact reasonable laws and regulations to reduce truly harmful pollution, end subsidies for inefficient activities, and revise endangered species policies and other laws that contravene stewardship principles.

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At the corporate level, businesses have adopted countless programs that reflect sustainability at its best. For example, incremental improvements in metallurgy and extrusion technology have made aluminum beverage cans more than 40 percent lighter than they were in the 1960s. New formulations and extrusion processes have done the same thing for plastic beverage and chemical containers. These advances reduce material needs, energy requirements, and fuel used to transport lighter pallets of goods, while also reducing the likelihood of breakage and spills.⁹

Improvements in tensile strength and architectural design mean high-rise buildings require 35 percent less steel than their counterparts did just a few decades ago. A 1,000-meter (3,280-foot) 24-fiber optic cable made from 45 pounds of silica sand (Earth’s most abundant element) carries thousands of times more information more safely and securely than a much thicker, old-fashioned RG-6 cable made from 3,600 pounds of copper. Additionally, older copper cables cannot carry high-definition video signals.¹⁰

⁸ Robert L. Bradley, Jr., *Julian Simon and the Triumph of Energy Sustainability* (Washington, DC: American Legislative Exchange Council, 2000); Terry L. Anderson and Donald R. Leal, *Enviro-Capitalists: Doing good while doing well* (Lanham, MD: Rowman & Littlefield Publishers, Inc., 1997).

⁹ Aluminum Institute, “The infinitely recyclable aluminum can,” <http://www.aluminum.org/search/node/infinately%20recyclable%20aluminum%20can>.

¹⁰ Lynn Scarlett and Jane Shaw, *Environmental Progress: What every executive should know* (Bozeman, MT: Political Economy Research Center, 1999); Lynn Scarlett, “Doing More with Less: Dematerialization – unsung environmental triumph,” in Ronald Bailey (Ed.), *Earth Report 2000: Revisiting the true state of the planet* (New York, NY: McGraw-Hill, 2000); Extron Electronics, “Fiber optic frequently asked questions,”

Videoconferencing dramatically reduces the need to travel, and work-at-home opportunities cut commuter traffic, reduce fuel use, decrease pollution, and let disciplined employees get more done with less time wasted in traffic jams.

Between 1970 and 2010, U.S. emissions declined by 63 percent for the six most dangerous air pollutants (particulates, ozone, lead, carbon monoxide, nitrous oxide, and sulfur dioxide). Those reductions occurred even as coal-based electricity generation increased by 180 percent, overall U.S. energy consumption rose 40 percent, miles traveled soared 168 percent, and the nation's population increased by 110 million.¹¹

AirDye Solutions and Colorep developed a new process that uses synthetic fibers from recycled bottles to manufacture and dye fabrics for clothing and signs. Not only can the process apply multiple vibrant colors and designs to each side of a fabric; it also reduces water and energy use, as well as air and water pollutants, by more than 85 percent.¹²

Waste disposal companies are pursuing numerous strategies for turning batteries, chemicals, food wastes, and fibers of every description into useful new products.

Modern combined-cycle gas turbines can generate electricity using natural gas. In the process, they achieve almost double the efficiency of older power plants. They can also recycle the formerly wasted hot air and coolant waters to heat buildings and can even use the still-warm water to heat hothouses for growing fruits and vegetables.¹³

Waste disposal companies are pursuing numerous strategies for turning batteries, chemicals, food wastes, and fibers of every description into useful new products. Material that once went to landfills is turned into pelletized fuel or burned in high-tech, gas-fired waste-to-energy (WTE) facilities that generate electricity for tens of thousands of homes and businesses, while emitting almost no pollution because fuel sources are burned completely in closed-cycle units. As an added bonus, WTE plants turn impossible-to-recycle trash into electrical power while recovering and recycling even staples and paper clips, metal light bulb and canister bottoms, and other items that otherwise would end up in landfills.¹⁴

<http://www.extron.com/company/article.aspx?id=foddgga>.

¹¹ Daniel Simmons, *Hard Facts: An energy primer* (Washington, DC: Institute for Energy Research, 2012), page 2.

¹² Alissa Walker, "AirDye's ecological color process makes the future of textiles bright," *Fast Company*, September 22, 2009.

¹³ Anna Shipley, Anne Hampson, Bruce Hedman, Patti Garland, and Paul Bautista, *Combined Heat and Power: Effective Energy Solutions for a Sustainable Future* (Oak Ridge, TN: Oak Ridge National Laboratory, 2008), http://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/chp_report_12-08.pdf.

¹⁴ Adam Lashinsky, "Turning trash into dollars," *Fortune*, June 10, 2013, page 54; Ogden Martin Systems of Fairfax (now Covanta Energy), "The I-95 Energy/Resource Recovery Facility," 1999.

Packaging protects and prolongs the life of valuable and often-fragile products that represent the contribution of thousands of hours, millions of dollars, large quantities of fuel and raw materials, significant environmental impacts, the extraction and processing of ores, and the manufacturing and shipping of goods. However, packaging and containers represent up to one-third of the United States' total waste stream and are the largest single component of municipal solid waste. Packaging thus offers significant opportunities for corporate sustainability efforts.

Many companies are designing new ways to manufacture linerboard and other packing material from wastes otherwise destined for landfills. They are also coming up with new ways to use fewer materials and less energy, reuse packaging components, recycle materials and energy streams, and make lighter yet stronger packing products that require less energy to ship goods and equipment and can then be recycled or reused.

Pratt Industries, for example, collects paper and cardboard in New York City and turns it into linerboard that it ships to box plants around the United States. Its Georgia gasifier facility uses trash and natural gas to generate 100 percent of the steam needed by its mill and corrugated materials operation and almost 40 percent of the mill's electricity requirement. The process also uses fewer chemicals and less water. Hexacomb, Bemis, and other companies are using honeycomb designs, new-generation polymers, and other materials that combine light weight, strength, safety, and recyclability.¹⁵

In many scuba diving destinations, resorts and dive operators have installed buoys so boats can tie up to them instead of dropping anchors on fragile coral reefs. They also have implemented rules against bringing anything back from a dive to help ensure magnificent marine environments are preserved for future visitors. Countless other practical "sustainable tourism" initiatives are preserving scenic and wildlife treasures all over the world.

Smart organizations want to protect the environment, save money, improve their bottom line, stay in business, and get well-deserved accolades for being good citizens. The innovators mentioned above are just a small sample of the thousands of businesses acting in ways they can objectively tout as advancing sustainability.

Such organizations often employ the language of sustainable development in promoting their wise-use efforts. This is proper and should be encouraged. Other sustainability developments, however, are problematical.

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¹⁵ "Ahead of the Pack" and "Profiting from Sustainability," *Fortune*, June 10, 2013, special advertising section, pages S1–S6; Marc Gunther, "Unilever's CEO has a Green Thumb: Paul Polman embraces sustainability, and the consumer products colossus grows like crazy," *Fortune*, June 10, 2013, pages 124–130.

Sustainability and Sustained Development

An early landmark in the global sustainability movement, the Brundtland Commission's 1987 report, *Our Common Future*,¹⁶ contained a lot of faulty science and flawed economics; however, to its credit, the report focused on alleviating poverty as well as achieving sustainable development. In her foreword, Dr. Brundtland stressed, "sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfill their aspirations for a better life." In addition, she wrote, "Meeting essential needs requires not only a new era of economic growth for nations in which the majority are poor, but an assurance that those poor get their fair share of the resources required to sustain that growth." That approach is vital, she stated, because "a world in which poverty is endemic will always be prone to ecological and other catastrophes."

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– Gro Harlem Brundtland

Unfortunately, these vitally important development concepts were abandoned by radical activists and bureaucrats intent on using sustainability as a blunt weapon to promote and impose an anti-development agenda.¹⁷ Conflicts and wars over lands, resources, and opportunities are made increasingly likely by policies that purposely

or unintentionally make resources less accessible and increase the misery index for millions more people. Pro-economic growth policies consistent with sustainability would avoid these consequences.

Peruvian economist Hernando de Soto and other true champions of the poor have long argued that private property ownership with defensible titles is the secret to improved opportunities, health, and living standards for all.¹⁸ The world's poor, de Soto notes, are sitting on vast wealth that, once unlocked by a legal system that recognizes and protects private property rights, can provide the springboard to economic growth and better lives. That essential beginning must be combined with honest government. Real sustained and sustainable development also means individual freedom, which encourages innovation and constantly improving technologies.¹⁹

¹⁶ United Nations, *Report of the World Commission on Environment and Development: Our Common Future*, 1987, <http://www.un-documents.net/our-common-future.pdf>.

¹⁷ For a good example, see Michael Redclift, "Sustainable Development (1987–2005): An oxymoron comes of age," *Sustainable Development*, Special Issue: Critical Perspectives on Sustainable Development, Volume 13, Issue 4, October 2005, pp. 212–227.

¹⁸ Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (New York, NY: Basic Books, 2003).

¹⁹ Mancur Olson, *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities* (New Haven, CT: Yale University Press, 1984) and by the same author, *Power And Prosperity: Outgrowing Communist And Capitalist Dictatorships* (New York, NY: Basic Books, 2000).

Innovation and sustainable practices are already common in the developing world, business consultant C.K. Prahalad has pointed out,²⁰ because people there are compelled by economic necessity to conserve resources by eliminating, reducing, or recycling waste products. The world's poor should not be seen as victims or as a burden, Prahalad explained. Instead, they are resilient and creative entrepreneurs and environmental stewards who may one day offer new technologies and techniques that enable all of us to enjoy greater prosperity and sustainability.

True sustainability empowers people in developing nations to create and manage their own wealth, develop their own free and healthy institutions, and solve their own environmental and human health challenges.²¹ That system – free-market capitalism – has produced a world in which billions of people are living longer, healthier, and more comfortable lives on a cleaner planet.²² People in developing nations do not require heavy government or activist oversight to use their resources wisely and safeguard their environment.

True sustainability empowers people in developing nations to create and manage their own wealth, develop their own free and healthy institutions, and solve their own environmental and human health challenges.

Unfortunately, too many well-intended people still think citizens in developing countries are “like children that they must save, as if we don’t realize ourselves what the source of our problems is,” explained Cameroonian journalist Jean-Claude Shanda Tonme. “Don’t insult Africa, this continent so rich, yet so badly led. Instead, insult its leaders, who have ruined everything. Our anger is all the greater because, despite the presidents for life, despite all the evidence of genocide, we didn’t hear anyone at Live 8 [a series of benefit concerts that took place in 2005 in developed countries and South Africa] raise a cry for democracy in Africa.”²³

Ultimately, sustainable development relies on affordable energy. “[E]nergy poverty causes more harm to the poor than global warming,” and cheap energy “makes the poor vastly less vulnerable to climate impacts,” Breakthrough Institute scholars Michael Shellenberger and Ted Nordhaus observed. Electricity would “dramatically improve their lives, reduce deforestation, and make them more resilient to climate impacts. ... This is not a low-energy program, it is a high-energy one. Any effort worthy of being called progressive, liberal, or environmental must embrace a

²⁰ C.K. Prahalad, *The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits* (Upper Saddle River, NJ: Pearson Prentice Hall, 2009).

²¹ William J. Baumol, *The Free-Market Innovation Machine: Analyzing the growth miracle of capitalism* (Princeton, NJ: Princeton University Press, 2002).

²² Indur M. Goklany, *The Improving State of the World: Why we’re living longer, healthier, more comfortable lives on a cleaner planet* (Washington, DC: Cato Institute, 2007).

