The Week That Was: 2023-03-18 (March 18, 2023) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week: Cheap renewables are very expensive."— Power engineers Chris Morris and Russ Schussler

Number of the Week: \$35 Trillion

THIS WEEK:

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

Scope: The following issues will be discussed. Canadian historian John Robson brings up the parable of the broken windows by French economist Claude-Frédéric Bastiat (1801-1850) in discussing the commitment by the US government to spend hundreds of billions of dollars to replace the delicately tuned, well-functioning electric system with unreliable wind and solar power. Some may get rich, while the society becomes poorer.

Power station engineer from New Zealand Chris Morrison and Planning Engineer Russ Schussler discuss problems arising in Australia from efforts in the states of South Australia and Western Australia to transition the electrical grid to Net Zero carbon dioxide emissions. The transition is far from complete, and the problems of providing a stable grid—and its hidden costs—are compounding with no end in sight.

The US National Renewable Energy Laboratories (NREL) produced a report on the feasibility of the US grid going to carbon dioxide Net Zero by 2030. The report states: "Clean electricity shares could increase substantially with IRA (Inflation Reduction Act) and BIL (Bipartisan Infrastructure Law), rising from 41% in 2022 to a range of 71%–90% of total generation by 2030." Interestingly, the report does not discuss costs particularly those of grid stability and costs of backup. No doubt, the authors assume the \$430 billion from the ill-named Inflation Reduction Act (IRA) and the Bipartisan Infrastructure Law (BIL) will pay for it all. The experiences in Australia, Germany, and the UK are not very encouraging.

The US Energy Information Administration (EIA) produced its "Annual Energy Outlook, 2023" which is not as rosy as those of NREL. The costs of going net zero is unknown. There is no successful demonstration project anywhere in the world. There is no successful demonstration project of needed backup anywhere in the world. At least the EIA recognizes there is a range of unknowns and makes crude estimates of high cost and low cost. No one really understands what they may be. Ordering technology that does not exist is not as simple as ordering dinner.

Writing for the Global Warming Policy Foundation (GWPF) Michael Kelly, the Emeritus Prince Philip Professor of Technology at the University of Cambridge, produced his estimates of what it will cost the US to go Net Zero. The estimate is staggering and the \$430 billion discussed by NREL is a drop in the bucket. It probably will not cover the costs of materials alone.

Francis Menton asks which entity, city, state, or country, will hit the green wall first? He gives his nomination.

The Biden Administration approved Conoco's Willow Project in the barren tundra of North Slope of Alaska, which was set aside for petroleum development. This approval received condemnation by environmentalist. However, there is no reason to assume that just because the administration granted a formal permit, it will allow the project to develop.

Roy Spencer is developing estimates for the Urban Heat Island (UHI) effect with some surprising results.

What Is Seen and Not Seen: John Robson writes:

"Scrapping America's energy infrastructure then spending trillions to get back to the same level of production will leave the nation as a whole poorer."

Robson gives a pithy summary of French economist Frédéric Bastiat's 1850 essay "That Which We See and That Which We Do Not See" when he writes:

"But the simple story is that Bastiat had it right. If you break every window in America then replace them all, the nation will be better off with fixed windows than with broken ones. But it cannot be better off than before the windows were broken because fixing them all only restores the benefits of having the original windows, but all the labor and raw material required to replace them is gone for good."

America had a solid, finely tuned, robust electrical grid with 99.99% reliability until politicians began adding unreliable, erratic wind and solar on the made-up claim that carbon dioxide (CO2) emissions from fossil fuels is causing dangerous global warming. As stated in last week's TWTW, Howard Hayden used the numbers for the greenhouse effect produced in the last full report by the UN Intergovernmental Panel on Climate Change (IPCC), "Sixth Assessment Report" (AR6, 2021): Making a calculation the IPCC did not make, Hayden found that a doubling of CO2 would increase the total greenhouse effect by 2.3% -- a trivial amount. Climate change is mostly natural or from human change of the earth's surface. See last week's TWTW and link under Questioning the Orthodoxy.

Driving Up Prices: Australian columnist Jo Nova writes: "Mystery: Australians invest billions in free wind and solar, but prices rise another 20-30%." She gives a good chart of the "*Annual volume weighted average 30-minute prices – regions*" on the wholesale markets by the Australian Energy Regulator. It shows dramatically increasing cost of electricity in a country with abundant fossil fuels. The politicians advocating "affordable wind and solar" are incompetent; they have no idea of what they are doing.

TWTW has covered how there is no project in the world that demonstrates how much backup wind and solar require. Green politicians and the bureaucracies that support them ignore this simple fact. The costs of the required backup are unknown.

Writing in Judith Curry's blog, Climate Etc., Power engineers Chris Morrison and Russ Schussler bring up other unknown costs that are being incurred in Australia and elsewhere when solar and wind replace thermal or hydro power – the costs of stabilizing the grid. Except for straight gas turbines (jet engines) used to generate electrical power for short durations, thermal generators (fossil fuel and nuclear) have massive steam turbines and hydropower uses massive turbines. These turbines are tuned to generate the frequency, voltage, and phase of the electricity being consumed, load. But varying load creates a problem, the engineers write: [boldface added]

"Alternating Current (AC) power generation aims to produce an alternating voltage in the shape of a sine wave, whereby the current has a similar wave at the same frequency. However, the current may not be timed in phase with the voltage. AC power can have three types of load, depending on how it affects the timing of the current to the voltage: resistive, inductive & capacitive. For a purely resistive load, the current and voltage are co-incident. However, this is not the normal case. Electric loads and grids have both inductive and capacitive elements. Inductive elements want to maintain constant current flows, while capacitive ones want to store charge (voltage). Active power is measured in Watts. With AC being a cycle, there is another value orthogonal to it, called reactive power, measured in units of Volt Amps Reactance or VARs. The diagram below explains the relationship. [Not shown here]

Generators and inverters produce some mixture of "real" and "reactive" power. That is why they and transformers are rated in MVA, not MW like their prime movers are. Real power, in watts, is the form of electricity that powers equipment and does work. Reactive power, in VARs, is the energy supplied to create or be stored in electric or magnetic fields in and around electrical equipment. VARs are 90° out of phase with real power. Reactive power (inductance) is particularly important for equipment that relies on magnetic fields for the production of induced electric currents (e.g., motors, transformers, pumps, and air conditioning.) Negative reactive power (capacitance) seeks to slow voltage waves by acting as a store for charges. The balance between real and reactive power is adjusted to meet the needed load and grid requirements.

Transmission line elements both consume and produce reactive power. Under conditions of light loads, transmission lines are net producers, and at heavy loads, they are heavy consumers. Reactive power consumption by these loads tends to depress transmission voltage, while production of transmission voltage (by generators, transformers, or synchronous condensers (syncons) or injection (from storage devices such as capacitors) tends to support voltage. Due to the characteristics of components on the grid, reactive power can be transmitted only over relatively short distances during heavy load conditions. If reactive power cannot be supplied promptly and in sufficient quantity, voltages decay, and in extreme cases a 'voltage collapse' may result. If there is too much capacitance, voltages rise to excessive levels, damaging the insulation of equipment.

