

The Week That Was: 2023-02-18 (February 18, 2023)
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The Science and Environmental Policy Project

Quote of the Week: *“It is not the most intellectual of the species that survives; it is not the strongest that survives; but the species that survives is the one that is able best to adapt and adjust to the changing environment in which it finds itself.”* — Charles Darwin

Number of the Week: 69%

THIS WEEK:

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

Scope: This TWTW includes the following. In a revealing interview by Jordan Peterson, Judith Curry quietly corrected errors in understanding certain concepts by Peterson. She covers numerous important concepts ignored by the dangerous climate change community and why she left Academia while chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology.

Writing for Net Zero Watch, Andrew Montford neatly sums the problem of going to net zero carbon dioxide emissions in generating electricity. It is a path to bankruptcy currently paved by huge government subsidies.

Power-System professional Donn Dears discusses the folly of eliminating fossil fuels in transportation systems by going to electric vehicles. Dears describes a lengthy report by the Geological Survey of Finland. The report took a novel approach from the simple assuming-away-problems (common to academics). It focused on the materials needed. The results are not fantasy.

In No Tricks Zone, Pierre Gosselin writes that new EU regulations will destroy automobile use for all but the rich (shades of Cuba?). In the comments following the post, Indur Goklany, author of **The Improving State of the World: Why We’re Living Longer, Healthier, More Comfortable Lives on a Cleaner Planet** (2007) points out why the science used to justify the regulations is shoddy. His comments apply to the US EPA as well.

Paul Homewood brings up a video explaining the problems with hydrogen which is touted as a fuel. No matter how it is “colored,” on earth, hydrogen is not a fuel, there are no pure hydrogen resources. It must be extracted from other compounds by breaking strong chemical bonds. The process is costly. At best it is a means of storage. See link under Alternative, Green (“Clean”) Energy – Other and Article #1.

Writing in Yale Climate Connections, a person with a Ph.D. in English, once funded by an entity of the National Science Foundation, claims we can use the power of love to “fight against climate change.” See link under Below the Bottom Line.

Due to the Heartland Conference, there will be no TWTW next week. TWTW will resume on March 4.

Uncertainty Monster: Unfortunately, a text of the comments by Judith Curry in her interview by Jordan Peterson is not available. Thus, one must sit through bombastic comments by Peterson and numerous ads to listen to her comments. Bombastic comments are sensationalistic, and no doubt help promote the interviews, just like UN Intergovernmental Panel on Climate Change (IPCC) reports become sensationalistic as one moves from the main report to the Summary for Policymakers, to press releases and declarations by United Nations Secretary-General António Guterres. Below is a brief review of what TWTW considers important points made by Curry.

Curry quietly corrects Peterson on several false notions. For example, Peterson talks about the hockey-stick featured in the 2001 IPCC Summary for Policymakers and press conferences, misunderstanding “hide the decline.” But as Curry states, the real issue with the hockey-stick is the use of two different datasets, without a standardization period showing they are compatible. That is, they measure the same thing the same way, on same scale.

Shortly after Katrina (2005), Curry published a paper showing increases in hurricane activity in the 1990s to the early 2000s. The short timescale showed an increase in activity of category 4 and 5 hurricanes. She was welcomed into the dangerous climate change community and attacked by skeptics for the short timescale. Then came the unauthorized release of the Climategate emails from the University of East Anglia by a person or persons unknown. These showed that the climate community refused to respond to Freedom of Information (FOIA) requests and avoided discussing the uncertainty of the science. They also showed how sensitive the community was to criticism.

Curry states that she did not question the substance of the science but questioned the behavior of the scientists. We cannot distinguish a human impact from natural variability with a lot of confidence. In response, she started her blog, Climate Etc., advocating what she calls the uncertainty monster.

She states that the 1992 IPCC supplement of the 1990 report started the deep dive of using model projections before there is supporting evidence.

[Among other major conclusions the Supplement states:

“the evidence from the modeling studies, from observations and the sensitivity analyses indicate that the sensitivity of global mean surface temperature to doubling CO₂, is unlikely to lie outside the range 1.5° to 4.5°C;

“the size of this warming is broadly consistent with predictions of climate models, but it is also of the same magnitude as natural climate variability. Thus, the observed increase could be largely due to this natural variability; alternatively this variability and other human factors could have offset a still larger human-induced greenhouse warming;

“the unequivocal detection of the enhanced greenhouse effect from observations is not likely for a decade or more.]

So, Curry did not depart from the conclusions in the report, but recognized the uncertainty involved, which advocates tried to dismiss. Yet, from her recognition of uncertainty, attacks on her began to snowball.

Other issues that Curry asserts that are important to understand are: 1) that in the global climate models water vapor and clouds amplify the warming, 2) Richard Lindzen proposes that in the tropics there is a negative feedback; 3) we need to understand the ocean circulations; 4) the vertical transport of heat, which is a major part of the uncertainty and changes in weather patterns and clouds.

Other points: we cannot make predictions into the future and dismissing of the role of the sun is crazy. Yet, the enormous uncertainty is ignored by the media (which seeks sensationalist headlines). Also, uncertainty is ignored in the 2015 Paris Agreement.

Curry brings up the 17 UN sustainable goals, which begin with:

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy

Climate action is number 13 in the list, yet climate action has taken precedence over elimination of poverty, hunger, etc.

As Curry states, no wonder African leaders are calling actions by western development organizations (such as international banks denying power plant loans) “Green Colonialism” and “Energy Apartheid.” See links under Defending the Orthodoxy, Seeking a Common Ground, and https://www.ipcc.ch/site/assets/uploads/2018/05/ipcc_90_92_assessments_far_1992_ipcc_suppl.pdf

What Back-up? Andrew Montford begins his essay asserting that the intermittency problem of solar and wind cannot be easily solved by stating:

“I often ask renewables enthusiasts to explain what we are supposed to do when the wind isn’t blowing if we can’t fall back on fossil fuels. The other day, I pressed James Murray, the editor of Business Green magazine, what forms of storage he thought we could use, and this is what he said:

“... a portfolio of nuclear, demand response, grid scale batteries, other emerging forms of energy storage technologies, hydrogen, and gas, ultimately in conjunction with CCS.’

“Clearly, we were talking somewhat at cross purposes; my question was specifically about storage, but even if we broaden the scope to cover the general question of ‘what do we do when the wind isn’t blowing’, his answer suggests that he hasn’t grasped the fundamental economic problem.

“That problem is that, with wind dominating the grid, for anyone looking to make money in the lulls, the economics look grim. There are two major kinds of lull that need to be filled. The first is a dunkelflaute, a lull in the winter, when solar is generating little or nothing. We get a dunkelflaute most years, and sometimes more than one. They can last from 1-3 weeks. The second is the long summer lull, with low wind generation right through the summer month, although

perhaps with occasional windy interruptions. This happens every year of course, and a large amount of energy needs to be stored to cover the gap: perhaps as much as 50 days' demand."

Montford asserts:

"Needing a large amount of electricity just a couple of times a year makes the economics impossible. It's not just storage technologies that are affected – James' idea that we could use nuclear to plug the gap therefore doesn't stack up."