²³ Jean-Claude Shanda Tonme, “All rock, no action,” *New York Times*, July 15, 2005, http://www.nytimes.com/2005/07/15/opinion/15tonme.html?_r=0.

high-energy planet.”²⁴ For now and the foreseeable future, that means coal, oil, natural gas, hydroelectric power, and nuclear power, as these are the only abundant, reliable, and affordable sources of energy.

Like Mao’s Great Leap Forward, the use of expensive and intermittent power demanded by environmental activists will return rich countries to backbreaking preindustrial labor, will lead to plummeting life spans, and will condemn poor families to deprivation, disease, and premature death. When environmental activists take advantage of affordable power in Western democracies and then say destitute Africans should be content with little solar panels on their huts to power a light bulb, operate a one-cubic-foot refrigerator, and charge a cell phone, they are acting as little more than callous eco-imperialists.²⁵

Sustainability as a Political Movement

As a political movement, sustainability is an environmentalist campaign theme and justification for a broad array of expanded government powers and intrusions. It is very different from economic and scientific sustainability efforts.

The political agenda of sustainability is a distillation of the central concerns of the environmental movement.

The political agenda of sustainability is a distillation of the central concerns of the environmental movement. The environmental movement began in earnest in the early 1970s, when the Environmental Defense Fund (EDF) capitalized on fears of DDT

based on Rachel Carson’s book *Silent Spring* to give the growing environmental movement what EDF scientist Charles Wurster described as “a level of authority [it] never had before.”²⁶

Scottish scientist Alexander King and Club of Rome secretary general Bertrand Schneider argued the new movement would prosper if it could create “a common enemy against whom we can unite.” In defining this enemy, they said, it was important to ensure the looming disasters

²⁴ Michael Shellenberger and Ted Nordhaus, “How the Left came to reject cheap energy for the poor: The great progressive reversal,” June 10, 2013, <http://thebreakthrough.org/index.php/voices/michael-shellenberger-and-ted-nordhaus/the-great-progressive-reversal/>.

²⁵ Ed Begley, Jr., discussing energy and ecological issues during a Public Relations Society of America teleconference on Hollywood support for environmentalist causes, October 29, 2002, said, “It’s much cheaper for everybody in Africa to have electricity where they need it – solar panels on their huts.” Gar Smith, former editor of the Earth Island Institute’s online magazine, *TheEdge*, offered a similar view: “African villagers used to spend their days and evenings sewing clothing for their neighbors on foot-peddle-powered sewing machines,” he wrote. “Once they get electricity, they spend too much time watching television and listening to the radio. If there is going to be electricity, I would like it to be decentralized, small and solar-powered.” Reported by Marc Morano, “Environmentalist laments introduction of electricity,” *CNSNews.com*, August 26, 2002.

²⁶ *Chemistry Daily: The Chemistry Encyclopedia*, “DDT,” <http://www.chemistrydaily.com/chemistry/DDT/>; Steven Milloy, “Bald eagle-DDT myth still flying high,” *FoxNews.com*, July 6, 2006, <http://www.foxnews.com/story/2006/07/06/bald-eagle-ddt-myth-still-flying-high/>.

were presented as being “caused by human intervention in natural processes,” and the only way to avoid the disasters was “through changed attitudes and behavior.” The “real enemy,” they argued, is “humanity itself.”²⁷

In 1989, the PR firm Fenton Communications and the CBS TV show *60 Minutes* orchestrated a campaign that cost the apple industry \$100 million and bankrupted family-owned orchards by falsely labeling the growth-regulating chemical Alar “the most potent cancer-causing agent in our food supply.” David Fenton later bragged, “The idea was for the story to achieve a life of its own. ... The PR campaign was designed so that revenue would flow back to the [Natural Resources Defense Council].” And so it did, by the millions.²⁸

Even though its premises have been discredited, thousands of environmental groups still feature the Club of Rome’s dire future scenarios in their newsletters and fundraising letters, raising billions of dollars by selling fear.

The Club of Rome’s 1972 best-seller, *Limits to Growth*,²⁹ used faulty computer models and neo-Malthusian precepts to promote the idea that “unchecked” economic and population growth was rapidly depleting finite natural resources, setting the stage for imminent and unprecedented global calamities. Some 30 million copies of the book have been distributed worldwide. Even though its premises have been discredited, thousands of environmental groups still feature its dire future scenarios in their newsletters and fundraising letters, raising billions of dollars by selling fear.³⁰

The words of environmental activists show the agenda behind this movement. “Building an environmentally sustainable future requires restricting the global economy, dramatically changing human reproductive behavior, and altering values and lifestyles,” argued Worldwatch Institute founder Lester Brown. “Doing this quickly requires nothing short of a revolution.”³¹

“It is clear that current lifestyles and consumption patterns of the affluent middle class – involving high meat intake, the use of fossil fuels, electrical appliances, home and workplace air

²⁷ “Club of Rome,” http://en.wikipedia.org/wiki/Club_of_Rome; “The Limits to Growth,” http://en.wikipedia.org/wiki/Limits_to_Growth.

²⁸ “Accidentally Poisonous Apples,” in Bonner Cohen, John Carlisle, *et al.*, *The Fear Profiteers: Do ‘socially responsible’ businesses sow health scares to reap monetary rewards?* (Arlington, VA: Lexington Institute, 2000); Nick Nichols, *Rules for Corporate Warriors: How to fight and survive attack group shakedowns* (Bellevue, WA: Free Enterprise Press, 2001), page 38.

²⁹ Donella H. Meadows, *The Limits to Growth: A Report for the Club of Rome’s Project on the Predicament of Mankind* (New York, NY: Universe Books, 1972); Bonner Cohen, *The Green Wave: Environmentalism and Its Consequences* (Washington, DC: Capital Research Center, 2006).

³⁰ Robert Zubrin, *Merchants of Despair: Radical Environmentalists, Criminal Pseudo-Scientists, and the Fatal Cult of Antihumanism* (New York, NY: Encounter Books, 2012).

³¹ Lester Brown, *World without Borders* (New York, NY: Vintage Books, 1972), page 308.

conditioning, and suburban housing – are not sustainable,” Canadian environmental activist Maurice Strong declared. “A shift is necessary toward lifestyles less geared to environment damaging consumption patterns.”³²

Former Vice President Al Gore emphasized, “Minor shifts in policy, moderate improvements in laws and regulations, rhetoric offered in lieu of genuine change – these are all forms of appeasement, designed to satisfy the public’s desire to believe that sacrifice, struggle and a *wrenching transformation of society* will not be necessary”³³ (emphasis added).

“It is clear that current lifestyles and consumption patterns of the affluent middle class ... are not sustainable.”

– Maurice Strong

EPA’s commitment to sustainability and Agenda 21 goes back at least 20 years. According to a 1998 EPA notice, “The Sustainable Challenge Grant Program is also a step in implementing Agenda 21, the Global Plan of Action on Sustainable Development, signed by the United States at the Earth Summit in Rio de Janeiro in 1992. All of these

programs require broad community participation to identify and address environmental issues. Through the Sustainable Challenge Grant Program, EPA also intends to further the vision and goals of the President’s Council on Sustainable Development (PCSD) created in 1993 by President Clinton.”³⁴

This “wrenching transformation” is already being implemented, and not just through EPA programs. Since the 1990s, it has been imposed via the President’s Council on Sustainable Development, the United Nations Economic and Social Council (ECOSOC), the U.N. Framework Convention on Climate Change (UNFCCC), Earth Charter agreements, Agenda 21 campaigns, and countless other government agencies and activist programs and campaigns – including those conducted at local, state, national, and international levels by the American Planning Association, Sierra Club, ICLEI Local Governments for Sustainability, and numerous other organizations.

For example, in 1994, the newsletter of the California Chapter of the American Planning Association proudly reported, “Within the past year, the President’s Council on Sustainable Development has been organized to develop recommendations for incorporating sustainability into the federal government. Also, various groups have been formed to implement Agenda 21,

³² Michael McCoy, “Trekking to the summit,” *Earth Summit in Focus* No. 2, United Nations Conference on Environment and Development (1991), page 2.

³³ Albert Gore, *Earth in the Balance: Ecology and the human spirit* (New York, NY: Plume, 1992), page 274. President Barack Obama used similar words when, five days before the 2008 elections, he told supporters, “We are just five days away from fundamentally transforming America.” See Leo Pusateri, “Obama’s dystopia,” *American Thinker*, February 23, 2013, http://www.americanthinker.com/2013/02/obamas_dystopia.html.

³⁴ “Notices, Environmental Protection Agency – Sustainable Development Challenge Grant Program,” *Federal Register*, Volume 63, Number 163, August 24, 1998.

a comprehensive blueprint for sustainable development that was adopted at the recent [United Nations Council on Environment and Development] conference in Rio de Janeiro.”³⁵

In 1993, environmental activist and lawyer Daniel Sitarz described these transformational sustainability goals as follows: “Agenda 21 proposes an array of actions which are intended to be implemented by every person on Earth. ... It calls for specific changes in the activities of all people. ... Effective execution of Agenda 21 will require a profound reorientation of all humans, unlike anything the world has ever experienced.”³⁶

The 1992 Rio Earth Summit showcased “sustainable development” as the United Nations Environment Program’s gravest concern. When the U.S. Senate rejected the proposed Biodiversity Treaty, Vice President Al Gore and environmental activists shifted gears, sought a new “common enemy,” and settled on “catastrophic global warming” as their new rallying cry. But two decades later, amid Climategate revelations, failed climate conferences in Copenhagen, Durban, and Warsaw, and an unexpected “pause” in the rise of the planet’s surface temperature (now extending to more than 17 years), the global warming meme seems to have fallen short of its backers’ hopes. Consequently, sustainability is back in the limelight.

“Effective execution of Agenda 21 will require a profound reorientation of all humans, unlike anything the world has ever experienced.”

– Daniel Sitarz, Environmental Activist and Lawyer

The organizers of the 2012 Rio+20 Summit repackaged global warming, species diversity, social justice, peak oil, and other “crises” within the sustainability agenda. U.N. initiatives and treaties must implement sustainability policies at the international level, they proposed, and Agenda 21 and ICLEI Local Governments for Sustainability would do so at the state and local level. UNFCCC Executive Secretary Christina Figueres told delegates at the 18th Conference of Parties (COP 18), held in Qatar in 2012, “What is occurring here, not just in Doha, but in the whole climate change process, is the complete transformation of the economic structure of the world.”³⁷

Changes like these come with a price, however. Activists, politicians, and regulators feel little pain as they control and redesign other people’s lives, flying to conferences at posh resorts around the world. Middle-income and poor citizens pay the price for these programs, with the poor paying the most.

³⁵ Robert Odland, “How Sustainable is Our Planning,” *Northern News* [newsletter of the Northern Section of the California Chapter of the American Planning Association], April 1994.

³⁶ Daniel Sitarz (Ed.), *Agenda 21: The Earth Summit Strategy to Save Our Planet* (Carbondale, IL: Earth Press, 1993), page 11. For an illuminating overview of Agenda 21, see Tom DeWeese, “Agenda 21 in One Easy Lesson,” American Policy Center, <http://AmericanPolicy.org/agenda21/>.

³⁷ Christina Figueres, statement at opening of November 2012 global climate summit in Doha, Qatar, as reported by Disclose.TV in “U.N. climateers and the ‘complete transformation of the world,’” December 20, 2012, <http://www.disclose.tv/forum/the-complete-transformation-of-the-world-t82280.html>.

