

The Week That Was: 2019-03-23 (March 23, 2019)

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The Science and Environmental Policy Project

Quote of the Week: *“Future generations will wonder in bemused amazement that the early twenty-first century’s developed world went into hysterical panic over a globally averaged temperature increase of a few tenths of a degree, and, on the basis of gross exaggerations of highly uncertain computer projections combined into implausible chains of inference, proceeded to contemplate a roll-back of the industrial age.”* – Richard Lindzen, [H/t Gordon Fulks]

Number of the Week: 100% Renewable

THIS WEEK:

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

Letter to President Trump: On March 18, under the leadership of the Competitive Enterprise Institute (CEI) and The Heartland Institute, about forty independent organizations and over one hundred individuals sent a letter to Donald Trump supporting the proposed President’s Commission on Climate Security under the direction of William Happer of the National Security Council staff. Robert Bradley posted the entire letter on the web site Master Resource. A few key points are quoted below:

“The commission would consist of a small number of distinguished experts on climate-related science and national security. It would be charged with conducting an independent, high-level review of the Fourth National Climate Assessment and other official reports relating to climate and its implications for national security. Its deliberations would be subject to the transparency requirements of the Federal Advisory Committees Act.

“In our view, an independent review of these reports is long overdue. Serious problems and shortcomings have been raised repeatedly in the past by highly-qualified scientists only to be ignored or dismissed by the federal agencies in charge of producing the reports. Among major issues that have been raised and that we hope the commission will scrutinize: the models used have assumed climate sensitivities to CO2 concentrations significantly higher than recent research warrants; the models used have predicted much more warming than has actually occurred; predictions of the negative impacts of global warming have been made based on implausible high-end emissions scenarios; the positive impacts of warming have been ignored or minimized; and surface temperature data sets have been manipulated to show more rapid warming than has actually occurred. An underlying issue that we hope the commission will also address is the fact that so many of the scientific claims made in these reports and by many climate scientists are not falsifiable, that is, they cannot be tested by the scientific method.

“The conclusions and predictions made by these reports are the basis for proposed energy policies that could cost trillions of dollars in less than a decade and tens of trillions of dollars over several decades. Given the magnitude of the potential costs involved, we think that taking the insular processes of official, consensus science on trust, as has been the case for the past three decades, is negligent and imprudent. In contrast, major engineering projects are regularly

subjected to the most rigorous and exhaustive adversarial review. We suggest that climate science requires at least the same level of scrutiny as the engineering employed in building a bridge or a new airplane.

“We further note that opponents of the proposed commission have already stooped to making personal attacks on Dr. Happer. Many signers of this letter know Dr. Happer personally and all are familiar with his scientific career. We know him to be a man of high capabilities, high achievements, and the highest integrity.

“It has been reported that some officials within your administration have proposed an internal working group as an alternative to an independent commission subject to FACA. Insofar as an internal working group would consist of federal career scientists reviewing their own work, we think this alternative would be worse than doing nothing.

“Although an independent commission of distinguished scientists would have high credibility, we do not mean to imply that its report should be the end of the matter. We therefore suggest that the National Academies of Science and Engineering would be appropriate bodies to conduct an initial review of the commission’s report.”

SEPP Chairman Thomas Sheahan and President Kenneth Haapala signed the letter on behalf of SEPP. For years, Will Happer worked with SEPP Chairman emeritus Fred Singer who found him an exceptional physicist. As expressed in last week’s TWTW, Happer’s field of expertise is Atomic, Molecular and Optical Physics, which is the only portion of science that links carbon dioxide (CO₂) to claimed global warming (a.k.a., climate change).

TWTW cannot speak for others signing the letter, but SEPP is very disturbed by lack of hard evidence the UN Intergovernmental Panel on Climate Change (IPCC) and, particularly, the US Global Change Research Program (USGCRP) have offered for their claims that CO₂ is causing drastic global warming. More specifically, as John Christy and his colleagues at the University of Alabama in Huntsville have shown, the global climate models funded by the US government cannot track temperature trends in the atmosphere over the past forty years, they greatly overestimate these trends. Thus, there is no logical reason to assume the models are remotely accurate in predicting what will occur in the atmosphere with increasing CO₂ over the next 80 years. Yet, the fear of carbon dioxide-caused warming is based on predictions from these models.

Using government reports on expenditures, TWTW has estimated that the US has spent over \$40 billion on climate science since 1993 (the last report ended in 2015). The budget of the USGCRP has been about \$2.5 billion per year. According to its web site:

“USGCRP was established by Presidential Initiative in 1989 and mandated by Congress in the Global Change Research Act (GCRA) of 1990 to ‘assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change.’”