The problem applies to every system trying to switch from reliable, affordable electricity to wind, solar, and storage. Who will pay for the backup, and how much will it cost? See link under Challenging the Orthodoxy.

Hitting the Net Zero Wall: In discussing the materials needed for wind, solar, biofuels, and nuclear power to replace fossil fuels for generating electricity, and the amount of materials required to replace vehicles powered by internal combustion engines (ICEs) with battery-powered vehicles (BEVs), Donn Dears discusses a report by the Geological Survey of Finland (GTK) which uses an approach different than that used by most organizations. The 1000-page report states:

"GTK's assistant research professor Simon Michaux approached this critical topic from a completely different perspective in his research. Generally, research on replacing fossil fuels focuses on carbon emissions and limiting climate change. Michaux, on the other hand, worked out from the bottom up by calculating how much electric cars, hydrogen, biofuels, solar panels, and wind turbines would be needed so that the current energy system could completely abandon the use of fossil fuels."

Dears writes [Boldface by Dears]:

"Here is what the report said about Nickel, Lithium and Cobalt.

*'In theory, there are enough global reserves of nickel and lithium if they were **exclusively used** just to produce li-Ion batteries for vehicles.*

- To make just one battery for each vehicle in the global transport fleet (excluding Class 8 HCV trucks), it would require 48.2% of 2018 global nickel reserves, and 43.8% of global lithium reserves.*
- There is also not enough cobalt in current reserves to meet this demand and more will need to be discovered.*
- **Lithium-ion batteries could only have a useful working life of 8 to 10 years. So, 8-10 years** after manufacture, new replacement batteries will be required, from either a mined mineral source, or a recycled metal source.*

"And here is what the report says about storage for wind and solar:

*'A conservative estimate selected for this report was a **4-week power capacity buffer** for solar and wind only to manage the winter season in the Northern Hemisphere.'*

And the reports' overall conclusion:

“

‘In conclusion, this report suggests that replacing the existing fossil fuel powered system (oil, gas, and coal), using renewable technologies, such as solar panels or wind turbines, will not be possible for the entire global human population.’”

Once, governments were thought to solve problems, not create them. See links under Challenging the Orthodoxy and Article # 2.

Absurd Statistics: In No Tricks Zone, P. Gosselin writes about a pushback from the auto industry in the EU against proposed regulations on automobiles using internal combustion engines.

“In November 2022, the EU Commission presented its “Euro 7” vehicle emissions standard proposal. The new directive would mandate new vehicles to become cleaner and apply to all newly registered vehicles as of July 2025.

“‘We cannot accept a society where exposure to air pollution is responsible for more than 300,000 premature deaths a year in the EU-27 alone,’ said Executive Vice President Margrethe Vestager, responsible for competition policy, at the launch of the proposal. The new rules will help us breathe cleaner air and make the sector greener and more resilient. We must stick to the goal of the European Green Deal and set global standards.’

“But critics warn “Euro 7” will make cars far more expensive, turning them into a luxury good affordable only to the rich. The EU Commission is in fact striving to restrict general individual mass mobility under the guise of clean air and climate protection.”

In the comments section, Indur Goklany, who is with the US Department of Interior and who understands how health statistics are misused, writes:

“The 300,000 estimate is based on shoddy science using equally shoddy statistical extrapolations based largely on a set of studies whose underlying data and methodology has not been subjected to proper forensic and scientific cross examination on the excuse that sharing the data would violate medical privacy. My view on this is that if you can’t cross examine the data you, then, can’t use it for developing public policy either.

*“First, there is little relationship between indoor and outdoor air pollution. Second, given the large (bogus) estimates of the death toll associated with outdoor air pollution, one may have expected that air pollutants in combination with carbon dioxide would have reduced life expectancy during the period of high carbon dioxide growth for a nation, that is, from the late 1990s to the present. It has been estimated that in 2010, outdoor air pollution, mostly from PM 2.5, led to 1.36 million deaths in China and 645,000 deaths in India. [Lelieveld et al., 2015.] If these estimates, which are based on statistical associations rather than hard cause-of-death data from death certificates, are accurate, then for 2010, 14.8% of all deaths in China and 7.0% in India were due to outdoor air pollution. [WHO, 2018.] Nevertheless, there is no hint of any decline in life expectancy during the period when fossil fuel use and therefore presumably outdoor air pollution were growing rapidly (see Figures 7.5 and 7.6). Table 7.1 [Not shown here] indicates that, despite substantial increases in PM 2.5 exposures, life expectancies in both countries **increased** substantially. This indicates that deaths from outdoor air pollution do not substantially decrease life expectancy, are overestimated, or they are more than overwhelmed by*

all the factors associated with economic development and energy use that improve life expectancy, or some combination of these factors. [Boldface added]

See links under Alternative, Green (“Clean”) Vehicles and Challenging the Orthodoxy for Goklany’s recent paper.

More Exaggerated Statistics: In The Daily Sceptic, Chris Morrison writes about a report presented at the UN COP15 Biodiversity Summit in Montreal:

“Two independent groups of scientists have destroyed the always improbable claim that vertebrates across the planet have declined by 69% since 1970. The averaged claim is made by the World Wildlife Fund (WWF) and the Zoological Society of London (ZSL). It is a bedrock climate and ecological scare story repeated endlessly in the mainstream media and broadcast everywhere from UN platforms to school classrooms.”

The two groups contesting the report at the UN conference are biologists from Canada and from Finland. The group from Finland goes deeper into the problems of the procedures used than the group from Canada. Interestingly, the authors of the original report write:

“In summary: (1) Puurtinen et al. raise an excellent and correct point: both researchers and the media must guard against the unfortunately common mistake of interpreting the LPI [Living Planet Index] as measuring abundance loss. (2) Analyses using the LPD [LPI?] necessarily refer to trends, given the type of data available. (3) Aggregate measures are inherently difficult to interpret, given the non-equivalence of species.”

See links under Challenging the Orthodoxy.

Beyond Groupthink: The 15th Climate Change Conference by The Heartland Institute will be held from February 23 to 25, 2023, at the Hilton Lake Buena Vista in Orlando, Florida. It will feature over 40 speakers, including members of the SEPP Board of Directors, Willie Soon and David Legates. Tom Sheahan, Howard “Cork” Hayden, and Ken Haapala will address the question: “Is Climate Science Scientific?”

Mathematician and Physicist Christopher Essex will receive SEPP’s 2022 Fredrick Seitz Memorial Award. Other featured speakers include Richard Lindzen, William Happer, Ross McKittrick, who exposed the improper use of the Gauss-Markov Theorem in CO2 attribution studies, Ian Plimer, Patrick Moore, Anthony Watts, Joe Bastardi, and many more. See

<https://climateconference.heartland.org/>

Number of the Week: 69%. It is stunning to realize that environmental groups proclaimed that vertebrates across the planet have declined by 69% since 1970 (at the December 7, 2022, UN conference on biodiversity) and were not challenged immediately. See links under Challenging the Orthodoxy.

