

The Week That Was: 2026-01-03 (January 3, 2026)
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The Science and Environmental Policy Project

Quote of the Week: “Einstein never accepted quantum mechanics because of this element of chance and uncertainty. He said: God does not play dice. It seems that Einstein was doubly wrong. The quantum effects of black holes suggest that not only does God play dice, He sometimes throws them where they cannot be seen.” — Steven Hawking

Number of the Week: -- 50 to 60 times

Dear Reader of The Week That Was:

2025 Estimated Budget: As of December 6, for the year 2025 SEPP has estimated expenses of about \$150,000. SEPP does not solicit donations, but they are welcome.



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THIS WEEK:

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Scope: This TWTW opens with a discussion on whether climate can be determined by a single event. It then questions whether a paper asserting that increasing atmospheric CO2 is a wolf in

lamb's clothing. TWTW presents an essay by Anthony Watts that produces physical evidence that death rates from extreme weather events (natural disasters) are falling. TWTW concludes with a brief discussion on the differences between classical physics and quantum physics.

Determining Climate: Judith Curry's blog, Climate Etc., had an interesting post by Javier Vinos, "The 2023 climate event revealed the greatest failure of climate science." The Hunga Tonga volcanic eruption occurred on January 15, 2022 (not 2023 as Vinos wrote). This was the largest, most significant underwater eruption ever recorded. It generated large tsunamis and atmospheric shockwaves circling the Earth, and injected enormous amounts of water vapor and sulfur dioxide into the stratosphere. According to Google AI, key aspects of the eruption include:

- ***"Scale & Power:** The eruption was assigned a Volcanic Explosivity Index (VEI) of 5 and released energy equivalent to several large nuclear tests, creating a huge ash plume and sonic booms heard globally.*
- ***Water Vapor Injection:** Uniquely, the eruption blasted immense quantities (around 150 million tons) of seawater into the stratosphere, turning it to steam, which acts as a greenhouse gas, unlike typical sulfate aerosols that cause cooling.*
- ***Tsunamis & Shockwaves:** It triggered devastating local tsunamis, with waves over 20 meters high on nearby islands, and created atmospheric pressure waves that circled the planet multiple times.*
- ***Stratospheric Impact:** The water vapor and sulfur dioxide led to ozone loss, stratospheric cooling, and shifts in atmospheric patterns, affecting weather and the ozone hole, with effects lingering for years.*
- ***Volcano Type:** HTHH [Hunga Tonga–Hunga Ha‘apai] is part of the Tonga-Kermadec volcanic arc, formed by the Pacific Plate subducting under the Indo-Australian Plate, and features a caldera almost entirely underwater, with small islands as remnants."*

Predicting significant geological events is beyond the scope of climate science and global climate models, so they should not be criticized for their failure to do so. However, **such uncertainty in the science should be noted. Usually, it is not.** Vinos lists a number of unusual weather events that occurred in 2023 and 2024 that may have been influenced by the eruption. They are [citations omitted here]:

- *"Extraordinary ocean warming that models can't explain.*
- *Record-low Antarctic sea ice.*
- *A record-breaking Amazon drought in 2023.*
- *31 atmospheric river events in the western US from November 2022 to March 2023. Nine made landfall in California marking the record in the 70-year database.*

- *The snowiest season in 71 years occurred in California after a 1-in-54-year event.*
- *NYC had the least snowy season on record, breaking a 50-year record on latest first snow.*
- *Cyclone Freddy in the Indian Ocean was the longest-lasting tropical cyclone ever.*
- *ITCZ displacement and unusual rains in the Sahara in 2024.*
- *The first half of the 2024 hurricane season was surprisingly quiet, and models can't explain it.*
- *In 2023, 42% of the globe experienced heat exceeding two standard deviations. Louisiana, for example, had its hottest summer in 129 years of records.*
- *2023 was the warmest year on record, and 2024 was even warmer.*
- *In October 2024, the North Polar Vortex was the weakest in 40 years. The three sudden stratospheric warming events that occurred in the same season are a one-in-250-year event according to models.*
- *The biggest global low cloud cover anomaly ever recorded occurred in 2023."*

Some of these may be just randomly occurring weather events such as snow records in New York City. Others may be interrelated such as the low cloud cover anomaly and extraordinary ocean warming. The ones that may be interrelated may merit further investigation. Will the extraordinarily low cloud cover anomaly continue? Vinos concludes his essay with:

"The greatest failure of climate science

Climate science has failed the test of an externally forced natural climate event. Most scientists who have published studies on the 2023 climate event have not recognized its nature. Any climatological manifestations of the event that do not align with the dominant consensus have been treated as either natural variability or rare events whose probability has increased due to anthropogenic climate change. No studies have addressed the climatic event in all its manifestations or analyzed its possible causes without relying on models clearly not designed to shed light on something we did not know was possible.

Rather than trying to determine the causes of the event, scientists have attempted to fit it into the dominant theory using models. In light of evidence of major natural climate change, this approach reveals its greatest flaw: the theory relies on an excessive focus on greenhouse gases and aerosols as the cause and temperature changes as the effect."

Although predicting singular events is beyond the scope of climate science, explaining the consequences of such events away as the result of carbon dioxide caused warming is inexcusable. See link under Changing Earth.

A Wolf? Kenneth Richard found a paper published in the journal “Sci” that Richard stated:

“As a result of today’s higher concentrations of CO₂ in the atmosphere, the radiative forcing power of CO₂ has dropped to less than one-third of the forcing power in 1750.”

‘The forcing attributable to atmospheric CO₂ is so small relative to the Earth’s energy budget that 80% of heat captured by CO₂ is reflected back into space by aerosols.’

‘If the concentration of CO₂ in Earth’s atmosphere continues to increase exponentially as it has since contemporary measurements began 67 years ago (see below), then the incremental contribution of CO₂ forcing to global warming will continue to decline exponentially because the forcing power of CO₂ wanes with higher CO₂ concentrations owing to the aforementioned diminishing returns in marginal forcing.’”

The abstract of the paper by W. Jackson Davis begins with:

*“Human-sourced emissions of carbon dioxide (CO₂) into the Earth’s atmosphere have been implicated in contemporary global warming, based mainly on computer modeling. Growing empirical evidence reviewed here supports the alternative hypothesis that global climate change is governed primarily by a natural climate cycle, the Antarctic Oscillation. This powerful pressure-wind-temperature cycle is energized in the Southern Ocean and teleconnects worldwide to cause global multidecadal warm periods like the present, each followed historically by a multidecadal cold period, which now appears imminent. The Antarctic Oscillation is modulated on a thousand-year schedule to create longer climate cycles, including the Medieval Warm Period and Little Ice Age, which are coupled with the rise and fall, respectively, of human civilizations. **Future projection of these ancient climate rhythms enables long-term empirical climate forecasting.** [Boldface added]*

All this seems consistent with our understanding of the Greenhouse Effect. That the influence of increasing CO₂ on temperatures is small. Perhaps ancient climate rhythms will be able to explain the abrupt warming and gradual cooling of Dansgaard–Oeschger events, but can they explain the onset of glacial periods lasting now about 100,000 years? Unfortunately, Richard overlooked the rest of the abstract and key parts of the paper. The rest of the abstract states:

*Although human-sourced CO₂ emissions play little role in climate change, they pose an existential threat to global biodiversity. **Past mass extinctions were caused by natural CO₂ surges that acidified the ocean, killed oxygen-producing plankton, and induced global suffocation. Current human-sourced CO₂ emissions are comparable in volume but hundreds of thousands of times faster.** Diverse evidence suggests that the consequent ocean acidification is destroying contemporary marine phytoplankton, corals, and calcifying algae. **The resulting global oxygen deprivation could smother higher life forms, including people, by 2100 unless net human-induced CO₂ emissions into the atmosphere are ended urgently.** [Boldface added]*

And here we see the wolf in the sheep’s clothing. CO₂ is not responsible for dangerous global warming, but it will be responsible for a massive extinction from acidifications of oceans, killing oxygen-producing plankton thus inducing global suffocation.

After a long explanation of warming and cooling periods driven by the Antarctic Oscillation (which TWTW will not discuss here), in Section 9 Davis states [citations omitted here]:

“9. Mass Extinctions of Biodiversity

The empirical evidence reviewed above supports the hypotheses that global climate is driven primarily by a natural PWT cycle in the SO, the AAO, and that human-sourced CO₂ in Earth's atmosphere provides a small fraction of climate forcing, estimated here as 1.57%. The “other CO₂ problem” is acidification of the global ocean. Atmospheric CO₂ dissolves at the air–sea interface to produce carbonic acid, which lowers the pH of the ocean (OA) to kill the plankton that collectively generate as much as 70% of planetary oxygen.