Worldwide, motors comprise about half the load on the grid. Air conditioning loads are almost exclusively motors. As well as needing the active power, motors produce significant reactive power. The distribution Network elements (local 'low voltage (<66kV)' lines, transformers, and switchyard components) have to absorb this reactive power, usually by increasing the voltage at the transformers. If the system can't compensate for the reactive power or has no more capacity, then the voltage starts to drop, while the motors' current and reactive power increases. This compounds the overvoltage problem – why you get brownout in the suburbs on those muggy hot afternoons.

Because of the lines and transformers in a grid, the VARs at each part, or even at either end of a single transmission line, can be significantly different. That means compromises or corrections need to be made throughout the distribution & transmission network. This is done by modifying generation output settings, changing transformer tap point settings and switching in or out capacitors, inductors and synchronous condensers installed at strategic locations. Grid operators monitor the various parameters, then adjust the settings as the generation source and loads change.

All this explanation and discussion about reactive power may seem esoteric and irrelevant. It isn't. The large 2003 blackout in the USA/ Canada was caused because they weren't managing reactive power properly because they had an inadequate system understanding.

The authors go into the problems of siting wind turbines far from where the load is consumed, which requires additional transmission lines and produce unpredictable variability, requiring additional equipment, substantially increasing costs.

"The frequency is the timing between wave cycles in an AC system 60Hz (a Hertz is one cycle per second) and 50Hz in most of the rest of the world. The frequency has to be the same across the whole grid – it is one of the things that defines it. A stable grid frequency is critical for effective operation. Thermal plants usually provide this by using governor control, whereby the frequency drives the plant output through a negative feedback device. The grid system operators may also run real time or short period dispatch, whereby the plant operators increase or decrease load over short time periods on grid operator's instructions.

The inertia, provided by the rotating machinery of the generator, serves to slow the rate of change of frequency (RoCoF). The slower the frequency changes occur, the less stress for the plant on governors. And as there is linkage, a small RoCoF in 'normal' grid fluctuations will also stabilize the voltage and reactive power requirements."

The Australian grid is experiencing rapid swings in frequency going outside of control limits.

"The cause of the variability observed hasn't been positively identified but is likely to be uncontrolled solar generation. If that is the case, then it indicates that faster acting and more expensive frequency control services are needed."

The need to stabilize the rate of change of frequency results in hidden costs that are not charged to the source of the instability, the wind turbines or solar panels, but to the consumer. In discussing battery reserves the engineers write:

"Inertia on a renewables grid can be provided by synchronous condensers or by large battery banks with specialized electronics. Of course, the batteries have to have enough charge in them to function, so they are reserved for just that purpose and thus can't be used for other purposes like general market dispatch. However, AEMO does not appear to believe that renewables and batteries are a substitute for the frequency response provided by synchronous units."

In subsidizing certain generation and implementing mandates, politicians are creating a mess of a scope and the cost of which is unknown. The engineers give further detail then conclude:

"The above is a simplified explanation of what is needed for reliable grid operation. **Proponents of renewable energy do not want to discuss concerns of this sort, particularly the costs involved.**When forced to address these issues, they rely on magical thinking, advocating for technologies that either do not yet exist or have not yet been proven to work reliably on a grid. The known solutions are expensive, but the renewable sector doesn't want to pay for them – their mantra remains that renewables are cheaper than fossil fuels so the others should pay for them – hiding the expense. Add in the costs from the needed system support requirements described above, then renewables are significantly more expensive (and less reliable) than conventional generation. The extra costs of renewables support are being paid for a deteriorating quality of electricity supply. That is why there is a new industry adage –

Cheap renewables are very expensive."

See links under Challenging the Orthodoxy and Energy Issues – Australia and Article #2

A Puff Piece? In sharp contrast to the problems brought up by Chris Morrison and Russ Schussler, the NREL report is a "puff piece" that is excessively favorable towards Net Zero. The \$430 Billion from the two bills will solve all problems. After discussing the two bills the summary reads: [Boldface added]

"While the climate and clean energy provisions are numerous and have the potential to impact all aspects of the U.S. energy system from fuel and electricity production to final consumption in industry, transportation, and buildings, the provisions relevant to the electricity sector—in particular the suite of tax credits for clean generation, storage, and carbon dioxide (CO2) capture and storage—are expected to be some of the most consequential in terms of emissions reduction and clean energy deployment [References omitted here.]

In this report, we detail the methods and results of a study estimating the potential impacts of key provisions of IRA and BIL on the contiguous U.S. power sector from present day through 2030. The analysis employs an advanced power system planning model, the Regional Energy Deployment System (ReEDS), to evaluate how major provisions from both laws impact investment in and operation of utility-scale generation, storage, and transmission, and, in turn, how those changes impact power system costs, emissions, and climate and health damages. While not exhaustive in capturing every provision, the analysis estimates the possible scale of power sector impacts that could result from the modeled provisions in IRA and BIL."

In short, lots of modeling but no examples of demonstrated successes. Further, the report goes into "saving" from avoided climate change, which require exaggerated effects of CO2 emissions as well fictitious modeled health threats from particulate matter, (That will be discussed more fully in the upcoming TWTW.) The report states that the discount rate used for future benefits is 2%, which is absurdly low given the inflation rate is above 6%. Subsequently, it concludes:

"Sensitivities structured to evaluate less favorable conditions for clean electricity deployment, including higher projected costs of clean electricity technologies and barriers to technology and infrastructure deployment, were shown to reduce the level of total clean electricity deployed. However, even in these cases, the IRA and BIL were still found to drive substantial increases in the clean electricity share, reaching over 70%, with power sector emissions falling to 72% below the 2005 level. Nonetheless, the lower rate of clean energy deployment in the deployment constrained and high clean cost cases highlights the potential value of continued research and

development to drive advancements in clean electricity technologies as well as actions taken to mitigate existing and developing constraints on deployment of clean electricity, transmission, and pipeline and storage infrastructure.

Finally, while this suite of changes ultimately arise as a result of the overall increase in investment in clean electricity technologies, the increased capital expenditures (and non-fuel operating expenditures) are more than offset by a reduction in fuel expenditures associated with decreased fossil generation and increased value (and scope) of the tax credits. In aggregate, this leads to a net reduction in average bulk power system costs. Irrespective of future market conditions we find that the IRA and BIL could spur substantial increases in clean technology investment in the U.S. power sector, driving down greenhouse gas emissions, all while lowering electricity costs. Fully realizing these modeled benefits will require action by all jurisdictions of U.S. government—federal, state, and local—the private sector, and civil society to support the beneficial deployment of clean energy technologies."

It is amazing what you can accomplish when you model benefits but do not include costs. See links under Defending the Orthodoxy.

A Politically Practical Estimate? The "Annual Energy Outlook, 2023" provides a practical example between what we know and what we do not know for politically charged Washington. It explores long term trends, yet recognizes the US nationally determined contribution under the Paris Agreement which has a target that the US reduce emissions to about 50 to 52% of 2005 levels. It states: [Boldface added]

"Overall, our lower projected U.S. energy-related CO2 emissions are driven by increased electrification, equipment efficiency, and renewable technologies for electricity generation. However, emissions reductions are limited by longer-term growth in U.S. transportation and industrial activity. As a result, these projected emissions reductions are most sensitive to our assumptions regarding economic growth and the cost of zero-carbon generation technology.

Renewable generating capacity grows in all regions of the United States in all AEO2023 cases, supported by growth in installed battery capacity."

There is no demonstration project of what battery capacity is needed and costs. The report then goes into some highly questionable assumptions.

