America Needs a Rational Energy Policy

By Dr. Mark W. Hendrickson

Access to cheap, reliable, safe energy is crucial to human well-being. Higher per-capita energy consumption correlates tightly with human well-being (see graph in this link and here). Societies with widespread access to affordable energy prosper; societies without such access languish in poverty. The typical American today enjoys a standard of living that is far more affluent than that of our great-grandparents—a spectacular difference that was made possible by the abundance of reliable, affordable energy over the past two centuries.

The multi-generational evolution of the sources of American energy consumption shows two clear trends. As we progressed from wood to coal, to oil and natural gas, to nuclear, each step featured energy that was progressively more concentrated while also emitting less pollution.

Interruption of the long-term trend in energy production

The trend toward cleaner, more concentrated energy sources bumped into a countertrend five or six decades ago. A strong anti-nuclear movement emerged. Environmentalists in this country exploited Americans' poor understanding of nuclear energy to stir up fears and turn public opinion against it. Consequently, in response to popular pressure from the electorate, government officials imposed ever-more regulations on the nuclear energy industry. Those regulations raised the costs of building nuclear power plants to prohibitive levels, first delaying and then putting a halt to the construction of such plants.

By the 1990s, the anti-nuclear movement had morphed into a broader anti-energy movement, as I wrote in this space 15 years ago. The so-called "greens" began to oppose not only nuclear energy, but also the use of fossil fuels—fuels with which our country is superabundantly endowed. In a few short years, the environmentalist movement went

from promoting natural gas as an energy source preferable to coal because it was much less polluting to vehemently opposing the production and use of all fossil fuels. We will examine the reason for this flip-flop momentarily.

First, though, let us establish that the underlying economics of energy has not changed. Making available to Americans a cheap, reliable supply of energy is still essential for generating economic growth and prosperity. A rational national energy policy is one that best meets that vital need. Any energy policy that unnecessarily raises the costs or reduces the reliability and availability of energy is counterproductive and not economically rational.

A crucial question

That raises the question: Is there any scenario in which it would make sense for government to curb or hobble energy production in the United States? Economic reasoning informs us that a policy ceases to be rational if its costs exceed its benefits. In recent decades, there has been a powerful, vocal political movement both in the United States and around the world claiming that the costs of using fossil fuels exceed the benefits, and therefore our national energy policy should be to restrict the production and consumption of coal, oil, and natural gas.

What are those alleged costs? In a phrase, "global warming" or "climate change."

According to proponents of this view, if humans continue to burn fossil fuels, Earth's climate will be so adversely affected that the results will be catastrophic, perhaps even posing a threat to life itself. I think people of goodwill would all agree that if a certain type of behavior, even though it enriches us in the short term, will lead to calamity, suffering, and massive loss of life in the long term, then it would be rational to alter that behavior. It makes no sense to hurtle toward doom and destruction just so that we can maximize our standards of living for a few more years until we plunge into an abyss of disaster and grief.

Thus, the first question we need to address before we settle on a national energy policy is the question of whether using fossil fuels will, in fact, precipitate a climate catastrophe. Let us now examine that question. (Note to reader: If you already understand that there is nothing unusual or dangerous about Earth's ever-changing climate, you can skip ahead to the subsection titled, "Where do we go from here?")

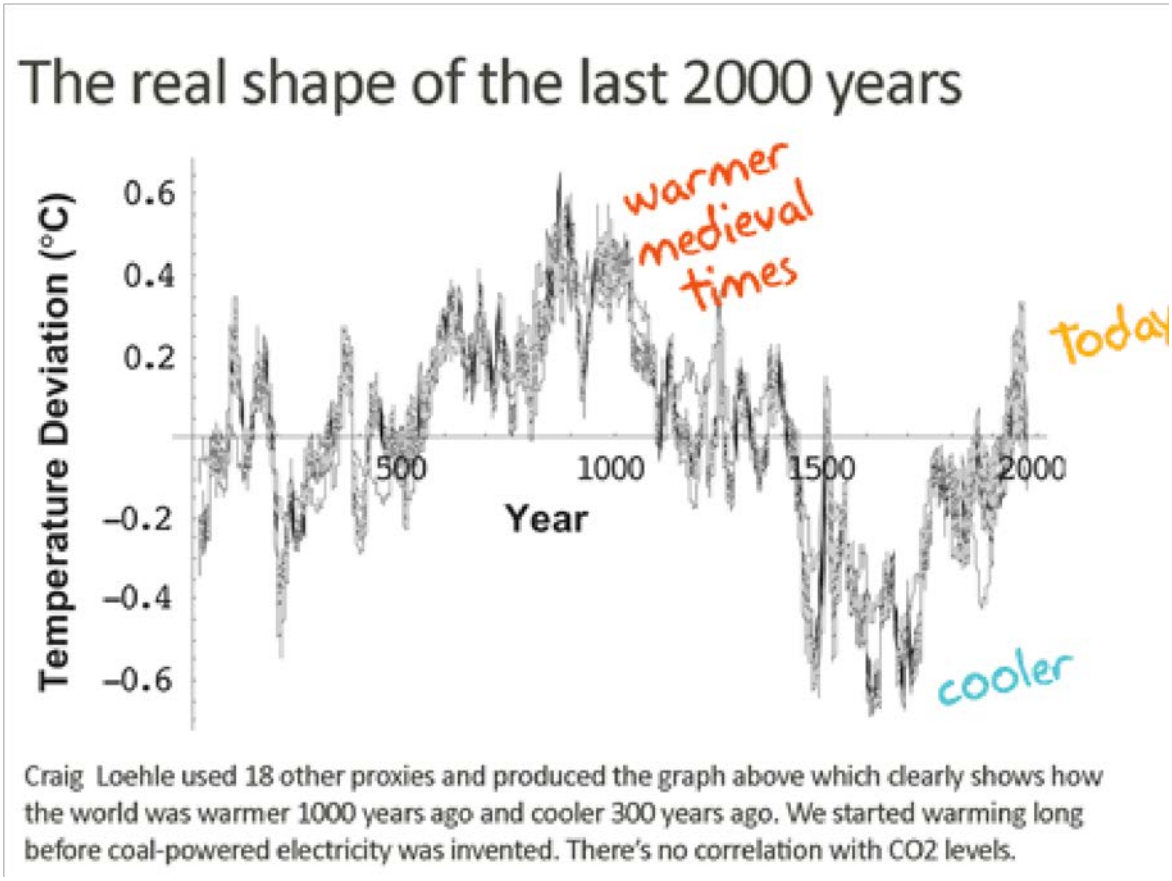
The so-called "science" of global warming/climate change

The gist of global warming/climate change alarmism is that human consumption of fossil fuels releases carbon dioxide (CO_2) into Earth's atmosphere (true); that CO_2 is a greenhouse gas that blocks infrared radiation from escaping into outer space, or in layman's terms, that traps heat in the atmosphere (also true); that the amount of CO_2 being emitted into the atmosphere will, if unchecked, make Earth's atmosphere get

much warmer (not true and actually impossible according to physics); and that if the atmosphere warms just another degree or two, the result will be a massively destructive climate breakdown (poppycock).