“These people need cheap, reliable, abundant energy and the infrastructure it can support, in order to climb out of abject poverty and lengthen life spans grossly shortened by disease and malnutrition,” observed Craig Rucker, executive director of the Committee For a Constructive Tomorrow (CFACT). “They need to terminate the tyranny of neo-colonialists who, in the name of ‘preventing climate change’ and ‘ensuring a sustainable future,’ continue to rule over them with iron fists.”³⁸

That hard reality is the reason activist-style sustainability must be examined very closely. It is the reason poor countries have refused to agree to any binding commitments on “renewable” energy, carbon dioxide emissions, or “sustainable” economic development.

Activists, politicians, and regulators feel little pain as they control and redesign other people’s lives.

Efforts to impose “sustainable” lifestyles via government coercion and regulation continue apace, however, even as true sustainability programs increasingly conserve resources and reduce waste and pollution.

Ambiguous Definition Enables Arbitrary Power

The 2011 National Research Council report cited at the beginning of this report said “sustainable development ... raises questions that are not fully or directly addressed in U.S. law or policy, including how to define and control unsustainable patterns of production and consumption and how to encourage the development of sustainable communities, biodiversity protection, clean energy, environmentally sustainable economic development, and climate change.”³⁹ Indeed, empowering EPA to “define and control” all these activities and phenomena would clearly put EPA firmly in charge of everything American families, companies, and communities make, grow, ship, eat, and do.

The U.S. Department of the Interior, Department of Energy, and other federal agencies also are employing a wide variety of tactics to promote the same agenda. They use climate change, sustainability, pollution, and precautionary rhetoric to justify billions of dollars in subsidies and revolutionary interpretations of once commonly understood statutes that formerly struck a proper balance between government and private lives. These federal government environmental activists are aided in this process by a multitude of state agencies, interstate compacts, local government coalitions for sustainability, and U.N. programs – many of them funded with our tax dollars.

Environmental activists and their government allies never have defined or explained the concept of “sustainability” according to any scientific standard, nor have they given due consideration to the economic or human aspects of the issue. As a result, no one will know the legal status of an activity or proposed manufacturing process until some government functionary renders an *ad*

³⁸ See William Jasper, “U.N. Summit fails to enact ‘complete transformation’ of the world,” *The New American*, December 10, 2012.

³⁹ National Research Council, *supra* note 1.

hoc determination that it is or is not “sustainable.” As in the case of Supreme Court Justice Potter Stewart grappling with “obscenity,” the regulatory overseers may not know how to define “sustainability,” but they presumably will know it when they see it. Community organizer John Callewaert characterized this attitude when he said, “sustainable development is a nebulous ideal that we hope to move toward, even if we do not know what it means.”⁴⁰

In practice, the absence of measurable criteria gives agencies such as EPA unrestrained authority to promote politically favored activities and restrict any they oppose. If the standard of no depletion of food supplies or mineral resources is applied, for example, virtually no human activities would pass the test. Thus, it would be completely up to EPA and other government agencies to decide which activities will be subjected to the test, and subsequently regulated, taxed, and/or banned, and which will not. This is a formula rife with potential for abuse.

“Sustainable development is a nebulous ideal that we hope to move toward, even if we do not know what it means.”

– John Callewaert
Community Organizer

The Brundtland/U.N./EPA/eco-activist brand of sustainability is inherently amorphous and a justification for steadily increasing government control over every aspect of life and erosion of liberties. Because the term is infinitely elastic and malleable, it is the perfect weapon in the hands of activists. Whatever they support is sustainable. Whatever they oppose is unsustainable.

As noted earlier, former Norwegian Prime Minister Brundtland’s idea of sustainability proclaims we may meet the needs of current generations only to the extent that doing so “will not compromise the ability of future generations to meet their needs.” This may sound logical at first blush, but any attempt to apply it self-destructs.

In 1887, nobody predicted the Hearst House in Appleton, Wisconsin would become the world’s first home lit with hydroelectric power, nor that electricity would safeguard and enhance our lives in the myriad ways it does today. Nobody foresaw widespread natural gas use for electricity generation and home heating. Nobody anticipated fiber optic cables replacing copper. Nobody foresaw mobile phones with superb cameras and more computing power than a 1990 desktop computer.

All of these things happened, however, as inventive, enterprising Americans went about their daily business. Today, the pace of technological change is downright dizzying, with the horizontal drilling and hydraulic fracturing revolution just one of countless recent examples. And yet, under sustainability precepts we are told we must empower governments to regulate all manner of activities today based on the wholly unpredictable technologies, lifestyles, needs, and resource demands of future generations, even if it means ignoring or compromising the needs of

⁴⁰ Callewaert, now the University of Michigan’s “Integrated Assessment Program Director at Graham Environmental Sustainability Institute,” was speaking at a 1999 National Town Meeting on Sustainable America in Detroit. See Michael Barkey, “Sustaining radicalism: Eric Voegelin meets Al Gore,” Acton Institute, Grand Rapids, MI (1999).

current generations, including the needs, aspirations, health, and welfare of the most impoverished, energy-deprived, malnourished, politically powerless people on the planet.

Implementation of a sustainability agenda also demands that policymakers somehow know how many years our planet's energy and metal deposits will last under evolving economic, social, and technological conditions, and precisely how much use of them will be sustainable. But technological change makes accurate forecasts impossible. New 3-D and 4-D (three-dimensional views over time) high-definition seismic analysis enables us to find and develop previously undetectable deposits, falsifying forecasts made just a few years ago. In coming years, similar discoveries likely will be made that will reveal how deposits will last decades or even centuries longer than we now believe.

In 1947, the world's proven oil reserves totaled 47 billion barrels. Today, after consuming hundreds of billions more barrels, we still have 2,800 billion barrels of oil reserves.

In 1947, the world's proven oil reserves totaled 47 billion barrels. Over the next 50 years, we consumed 783 billion barrels, yet at the end of 1998 we had proven reserves of 1,050 billion barrels. Today, after consuming hundreds of billions more barrels, we still have 2,800 billion barrels of oil reserves, including Canadian oil sands and other

unconventional deposits, like those made available through fracking. Moreover, that total does not include methane hydrates and other oil and gas that new technologies are unlocking every year.⁴¹

It is simply false for politicians, regulators, and environmental activists to say oil and gas are not sustainable and corn ethanol is. Current U.S. ethanol quotas require 40 percent of the nation's corn crop, cropland the size of Iowa, billions of gallons of water, and enormous quantities of pesticides, fertilizers, tractor fuel, and natural gas to produce a fuel that drives up food prices and gets one-third less mileage per gallon than gasoline.⁴²

Similarly, it is unscientific to decree wind energy is sustainable when wind power requires perpetual subsidies, relies on backup fossil fuel generation, creates chronic health problems for people who live near industrial wind facilities, blankets millions of acres of farmland and wildlife habitats with turbines and transmission lines that kill millions of birds and bats every

⁴¹ Robert L. Bradley, Jr., *Julian Simon and the Triumph of Energy Sustainability* (Washington, DC: American Legislative Exchange Council, 2000); Institute for Energy Research, *Hard Facts: An energy primer* (Houston, Texas: Institute for Energy Research, 2012), pages 20–23; Paul Driessen, *Eco-Imperialism: Green power - Black death* (Bellevue, WA: Merril Press, 2003), pages 94–95; Dennis Avery, "Back from the brink of extinction: Woods bison, muskeg swamps and Canadian oil sands prove energy and wildlife coexist," *Canada Free Press*, December 19, 2012, <http://www.canadafreepress.com/index.php/article/51888>.

⁴² Paul Driessen, "Folly and immorality of E15: EPA's new ethanol mix will punish taxpayers, the environment and the hungry," *Washington Times*, May 2, 2012; Sherzod Abdulkadirov, *The Unintended Consequences of Safety Regulation: Ethanol use creates a spike in global food prices* (Arlington, VA: Mercatus Center, June 2013).

year, and receives a free pass from environmental reviews and bird protection laws that are strictly enforced with heavy penalties and interminable delays for all other industries.⁴³

We cannot talk about sustainability, Obama presidential science advisor John Holdren has said, without talking about politics, power, and control.⁴⁴ That is true, but we also cannot talk wisely about sustainability without talking about science and economics. Sustainability undefined gives unelected regulators increasing control over energy use, economic growth, and all other aspects of life.

For developed nations, it means communities and families will be less healthy, less prosperous, less upwardly mobile, and less free to chart their own destinies. Instead, they will be obligated to redistribute more of their wealth. For poor countries, it means communities and families must accept a future that has more limited opportunities and progress. It also means continued foreign aid but nominal electricity and development.

Sustainability undefined gives unelected regulators increasing control over energy use, economic growth, and all other aspects of life.

Justifying Political Sustainability: The Five Rationales

Sustainability proponents assert many “dangerous” trends they say portend an increasingly fragile planet and necessitate a shift to more sustainable lifestyles. The claims are asserted with intense ideological fervor. However, they lack scientific precision, evidence, and empirical observations to support them.

The Earth Charter states mankind’s “dominant patterns of production and consumption are causing environmental devastation, the depletion of resources, and a massive extinction of species.” To prevent a global disaster, “fundamental changes are needed in our values, institutions and ways of life.” People everywhere “must join together to bring forth a sustainable

⁴³ Meera Subramanian, “The trouble with turbines: An ill wind,” *Nature*, June 20, 2012; American Bird Conservancy, “Bird deaths from wind farms to continue under new federal voluntary industry guidelines,” <http://www.abcbirds.org/newsandreports/releases/110208.html>; Paul Driessen, “Big Wind tax credit exterminates bird species: Thousands of birds killed by wind turbines,” *Washington Times*, December 22, 2012. Land and wildlife impacts like these are never tolerated with oil and gas leasing and drilling, or even when a mere 300 three-inch smelts are caught in northern California irrigation pumps, regardless of the harm this heavy-handed enforcement of endangered species laws inflicts on Central Valley farmers, families, and communities. See editorial, “California fish fry,” *The Wall Street Journal*, July 15, 2013.

⁴⁴ John Holdren, Gretchen Dailey, and Paul Ehrlich, “The Meaning of Sustainability: Biophysical Aspects,” United Nations University (1995). See also, Paul and Anne Ehrlich and John Holdren, *Human Ecology: Problems and Solutions* (San Francisco, CA: W.H. Freeman and Company, 1973), especially pages 278–279, where the authors argue it is necessary to use the power of national and global governments to “de-velop” the United States and other modern countries, to bring them “into line with the realities of ecology and the global resource situation” (rapidly depleting energy and minerals); permit only “ecologically feasible” development in underdeveloped countries; and ensure “much more equitable distribution of wealth” worldwide.

global society.”⁴⁵ Additional themes presented in the charter and other environmentalist literature include an “unprecedented rise in human populations,” the widening “gap between rich and poor,” the need for a more “equitable sharing” of development benefits, and an appeal for [undefined] “economic justice.”⁴⁶

Assertions of catastrophic manmade global warming were deliberately kept in the background during the Rio+20 Summit, but climate cataclysm remains a critical foundation of sustainability dogma.

Similarly, United Nations Secretary-General Ban Ki-Moon and the U.N. Economic and Social Council frequently claim many species “are heading for extinction at an ever faster rate,” there is an urgent need to cope with climate change, and “environmental sustainability is under severe threat, demanding a new level of global cooperation.”⁴⁷ EPA, other government

agencies, and activist groups decry “dangerous” levels of pollution from factories and power plants and emphasize the need to follow the so-called “precautionary principle” as other components of sustainability.

Let’s take a closer look at five concerns or rationales for political sustainability that are most frequently put forth.

Climate Cataclysm

Assertions of catastrophic manmade global warming were deliberately kept in the background during the Rio+20 Summit, but climate cataclysm remains a critical foundation of sustainability dogma. Real-world data, however, cast increasing doubt on this alarm.

