

The Week That Was: 2021-03-27 (March 27, 2021)
Brought to You by SEPP (www.SEPP.org)
The Science and Environmental Policy Project

Quote of the Week: *“Aqueous vapor [water vapor] is a blanket more necessary to the vegetable life of England than clothing is to man. Remove for a single summer-night the aqueous vapour from the air which overspreads this country, and you would assuredly destroy every plant capable of being destroyed by freezing temperature. The warmth of our fields and gardens would pour itself unrequited into space, and the sun would rise upon an island held fast in the iron grip of frost.”* – John Tyndall, “Heat, a Mode of Motion” (p. 359, fifth edition, 1875) [H/t William Happer]

Number of the Week: – 13%

THIS WEEK:

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

The Greenhouse Effect: As early as the 1820s, 200 years ago, the brilliant French mathematician and physicist Jean-Baptiste Joseph Fourier realized something was wrong. The earth was far warmer than it should be given its distance from the sun. In 1859 John Tyndall conducted experiments in spectroscopy (the interaction between matter and electromagnetic radiation). He determined that most atmospheric gases are transparent to both the energy from the sun and electromagnetic radiation, but certain gases absorb electromagnetic radiation. Tyndall labeled those gases which absorb infrared energy given off by the earth as greenhouse gases. The strongest absorber is water vapor.

The Greenhouse Effect – Happer: In a 25-minute presentation for the Shiller Institute, William Happer gives an outstanding presentation on the greenhouse effect, which is poorly understood by those claiming that human emissions of carbon dioxide (CO₂) are causing dangerous global warming. Happer is a distinguished professor in Atomic Molecular and Optical Physics – the field of physics that encompasses the interaction between matter and electromagnetic radiation, radiative transfer.

Happer considers the proclamations of a climate crisis a form of hysteria and they have no scientific backing. Unfortunately, governments and the UN Intergovernmental Panel on Climate Change (IPCC) are promoting climate hysteria. Among the tricks they use is “bait and switch.” Photos of air in China polluted by soot, dust, etc. are passed off as pollution from CO₂, N₂O (Nitrous oxide), and CH₄ (methane). These gases are invisible, transparent, but propagandists, including those in government, do not care.

The emissions of a clean power plant, which uses scrubbers for removing impurities from the exhausts, is about as clean as human breath, which is 4% CO₂ and 6% water vapor (power plant emit much more CO₂, but contrary to propaganda photos the CO₂ is transparent.)

Happer points out that the 800-pound gorilla is the sun. About 30% of sunlight is reflected to space and about 70% heats the earth. Through convection in the oceans and the atmosphere this heat is transported from the tropics to the poles and to the top of the troposphere. The radiative effect primarily takes place above the troposphere where the atmosphere is very thin and there is

little water vapor remaining. (Water vapor freezes out at the tropopause, about 20,000 feet (6000 meters) above the poles and 60,000 feet (18,000 meters) above the equator.)

[To TWTW, many of the problems of “solving climate change” encountered by climate modelers and others occurs because they fail to separate the issues of heat transport, by convection, from the issue of greenhouse effect, radiative transfer.]

Happer then discusses the work of John Tyndall (see quote of the week, above) and points out that we have forgotten this important work.

Happer brings up the work of Max Planck trying to solve the problem of how and why does radiation transfer work. In solving the thermal radiation transfer problem, Planck invented quantum mechanics. Why does the radiation distribution look the way it does? [Anyone claiming that understanding the greenhouse effect is simple physics does not know what he is talking about.]

Using the calculations of Planck for outgoing radiation without greenhouse gases the earth’s average surface temperature would be about 16 °F (minus 9 °C). [As Tyndall wrote, on the land masses each night, all plant life would freeze, making life on land unlikely.] With greenhouse gases, the earth’s average surface temperatures are about 60 °F (16 °C), making the earth habitable.

Happer super imposed on Planck’s graph is a graph using calculations and observations from the high-resolution transmission molecular absorption database (HITRAN). The second graph is named after German physicist and astronomer Karl Schwarzschild who died in 1916 on the Russian front from disease. The difference between the two graphs illustrates the greenhouse effect over the entire spectrum of infrared frequencies (wavelengths). The influences of various gases are identified.

What is clearly shown is that the influence of CO₂ on warming the planet is pronounced when the CO₂ goes from zero to 400 ppm (parts per million (actually in volume)). But there is little influence going from 400 ppm to 800 ppm. Based on HITRAN, Happer estimates that going from 400 to 800 ppm will decrease radiation to space by about 3 W/m², which is insignificant.

Happer’s review is based on rock-solid physics. He states there is no climate emergency.

Happer presents two graphs comparing projections of temperatures with actual data. The first graph is from a paper in Nature Climate Change (September 2013) which shows estimated changes in temperatures as °C per decade on which the actual surface data from the HadCRUT 4 (Hadley Center and Climatic Research Unit Temperatures version 4) data set is superimposed. All the estimates exaggerate actual changes, including Happer’s own estimates in 1982.

The second graph is from John Christy showing predictions from climate models compared with observations in the Global Bulk Atmospheric Temperature (Surface-50K ft). The models greatly overestimate the warming of the atmosphere where the greenhouse effect occurs.

Happer then discusses the benefits of adding CO₂ to the atmosphere, stating the Earth has been in CO₂ famine for several tens of millions of years and our primate ancestors lived in an atmosphere far richer in CO₂ than today. In recognizing that his view is opposed to a supposed “consensus of

scientists,” Happer points out that so was the theory of continental drift. What is important is that it agrees with observation and experiment.

Happer concludes by stating:

“Policies to slow CO₂ emissions are based on flawed computer models which exaggerate warming by factors of 2 or 3.

“More CO₂ is an overall benefit, so costly ‘mitigation’ schemes are harmful. We should have the courage to do nothing about CO₂ emissions.” See links under Challenging the Orthodoxy.

The Greenhouse Effect and CO₂ – Hayden: Professor emeritus Howard “Cork” Hayden spent much of his career in laboratories experimenting with particle accelerators, observing how subatomic particles, atoms, and molecules interfere with highly charged subatomic particles. Also, he is on the SEPP Board of Directors and an editor of TWTW. He recently completed a paper for advocates of nuclear energy on Carbon Dioxide, Infrared Radiation, and Climate, which is posted on the SEPP website. His comments begin with:

“It is hard to believe, when thinking of things as large as the earth, that people get bogged down in minutiae, staring at things through microscopes and not seeing the globe. This essay is about the big picture, and everything herein is based on well-known facts.

“1. The solar intensity at the earth’s orbit is 1368 W/m². The earth reflects 30% (approximately, and variably) of that, and the spherical average is 244 W/m². (Note that in all cases, we will be talking of averages over the spherical area of the earth.)

2. At equilibrium the earth radiates precisely that amount back into space: 244 W/m². (Minor disequilibria do occur frequently, but temporarily.)

3. The surface of the earth (at 288.4 K) radiates 394 W/m², as determined by the Stefan-Boltzmann radiation law.

4. In other words, the surface of the earth radiates 150 W/m² more than is radiated into space. That 150 W/m² is retained heat, and obviously the atmosphere is responsible.

5. If the atmosphere had no interaction with IR, but still reflected 30% of the sunlight, its temperature would be 255 K, which is 33 K (= 33°C) colder than it is now.