9.1. The Role of Atmospheric Carbon Dioxide

Numerous students of the fossil record have concluded that past mass extinctions were caused by the release of CO₂ to the atmosphere, which destroys biodiversity through ocean acidification, plankton die-off, and global anoxia. Genus loss has accordingly been strongly and positively correlated with atmospheric CO₂ concentration for at least the past 210 My [Million year] the most highly resolved segment of the 425-My paleo data record of atmospheric CO₂ concentration.”

The last item in the conclusion states:

“11.7. Deploying a Carbon-Neutral Global Economy

This review summarizes recent empirical evidence that atmospheric CO₂ as elevated by human activities is a negligible threat to global climate, but a potentially existential threat to global biodiversity including humans. Past research shows that carbon-neutral energy sources are not entering the market fast enough to forestall projected human-induced mass extinction. Future research could address questions of how to implement a CO₂ reduction protocol on an accelerated timetable.

What are the necessary steps, requisite policies and technologies, likely socio-economic and political barriers, and objective outcome measures? Perhaps most difficult politically, how can nations that produce fossil fuels be persuaded and compensated for leaving fossil fuels, their primary source of survival and prosperity, untouched in the ground? Such a sacrifice of national interests seems unlikely without some form of negotiated compensation. This review concludes that preservation of biodiversity including humans requires emplacing a global carbon-neutral economy—zero net emissions of CO₂—in less than a human lifetime, with all of the technical, social, economic, and political challenges, changes, and opportunities inherent in such an unprecedented civilizational transition.” The paper contains over 650 references.

Increasing atmospheric CO₂ that is causing a flourishing of life on Earth, will kill life? The June 21, 2025, TWTW covered this issue. In part, it stated:

“As a gas, water vapor contains no CO₂ and has a pH of 7 which is neutral. But when it liquefies in the atmosphere and falls as rain, it absorbs CO₂ making a weak acid, carbonic acid. All rain is carbonic acid and has a pH ranging from 4 to 6. Thus, it is common that in land areas with moderate to heavy rainfall, such as the tropics, the soils are acidic. Millions of years of rainfall have washed CO₂ from the atmosphere into the oceans. Roughly, there is about 50 to 60 times more carbon dioxide in oceans than in the atmosphere. So, direct rainfall will slightly increase CO₂ in the oceans, slightly lowering the pH.

Yet after millions of years of rainfall, the oceans are alkaline with pH of about 8.1. A fact that NOAA and others ignore. To recall, the acidity or alkalinity of a solution is measured by the pH scale with 7 as neutral. The scale is a base 10 logarithm. Alkaline drain cleaner has a pH of about 14; bleach has a pH of about 13. Is bleach 10 times more acidic than alkaline drain cleaner? Hen eggs have a pH of about 8 (oceans 8.1); sweet cream butter has a pH of about 6.0 to 6.7. Does cooking eggs in butter make them acidic?

Further, the areas in the oceans, called Marine primary production areas or regions, are areas where ocean upwellings bring carbon dioxide and other nutrients to the surface and marine life flourishes. Examples are the Grand Banks in the Atlantic off Canada, the area off Monterey, California, off Canada and Alaska, and off most of Europe.

As with most such distortions, the claim of ocean acidification requires a huge ignorance of geological history. Mollusks evolved in the Cambrian explosion of life about 540 million years ago, when CO₂ concentrations in the atmosphere were about ten times what they are today. Marine creatures with shells containing calcium carbonate evolved before then, with even higher concentrations of CO₂. Great limestone beds were laid down during the hot, high CO₂ Cambrian period.

Reef building corals evolved around 245 million years ago. Since then, Earth has experienced periods far hotter than today and periods with CO₂ concentrations far greater than today. Reef-building corals have a symbiotic relationship with microscopic algae called zooxanthellae, which live within their tissues. The coral provides the algae with a protected environment and the carbon dioxide and nitrogen (for chlorophyll and other compounds) needed for photosynthesis, while the algae, through photosynthesis, provides the coral with energy, nutrients, and their vibrant colors. Changes in water temperatures, salinity, or solar irradiance can cause corals to expel the algae, turning them white. They are not dead but may need a different variety of zooxanthellae, which are diverse with many clades (groups of organisms believed to have a common ancestor) and types.

There is no reason to assume that a modest lowering of pH will kill corals any more than slow changes in temperatures will kill them. However, human causes including sediment from land disturbances and destructive fishing practices such as using dynamite and cyanide do kill them. Water running into the oceans for millions of years often passes over many types of alkaline material resulting in a pH of about 8.1, alkaline.

The best scientific explanation why increasing atmospheric concentrations of CO2 will not acidify the oceans TWTW has seen was written by the late Roger Cohen and William Happer ten years ago.”

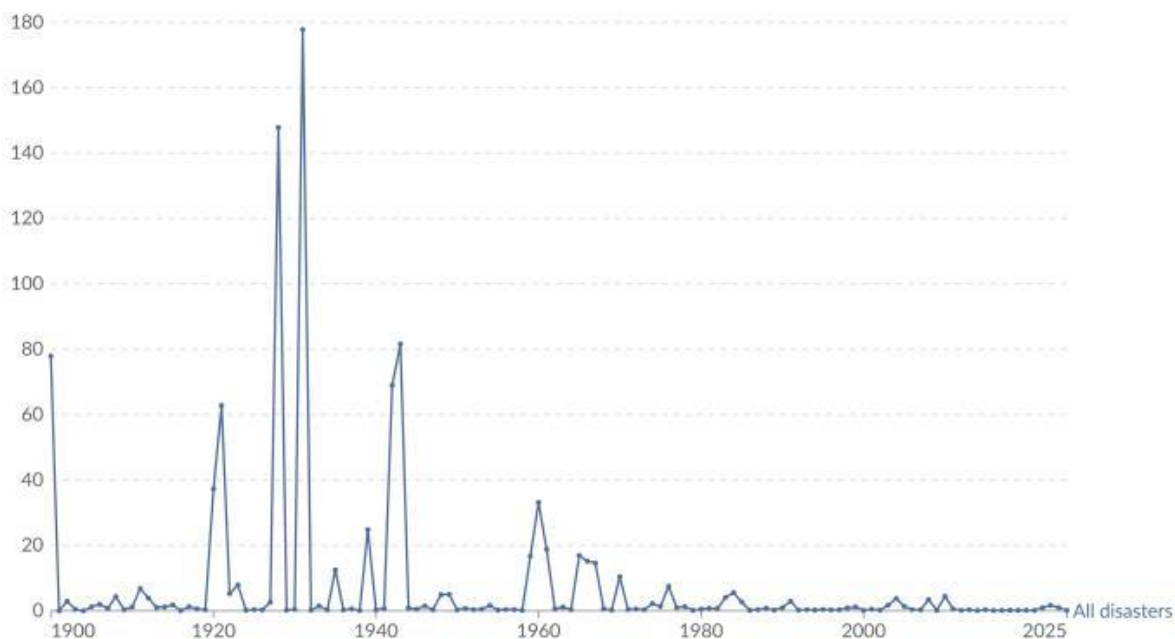
For the paper by Cohen and Happer “Fundamentals of Ocean pH” see link under Challenging the Orthodoxy, for the paper by Davis see links under Changing Earth, and for the previous TWTW see <https://www.sepp.org/twtwfiles/2025/TWTW%206-21-25.pdf>.

Falling Death Rates: In WUWT, Anthony Watts writes:

“Over the past century—and especially since the mid-20th century—the risk of dying from extreme weather has fallen dramatically. This is not a matter of interpretation or projection. It is documented in global disaster databases and confirmed by peer-reviewed research. This new research bolsters what the ‘Our World in Data’ graph shows, seen below.

Global natural disaster death rates, 1900 to 2025

Death rates from natural disasters are measured as the number of deaths per 100,000 individuals.



Data source: EM-DAT, CRED / UCLouvain (2025); Population based on various sources (2024)

Note: Data includes disasters reported up to October 2025.

OurWorldinData.org/natural-disasters | CC BY

Data compiled by the Centre for Research on the Epidemiology of Disasters (CRED) and summarized by Our World in Data show that global death rates from weather-related disasters have dropped by roughly two orders of magnitude since the 1960s. In 1960, extreme weather events killed more than 300 people per 100,000 worldwide. By 1970, that figure had already fallen below 100. By 1990, it was closer to one or two per 100,000. In recent years—particularly since about 2014—global death rates from storms, floods, and wind-related disasters have routinely fallen below one per 100,000 people.