Average global temperatures have not budged in 17 years, even as atmospheric levels of beneficial, plant-fertilizing carbon dioxide have climbed steadily. (See Figure 1.) In many parts of the world, the winters of 2012–13 and 2013–14 were among the coldest in decades, and 2013 marked one of the coldest U.S. and U.K. springs on record.

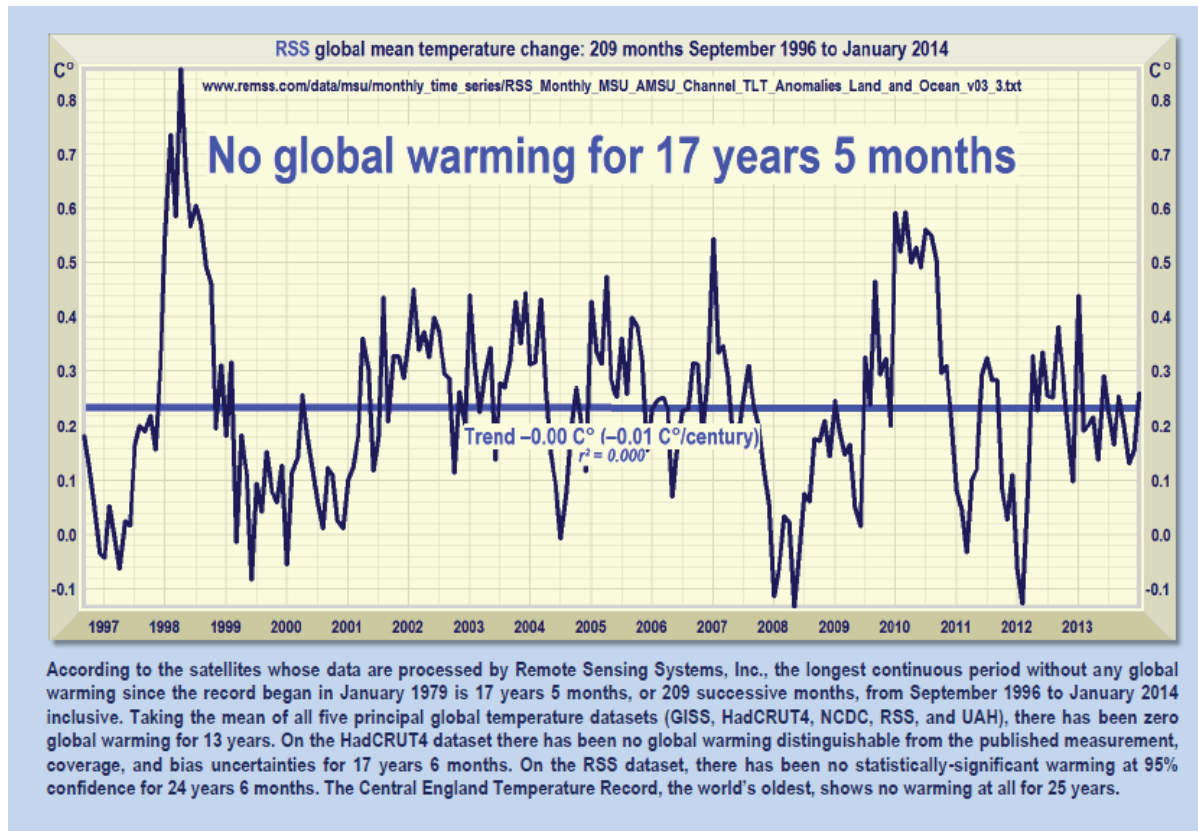
The frequency and severity of hurricanes, tornadoes, floods, and droughts are no different from observed trends and cycles over the past century. The year 2012 set records for the fewest strong tornadoes since 1954 and the number of years without a Category 3 or higher hurricane making

⁴⁵ Preamble to the Earth Charter, <http://www.earthcharterinaction.org/invent/images/uploads/ENG-Preamble.pdf>.

⁴⁶ Herman E. Daly and Kenneth N. Townsend, *Valuing the Earth: Economics, Ecology, Ethics* (Cambridge, MA: MIT Press, 1993); Christopher Woodward, “The Earth Charter: A dangerous declaration,” Suite 101, Politics and Society, last updated March 25, 2013, <http://suite101.com/article/the-earth-charter-a-dangerous-declaration-a358145>.

⁴⁷ U.N. Department of Social and Economic Affairs, “Innovation at the heart of ECOSOC,” July 2013 news feature, <http://www.un.org/en/development/desa/newsletter/desanews/feature/2013/07/index.html#7801>.

Figure 1



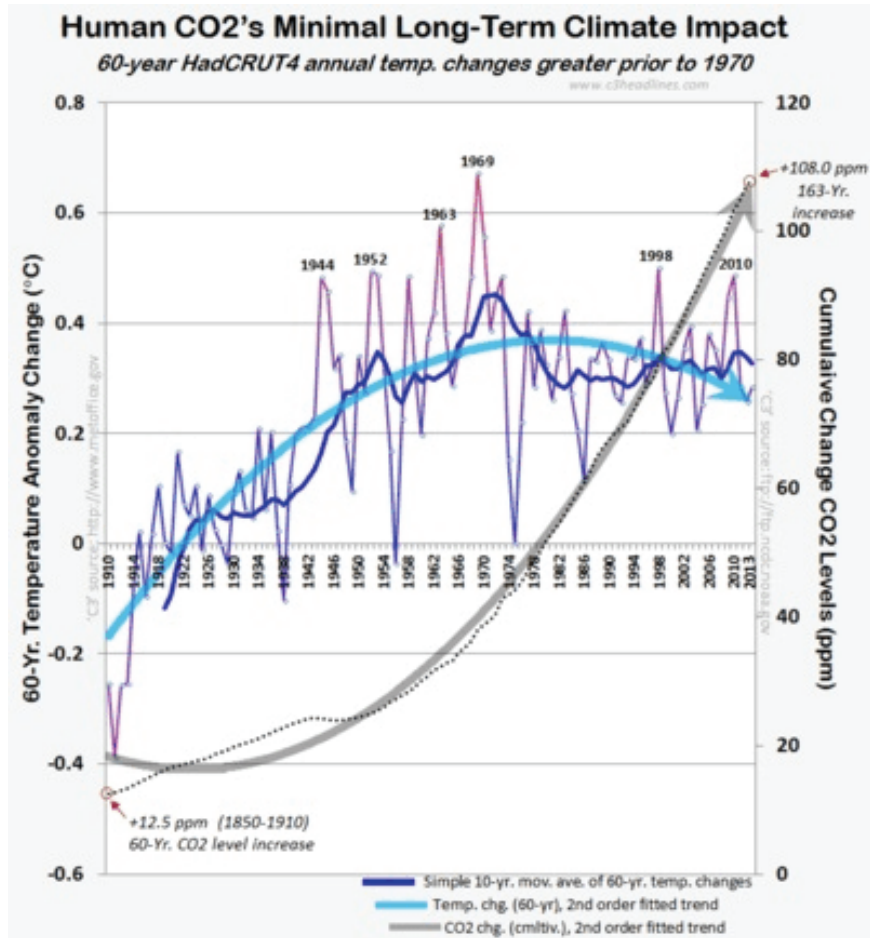
Source: Christopher Monckton of Brenchley, "Satellites show no global warming for 17 years 5 months," February 6, 2014, <http://wattsupwiththat.com/2014/02/06/satellites-show-no-global-warming-for-17-years-5-months/>. Data by Remote Sensing Systems; chart by Monckton.

U.S. landfall. The low number of recent EF5 tornadoes reflects how much and how quickly natural conditions can change. Arctic climate and sea ice are within a few percentage points of their normal levels for the past 50 years, and the rate of sea level rise (seven inches per century) is not accelerating.⁴⁸

HadCRUT4 land and sea temperature records compiled by the Hadley Center of the U.K.'s Met (Meteorological) Office through April 2013 refute alarmist predictions of "runaway" global temperatures, showing them to be without scientific merit or empirical validation. Overlaying steadily upward carbon dioxide trends on average global temperature trends makes it clear there is no correlation between the two. (See Figure 2.) Temperatures have fallen since 1970 and

⁴⁸ See "A Sensitive Matter," *The Economist*, March 30, 2013, <http://www.economist.com/news/science-and-technology/21574461-climate-may-be-heating-up-less-response-greenhouse-gas-emissions> (April 15, 2013); Craig D. Idso, et al., *Climate Change Reconsidered II: Physical Science* (Chicago, IL: The Heartland Institute, 2013).

Figure 2



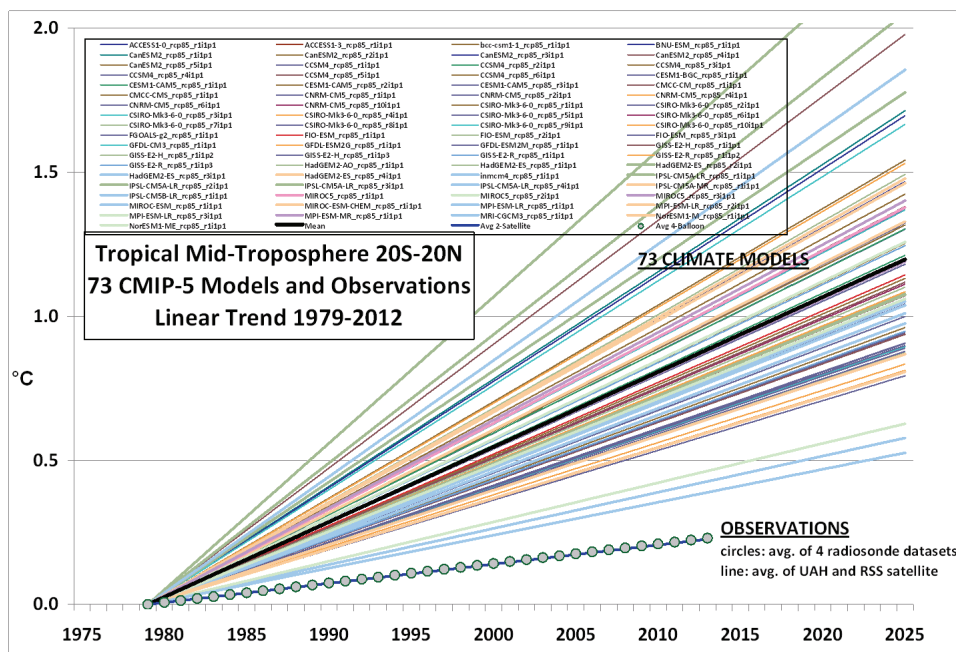
Sources: Met Office Hadley Centre observations datasets, <http://hadobs.metoffice.com/hadcrut3/>; National Oceanic and Atmospheric Administration, <http://www.esrl.noaa.gov/gmd/ccgg/trends/>. This specific rendering originally appeared in 2011 at www.c3headlines.com.

remained relatively unchanged since 1997, in direct contradiction of alarmist predictions and climate models.

Computer model forecasts have been substantially higher than actual measured temperature records for 1979–2012.⁴⁹ (See Figure 3.) Not a single one of the 73 CMIP-5 (Coupled Model Intercomparison Project) models accurately forecasts the actual temperature trend since 1979. Every one forecasts more rapid warming, suggesting a bias in the assumptions of their creators.