NEWS YOU CAN USE:

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/>

Summary: <https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf>

Climate Change Reconsidered II: Fossil Fuels

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

<http://store.heartland.org/shop/ccr-ii-fossil-fuels/>

Download with no charge:

<http://climatechangereconsidered.org/wp-content/uploads/2019/01/Climate-Change-Reconsidered-II-Fossil-Fuels-FULL-Volume-with-covers.pdf>

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/>

Download with no charge:

<https://www.heartland.org/policy-documents/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

Global Sea-Level Rise: An Evaluation of the Data

By Craig D. Idso, David Legates, and S. Fred Singer, Heartland Policy Brief, May 20, 2019

<https://www.heartland.org/template-assets/documents/publications/SeaLevelRiseCCRII.pdf>

Challenging the Orthodoxy

Impacts of Climate Change: Perception and Reality

By Indur M. Goklany, The Global Warming Policy Foundation, 2021

<https://www.thegwpf.org/content/uploads/2021/02/Goklany-EmpiricalTrends.pdf>

Final Brief Submitted In CHECC v. EPA

By Francis Menton, Manhattan Contrarian, Feb 11, 2023

<https://www.manhattancontrarian.com/blog/2023-2-11-final-brief-submitted-in-checc-v-epa>

“I won’t try to go into great detail about the arguments in the brief, but here are two of the main ones:

“The Made-up Surface Temperature Record”

“The Failure Of Real-World Data To Validate The Models On Which EPA Relies”

Scientists Debunk Alarmist Claim That 69% of Vertebrates Have Declined Over Last 50 Years

By Chris Morrison, The Daily Sceptic, Feb 16, 2023 [H/t ICECAP]

<https://dailysceptic.org/2023/02/16/scientists-debunk-alarmist-claim-that-69-of-vertebrates-have-declined-over-last-50-years/>

Link to counter to UN accepted report: **The Living Planet Index does not measure abundance**

By Mikael Puurtinen, et al, Nature, Jan 26, 2022

https://leung-lab.github.io/leunglab/articles/Leung_2022_601a.pdf

Link to latest technical report: **A Deep Dive Into the Living Index; A Technical Report**

By J. Westveer, et al., WWF and ZSL (Zoological Society of London) Institute of Zoology, 2022

https://www.livingplanetindex.org/documents/LPR_2022_TechnicalSupplement_DeepDiveLPI.pdf

Why the intermittency problem can't be solved

By Andrews Montford, Net Zero Watch, Feb 15, 2023

<https://www.netzerowatch.com/why-the-intermittency-problem-cant-be-solved/>

It's All About Materials

By Donn Dears, Power For USA, Feb 14, 2023

<https://ddears.com/2023/02/14/its-all-about-materials/>

Link to press release of report: **Research by GTK: current mineral resources are not enough to build an infrastructure based on fossil-free energy.**

By Staff, Geological Survey of Finland, Apr 12, 2022

<https://www.gtk.fi/ajankohtaista/gtkn-tutkimus-nykyiset-mineraalivarat-eivat-riita-fossiilittomaan-energiaan-pohjautuvan-infrastruktuurin-rakentamiseen/>

Greenpeace Betrays Founders to Peddle Junk Science

By Patrick Moore, CO2 Coalition, Feb 15, 2023 [H/t ICECAP]

<https://co2coalition.org/2023/02/15/greenpeace-betrays-founders-to-peddle-junk-science/>

REPRISE — Why I Don't Deny: Confessions of a Climate Skeptic — Part 2

By Kip Hansen, WUWT, Feb 12, 2023

<https://wattsupwiththat.com/2023/02/12/reprise-why-i-dont-deny-confessions-of-a-climate-skeptic-part-2/>

“I am still a skeptic because all of those things, freely accepted more-or-less as claimed, do not add up to anything even near a “proof” of the IPCC hypothesis:

“CO2 and other anthropogenic emissions are **‘the dominant cause of the observed warming since the mid-20th century.’**” [Boldface in original]

Defending the Orthodoxy

The 17 Sustainable Development Goals

By Staff, UN Sustainable Development, Adopted in Paris Agreement, Dec 2015 (Latest listed)

<https://sdgs.un.org/goals#>

UN chief: Rising seas could spark ‘mass exodus of entire populations on a biblical scale’

By Julia Shapero, The Hill, Feb 15, 2023

<https://thehill.com/policy/energy-environment/3859919-un-chief-rising-seas-could-spark-mass-exodus-of-entire-populations-on-a-biblical-scale/>

How Leaders Should Spend Trillions to Combat Climate?

By Greta Thunberg, LA Times, Feb 13, 2023

<https://www.latimes.com/opinion/story/2023-02-13/greta-thunberg-climate-change-carbon-emissions>

“We cannot just buy, invest or build our way out of the climate and environmental crisis. Nevertheless, money is still very much at the heart of the problem. Investment is vital.”
[SEPP Comment: How does this “climate justice activist” expect to obtain the money – gunpoint?]

Defending the Orthodoxy – Bandwagon Science

University Experts say climate change causes Earthquakes. Let’s stop quakes with solar panels then?

By Jo Nova, Her Blog, Feb 16, 2023

<https://joannenova.com.au/2023/02/university-experts-say-climate-change-causes-earthquakes-should-we-stop-quakes-with-solar-panels-then/>

“Professor İbrahim Özdemir is a UN advisor and an ecologist teaching at Üsküdar University. He has served as Director-General at the Department of Foreign Affairs of the Turkish Ministry of Education and was a leading member in drafting the Islamic Declaration on Global Climate Change endorsed by the United Nations Framework Convention on Climate Change, UNFCCC.”

Questioning the Orthodoxy

2035: the end of civilization

Where is energy policy taking us

By James McSweeney, The Critic, Feb 10, 2023

<https://thecritic.co.uk/2035-the-end-of-civilisation/>

Opposing the Climate Inquisition

By Anthony Watts and H. Sterling Burnett, American Thinker, Feb 17, 2023

https://www.americanthinker.com/articles/2023/02/2_16_2023_21_48.html

Winter Games: A Climate Change Thriller that Skeptics Will Love

By John Dale Dunn, American Thinker, Feb 15, 2023

https://www.americanthinker.com/articles/2023/02/emwinter_gamesem_a_climate_change_thriller_that_skeptics_will_love.html

The Climate Scare Narrative Continues To Collapse

I & I Editorial Board, Feb 14, 2023

<https://issuesinsights.com/2023/02/14/the-climate-scare-narrative-continues-to-collapse/>

Gas Stoves: The Beloved Blue Flame is Just Better

By Mark Krebs and Tom Tanton, Master Resource, Feb 14, 2023

<https://www.masterresource.org/krebs-mark/gas-stove-get-real/>

Out of Sight, Out of Mind Isn’t a Climate Strategy

By Danielle Butcher Franz, Real Clear Energy, Feb 13, 2023

https://www.realclearenergy.org/articles/2023/02/13/out_of_sight_out_of_mind_isnt_a_climate_strategy_880883.html

Seeking a Common Ground

My interview with Jordan Peterson

By Judith Curry, Climate Etc. Feb 6, 2023

<https://judithcurry.com/2023/02/06/my-interview-with-jordan-peterson/#more-29700>

Link to podcast: **The Models Are OK, the Predictions Are Wrong | Dr. Judith Curry | EP 329**

By Jordan Peterson, YouTube, Feb 6, 2023

<https://www.youtube.com/watch?v=9Q2YHGIIUDk>

Change in US Administrations

Yeah, we looked

By John Robson, Climate Discussion Nexus, Feb 15, 2023

<https://climatediscussionnexus.com/2023/02/15/yeah-we-looked/>

“As we predicted back on August 17 of last year, delirious claims that Biden’s Inflation Reduction Act meant the US is finally taking action have quickly given way to moans that nothing is being done and we finally need to start doing something.”