“Extreme weather still happens. What has changed is its ability to kill.”

Watts links to a paper reaffirming part of the data covering the years 1980 to 2016. The claims that CO₂ is causing more deaths and deadly weather events are without physical evidence, just speculation. Unfortunately, the false claims are often used to prevent construction of barriers that reduce the destructiveness of extreme weather events, such as hurricanes and other fierce storms along the coasts. See links under Challenging the Orthodoxy.

Not Understanding the Physics? In a post “It’s Not the Taking Part That Counts” on the blog Climate Skepticism, John Ridgway writes:

*“One of the greatest causes of concern to those who see existential peril in the climate records is the failure of others to act as though they share that understanding. Many experts, particularly from the fields of psychology and sociology, have sought to provide scientific explanations for this supposed perversity. Some say it is due to a myriad of cognitive biases causing the human mind to miscalculate risk. Others seek answers in demography, claiming that political leanings or having certain backgrounds, or even moving in certain circles, gets in the way of critical thinking. Still others put it all down to being led astray by bad actors who have learnt to exploit our dopamine system by rewarding belief in alluring conspiracy theories. **Then, of course, there are the merchants of doubt; the shady influencers who use their playbooks to misinform the public and discredit the scientists.** And maybe it’s just a lack of morality.”* [Boldface added]

Since SEPP founder S. Fred Singer was accused of being a “merchant of doubt,” TWTW adds the following. Many “experts” do not understand that the greenhouse effect of both CO₂ and water vapor is self-limiting, self-governing. Two plus one equals something less than three.

Understanding the greenhouse effect requires some understanding of quantum physics, which is different than classical physics. The scales are radically different. In classical physics energy transfer deals with objects we can see, for the most part. In quantum physics energy transfer deals with objects we cannot see such as molecules, atomic and subatomic particles as well as electromagnetic energy. Classical physics describes deterministic, continuous, and predictable behavior. Quantum physics describes uncertain, quantized (discrete) and probabilistic behavior.

Some scientists recognize that classical physics not only does not solve problems of turbulence, but also classical physics cannot address issues such as the energy transfer from electromagnetic radiation to molecules (molecular transfer). Calling such scientists merchants of doubt is disgraceful. See link under Questioning the Orthodoxy.

Number of the Week: -- 50 to 60 times. As mentioned above, Roger Cohen and William Happer estimate that after hundreds of millions of years of rainfall (carbonic acid) the oceans contain 50 to 60 times more carbon dioxide than the atmosphere. A doubling of atmospheric carbon dioxide will change the alkalinity of the oceans (reduce the pH) by a tiny amount. See link under Challenging the Orthodoxy.

NEWS YOU CAN USE:

Censorship

Welcome To 2026: Europe Laying Groundwork For Climate Science Censorship!

By P Gosselin, No Tricks Zone, Dec 31, 2025

<https://notrickszone.com/2025/12/31/welcome-to-2026-europe-laying-groundwork-for-climate-science-censorship/>

Link to: **Harmful Environmental Agendas and Tactics – A look at France, Germany, and the Netherlands**

By Staff, EU DisinfoLab & Logically June 2025

<https://www.disinfo.eu/wp-content/uploads/2025/06/20250623-heat-harmful-environmental-agendas-tactics.pdf>

The Misinformation Inquisition: How Censorship Shields Approved Narratives from Scrutiny

By Tilak Doshi, His Substack, Via WUWT, Jan 1, 2026

<https://wattsupwiththat.com/2026/01/01/the-misinformation-inquisition-how-censorship-shields-approved-narratives-from-scrutiny/>

Yet, there is cause for optimism in this twilight of technocratic hubris. President Trump's re-election signals a pivot toward evidence-based policy, unshackling science from the misinformation inquisition. By defunding activist enclaves like NCAR and enforcing transparency via executive order, the administration paves the way for genuine inquiry. Imagine a world where debates on climate sensitivity, the role of solar cycles, or the costs of adaptation are conducted openly, without fear of cancellation.

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2013

<https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf>

Summary: https://www.heartland.org/_template-assets/documents/CCR/CCR-II/Summary-for-Policymakers.pdf

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2014

<http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/>

Climate Change Reconsidered II: Fossil Fuels

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019

<http://climatechangereconsidered.org/climate-change-reconsidered-ii-fossil-fuels/>

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, Nongovernmental International Panel on Climate Change (NIPCC), Nov 23, 2015

<http://climatechangereconsidered.org/why-scientists-disagree-about-global-warming/>

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

http://www.sepp.org/publications/nipcc_final.pdf

Challenging the Orthodoxy – Radiation Transfer

The Role of Greenhouse Gases in Energy Transfer in the Earth's Atmosphere

By W.A. van Wijngaarden and W. Happer, Preprint, Mar 3, 2023

<https://co2coalition.org/wp-content/uploads/2023/11/The-Role-of-Greenhouse-Gases-in-Energy-Transfer-in-the-Earths-Atmosphere.pdf>

Dependence of Earth's Thermal Radiation on Five Most Abundant Greenhouse Gases

By W.A. van Wijngaarden and W. Happer, Preprint, December 22, 2020

<https://wvanwijngaarden.info.yorku.ca/files/2020/12/WThermal-Radiationf.pdf?x45936>

Net Zero Averted Temperature Increase

By Richard Lindzen, William Happer, and William A. van Wijngaarden, CO2 Coalition, June 2024

<https://co2coalition.org/publications/net-zero-averted-temperature-increase/>

Radiation Transport in Clouds

By W.A. van Wijngaarden and W. Happer, *Klimarealistene*, Science of Climate Change, January 2025

<https://scienceofclimatechange.org/wp-content/uploads/SCC-2025-vWijngaarden-Happer.pdf>

Challenging the Orthodoxy

Sunlight, the Bond Albedo, CO₂, and Earth's Temperature

By R. Louw, W.A. van Wijngaarden, and W. Happer, CO2 Coalition, Nov 27, 2025

<https://co2coalition.org/publications/sunlight-the-bond-albedo-co2-and-earths-temperature/>

Link to full post: **Sunlight, the Bond Albedo, CO₂, and Earth's Temperature**

By R. Louw, W.A. van Wijngaarden, and W. Happer, CO2 Coalition, Nov 27, 2025

<https://co2coalition.org/wp-content/uploads/2025/12/SAepsilon-Sunlight-the-Bond-Albedo-CO2-and-Earths-Temperature.pdf>

Abstract: The main determinants of Earth's absolute surface temperature, T , are the solar constant, S , the Bond albedo, A , and the effective emissivity for thermal radiation, ϵ . In this note we assume that the value of the effective emissivity, $\epsilon = \epsilon(C)$, is determined by the atmospheric concentration C of CO₂. We show that the solar constant is most important, the albedo is second, and the CO₂ concentration is a distant third.

[SEPP Comment: A mathematically more rigorous explanation of what Howard Hayden described in ten essays on basic climate physics in 2022. As Willie Soon has demonstrated, the "solar constant" is not constant. The Bond albedo is also subject to change. But the formula is useful. See links under Challenging the Orthodoxy and

[https://www.sepp.org/science_papers.cfm?whichyear=2022\]](https://www.sepp.org/science_papers.cfm?whichyear=2022)

"CO₂ is plant food... It's the gas of life."

Interview of Willie Soon, Wide Awake Media, Jan 2, 2026

https://x.com/wideawake_media/status/2007080712176906548

1 hour 47-minute video

Fundamentals of Ocean pH

By Roger Cohen and William Happer, CO₂ Coalition, Sep 18, 2015

<https://co2coalition.org/wp-content/uploads/2021/11/2015-Cohen-Happer-Fundamentals-of-Ocean-pH.pdf>

Climate Change Perceptions

By Roger Caiazza, Pragmatic Environmentalist of New York, Via WUWT, Dec 28, 2025

<https://wattsupwiththat.com/2025/12/28/climate-change-perceptions/>

The intent of this article was to explain why anecdotal “evidence” of climate change is no more than recognition that there are weather pattern cycles that currently show warming. It does not mean that there is conclusive evidence that continued GHG emissions will inevitably increase global temperatures. There is overwhelming evidence that the current warming cycle will eventually reverse. This does not mean that GHG emissions are not a factor but does mean they are a tweak not the primary driver. This combined with the fact that New York GHG emissions are so small relative to global emissions that we cannot meaningfully affect global emissions means that GHG emission reductions for the sake of the climate is a useless endeavor.