Is Earth getting too warm?

Let's address first the assertion that Earth global warming is bad for us—that just a degree or so of additional warming will create hellish climate conditions. While there are formidable, if not insuperable, challenges to measuring "average global temperature" (the main difficulty being a paucity of actual historical and present measurements from the vast majority of Earth's surface and at different levels of the atmosphere), the world undoubtedly has gotten a degree or two warmer over the past two centuries. (Incidentally, there are scientists who say the temperature trend for the past 11 centuries is downward.)

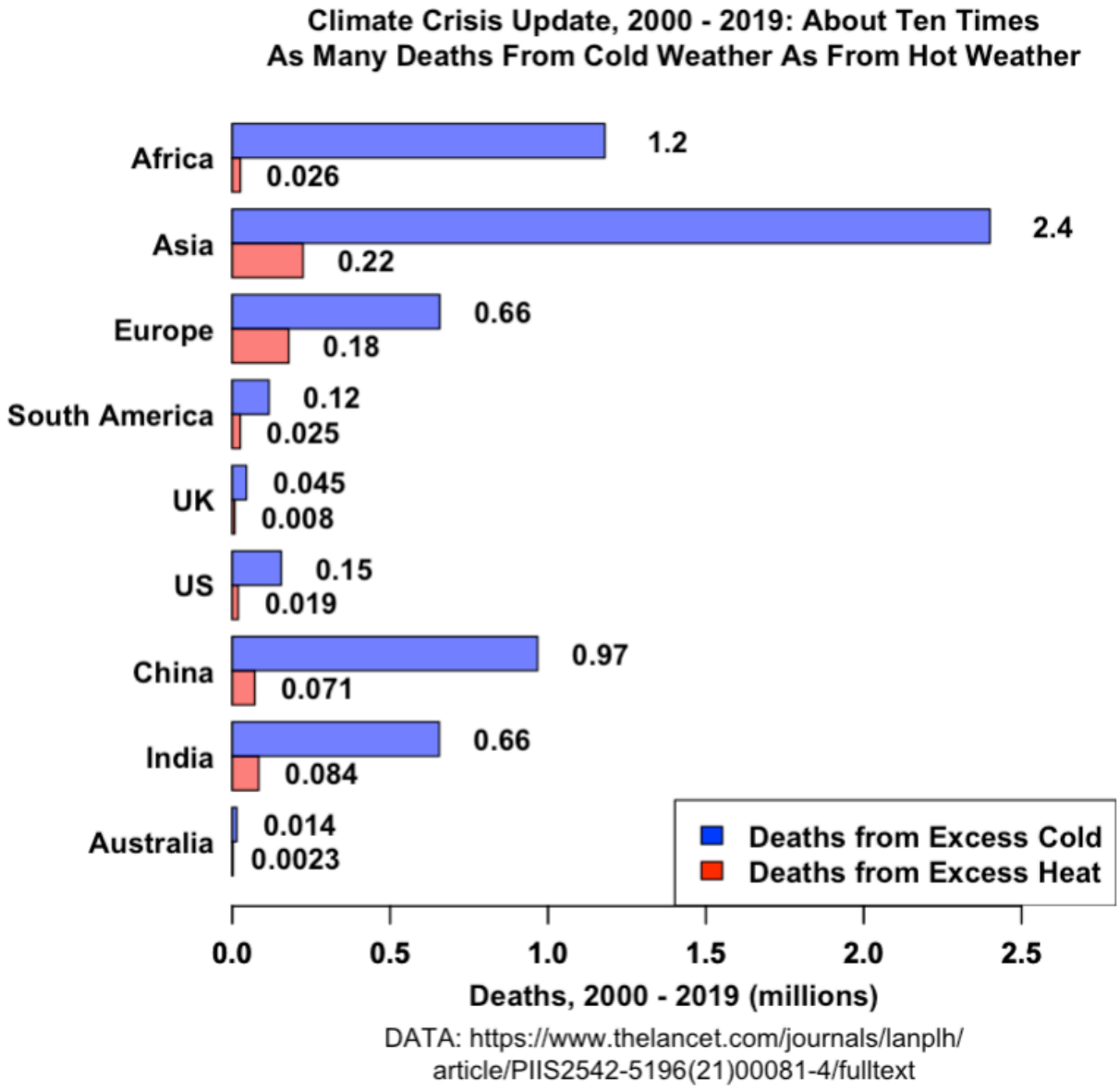


Craig Loehle used 18 other proxies and produced the graph above which clearly shows how the world was warmer 1000 years ago and cooler 300 years ago. We started warming long before coal-powered electricity was invented. There's no correlation with CO2 levels.

If nothing else, this illustrates that the direction of trends is often determined by where one arbitrarily chooses to start one's analysis.

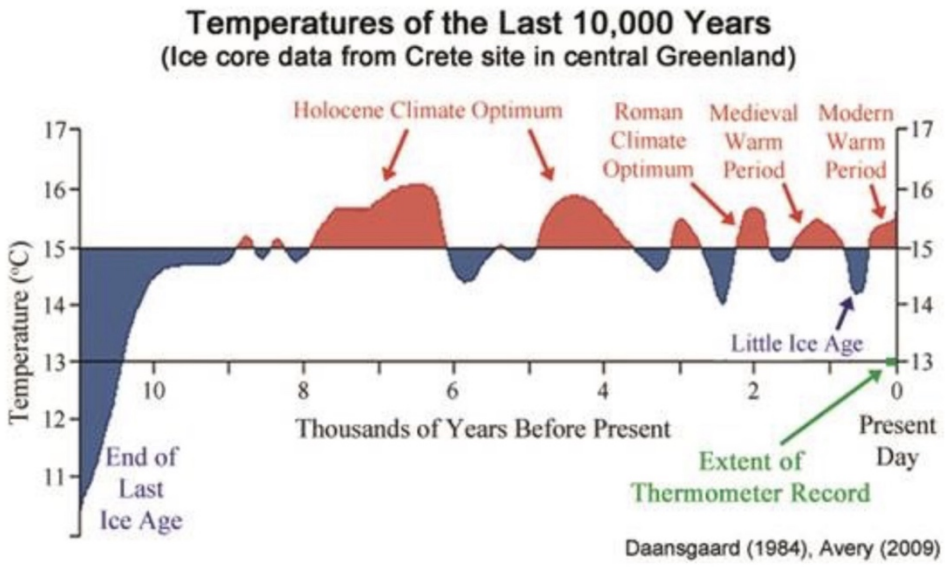
We should all celebrate the warming since the 1800s, because that warming marked an end to the Little Ice Age which was the coldest period in the last 10,000 years. Recent