6. The 150 W/m² of heat retention is responsible for that 33 °C of warming,

“Some people may say that the numbers are not quite accurate, but in what follows, it is unimportant whether the difference is 140 W/m² or 160 W/m². What matters is that the atmosphere has a net effect of reducing the surface radiation by about 150 W/m² to equal the net radiation to space. The surface radiation is calculable from the average surface temperature, and the radiation to space must equal the solar radiation absorbed by the earth.

“Now it is time to start thinking about the atmosphere. IR leaves the surface, and less IR goes into space. Obviously, what matters is the interaction between IR and molecules in the atmosphere. Whose expertise should one seek for information about this subject? Most people have no idea because the subject is so alien to their background. Physicists whose expertise is Atomic, Molecular, and Optical (AMO) physics, and chemists whose specialty is Molecular Spectroscopy may or may not know details of the relevant spectra (of CO₂, H₂O, CH₄, and other greenhouse gases, GHGs). Suffice it to say that these subjects are not to be found in curricula of Meteorology or Climatology Departments, let alone in Political Science Departments or law schools. For a

genuine expert, see Will Happer's recent essay at <https://www.independent.org/issues/article.asp?id=13458&omhide=true>.

“Molecular dynamics involves not only IR absorption, but energy sharing through collisions. At high altitude, GHGs can absorb energy from collisions and then radiate IR to outer space. Things are not as simple as Mr. Gore pretends.

*“The CO₂ concentration is usually given (a bit too casually) in terms of **parts per million (ppm)**, which chemists take to mean by **weight**. The known data, however, are expressed in units of **parts per million by volume (ppmv)**, which is numerically the same as parts per million by the count of molecules.*

“Again, we need to concentrate on the big picture. Let us take the words of the experts about the effect of doubling CO₂ concentration.

“7. The current estimate is that if CO₂ concentration is doubled, the additional IR amount that will be absorbed by atmospheric CO₂ is 3.5 W/m².

8. That is, doubling the CO₂ concentration would increase the retained heat from 150 W/m² to 153.5 W/m².

9. If 150 W/m² results in 33 °C warming, what do you expect from 153.5 W/m²?

Carbon dioxide has been singled out and demonized on the grounds that our consumption of fossil fuels will cause/is causing “climate change” (nee global warming). You can see from list item 8 that the claim is dicey at best, but it is useful to look into CO₂ a bit carefully.

10. At present, CO₂ (at ca. 400 ppmv) is responsible for about one-fifth, 30 W/m² of the total heat retention (150 W/m²) of the atmosphere,

At very low concentrations (compared to the present low 400 ppmv), CO₂ is a very effective IR absorber in a certain region of the IR spectrum.

11. The first 200 parts per million of CO₂ are responsible for about 26.5 W/m². The next 200 ppmv—taking us from 200 ppmv to our present 400 ppmv—raised CO₂'s total to 30 W/m², and the next doubling—400 ppmv to 800 ppmv—will raise CO₂'s total to 33.5 W/m². [There may be some small disagreement as to the precise numbers, but not to the effect on temperatures that is extremely small.]

“The very strong GHG property of CO₂ at extremely low concentration is likely responsible for the current demonization of CO₂.” [Except for # 8, boldface was italics in the original]

Agreeing with Happer, Hayden is convinced that the proper physics shows that adding CO₂ to today's atmosphere will have little effect on temperatures. Not reproduced here is a diagram showing the energy emitted by the surface, and the energy emitted by the atmosphere, which is less. Note that the greenhouse effect, which occurs in the atmosphere, cannot be observed from the surface.

Using an illustration (not reproduced here), Hayden extends the concept announced by John Tyndall that water vapor is a blanket protecting the vegetable life of England from being destroyed by freezing temperatures. It shows a thin blanket covering the entire spectrum of outgoing infrared radiation. On top of a small section of that blanket is a thick quilt showing the blocking effect of CO₂. A doubling of CO₂ in today's atmosphere will add a bit of quilt at the edges. After discussing issues such as feedbacks and other variables, Hayden concludes on Nuclear Power:

“There is no doubt that switching from fossil fuels to nuclear power would decrease our emissions of CO2. There is also no doubt that nuclear power is the safest of all energy options.

*“There is doubt—**profound** doubt—that reducing CO2 emissions would have measurable effect on the climate.*

*“As I have done for the last several decades, I strongly recommend nuclear power and strongly recommend **against** basing the pro-nuclear case on the dubious claim that CO2 is causing a ‘climate crisis.’” [Boldface was italics in the original]*

“NEVER TRY TO BUILD A STRONG CASE ON WEAK ARGUMENTS!”

See links under Challenging the Orthodoxy.

Deadly Policy: Writing in WUWT, Nuclear physicist and chairperson of the South African Nuclear Energy Corporation Kelvin Kemm states some of the lessons we should have learned from the Fukushima disaster that occurred ten years ago. The most severe earthquake ever recorded in Japan caused a tidal wave that was as high as 40 meters, (130 feet) in some places, and killed about 15,000 people. The tidal wave wiped out primary and backup electricity for pumps providing cooling water for nuclear power stations. One station did not cool down properly and the fuel in three reactors melted.

The water no longer circulating resulted in steam and a buildup of hydrogen gas. The gas exploded, blowing off a lightweight roof in front of TV cameras. Government officials had to do something, so they ordered an evacuation of about 160,000 people in the neighborhood. As Kemm writes:

“So, one of the lessons learned from Fukushima is that a huge amount of nuclear power can be struck by the largest earthquake and tsunami ever recorded [in Japan], and nobody gets harmed by nuclear radiation.

“Another lesson learned is that an evacuation order issued too hastily did harm and kill people.”

Kemm quotes the World Nuclear Association Director-General saying:

*“**Actions taken to mitigate a situation should not result in worse impacts than the original events.** This is particularly important when managing the response to incidents at nuclear facilities – where fear of radiation may lead to an overly conservative assessment and a lack of perspective for relative risks.” [Boldface added]*

Kemm further writes:

*“Thus, a decade later, we can contemplate the cumulative lessons learned. Above all, they are that nuclear power is far safer than anyone had thought. Even when dreaded core meltdowns occurred, and although reactors were wrecked, resulting in a financial disaster for the owners, **no people were harmed by radiation.** [Boldface italics in original.]*

“We also learned that, for local residents, it would have been far safer to stay indoors in a house than to join the forced evacuation. We also learned that governments and authorities must listen

to the nuclear professionals, and not overreact, even though the television news cameras look awfully close.

As Happer clearly shows above, Government officials in the US and in Western Europe are taking actions against carbon dioxide that will have impacts on their publics far worse than events caused by carbon dioxide. See links under Nuclear Energy and Fears.

Number of the Week: 13%. The abstract of a paper published in the Proceedings of the National Academy of Sciences (PNAS) “Natural variability contributes to model–satellite differences in tropical tropospheric warming” states: *We find that 13% of the model realizations have tropical TMT trends within the observed trend range.*” TMT is temperature of the mid-troposphere and model realizations is an absurd term for model runs.

For years Roy Spencer, John Christy, and others have been showing that model runs greatly overestimate temperatures in the lower- and mid-troposphere but have had their papers rejected. Now, natural variation is helping to resolve a climate puzzle? The only puzzle is why global climate models are used!