"Once built and when the resource is available, wind and solar are the least cost resources to operate to meet electricity demand because they have zero fuel costs. Over time, the combined investment and operating cost advantage increases the share of zero-carbon electricity generation.

The report makes questionable predictions about expansion of wind and solar then states:

"In the residential and commercial sectors, higher equipment efficiencies and stricter building codes extend ongoing declines in energy intensity. Despite the growth in adopting heat pumps, natural gas-fired heating equipment, including furnaces and boilers, continue to account for the largest share of energy consumption for space heating in U.S. residential and commercial buildings across all cases through 2050. In the transportation sector, light-duty vehicle energy demand declines through 2045 as more electric vehicles are deployed and stricter Corporate

Average Fuel Economy (CAFE) standards largely offset the continued growth in travel demand. The energy demand then increases as rising travel overcomes increasing efficiency. Across all cases, light-duty vehicle energy demand decreases by 3% to 28% in 2050 relative to 2022."

Hard Nose Estimates? Michael Kelly produced a report on the costs of the US going Net Zero that can be called Hard Nose. He writes:

"Conceit: I imagine that I have been appointed the first CEO of a new agency set up by the Federal Government of the United States of America with the explicit goal of actually delivering a Net Zero CO2 emissions economy by 2050. My first task is to scope the project and to estimate the assets required to succeed. This is the result of that exercise and includes a discussion of some consequences that flow from the scale and timescale for meeting the target.

Executive summary: The cost to 2050 will comfortably exceed \$12 trillion for electrification projects, and \$35 trillion for improving the energy efficiency of buildings. A work-force comparable in size to the health sector will be required for 30 years, including a doubling of the present number of electrical engineers. The bill of specialist materials is of a size that, for the USA alone, is several times the global annual production. On the manpower front, one will have to rely on the domestic workforce, as everywhere else in the world is aiming for the same target. If they were not doing so, the value of the USA specific target would be moot. The scale of this project suggests that a war footing, and a command economy will be essential, as major cuts to other favored forms of expenditure, such as health, education, and defense, will be needed. Without a detailed roadmap, as exemplified by the International Technology Roadmap for Semiconductors that drove the electronics revolution after 1980, the target is simply unattainable." [Boldface added]

See link under Challenging the Orthodoxy

Hitting the Wall: Francis Menton writes:

"The race is on to see who hits the green energy wall of impossibility first. California, Germany, and the UK (the "Poseurs") might seem to have leapt early into the lead positions. But New York is now making a strong sprint to catch and surpass them, so it can be the first to splatter its citizens' flesh and blood all over the impenetrable barricade.

"We're about to see thousands of buildings designated as lawbreakers and subjected to punishing annual fines, with no realistic way to get around them. Let's see how long this can continue."

Battle Beginning? The Department of Interior issued a Record of Decision on ConocoPhillips Willow Project after nearly five years of effort. If the project goes ahead with three core pads on

UHI Effect, Beginning Results: Roy Spencer's efforts to estimate the Urban Heat Island (UHI) effect produced interesting initial results. Starting in the 1880s, he found the effects are weakening over time. He states:

"Eventually, all of this will lead to an estimation of how much of the land warming (say, since 1880) has been spurious due to the Urban Heat Island effect. As I have mentioned previously, I don't believe it will be large. But it needs to be documented."

See link under Measurement Issues -- Surface *************

Number of the Week: \$35 Trillion. Michael Kelly's estimate of cost of meeting the announced energy standards for buildings in the US. The 2021 US gross domestic product was \$23.3 Trillion. See link under Challenging the Orthodoxy.

NEWS YOU CAN USE:

Censorship

Government & Media Censorship & Matt Taibbi

By Jennifer Marohasy, Her Blog, Mar 16, 2023

https://jennifermarohasy.com/2023/03/government-media-censorship-matt-taibbi/

"The 'Twitter Files' confirm what many have suspected for years — that governments and much of the mainstream media actively work with social media giants to censor and deplatform those they disagree with. Journalist Matt Taibbi explained something of the problem last Thursday in testimony to the US House of Representatives."

The Censorship Industrial complex — the secret cabal of Big-Government, University, Media and NGO's

By Jo Nova, Her Blog, Mar 11, 2023

https://joannenova.com.au/2023/03/the-censorship-industrial-complex-the-secret-cabal-of-biggovernment-university-media-and-ngos/

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

Australian renewable energy transition. Part 3

By Chris Morrison and Planning Engineer Russ Schussler, Climate Etc. Mar 14, 2023 https://judithcurry.com/2023/03/14/australian-renewable-energy-transition-part-3/#more-29837

Net Zero could cost Americans more than \$50 trillion, new paper warns

By Paul Homewood, Not a Lot of People Know That, Mar 17, 2023

 $\frac{https://notalotofpeopleknowthat.wordpress.com/2023/03/17/net-zero-could-cost-americans-more-than-50-trillion-new-paper-warns/$

Link to paper: The Feasibility of a Net-zero Economy for the USA by 2050

By Michael Kelly, The Global Warming Policy Foundation, 2023

https://www.thegwpf.org/content/uploads/2023/03/Kelly-Net-Zero-Progress-Report-USA-pdf?mc_cid=f6932966ff&mc_eid=4961da7cb1

Are we about to lose 40% of our species?

By William D. Balgord, American Thinker, Mar16, 2023

https://www.americanthinker.com/articles/2023/03/are_we_about_to_lose_40_of_our_species_.ht ml

Link to report: Over One-third of Biodiversity in the United States is at Risk of Disappearing

New report addresses nation's extinction crisis by providing data and conservation insights By Staff, NatureServe, Feb 6, 2023

https://www.natureserve.org/news-releases/over-one-third-biodiversity-united-states-risk-disappearing

Defending the Orthodoxy

Analysis: US grid could be 90 percent carbon-free by 2030 with IRA tax credits

By Zack Budryk, The Hill, Mar 16, 2023

https://thehill.com/policy/energy-environment/3904098-analysis-us-grid-could-be-90-carbon-free-by-2030-with-ira-tax-credits/

Link to report: Evaluating Impacts of the Inflation Reduction Act and Bipartisan

Infrastructure Law on the U.S. Power System

By Daniel C. Steinberg, et al. NREL, March 2023 https://www.nrel.gov/docs/fy23osti/85242.pdf

United Nations Coral Expert Speaks Out

By Tony Heller, His Blog, Mar 16, 2023

https://realclimatescience.com/2023/03/united-nations-coral-expert-speaks-out/

"The UN Secretary General says global warming will wipe out the world's coral reefs." [SEPP Comment: The Coral Sea in the South Pacific is the warmest in the world.]

The UN's climate handbook for a 'liveable' future

Hitting the 2015 Paris Agreement temperature goals will require a massive reduction in fossil fuel use and unprecedented changes in all aspects of society, IPCC reports say.

By Staff, Aljazeera. Mar 14. 2-23

https://www.aljazeera.com/news/2023/3/14/ipcc-the-climate-handbook-for-a-liveable-future *[SEPP Comment: Summary of recent UN climate activities.]*

Five Reasons Why Climate Action Needs Women

Press Release, UN Climate Change News, Mar 8, 2023

https://unfccc.int/news/five-reasons-why-climate-action-needs-women

Defending the Orthodoxy – Bandwagon Science

China Is Reason for a Strong U.S. Offshore Wind Energy Industry

By James 'Spider' Marks, Real Clear Energy, March 13, 2023

https://www.realclearenergy.org/articles/2023/03/13/china_is_reason_for_a_strong_us_offshorewind_energy_industry_887048.html

[SEPP Comment: The retired Major General confuses offshore wind power with reliable electricity. As the UK is finding, they are not the same.]