bias shouldn't trick us into thinking that the harsh conditions of the Little Ice Age are somehow optimal for human welfare. They were not. Among other undesirable conditions, during cold periods, food is harder to grow. The fact that temperatures are warmer today than during the Little Ice Age has been a blessing. Growing seasons are longer, early killing frosts less frequent, and food production has greatly increased. Medical statistics show that cold weather is a much greater enemy of human well-being than warm weather. Estimates range from colder weather killing 20 times as many people as heat (according to the English medical journal, *The Lancet*) to nine times as many in another detailed study. Here is how one graph summarizes the greater lethality of cold weather:



Also, the assertion that today's temperatures are "the hottest ever" are not supported by the facts. Historical records show that Earth was warmer in the Roman Period around the

time of Christ, and even warmer (approximately 2.75 degrees C. or five degrees F.) than that during the Minoan Period of 3,500-4,000 years ago. Yet those periods were ones of civilizational flourishing, not disasters.



Climate alarmists regularly bewail the gentle warming of a degree or two over the past two centuries while datasets provide overwhelming evidence that this warming has been beneficial, not destructive. Climate-related deaths have fallen preciously over the past century. You can read the specifics and see the decline depicted graphically here. Indeed, "the global climate-related death risk has dropped by over 99% since 1920." In short, when it comes to the ongoing battle with potentially destructive weather events, it turns out that humans are winning. That favorable trend has continued over the most recent decades. According to the *European Physical Journal Plus*, "global average mortality and economic loss rates ... have dropped by 6.5 and nearly five times, respectively, from 1980–1989 to 2007–2016." The key to this welcome progress is growing levels of wealth. Happily, this progress toward fewer climate-related death rates is not confined to rich countries. Bangladesh, for example, since 1970 has seen storm fatalities decrease by a hundredfold, even though the frequency of destructive cyclones has increased in that part of the world.

Climate alarmists might agree that warmer weather may appear to be better for human health, but that the real danger lies in various side effects of warmer temperatures. Three of the most common warnings of the alarmists is that warmer weather causes more frequent destructive weather events, that sea levels are rising dangerously, and that mass extinctions will result.

More bad weather?

Briefly, there is no documented increase in adverse weather events. Here is a chart taken straight from the AR6 IPCC report published in 2021:

Weather Event	Detection	Attribution
Increased Flooding	No	No
Increased Meteorological Drought	No	No
Increased Hydrological Drought	No	No
Increased Tropical Cyclones	No	No
Increased Winter Storms	No	No
Increased Thunderstorms	No	No
Increased Hail	No	No
Increased Lightning	No	No
Increased Extreme Winds	No	No

More good news: Hurricanes and tornadoes, not specifically mentioned in the chart above, but often cited by alarmists, are not becoming more frequent, but in fact are trending slightly downward.

In addition to the IPCC report, dozens of posts at *Climate Realism* present comprehensive data analyses demonstrating that there has been no significant increase in the frequency or intensity of hurricanes, tornadoes, droughts, or floods over the past several decades. The peer-reviewed research and data sets presented in *Climate at a Glance* similarly show no upward trend in extreme weather.

Rising sea levels?

Climate alarmists have claimed that a warmer world will accelerate the rise of sea levels. This was the scenario depicted in the cheesy 1995 Hollywood flick, *Waterworld*. The fact is that sea-level rise, which has been proceeding at a not-so-scary rate of 1.5 mm/yr (or one meter every 666 years), is being more than offset by the geological process of accretion. The planet is actually adding a modest amount of above-sea-level land, namely, by approximately 5,200 sq. km over a recent 30-year period. As for the Pacific and Indian Ocean atolls that we have been told would submerge, they are actually increasing their land area despite the slowly rising sea level.

Mass extinctions?

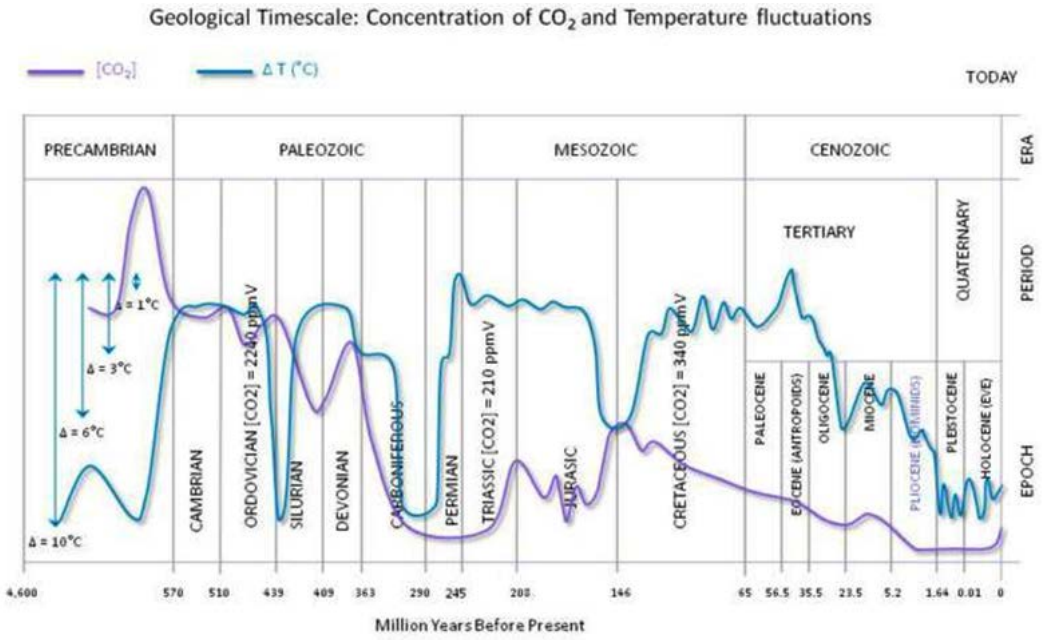
One outlandish alarmist prediction has been that a warmer climate has us on the brink of a mass extinction, perhaps as severe as 20,000 species per year ceasing to exist. The fact is that species extinctions (which are a fixed feature of life on Earth, with over 99 percent of species that ever existed having gone extinct before homo sapiens appeared) have been declining for the past century even as Earth has warmed modestly. The BBC, which is very sympathetic to the alarmist camp, reported that there was only one extinction (a mollusk) between 2000 and 2012, while the International Union for Conservation of Nature states that the rate of extinction in recent years has been one-half a species per year. Does anybody really think that one-half will explode to 20,000 or more annual extinctions if Earth warms another degree or two?