⁴⁹ Roy Spencer, "Epic Fail: 73 climate models vs. observations for tropical tropospheric temperature," June 4, 2013, <http://www.drroyspencer.com/2013/06/epic-fail-73-climate-models-vs-observations-for-tropical-tropospheric-temperature/>; David Whitehouse, "Before and after the temperature standstill," Global Warming Policy Foundation, June 11, 2013, <http://www.thegwgf.org/temperature-standstill/>.

Figure 3.
Climate Models Versus Actual Observations



Source: Roy W. Spencer, Ph.D., “EPIC FAIL: 73 Climate Models vs. Observations for Tropical Tropospheric Temperature,” June 4, 2013, <http://www.drroyspencer.com/2013/06/epic-fail-73-climate-models-vs-observations-for-tropical-tropospheric-temperature/>. Spencer attributes the graph to John Christy.

Sustainability activists and climate change alarmists also ignore the harms to the environment and to human well-being caused by pointless and largely symbolic efforts to reduce carbon dioxide emissions. Government mandates and subsidies prop up expensive and often ecologically harmful renewable energy production and suppress the use of cheap, reliable energy sources. Scientifically unjustified climate disaster claims cause “fuel poverty,” wintertime deaths from hypothermia, and the perpetuation of poverty, disease, and premature death in poor countries denied access to large-scale electricity generation technologies.⁵⁰

Most importantly for the sustainability debate, even those who believe in man-made global warming admit that reducing rich-country emissions is unlikely to have much effect on the climate or the biological world. Because rapidly developing countries are emitting carbon dioxide far in excess of any possible U.S. reductions, even economically devastating CO₂ reduction regulations in the United States would have no effect on global temperatures, even if this gas were a primary cause of global warming. As Circuit Judge Janice Rogers Brown noted in her dissent from the court’s denial of rehearing *en banc* in *Coalition for Responsible Regulation*

⁵⁰ Gautam N. Yadama, *Fires, Fuel and the Fate of 3 Billion: The state of the energy impoverished* (New York, NY: Oxford University Press, 2013).

v. *Environmental Protection Agency*, not even EPA “disputes that its new rules for vehicles will affect global mean temperatures by no more than 0.01 degrees Celsius [0.006 degrees Fahrenheit] by 2100.”⁵¹

Resource Depletion

Resource depletion claims reflect long-discredited Club of Rome orthodoxy. Experience has not been kind to the notion that human wellbeing might someday be put at risk by physical limitations on the supplies of minerals or even amount of space or land suitable for farming on the planet’s surface. Human ingenuity repeatedly has found ways to discover new reserves, new technologies to make previously uneconomic reserves profitable, and new resources to substitute for old and depleted or expensive ones.

Human ingenuity has repeatedly found ways to discover new reserves, new technologies to make previously uneconomic reserves profitable, and new resources to substitute for old and depleted or expensive ones.

Many writers have debunked Malthusian pessimism,⁵² and rather than beat the dead horse even further, we can focus on just one modern example of how technology changes the meaning of sustainable use of a resource. The horizontal drilling and hydraulic fracturing (fracking) revolution has demolished the “peak oil and gas” pillar of environmentalism by providing at least a

century of new energy supplies and making wind and solar power even less competitive. Used in conjunction with conventional drilling and tertiary recovery operations, fracking can prolong the life of oil and gas fields, promote sustained resource conservation by extracting far more of the original in-place hydrocarbon resources than previously possible, and increase the ongoing trend of producing much more energy per acre – all hallmarks of true sustainable development.

Hydraulic fracturing has created 1.7 million new direct and indirect jobs in the United States, with the total likely to rise to 3 million in the next eight years, IHS Global Insight reports.⁵³ It has added \$62 billion to federal and state treasuries, with that total expected to rise to \$111 billion by 2020. By 2035, U.S. fracking operations could inject more than \$5 trillion in cumulative capital expenditures into the economy, while generating more than \$2.5 trillion in cumulative additional government revenues.

⁵¹ 2012 U.S. App LEXIS 25997 at *48, n.3 (D.C. Circuit 2012).

⁵² Goklany, *supra* note 22; Julian Simon (Ed.), *The State of Humanity* (Hoboken, NJ: Wiley-Blackwell, 1996); Bjørn Lomborg, *The Skeptical Environmentalist: Measuring the Real State of the World* (Cambridge, MA: Cambridge University Press, 2001); Jack W. Dini, *Challenging Environmental Mythology: Wrestling Zeus* (Raleigh, NC: Scitech Publishing, 2003).

⁵³ IHS Global Insight, *America’s New Energy Future: The unconventional revolution and the economy*, October 23, 2012, <http://www.ihs.com/UnconventionalsAndTheEconomy>; Paul Driessen, “Fractured fairy tales: Greens hate natural gas and fracking, but costly, parasitic wind energy can’t live without it,” October 27, 2012, http://townhall.com/columnists/pauldriessen/2012/10/27/fractured_fairy_tales_greens_hate_natural_gas_and_fracking_but_costly_parasitic_wind_energy_cant_live_without_it.

In just six years, 2006–12, North Dakota’s oil and gas fracking boom sent the state’s per-capita income from 38th in the United States to 6th. The state’s 3 percent unemployment rate is well below the 7.5 percent national rate (and the 15 percent rate that includes those who have given up looking for a job or are working part-time because they cannot find full-time employment) in 2013. North Dakota has the highest personal income growth of all 50 states, state royalty and tax revenues are at an all-time high, and thousands of jobs in other states owe their existence to the needs of North Dakota’s oilfield companies.⁵⁴

By contrast, U.S. Department of Energy records reveal \$26 billion in taxpayer subsidies and loan guarantees for renewable energy projects since 2009 created only 2,298 permanent jobs, at a cost of \$11.45 million per job.⁵⁵ In Spain and Scotland, “green” energy programs caused the loss of between two and four traditional jobs for every renewable energy job created.⁵⁶

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The fracking revolution has put the United States on the verge of energy self-sufficiency for the first time in decades.⁵⁷ It has driven natural gas prices down as low as \$3.30 per million Btu in the United States, compared with \$11.75 per Btu in Europe and \$16.65 in Japan. By partially displacing coal as an energy source, fracking also has sent U.S. carbon dioxide emissions sharply downward, to levels well below what China and India are emitting.

The claim that fracking uses too much water is overblown.⁵⁸ A typical fracked well uses four million gallons of water over the course of an operation that requires six to eight days to fracture

⁵⁴ Wisconsin state Sen. Frank Lasee, “The benefits of oil,” *Reality News*, May 16, 2013; Travis Brown, “Fracking fuels and economic boom in North Dakota,” *Forbes*, January 29, 2014; “North Dakota oil boom,” http://en.wikipedia.org/wiki/North_Dakota_oil_boom; Steve Hargreaves, “North Dakota grows five times faster than nation,” CNN Money News, June 6, 2013, <http://money.cnn.com/2013/06/06/news/economy/north-dakota-economy/>. See also, Phelim McAleer and Ann McElhinney, *FrackNation: A journalist’s search for the fracking truth* (documentary video, 2012), www.FrackNation.com; Karen Moreau, *The Empire State Divide*, Land and Liberty Foundation (documentary video, 2011).

⁵⁵ Institute for Energy Research, “Department of Energy spends \$11 million per job,” May 8, 2013, <http://www.InstituteForEnergyResearch.org/2013/05/08/does-11-million-jobs/>; Gabriel Calzada Alvarez, “Study of the effects on unemployment of public aid to renewable energy sources,” King Juan Carlos University, 2009.

⁵⁶ Ilan Brat and Christopher Bjork, “Spain Said to Be Poised to Cut Renewable Subsidies: Green Investors Face Bankruptcy as Spain Cuts Subsidies Even Further,” *The Wall Street Journal*, June 6, 2013.

⁵⁷ See Isaac Orr, “Hydraulic Fracturing a Game-Changer for U.S. Energy and Economies,” *Heartland Policy Study*, November 2013, The Heartland Institute, <http://heartland.org/policy-documents/hydraulic-fracturing-game-changer-us-energy-and-economies>.

⁵⁸ Walter Russell Mead, “Shale gas is fracking Green extremism,” *The American Interest*, July 5, 2013, <http://blogs.the-american-interest.com/wrm/2013/07/05/shale-gas-is-fracking-green/>; Christopher Helman, “China-Russia gas deal should unleash a Euro-fracking revolution,” *Forbes*, May 21, 2014..

a shale formation sufficiently to get the gas or liquids flowing. A 2013 CERES study found hydraulic fracturing nationwide consumed 65.8 billion gallons of water over a 21-month period in 2011 and 2012, and EPA estimated fracking consumes 70 billion to 140 billion gallons a year nationally. In addition, in an increasing number of cases, water used in fracking is brackish, recycled, or produced from other shale gas production wells, and companies are even experimenting with propane (natural gas liquids) as a substitute for water and trace chemicals.

Instead of recognizing their errors, anti-hydrocarbon activists masquerading as sustainability proponents continue to block access to resources that already have been discovered and prevent companies from finding and developing new deposits.

EPA estimates household landscape irrigation nationwide consumes nearly 3 trillion gallons of water annually – more than 20 times its estimate for fracking. The Texas Water Resources Board found Lone Star State homes used 495 billion gallons for lawns and gardens, compared to 27 billion for fracking statewide. Perhaps most revealing, on the basis of water used per million Btu of energy produced, U.S. Department of Energy data show fracking trounces supposedly sustainable renewable energy production: 0.6

to 5.8 gallons for fracking; 2,510 to 29,100 gallons for corn-based ethanol; and an astounding 14,000 to 75,000 gallons of water per million Btu for biodiesel from soybeans.⁵⁹ Another recent study, from the University of Texas at Austin, concludes using natural gas from fracking to produce electricity reduces water consumption dramatically compared to coal-based electricity generation. For every gallon of water used to “frack” for natural gas, Texas saved 33 gallons in the overall electricity generation process, compared to producing the same electricity by burning coal, the study found.⁶⁰

Instead of recognizing their errors, anti-hydrocarbon activists masquerading as sustainability proponents continue to block access to resources that already have been discovered and prevent companies from finding and developing new deposits. A cynic might think they are determined to make their fossil fuel depletion claims a self-fulfilling prophecy in an era when hydrocarbons still supply more than 80 percent of the United States’ and the world’s energy requirements.

⁵⁹ U.S. Department of Energy, *Energy Demands on Water Resources: Report to Congress on the interdependency of energy and water*, December 2006, especially pages 44, 54, 64, 65; Rusty Todd, “Why the grass should not always be greener,” *The Wall Street Journal*, June 29–30, 2013; “From flowback to fracturing: Water recycling grows in the Marcellus Shale,” *Journal of Petroleum Technology*, July 2011; Jesse Jenkins, “Energy Facts: How much water does fracking for shale gas consume?” *The Energy Collective*, April 6, 2013, <http://theenergycollective.com/jessejenkins/205481/friday-energy-facts-how-much-water-does-fracking-shale-gas-consume>.

⁶⁰ See Bridget R. Scanlon, I. Duncan, and R. Reedy, “Drought and the water-energy nexus in Texas,” *Environmental Research Letters* 8: 045033 DOI:10.1088/1748-9326/8/4/045033.

Lost Biodiversity

Lost biodiversity reflects the claim that “unsustainable development” will cause extensive species extinctions. These assertions are based on computer models that in turn are based on cases of extinctions on isolated oceanic islands, where people and human-introduced predators and diseases brought about the destruction of local species populations, largely through easily preventable means. The computer models generate forecasts of unprecedented species losses on entire continents, blaming the predicted losses on human population growth, economic development, and catastrophic climate change driven by rising atmospheric carbon dioxide levels.⁶¹

Craig Idso *et al.* conducted a thorough review of the literature on the likelihood of widespread extinctions due to man-made global warming and concluded they were without scientific foundation.⁶² Among their findings:

The real threats to biodiversity are the policies demanded by sustainability activists.