14th ICCC Rescheduled: The 14th International Conference on Climate Change presented by The Heartland Institute has been rescheduled to October 15 to 17, 2021, at Caesars Palace in Las Vegas. See <https://climateconference.heartland.org/>

NEWS YOU CAN USE:

Censorship

Marc Morano’s New Book “Green Fraud”: So Explosive, Leftists Now Pressuring Amazon To Stop Selling It!

By P Gosselin, No Tricks Zone, Mar 26, 2021

<https://notrickszone.com/2021/03/26/marc-moranos-green-fraud-so-explosive-that-leftists-now-pressuring-amazon-to-stop-selling-it/>

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/SeaLevelRiseCCRIL.pdf>

Challenging the Orthodoxy

How To Think About Climate Change

By William Happer, An Online Discussion for the Schiller Institute. Mar 20, 2021 [H/t Rick Sanders]

<https://www.youtube.com/watch?v=2qhxj6GkWpE>

Comments on CO₂, IR, and Climate

By Howard Hayden, SEPP, Mar 26, 2021

http://www.sepp.org/science_papers/Climate%20Comments.pdf

Former Obama-Biden federal scientist Dr. Steve Koonin declares his climate dissent

By Charles Rotter, WUWT, Mar 21, 2021

<https://wattsupwiththat.com/2021/03/21/former-obama-biden-federal-scientist-dr-steve-koonin-declares-his-climate-dissent/>

Links to video of interview of Koonin by Larry Kudlow and prior article by Koonin

“I don’t think the word ‘science’ means what you think it means.”

The Climate Headline The Legacy Media Wouldn’t Dare Write

I & I Editorial Board, I & I, Mar 24, 2021 [H/t William Readdy]

<https://issuesinsights.com/2021/03/24/the-climate-headline-the-legacy-media-wouldnt-dare-write/>

See link immediately above.

Climate Dynamics: The True Control Knob of Climate Change

By Jim Steele, Landscapes and Cycles, Mar 25, 2021

<http://landscapesandcycles.net/dynamics-the-climate-change-control-knob.html>

Podcast: Roger Pielke Jr on Shadow Science Advice

Discussing those outside government recognized advisors Mar 22, 2021

<https://rogerpielkejr.com/2021/03/22/podcast-roger-pielke-jr-on-shadow-science-advice/>
Discussing the science advisory process, an opposition party

Defending the Orthodoxy

Claim: Direct Observations Confirm that Humans are Throwing Earth's Energy Budget off Balance

From NASA, Via WUWT, Mar 25, 2021

<https://wattsupwiththat.com/2021/03/25/claim-direct-observations-confirm-that-humans-are-throwing-earths-energy-budget-off-balance/>

Link to article: Direct Observations Confirm that Humans are Throwing Earth's Energy Budget off Balance

By Sofie Bates, NASA, Mar 25, 2021

<https://www.nasa.gov/feature/goddard/2021/direct-observations-confirm-that-humans-are-throwing-earth-s-energy-budget-off-balance>

Link to paper: Observational evidence of increasing global radiative forcing

By Ryan J. Kramer, et al. Geophysical Research Letters, Mar 25, 2021

<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2020GL091585>

[SEPP Comment: To be discussed next week.]

Defending the Orthodoxy – Bandwagon Science

Intensity of tropical cyclones is probably increasing due to climate change

Press Release by University of East Anglia, Mar 26, 2021 [H/t Bernie Kepshire]

<https://phys.org/news/2021-03-intensity-tropical-cyclones-due-climate.html>

[SEPP Comment: No physical evidence, just lots of bandwagon "science."]

Tropical species are moving northward in U.S. as winters warm

Insects, reptiles, fish and plants migrating north as winter freezes in South become less frequent

News Release by University of California, Berkeley, Mar 19, 2021

https://www.eurekaalert.org/pub_releases/2021-03/uoc--tsa031921.php

Questioning the Orthodoxy

Bjorn Lomborg: When climate alarmism meets cancel culture

By Bjorn Lomborg, The Australian, Via GWPF, Mar 24, 2021

<https://www.thegwpf.com/bjorn-lomborg-when-climate-alarmism-meets-cancel-culture/>

Lomborg: 50 years of unmitigated climate change might leave us only 356% richer instead of 363%

By Jo Nova, Her Blog, Mar 24, 2021

<https://joannenova.com.au/2021/03/lomborg-50-years-of-unmitigated-climate-change-might-leave-us-only-356-richer-instead-of-363/>

Ten climate fear stories that failed

By Dr. Jay Lehr, CFACT, Mar 23, 2021 [H/t William Readdy]

<https://www.cfact.org/2021/03/23/ten-climate-fear-stories-that-failed/>

Choose verifiable facts over emotional narratives on polar bear conservation

By Susan Crockford, Polar Bear Science, Mar 22, 2021

<https://polarbearscience.com/2021/03/22/choose-verifiable-facts-over-emotional-narratives-on-polar-bear-conservation/>

Scientists say

By John Robson, Climate Discussion Nexus, Mar 24, 2021

<https://climatediscussionnexus.com/2021/03/24/scientists-say-11/>

Link to paper: Nature's style: Naturally trendy

By Timothy A. Cohn and Harry F. Lins, Geophysical Research Letters, Dec 8, 2005

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2005GL024476>

From abstract: "From a practical standpoint, however, it may be preferable to acknowledge that the concept of statistical significance is meaningless when discussing poorly understood systems."

Science in an Age of Fear

By Chet Richards, American Thinker, Mar 22, 2021

https://www.americanthinker.com/articles/2021/03/science_in_an_age_of_fear.html

Carbon cycle blows tire

By John Robson, Climate Discussion Nexus, Mar 24, 2021

<https://climatediscussionnexus.com/2021/03/24/carbon-cycle-blows-tire/>

Many Climate Crisis Claims Are Based on Manipulated Science

By H. Sterling Burnett, Townhall, Mar 23, 2021

<https://townhall.com/columnists/hsterlingburnett/2021/03/23/many-climate-crisis-claims-are-based-on-manipulated-science-n2586662>

After Paris!

Paris Panic: Governments Fail to Meet Their Climate Commitments, and Some Are Getting Farther Away

By H. Sterling Burnett, The Heartland Institute, Mar 25, 2021

https://www.heartland.org/news-opinion/news/paris-panic-governments-fail-to-meet-their-climate-commitments-and-some-are-getting-farther-away?vgo_ee=K3MjnNRCJr0oiS9v4U%2BHzw%3D%3D

Change in US Administrations

Prominent Oregon scientist returns to White House duty with new climate role

The Oregon State University scientist and former head of NOAA under President Barack Obama will advise the Biden administration on climate science.

By Monica Samayoa, OPB, Mar 23, 2021 [H/t James Karlock]

<https://www.opb.org/article/2021/03/23/oregon-scientist-lubchenco-white-house-climate-change/>

"I hope Jane repeats her ocean acidification demo, where she dropped a chunk of dry ice into a pitcher of fresh water to show how the oceans turn acidic from CO₂. The slight complication is that our oceans remain alkaline, even as Mother Nature drops in chunks of dry ice!"