EPA details plans for \$27 billion in Inflation Reduction Act climate funds

By Rachel Frazin, The Hill, Feb 14, 2023

<https://thehill.com/policy/energy-environment/3857445-epa-details-plans-for-27-billion-in-inflation-reduction-act-climate-funds/>

“A total of \$20 billion in grants will go to nonprofits that collaborate with local financial institutions including green banks, credit unions or housing finance agencies. That money will go toward projects that cut pollution and energy costs, according to the announcement.”

[SEPP Comment: Green squandering will reduce inflation?]

Joe Biden’s '10 Years More of Oil' Is More Dangerous Energy Ignorance

By Daniel Turner, Real Clear Energy, Feb 16, 2023

https://www.realclearenergy.org/articles/2023/02/16/joe_bidens_10_years_more_of_oil_is_more_dangerous_energy_ignorance_882257.html

Measurement Issues -- Surface

Legacy Electronics Botch Temperature Recordings Across Australia (Part 1)

By Jennifer Marohasy, Her Blog, Feb 13, 2023

<https://jennifermarohasy.com/2023/02/legacy-electronics-botch-temperature-recordings-across-australia-part-1/>

Charting The Record Cold [Wyoming]

By Tony Heller, His Blog, Feb 17, 2023

<https://realclimatescience.com/2023/02/charting-the-record-cold/>

Shows How NOAA hides the decline.

Hyping Maximum Daily Temperatures (Part 7)

By Jennifer Marohasy, Her Blog, Feb 17, 2023

<https://jennifermarohasy.com/2023/02/hyping-maximum-daily-temperatures-part-7/>

“In summary, the available 90th, 95th and 99th percentile data provides compelling evidence that platinum resistance probes in automatic weather stations increased the frequency of hot, very hot and extremely hot days in Australia since 1996, with a further change in the pattern of increase since installation of the replacement probes to as recently as 2016.

In 2003 The Globe Was 0.34% Urban. By 2035 0.96% Will Be. ‘Global’ Warming Is Significantly Urban-Induced.

By Kenneth Richard, No Tricks Zone, Feb 13, 2023

<https://notrickszone.com/2023/02/13/in-2003-the-globe-was-0-34-urban-by-2035-0-96-will-be-global-warming-is-significantly-urban-induced/>

Link to paper: Urbanization-induced Earth's surface energy alteration and warming: A global spatiotemporal analysis

By Pengke Shen, et al. Remote Sensing of Environment, January 2023

<https://www.sciencedirect.com/science/article/abs/pii/S0034425722004679>

Link to second paper: Surface warming in global cities is substantially more rapid than in rural background areas

By Zihan Liu,, et al. Nature Communications, Earth & Environment, Sep 29, 2022

<https://www.nature.com/articles/s43247-022-00539-x>

[SEPP Comment: Interesting coincidence in second paper: “We also find evidence of urban greening in European cities, which offsets 0.13 ± 0.034 K-decade⁻¹ of background surface warming.” The offset is equal to the total 40 plus year warming trend of the atmosphere.]

Valentine’s Day Trends

By Tony Heller, His Blog, Feb 15, 2023

<https://realclimatescience.com/2023/02/valentines-day-trends/>

[SEPP Comment: Includes headlines on the 1921 severe heatwave.]

Changing Weather

Cat 4 Hurricane Trends

By Paul Homewood, Not a Lot of People Know That, Feb 11, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/11/cat-4-hurricane-trends/>

” The only long term dataset we have is for US landfalling hurricanes, which dates back to 1851. Some of the earlier data is still uncertain, but the record is reasonably reliable since around 1880.”

Is Another Beast From The East On The Way?

By Paul Homewood, Not a Lot of People Know That, Feb 14, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/14/is-another-beast-from-the-east-on-the-way/>

The Big Chill Will Strike the Northwest

By Cliff Mass, Weather Blog, Feb 17, 2023

<https://cliffmass.blogspot.com/2023/02/the-big-chill-will-strike-northwest.html>

Changing Climate

Fossil discovery reveals complex ecosystems existed on Earth much earlier than previously thought

Discovery challenges understanding of how quickly life recovered from the greatest mass extinction in Earth’s history

Press Release, McGill University, Feb 9, 2023 [H/t WUWT]

<https://www.eurekalert.org/news-releases/979313>

Link to paper: A Mesozoic fossil lagerstätte from 250.8 million years ago shows a modern-type marine ecosystem

By Xu Dai, et al, AAAS Science, Feb 9, 2023

https://www.science.org/doi/10.1126/science.adf1622?adobe_mc=MCMID%3D17217070078390829693680401760040852165%7CMCORCID%3D242B6472541199F70A4C98A6%2540AdobeOrg%7CTS%3D1676742347&_ga=2.253948744.1353305.1676742347-142349346.1676742347

Changing Cryosphere – Land / Sea Ice

New Study Indicates NW Greenland Was ‘At Least 9°C’ Warmer Than Today When CO2 Was ~300 ppm

By Kenneth Richard, No Tricks Zone, Feb 16, 2023

<https://notrickszone.com/2023/02/16/new-study-indicates-nw-greenland-was-at-least-9c-warmer-than-today-when-co2-was-300-ppm/>

Link to paper: **An Early Pleistocene interglacial deposit at Pingorsuit, North-West Greenland**

By Ole Bennike, et al. Boreas An international journal of Quaternary research, 2022

<https://onlinelibrary.wiley.com/doi/pdf/10.1111/bor.12596>

New study provides close-up view of melting beneath Thwaites Glacier

Data come from expedition using underwater robot Icefin under remote Thwaites Glacier in Antarctica

Press Release, NSF, Feb 15, 2023

https://beta.nsf.gov/news/new-study-provides-close-view-melting-beneath?utm_medium=email&utm_source=govdelivery

Link to one paper: **Suppressed basal melting in the eastern Thwaites Glacier grounding zone**

By Peter E. D. Davis, et al. Nature, Feb 15, 2023

<https://www.nature.com/articles/s41586-022-05586-0>

Link to second paper: **Heterogeneous melting near the Thwaites Glacier grounding line**

By B. E. Schmidt, et al. Nature, Feb 15, 2023

<https://www.nature.com/articles/s41586-022-05691-0>

From the first abstract:

“Here we show—using observations from a hot-water-drilled access hole—that the grounding zone of Thwaites Eastern Ice Shelf (TEIS) is characterized by a warm and highly stable water column with temperatures substantially higher than the in situ freezing point. Despite these warm conditions, low current speeds and strong density stratification in the ice–ocean boundary layer actively restrict the vertical mixing of heat towards the ice base, resulting in strongly suppressed basal melting. Our results demonstrate that the canonical model of ice-shelf basal melting used to generate sea-level projections cannot reproduce observed melt rates beneath this critically important glacier, and that rapid and possibly unstable grounding-line retreat may be associated with relatively modest basal melt rates.”