Is CO_2 the "control knob" on Earth's climate?

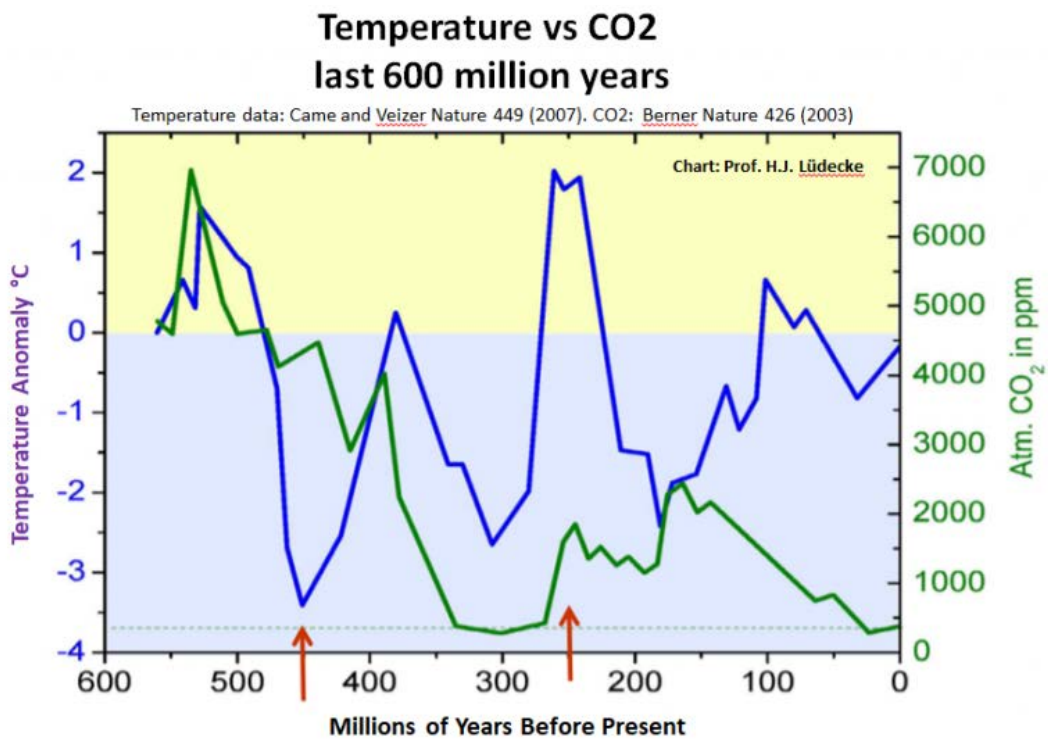
Having hopefully demonstrated that warmer temperatures don't pose a danger to life on Earth, let us now correct the myth that the additional warmth of the last century-and-a-half is due primarily to the increased amount of carbon dioxide in the atmosphere. I wrote above that the physics of carbon dioxide render it literally impossible for increased CO_2 concentrations in the atmosphere to warm Earth's atmosphere significantly. That is because CO_2 "traps" infrared radiation on a logarithmic scale whereby each additional increase in CO_2 concentrations in the atmosphere will have an increasingly minuscule, even undetectable, effect. In other words, the CO_2 effect is largely saturated already, meaning that even a doubling of CO_2 concentrations from present levels (approx. 427 parts per million) would have a minimal impact on temperature. This is how CO_2's warming effect appears graphically:

Apart from the physics of CO_2 absorption of radiation, history shows little to no correlation between how much CO_2 is in the atmosphere and global temperatures. One example: The Late Ordovician Period (well over 400 million years ago) was an ice age even though the CO_2 concentrations at that time were more than 10 times higher than today, specifically, 4,400 ppm. In more recent geological history: "Earth is currently about 3° C cooler than it was during the peak warmth of the previous four interglacials, when the air's CO_2 content was only about 75% of what it is today." (See pages 158-159 of *Climate Change Reconsidered II: Physical Science*.) Scientist W. Jackson Davis "documents an overall negative correlation between global temperatures and atmospheric CO_2 concentrations over the last 210 million years," as summarized in NoTricksZone.com.

Here are two graphs tracking the history of CO_2 and temperatures:



1- *Analysis of the Temperature Oscillations in Geological Eras* by Dr. C. R. Scotese © 2002. 2- Ruddiman, W. F. 2001. *Earth's Climate: past and future*. W. H. Freeman & Sons. New York, NY. 3- Mark Pagani *et all*. *Marked Decline in Atmospheric Carbon Dioxide Concentrations During the Paleocene*. Science; Vol. 309, No. 5734; pp. 600-603. 22 July 2005.
Corrected on 07 July 2008 (CO2: Ordovician Period).



Even in the lifetime of some of those reading this article today, CO_2 and temperatures have moved in different directions. As geologist Gregory Wrightstone documents on page 29 of his book, *Inconvenient Facts: The science that Al Gore doesn't want you to know*, 70% of the time since World War II the planet has not been warming even as CO_2 concentrations were rising steadily and significantly.

In *Hydrological Sciences Journal*, Demetris Koutsoyiannis and Christos Vournas found that the post-1900 increase in CO_2 concentration (from 300 parts per million to 420 parts per million) "has not altered, in a discernible manner, the greenhouse effect, which remains dominated by the quantity of water vapour in the atmosphere."

Other scientists question the alarmist dogma that CO_2 causes warming by finding that the reverse is often the case. Allan T. Emrén, writing in the *International Journal of Global Warming*, found that the rate of change in CO_2 concentration "is controlled by global temperature rather than vice versa."