Social Benefits of Carbon Dioxide

Forget "implicit" subsidies: Fossil fuels subsidize the whole world: feeding people and forests for free

By Jo Nova, Her blog, Mar 26, 2021

<https://joannenova.com.au/2021/03/forget-implicit-subsidies-fossil-fuels-subsidize-the-whole-world-feeding-people-and-forests-for-free/>

Link to paper: The producer benefits of implicit fossil fuel subsidies in the United States

By Matthew J. Kotchen, PNAS, Apr 6, 2021

<https://www.pnas.org/content/118/14/e2011969118>

Aerosol formation in clouds

News Release, Paul Scherrer Institute, Mar 24, 2021 [H/t Bernie Kepshire]

<https://www.sciencedaily.com/releases/2021/03/210324142849.htm>

Link to paper: Large contribution to secondary organic aerosol from isoprene cloud chemistry
By Houssni Lamkaddam, et al. Science Advances, Mar 24, 2021

<https://advances.sciencemag.org/content/7/13/eabe2952>

Link to additional paper: Microbial cycling of isoprene, the most abundantly produced biological volatile organic compound on Earth

By Terry J. McGenity, et al. ISME, Feb 20, 2018

<https://www.nature.com/articles/s41396-018-0072-6>

[SEPP Comment: Trees and shrubs are polluting the skies and changing climate? How dare them?]

Problems in the Orthodoxy

Europe's Climate Strategy is a Failure

By Donn Dears, Power For USA, Mar 26, 2021

<https://ddears.com/2021/03/26/europes-climate-strategy-is-a-failure/>

Vijay Jayaraj: India speeds up fossil-fuelled economy, despite Net Zero noises

By Vijay Jayaraj, GWPF, Mar 26, 2021

<https://www.thegwpf.com/vijay-jayaraj-india-speeds-up-fossil-fuelled-economy-despite-net-zero-noises/>

Cyprus gas could get green EU label, and funds

By Reuters News Service, Mar 23, 2021

<https://cyprus-mail.com/2021/03/23/cyprus-gas-eu-funding/>

“A group of 10 EU countries, including Bulgaria and Poland, had urged the Commission to label gas power as green by giving plants a feasible threshold they could meet.

“States including Denmark and Spain, however, have warned Brussels not to weaken its initial plan to deny gas a green label.”

[SEPP Comment: Never guess which countries bet heavily on expanding wind power.]

Despite Pledges to Cut Emissions, China Goes on a Coal Spree

China is building large numbers of coal-fired power plants to drive its post-pandemic economy.

The government has promised a CO2 emissions peak by 2030, but the new coal binge jeopardizes both China's decarbonization plans and global efforts to tackle climate change.

By Michael Standaert, Yale Environment 260, Mar 24, 2021

<https://e360.yale.edu/features/despite-pledges-to-cut-emissions-china-goes-on-a-coal-spree>

In message to Joe Biden, India embarks on new coal boom

By Staff, Bloomberg, Via GWPF, Mar 26, 2021

<https://www.thegwpf.com/in-message-to-joe-biden-india-embarks-on-new-coal-boom/>

Seeking a Common Ground

Don't Ban Fossil Fuels: Absolutism In Climate Change Policy Is A Vice

By Michael Lynch, Forbes, Mar 24, 2021

<https://www.forbes.com/sites/michaelynych/2021/03/24/dont-ban-fossil-fuels-absolutism-in-climate-change-policy-is-a-vice/?sh=7b3265742541>

How climate alarmists fuel climate denial

By Ivo Vegter, Daily Friend, Mar 19, 2021

<https://dailyfriend.co.za/2021/03/19/how-climate-alarmists-fuel-climate-denial/>

“No, the alarmists are quite open about their zeal to destroy the existing political, social and economic order, which they see as evil, so that they can build a glorious socialist utopia upon the ashes of civilisation.

“Perhaps they’re not so different from the religious prophets of doom of old, after all. If they were to succeed, however, we’d have a genuine apocalypse of poverty, hunger and death on our hands.”

Sea Level and the Jersey Shore

By Kip Hansen, WUWT, Mar 22, 2021

<https://wattsupwiththat.com/2021/03/21/sea-level-and-the-jersey-shore/>

Rethinking Climate, Climate Change, and Their Relationship with Water

New open access paper by Prof. Demetris Koutsoyiannis

By Charles Rotter, WUWT, Mar 22, 2021

<https://wattsupwiththat.com/2021/03/22/rethinking-climate-climate-change-and-their-relationship-with-water/>

Link to paper: Rethinking Climate, Climate Change, and Their Relationship with Water
[file:///C:/Users/Owner/Downloads/water-13-00849%20\(1\).pdf](file:///C:/Users/Owner/Downloads/water-13-00849%20(1).pdf)

Science, Policy, and Evidence

Understanding Energy Crises of the 1970s and Avoiding Problems Today

By Aaron Larson, Power Mag, Mar 25, 2021

https://www.powermag.com/understanding-energy-crises-of-the-1970s-and-avoiding-problems-today/?oly_enc_id=7809H6412578J0B

Relies heavily on Jay Hakes who was “director for Research and Policy for President Obama’s BP Deepwater Horizon Oil Spill Commission.”

[SEPP Comment: Question the assumed competence of President Carter on nuclear. He failed to complete the nuclear program he started while in the Navy. The 1970s energy crisis was largely created in Washington.]

Weaponizing Scientific Expertise

Activist scientists have appointed themselves arbiters of who’s entitled to protest and who isn’t.

By Donna Laframboise, Big Picture News, Mar 24, 2021

<https://nofrackingconsensus.com/2021/03/24/weaponizing-scientific-expertise/>

[SEPP Comment: Everyone I agree with is an expert?]

Review of Recent Scientific Articles by CO2 Science

CO2 Enrichment Enhances the Growth and Quality of Tomato Fruit

Hao, P.-F., Qiu, C.-W., Ding, G., Vincze, E., Zhang, G., Zhang, Y. and Wu, F. 2020. Agriculture organic wastes fermentation CO2 enrichment in greenhouse and the fermentation residues improve growth, yield and fruit quality in tomato. *Journal of Cleaner Production* 275: 123885, doi.org/10.1016/j.jclepro.2020.123885. Mar 26, 2021

<http://www.co2science.org/articles/V24/mar/a12.php>

The Impact of CO₂ on the Growth and Yield of Two Soybean Cultivars

Soba, D., Shu, T., Runion, G.B., Prior, S.A., Fritschi, F.B., Aranjuelo, I. and Sanz-Saez, A. 2020. Effects of elevated [CO₂] on photosynthesis and seed yield parameters in two soybean genotypes with contrasting water use efficiency. *Environmental and Experimental Botany* 178: 104154, doi.org/10.1016/j.envexpbot.2020.104154. Mar 24, 2021
<http://www.co2science.org/articles/V24/mar/a11.php>

Soil Carbon and Nitrogen Dynamics in a Desert Ecosystem under Elevated CO₂

Koyama, A., Harlow, B. and Evans, R.D. 2019. Greater soil carbon and nitrogen in a Mojave Desert ecosystem after 10 years exposure to elevated CO₂. *Geoderma* 355: 113915, doi.org/10.1016/j.geoderma.2019.113915. Mar 22, 2021
<http://www.co2science.org/articles/V24/mar/a10.php>

Models v. Observations

Natural variations help resolve a climate puzzle

Press Release by Anne M Stark, Lawrence Livermore National Laboratory, Mar 23, 2021 [H/t Bernie Kepshire]

<https://phys.org/news/2021-03-natural-variations-climate-puzzle.html>

Link to paper: Natural variability contributes to model–satellite differences in tropical tropospheric warming

By Stephen Po-Chedley, et al. PNAS, Mar 30, 2021

<https://www.pnas.org/content/118/13/e2020962118>

\$10 Million AI Grant to Improve Climate Modelling of Clouds

By Eric Worrall, WUWT, Mar 24, 2021

<https://wattsupwiththat.com/2021/03/24/10-million-ai-grant-to-improve-climate-modelling-of-clouds/>

[SEPP Comment: How many tens of billions have governments spent on climate modeling?]