From second abstract:

“Data closest to the ice base show that enhanced melting occurs along sloped surfaces that initiate near the GL and evolve into steep-sided terraces. This pronounced melting along steep ice faces, including in crevasses, produces stratification that suppresses melt along flat interfaces. These data imply that slope-dependent melting sculpts the ice base and acts as an important response to ocean warming.”

Acidic Waters

The relationship between ocean acidification and net calcification in a Hawaiian reef coral

By John Robson, Climate Discussion Nexus, Feb 15, 2023

<https://climatediscussionnexus.com/2023/02/15/the-relationship-between-ocean-acidification-and-net-calcification-in-a-hawaiian-reef-coral/>

From the CO2Science archive

Agriculture Issues & Fear of Famine

Are Your Veggies Less Nutritious?

By Kip Hansen, WUWT, Feb 14, 2023

<https://wattsupwiththat.com/2023/02/15/are-your-veggies-less-nutritious/>

[SEPP Comment: Fertilizer makes food slightly less nutritious. How many will starve without it? Ask Sri Lanka.]

Lowering Standards

Out Of Transmission

Want to double the size of our transmission grid? At current growth rates, it'll only take about 140 years!

By Robert Bryce, His Blog, Feb 9, 2023

https://robertbryce.substack.com/p/out-of-transmission?r=2vnfr&utm_campaign=post&utm_medium=web

“Or consider a document published on Tuesday by Lawrence Berkeley National Lab which claimed that in 2022, ‘additional transmission could have reduced electricity system costs by more than in any year from 2012 to 2021.’ The document includes a map (see above) with an overlay of a theoretical high-voltage system and how many millions of dollars it might save per 1,000 megawatts of transmission capacity. But the word ‘miles’ doesn’t appear anywhere in the analysis. There’s no recognition that all that new transmission capacity has a physical footprint that will have to be quantified, mapped, and constructed. Instead, the authors of the report—at least two of whom are PhDs—explain that the focus of the ‘factsheet is the simple concept that transmission enables a lower cost set of generators to meet load than would otherwise be available.”

[SEPP Comment: Does Lawrence Berkely National Lab have any standards remaining?]

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

The Mass Extinction Fraud

By James Aresti, WUWT, Feb 11, 2023

<https://wattsupwiththat.com/2023/02/11/the-mass-extinction-fraud/>

Such a deal we have for you

By John Robson, Climate Discussion Nexus, Feb 15, 2023

<https://climatediscussionnexus.com/2023/02/15/such-a-deal-we-have-for-you/>

“And according to Canary Media, ‘Clean energy is cheaper than coal across the whole US, study finds. Almost every coal-fired power plant in the country could be cost-effectively replaced by local solar or wind and batteries, according to a groundbreaking new analysis.’”

[SEPP Comment: If “climate change” stops all cold, still, winter nights!]

Communicating Better to the Public – Exaggerate, or be Vague?

Climate Change is More Extreme and Widespread Than Previously Thought

By Staff, Negative Population Growth, Feb 14, 2023

<https://npg.org/npg-commentary/em02102023.html>

Communicating Better to the Public – Make things up.

“Carbon Colonialism”: Four Corners Exposes Alleged Carbon Farming Exploitation in New Guinea

By Eric Worrall, WUWT, Feb 14, 2023

<https://wattsupwiththat.com/2023/02/14/carbon-colonialism-four-corners-exposes-carbon-farming-chaos-in-new-guinea/>

Why the EPA puts a higher value on rich lives lost to climate change

By Rebecca Hersher, NPR, Feb 8, 2023

<https://www.npr.org/2023/02/08/1152079692/why-the-epa-puts-a-higher-value-on-rich-lives-lost-to-climate-change>

“The most powerful climate policy tool available to the federal government is a single number. It's called the social cost of carbon, and it represents the cost to humanity of emitting greenhouse gas pollution into the atmosphere.”

‘An estimated 74 million lives could be saved this century if greenhouse gas emissions are eliminated by 2050, a study published last year suggested.’

Link to paper: **More than one-third of heat deaths blamed on climate change**

Unable to access paper.

Communicating Better to the Public – Go Personal.

The Shameless Attack on a Climate Change Dissenter

We couldn't find any negative review of physicist Steven Koonin's Unsettled that disputed its claims directly or even described them accurately.

By Aaron Brown and John Osterhoudt, Reason, Feb 13, 2023

<https://reason.com/video/2023/02/13/the-shameless-attack-on-a-climate-change-dissenter/>

Disinfluencers Love to Hate EVs, and We Love How Creative They're Getting

Climate Denier Roundup, Daily Kos, Feb 14, 2023

<https://www.dailykos.com/stories/2023/2/14/2152899/-Disinfluencers-Love-to-Hate-EVs-and-We-Love-How-Creative-They-re-Getting>

Communicating Better to the Public – Use Propaganda

White Noise and Climate Anxiety

Experts' addiction to inaccurate visions of climate catastrophe are creating major climate anxiety. Can we overcome this noise?

By Alex Trembath, Discourse, Feb 2, 2023

<https://www.discoursemagazine.com/ideas/2023/02/02/white-noise-and-climate-anxiety/?s=03>

[SEPP Comment: It is very difficult to overcome the impact of 20 years of use of erroneous statistics attributing natural disasters to CO2.]

Questioning European Green

We Will Still Need Fossil Fuels In 2050–AEP's U-Turn

By Paul Homewood, Not a Lot of People Know That, Feb 16, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/16/we-will-still-need-fossil-fuels-in-2050-aeps-u-turn/>

“As the IEA projections above make clear, we may still be needing almost as much oil as we do now in 2050.

“It's a pity AEP did not wake up to the real world a few years ago.”

Questioning Green Elsewhere

U.S. ESG Funds Suffer Disastrous Fourth Quarter In 2022

By Irina Slav, Oil Price.com, Feb 10, 2023

<https://oilprice.com/Latest-Energy-News/World-News/US-ESG-Funds-Suffer-Disastrous-Fourth-Quarter-In-2022.html>

[SEPP Comment: *Is the bloom off the rose?*]

Funding Issues

Journalist Receives \$100,000 From Bank For Promoting Climate Alarmism

By Chris Morrison, The Daily Sceptic, Feb 14, 2023

<https://dailysceptic.org/2023/02/14/journalist-receives-100000-from-bank-for-promoting-climate-alarmism/>

The Political Games Continue

Whitehouse builds case for climate action from new perch

By Emma Dumain, Jeremy Dillon, E & E News, Feb 13, 2023

<https://www.eenews.net/articles/whitehouse-builds-case-for-climate-action-from-new-perch/>

[SEPP Comment: *Well packed list of witnesses.*]

Litigation Issues

Two dozen Republican-led states sue EPA over water protection rule

By Rachel Frazin, The Hill, Feb 16, 2023

<https://thehill.com/policy/energy-environment/3862199-two-dozen-republican-led-states-sue-epa-over-water-protection-rule/>

[SEPP Comment: *The issue is Federal agency overreach. What are “navigable waters of the United States”?*]

Subsidies and Mandates Forever

National Grid spends £4bn to prevent blackouts after surge in wind and solar

By Paul Homewood, Not a Lot of People Know That, Feb 15, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/15/national-grid-spends-4bn-to-prevent-blackouts-after-surge-in-wind-and-solar/>

“I must admit, I had to laugh at the final sentence:

“The figures are highlighted amid concerns that clean energy and other investors are being lured away from the UK by huge subsidies in the US and EU.”