Good News, Everyone! Extreme Weather Isn’t Getting Deadlier – Despite What the Media Says

By Anthony Watts, WUWT, Jan 1, 2026

<https://wattsupwiththat.com/2026/01/01/good-news-everyone-extreme-weather-isnt-getting-deadlier-despite-what-the-media-says/>

Link to paper; **Empirical evidence of declining global vulnerability to climate-related hazards**

By Giuseppe Formetta and Luc Feyen Global Environmental Change, July 2019

<https://www.sciencedirect.com/science/article/pii/S0959378019300378>

Safest Global Climate Ever?

Technology and prosperity enable defenses against harsh weather.

By James Freeman, WUWT, Jan 2, 2026

<https://www.wsj.com/opinion/safest-global-climate-ever-25d757a7>

Top Five Climate Science Scandals 2025

Bad science, Trump vengeance, USNCA, "climate risk," and the top holds steady!

By Roger Pielke Jr., His Blog, Dec 29, 2025 [H/t Bernie Kepshire]

https://rogerpielkejr.substack.com/p/top-five-climate-science-scandals?utm_source=post-email-title&publication_id=119454&post_id=182864916&utm_campaign=email-post-title&isFreemail=true&r=172n5r&triedRedirect=true&utm_medium=email

New Study Finds A Higher Rate Of Global Warming From 1899-1940 Than From 1983-2024

By Kenneth Richard, No Tricks Zone, Dec 30, 2025

<https://notrickszone.com/2025/12/30/new-study-finds-a-higher-rate-of-global-warming-from-1899-1940-than-from-1983-2024/>

Link to working paper: **Revisiting CO2 emissions and global warming: Implications for society**

By Bibek Bhatta, Queen's University Belfast, Aug 17, 2025

<https://pure.qub.ac.uk/en/publications/revisiting-co2-emissions-and-global-warming-implications-for-soci/>

From abstract: This paper revisits the relationship between CO2 emissions and global warming by analyzing over 60 million daily temperature observations from over 1600 global weather stations, with continuous records spanning from the pre-1900 era to 2024. Employing fixed effects models to isolate temperature trends from station-specific and seasonal variations, the study finds an overall warming trend of 0.0054°C per year after controlling for urban built-up areas. The analysis reveals a significant disconnect between the rise in annual anthropogenic CO2 emissions and the rate of temperature change. Notably, the period of the sharpest warming occurred in the early 20th century when CO2 emission levels were modest.

[SEPP Comment: Around the globe, there were about 1600 weather stations in 1900.]

The world warmed faster 100 years ago when man-made CO2 was one-eighth as high...

By Jo Nova, Her Blog, Dec 31, 2025

<https://joannenova.com.au/2025/12/the-world-warmed-faster-100-years-ago-when-man-made-co2-was-one-eighth-as-high/>

[SEPP Comment: Shows the clustering of a sample of the locations, most in the US. See links immediately above.]

Defending the Orthodoxy

Contrails and their claimed climatic effect

By Anthony Watts, WUWT, Dec 27, 2025

<https://wattsupwiththat.com/2025/12/27/contrails-and-their-claimed-climatic-effect/>

Link to paper: **The social costs of aviation CO2 and contrail cirrus**

By Daniel J. A. Johansson, et al., Nature Communications, Sep 29, 2025

<https://www.nature.com/articles/s41467-025-64355-5>

From the abstract: The radiative forcing (RF) of contrail cirrus is substantial, though short-lived, uncertain, and heterogeneous, whereas the RF from CO2 emissions is long-term and more predictable.

While uncertainty is considerable, our findings suggest that carefully implemented operational contrail avoidance could offer climate benefits even when the social cost of additional CO2 emissions is considered.

[SEPP Comment: The statement that “the RF from CO2 emissions is long-term and more predictable” may be correct. But, generally, predictions greatly overestimate actual warming. Thus, the generally used predictions do not correctly predict radiative forcing from CO2 emissions.]

Defending the Orthodoxy – Bandwagon Science

Claim: Some Populations are Approaching the Limits to Climate Adaption

By Eric Worrall, WUWT, Dec 31, 2025

<https://wattsupwiththat.com/2025/12/31/claim-some-populations-are-approaching-the-limits-to-climate-adaption/>

Link to: **Unequal evidence and impacts, limits to adaptation: Extreme Weather in 2025**

By Staff, World Weather Attribution, Dec 29, 2025

<https://www.worldweatherattribution.org/unequal-evidence-and-impacts-limits-to-adaptation-extreme-weather-in-2025/>

From WWA Introduction: At the close of 2025, this report underscores that even in a year that had weak La Nina conditions (NASA, 2025), that lead to lower sea surface temperatures, global temperatures remained very high and significant harm from human-induced climate change is very real. It is not a future threat, but a present-day

From Worrall: I went through the main report, most of the listed problems were problems of poverty or governance. Places like Sudan, Philippines, Spain, Greece, Pakistan, Cuba and Jamaica featured heavily in the report. A handful of wealthy countries like South Korea and Mississippi River Valley in the USA were mentioned, but guess what? Wealthy countries were not impacted to the same extent as say women standing in the sun without air-conditioning in poverty-stricken disaster zones like Sudan.

[SEPP Comment: See links by Watts and Freeman on declining deaths from weather events under Challenging the Orthodoxy.]

When Everything Is a Heat Wave and Every Change Is Climate

By Charles Rottere, WUWT, Jan 2, 2026

<https://wattsupwiththat.com/2026/01/02/when-everything-is-a-heat-wave-and-every-change-is-climate/>

Link to paper: **Major heat wave in the North Atlantic had widespread and lasting impacts on marine life**

By Karl Michael Werner, et al., AAAS Science Advances, Jan 1, 2026

<https://www.science.org/doi/10.1126/sciadv.adt7125>

From Rotter: In the end, the paper offers a compelling story, but not a disciplined causal argument. A loosely defined marine heat wave is paired with a loosely defined ecological baseline, and the two are joined by temporal coincidence and confident language. The synthesis feels objective because it is large and comprehensive, not because its foundations are secure.

Questioning the Orthodoxy

Six Impossible Climate Things to Believe

By Ron Clutz, His Blog, Jan 1, 2026

<https://rclutz.com/2026/01/01/six-impossible-climate-things-to-believe/>

Thirty Failed Climate Forecasts (optimism please)

By Robert Bradley Jr, Master Resource, Jan 2, 2026

<https://www.masterresource.org/co2-climate-optimism/co2-climate-optimism-vs-statism/>

Energy Transition Meltdown Could Mean Global Bifurcation

By Vijay Jayaraj, Daily Caller, Via WUWT, Dec 27, 2025

<https://wattsupwiththat.com/2025/12/27/energy-transition-meltdown-could-mean-global-bifurcation/>

History will likely remember 2025 as the year energy corporatists finally stopped pretending there is a climate crisis. For a decade, a bizarre theater of the absurd played out as titans of the oil and gas industry apologized for their core business while pledging allegiance to a “green transition” that existed mostly in the imaginations of Western bureaucrats. But the curtain has seemingly fallen.

Data Centers, the Grid, and the Assumptions That Don’t Hold Up

By Aaron Larson, Power Mag, Dec 29, 2025

<https://www.powermag.com/data-centers-the-grid-and-the-assumptions-that-dont-hold-up/>

One of the most overhyped narratives in the data center space, Empedocles argues, is the notion that these facilities will function as flexible grid assets. The assumption that demand response, virtual power plants, on-site generation, or batteries will enable data centers to contribute meaningfully to grid stability is, in his view, fundamentally flawed at hyperscale.

What’s underestimated, he said, is how much firm generation and transmission capacity is actually required to serve these facilities. **“Data centers will take far more from the grid than they will ever give back,”** said Empedocles. **“Planning for them as flexible resources risks underbuilding the infrastructure needed to support the incoming scale of load.”** [Boldface added]

Expect Soon Another PIK Paper Claiming Warming Leads To Cold Snaps Over Europe

By P Gosselin, No Tricks Zone, Jan 2, 2025

<https://notrickszone.com/2026/01/02/expect-soon-another-pik-paper-that-claims-warming-leads-to-cold-snaps-over-europe/>

Winter across Europe has been on the mild side so far – just as predicted by global warming alarmists. But now the weather is about to turn cold.

Shropshire Sinkhole? Blame It On Climate Change!