Model Issues

US weather model upgraded to better forecast extreme events

By Seth Borenstein, Phys.org, Mar 23, 2021 [H/t Bernie Kepshire]

<https://phys.org/news/2021-03-weather-extreme-events.html>

Models link 1 degree of global warming to 50% spike in population displacement

By Brooks Hays, Washington DC (UPI), Mar 24, 2021

https://www.terraviva.com/reports/Models_link_1_degree_of_global_warming_to_50_spike_in_population_displacement_999.html

“Their analysis, published Wednesday in the journal *Environmental Research Letters*, showed a single degree of warming will increase the risk of displacement caused by river flooding by 50 percent.”

“Since 2008, 288 million people have been displaced by natural disasters, more than 140 million people by river flooding.

“Over the last 15 years, three times as many people have been displaced by natural disasters than by violence and political conflict.”

Unable to locate paper

Measurement Issues -- Surface

Best Climate Change Temperatures

By Andy May, WUWT, Mar 26, 2021

<https://wattsupwiththat.com/2021/03/26/best-climate-change-temperatures/>

The same sea level for everyone

By Staff Writers, Munich, Germany (SPX), Mar 24, 2021

https://www.terraviva.com/reports/The_same_sea_level_for_everyone_999.html

Link to paper: Strategy for the realisation of the International Height Reference System (IHR)

By Laura Sánchez, et al. Journal of Geodesy, Feb 22, 2021

<https://link.springer.com/article/10.1007%2Fs00190-021-01481-0>

“There was never a fixed definition. Every country could use arbitrary tide gauges to define its own zero level. As a result, Germany's official sea level is 31 centimeters higher than Italy's, 50 cm higher than that used in Spain and actually 2.33 m higher than in Belgium, where the zero height is based on low water in Ostend.”

Changing Weather

Carbon dioxide radically lower but floods destroy houses, cover beaches in debris across NSW in 1857

By Jo Nova, Her Blog, Mar 22, 2021

<https://joannenova.com.au/2021/03/carbon-dioxide-radically-lower-but-floods-destroy-houses-cover-beaches-in-debris-across-nsw-in-1857/>

Ayers Rock Waterfalls

By Paul Homewood, Not a Lot of People Know That, Mar 26, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/26/ayers-rock-waterfalls/>

Dust to Beijing

By John Robson, Climate Discussion Nexus, Mar 24, 2021

<https://climatediscussionnexus.com/2021/03/24/dust-to-beijing/>

JMA (Unaltered) Data Show Far Northern Europe February Mean Temperatures Are Not Warming

By Kirye and Pierre Gosselin, No Tricks Zone, Mar 21, 2021

<https://notrickszone.com/2021/03/21/jma-unaltered-data-show-far-northern-europe-february-mean-temperatures-are-not-warming/>

The Northwest Snowpack Trend of the Past Fifty Years: The Truth May Surprise You

By Cliff Mass, Weather Blog, Mar 21, 2021

<https://cliffmass.blogspot.com/2021/03/the-northwest-snowpack-trend-of-past.html>

Changing Seas

We're Not Gonna Drown! Analyses Show COASTAL SEA LEVEL RISE Is Only 1.69 mm Per Year!

By P Gosselin, No Tricks Zone, Mar 23, 2021

<https://notrickszone.com/2021/03/23/were-not-gonna-drown-analysis-shows-coastal-sea-level-rise-is-only-1-62-mm-per-year/>

Britomart – Mostly Dead Coral, with Fish on Top

By Jennifer Marohasy, Her Blog, Mar 24, 2021

<https://jennifermarohasy.com/2021/03/britomart-mostly-dead-coral-with-fish-on-top/>

Changes in ocean chemistry show how sea level affects global carbon cycle

New analysis of strontium isotopes reveals how the global carbon cycle has responded to changes in climate and sea level through geologic time

News Release, University of California, Santa Cruz, Mar 25, 2021 [H/t WUWT]

https://www.eurekalert.org/pub_releases/2021-03/uoc--cio032221.php

Climate change has reduced ocean mixing far more than expected

News Release by CNRS, Mar 24, 2021 [H/t Bernie Kepshire]

<https://phys.org/news/2021-03-climate-ocean.html>

Link to paper: Summertime increases in upper-ocean stratification and mixed-layer depth

By Jean-Baptiste Sallée, Nature, Mar 24, 2021

<https://www.nature.com/articles/s41586-021-03303-x>

[SEPP Comment: So claims that “global warming” is hiding in the deep oceans are false?]

Changing Cryosphere – Land / Sea Ice

Greenland And Iceland Mean Winter Temperatures Continue Cooling Since Start Of The Century

By Kirye and Pierre Gosselin, No Tricks Zone, Mar 24, 2021

<https://notrickszone.com/2021/03/24/greenland-and-iceland-mean-winter-temperatures-continue-cooling-since-start-of-the-century/>

Agriculture Issues & Fear of Famine

Modifying corn kernels with CRISPR

Scientists apply DNA-editing technique to the corn genome

Press Release, NSF, Mar 22, 2021

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=302339&WT.mc_id=USNSF_1

Lowering Standards

Factcheck On The Times Climate “Facts”

By Paul Homewood, Not a Lot of People Know That, Mar 20, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/20/factcheck-on-the-times/>

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

Oh that media climate conspiracy

By John Robson, Climate Discussion Nexus, Mar 24, 2021

<https://climatediscussionnexus.com/2021/03/24/oh-that-media-climate-conspiracy/>

Link to article: Data proves decades of lies in Murdoch media climate change coverage

By Mia Armitage & Sean O’Shannessy, Echo, Mar 17, 2021

<https://www.echo.net.au/2021/03/data-proves-decades-of-lies-in-murdoch-media-climate-change-coverage/>

Link to “exhaustive study”: Lies, debates, and silences: How News Corp produces climate scepticism in Australia

By Wendy Bacon & Arunn Jegan, GetUp, Dec 2020

https://d68ej2dhhub09.cloudfront.net/2790-Lies_Debates_and_Silences_FINAL.pdf

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

Mark Carney’s Value(s) moans about free markets – but his Brave New World alternative is a muddled farce

“The former Governor of the Bank of England seems frustrated that our freely made economic and political choices don’t conform to his own.”

By Paul Homewood, Not a Lot of People Know That, Mar 21, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/21/mark-carneys-values-moans-about-free-markets-but-his-brave-new-world-alternative-is-a-muddled-farce/>

“Above all, this book reveals that it was never about the climate. All along, Carney and the rest of the Davos elite have wanted to change society to conform to what they think it should be like.