“I thought renewables were now the cheapest form of electricity, so why would they need any subsidies?”

[SEPP Comment: *Subsidize solar and wind, then subsidize countering the consequences?*]

Will Electric Vehicles Continue To Thrive Without Subsidies?

By ZeroHedge, Oil Price.com, Feb 13, 2023

<https://oilprice.com/Energy/General/Will-Electric-Vehicles-Continue-To-Thrive-Without-Subsidies.html>

EPA and other Regulators on the March

The Real Risk To Firefighters

By Susan Goldhaber, ACSH, Feb 7, 2023

<https://www.acsh.org/news/2023/02/07/real-risk-firefighters-16859>

“The height of absurdity may have been reached in a recent article about how the firefighters’ union is warning its members about the health risks from per- and polyfluoroalkyl substances (PFAS) in their protective gear. ‘We need to combat what’s killing us,’ said the union president.”

Will the SEC Climate Rules Make Smaller Public Companies Go Extinct?

By Cromwell Coulson, Real Clear Energy, Feb 14, 2023

https://www.realclearenergy.org/articles/2023/02/14/will_the_sec_climate_rules_make_smaller_public_companies_go_extinct_881424.html

Biden administration proposes more stringent efficiency standards for refrigerators, clothes washers.

By Rachel Frazin, The Hill, Feb 10, 2023

<https://thehill.com/policy/energy-environment/3853321-biden-administration-proposes-more-stringent-efficiency-standards-for-refrigerators-clothes-washers/>

[SEPP Comment: DOE: “we will save you money no matter how much it costs you!”]

EPA restores legal basis for coal plant pollution regulations undercut by Trump

By Rachel Frazin, The Hill, Feb 17, 2023

<https://thehill.com/policy/energy-environment/3863431-epa-restores-legal-basis-for-coal-plant-pollution-regulations-undercut-by-trump/>

[SEPP Comment: The issue is: are the regulations “appropriate and necessary”?

Biden EPA proposes restoring pesticide protections for farmworkers rolled back under Trump

By Rachel Frazin, The Hill, Feb 16, 2023

<https://thehill.com/policy/energy-environment/3861750-biden-epa-proposes-restoring-pesticide-protections-for-farmworkers-rolled-back-under-trump/>

“Under Obama administration rules, there either needed to be a 100-foot zone or a 25-foot zone with no people around pesticide spraying depending on **how prone the chemicals were to causing accidental exposures.**” [Boldface added]

[SEPP Comment: Chemicals causing exposure?]

Energy Issues – Non-US

Lord Deben in conflict-of-interest row over his green clients — yet again

By Paul Homewood, Not a Lot of People Know That, Feb 13, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/13/lord-deben-in-conflict-of-interest-row-over-his-green-clients-yet-again/>

“Lord Deben, who chairs the climate change committee (CCC), is also the chairman of a consultancy that has worked with an investment firm responsible for financing “environmental infrastructure markets’.”

Energy Issues – Australia

Australia’s Biggest Renewable Energy Project, Snowy 2.0, grinds to a halt, with a stuck bore

By Jo Nova, Her Blog, Feb 4, 2023

<https://joannenova.com.au/2023/02/australias-biggest-renewable-energy-project-snowy-2-0-grinds-to-a-halt-with-a-stuck-bore/>

“Unfortunately, a 2,400-ton Tunnel Boring Machine called Florence is quite stuck under a cave-in. According to the ABC she started ten months ago and is supposed to be digging her way through 15 kilometers (10 miles) of mountain. The stuck bore can’t go forwards, but she can’t go back the way she came in either.”

Energy Issues -- US

Climate Activists Celebrate Your Utility Bill Pain

By Eric Worrall, WUWT, Feb 12, 2023

<https://wattsupwiththat.com/2023/02/12/atlantic-climate-activists-celebrate-your-utility-bill-pain/>

Minnesota Democrats Vote to Freeze in the Dark by 2040

By David Middleton, WUWT, Feb 14, 2023

<https://wattsupwiththat.com/2023/02/14/minnesota-to-return-to-ice-age-by-2040/>

Are Federal Energy Commissioners Taking Cues From Climate Activists?

By Kevin Mooney, Real Clear Energy, Feb 13, 2023

https://www.realclearenergy.org/articles/2023/02/13/are_federal_energy_commissioners_taking_cues_from_climate_activists_880885.html

“But up until now, the Federal Energy Regulatory Commission, or FERC, has refused to release any documents showing what guidance was offered, or even if any was sought, or even admit if any such records exist in response to Freedom of Information Act requests.”

Are Electricity ISOs/RTOs Government Central Planning?

By Robert Bradley Jr., Master Resource, Feb 17, 2023

<https://www.masterresource.org/texas-blackout-2021/iso-rto-central-planning-kiesling-smith/>

An Exchange with Michael Webber (UT- Austin) on the February 2021 Texas Blackouts

By Robert Bradley Jr, Master Resource, Feb 15, 2023

<https://www.masterresource.org/electricity-policy/michael-webber-exchange-texas-blackouts/>
[SEPP Comment: Rather than finger pointing about which failed worse, a major improvement could be to require that natural gas electricity generation be powered by energy that is 99.99% reliable from well head to power plant. This may mean no electrical power from a grid that relies on wind and solar! During the freeze, the grid failed stopping operations at wellheads which could have been operating if using gas.]

New Jersey To Eliminate Carbon By 2035

By Tony Heller, His Blog, Feb 17, 2023

<https://realclimatescience.com/2023/02/new-jersey-to-eliminate-carbon-by-2035/>

A Texas Politician in Electricity (missing a chaired meeting with the PUCT)

By Robert Bradley Jr., Master Resource, Feb 16, 2023

<https://www.masterresource.org/texas-blackout-2021/drunken-politician-texas-electricity/>

“Who should manage and be accountable for electricity in Texas? Politicians and bureaucrats with special interests everywhere? Or corporations with their own capital on the line?”

Right of First Refusal Laws Benefit Utilities, Not Consumers

States should end Right of First Refusal laws if they want to lower energy prices for struggling consumers

By Marc Marie & Josiah Neeley, Real Clear Energy, Feb 15, 2023

https://www.realclearenergy.org/articles/2023/02/15/to_lower_energy_prices_states_should_end_right_of_first_refusal_laws_881656.html

Washington's Control of Energy

It's Washington's Turn for Real Action on Energy Now That Voters Have Spoken

By Nikki Martin, Real Clear Energy, Feb 12, 2023

https://www.realclearenergy.org/articles/2023/02/12/its_washingtons_turn_for_real_action_on_energy_now_that_voters_have_spoken_880889.html

Oil and Natural Gas – the Future or the Past?

A Dynamic U.S. Oil Industry Will Curb Gargantuan Emissions From Russia and China

By Paul Steidler, Real Clear Energy, Feb 12, 2023

https://www.realclearenergy.org/articles/2023/02/12/a_dynamic_us_oil_industry_will_curb_gargantuan_emissions_from_russia_and_china_880886.html

[SEPP Comment: Some technological solutions to complex problems in the oil and gas industries.]