Questioning the Orthodoxy

Annual Energy Outlook, 2023

By Staff, EIA, March 16, 2023

https://www.eia.gov/outlooks/aeo/

Stop them if you've heard it before

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

https://climatediscussionnexus.com/2023/03/15/stop-them-if-youve-heard-it-before/

Tucker Carlson: It's been a tough couple of years for the 'experts'

By Paul Homewood, Not a Lot of People Know That, Mar 17, 2023

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2023/03/17/tucker-carlson-its-been-a-tough-couple-of-years-for-the-experts/}$

VIDEO

As Whales Wash Up Dead, Feds Push Forward With "Green" Energy

By Collister Johnson, Jr., Real Clear Energy, March 13, 2023

https://www.realclearenergy.org/articles/2023/03/13/as_whales_wash_up_dead_feds_push_forward with green energy 886688.html

Above It All

By Robert Bryce, His Blog, Mar 13, 2023

https://robertbryce.substack.com/p/above-it-all

"Michael Bloomberg is giving hundreds of millions of dollars to groups that want to ban gas stoves. Last year, his private jets burned 328,000 gallons of jet fuel."

Energy and Environmental Review: March 13, 2023

By John Droz, Jr., Master Resource, Mar 13, 2023

https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-and-environmental-review-03-13-2023/

Change in US Administrations

Alaska, Oil, and Joe Biden: Do You Believe in Miracles?

By Rick Whitbeck, Real Clear Energy, March 14, 2023

https://www.realclearenergy.org/articles/2023/03/14/alaska_oil_and_joe_biden_do_you_believe_in_miracles_887157.html

Biden administration withdraws approval for road through Alaskan refuge after previously defending it in court

By Zack Budryk, The Hill, Mar 14, 2023

https://thehill.com/policy/energy-environment/3900362-biden-administration-withdraws-approval-for-road-through-alaskan-refuge-after-previously-defending-it-in-court/

Problems in the Orthodoxy

Bank of England downgrades Net Zero and cuts climate spending

Press Release, Net Zero Watch, Mar 13, 2023

https://www.netzerowatch.com/bank-of-england-downgrades-net-zero-and-cuts-climate-spending/

"Climate change" suddenly seems irrelevant: Bank of England drops it, and Biden drills for Big-oil

By Jo Nova, Her Blog, Mar 15, 2023

https://joannenova.com.au/2023/03/climate-change-is-suddenly-irrelevant-bank-of-england-drops-it-and-biden-drills-for-big-gas/

[SEPP Comment: Map of Willow Project area, photos can be found at

 $\label{lower} $$ \frac{https://www.google.com/search?q=photos+of+willow+project\&rlz=1C1GCEA_enUS785US785}{\&oq=photo\&aqs=chrome.0.69i59j69i57j0i20i263i433i512l2j0i433i512j69i61j69i60l2.2368j0j7\&sourceid=chrome\&ie=UTF-8\#imgrc=pmUhSi4WJvmOwMJ $$$

King Coal: India, Japan Update

By Robert Bradley Jr., Master Resource, Mar 15, 2023

https://www.masterresource.org/coal-environmentalism/king-coal-some-insights/

Science, Policy, and Evidence

Climate Policies Will Shut Down Farmers

By Diana Furchtgott-Roth, The Daily Signal, Mar 9, 2023

https://www.dailysignal.com/2023/03/09/climate-policies-will-shut-down-farmers/

Climate change comes for your unbuilt road

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

https://climatediscussionnexus.com/2023/03/15/climate-change-comes-for-your-unbuilt-road/

Link to report: Estimating Future Costs for Infrastructure in the Proposed Canadian Northern Corridor [CNC] at Risk from Climate Change

By Nathan S. Debortoli, Tristan D. Pearce and James D. Ford, University of Calgary, March 2023 https://www.policyschool.ca/wp-content/uploads/2023/03/NC41-

<u>EstFutureCostsInfrastructure.pdf?mkt_tok=MTYxLU9MTi05OTAAAAGKYSOehAwjxaxxmXWpZhAmLUle5uL7IeKObkbuqvGJxmAHwFB7JKFTwPWyuWSihD6X3X2UqsMmjDeKWIVFjn8qewH_2tCneOVPA8JFOF-cNYvP</u>

From abstract: "We draw upon climate change projections at the end of the century (2100) using information from several climate variables sourced on the CMIP6 and CMIP5 reports."

"The findings of our analysis show that mean temperatures within the CNC area could increase by 10.9°C, and precipitation by 45 per cent by 2100."

[SEPP Comment: No possibility of future glaciation in northern Canada?]

Models v. Observations

CMIP6 GCM Validation Based on ECS and TCR Ranking for 21st Century Temperature Projections and Risk Assessment

By Nicola Scafetta, Atmosphere, Feb 9, 2023 https://www.mdpi.com/2073-4433/14/2/345

Measurement Issues -- Surface

Urbanization Effects on GHCN Temperature Trends, Part III: Using Population Density, 1880-2015

By Roy Spencer, His Blog, Mar 17, 2023

https://www.drroyspencer.com/2023/03/urbanization-effects-on-ghcn-temperature-trends-part-iii-using-population-density-1880-2015/

Measurement Issues -- Atmosphere

The world's atmospheric rivers now have an intensity ranking like hurricanes

By Staff Writers, Washington DC (SPX) Mar 10, 2023

https://www.spacedaily.com/reports/The_worlds_atmospheric_rivers_now_have_an_intensity_ran king like hurricanes 999.html

Link to paper: Global Application of the Atmospheric River Scale

By Bin Guan, Duane E. Waliser, F. Martin Ralph, JGR Atmospheres, Feb 16, 2023

https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2022JD037180

Changing Weather

California's Wild Winter

By Joseph D'Aleo, ICECAP, Mar 17, 2023

http://icecap.us/index.php/go/new-and-cool/californias wild winter1/

"The main lodge at Mammoth Mountain in California has reached 618 inches (more than 50 feet) for the season. The record was 668 inches in 2010/11. At the summit, the seasonal total is at 784 inches (over 65 feet)."

Extreme Rainfall In 1937

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

https://notalotofpeopleknowthat.wordpress.com/2023/03/11/extreme-rainfall-in-1937/

[SEPP Comment: The Met Office creating new records?]

Nearly two-thirds of California is now drought-free

By Sharon Udasin, The Hill, Mar 16, 2023

https://thehill.com/policy/equilibrium-sustainability/3904027-nearly-two-thirds-of-california-is-now-drought-free/

Link to: National Drought Summary for March 14, 2023

https://droughtmonitor.unl.edu/Summary.aspx

[SEPP Comment: No part of California is in severe drought or greater.]