Sea-level rise in 20th century was fastest in 2,000 years along much of East Coast

Global increase from melting ice and warming oceans is most significant change since 1800

News Release by Rutgers University, Mar 23, 2021 [H/t Bernie Kepshire]

<https://www.sciencedaily.com/releases/2021/03/210323131216.htm>

Link to paper: Common Era sea-level budgets along the U.S. Atlantic coast

By Jennifer S. Walker, et al. Nature Communications, Mar 23, 2021

<https://www.nature.com/articles/s41467-021-22079-2>

From the abstract: “The most significant change in the budgets is the increasing influence of the common global signal due to ice melt and thermal expansion since 1800 CE, which became a dominant contributor to RSL with a 20th century rate of 1.3 ± 0.1 mm yr⁻¹.”

[SEPP Comment: Sea-level budgets?? The 20th century increase works out to be about 5 inches per century – well within NIPCC 2008 calculations.]

Communicating Better to the Public – Make things up.

PAGES 12K: The Ice Age Goeth

By David Middleton, WUWT, Mar 26, 2021

<https://wattsupwiththat.com/2021/03/26/pages-12k-the-ice-age-goeth/>

PAGES 12K... A funny thing happened on the way to the Anthropocene!

By David Middleton, WUWT, Mar 23, 2021

<https://wattsupwiththat.com/2021/03/23/pages-12k-a-funny-thing-happened-on-the-way-to-the-anthropocene/>

Fake Hurricane News Exposed: Average Day Of First Hurricane Formation “Contrary To Media Reports”

Lazy, uncritical media again fail to adequately examine data to produce misleading “news”

By P. Gosselin, No Tricks Zone, Mar 20, 2021

<https://notrickszone.com/2021/03/20/fake-hurricane-news-exposed-average-day-of-first-hurricane-formation-contrary-to-media-reports/>

Communicating Better to the Public – Do a Poll?

Claim: If 80% of Australians care about climate action, why don’t they vote like it?

By Charles Rotter, WUWT, Mar 25, 2021

<https://wattsupwiththat.com/2021/03/25/if-80-of-australians-care-about-climate-action-why-dont-they-vote-like-it/>

Communicating Better to the Public – Go Personal.

Chinese scorn US Upperclass Woke self haters – “Baizuo” are phony intolerant hypocrites

By Jo Nova, Her Blog, Mar 22, 2021

<https://joannenova.com.au/2021/03/chinese-scorn-us-upperclass-woke-self-haters-baizou-are-phony-intolerant-hypocrites/>

Communicating Better to the Public – Use Propaganda

Climate change to put farming sectors under stress

By Paul Homewood, Not a Lot of People Know That, Mar 21, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/21/climate-change-to-put-farming-sectors-under-stress/>

“The latest climate boogeyman from the Met Office propaganda department:”

The End Is Near

By Tony Heller, His Blog, Mar 26, 2021

<https://realclimatescience.com/2021/03/the-end-is-near-2/>

It has been ten years since the Sydney Morning Herald announced the end of the world.

Questioning European Green

African countries deem EU carbon border levy ‘protectionist’

By Clara Bauer-Babef, EURACTIV France, Mar 25, 2021

<https://www.euractiv.com/section/energy-environment/news/developing-countries-deem-eu-carbon-border-levy-protectionist/>

Decarbonising homes to meet Net Zero targets will cost £20,000, MPs warn

By Staff, The Times, Via GWPF, Mar 22, 2021

<https://www.thegwpf.com/decarbonising-housing-to-meet-net-zero-targets-will-cost-20000-mps-warn/>

GWPF welcomes recognition public has been misled over Net Zero costs

By Staff, GWPF, Mar 22, 2021

<https://www.thegwpf.com/gwpf-welcomes-recognition-public-has-been-misled-over-net-zero-costs/>

Most companies not serious about Net Zero

By Staff, The Times, Via GWPF, Mar 23, 2021

<https://www.thegwpf.com/most-companies-not-serious-about-net-zero/>

French Power Supply Margins Seen Under Threat in Coming Winters

By Paul Homewood, Not a Lot of People Know That, Mar 25, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/25/french-power-supply-margins-seen-under-threat-in-coming-winters/>

“France’s electricity supply may be unable to cope with extreme cold or unplanned power plant outages over the next three winters as atomic output remains constrained by long maintenance halts, the country’s grid operator said.”

Questioning Green Elsewhere

Green Dreams

Interview of Mark Mills by Daniel Kennelly, City Journal, Mar 20, 2021

<https://www.city-journal.org/biden-agenda-on-energy-and-the-environment#.YFi3SE7qy5g.linkedin>

“As I’ve written often, the shift from oil and gas to wind, solar, and batteries is a shift from liquids and gases to using solids and mining for energy minerals. That shift entails an enormous—

about ten-fold—increase in the total quantities of materials used for each unit of energy delivered.”

The contradictory Green policies to limit CO2 emissions

By Ed Hoskins, Via WUWT, Mar 20, 2021

<https://wattsupwiththat.com/2021/03/20/the-contradictory-green-policies-to-limit-co2-emissions/>

The Red-Green Menace

By John Robson, Climate Discussion Nexus, Mar 20, 2021

<https://climatediscussionnexus.com/videos/the-red-green-menace/>

Video

Australian Financial Review Advises Readers to Embrace Climate Investments

By Eric Worrall, WUWT, Mar 19, 2021

<https://wattsupwiththat.com/2021/03/19/australian-financial-review-advises-investors-to-embrace-climate-investments/>

“To keep energy flowing when the sun isn’t shining and the wind isn’t blowing will require enormous batteries at the grid level. This means 40 million tons of lithium—an eye-watering 2,700 percent increase over current levels of extraction.”

'Better informed' now turning away from 'green' agenda

But Biden still stuck on wind, solar tech

By WND News Services, Mar 21, 2021 [H/t Bernie Kepshire]

[https://www.wnd.com/2021/03/better-informed-now-turning-away-green-](https://www.wnd.com/2021/03/better-informed-now-turning-away-green-agenda/?utm_source=Email&utm_medium=wnd-)

[agenda/?utm_source=Email&utm_medium=wnd-](https://www.wnd.com/2021/03/better-informed-now-turning-away-green-agenda/?utm_source=Email&utm_medium=wnd-)

[newsletter&utm_campaign=dailyam&utm_content=newsletter&ats_es=%5B-MD5-%5D](https://www.wnd.com/2021/03/better-informed-now-turning-away-green-agenda/?utm_source=Email&utm_medium=wnd-newsletter&utm_campaign=dailyam&utm_content=newsletter&ats_es=%5B-MD5-%5D)

Funding Issues

The World Needs \$131 Trillion In Clean Energy Investment By 2050

By Tsvetana Paraskova, Oil Price.com, Mar 16, 2021

<https://oilprice.com/Latest-Energy-News/World-News/The-World-Needs-131-Trillion-In-Clean-Energy-Investment-By-2050.html>

Link to report: World Energy Transitions Outlook: 1.5°C Pathway (Preview)

By Staff, The International Renewable Energy Agency (IRENA), March 2021

<https://www.irena.org/publications/2021/March/World-Energy-Transitions-Outlook>

file:///C:/Users/Owner/Downloads/IRENA_World_Energy_Transitions_Outlook_2021.pdf

“Energy transition investment will have to increase by 30% over planned investment to a total of USD 131 trillion between now and 2050, corresponding to USD 4.4 trillion on average every year.”