Energy Company Profitability Pays Dividends

By Mike Roman, Real Clear Energy, Feb 14, 2023

https://www.realclearenergy.org/articles/2023/02/14/energy_company_profitability_pays_dividends_881648.html

[SEPP Comment: Washington blames them for not squandering resources the Washington way?]

U.S. Shale Giants Want In On The Global LNG Game

By Irina Slav, Oil Price.com, Feb 09, 2023

<https://oilprice.com/Energy/Natural-Gas/US-Shale-Giants-Want-In-On-The-Global-LNG-Game.html>

Return of King Coal?

U.S. coal power refuses to die. What that means for climate.

By Jean Chemnick, E & E News, Feb 13, 2023

<https://www.eenews.net/articles/u-s-coal-power-refuses-to-die-what-that-means-for-climate/>

“Rich Nolan, president of the National Mining Association, told E&E News that he was particularly concerned about EPA’s upcoming rule for pollution that crosses state lines, which the agency itself has estimated could prompt 23,000 MW of coal-fired power to retire by 2025.”

[SEPP Comment: With photo of coal-fired power plant emitting condensing steam!]

Oil Spills, Gas Leaks & Consequences

What to know about the chemicals in the Ohio train derailment

By Rachel Frazin and Sharon Udasin, The Hill, Feb 17, 2023

<https://thehill.com/policy/energy-environment/3862364-what-to-know-about-the-chemicals-in-the-ohio-train-derailment/>

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

The Trouble With Hydrogen

By Paul Homewood, Not a Lot of People Know That, Feb 13, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/13/the-trouble-with-hydrogen/>

“While the government wants to add a hydrogen levy to energy bills, this sobering video explains why hydrogen is a dead-end technology:”

Grant Shapps faces Tory mutiny over hydrogen levy plans

By Paul Homewood, Not a Lo of People Know That, Feb 12, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/12/grant-shapps-faces-tory-mutiny-over-hydrogen-levy-plans/>

“Do the Tories have a death wish?”

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

Sky Fall For The Battery Con Trick

By Paul Homewood, Not a Lot of People Know That, Feb 16, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/14/sky-fall-for-the-battery-con-trick/>

“Let’s take a step back. One of the great advantages of fossil fuels, and one we take largely for granted, is they are so easy to store. Piles of coal, drums of oil, tanks of gas. They just sit there waiting for a deliberate spark.

“Renewables are different: you can’t hold the wind or bottle the sun. As the proportion of green power on our grid grows so does this inconvenient truth.

“The variable and uncontrollable nature of solar and wind is not a new discovery, but it is only now that we are coming close to an affordable solution: massive banks of lithium-ion batteries similar to those in a laptop, phone and only affordable now thanks to their use in electric cars.”

Alternative, Green (“Clean”) Vehicles

Critics: EU’s Euro 7 Vehicle Emissions Directive Will Make Automobiles A Luxury For The Rich!

By P Gosselin, No Tricks Zone, Feb 12, 2023

<https://notrickszone.com/2023/02/12/critics-eus-euro-7-vehicle-emissions-directive-will-make-automobiles-a-luxury-for-the-rich/>

And iff n we don't buy 'em?

By John Robson, Climate Discussion Nexus, Feb 15, 2023

<https://climatediscussionnexus.com/2023/02/15/and-iffn-we-dont-buy-em/>

“At a media event announcing the new federal regulations in December 2022, Liberal MP Julie Dabrusin, parliamentary secretary to Environment Minister Steven Guilbeault, claimed that the regulations forcing Canadians to buy EVs are ‘about making sure that Canadians have access to the vehicles they want.’ It is a strange claim to make.”

[SEPP Comment: Labels mean little, are those who call themselves “progressive liberals” really petty dictators with number fairies dancing in their wee little heads?]

EU Puts Continent On Fast Track To Zero... New Fossil Fuel Cars To Be Banned By 2035!

By P Gosselin, No Tricks Zone, Feb 15, 2023

<https://notrickszone.com/2023/02/15/eu-puts-continent-on-fast-track-to-zero-new-fossil-fuel-cars-to-be-banned-by-2035/>

“Already, due to its power grid instability, the German government has been forced to extend the operating time of 3 nuclear power plants that had been planned to be taken offline December 31st, 2022. Policy reversals are unavoidable whenever pie-in-the-sky ideologies clash with reality.”

EVs Are Failing To Break Into Mass Market

By Paul Homewood, Not a Lot of People Know That, Feb 16, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/13/evs-are-failing-to-break-into-mass-market/>

Other Scientific News

Changing the Discount Rate by Adjusting the Pure Rate of Time Preference

By Ross McKittrick, His Blog, Feb 14, 2023

<https://www.rossmckittrick.com/>

Link to paper: Changing the Discount Rate by Adjusting the Pure Rate of Time Preference

By Jamie Lee, Ross McKittrick, and Thanasis Stengos, Jan 23, 2023

<https://www.rossmckittrick.com/uploads/4/8/0/8/4808045/discounting.rate.adjustment.pdf>
[SEPP Comment: A technical issue, but important.]

Can You Trust Machine Learning Chat Applications for Weather Information?

By Cliff Mass, Weather Blog, Feb 15, 2023

<https://cliffmass.blogspot.com/2023/02/can-you-trust-machine-learning-chat.html>

“My conclusion: human meteorologists currently don't have much to worry about.”

Other News that May Be of Interest

Two More "Unidentified" Objects Shot Down: Where Did They Come From?

By Cliff Mass, Weather Blog, Feb 11, 2023

<https://cliffmass.blogspot.com/2023/02/two-more-unidentified-objects-shot-down.html>

[SEPP Comment: Backtracking the probable flight cannot show where the balloons were launched.]

BELOW THE BOTTOM LINE

The power of love in the fight against climate change

Love can drive individuals and communities to take action, to care for the planet and for each other.

By SueEllen Campbell, Yale Climate Connections, Feb 14, 2023

<https://yaleclimateconnections.org/2023/02/the-power-of-love-in-the-fight-against-climate-change/>

“As co-founder and co-director of Changing Climates at Colorado State University, a decade-long program supported by CMMAP, an NSF Science and Technology Center, she organized some 120 talks on campus by as many different faculty members (drawn from over 25 departments and all 8 colleges); offered communication training for scientists and others wishing to speak clearly to non-specialists; and ran the 100 Views website.

“With a B.A. in English and Art/Art History from Rice University and an M.A. and Ph.D. in English from the University of Virginia, SueEllen spent over forty years teaching university students, most of them at Colorado State, where she focused on the (mostly nonfiction) literature of nature and the environment, a choice that led her into the topic of climate change.”

[SEPP Comment: As an expert in literature and once funded by an entity of the National Science Foundation, does she understand the difference between science and science fiction?]