The author of this paper recalls in 2009 that several scientists in the alarmist camp were saying that the world might cool for the next 30 years, even as CO_2 levels would continue to rise. This is a tacit admission that factors other than CO_2 at least sometimes override whatever influence CO_2 has on Earth's climate.

The very notion that carbon dioxide is the control knob on the global climate is bizarre. CO_2 is a minor greenhouse gas. The dominant greenhouse gas is water vapor. A 2024 study calculated that water vapor "absorb(s) 84 times more radiation than CO_2 does." That exact number is not universally accepted, but that study is one of many that demonstrate water vapor's dominance. Another example: retired infrared astronomer,

Mike Sanicola, notes that CO2 absorption primarily takes place at temperatures colder than Antarctica (in other words, in Earth's stratosphere) and "the greenhouse effect is way over 95% caused by water vapor."

Not only is CO_2 a very minor component of the greenhouse effect, the greenhouse effect itself is far from the only influence on the heat content of Earth's atmosphere. Other major factors include but are not limited to solar radiation, cosmic rays, volcanic activity (both on land and underseas), ocean currents, tectonic movements, and cloud cover. Albedo (the reflectivity of clouds) in one observation had 229 times the impact on heat content as that attributed to the greenhouse effect.

How did the CO_2 scare become entrenched in public thought?

This may sound too cynical, but the climate change issue was used to achieve a political agenda. A climate-change cabal has been striving mightily to reconstruct human society in accordance with an elitist top-down government plan, a new version of socialist central planning. Central planning requires extensive government control of human activity, and there are few policies better designed to tighten such controls than controlling the human consumption of energy. The goal of this political cabal is to radically transform human society, and to accumulate enough power to remake society. In furtherance of this goal, they stirred up an unfounded fear of climate change and then posed as the cavalry riding to the rescue; in this case, promising to save the planet from the supposed ravages of global warming.

Lest you think this is my own esoteric interpretation of events, let me simply quote several of the movers and shakers behind the climate change movement. They are quite frank about what their real goal is:

Ottmar Edenhofer, an IPCC senior official, said in 2010: "One has to free oneself from the illusion that international climate policy is environmental policy.... [One] must say clearly that we redistribute de facto the world's wealth by climate policy."

Christine Stewart, former Canadian minister of the environment, said in 1988: "No matter if the science of global warming is all phony ... climate change [provides] the greatest opportunity to bring about justice and equality in the world."

Christiana Figueres, executive secretary of the United Nations Framework Convention on Climate Change, said in 2015: "[We] are setting ourselves the task of intentionally ... [changing] the economic development model that has been reigning for at least 150 years."

In his 1992 book *Earth in the Balance*, then-Senator Al Gore wrote on page 163, "we must dramatically change our civilization." Gore's ally, former senator and undersecretary of state, Tim Wirth, candidly stated, "Even if the theory of global warming is wrong, we will be doing the right thing" by reducing Americans'

consumption of fossil fuels.[1] At around the same time, State Department official Richard Benedick asserted, "A global warming treaty must be implemented even if there is no scientific evidence to back the greenhouse effect."

In May 2019, Saikat Chakrabarti, Rep. Alexandria Ocasio Cortez's (D-N.Y.) then-chief of staff, said: "The interesting thing about the Green New Deal [is that it] wasn't originally a climate thing at all.... [We] really think of it as a how-do-you-change-the-entire-economy thing." Indeed, according to AOC herself, on a FAQ web page that has since been taken down, the Green New Deal is "the plan to build [a] new economy." (Notice the arrogance: "the plan," not "a plan.")

The March 2009 U.N. Global Green New Deal report stated: "We must not miss this chance to fundamentally shift the trajectory of human civilization."

Van Jones, an official in the Obama administration, who was informally known as Obama's "green czar," stated in 2008 that the "green economy" will eventually culminate in "redistribution of all the wealth" and so serve as "the engine for transforming the whole society."

The World Development Movement and Jubilee Debt Campaign asserted that the developed countries owe the undeveloped countries a "climate debt" and that there should be a "radical redistribution of the world's resources."[124]

The Intergovernmental Panel on Climate Change (IPCC), the UN agency that is leading the international "climate change" political movement, stated in a rough draft of its Sixth Report (2018) that "such a radical transformation of society has never been planned before."

The tactics employed by the climate-change cabal

The first tool politicians used to promote climate-change hysteria has been their favorite tool: money. Since Al Gore began to spearhead the alarmist agenda in the early 1990s, a vast flood of money has gone to scientists and institutions willing to promote the possibility of a heat-related climate disaster. In an article titled "The Ozone Scare" in *Insight*, June 1992, scientist Melvyn Shapiro of the National Oceanic and Atmospheric Administration (NOAA) was quoted as saying, "Al Gore makes sure the science guys get their money. When they have a problem, they go to Gore. Now that's a very dangerous situation."

The word quickly spread throughout academia that any college or university that had faculty members (whether in the sciences or in liberal arts) who questioned the alarmist scenario were in danger of having federal funding of their schools withdrawn. That is why

[1] "What Liberals Say," *Accuracy In Media*, posted at www.aim.org/wls/author/timothy-wirth/ (accessed May 7, 2017).

the leading critics of climate alarmism tend to be retired, because they are beyond the reach of government retribution.

Two eminent retired scientists have described explicitly how government censorship works. Richard Lindzen has held major scientific appointments at Harvard and MIT. Dr. Lindzen talked freely in a recent podcast about the corrupting influence of money in science. (If you don't have time to listen to the entire podcast, go to time signatures 0:20:33, 1:12:00, and 1:30:00.) Similarly, William Happer, an expert in atomic physics and optics and an emeritus professor at Princeton University, in a recent public speech in Australia returned several times to the topic of government money corrupting the integrity of scientific research. (If you go to a YouTube video of the speech, see especially time signatures 23:50, 35:55, and 44:15.)

In the tight relationship between politically correct scientists and a powerful political movement, we see evidence of a problem that President Dwight Eisenhower warned about in his farewell address: "The prospect of domination of the nation's scholars by Federal employment, project allocation, and the power of money is ever present and is gravely to be regarded" and there is a "danger that public policy could itself become captive of a scientific-technological elite."