March 16, 1942, Tornado Outbreak

By Tony Heller, His Blog, Mar 16, 2023

https://realclimatescience.com/2023/03/march-16-1942-tornado-outbreak/

Tens of thousands without power after nor'easter dumps snow on northeast US

By Jared Gans, The Hill, Mar 15, 2023

https://thehill.com/policy/energy-environment/3901348-tens-of-thousands-without-power-after-noreaster-dumps-snow-on-northeast-us/

Changing Climate

Tree Taxa Affirm A Much Warmer Alpine Climate Than Today For Nearly All Of The Last 10,000 Years

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

https://notrickszone.com/2023/03/16/tree-taxa-affirm-a-much-warmer-alpine-climate-than-today-for-nearly-all-of-the-last-10000-years/

Link to paper: Chironomid-based temperature reconstructions in the central eastern Alps showed...between ca. 10 000 and 8600 cal a BP...a thermal maximum of up to 4.5°C higher temperatures than present

By Nina Caf et al., Journal of Quaternary Science, 2023

https://onlinelibrary.wiley.com/doi/pdf/10.1002/jqs.3461

[SEPP Comment: How sensitive is the change in tree types to changes in rainfall?]

New Study: Roman And Medieval Warm Periods Were 2.8°C Warmer Than 1970-2000 In Central China

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

 $\frac{https://notrickszone.com/2023/03/13/new-study-roman-and-medieval-warm-periods-were-2-8c-warmer-than-1970-2000-in-central-china/$

Link to paper: Late Holocene temperature and precipitation variations in an alpine region of the northeastern Tibetan Plateau and their response to global climate change

By Youmo Li, et al., Palaeogeography Palaeoclimatology Palaeoecology, February 2023 <a href="https://www.researchgate.net/publication/368414604_Late_Holocene_temperature_and_precipitation_variations_in_an_alpine_region_of_the_northeastern_Tibetan_Plateau_and_their_response_toglobal_climate_change

Changing Seas

Giant seaweed blob twice the width of the US takes aim at Florida

By Rachel Tucker, The Hill, Mar 13, 2023

https://thehill.com/homenews/3896298-giant-seaweed-blob-twice-the-width-of-the-us-takes-aim-at-florida/

[SEPP Comment: Reminiscent of a 1950's Sci-Fi movie.]

Changing Cryosphere – Land / Sea Ice

Mercury stalled in Greenland

By John Robson, Climate Discussion Nexus, Mar 15, 2023 https://climatediscussionnexus.com/2023/03/15/mercury-stalled-in-greenland/

Birthing season for harp seals in Labrador Sea just in time to feed hungry polar bears

By Susan Crockford, Polar Bear Science, Mar 15, 2023

 $\frac{https://polarbearscience.com/2023/03/15/birthing-season-for-harp-seals-in-labrador-sea-just-intime-to-feed-hungry-polar-bears/$

Return of Svalbard sea ice in time for seal births and the polar bear feeding bonanza

By Susan Crockford, Polar Bear Science, Mar 16, 2023

 $\underline{https://polarbearscience.com/2023/03/16/return-of-svalbard-sea-ice-in-time-for-seal-births-and-the-polar-bear-feeding-bonanza/}$

Ice-entrapped dolphins in Newfoundland lucky not to have been eaten by polar bears

By Susan Crockford, Polar Bear Science, Mar 12, 2023

https://polarbearscience.com/2023/03/12/ice-entrapped-dolphins-in-newfoundland-lucky-not-to-have-been-eaten-by-polar-bears/

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

Net Zero Unrealistic; But Jeremy Warner Wants To Spend Trillions On It Anyway!

By Paul Homewood, Not a Lot of People Know That, Mar 12, 2023

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2023/03/12/net-zero-unrealistic-but-jeremywarner-wants-to-spend-trillions-on-it-anyway/}$

Serious Climate Misinformation In Seattle Time Headline Article

By Cliff Mass, Weather Blog, Mar 16, 2023

https://cliffmass.blogspot.com/2023/03/serious-climate-misinformation-in.html

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

What to know about the Willow project: Why Joe Biden just approved a climate bomb in Alaska

The ConocoPhillips drilling project in one of the country's last great wildernesses would equal adding two million cars to the road every year for three decades.

By Dave Levitan, Grid, Mar 13, 2023

https://www.grid.news/story/climate/2023/03/13/what-to-know-about-the-willow-project-why-joe-biden-just-approved-a-climate-bomb/

[SEPP Comment: Why not show photos taken of the site called the last great wilderness? Barren? See links under Problems in the Orthodoxy.]

San Francisco Bay Area to phase out natural gas furnaces and water heaters

By Sharon Udasin, The Hill, Mar 16, 2023

https://thehill.com/policy/equilibrium-sustainability/3903555-san-francisco-bay-area-to-phase-out-natural-gas-furnaces-and-water-heaters/

"'The new amendments will safeguard public health against the hazards of these pollutants and prevent an **estimated 85 premature deaths**, as well as dozens of new asthma cases, in the Bay Area each year,' a statement from the agency added."

[SEPP Comment: Absurd mathematical results in boldface.]

Communicating Better to the Public - Make things up.

Guardian's Hurricane Florence Claims Were Fake

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

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2023/03/16/guardians-hurricane-florence-claims-were-fake/}$

Link to paper: Forecasted attribution of the human influence on Hurricane Florence

K.A. Reed, et all., AAAS ScienceAdvances, Jan 1, 2020

https://www.science.org/doi/10.1126/sciadv.aaw9253

"But the whole episode shows that these weather attribution models are run for political impact and contribute little to the science."

The abstract states: "Mean total overland rainfall amounts associated with the forecasted storm's core were increased by $4.9 \pm 4.6\%$ with local maximum amounts experiencing increases of $3.8 \pm 5.7\%$ due to climate change. A slight increase in the forecasted storm size of 1 to 2% was also attributed. This work reviews our forecasted attribution statement with the benefit of hindsight, demonstrating credibility of advance attribution statements for tropical cyclones."

[SEPP Comment: The precision is unreal, and this was published before Ross McKitrick showed that probability estimates in attribution studies are meaningless.]

Communicating Better to the Public – Do a Poll?

This is Kryptonite for fake science preachers: 60% of voters agree Climate Change is a religion

By Jo Nova, Her Blog, Mar 17, 2023

 $\underline{https://joannenova.com.au/2023/03/kryptonite-for-fake-science-preachers-60-of-voters-agree-climate-change-is-a-religion/}$

Communicating Better to the Public – Use Propaganda

Goering Explained War Propaganda

By Tony Heller, His Blog, Mar 16, 2023

https://realclimatescience.com/2023/03/goering-explained-war-propaganda/

Communicating Better to the Public - Protest

Farmers' protest party win shock Dutch vote victory

By Paul Homewood, Not a Lot of People Know That, Mar 17, 2023

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2023/03/17/farmers-protest-party-win-shock-\underline{dutch-vote-victory/}}$

"This shows what can happen when governments push their electorate too far."

NJ Seeks More Offshore Wind Contracts As Opponents Push For Halt

New projects are scheduled to be awarded every 2 years until 2031, but opponents of the project seek a halt after a number of whale deaths.

By Michelle Rotuno-Johnson, Patch, Mary 14, 2023

 $\underline{https://patch.com/new-jersey/across-nj/nj-seeks-more-offshore-wind-contracts-opponents-push-halt}$

Expanding the Orthodoxy

You didn't really want that car

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

https://climatediscussionnexus.com/2023/03/15/you-didnt-really-want-that-car/

"'Rationing has been neglected as a climate change mitigation policy option.' It added that rationing was widely accepted in Britain during the conflict, explaining: 'As long as there was scarcity, rationing was accepted, even welcomed or demanded.'"