By Paul Homewood, Not a Lot of People Know That, Dec 29, 2025

<https://notalotofpeopleknowthat.wordpress.com/2025/12/29/shropshire-sinkhole-blame-it-on-climate-change/>

If you want more money from the government, what better excuse do you need than “climate change”!

It’s Not the Taking Part That Counts

Game theory and climate change

By John Ridgway, Climate Skepticism, Dec 29, 2025 [H/t Bernie Kepshire]

<https://cliscep.com/2025/12/29/its-not-the-taking-part-that-counts/>

After Paris!

Claim: COP30 Was “Clouded” by the Issuing of Oil Licenses in the Amazon

By Eric Worrall, WUWT, Jan 1, 2026

<https://wattsupwiththat.com/2026/01/01/claim-cop30-was-clouded-by-the-issuing-of-oil-licenses-in-the-amazon/>

From an article by Elin Westerling:

“This year, the Paris Agreement turned ten—An occasion to commemorate a truly remarkable achievement of multilateral diplomacy
While Brazil clearly shared the disappointment in the lack of a fossil fuel phaseout roadmap, their ability in getting all states to unite behind it may have been clouded by
[President of Brazil] Lula da Silva’s decision to grant new oil exploration licenses in the Amazon delta just weeks before COP30 began.” [Boldface added]

Seeking a Common Ground

What is Technology

By Kelvin Kemm, WUWT, Dec 27, 2025

<https://wattsupwiththat.com/2025/12/27/what-is-technology/>

CFACT comments on using AI to understand big bodies of research

By David Wojick, CFACT, Dec 29, 2025

<https://www.cfact.org/2025/12/29/cfact-comments-on-using-ai-to-understand-big-bodies-of-research/>

Models & Lab Studies

By James D. Agresti, Just Facts, Via WUWT, Jan 2, 2026

<https://wattsupwiththat.com/2026/01/02/models-lab-studies/>

If you want to determine how well a particular medicine works, what’s the worst possible type of study you can do?

[SEPP Comment: There is a difference between physical science and medical science.]

Stupidity: A Dummies Guide

By Chuck Dinerstein, MD, ACSH, Aug 8, 2025

<https://www.acsh.org/news/2025/08/08/stupidity-dummies-guide-49663>

Changing Weather

True, Rigzone, 2025 Was Quiet in the USA For Hurricanes

By Linnea Lueken, Climate Realism, Dec 26, 2025

<https://climaterealism.com/2025/12/true-rigzone-this-year-was-quiet-in-the-usa-for-hurricanes/>

Met Office Blowing Hot & Cold!

By Paul Homewood, Not a Lot of People Know That, Jan 1, 2026

<https://notalotofpeopleknowthat.wordpress.com/2026/01/01/met-office-blowing-hot-cold/>

The Windstorm That Never Came: A Failure of Communication

By Cliff Mass, Weather Blog, Dec 29, 2025

<https://cliffmass.blogspot.com/2025/12/the-windstorm-that-never-came-failure.html>

The National Weather Service needs serious reform and reorganization. The American people deserve state-of-the-science weather prediction. They are not getting it now, and last week was a good example of the persistent failure mode.

Changing Seas

Slam Dunk: Δtemp Drives Δco₂, Ocean Biochemistry at Work

By Ron Clutz, His Blog, Dec 30, 2025

<https://rclutz.com/2025/12/30/slam-dunk-%ce%b4temp-drives-%ce%b4co2-ocean-biochemistry-at-work/>

Link to paper: A Thermal Acid Calcification Cause for Seasonal Oscillations in the Increasing Keeling Curve

By Ivan R. Kennedy, et al., Preprint, Accessed Jan 2, 2026

<https://arxiv.org/pdf/2505.06253>

From abstract: Our findings reveal that warming waters absorb atmospheric CO₂ by promoting calcium carbonate formation, acidifying seawater and boosting CO₂ release to the atmosphere in late autumn and winter, when atmospheric CO₂ becomes highest. The model predicts a net annual CO₂ rise of 2 ppmv, driven by calcification rather than land-based processes.

[SEPP Comment: Does not explain why CO₂ levels are higher today than during the last interglacial period, the Eemian. Both land and ocean-based processes may explain the seasonal changes in CO₂.]

Changing Cryosphere – Land / Sea Ice

Arctic Ice Recovering 2025 Yearend

By Ron Clutz, His Blog, Jan 2, 2026

<https://rclutz.com/2026/01/02/arctic-ice-recovering-2025-yearend/>

Hiding the Pea, Revisited: Remove the Scenario, Keep the Result

By Charles Rotter, WUWT, Dec 28, 2025

<https://wattsupwiththat.com/2025/12/28/hiding-the-pea-revisited-remove-the-scenario-keep-the-result/>

Link to paper: Peak glacier extinction in the mid-twenty-first century

By Lander Van Tricht, et al., Nature Climate Change, Dec 15, 2025

<https://www.nature.com/articles/s41558-025-02513-9>

From Rotter: The paper's most dramatic conclusions—those concerning peak glacier extinction rates approaching 4,000 glaciers per year and near-complete loss by century's end—are driven largely by a +4.0 °C warming case constructed from SSP5-8.5 and SSP3-7.0 simulations. The result is familiar: the scenario is gone, but the signal remains.

Changing Earth

The 2023 climate event revealed the greatest failure of climate science

By Javier Vinos, Climate Etc., Dec 29, 2025

<https://judithcurry.com/2025/12/29/the-2023-climate-event-revealed-the-greatest-failure-of-climate-science/>

New Study: Human CO₂ Emissions Responsible For 1.57% Of Global Temperature Change Since 1750

By Kenneth Richard, No Tricks Zone, Jan 2, 2026

<https://notrickszone.com/2026/01/02/new-study-human-co2-emissions-responsible-for-1-57-of-global-temperature-change-since-1750/>

Link to paper: Human Versus Natural Influences on Climate and Biodiversity: The Carbon Dioxide Connection

By W. Jackson Davis, Sci, Nov 1, 2025

<https://www.mdpi.com/2413-4155/7/4/152>

Lowering Standards

Outstanding BBC Complaints

By Paul Homewood, Not a Lot of People Know That, Dec 30, 2025

<https://notalotofpeopleknowthat.wordpress.com/2025/12/29/outstanding-bbc-complaints-2/>

[SEPP Comment: BBC is looking into it – since August.]

Communicating Better to the Public – Use Yellow (Green) Journalism?

Good News Everyone! We hit ‘Peak Climate’ – Media Articles are in Decline

By Anthony Watts, WUWT, Dec 30, 2025

<https://wattsupwiththat.com/2025/12/30/good-news-everyone-we-hit-peak-climate-media-articles-are-in-decline/>

Major Climate Grooming Course Shuts Down as World Turns Away from Constant Media Gaslighting

By Chris Morrison, The Daily Sceptic, Dec 29, 2025 [H/t Bernie Kepshire]

<https://dailysceptic.org/2025/12/29/major-climate-grooming-course-shuts-down-as-world-turns-away-from-constant-media-gaslighting/>

In a further sign of declining interest in the Net Zero fantasy, a major climate grooming course has shut up shop. The terminated six-month indoctrination was run by the Oxford Climate Journalism Network (OCJN) and was funded by a number of tax-efficient billionaire foundations. Over the last four years it has hosted around 800 journalists from over 100 countries. Described as a “flagship online course”, it will be “halted” from January 2026.

Open Letter To The Telegraph

By Paul Homewood, Not a Lot of People Know That, Jan 2, 2026

<https://notalotofpeopleknowthat.wordpress.com/2026/01/02/open-letter-to-the-telegraph-2/#more-90084>

[SEPP Comment: In an open letter, Homewood gave his views on renewables replacing fossil fuels four years ago.]

Communicating Better to the Public – Use Propaganda

We analyzed 73,000 articles and found the UK media is divorcing ‘climate change’ from net zero

By James Painter, The Conversation, Dec 23, 2025 [H/t Bernie Kepshire]

<https://theconversation.com/we-analysed-73-000-articles-and-found-the-uk-media-is-divorcing-climate-change-from-net-zero-272527>

Given these levels of public confusion and misunderstanding, reporters should remind audiences more frequently of why net zero is a necessity. At the very least, a simple statement outlining that scientists view net zero as essential to stopping global warming should be standard practice.