Making science subservient to politics

Government money also funds various agencies, both domestic and multilateral, whose bureaucratic mission has been to spend billions of taxpayer dollars to promote climate alarmism. For example, the IPCC was deliberately structured to empower its political overseers to revise the language of the scientists who did the actual research so that the IPCC's summary reports would conform to the IPCC's political objectives. Here are two examples of this unscientific chicanery:

A 2001 IPCC report stated, "The climate system is a coupled non-linear chaotic system, and therefore the long-term prediction of future climate states is not possible." Yet, the IPCC has been publishing scary predictions about future climate conditions ever since. (Also, I last accessed the original page in the IPCC report eight years ago, but it appears to have been taken off the Internet since then. Hmm.) Similarly, while a 2012 IPCC report acknowledged that a relationship between global warming and wildfires, rainfall, storms, hurricanes, and other extreme weather events had not been demonstrated, the IPCC's corresponding *Summary for Policymakers* was filled with scary warnings about an increase of such phenomena.

Similarly, in Washington, federal agencies have been given similar latitude. According to an editorial in the print edition of *The Wall Street Journal* (Sept. 29, 2004), a Senate spending bill explicitly exempted any "research and data collection, or information analysis conducted by or for the National Oceanic and Atmospheric Administration (the agency charged with monitoring climate change) from the Data Quality Act, a new law that requires sound science in policymaking." It is no surprise, then, that NOAA has been caught falsifying data on numerous occasions (see here, here, here, here, and here).

Sometimes government agents promoting climate alarmism don't just fudge existing data but go so far as to fabricate data out of thin air.

The National Aeronautics and Space Administration (NASA) also has run interference for the alarmist cause. For example, in 2010, a page on NASA's website stated that "the Sun is *the* major driver of Earth's climate, that it controls all the major aspects, and we may be on the cusp of an ice age. Furthermore, *NASA Science* said things like clouds, albedo and aerosol behaviour can have more powerful cooling effects that outdo the warming effect of CO_2." By 2019, NASA denied access to that page. NASA has known for decades that the sun and cosmic rays tilts in Earth's orbit and other natural factors cause the Earth to warm or cool, and yet the agency has remained conspicuously silent about those factors during the climate alarmism era.

The debasement and emasculation of science

In 2009, an incident occurred known as "climategate," which erupted with the release to the public of over 1,000 emails that had passed between leading climate alarmists. It revealed that several scientists closely allied to the IPCC were energetically defying the norms of scientific research and debate. In his efforts to keep opposing views out of IPCC reports, a prominent scientist emailed one of his allies, "I can't see either of these papers being in the next IPCC report. Kevin and I will keep them out somehow—even if we have to re-define what peer-review literature is!"

Interestingly, the alarmist establishment tried to make a scandal of the fact that somebody published what were supposed to have been confidential emails. This bothered them far more than the various machinations that members of the alarmist cabal were willing to employ to out-maneuver their opponents. "Move right along people. Nothing to see here!"

Another not-so-scientific approach was for the White House to request that federal agencies keep track of something called "the social cost of carbon." It makes economic sense to subject various governmental policies and private practices to cost-benefit analyses to see if they make economic sense. The bogus nature of "the social cost of carbon" is evident by what is excluded: there is no mention of benefits, only alleged costs.

Are there benefits to a warming climate, and therefore to human emissions of carbon dioxide, that are contributing (modestly, so far) to the warming trend? Yes, indeed. The human-assisted CO_2 enrichment of Earth's atmosphere over the past four or five decades has led to a greening of the planet—an increase of land featuring vegetation about twice the size of the continental United States. Climate expert Bjorn Lomborg says the land is equivalent to "three Great Britains" per year. Combine a noticeable greening of planet Earth with longer growing seasons and increased agricultural output, plus the afore-mentioned fact that warmth is better than cold for human well-being, and it is clear that the benefits of increased CO_2 in the atmosphere are considerable. And since it has been demonstrated above that more CO_2 simply cannot warm the planet to any significant degree, the alarmists should have no objections to using energy sources (i.e., fossil fuels) that put more CO_2 into the atmosphere.

The use of censorship

Another tactic employed by alarmists to propagate their distorted vision of how the world works is the advocacy and practice of censorship. Al Gore and other prominent public figures have stated that those who would dissent from global warming orthodoxy should be censored. Former presidential nominee John Kerry has stated that the First Amendment is an obstacle to the desired censorship of those who disagree with his opinions on climate change. Groups of scientists in the alarmist camp have publicly stated that they will not debate anyone who disagrees with them. There is even a blacklist of scientists who don't toe the alarmist line. This, of course, is how politics works, not science, so any alarmist appeal to "follow the science" rings exceedingly hollow.

Media dupes and propaganda agents

Finally, a compliant media has been all too happy to promote alarmism. After all, the media sells more papers and get more clicks if it publishes scary stories about pending disaster rather than the truth, which is that so-called "climate change" is a perpetual reality but nothing that is threatening our very existence. Some media outlets have shown that they have abandoned all objectivity by accepting generous payments from "philanthropic organizations" to report on the climate. The Associated Press, for example, has received $8 million to hire approximately 20 "reporters" to keep this issue alive to the American public.

Media bias and hype about climate change is blatantly obvious when various media outlets use an identical story line when "reporting" about the state of the climate. Thus, we are treated to the absurdity of reading that virtually every area of the world is warming twice as fast (see here, too) as everywhere else.

Environmental journalism has been very one-sided. For example, a few years ago, the media hyped a record-warm summer temperature of 64.94 degrees F. (18.3° C.) in Antarctica, while you would have been hard put to find any reporting about the record wintertime low that had occurred in the northern hemisphere just a month earlier—a reading of minus 86.8° F. (66° C.) in Greenland.

Another example: When the mercury in the Siberian town of Verkhoyansk touched 100° F. on a June day, the green media network kicked into overdrive. It wasn't the first time that a temperature of 100° was reached inside the Arctic Circle. It happened in Fort Yukon way back on June 27, 1915. Yet, you would have struggled to find in the popular press any mention of the people of Verkhoyansk waking up to snow on the ground on July 5 .

Did you happen to catch the BBC report about the Antarctic glacier Thwaites melting rapidly? That's true, but the report failed to inform listeners that the melting is being caused by active volcanoes beneath the glacier. In other words, banning SUVs and fossil fuels will not keep Thwaites from melting.

Many scientists reject climate alarmism

Lest you think that only a few scientists dissent from the global warming orthodoxy I have found large numbers of scientists who challenge the alarmist narrative. These include Belgian, Japanese, Finnish, Dutch, and Italian scientists. Among the Nobel Prize winners in the sciences who state that climate alarmism is invalid are John Clauser, physicist, the late Kary Mullis, chemist, Ivar Giaever, physicist, and Robert Laughlin, physicist. They are joined by such scientific luminaries as the late Fred Seitz, President of the National Academy of Science, and the late world-famous scientist Freeman Dyson.