- Amphibian populations will suffer little, if any, harm from projected CO₂-induced global warming, and they may even benefit from it.
- Changes in bird populations and their habitat areas generally have not been linked to man-made global warming, and when there have been changes, they often are positive, as many species have adapted and are thriving in response to rising temperatures of the modern era.
- Polar bears have survived historic changes in climate that have exceeded those of the twentieth century or are forecast by computer models to occur in the future. Polar bear populations have been stable or increasing despite rising temperatures and summer sea ice declines.
- Empirical data indicate global warming tends to foster the expansion and proliferation of animal habitats, ranges, and populations, or otherwise have no observable impacts one way or the other.

The real threats to biodiversity are the very policies demanded by sustainability activists. For example, U.S. Fish and Wildlife Service regulators have given wind turbine operators a license to kill countless birds and bats, including many endangered species. Solar panels smother vast desert habitats. Wind and solar both require long transmission lines across more habitats, redundant natural gas-fired backup generators, and mining and processing of rare-earth metals,

⁶¹ Craig Loehle and Willis Eschenbach, “Historical bird and terrestrial mammal extinction rates and causes,” *Diversity and Distributions: A Journal of Conservation Biogeography*, October 13, 2011, <http://onlinelibrary.wiley.com/doi/10.1111/j.1472-4642.2011.00856.x/abstract>.

⁶² Craig Idso, Sherwood Idso, Robert Carter, and S. Fred Singer, *Climate Change Reconsidered II: Biological Impacts* (Chicago, IL: The Heartland Institute, 2014), chapter 5.

destroying agricultural and wildlife habitat land in China and endangering the health and welfare of Chinese workers and residents.⁶³

Biotechnology could improve biofuel production, but not enough to justify locking up use of hydrocarbons or devoting 40 percent of the U.S. corn crop and tens of millions of acres of cropland and wildlife habitat to biofuels. Thanks to hybrid and biotech seeds, synthetic fertilizers, and other agricultural advances since 1960, people are now using half as much land to grow food crops as they would have without those new technologies. Had those technologies not become so widespread, the world's farmers would have had to plow new land areas equal in size to Russia or three Amazon rainforests to grow the same amount of food. Instead, they have been able to preserve more land for wildlife habitat.⁶⁴

Irrational fears of chemicals leads to claims of industrial pollutants causing asthma, mercury poisoning, endocrine disruption, and ecological contamination.

Many of the same groups that oppose oil, gas, and coal also oppose biotechnology, fertilizers, pesticides, and even hybrid seeds. They also battle the use of insecticides and the insect repellent DDT to control malaria and yellow fever, which continue to kill up to a million adults and children every year.⁶⁵

Chemophobia

Man-made chemicals are an unavoidable part of modern living. Irrational fears of such chemicals lead to claims of industrial pollutants causing asthma, mercury poisoning, endocrine disruption, and ecological contamination. Advocates of sustainability often call for reduced use of chemicals.

Certainly, responsible citizens, companies, and regulators must always strive to reduce pollution where actual health and environmental risks exist. That is an especially serious problem in poor countries, where burning wood and dung causes deadly lung infections and the lack of

⁶³ John Droz, Jr., "Twenty bad things about wind energy, and three reasons why," October 24, 2012, <http://www.masterresource.org/2012/10/20-bad-things-wind-3-reasons-why/>; Committee For a Constructive Tomorrow, "Comments to U.S. Fish and Wildlife Service, Eagle Permits: Revisions to regulations governing takings necessary to protect interests in certain localities," Docket Number: FWS-R9-MB-2011-0094, July 11, 2012, http://cfact.org/pdf/CFACT_Comments_to_FWS_on_eagle_taking_permits.pdf; "Rare-earth mining in China comes at heavy cost for local villages: Pollution is poisoning the farms and villages that process the precious metals," *Guardian Weekly*, August 7, 2012.

⁶⁴ Indur M. Goklany, "Have increases in population, affluence and technology worsened human and environmental well-being?" *The Electronic Journal of Sustainable Development* (2009) 1(3), <http://goklany.org/library/EJSD%202009.pdf>.

⁶⁵ See Paul Driessen, "3 Billion and Counting: A new film challenges DDT myths and lies that have caused millions of needless deaths," September 13, 2010, <http://www.cfact.org/2010/09/13/3-billion-and-counting/>.

refrigeration and safe water causes lethal intestinal diseases.⁶⁶ Air pollution is an equally serious problem in rapidly developing nations. Widespread coal-based electricity generation occurs in developing nations without the scrubbers and other air pollution controls that have slashed sulfur dioxide emissions from U.S. coal-fired power plants by more than 40 percent and particulate emissions by more than 90 percent since 1970, even as coal use tripled.⁶⁷

However, modern chemicals have done much to improve, safeguard, and save lives. The ability to detect trace amounts (in parts per billion) of chemicals does not mean they pose risks to human health, and many recent EPA and activist claims about dangers to public welfare have no basis in medical research or science.⁶⁸

The Precautionary Principle focuses on the risks of using chemicals and technologies, but never on the risks of *not* using them.

Claims of health dangers related to mercury, for example, have been based on false analogies between modern-day Americans and Faroe Islanders who eat a diet heavy with whale blubber and on an EPA invention of “hypothetical female subsistence fish eaters.” Claims of dangers posed by America’s coal-fired plants also have relied on citations to studies that ignore significant natural and foreign sources of mercury in the U.S. atmosphere. Similar arguments are based on claims that pollution from modern coal- or gas-fired electric generating plants in Africa is more dangerous than the life-threatening risks Africans still face today from open fires, unsafe water, spoiled food, and diseases of poverty that economic development, those very generating plants, and other modern technologies could prevent.⁶⁹

Precautionary Principle

The Precautionary Principle is the belief that no new technology (such as fracking or biotechnology) should be permitted until it can be shown the technology will pose absolutely no threat to human health or the environment, even if there is no evidence such cause-and-effect

⁶⁶ Gautam N. Yadama, *supra* note 50.

⁶⁷ Paul Driessen, “The social responsibility of coal,” September 2, 2008, http://townhall.com/columnists/pauldriessen/2008/09/02/the_social_responsibility_of_coal/page/full/; Joel Schwartz and Steven Hayward, *Air Quality in America: A dose of reality on air pollution levels, trends and health risks* (Washington, DC: AEI Press, 2007).

⁶⁸ Jeff Gillman and Eric Heberlig, *How the Government Got in your Backyard: Superweeds, Frankenfoods, Lawn Wars, and the (Nonpartisan) Truth about Environmental Policies* (Portland, OR: Timber Press, Inc., 2011); M. Alice Ottoboni, *The Dose Makes the Poison* (Berkeley, CA: Vincente Books, 1984); John Paling and Sean Paling, *Up to your Armpits in Alligators? How to sort out what risks are worth worrying about* (Gainesville, FL: The Environmental Institute, 1994).

⁶⁹ See, e.g., Willie Soon and Paul Driessen, “The myth of killer mercury: Panicking people about fish is no way to protect public health,” *The Wall Street Journal*, May 25, 2011; Paul Driessen and Willie Soon, “Eco-colonialism degrades Africa,” *SPPI Commentary and Essay Series*, February 14, 2009, <http://ScienceAndPublicPolicy.org/images/stories/papers/commentaries/ecocolonialism.pdf>.

dangers actually exist. This is an impossible standard, of course, and it is applied in a completely one-sided manner. It focuses on the risks of using chemicals and technologies, but never on the risks of *not* using them. It spotlights risks that a chemical or technology might cause, but it ignores the risks the technology would reduce or prevent.⁷⁰

The Precautionary Principle is a potent weapon for anti-technology activists. Whatever they support is seen as complying with the precautionary principle, and whatever they oppose violates it. As Competitive Enterprise Institute founder Fred Smith has put it, “For radical environmentalists, ‘sustainable development’ means don’t use it today, and the Precautionary Principle means don’t produce it tomorrow.”⁷¹

Anti-technology activists never use the precautionary dictum to control regulatory excess, even though the Precautionary Principle should dictate regulators refrain from implementing new regulations or restrictions until they can prove their proposed actions will not harm people,

The Precautionary Principle should dictate regulators refrain from implementing new regulations or restrictions until they can prove their proposed actions will not harm people, wildlife, or the environment.

wildlife, or the environment. Empirical research has found that every \$15 million of compliance costs imposed by regulation in the U.S. causes one premature human fatality.⁷²

Ironically, Precautionary Principle advocates do not apply it to assess the harmful effects of wind turbines on bird and bat populations or the harmful effects of rising insect

populations resulting from bird and bat kills; nor do they apply the principle to the impacts that constant subsonic noise and vibrations from wind turbines may have on human health and welfare.⁷³ Those and other deliberate oversights should be considered in any discussion of sustainability.

The UN’s Sustainability Agenda

None of these shortcomings in sustainability arguments has blocked activists’ determined efforts to implement their dogma throughout the world.

As the Rio+20 summit approached, United Nations organizers and allies prepared a series of

⁷⁰ Indur M. Goklany, *The Precautionary Principle: A Critical Appraisal* (Washington, DC: Cato Institute, 2001).

⁷¹ Fred L. Smith, Jr., “Sustainable development? How about sustainable growth?” *Wall Street Journal Europe*, May 31, 2001.

⁷² Randall Lutter *et al.*, “The Cost-Per-Life-Saved Cutoff for Safety-Enhancing Regulations,” *Economic Inquiry*, Vol. 37, No. 599 (1999), p. 608.

⁷³ See Droz and other sources cited in note 63.

reports that asserted a dire situation, outlined what they said needs to be done to avert a planetary crisis, and presented mandates for countries to enact. Key documents included the UN's *Resilient People, Resilient Planet: A Future Worth Choosing*, the World Wildlife Fund's *Living Planet Report 2012*, the "NGO partnership" paper *The Future We Want*, and a report from the 18-member (no Americans included) Civil Society Reflection Group on Global Development Perspectives, *No Future Without Justice*. Sustainability activists clearly explained their goals in these reports.

The documents proposed a new "Sherpa" at the United Nations for sustainability (with cabinet rank), a parliamentary committee on policy coherence for sustainability, the U.N. Sustainability Council, the Universal Periodic Review on Sustainability, and an Ombudsman for Intergenerational Justice and Future Generations. They also promoted expanded budgets, greater control over energy development and economic activities, "genuine global actions" by every nation and community, and an International Panel on Sustainability that would build on the alleged successes of the Intergovernmental Panel on Climate Change. Guiding all this would be the world's premiere global governance political body: the U.N. General Assembly.⁷⁴

These actions, the activists said, would foster social justice and wealth redistribution, eradicate poverty, and protect the right of all people to have "decent" work and "fulfill their aspirations for a better life." The goals would be defined and controlled by UN-approved bureaucrats and would be defined in terms of climate protection, biodiversity, "green growth," renewable energy, and an end to "unsustainable patterns of consumption and production." To ensure they would have sufficient funds to implement their agenda and pay for new programs, the Rio+20 organizers called for funding from Western democracies such as the United States and Great Britain, set at 0.7 percent of their gross domestic product. (That would be \$100 billion per year from the United States.) They also sought global power to tax financial transactions and other activities, with the permanent stream of revenues flowing directly to the United Nations to be used at the discretion of the UN's sustainability coordinators.⁷⁵

United Nations sustainability documents call for, among other things, an Ombudsman for Intergenerational Justice and Future Generations.