Questioning European Green

The Price We All Pay For The Emissions Trading Scheme

By Paul Homewood, Not a Lot of People Know That, Mar 17, 2023

https://notalotofpeopleknowthat.wordpress.com/2023/03/17/the-price-we-all-pay-for-the-emissions-trading-scheme/

"As this cost surcharge is reflected in the price of all electricity sold on the market regardless of source, except for CfD generators which account for about 20 TWh a year, it means that energy users are paying about £10 billion a year extra as a direct result of government policy.

"As I have noted previously, carbon prices rocketed from around £15/tonne three years ago. This was deliberately engineered by the UK government, in tandem with the EU, by restricting the number of free allowances handed out."

Surprise: "Coal Became Most Important Energy Source For Electricity In Germany" In 2022

By P Gosselin, No Tricks Zone, Mar 14, 2023

"Last summer, a total of 14 coal-fired power plants and one petroleum-fired power plant were put back into operation or, contrary to original plans, were not shut down in order to counteract the acute gas crisis,' reports Blackout News, citing the German tagesschau."

Coal power stations refuse to provide emergency energy top-up next winter

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

https://notalotofpeopleknowthat.wordpress.com/2023/03/16/coal-power-stations-refuse-to-provide-emergency-energy-top-up-next-winter/

"Closure of West Burton and Drax will lose 2.2GW of capacity. The former was called up by the grid just last week during the cold snap, even though it was a windy day. So far this winter, we have avoided a really windless, cold period, but the only solution the National Grid appears to have is to pay people not to use electricity.

"That can never be a proper long-term solution."

[SEPP Comment: Why should mature-thinking executives commit to even one year when government policy is created with teen-age group think?]

UK's new budget is the beginning of the end for renewables-based Net Zero

Press Release, Net Zero Watch, Mar 16, 2023

https://www.netzerowatch.com/uks-new-budget-is-the-beginning-of-the-end-for-renewables-based-net-zero/

Heat pumps won't work in old homes, warns Bosch

By Paul Homewood, Not a Lot of People Know That, Mar 17, 2023

https://notalotofpeopleknowthat.wordpress.com/2023/03/15/heat-pumps-wont-work-in-old-homes-warns-bosch/

"Heat pumps will not work for Britain's Victorian houses, one of the largest makers of the devices has warned."

"I've got a better idea – just stick with what does work, gas boilers."

Questioning Green Elsewhere

Countdown To New York's Rendezvous With Energy Impossibility

By Francis Menton, Manhattan Contrarian, Mar 15, 2023

 $\underline{https://www.manhattancontrarian.com/blog/2023-3-15-countdown-to-new-yorks-rendezvous-with-energy-impossibility}$

Unaffordable Energy Bills Necessitate a Climate and Energy Policy Rethink

By Jennifer Schubert-Akin, Real Clear Energy, Mar 14, 2023

https://www.realclearenergy.org/articles/2023/03/14/unaffordable_energy_bills_necessitate_a_cli mate and energy policy rethink 887077.html

[SEPP Comment; Don't "feel good" policies keep people warm?]

Multiple Choice Question re Green Energy

By Ron Clutz, Science Matters, Mar 17, 2023

https://rclutz.com/2023/03/17/multiple-choice-question-re-green-energy/

Funding Issues

US Banks Collapse, As Regulators Focus On Climate Change

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

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2023/03/14/us-banks-collapse-as-regulators-focus-on-climate-change/}$

"Note the comment that banks are 'increasingly focused on the risk' of climate change.

"It's little wonder that the FSOC, together with some of the banks it seems, failed to see the elephant in the room!"

[SEPP Comment: The FSOC is the Financial Stability Oversight Council in the US Department of Treasury created under the Dodd-Frank Wall Street Reform and Consumer Protection Act after the 2007-2009 financial crunch.] https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc/about-fsoc

Lessons From The Collapse Of SVB

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

https://notalotofpeopleknowthat.wordpress.com/2023/03/13/lessons-from-the-collapse-of-svb/

"Let this be a reminder that there is no such thing as a magic money tree, which all UK parties still seem to believe in, not least to finance Net Zero."

Silicon Valley Bank was a Big Green Government Ponzi Scheme

By Jo Nova, Her Blog, Mar 14, 2023

https://joannenova.com.au/2023/03/silicon-valley-bank-was-a-big-green-government-ponzischeme/

"SVB was a 'Green' Banker. We know this, not because newspapers are saying that now, but because of the emergency flares released on behalf of the victims. The New York Times tells us that the collapse of SVB is going to hit green tech hard because SVB clients included 1,550 companies dedicated to 'fighting climate change'."

SVB, ESG, and Biden's ERISA Rule

By Rupert Darwall, Real Clear Energy, March 14, 2023 https://www.realclearenergy.org/articles/2023/03/14/svb esg and bidens erisa rule 887304.html

The Political Games Continue

Republicans use new majority to take on Biden regulations

By Rachel Frazin, The Hill, Mar 12, 2023

https://thehill.com/policy/energy-environment/3894687-republicans-use-new-majority-to-take-on-biden-regulations/

New coalition urges Congress to investigate risks of net-zero energy actions

Press Release by Paul Driessen, Net Zero Reality Coalition, Feb 24, 2023 https://www.cfact.org/netzerorealitycoalition/?mc_cid=f2a6d7db03&mc_eid=ffd82d3222

Litigation Issues

Environmental groups sue over Biden administration approval of Alaska oil drilling project By Zack Budryk, The Hill, Mar 15, 2023

 $\underline{https://thehill.com/policy/energy-environment/3901201-environmental-groups-sue-over-biden-administration-approval-of-alaska-oil-drilling-project/}$

[SEPP Comment: The groups include Sierra Club, the Wilderness Society, Earthjustice, the Center for Biological Diversity, Defenders of Wildlife, Friends of the Earth, Greenpeace and the Natural Resources Defense Council which have not said anything about the increase in deaths of right whales washing up on East Coast beaches.]

Subsidies and Mandates Forever

Tidbits

By John Robson, Climate Discussion Nexus, Mar 15, 2023 https://climatediscussionnexus.com/2023/03/15/tidbits-5/

"The green subsidy trade war we warned of rages on, with Reuters 'Sustainable Switch', which inexplicably has not figured out how to post its newsletter online during the transition, announces that 'United States vs EU green funding battle begins', with President Biden hurling billions at firms in America and 'not everyone is pleased about the program as the billions of dollars in clean energy incentives might put the European Union's energy transition at risk by luring away money and talent, executives at the CERAWeek energy conference said this week."

Environmental Levies-March 2023

By Paul Homewood, Not a Lot of People Know That, Mar 17, 2023 https://notalotofpeopleknowthat.wordpress.com/2023/03/17/environmental-levies-march-2023/ "We can of course ignore the rosy forecasts for CfDs in the later years. These assume that lots of offshore wind capacity will come on stream at the ridiculously low prices tendered. As we know,

there is not a cat in hell's chance of this."

EPA and other Regulators on the March

EPA issues final rule cutting interstate smog

By Zack Budryk, The Hill, Mar 15, 2023

https://thehill.com/policy/energy-environment/3901075-epa-issues-final-rule-regulating-interstate-smog/

"EPA estimates project that the rule will cut about 70,000 tons in pollutants from power plants by 2026 and that in 2026 alone it will create public health benefits that prevent about 1,300 premature deaths, 1.3 million asthma cases and more than 2,000 hospitalizations." [SEPP Comment: Mathematical absurdity.]