Al Gore cries an atmospheric river in Davos

By John Robson, Climate Discussion Nexus, Feb 15, 2023

<https://climatediscussionnexus.com/2023/02/15/al-gore-cries-an-atmospheric-river-in-davos/>

Climate fungus ate my brain

By John Robson, Climate Discussion Nexus, Feb 15, 2023

<https://climatediscussionnexus.com/2023/02/15/climate-fungus-ate-my-brain/>

Norwich To Get £170K e-Cargo Bikes

By Paul Homewood, Not a Lot of People Know That, Feb 11, 2023

<https://notalotofpeopleknowthat.wordpress.com/2023/02/11/norwich-to-get-170k-e-cargo-bikes/>

[SEPP Comment: For 10 e-cargo bikes?]

ARTICLES

1. Europe's Lesson in Green Hydrogen

The [hydrogen as a] fuel doubles down on renewables instead of replacing them.

By The Editorial Board, WSJ, Feb. 16, 2023 https://www.wsj.com/articles/europe-brussels-hydrogen-green-energy-renewables-electricity-dbec480a?mod=hp_opin_pos_5#cxrecs_s

TWTW Summary:

The editorial starts:

“Politicians love to say that green hydrogen is the carbon-neutral fuel of the future. If only it were true. A series of policy fights in Brussels is highlighting the perils of the new ‘hydrogen economy’ even as political enthusiasm for it reaches a new peak.

“It’s hard to overstate how much the green agenda relies on hydrogen’s alleged promise. It holds out the prospect of carbon-free transportation even if electric-vehicle battery technology never improves. Hydrogen also could be used in industrial processes that can’t easily be electrified to run directly on renewable power.

“There’s one problem: physics. Hydrogen atoms don’t appear in isolation in nature so they must be produced, usually by splitting water molecules via electrolysis. A lot of energy is lost in this process, and hydrogen is only as green as the electricity used to electrolyze it.

“Enter Brussels. The European Union has set an ambitious target of incorporating 20 million metric tons of clean hydrogen into the continent’s energy mix by 2030. Current consumption is about 6.5 million metric tons, most of that used in industry and produced from fossil fuels. Brussels wants 10 million of those 20 million metric tons to be produced in Europe. Now it wants to make sure hydrogen will be produced the green way.

“The first step is a regulation proposed this week by the European Commission setting out what counts as ‘renewable hydrogen.’ Brussels would require that by 2028 hydrogen is electrolyzed using power only from newly installed renewable sources such as windmills or solar panels. This would prevent countries from powering hydrogen electrolysis with existing renewable power and then adding new fossil-fuel generation to meet other demands.

“This ‘additionality rule’ brings into focus the extraordinary demands hydrogen will impose on electric grids. Producing one million metric tons of hydrogen would require 11 gigawatts of installed capacity for offshore wind, 22 gigawatts of onshore wind, or 52 gigawatts of solar, according to S&P Global Commodity Insights. The numbers are different to account for the intermittency of those sources. Installed capacity in Europe today is 17 gigawatts for offshore wind, 188 gigawatts for onshore wind and 196 gigawatts for solar.

“Put another way, meeting the EU’s domestic clean-hydrogen production target in 2030 would require about 500 terawatt-hours of electricity. That’s roughly equivalent to Germany’s current annual power consumption. Since renewable power production across the EU currently measures 1,100 terawatt-hours, making so much hydrogen would require increasing renewables by 44%.”

The editorial states that the obvious solution is nuclear, which green politicians don't want and concludes:

“Politicians haven't warned voters about this when touting hydrogen, implying instead that it's a simple matter of exploiting atoms found in water to replace the gasoline in your car. The public is about to discover that hydrogen doubles down on all the costs of renewables—skyrocketing prices, unstable electric grids, and dependence on China for rare-earth metals. Hydrogen shows again that green climate promises always exceed what can be delivered.”

2. The Climate Crusaders Are Coming for Electric Cars Too

A new report makes clear the ultimate goal: tiny, uncomfortable apartments and bicycles for all.

By Allysia Finley. WSJ, Feb. 12, 2023

https://www.wsj.com/articles/the-climate-crusaders-are-coming-for-electric-cars-too-global-warming-energy-power-fossil-fuels-environment-31a692ca?mod=hp_opin_pos_3#cxrecs_s

The journalist begins:

“Replacing all gasoline-powered cars with electric vehicles won't be enough to prevent the world from overheating. So people will have to give up their cars. That's the alarming conclusion of a new report from the University of California, Davis and 'a network of academics and policy experts' called the Climate and Community Project.

“The report offers an honest look at the vast personal, environmental and economic sacrifices needed to meet the left's net-zero climate goals. Progressives' dirty little secret is that everyone will have to make do with much less—fewer cars, smaller houses and yards, and a significantly lower standard of living.

“Problem No. 1: Electric-vehicle batteries require loads of minerals such as lithium, cobalt and nickel, which must be extracted from the ground like fossil fuels. 'If today's demand for EVs is projected to 2050, the lithium requirements of the US EV market alone would require triple the amount of lithium currently produced for the entire global market,' the report notes.

“Unlike fossil fuels, these minerals are mostly found in undeveloped areas that have abundant natural fauna and are often inhabited by indigenous people. 'Large-scale mining entails social and environmental harm, in many cases irreversibly damaging landscapes without the consent of affected communities,' the report says. Mining can be done safely, but in poor countries it often isn't.

“Problem No. 2: Mining requires huge amounts of energy and water, and the process of refining minerals requires even more. According to the report, mining accounts for 4% to 7% of global greenhouse-gas emissions. Auto makers have made a priority of manufacturing electric pick-up trucks and SUVs because drivers like them, but they require much bigger batteries and more minerals.

“More mining to make more EVs will increase CO2 emissions. It will also destroy tropical forests and deserts that currently suck CO2 out of the atmosphere, the report says.

“Problem No. 3: 'Producing EVs and building and maintaining roads, highways, and parking lots are energy- and emissions-intensive processes with high levels of embodied carbon,' the report

says. *'Electrification of the US transportation system will massively increase the demand for electricity while the transition to a decarbonized electricity grid is still underway.'*

"The report concludes that the auto sector's 'current dominant strategy,' which involves replacing gasoline-powered vehicles with EVs without decreasing car ownership and use, 'is likely incompatible' with climate activists' goal to keep the planet from warming by more than 1.5 degrees Celsius compared with preindustrial times. Instead, the report recommends government policies that promote walking, cycling and mass transit.

"Governments, the report says, could reduce 'financial subsidies for private vehicles,' such as on-street and free parking. They could also impose charges on pickup trucks and SUVs (including electric ones) and build more bike lanes. Urbanites who suspect the expansion of bike lanes in their cities is intended to force people to stop driving aren't wrong.

"But what about suburbanites who need cars to get around? Reducing 'car dependency' will require 'densifying low-density suburbs while allowing more people to live in existing high-density urban spaces,' the report says. Translation: Force more people to live in shoe-box apartments in cities by making suburbs denser and less appealing.

"All this may sound crazy, but it isn't a fringe view on the left. A Natural Resources Defense Council report last year on lithium mining also concluded that the government needs 'to reduce long-term dependency on single-passenger vehicles.' The Inflation Reduction Act included billions of dollars to promote bicycling and so-called livable neighborhoods."

The journalist cites support by green politicians despite the lack of materials for EV's and concludes:

"Progressives' ultimate goal is to reduce consumption—and living standards—because they believe humans are a menace to the Earth."