As this agenda suggests, the Rio+20 proceedings were controlled by activists and bureaucrats who have no experience in generating new wealth, generally oppose efforts by those who have

⁷⁴ United Nations, *Resilient People, Resilient Planet: A future worth choosing: The report of the United Nations Secretary General High Level Panel on Global Sustainability*, 2012, http://www.un.org/gsp/sites/default/files/attachments/GSP_Report_web_final.pdf; Civil Society Reflection Group on Global Development Perspectives, *No Future Without Justice* (Uppsala, Sweden: Dag Hammarskjöld Foundation, Development Dialogue, No. 59, June 2012), http://www.dhf.uu.se/wordpress/wp-content/uploads/2012/06/dd59_web_optimised_single.pdf.

⁷⁵ David Rothbard and Craig Rucker, "Sustainable development: The latest U.N. scare: The UN's Rio+20 agenda would harm health, welfare and nature – and make poverty permanent," June 23, 2012, <http://WattsUpWithThat.com/2012/06/23/sustainable-development- the-latest-un-scare/>.

such experience, and see humans primarily as consumers and polluters rather than as creators and innovators. The real stakeholders – the world’s poorest people – were barely represented.

Poor nations began to realize that their quest for affordable energy, improving health, and improving economic welfare was being given lip service but then mostly brushed aside and undermined. The Rio+20 mandates metamorphosed into amorphous goals that did not include binding agreements, and the Brazil summit ended with promises to continue pursuing the same agenda in the name of ensuring the sustainability of future development.

After China and India led walkouts by 132 developing countries at the November 2013 U.N. climate conference in Warsaw, Poland, that event ended with an agreement that those countries would merely make “contributions” toward lower greenhouse gas emissions and only when they are “ready to do so.”⁷⁶

A third session of the Open Working Group on Sustainable Development Goals (SDGs) was held May 22–24, 2013, at U.N. headquarters in New York. An announcement from the Third World Network called the formulation of SDGs “one of the major agreed actions from the Rio de Janeiro Conference on Sustainable Development.” The New York meeting addressed food security, nutrition, sustainable agriculture, drought, desertification, land degradation, water, and sanitation. Its purpose was to “influence the formulation of the SDGs.” Many more meetings are planned for 2014 and beyond.⁷⁷

Parties to the UN’s High-Level Political Forum meetings were selected carefully from climate, sustainability, social justice, and other activist groups, so as to minimize debate.

Not long after, the U.N. General Assembly announced it had officially established a new High-Level Political Forum to replace the U.N. Commission on Sustainable Development and “boost efforts to tackle global economic, social and environmental challenges.” An inaugural meeting in September 2013 began to implement the HLPF resolution. Parties to the meetings were

selected carefully from climate, sustainability, social justice, and other activist groups, so as to minimize debate, implement the U.N. agendas on climate change and sustainable development, and better “educate,” enlist, and mobilize young people to be the vanguard for these programs.⁷⁸

A November 2013 memo from the European Environmental Bureau announced an upcoming “Climate Summit” and clearly linked climate change claims and goals to “economic opportunities” for “reaping the benefits of sustainable low carbon economic growth” and other

⁷⁶ See e.g., Ben Webster, “Change of wording lets the emerging nations off the hook over emissions,” *The Times* (London), November 25, 2013.

⁷⁷ Third World Network, “TWN Info Service on U.N. Sus Dev: Important elements for consideration: Food Security and Nutrition, and Sustainable Agriculture,” May 20, 2013 (email announcement).

⁷⁸ See U.N. Department of Social and Economic Affairs, “Innovation at the heart of ECOSOC,” July 2013, <http://www.un.org/en/development/desa/newsletter/desanews/feature/2013/07/index.html#7801>.

“progressive” agendas including “decent jobs” and “women’s empowerment,” as well as “sustainable agriculture and forestry.” The memo states, “the twin post-2015 development and climate processes present an unprecedented opportunity to advance sustainable development,” while “restructuring the global economy to hold global temperature rise below 2 degrees Celsius.” The U.N. Secretary-General, it continues, “will host a Climate Summit in September 2014 as an integral part of his strategy to engage leaders and advance climate action and ambition, drawing on his global convening power and harnessing the full strength of the U.N. system, working in partnership with all sectors of society.”⁷⁹

As these numerous examples indicate, many would-be governing elites think the rest of humanity is not intelligent enough to do what is in the best interest of people and the natural environment. Therefore, they say, global governing bodies must make decisions for others, penalize incorrect behavior, and replace decision-making by individual human beings and local communities. Yet, when those elites make poor decisions that result in widespread injuries, deaths, and environmental damage, they are rarely (if ever) held accountable or made to suffer any real consequences in the way private citizens and corporate executives are held accountable. This alone is reason enough not to grant more power to these agencies and organizations.

Many would-be governing elites think the rest of humanity is not intelligent enough to do what is in the best interest of people and the natural environment.

Denying Affordable Energy to People in Poverty

Nearly 1.5 billion people still do not enjoy the blessings of electricity. In Africa alone, more than 700 million people (twice the population of the United States and Canada combined) have no access, or only sporadic and limited access, to electricity. More than 300 million Indians, including one-third of the nation’s rural population, lack electricity. Instead, they must burn wood and dung for heating and cooking, which results in lung diseases that kill a million people every year. Because they also lack refrigeration, safe water, and decent hospitals, nearly two million people die annually from virulent intestinal diseases.

Even in South Africa, the most advanced nation in sub-Saharan Africa, 25 percent of the population has no electricity. Roy Innis, national chairman of the Congress of Racial Equality, observes, “Pervasively insufficient electrical power has meant frequent brownouts that have hampered factory output and forced gold and diamond mines to shut down, because of risks that miners would suffocate in darkness deep underground. The country also suffers from maternal mortality rates 36 times higher than in the US, and tuberculosis rates 237 times higher.” He notes

⁷⁹ European Environmental Bureau, “Catalyzing Climate Action,” a memo announcing and describing the 2014 Climate Summit, November 25, 2013. See also Commons Action for the United Nations, “Addressing Sustainable Production and Consumption in the SDGs,” a contribution to the January 8, 2014 Open Working Group Session on SCP, www.CommonsActionForTheUnitedNations.org; and Integrative Strategies Forum, “The Overarching Goal of Sustainable Production and Consumption,” 2014 (prepared for the same OWG session).

thousands still die from lung and intestinal diseases.⁸⁰

Nevertheless, in July 2009, President Barack Obama told Africans they should refrain from using “dirty” fossil fuels and focus instead on their “bountiful” wind, solar, geothermal, and biofuel energy. The Obama administration’s Overseas Private Investment Corporation then refused to support construction of a 130-megawatt gas-fired power plant in Ghana that would provide clean and affordable electricity in a power-deprived nation.⁸¹

South Africa encountered similar reactions the following year when it applied for a World Bank loan to continue building its 4,800-megawatt coal-fired Medupi power plant. The Medupi power plant is being equipped with the latest in supercritical clean coal technologies, pollution control, and even carbon capture technologies. Claiming the project violated clean energy principles, climate change goals, and sustainability principles, the Center for American Progress, Africa Action, Friends of the Earth, Sierra Club, and other activist groups pressured the World Bank and the United States to deny funding and to oppose any loan. The United States ultimately voted “present” and the loan was approved by a bare majority of bank member nations.⁸²

Developed nations continue erecting roadblocks to the building of adequate energy infrastructure in poor nations.

Developed nations continue erecting roadblocks to the building of adequate energy infrastructure in poor nations. Three-quarters of Cambodia’s population does not have electricity, but in order to receive aid from the United States, the country was compelled to

focus its energy programs on projects that promote “climate resilient development” and “economic growth activities that minimize greenhouse gas emissions.”⁸³ In June 2013, Obama told students at the University of Johannesburg, “Ultimately, if you think about all the youth that everybody has mentioned here in Africa – if everybody is raising living standards to the point where everybody has got a car and everybody has got air conditioning, and everybody has got a big house – the planet will boil over, unless we find new ways of producing energy.”⁸⁴

The next day, the president announced his Power Africa initiative for a “sustainable” African energy strategy that emphasizes wind, solar, biofuel, and geothermal energy. He also promised \$7 billion over the next five years for the whole of sub-Saharan Africa to help combat power outages in a region that (except for South Africa) still does not have sufficient electrical power.

⁸⁰ Roy Innis, “Bringing light, health and prosperity to Africa,” March 25, 2010, http://townhall.com/columnists/royinnis/2010/03/25/bringing_light_health_and_prosperity_to_africa/page/full.

⁸¹ *Ibid.*

⁸² *Ibid.*; Lisa Friedman, “US to abstain on South African coal plant,” *New York Times*, April 8, 2010; Lisa Friedman, “South Africa wins \$3.75 billion coal loan,” *New York Times*, April 9, 2010.

⁸³ Steven Milloy, “Obama’s climate Khmer Rouge: U.S. cons Cambodia into foregoing electricity to cut emissions,” May 31, 2013, JunkScience.com.

⁸⁴ Jason Howerton, “Obama in Africa: ‘The planet will boil over’ if everybody has a car, air conditioning and a big house,” *The Blaze*, July 1, 2013.

Wind, solar, and geothermal sources cannot possibly supply sufficient, affordable, reliable electricity for modern societies, and use of biofuels results in using scarce water to turn crops into fuel, a disastrous idea for drought-plagued regions where people are malnourished and starving.⁸⁵ What developing countries need is large-scale power plants fueled by coal and natural gas.

Advocates for poor families should campaign for modern gas, coal, nuclear, and hydroelectric power plants that can bring light, health, and prosperity to tens of millions of people. They also should argue against energy-killing “sustainable development” policies like those embedded in the so-called Equator Principles.

As American Policy Center President Tom DeWeese observed, more than 70 financial institutions have adopted the Equator Principles and frequently use their international performance standards to justify turning down loans for power plants, housing projects, and other development projects in poor countries.⁸⁶ These policies and practices certainly promote sustainability dogma, but they are hardly a prescription for better lives, true sustainability, or even improved environmental quality. Instead, the “green” energy formula ensures continued deforestation, wood and dung use in cooking and home heating fires, air pollution, and more premature deaths from lung and intestinal diseases. This misguided formula is a recipe for sustained poverty through energy, technology, and economic deprivation.

Advocates for poor families should campaign for modern gas, coal, nuclear, and hydroelectric power plants that can bring light, health, and prosperity to tens of millions of people.

People in developing countries “just want to improve their lives and have simple things like running water and heated homes” – things most of us take for granted – DeWeese explained. Instead, they are “caught in the middle ... sentenced to lives of poverty, sickness and neglect.” They are denied electricity “to light even a bulb in their huts. There is no internet. There are few roads and fewer cars.” People are forced to walk wherever they go, scratching out a living in the wild while being ignored by the rest of the world.

“That is sustainable development,” DeWeese said, a “social justice weapon used by self-appointed NGO/stakeholder groups to promote their own political agendas.”⁸⁷ Sustainability advocates condition trade and aid to poor countries on those countries not using insecticides, high-yield farming, biotechnology, fossil fuels, and other modern technologies to boost crop

⁸⁵ Faith Karimi and Matt Smith, “Obama pledges \$7 billion to upgrade power in Africa,” CNN News, June 30, 2013, <http://www.cnn.com/2013/06/30/world/africa/south-africa-obama-pledge>.

⁸⁶ Tom DeWeese, “The Equator Principles and sustainable poverty,” February 2, 2013, <http://www.newswithviews.com/DeWeese/tom230.htm>.