Energy Issues - Non-US

Four Reasons For Europe's Record-Breaking Drop In Natural Gas Demand

By Tsvetana Paraskova, Oil Price.com, Mar 14, 2023

https://oilprice.com/Energy/Energy-General/Four-Reasons-For-Europes-Record-Breaking-Drop-In-Natural-Gas-Demand.html

"The IEA said the estimated 13% drop in demand was driven by changes in the energy mix, economic activity, weather, and consumer behavior."

Andrew Neil Exposes Labour's Net Zero Madness

By Paul Homewood, Not a Lot of People Know That, Mar 12, 2023

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2023/03/12/andrew-neil-exposes-labours-net-zero-madness/$

Video

[SEPP Comment: Investing in the energy of the future, that does not exist today?]

Berlin's March 26th Climate Referendum... Berlin Leaders Could Have Immediate Dictatorial Powers

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

 $\frac{https://notrickszone.com/2023/03/12/berlins-march-26th-climate-referendum-berlin-leaders-could-have-immediate-dictatorial-powers/}{}$

EU Takes Step To Force All Homes, Buildings To Meet Crushing Energy Efficiency Standards

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

https://notrickszone.com/2023/03/15/eu-takes-step-to-force-all-homes-buildings-to-meet-crushing-energy-efficiency-standards/

Germany's Coming Green Energy "Economic Miracle"

By Francis Menton, Manhattan Contrarian, Mar 12, 2023

https://www.manhattancontrarian.com/blog/2023-3-12-germanys-coming-green-energy-economic-miracle

Climate Friendly" Heating Systems: German Gov Plans 50,000 Euro Fines For Non Compliance!

By P Gosselin, No Tricks Zone, Mar 11, 2023

 $\frac{https://notrickszone.com/2023/03/11/climate-friendly-heating-systems-german-gov-plans-50000-euro-fines-for-non-compliance/$

Energy Issues – Australia

Mystery: Australians invest billions in free wind and solar, but prices rise another 20-30% By Jo Nova, Her Blog, Mar 16, 2023

https://joannenova.com.au/2023/03/mystery-australians-invest-billions-in-free-wind-and-solar-but-prices-rise-another-20-30/

"The bigger the bureaucracy is, the more it can screw things up."

Energy Issues -- US

Record of Decision, Willow Master Development Plan

By Staff, Bureau of Land Management March 2023 [H/t Tony Heller] https://www.documentcloud.org/documents/23706055-alaska-willow-oil-project-decision

US Gas Consumption Trends

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

https://notalotofpeopleknowthat.wordpress.com/2023/03/16/us-gas-consumption-trends/

Link to report: U.S. natural gas consumption set nine monthly records and an annual record in 2022

By Katy Fleury, Kristen Tsai, et al., Today in Energy, USEIA, Mar 14, 2023 https://www.eia.gov/todayinenergy/detail.php?id=55800&src=email

"But I would draw your attention to the seasonal peaks and troughs. As with the UK, gas consumption rises sharply in winter, typically about 60% above summer levels.

"This is a reminder of how difficult it will be to replace gas and coal with renewables, which cannot be simply be turned up and down as required."

SB4 Is Vital: Kentuckians Are Paying a High Price for Closing Coal-Fired Power Plants

By Tucker Davis, Real Clear Energy, Mar 15, 2023

https://www.realclearenergy.org/articles/2023/03/15/sb4_is_vital_kentuckians_are_paying_a_high price for closing coal-fired power plants 887329.html

"The one common factor in the rise of electric bills for Kentuckians is the closure of approximately 6000 MW of coal-fired capacity that has been shut down in Kentucky over the past decade. That is enough power generation capacity to provide electricity to every home in Kentucky for three years."

Texas's Central Planning: Duplicating the Grid

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

https://www.masterresource.org/texas-blackout-2021/texas-duplicating-the-grid/

Washington's Control of Energy

Jennifer Granholm Praises China

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

https://notalotofpeopleknowthat.wordpress.com/2023/03/11/jennifer-granholm-praises-china/

"U.S. Department of Energy Secretary Jennifer Granholm claimed Friday that Americans can 'learn from what China is doing' in combating climate change."

"And China will carry on treating them all like the fools they are."

[SEPP Comment: China is building more coal-fired power plants to combat climate change?]

Oil and Natural Gas – the Future or the Past?

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

https://ddears.com/2023/03/14/lng-potential/

[SEPP Comment: The PM of Canada claimed there is no market for LNG!]

Alternative, Green ("Clean") Solar and Wind

Renewable Giant NextEra: Offshore Wind Is A Poor Investment

By Charles Kennedy, Oil Price.com. Mar 08, 2023

https://oilprice.com/Latest-Energy-News/World-News/Renewable-Giant-NextEra-Offshore-Wind-Is-A-Poor-Investment.html

"Costs associated with offshore wind projects continue to mount due to complicated subsea cable installation and supply chain issues, while extreme weather and saltwater corrosion are constant threats to viability."

[SEPP Comment: Who would have thought corrosion from saltwater spray is a problem in the oceans?]

Alternative, Green ("Clean") Energy -- Other

Pembrokeshire floating wind farm gets Welsh government backing

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

https://notalotofpeopleknowthat.wordpress.com/2023/03/13/pembrokeshire-floating-wind-farm-gets-welsh-government-backing/

"And, as ever, it all boils down to cost. Hywind off the Scottish coast is the only commercial floating wind farm in the UK at the moment. Built in 2017, it is slightly smaller than Erebus, and receives about £190/MWh in ROC subsidies. It seems likely that Erebus will need a similar level of subsidy.

"The project is estimated to cost \$478 million, about £400 million, equivalent to £11,000 for each of those lucky 35,000 homes! The capital cost works out at £2805/KW, compared to £1630/KW for the new Hornsea wind farm being planned. In other words, Erebus looks like being highly uncompetitive, and will rely on big subsidies.

"As with Hywind, the claim is that costs will fall rapidly once the technology is established. But that has not happened in the years since Hywind became operational, and developers are not queuing up to build more of them.

"As with the Swansea tidal lagoon, the Welsh government would love to see the project go ahead, just as long as somebody else pays the cost!"

Alternative, Green ("Clean") Vehicles

The Real Reason Why Automakers Slashed EV Prices

By Rystad Energy, Oil Price.com, Mar 13, 2023,

https://oilprice.com/Energy/Energy-General/The-Real-Reason-Why-Automakers-Slashed-EV-Prices.html

"Cuts in subsidies and tax credits across Europe and mainland China have dampened consumer sentiment and caused automakers to scramble for solutions to salvage the market in 2023." [SEPP Comment: Low costs are important to buyers?]

California Dreaming

California, struggling with weekend floods, braces for new atmospheric river

By Sharon Udasin, The Hill, Mar 13, 2023

https://thehill.com/policy/energy-environment/3897982-california-struggling-with-weekend-floods-braces-for-new-atmospheric-river/

California cancels rest of salmon season over lingering drought issues

By Olafimihan Oshin, The Hill, Mar 13, 2023

 $\frac{https://thehill.com/policy/energy-environment/3898688-california-cancels-rest-of-salmon-season-over-lingering-drought-issues/$

Link to press release: Ocean Salmon Sport Fisheries In California Closed For April Through Mid-May 2023

California Department of Fish and Wildlife (CDFW), Mar 10, 2023

https://wildlife.ca.gov/News/ocean-salmon-sport-fisheries-in-california-closed-for-april-through-mid-may-2023#gsc.tab=0

UpdatedCA Seeks EPA Authorization to Ban Gas and Diesel Vehicle Sales. Policy Could Spread to Other States Too.