No, Yale Climate Connections, Dramatic Photos Don’t Prove Climate Change Effects

By Anthony Watts, Climate Realism, Dec 30, 2025

<https://climaterealism.com/2025/12/no-yale-climate-connections-dramatic-photos-dont-prove-climate-change-effects/>

Communicating Better to the Public – Protest

Aussie Greens Demand Wind Farm Cancellation to Protect Endangered Birds

By Eric Worrall, WUWT, Dec 28, 2025

<https://wattsupwiththat.com/2025/12/28/aussie-environmentalists-demand-wind-farm-cancellation-to-protect-endangered-birds/>

“Experts say climate change bigger threat to biodiversity than renewable energy projects”

From Worrall: So long as Australia rejects such an obvious solution this green on green conflict will continue. Green energy advocates who claim you have to bulldoze nature to protect the environment vs old style environmentalists who actually care about endangered species, who after 30 years of shameful silence in the face of large-scale destruction of sensitive wilderness areas are finally finding their voices.

Eco Loons Object To AI Centers in Scotland

By Paul Homewood, Not a Lot of People Know That, Dec 27, 2025

<https://notalotofpeopleknowthat.wordpress.com/2025/12/27/eco-loons-object-to-ai-centres-in-scotland/>

As with Ireland, this is all a reminder that wind and solar power cannot run a modern economy.

Questioning European Green

The Case Against Net Zero – a Thirteenth Update

Unachievable Disastrous Pointless

By Robin Guenier, Climate Scepticism, Dec 31, 2025 [H/t Bernie Kepshire]

<https://cliscep.com/2025/12/31/the-case-against-net-zero-a-thirteenth-update/>

In other words, Net Zero means that Britain is legally obliged to pursue an unachievable, potentially disastrous and pointless policy – a policy that imperils our national security and could result in Britain’s economic destruction.

Tide Turns Against Climatists’ Agenda

By Ron Clutz, His Blog, Dec 29, 2025

<https://rclutz.com/2025/12/29/tide-turns-against-climatists-agenda/>

The folly of the climate agenda lies in its defiance of economic and physical realities. Low-density, intermittent renewables like wind and solar cannot power a modern industrial economy without massive subsidies and grid instability. The Office for Budget Responsibility has warned that Net Zero's costs, projected at £1.4 trillion by 2050, far outstrip promised savings. Meanwhile, global competitors like China and India, responsible for over 40% of emissions, continue burning coal with little regard for Western virtue-signaling. Britain's "lead by example" approach is not just naïve, it's self-destructive, hamstringing its economy while others race ahead.

Funding Issues

The Trump Administration’s Fight To Fund Scientists

By Paul D. Thacker, WUWT, Dec 30, 2025

<https://wattsupwiththat.com/2025/12/30/the-trump-administrations-fight-to-fund-scientists/>

The sky has not fallen on American research in the 10 months since. The National Institutes of Health (NIH) is still paying the same 50% to 70% in indirect costs – the premium added on top

of grants meant to reimburse universities for providing labs and other research infrastructure – because lawsuits have frozen the president’s proposed policy. One Trump official admits this is unlikely to change because the administration will almost certainly lose in court. The current system, which provides the lion’s share of billions of dollars each year for often-unspecified overhead costs to universities, has the backing of Congress. As it stands, there appears to be no momentum, even among Republicans, to reform the practice.

While institutions charge private foundations like Gates a mere 10% and Rockefeller 15% for indirect costs, they charge the NIH much higher rates – 69% for Harvard, 67.5% for Yale, and 63.7% for Johns Hopkins.

[SEPP Comment: Is the administration of government funded university research more valuable than the research and learning?]

The Political Games Continue

Our Labour MP Remains Silent About EV Problems

By Paul Homewood, Not a Lot of People Know That, Jan 1, 2026

<https://notalotofpeopleknowthat.wordpress.com/2026/01/01/our-labour-mp-remains-silent-about-ev-problems/>

Litigation Issues

Climate activists v. the U.S. energy industry: Cases to watch in 2026

By Andrew Rice, Center Square, Via Climate Realism, Dec 29, 2025

<https://climaterealism.com/2025/12/climate-activists-v-the-u-s-energy-industry-cases-to-watch-in-2026/>

[SEPP Comment: States and other jurisdictions suing oil companies claiming the use of hydrocarbon fuels is a public nuisance. Why don’t those governments just ban the use of hydrocarbon fuels in their jurisdiction to see whether the public thinks these fuels are a nuisance?]

Subsidies and Mandates Forever

Ed Miliband’s Insanity’ | Labour To Offer ‘Grants’ For Solar Panels

By Paul Homewood, Not a Lot of People Know That, Dec 30, 2025

<https://notalotofpeopleknowthat.wordpress.com/2025/12/30/ed-milibands-insanity-labour-to-offer-grants-for-solar-panels/>

5-minute Video

Energy Issues – Non-US

Offshore pipeline closure risk: the hidden threat to GB energy security

By Paul Homewood, Not a Lot of People Know That, Dec 30, 2025

<https://notalotofpeopleknowthat.wordpress.com/2025/12/30/offshore-pipeline-closure-risk-the-hidden-threat-to-gb-energy-security/>

Link to analysis: **Offshore pipeline closure risk: the hidden threat to GB energy security**

By Kathryn Porter, Watt-Logic, Dec 30, 2025

<https://watt-logic.com/2025/12/30/offshore-pipeline-closure-risk/>

From Porter: The UKCS [UK Continental Shelf] is in a much sharper decline than had previously been expected, primarily as a result of a punitive fiscal regime and current Government policy against new exploration. This not only threatens energy security in terms of

access to molecules, it also threatens the viability of offshore pipeline infrastructure. The key issue isn't simply that UKCS output is declining, but that the offshore gathering and transmission system has fixed costs and physical interdependencies – as throughput falls, it becomes progressively harder to maintain and justify these assets.

Miliband Claims High Energy Bills Due To Fossil Fuels

By Paul Homewood, Not a Lot of People Know That, Dec 30, 2025

<https://notalotofpeopleknowthat.wordpress.com/2025/12/30/miliband-claims-high-energy-bills-due-to-fossil-fuels/>

Gas Boiler Owners “Will Subsidize Heat Pump Users” With New Levy Under Ed

Miliband’s £15 Billion Energy Plans

By Will Jones, The Daily Sceptic, Dec 31, 2025

<https://dailysceptic.org/2025/12/31/gas-boiler-owners-will-subsidise-heat-pump-users-with-new-levy-under-ed-milibands-15-billion-energy-plans/>

Energy Issues -- US

The PJM Capacity Auction Sent a Message the Washington Left Can’t Spin Away

By Terry L. Headley, Real Clear Energy, Dec 26, 2025

https://www.realclearenergy.org/articles/2025/12/26/the_pjm_capacity_auction_sent_a_message_the_washington_left_cant_spin_away_1155567.html

The latest PJM capacity auction cleared at the maximum allowed price—\$333 per megawatt-day—and still came up short. Even at the price cap, the market could not buy enough power to meet PJM’s own reliability standard.

Capacity auctions exist for one reason: to make sure the lights stay on when the system is under real stress. Not on a mild spring afternoon. On the worst day of the year—when demand peaks, equipment is strained, and weather is working against you. This auction tested that standard and found the system wanting.

By the time bidding hit the price cap, PJM still had not secured enough dependable capacity. That is not a market failure. That is a supply failure. You cannot buy power plants that no longer exist, no matter how high the bid.

Time to Reconsider the Climate Act Press Release

By Roger Caiazza, Pragmatic Environmentalist of New York, Accessed Jan 1, 2026

<https://pragmaticenvironmentalistofnewyork.blog/>

Two weeks after this was published I can safely now say that nobody[in government] I contacted responded. I thought that showing that \$593 per month in added energy expenses would have prompted some kind of response.

Thomas Sowell has been quoted as saying: “It is hard to imagine a more stupid or more dangerous way of making decisions than by putting those decisions in the hands of people who pay no price for being wrong”. In this instance, there is nothing more stupid or dangerous than ignoring the people who will pay the price if there are problems with the energy system.

High Electricity Prices Are a Choice Blue States Make Every Day

By Issac Orr, Tom Pyle, Real Clear Energy, Dec 29, 2025

https://www.realclearenergy.org/articles/2025/12/29/high_electricity_prices_are_a_choice_blue_states_make_every_day_1155858.html

Link to slides: U.S. State Electricity Resource Standards: 2025 Data Update

By Galen Barbose, Berkely Lab, August 2025

<https://emp.lbl.gov/sites/default/files/2025-08/State%20Electricity%20Resource%20Standards-2025%20Data%20Update.pdf>

From article: Today, 28 states enforce an RPS, requiring a certain percentage of retail electricity sales to come from renewable sources, and 16 states have 100% clean energy standards (CES) or carbon-free mandates. Many of these policies compel utilities to overbuild intermittent generation, such as wind and solar, thereby requiring significant investments in transmission, grid-scale storage, and backup generation to maintain reliability. The result is a higher total system cost, which is passed onto ratepayers in the form of higher electricity rates.