⁸⁷ *Ibid.* As one wag has observed, “stakeholders” are activists who hold the stakes other pressure groups are pounding through the hearts and dreams of the poorest and most politically powerless people on Earth.

yields and improve living standards. Such activists should have to explain how long they expect billions of people to remain malnourished under the rule of these activists and bureaucrats.

Supposed sustainable, renewable energy policies are dangerous for developed nations, too. On a torrid August 2012 day, Great Britain's 3,500 wind turbines generated a mere 12 megawatts of electricity, 0.032 percent of the 38,000 megawatts the country was using at the time. Had it not been for barely adequate supplies of conventional fossil fuel, the U.K.'s grid would have shut down, causing widespread chaos. During winter months, hundreds and perhaps thousands of elderly Brits now die of hypothermia because "green" energy programs have made adequate home heating unaffordable.⁸⁸

Sustainability Activism in the United States

Political sustainability punishes the United States as well as underdeveloped nations. Shellenberger and Nordhaus advocate a high-energy fossil fuel future for developing nations, yet they also espouse activist-defined sustainability and alarmism about "dangerous manmade climate change."⁸⁹ They say the developed world "should move to cleaner sources of energy – from coal to natural gas, from natural gas to nuclear and renewables, and from gasoline to electric cars – as quickly as we can."

Social transformation sustainability punishes the United States as well as underdeveloped nations, reaching epidemic proportions on matters of energy policy, the lifeblood of any modern society.

That is unrealistic and unlikely. Most environmentalist pressure groups adamantly oppose nuclear energy, and many also object to hydroelectric power, the only renewable energy source that provides reliable, affordable electricity. Heavily subsidized electric cars have cost, distance, and environmental problems that may never be solved. Likewise, lavishly subsidized wind

and solar facilities require resource-intensive fossil fuel backup generating plants, even as the "renewable" energy installations inflict severe damage on wildlife habitats and bird and bat species that are carefully protected from hydrocarbon energy activities.

These realities have not affected environmental activists' determination to transform the United States' energy economy. Activists in and out of government employ well-funded, carefully orchestrated sustainable development campaigns, and their agenda is implemented by what *Wall Street Journal* columnist Kimberly Strassel called the "imperious and extralegal tendencies of the Obama administration." The thousands of resulting regulations are beyond the scope of any

⁸⁸ Christopher Booker, "The great wind delusion has hijacked our energy policy," *The Telegraph* (London), August 11, 2012, <http://www.telegraph.co.uk/comment/9468604/The-great-wind-delusion-has-hijacked-our-energy-policy.html>; James Delingpole, "The real cost of global warming," *The Telegraph*, February 28, 2011, <http://blogs.telegraph.co.uk/news/JamesDelingpole/100078040/the-real-cost-of-global-warming/>.

⁸⁹ Michael Shellenberger and Ted Nordhaus, *supra* note 24.

small or medium-sized business to read, much less comprehend or follow. They send business costs soaring, stifle innovation and investment, and reduce economic growth to a trickle, endangering our health, well-being, and wildlife. Poor and minority families are hurt most, because they are least able to afford the direct and indirect costs of higher-priced energy.⁹⁰

EPA's new 54.5 mpg fuel efficiency standards, for example, will force more people into smaller, lighter, less safe cars, causing thousands of needless additional serious injuries and deaths every year.⁹¹ The agency's new regulations restricting carbon dioxide emissions from new coal-fired electricity-generating plants likely will be followed by increasingly tough standards for greenhouse gas emissions from older coal units, gas-fueled power plants, factories, cement kilns, refineries, office and apartment buildings, hospitals, schools, and other large facilities.⁹²

Increasingly powerful bureaucrats operate largely behind closed doors, issue excessive regulations, and arrange "sue and settle" legal actions with radical environmentalist groups that advance extremist agendas.

EPA alone promulgated more than 1,900 regulations from the time Obama took office through December 2012. According to Heritage Foundation calculations, the 20 "major" rulemaking decisions (costing \$100 million or more annually) promulgated during that period alone could cost the United States more than \$36 billion per year.⁹³

⁹⁰ Paul Driessen, "Affordable Energy: The foundation of human rights and economic justice," American Legislative Exchange Council, April 2010, http://www.alec.org/wp-content/uploads/SF_Affordable-Energy_final.pdf; Roger Bezdek, "Potential impact of the EPA endangerment decision on low income groups and minorities," Management Information Systems, March 2010; U.S. Senate Report, "A Look Ahead to EPA Regulations for 2013: EPA rules placed on hold until after the election spell doom for jobs and economic growth," United States Senate Committee on Environment and Public Works (Minority Staff), October 2012; Linda Carroll, "Losing your job increases heart attack risk: Duke University researchers find that unemployment significantly raises risk of heart attack," NBC News, November 19, 2012, <http://www.nbcnews.com/health/losing-your-job-increases-heart-attack-risk-1C9382184?franchiseSlug=healthmain>; Donald Lambro, "Casualties in the jobs war: Suicide statistics start to track the unemployment rate," *Washington Times*, May 8, 2013; H. Harvey Brenner, "Many Factors in the Prediction of National Life Expectancy: GDP and unemployment," testimony before the U.S. Senate Committee on Public Works, June 15, 2011.

⁹¹ Bishop Harry Jackson, Jr., "54.5 mpg and the law of unintended consequences," August 8, 2012, http://townhall.com/columnists/harryrjacksonjr/2012/08/08/545_mpg_and_the_law_of_unintended_consequences/page/full.

⁹² See *Coalition for Responsible Regulation, Inc. v. EPA*, 2012 WL 6621785 (D.C. Cir. Dec. 20, 2012) (Judges Brown and Kavanaugh dissents from denial of rehearing *en banc*); Chamber of Commerce of the United States, Supreme Court Brief No. 12-1272 (December 2013); Committee For a Constructive Tomorrow, *amicus curiae* brief in support of petitioners in *Southeastern Legal Foundation v. EPA*, Supreme Court Brief No. 1268 (December 2013).

⁹³ James Gattuso and Diane Katz, "Red Tape Rising: Regulation in Obama's first term," The Heritage Foundation, May 2, 2013, <http://www.heritage.org/research/reports/2013/05/red-tape-rising-regulation-in-obamas-first-term>.

Regulators say they are prohibited from considering the business or economic costs of their rules, regardless of how many billions they might cost the U.S. economy. These increasingly powerful bureaucrats operate largely behind closed doors, issue excessive regulations, and arrange “sue and settle” legal actions with radical environmentalist groups that advance extremist agendas. They ignore the adverse impacts of their regulations and other actions on human health and welfare. That is hardly a prescription for sustainable development or responsible government.

Conclusion

Earth has vast supplies of energy, minerals, and other raw materials. The Stone Age did not end because we ran out of stones, and the Bronze Age did not end because we exhausted supplies of copper and tin. Neither will the current Fossil Fuel Age end because we run out of coal, natural gas, and oil. Resource use changes constantly because innovators replace less-efficient technologies with new and better ones.

We will never lack the resources needed to continue improving lives, unless misguided activists, politicians, and regulators succeed in placing those resources off-limits.

Wise resource use is consistent with sustainable development because the creative human mind – what economist Julian Simon called the ultimate resource – will continue to devise new technologies and new ways of finding and extracting important natural resources.⁹⁴ We will never lack the resources needed to continue improving lives, unless

misguided activists, politicians, and regulators succeed in placing those resources off-limits. Our most valuable natural resources are not endangered or approaching exhaustion under any reasonable analysis.

True sustainable development improves living standards instead of paying mere lip service to them. It allows people the freedom to develop and use new technologies and best practices that conserve resources, reduce waste and pollution, and give people incentives to choose the most efficient energy and mineral sources, and ultimately to abandon them once better ones are found. That is the key to real sustainability, and it will enable the people of today to prosper ... and still leave the world better than we found it.

In sharp contrast, political sustainability impedes efforts to improve lives, protect the planet, and prolong resource availability for current or future generations. It functions as merely the latest pretext under which to advance collectivist and obstructionist worldviews and agendas. The experiences of developed and developing nations show governments consistently fail to mandate the best and wisest uses of the world’s resources.

⁹⁴ See Julian L. Simon, *The Ultimate Resource* (Princeton, NJ: Princeton University Press, 1983); *The Ultimate Resource 2* (Revised Edition) (Princeton, NJ: Princeton University Press, 1996).

The UN, EPA, Rio+20, and environmental activist vision of sustainable development would perpetuate poverty for developing countries and reduce living standards in wealthier countries. It would ensure ever-increasing scarcity and ever-decreasing prosperity and personal liberty. As two skeptical attendees noted at the close of the 2012 Brazil sustainability summit:

If Rio+20 had achieved what its organizers had set out to accomplish, citizens of still wealthy nations would now have to prepare for new assaults on their living standards. Impoverished people in poor nations would now have to prepare for demands that they abandon their dreams for better lives. That is neither just nor sustainable.⁹⁵

The environmental activists' sustainability agenda is not based on science, common sense, or human experience. Whereas true sustainability practices represent the best in wise stewardship, the U.N./EPA/activist version is economically harmful, destructive of human rights, and environmentally counterproductive.

Whereas true sustainability practices represent the best in wise stewardship, the U.N./EPA/activist version is economically harmful and environmentally counterproductive.

Far from being a curse or an environmental hazard, hydrocarbon energy has been a tremendous blessing. As analyst Indur Goklany demonstrated in his book, *The Improving State of the World*, we are living longer, healthier, more comfortable, and more productive lives, on a cleaner planet, than even kings and queens dreamed of 150 years ago.⁹⁶ A major reason is fossil fuels, which have “saved humanity from nature, and nature from humanity,” Goklany writes.

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⁹⁵ David Rothbard and Craig Rucker, *supra* note 75.

⁹⁶ Goklany, *supra* note 22.

About the Author

Paul Driessen is senior policy analyst for the Committee For a Constructive Tomorrow (CFACT) and a policy advisor to The Heartland Institute. His undergraduate degree is in geology, biology, and ecology, and his law degree emphasizes environmental and natural resource law. He writes and speaks frequently on the environment, energy and economic development, malaria eradication, climate change, human rights, corporate social responsibility, and sustainable development.



Driessen's articles have appeared in *The Wall Street Journal*, *Washington Times*, *Investor's Business Daily*, *Risk Management*, and other newspapers and magazines, and on news and opinion websites in the United States, Bangladesh, Canada, Germany, Italy, Peru, South Africa, Uganda, Venezuela, and other countries.

His book, *Eco-Imperialism: Green Power – Black Death*, documents the harm restrictive environmental policies often impose on poor people, especially in developing countries, by limiting their access to life-enhancing modern technologies. It has been published in Argentina (Spanish), India (English), Germany (German), and Italy (Italian).

Driessen was editor of *Energy Keepers – Energy Killers: The new civil rights battle*, by Roy Innis, national chairman of the Congress of Racial Equality; *Rules for Corporate Warriors: How to Fight and Survive Attack Group Shakedowns*, by Nick Nichols; and *Creatures, Corals and Colors in North American Seas*, by Ann Scarborough-Bull. His studies and analyses have appeared in *Conserving the Environment* (Doug Dupler, editor), *Resurgent Diseases* (Karen Miller, editor), and *Should Drilling Be Allowed in the Arctic National Wildlife Refuge?* (Tamara Thompson, editor), all part of the Gale-Cengage Learning "Opposing Viewpoints" and "At Issue" book series used in high schools and colleges. His work also appeared in *Redefining Sovereignty: Will Liberal Democracies Continue to Determine Their Own Laws and Public Policies, or Yield These Rights to Transnational Entities in Search of Universal Order and Justice?* (Orin Judd, editor), and other publications.

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