Press Release, AFPM Communications (American Fuel & Petrochemical Manufacturers), Mar 6, 2023

 $\underline{https://www.afpm.org/newsroom/news/updated ca-seeks-epa-authorization-ban-gas-and-diesel-vehicle-sales-policy-could}$

Environmental Industry

Sierra Club Statement on White House Final Decision on Willow Oil and Gas Project

The Harmful Effects Of President Biden's Decision Cannot Be Overstated

Press Release, Sierra Club, Mar 13, 2023

https://www.sierraclub.org/press-releases/2023/03/sierra-club-statement-white-house-final-decision-willow-oil-and-gas-project

[SEPP Comment: Sierra Club overstatement?]

Other Scientific News

Review of Acute Human-Toxicity Estimates for Selected Chemical-Warfare Agents.

By National Research Council (US), Committee on Toxicology.

National Academies Press, 1997

https://www.ncbi.nlm.nih.gov/books/NBK233733/

Other News that May Be of Interest

Massive Migration [of Birds] Occurring Aloft and Even Warmer on Saturday

By Cliff Mass, Weather Blog, Mar 17, 2023

https://cliffmass.blogspot.com/2023/03/massive-migration-occurring-aloft-and.html

BELOW THE BOTTOM LINE

The green magic spell

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

https://climatediscussionnexus.com/2023/03/15/the-green-magic-spell/

"What is it about environmentalism that suspends people's powers of rational judgement? It's a kind of talisman imbuing your cause, and your funding request, with an aura of sanctity and quasi-infallibility."

"Thus 'Canada's spy service warns that climate change poses a profound, ongoing threat to national security and prosperity, including the possible loss of parts of British Columbia and the Atlantic provinces to rising sea levels' and who could refuse to increase the CSIS budget to forestall that disaster, plus fighting in the streets 'across the traditional left-right ideological

spectrum' between climate alarmists and, who knows, Sons of Thor who want their furnace to turn on."

Comrade Geoengineerov to the rescue

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

https://climatediscussionnexus.com/2023/03/15/comrade-geoengineerov-to-the-rescue/

Link to article: Old Bomber Plane Will Sniff the Sky for Geoengineering Particles

NOAA will use a converted Air Force bomber to search the upper atmosphere for substances that could help the U.S. reflect sunlight away from Earth

By John Fialka, E&E News on March 7, 2023

https://www.scientificamerican.com/article/old-bomber-plane-will-sniff-the-sky-for-geoengineering-particles/

Al Gore rides the waves in Davos

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

https://climatediscussionnexus.com/2023/03/15/al-gore-rides-the-waves-in-davos/

"Oxford University's Our World in Data puts the number of refugees at around 26.4 million as of 2020. But was this caused by rising temperatures? The Bible of climate alarmism, the IPCC's 2018 Special Report on 1.5 degrees warming, said ... probably not."

ARTICLES

1. Net Zero? Never Mind!

A small agency in the Energy Department admits the administration can't reach its climate-change goals.

By Steve Milloy, WSJ, March 17, 2023

https://www.wsj.com/articles/net-zero-never-mind-environment-electrical-grid-carbon-emissions-climate-change-southern-co-energy-information-administration-db856556?mod=hp_opin_pos_2#cxrecs_s

TWTW Summary: The senior legal fellow with the Energy and Environment Legal Institute writes:

"The Biden administration is committed to an all-of-government implementation of its climate agenda. Every executive-branch agency, including such unlikely ones as the Consumer Product Safety Commission and the Securities and Exchange Commission, have been drafted to help.

But the Energy Information Administration didn't get the memo. The EIA, part of the Energy Department, just issued its 'Annual Energy Outlook' report for 2023, which contains a startling graph that undermines the president's climate agenda.

Featured in a media release titled 'EIA projects that U.S. energy-related CO2 emissions will fall through 2050,' the report finds that by 2030, U.S. emissions will decline from their 2005 peak by 30%.

[&]quot;It's that, as we've said before, you'll succeed and bring back the glaciers."

But a 30% decline isn't what the president has been selling. On his first day in office, Mr. Biden issued an executive order recommitting the U.S. to the Paris Climate Accords, which entails a pledge to reduce net U.S. greenhouse-gas emissions at least 50% by 2030 and to zero by 2050.

Last year's report from the U.S. electric-utility industry concluded that net-zero emissions on an economywide basis is impossible. Yet the irrational march to net zero continues. The SEC is preparing climate disclosure rules to facilitate the president's goal by 2050. Many large U.S. and European companies have publicly committed to attaining net zero by 2050. Companies that haven't yet surrendered are being pressured to do so by Wall Street and large institutional investors.

I filed a shareholder proposal with Southern Co., a large Atlanta-based utility, asking it to report to shareholders annually on its progress to net zero by 2050. In its statement recommending a vote against my proposal, Southern wrote: 'Implying that there is no realistic pathway to reaching net zero by 2050 is in direct conflict with the stated intentions of policymakers—including the current administration's stated goal of zero-carbon electricity and a net zero carbon economy by 2050.'

Unfortunately, policy makers can't order technology like dinner. The road to disastrous blackouts begins with those 'stated intentions of policymakers.' Across the country, electricity grids are being systematically weakened by the 'net zero by 2050' cult. Coal and gas plants are being replaced with unreliable and subsidy-dependent wind and solar operations. Electrical grids are simultaneously being burdened with extra demand from electric vehicles. Disaster looms."

Mr Milloy then discusses that some states are recognizing that the green dreams are not real.

The Real Price of Wind and Solar

First pay for renewables. Then pay again to pick up all the slack. By The Editorial Board, WSJ, March 12, 2023 https://www.wsj.com/articles/renewable-energy-balancing-costs-united-kingdom-energy-bills-9795e48d?mod=hp_user_preferences_pos1#cxrecs_s

TWTW Summary: The editorial begins:

"A billion here, a billion there, and soon you're talking about real costs from politicians' headlong rush toward net zero carbon emissions. United Kingdom households received a reminder of this truth recently with the latest data on how renewables drive up their energy bills.

The British electric-grid operator spent £4.2 billion in 2022 balancing supply and demand on the network, a record amount. This works out to £150 per household, according to the Nuclear Industry Association, the lobbying group that crunched the numbers based on data released by National Grid.

These charges arise because with current technology it's impossible to store large amounts of electricity for long. The grid must balance supply and demand on a minute-by-minute basis, and the task becomes urgent and costly as renewables take up a greater share of installed generation. Whenever the wind isn't blowing, or the sun isn't shining—which is often in northern Europe—the grid operator must rack up high fees buying emergency power from conventional generators.

These balancing costs constitute a growing burden on British households and businesses that already have seen their bills skyrocket by up to 230% over the past year, prompting the government to step in with as-yet incalculable subsidies to reduce the amount people must actually pay. The annual balancing cost was about £1.2 billion as recently as 2019."

The editorial concludes with how unreliable renewables are despite claims by politicians.