Litigation Issues

EU's top court rejects effort to force tougher climate rules

The European Union’s top court has rejected an effort by a Scandinavian youth group and eight families around the world to force the EU to set more ambitious targets for reducing greenhouse gas emissions

By Staff, AP, Mar 25, 2021

<https://abcnews.go.com/Technology/wireStory/eus-top-court-rejects-effort-force-tougher-climate-76673729>

“Families from Kenya, Fiji, Germany, France, Italy, Portugal and Romania, along with the Swedish Sami Youth organization, launched the legal action in 2018.”

US Cities Can Deliver the Climate Solutions Outside the Courtroom

By Sarah E. Hunt, Real Clear Energy, Mar 25, 2021

https://www.realclearenergy.org/articles/2021/03/25/us_cities_can_deliver_the_climate_solutions_outside_the_courtroom_769820.html

[SEPP Comment: But much of the litigation is driven by the hope of getting a pot of gold as was done in the tobacco settlement.]

Cap-and-Trade and Carbon Taxes

‘Government decision to drop carbon tax is a small step in the right direction’

Press Release, GWPF, Mar 25, 2021

<https://www.thegwpf.com/government-decision-to-drop-carbon-tax-is-a-small-step-in-the-right-direction/>

UK drops Carbon Tax, sets up Emissions Trading Scheme (ETS)

By Bloomberg & UK Treasury, Via GWPF, Mar 24, 2021

<https://www.thegwpf.com/uk-government-drops-carbon-tax-sets-up-emissions-trading-scheme-ets/>

EU Carbon Pricing Pushing Power And Gas Prices Higher

By Paul Homewood, Not a Lot of People Know That, Mar 23, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/23/eu-carbon-pricing-pushing-power-and-gas-prices-higher/>

Link to report: Carbon driving gas, power & LNG prices higher

By Staff, Timera Energy, Mar 22, 2021

<https://timera-energy.com/carbon-driving-gas-power-and-lng-prices-higher/>

“We are a consultancy that provides expert advice on value and risk in power, gas & LNG markets. Our work is backed by industry experience.”

Terence Corcoran: Carbon-tax green light flashing red

Hard realities behind the Supreme Court decision

By Terence Corcoran, Financial Post, Canada, Mar 26, 2021

<https://financialpost.com/opinion/terence-corcoran-carbon-tax-green-light-flashing-red>

EPA and other Regulators on the March

Will EPA Establish National Ambient Air Quality Standards for Greenhouse Gases?

By Marlo Lewis, Jr., CEI, Mar 25, 2021

<https://cei.org/blog/will-epa-establish-national-ambient-air-quality-standards-for-greenhouse-gases/>

[SEPP Comment: How about aerosol pollution from plants? See link under Other News that May Be of Interest.]

Energy Issues – Non-US

The French Interconnectors

By Paul Homewood, Not a Lot of People Know That, Mar 24, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/24/the-french-interconnectors/>

“All of these other countries are heavily dependent on French nuclear power, which is effectively holding the grid together. Which raises the question, what will they do when France begins shutting down its nuclear plants as planned?”

Capacity Market Auction For 2024/25

By Paul Homewood, Not a Lot of People Know That, Mar 25, 2021

<https://notalotofpeopleknowthat.wordpress.com/2021/03/25/capacity-market-auction-for-2024-25/>

“The small bits of storage and demand supply response are only useful for an hour or two at times of peak demand.”

Energy Issues -- US

America's Most Underrated Energy Reality: Low and Lower Cost Natural Gas

By Jude Clemente, Real Clear Energy, Mar 19, 2021

https://www.realclearenergy.org/articles/2021/03/19/americas_most_underrated_energy_reality_low_and_lower_cost_natural_gas_768331.html

[SEPP Comment: Going from fear of running out to decades of surplus production.]

Department Of Energy Price Data Spotlights Regressive Nature Of ‘Electrify Everything’ Effort

By Robert Bryce, Forbes, Mar 19, 2021 [H/t ICECAP]

<https://www.forbes.com/sites/robertbryce/2021/03/19/department-of-energy-price-data-spotlights-regressive-nature-of-electrify-everything-effort/?sh=c85d469574f3>

Natural Gas Power Plants – Including Data from Texas

By Donn Dears, Power For USA, Mar 23, 2021

<https://ddears.com/2021/03/23/natural-gas-power-plants-including-data-from-texas/>

“One would think this [using gas from wells to drive small turbines] was an excellent engineering and cost effective solution for driving the compressors.

“However, these small gas turbines are being replaced with electric motors in an effort to reduce GHG emissions, which has led to unexpected consequences.”

“No one had considered the ramification of replacing small gas turbines with electric motors.”

ERCOT “worked as planned” (architect Hogan gives no quarter)

By Robert Bradley Jr., Master Resource, Mar 23, 2021

<https://www.masterresource.org/texas-blackout-2021/central-planner-ercot-worked-as-planned/>

Electricity Planning: Physical vs. Economic (an exchange with Eric Schubert)

By Robert Bradley Jr., Master Resource, Mar 25, 2021

<https://www.masterresource.org/texas-blackout-2021/electricity-planning-physical-vs-economic/>

“The following exchange with power/regulatory expert Eric Schubert, a designer of the current PUCT/ERCOT market, shows how we were/are “talking past each other” on this point. I was arguing against planning in favor of a true free-market order; he was defending Texas’s existing regulatory framework.”

Oil and Natural Gas – the Future or the Past?

The Shale Party Is Just Getting Started

By Dan Eberhart, Forbes, Mar 19, 2021

https://www.forbes.com/sites/daneberhart/2021/03/20/the-shale-party-is-just-getting-started/?sh=1f4d5c668b62&mc_cid=39bbe7a200&mc_eid=4961da7cb1

UK news media campaign against oil and gas exploration

Press Release, GWPF, Mar 24, 2021

<https://www.thegwpf.com/british-news-media-campaign-against-oil-and-gas-exploration/>

Nuclear Energy and Fears

We should learn what lessons from Fukushima?

By Kelvin Kemm, WUWT, Mar 26, 2021

<https://wattsupwiththat.com/2021/03/26/we-should-learn-what-lessons-from-fukushima/>

Alternative, Green (“Clean”) Solar and Wind

It takes big energy to back up wind and solar

By David Wojick, CFACT, Mar 21, 2021

<https://www.cfact.org/2021/03/21/it-takes-big-energy-to-back-up-wind-and-solar/>

[SEPP Comment: Perhaps the needed reliable backup should be called critical reserve.]

Devastating Drone Images Expose The Uselessness Of Wind Energy In Cold Weather

By Kenneth Richard, No Tricks Zone, Mar 25, 2021

<https://notrickszone.com/2021/03/25/devastating-drone-images-expose-the-uselessness-of-wind-energy-in-cold-weather/>

Link to one paper: A field study of ice accretion and its effects on the power production of utility-scale wind turbines

By Linyue Gao, et al. Renewable Energy, April 2021

<https://www.sciencedirect.com/science/article/abs/pii/S0960148120319406>

Joe Biden Pledges to Make Solar Panels More Environmentally Toxic

By Eric Worrall, WUWT, Mar 25, 2021

<https://wattsupwiththat.com/2021/03/25/joe-biden-pledges-to-make-solar-panels-more-environmentally-toxic/>

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

BP Details Plan for UK’s Largest Hydrogen Project

By Darrell Proctor, Power Mag, Mar 22, 2021

https://www.powermag.com/bp-details-plan-for-uks-largest-hydrogen-project/?oly_enc_id=7809H6412578JOB

DOE Clean Hydrogen Plan: Breathing New Life into Brown Coal Plants

By Eric Worrall, WUWT, Mar 21, 2021

<https://wattsupwiththat.com/2021/03/21/doe-clean-hydrogen-plan-breathing-new-life-into-brown-coal-plants/>

I Did It - Converting Hydrogen’s Units Is An Accomplishment In Itself

By Jason Ferguson, RBN Energy, Mar 24, 2021

<https://rbnenergy.com/i-did-it-converting-hydrogens-units-is-an-accomplishment-in-itself>

Alternative, Green (“Clean”) Vehicles

Toyota says “The world is not yet ready to support a fully electric auto fleet.”