Power Generation in the Age of AI: Year-End 2025 Outlook

By Adil Sener, Power Mag, Dec 31, 2025

https://www.powermag.com/power-generation-in-the-age-of-ai-year-end-2025-outlook/?utm_source=omeda&utm_medium=email&utm_campaign=pwrnews+eletter&oly_enc_id=7809H6412578J0B

The U.S. power sector has entered a defining decade shaped by speed, reliability and electricity pragmatism. The slow-and-steady transition narrative of the last cycle has collided with today's data center driven load growth and unexpected shifts in supply chains, cost of capital and system reliability. The coming years will require balancing these pressures while supporting U.S. economic competitiveness and geopolitical strength, with federal policy once again serving as an essential backdrop. In this environment, the most valuable power will not be the cheapest MWh but the power that is deliverable, firm, financeable and on time.

[SEPP Comment: The marginal costs of unreliable power when generating are irrelevant. Total cost of reliable generation is most important.]

Amazon Data Centers Aren't Raising Your Electric Bills—They May Be Lowering Them

By Aaron Larson, Power Mag, Dec 29, 2025

<https://www.powermag.com/amazon-data-centers-arent-raising-your-electric-bills-they-may-be-lowering-them/>

Link to study: Tailored for Scale: Designing Electric Rates and Tariffs for Large Loads

A Guidebook of Industry Best Practices and Examples from Real-World Amazon Data Center Case Studies

By Isabelle Riu, et al., Energy and Environmental Economics, Inc., 2025

<https://www.ethree.com/wp-content/uploads/2025/12/RatepayerStudy.pdf>

As electricity demand from data centers continues to surge, a persistent question has dogged the industry: Are residential ratepayers footing the bill for massive tech infrastructure? According to Amazon Web Services (AWS) and an independent study it commissioned, the answer is a definitive no.

“The simple answer is that Amazon data centers are not being subsidized by other utility customers,” Ulrich said. The study projects that Amazon's data centers will generate \$33,500/MW of surplus value in 2025, increasing to \$60,650/MW by 2030.

[SEPP Comment: The key question: does the surplus value reduce consumer bills?]

Hochul must reveal the “ruinous cost” of the Climate Act

By David Wojick, CFACT, Jan 1, 2025

<https://www.cfact.org/2026/01/01/hochul-must-reveal-the-ruinous-cost-of-the-climate-act/>

[SEPP Comment: Not if she runs on affordability.]

Washington’s Control of Energy

Entering the New Year with Bipartisan Permitting Momentum

By Heather Reams, Real Clear Energy, Dec 29, 2025

https://www.realclearenergy.org/articles/2025/12/29/entering_the_new_year_with_bipartisan_permitting_momentum_1155892.html

How Trump transformed energy, environmental policy this year

By Rachel Frazin, The Hill, Dec 28, 2025

<https://thehill.com/policy/energy-environment/5661083-trump-loosens-energy-environmental-regulations/>

Trump Shook Up Energy Policy In 2025. Disaster Could Still Strike In 2026.

By Audrey Streb, Daily Caller, Jan 1, 2026

<https://dailycaller.com/2026/01/01/trump-energy-democrat-coal-climate-change-environmentalism-fossil-fuels/>

Offshore wind companies challenge Trump anti-wind orders

By Rachel Frazin, The Hill, Jan 2, 2026

<https://thehill.com/policy/energy-environment/5670336-offshore-wind-trump-court-challenge/>

[SEPP Comment: Was the administration’s reasoning as arbitrary as the reasoning of the Biden and Obama administrations in blocking natural gas pipeline?]

Nuclear Energy and Fears

SMRs Explained: Real-World Economics, Fuel Bottlenecks, and the Race to Scale

By Michael Kern, Oil Price.com, Jan 1, 2025 [H/t Bernie Kepshire]

<https://oilprice.com/Alternative-Energy/Nuclear-Power/SMRs-Explained-Real-World-Economics-Fuel-Bottlenecks-and-the-Race-to-Scale.html>

We are seeing a move toward Generation IV concepts: molten salt reactors that can't melt down because the fuel is already liquid, and gas-cooled reactors that can provide the 700°C+ process heat required for making steel or hydrogen.

The U.S. Nuclear Regulatory Commission (NRC) was designed to regulate massive, one-off light-water reactors. Applying 1970s regulations to 2025 technology is like trying to get a Tesla licensed using rules written for steam engines.

The IEA’s APS scenario calls for 120 GW of SMR capacity by 2050. Under today’s policy settings, we are only on track for 40 GW. The gap between those two numbers represents the difference between a grid that works and a grid that fails.

The next five years (2025–2030) will be the most important in the history of nuclear power. SMRs are not a "silver bullet," but they are the only "firm" floor that makes a clean grid physically possible. If SMR manufacturers can reach a production rate of just one unit per month, the "learning curve" will finally drive costs toward that \$4,500/kW target.

Seizing the Moment for U.S. Nuclear Energy Dominance

By Sam Thernstrom , Paul Saunders , Todd Abrajano, Real Clear Energy, Dec 30, 2025

https://www.realclearenergy.org/articles/2025/12/30/seizing_the_moment_for_us_nuclear_energy_dominance_1156024.html

Link to: **Deploying Advanced Nuclear Reactor Technologies for National Security**

Executive Order, The White House, May 23, 2025

<https://www.whitehouse.gov/presidential-actions/2025/05/deploying-advanced-nuclear-reactor-technologies-for-national-security/>

From Article: The plan reflects the Administration's understanding of two key facts: Effective government policy support is needed to jumpstart a resurgence of nuclear power; and success depends upon building new reactors in series, not just one or two. That allows companies to establish robust supply chains and secure the manufacturing scale that drives cost-reductions. Congress should also ease the licensing burden on small, innovative reactor developers. The NRC is funded almost entirely through industry fees—more than \$800 million annually—while agencies like the Environmental Protection Agency use taxpayer funds to support its work regulating other power generators. Nuclear should be treated no differently.

Nuclear Power is making a global comeback! Where is America at?

By Ronald Stein P.E., Steve Curtis, and Oliver Hemmers, America Outloud News, Dec 29, 2025

<https://www.americaoutloud.news/nuclear-power-is-making-a-global-comeback-where-is-america-at/>

BEFORE the Nuclear Regulatory Commission (NRC) (1954-1977): 100+ reactors were built and safely operating during that 23-year period!

AFTER THE NRC (1977-2025): Only 2 Large Light-Water Commercial Construction Permits were issued over that 48-year period!

[SEPP Comment: The worst incident in the US was the Three Mile Island accident of a partial meltdown in a reactor that took place on March 28, 1979, with no detectable health effects on workers or the public, except extreme panic driven, in part, by ignorant politicians.]

Alternative, Green ("Clean") Solar and Wind

Blockbuster: Renewables, EVs need silver but China bans silver exports, and the price takes off

By Jo Nova, Her Blog, Dec 28, 2025

<https://joannenova.com.au/2025/12/blockbuster-renewables-evs-need-silver-but-china-bans-silver-exports-and-the-price-takes-off/>

BBC: "India's solar boom faces a hidden waste problem"

By Eric Worrall, WUWT, Dec 28, 2025

<https://wattsupwiththat.com/2025/12/28/bbc-indias-solar-boom-faces-a-hidden-waste-problem/>

Green energy company in the hot seat after bald eagles knocked out of the skies

Ørsted Onshore North America is facing over \$30,000 in fines after two bald eagles were discovered dead

By Peter Pinedo, Fox News, Nov 3, 2025 [H/t Bernie Kepshire]

<https://www.foxnews.com/politics/green-energy-company-hot-seat-after-bald-eagles-knocked-out-of-skies/>

Because the Ørsted facilities did not have permits to kill the eagles, the Fish and Wildlife Service is proposing civil penalties of \$16,170 per violation, totaling \$32,340. The bureau is giving Ørsted 45 days to respond to the notice before sealing the penalties.