In 2019, a group of more than 500 scientists and professionals signed a letter addressed to the head of the United Nations stating that there was no climate emergency. In 2023, 1,609 scientists, professors, and other experts signed a public declaration titled "There Is No Climate Emergency." Their six primary points are: (1) natural forces, not just human activity, cause warming; (2) warming has been far slower than the Intergovernmental Panel on Climate Change (IPCC) predictions; (3) computer climate models "are not remotely plausible as global policy tools;" (4) "CO2 is plant food ... not a pollutant;" (5) there has been no discernible increase in natural disasters; (6) "Climate policy must respect scientific and economic realities," and a net-zero policy is harmful and unrealistic.

Finally, more than 30,000 scientists signed a petition in 2008 in which they disputed the claims of the alarmists.

Implications for today

Tragically, a significant percentage of American children have experienced anxiety and/or depression because of what they have been mistaught about climate change. This is educational malpractice on a massive scale, a crime against children. Fortunately, American adults appear to be more impervious to the constant barrage of bogus science coming from the alarmists. According to a report in *The Guardian* two years ago, only 38 percent of American adults would be willing to pay one dollar per month to lower CO_2 emissions. This represents a triumph of common sense seeing through an aggressive political agenda. In their gut, Americans intuitively sense that there is no solid reason why our society should be radically altered to combat climate change.

Another positive sign

Thanks to an executive order issued on April 9 of this year, "Directing the Repeal of Unlawful Regulations," the path to terminating the so-called "endangerment finding" is now wide open. The endangerment finding, issued by the Environmental Protection Agency in 2009, classified carbon dioxide as a pollutant because of its contribution to the greenhouse effect in our atmosphere.

The unscientific nature of the endangerment finding is blatantly obvious when we consider that it does not classify water vapor as a pollutant even though water vapor's contribution to the greenhouse effect dwarfs that of CO_2. Prior to 2009, classifying CO_2 as a pollutant would have been considered crazy. Not only is CO_2 the indispensable source of nourishment for plants, and thus the base of the human food chain, but for years environmentalists sang the praises of catalytic converters on our car engines (equipment which became mandatory in 1974) because they converted toxic carbon monoxide into harmless, benign carbon dioxide. In 2009, though, CO_2 was reclassified as a threat to human well-being on the basis of its alleged dangerous warming of the atmosphere. As explained herein, CO_2 poses no danger to life on Earth.

Where do we go from here?

If there is no compelling reason to forsake fossil fuels to save us from some imaginary climate crisis, then those sources of energy definitely belong in our energy mix. But to what extent? What are the best energy sources for our country? It would be presumptuous of me to say. But it is safe to say that there are several important aspects of this question that are crucially important for us to examine. A rational energy policy should consider the issues of reliability, affordability, and environmental impact.

Reliability

The reliability of our supply of electricity has become a more pressing issue in recent years. Cities that for decades enjoyed reliable delivery of electricity have begun experiencing brownouts and blackouts. We are now at a time when the demand for electricity will increase significantly, not primarily because of growth in the population, but due to new technological applications. Cloud computing, quantum computing, artificial intelligence, crypto-currencies, electric vehicles, computer chip factories, large data centers, etc. will require massive amounts of electricity.

The North American Electric Reliability Corporation (NERC), an independent non-profit that develops policies and guidelines to coordinate the activities of electric utilities, stated in 2023 that the leading risk to the reliability of the American power grid was not catastrophic weather events or sabotage, but government policy. Intermittent sources of power (i.e., wind and solar) present challenges to the stability of the electric grid precisely because of their intermittency (they ebb and flow with the coming and going of sunlight and wind). Thus, the heavy support that the federal government has given to wind and solar companies has greatly increased the risk of grid destabilizations and blackouts.

Along the same lines, the Federal Energy Regulatory Commission (FERC, a U.S. government agency) stated last summer that intermittent sources of energy cannot supply power as reliably as do fossil fuels. FERC advised against policies of retiring too many fossil fuel power plants prematurely. They also warned against obstructionist legal harassment designed to block the construction of pipeline infrastructure needed to transport gas-generated electricity to where it is needed. Thanks to the recent blackout that

engulfed the Iberian Peninsula in Europe, we have a real-world demonstration of how a national energy policy mix of closing fossil fuel and nuclear power plants while increasingly relying on intermittent energy sources can literally leave millions of people in the dark.

Affordability

There is a *prima facie* case that wind and solar are not as affordable as other sources of energy. The public is told repeatedly that wind and solar are getting cheaper all the time, and yet wind and solar companies continue to receive massive government subsidies. In fact, numerous producers of those "green" energies have made it clear that they will exit those markets if subsidies are withdrawn. That seems conclusive proof that those sources are not economically viable on their own. The inescapable fact is that wind and solar generation require back-up sources of energy (usually fossil fuels-based) for times when the wind has stopped blowing or at nighttime. That necessary redundancy makes it obvious that wind and solar are more costly.

The overall costs of the various types of power used to produce electricity are widely debated. A recent peer-reviewed analysis of full-system levelized costs of competing power sources shows wind power is seven times more expensive than natural gas power and solar power is 10 times more expensive. Even if the actual cost differences are only half of those amounts, the economics of wind and solar power are daunting.

By placing a heavy bet on wind and solar, Britain increased its generating capacity from 2009 to 2020 by 15.6 percent. The problem is that due to the lack of constancy of wind and solar, the country actually produced 17.1 percent less electricity.

Here in the United States, something similar has happened. In 2023, despite having added 6.2 gigawatts of wind capacity, the actual power generated by wind declined by 2.1%. Spending more money to get less electricity is the antithesis of affordable.

One other fact worth noting about affordability: As per a report in *The Wall Street Journal*, people living in states with renewable energy mandates are paying increasingly higher prices for electricity than people in states without such mandates.

Environmental damage

One of the painful lessons of the last few decades is that supposedly "green" energy technologies often have negative environmental consequences. Even the leftist, anti-market filmmaker Michael Moore has pointed out many instances of environmental damage that accompany "green" energy projects. See his documentary "*Planet of the Humans*." (A caveat: The overall message of this documentary is clearly from a leftist perspective, but his honesty in documenting that "green" policies often are very environmentally destructive is right on.)