By Jo Nova, Her Blog, Mar 24, 2021

<https://joannenova.com.au/2021/03/toyota-says-the-world-is-not-yet-ready-to-support-a-fully-electric-auto-fleet/>

Health, Energy, and Climate

The World Since I Was Born

By David Kreutzer, IER, Mar 23, 2021

<https://www.instituteforenergyresearch.org/climate-change/the-world-since-i-was-born/>

Oh Mann!

Michael Mann: Reduce CO2 Emissions to Restore Climate Stability in Australia

“It’s not too late for Australia to forestall a dystopian future that alternates between Mad Max and Waterworld”

By Eric Worrall, WUWT, Mar 25, 2021

<https://wattsupwiththat.com/2021/03/25/michael-mann-reduce-co2-emissions-to-restore-climate-stability-in-australia/>

Environmental Industry

Green groups launch \$10 million ad campaign pressuring Biden, Congress to spend huge on climate

"The Great American Build" campaign aims to set an aggressive starting point for negotiations over the size and scope of the infrastructure package.

By Josh Lederman, Climate in Crisis, NBC News, Mar 16, 2021

<https://www.nbcnews.com/politics/politics-news/green-groups-launch-10-million-ad-campaign-pressuring-biden-congress-n1261177>

“Biden has met with senators from both parties about the plan, which as a candidate he vowed would be the ‘largest mobilization of public investment since World War II.’”

[SEPP Comment: More like Vietnam and we all know how well that turned out!]

The Dirty Dozen List: Science Based Or Agenda Driven?

By David Lightsey, ACSH, Mar 24, 2021

<https://www.acsh.org/news/2021/03/24/dirty-dozen-list-science-based-or-agenda-driven-15420>

Other Scientific News

Major Earth Satellite to Track Disasters, Effects of Climate Change

News Release by Jane J. Lee and Ian J. O’Neill, JPL - NASA, Mar 24, 2021 [H/t WUWT]

<https://www.nasa.gov/feature/jpl/major-earth-satellite-to-track-disasters-effects-of-climate-change>

“NISAR will detect movements of the planet’s surface as small as 0.4 inches (a centimeter) over areas about the size of half a tennis court.”

Littlest shop of horrors: Hungry green algae prefer to eat bacteria alive

New study leads to improved methodology in environmental microbiology

News Release, NSF, Mar 24, 2021

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=302350&WT.mc_id=USNSF_1

Link to paper: Experimental identification and in silico prediction of bacterivory in green algae

By Nicholas A. Bock, et al. The ISME Journal, Mar 2, 2021

<https://www.nature.com/articles/s41396-021-00899-w>

Other News that May Be of Interest

Facts are facts

By John Robson, Climate Discussion Nexus, Mar 24, 2021

<https://climatediscussionnexus.com/2021/03/24/facts-are-facts/>

“The problem is that an economy is, very like a climate, a transcomputably complex agglomeration of unpredictable processes with immensely complicated self-crossing feedback loops that is sensitively dependent on initial conditions. Macroeconomic models are exercises in simplification whose characteristic results, like their design, do not inspire confidence.”

With drop in LA’s vehicular aerosol pollution, vegetation emerges as major source

Plants that emit lots of isoprenes may be causing unhealthy aerosol levels during heat waves

News Release, University of California, Berkeley, Mar 23, 2021 [H/t WUWT]

https://www.eurekaalert.org/pub_releases/2021-03/uoc--wdi032321.php

Link to paper: Impact of OA on the Temperature Dependence of PM 2.5 in the Los Angeles Basin

By Clara M. Nussbaumer and Ronald C. Cohen, Environmental Science Technology, Mar 4, 2021

<https://pubs.acs.org/doi/10.1021/acs.est.0c07144>

The unexpected history and miraculous success of vaccines

By Matt Ridley, Rational Optimist, Mar 19, 2021

<https://www.rationaloptimist.com/blog/the-unexpected-history-vaccines/>

BELOW THE BOTTOM LINE

Australians warned of deadly spider 'plague' after floods

By AFP Staff Writers, Sydney (AFP), March 24, 2021

https://www.terradaily.com/reports/Australians_warned_of_deadly_spider_plague_after_floods_99.html

“Sydney funnel-webs are widely feared for their notoriously toxic and fast-acting venom, with 13 recorded deaths from bites.

“However, no one is believed to have died since an anti-venom programme was introduced in the early 1980s.”

Bill Gates launches giant chalk advertising campaign to “block sun”

By Jo Nova, Her Blog, Mar 25, 2021

<https://joannenova.com.au/2021/03/bill-gates-launches-giant-chalk-advertising-campaign-to-block-sun/>

Climate Grief: “Half the wildlife in Africa has died on my watch.”

By Eric Worrall, WUWT, Mar 26, 2021

<https://wattsupwiththat.com/2021/03/26/climate-grief-half-the-wildlife-in-africa-has-died-on-my-watch/>

Plummeting sperm counts, shrinking penises: toxic chemicals threaten humanity

The chemicals to blame for our reproductive crisis are found everywhere and in everything

By Erin Brockovich, The Guardian, Mar 18, 2021

<https://www.theguardian.com/commentisfree/2021/mar/18/toxic-chemicals-health-humanity-erin-brockovich>

Ten years Since Climate Pollution Deniers Were Punished

By Tony Heller, His Blog, Mar 26, 2021

ARTICLES

Berkshire Hathaway Offers to Spend \$8.3 Billion on Emergency Power Plants in Texas

The move comes a month after the state suffered devastating blackouts

By Russell Gold and Katherine Blunt, WSJ, Mar 25, 2021

https://www.wsj.com/articles/berkshire-hathaway-offers-to-spend-8-3-billion-on-emergencypowerplants-in-texas-11616699446?mod=business_minor_pos13

TWTW Summary: The article has several key points for considering utilities:

“Mr. Brown [the chief executive of Berkshire Hathaway Energy Infrastructure] said he hoped to receive a 9.3% rate of return on the investment, the same as regulated electric companies that operate a portion of the grid such as Sempra Energy unit Oncor and CenterPoint Energy Inc.

“He said Berkshire Hathaway would create a \$4 billion financial guarantee the state would receive if the plants didn’t operate when needed. They would have a week’s supply of liquefied natural gas on site, fixing the problem of the state’s gas supply infrastructure freezing up.”

For a utility, a government guaranteed rate of return is always preferred to market volatility. Many investors seek a guaranteed rate of return. Also, would wind promoters guarantee ability to deliver?