Alternative, Green (“Clean”) Energy -- Other

The Next Wave in Hydropower Condition Monitoring

By Mike Hastings and Jon Fox, Power Mag, Dec 23, 2025

<https://www.powermag.com/the-next-wave-in-hydropower-condition-monitoring/>

Modern hydropower operations differ significantly from their traditional counterparts. Where facilities once featured oversized units operating under continuous baseload conditions with well-staffed maintenance teams, today’s environment demands value-engineered units that must handle load following, peaking operations, and frequent starts and stops. This operational shift, combined with partial loading conditions that many aging machines were never designed to handle, creates new stress patterns and potential failure modes that require sophisticated monitoring approaches.

Alternative, Green (“Clean”) Energy -- Storage

The Unreported Story Of Grid Scale Battery Fires

By Francis Menton, Manhattan Contrarian, Dec 28, 2025

<https://www.manhattancontrarian.com/blog/2025-12-28-the-unreported-story-of-grid-scale-battery-fires>

Alternative, Green (“Clean”) Vehicles

Tesla falls behind China’s BYD as top EV maker after second year of declining sales

By Julia Shapero, The Hill, Jan 2, 2026

<https://thehill.com/policy/technology/5670030-byd-overtakes-tesla-ev-sales/>

[SEPP Comment: New BYD EV are not for sale in the US due to safety regulations. Tariffs are another issue.]

Hybrid Horror – You are 3x More Likely to Die in a Hybrid Vehicle than a Gasoline Vehicle

By Eric Worrall, WUWT, Dec 30, 2025

<https://wattsupwiththat.com/2025/12/30/hybrid-horror-you-are-3x-more-likely-to-die-in-a-hybrid-than-a-gasoline-vehicle/>

Electric car charger rollout suffers slowdown in blow to Labour

By Paul Homewood, Not a Lot of People Know That, Jan 1, 2026

<https://notalotofpeopleknowthat.wordpress.com/2026/01/01/electric-car-charger-rollout-suffers-slowdown-in-blow-to-labour/>

Installations of EV Chargers Collapse

By Sallust, The Daily Sceptic, Dec 31, 2025

<https://dailysceptic.org/2025/12/31/installations-of-ev-chargers-collapse/>

California Dreaming

**Why Would California Bureaucrats Want to Blow Up Dams and Take Water From 600K?
Victor Davis Hanson Explains**

By Victor Davis Hansen, The Daily Signal, Dec 30, 2025

<https://www.dailysignal.com/2025/12/30/victor-davis-hanson-california-bureaucrats-threaten-the-water-of-600k/>

... “a symbolic act to punish civilization and hurt people.”

Video and transcript

Health, Energy, and Climate

Study shows boiling drinking water can remove microplastics

By Jordan Perkins, The Hill, Dec 30, 2025

<https://thehill.com/policy/energy-environment/5665698-boiling-water-microplastics-study/>

Link to paper: **Drinking Boiled Tap Water Reduces Human Intake of Nanoplastics and Microplastics**

By Zimin Yu, et al., Environmental Science & Technology Letters, Feb 28, 2024

<https://pubs.acs.org/doi/10.1021/acs.estlett.4c00081>

Mouse study suggests that starch-based microplastics may raise blood sugar, damage organs

By Jo Nova, Her Blog, Dec 30, 2025

<https://joannenova.com.au/2025/12/mouse-study-suggests-that-starch-based-microplastics-may-raise-blood-sugar-damage-organs/>

Other Scientific News

Tiny Fiddler crabs are hoovering up and breaking down microplastics, study finds

By Liam Gilliver, Euro News, Jan 2, 2026

<https://www.euronews.com/green/2026/01/02/tiny-fiddler-crabs-are-hoovering-up-and-breaking-down-microplastics-study-finds>

Link to paper: **Beyond Abiotic Decay: Fiddler Crabs Accelerate Plastic Fragmentation in Pollution Hotspots**

By José M. Riascos, Global Change Biology, Dec 17, 2025

<https://onlinelibrary.wiley.com/doi/10.1111/gcb.70651>

BELOW THE BOTTOM LINE

Europe’s biggest insect factory goes bankrupt — these bugs are not even Dog Food

By Jo Nova, Her Blog, Jan 2, 2026

<https://joannenova.com.au/2026/01/europes-biggest-insect-factory-goes-bankrupt-ze-bugs-are-not-even-dog-food/>

How reality crushed Ÿnsect, the French startup that had raised over \$600M for insect farming
In the biggest irony, insects need high temperatures to grow fast, and the energy costs were killing them:

Agenda 2030 Failed: The Largest Insect Farm in Europe Went Bankrupt

This happened despite having received hundreds of millions of dollars in public and private funds

Editorial, Derechadiario.com, Dec 29, 2025

<https://derechadiario.com.ar/us/argentina/failure-2030-agenda-went-bankrupt-largest-insect-farm-europe>

The company's failure is due to the cultural rejection of insect consumption by humans. From its beginnings, insect moved among several segments: animal feed, aquaculture, pet food, and human consumption.

[SEPP Comment: Doubt that Crispy Cockroaches will replace Krispy Kremes.]

EPA urged to classify abortion drugs as pollutants

By Patrick Djordjevic, The Hill, Jan 2, 2026

<https://thehill.com/homenews/administration/5669492-epa-abortion-drugs-water-pollutants/>

[SEPP Comment: Abortion drugs kill human life; CO2 is essential for human life and EPA classifies CO2 as a pollutant.]

The Year of the Octopus

By Paul Homewood, Not a Lot of People Know That, Dec 27, 2025

<https://notalotofpeopleknowthat.wordpress.com/2025/12/27/the-year-of-the-octopus/>

In fact, Olly the Octopus never went away!

Far from walking along the bottom of the sea all the way from Spain, octopus rarely travel more than a hundred yards or so.

The blooms are due to higher survival rates for eggs and larvae in milder winters. As Bryce Stewart points out, the adults die soon after breeding, a natural way of keeping population under control.

ARTICLES

1. Trump Unbreaks the Internet

Deregulation in broadband deployment is saving billions of dollars for taxpayers.

By The Editorial Board, WSJ, Dec. 28, 2025

<https://www.wsj.com/opinion/trump-administration-broadband-deregulation-commerce-arielle-roth-a6f1d1e8?mod=Searchresults&pos=1&page=1>

TWTW Summary: After stating that economists may have underestimated the costs of regulation the editorial states:

“Congress appropriated \$42 billion in the 2021 infrastructure bill for states to expand broadband to ‘unserved’ and rural communities. The spending was unnecessary since satellite services like SpaceX’s Starlink and 5G fixed wireless services were rapidly closing the so-called digital divide. Upward of 99% of households already had high-speed internet.

But Democrats wanted the money, and the Biden team then used it in an attempt to micromanage broadband nationwide. States receiving funds had to consult with unions, native American tribes and ‘local community organizations’ on their plans to expand broadband. This gave liberal special interests a veto and let them extort developers.

States also had to submit plans for Commerce Department review, explaining how they would make broadband 'affordable' for middle-class consumers. Biden-era guidance suggested that states hand out subsidies to consumers or use 'their regulatory authority to promote structural competition'—i.e., industrial policy.

Providers applying for funds were also advised to offer 'low-cost' plans and provide 'nondiscriminatory access to and use' of their networks on a 'wholesale basis to other providers . . . at just and reasonable wholesale.' This was a back-door way to impose utility-style rate regulation on internet providers.

The Biden crowd also stipulated that broadband providers give hiring preferences to 'underrepresented' groups, including 'aging individuals,' prisoners, racial, religious and ethnic minorities, 'Indigenous and Native American persons,' 'LGBTQI+ persons,' and 'persons otherwise adversely affected by persistent poverty or inequality.'

Fiber projects were also given heavy preference over satellite and fixed wireless services, even though the latter could be installed faster and at a fraction of the cost. These requirements delayed projects, raised costs, and added uncertainty across the industry.

Enter the Trump team, led by assistant Commerce secretary Arielle Roth, which removed nearly all of the Biden mandates and prioritized projects in which private operators put up more capital so they would have more skin in the game. Ms. Roth said this month the Administration's deregulation is on track to save taxpayers \$21 billion.

The average cost for each new household or business connected in Louisiana fell to \$3,943 from \$5,245. Louisiana's most expensive project had run at \$120,000 per connection under the Biden rules—almost as much as a starter home—but the Trump team brought the cost down to \$7,547 per connection. Similar savings have occurred in other states.

The broadband program illustrates how the Biden combination of spending and regulation created market distortions and raised costs. It would be better if Congress let markets allocate capital, but the Trump Administration is ensuring taxpayer funds are spent in a more cost-effective way that does less economic harm."