If the inferior reliability and higher costs of "renewable energy" sources haven't convinced you that subsidizing wind and solar energy has been an unwise policy, consider this: The supposedly "green" technologies of wind and solar energy are wreaking environmental havoc on a much greater scale than the more conventional sources of electricity. Not only do solar panels and giant windmills require vast amounts of land (one study estimates land four times the area of South Dakota), but they also require massive amounts of minerals. Mining those minerals on a scale sufficient to continue expanding wind and solar is an environmentally devastating exercise. Indeed, the amount of fossil fuels needed for the extraction, processing, transportation, and manufacturing of wind and solar equipment often negates the reduction in CO_2 emissions at the point of actual generation of electricity. Equally problematic is the daunting task of figuring out how to dispose of all the waste generated by panels and windmills (another energy-intensive undertaking) virtually all of which have to be replaced every 20 or 30 years.

Meanwhile, it is curious, to say the least, that greens, who squeal with indignation if a natural gas company lays a 36-inch pipeline anywhere, now call for 100-mile-wide swaths of natural habitat to be cleared to make room for ever-more turbines and the mind-boggling quantity of transmission lines needed to convey electricity from remote countryside to crowded cities.

We need to also consider the damage to countless ecosystems caused by solar panels and windmills. It turns out that so-called green (i.e., intermittent) energy production kills vast numbers of birds, bats, and insects (as much as five percent of some insect species per year). If any fossil fuel company were killing one-tenth the wildlife that wind and solar are killing, the greens would be screaming to lock up their CEOs. Instead, in their pursuit of socialistic control over us, greens are too often willing to ignore the decimation of animal species wrought by "green energy."

We also should not overlook the dangers to human wellbeing posed by wind and solar. Rotating turbines create atmospheric undulations and subsonic resonances that harm human health, causing headaches, sleep problems, tinnitus, irritability, anxiety, and nausea. Wind turbines also increase humans' exposure to Bisphenol A which, according to the Swedish Environmental Protection Agency, "is the most toxic substance we know."

Wind turbines also have negative psychological effects. As reported in one medical journal, "People who live or work in close proximity to IWTs have experienced symptoms that include decreased quality of life, annoyance, stress, ... depression, and cognitive dysfunction." Another study linked wind turbines to significantly higher suicide rates. Also, wind turbines collectively shed tons of microplastics annually with as-yet unknown consequences to human health through the air we breathe and the water we drink.

Solar panels appear not to be as harmful to humans as wind turbines, but they are responsible for depleting life-sustaining aquifers (that used to be an environmentalist cause). Solar panels contain toxic materials that are difficult and expensive to dispose of

properly, and they have caused spikes in humans suffering from "valley fever" and silicosis.

Encouraging possibilities

There is good news on the energy front. We have the capacity to expand our production of energy considerably and to reverse the deterioration in the security of our electric grid. We are the global energy superpower in terms of fossil fuels and have reserves more than sufficient to easily meet all our needs.

There are plans to try to tap into the super-abundant thermal energy beneath Earth's crust. There are also those who think that wind energy can be made more reliable and economical by building turbines that rise hundreds of feet higher than current models do.

Some of the more promising options for meeting our future energy needs lie in the field of nuclear energy. The decades-old anti-nuke hysteria seems to have subsided—finally! Nuclear power has long been shown to be safe and reliable. The French generate more than 70 percent of their electricity from nuclear power. They deposit their spent radioactive fuel rods in a vault under one of their cities. There are no compelling safety reasons to avoid this clean, prolific energy source. Plus, there are exciting developments going on in the nuclear sphere. Some are working on designing commercial reactors that use thorium instead of uranium (thorium is less radioactive). Others are experimenting with small, even pocket-sized nuclear reactors—perhaps just large enough to power a neighborhood or maybe, eventually, just one's own house.

Good news

Last June, the U.S. Senate overwhelmingly passed the ADVANCE Act. This legislation is designed to streamline the application process, reduce fees, and shorten approval times for the construction of nuclear energy generators. In short, ADVANCE does much to reverse the longstanding anti-nuke regulatory framework that has so tragically crippled nuclear power in our country.

We have arrived at a propitious time to reexamine our national energy policies. Clearly, intermittent energy sources in their current form are not a viable answer to our society's growing energy needs. Neither is corn-based ethanol, a decades-old environmentally destructive boondoggle whereby the federal government subsidizes corn production on millions of acres of land that would otherwise be used for different agricultural products or simply as natural habitat. Government subsidies to wind, solar, and ethanol have been acting as a brake on economic growth while helping to balloon our soaring national debt.

Seeking a bipartisan solution

The first step in reforming energy policy should be to rise above the partisanship that dominates energy policy in Washington. In recent decades, Democrats have sought to block the development of fossil fuels. Currently, President Trump has imposed a halt on new wind projects. This shouldn't be a partisan decision. Both parties should agree to let the market determine what energy sources we should rely upon. How would we achieve that goal? Simple: by getting government money (i.e., taxpayers' money) out of the energy markets.

The key policy reform is to jettison all the wasteful, counterproductive subsidies to renewables and to any other energy producer. Yes, put a complete halt to them. End that prodigiously costly corporate welfare. Let energy producers compete with each other unaided, unsubsidized, and see which projects can be economically viable on their own.

The only way to sort through the various options is to let markets work their magic. Free and open markets process far more economically valuable information than any genius or panel of experts possibly can.

The bottom line:

In sum, a rational energy policy for the United States has three elements.

The first is to adopt as the law of the land that carbon dioxide is not to be classified as a pollutant. This would remove the artificial justification that the anti-energy forces in Washington have used to delay, halt, or block the development of America's vast hydrocarbon (i.e., gas, oil, and coal) resources. It is encouraging that current EPA administrator Lee Zeldin is reported to be on the verge of repealing the endangerment finding that misclassified carbon dioxide as a pollutant. Bravo!

The second element is to terminate all energy subsidies—not only the massive subsidies to inferior energy sources, such as wind, solar and corn-based ethanol, but also the various subsidies that fossil fuel corporations receive. Let's maintain a level playing field for all competing fuel sources. This will be politically difficult to achieve because of all the special interests that are receiving federal money, but such a reform would necessarily lower the prices that Americans pay for energy.

The third element is simple: freedom. Let entrepreneurs and utilities produce fuels and electricity from whatever source they choose, subject to government banning activities that harm humans and animals or are otherwise too environmentally destructive. Let us rely on market forces to identify the most practical alternatives.

Such a policy mix will rationalize our energy markets and boost prosperity for decades to come.

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