In addition to satellites used to estimate temperature trends, independently supported by instruments on weather balloons taking daily readings, we have constant satellite monitoring of the atmosphere for clouds, aerosols, atmospheric chemistry, and other elements critical for understanding Earth’s environment and changing climate. Yet, the IPCC and the USGCRP ignore the great advances in monitoring the atmosphere, where the greenhouse effect occurs. It’s like 17th century scientists arguing the heavens orbit the earth but refusing to use a telescope.

The IPCC has the political excuse that it is not responsible for understanding and predicting natural processes of global change. The USGCRP has no such excuse.

Hard evidence separates science from science fiction. The IPCC and USGCRP ignore the hard evidence. See links under Challenging the Orthodoxy, Change in US Administrations, <https://www.globalchange.gov/about>, and <https://atrain.nasa.gov/>

An Independent, Public Review Is Stalinist? Among strange objections to the commission discussed above is an article in The Guardian newspaper by Michael Mann and Bob Ward that such a commission is a Stalinist tactic to discredit climate science. Mr. Mann was the lead author of the famous “hockey-stick” graph featured by the IPCC Third Assessment Report (AR-3, 2001) until statisticians such as Stephen McIntyre and Ross McKittrick demonstrated that the statistical procedures used by Mr. Mann, *et al.*, produced a hockey stick from noise, that the methodology used differed from what was stated in print, and it could not be replicated. When McIntyre and McKittrick tested the Mann procedure they rejected the temperature reconstruction.

In addition to calling an independent review a Stalinist tactic and climate lysenkoism, Mann and Ward engaged in a personal attack on Will Happer. Apparently, the worst they could find is that when approached by a potential client for consulting, Happer sent the potential client documents on his views on carbon dioxide-caused global warming, and on the “social cost of carbon,” a concept that is without any hard evidence and is contrary to the demonstrated benefits of CO₂ enrichment. Happer suggested that any possible consulting fees go a non-profit organization he helped establish, the CO₂ Coalition. [When Happer received SEPP’s Fredrick Seitz award for his outstanding contributions to science, Happer directed that the award moneys be sent to the CO₂ Coalition.]

Since Mr. Mann is a “distinguished professor of atmospheric science and director of the Earth System Science Center at Pennsylvania State University,” perhaps he does not wish members of the commission to ask: “Why do atmospheric scientists ignore temperature trends of the atmosphere?”

Mann’s co-author is Bob Ward, the policy and communications director at the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science. See links under Communicating Better to the Public – Go Personal.

The Greenhouse Effect – Atmospheric Gases: When discussing atmospheric gases, it is useful to refresh one’s memory of the relative concentrations of various gases. To be more useful these will be put in the same units, that is ppmv: parts per million by volume. In the idealized dry atmosphere:

Nitrogen is about 78% of the atmosphere or 780,840 ppmv;
Oxygen is 20.9% or 209,460 ppmv;
Argon is 0.93% of the atmosphere or 9,340 ppmv;
Carbon dioxide is about 0.04% of the atmosphere or 400 ppmv [carbon dioxide varies seasonally and is increasing]. The next greenhouse gas, significantly lower, is Methane, with about 0.00018% of the atmosphere or 1.79 ppmv;
Nitrous oxide is about 0.0000325% or 0.325 ppmv; and
Ozone is about 0 to 0.000007% or 0 to 0.07 ppmv.

The greenhouse influence of ozone is predominantly in the upper the atmosphere, the stratosphere, where it is created naturally by chemical reactions involving solar ultraviolet radiation (sunlight) and oxygen molecules. It is formed elsewhere in the atmosphere with chemical reactions involving volatile hydrocarbons, oxides of nitrogen, and sunlight. Before pollution control devices, ozone from car exhausts were a problem. In eastern forests of North America, *terpines* from trees can create ozone haze under the proper conditions.

Methane and nitrous oxide do not have enough concentration to increase the greenhouse effect significantly.

The kicker to this is water vapor, H₂O in a gaseous phase. Over the full atmosphere, it is calculated to be about 0.4% or 4,000 ppmv. In the troposphere water vapor is typically 1% to 4% or 10,000 to 40,000 ppmv. The boundary between the troposphere and stratosphere is called the tropopause. From the NCAR/UCAR web site:

“The troposphere is the lowest layer of Earth's atmosphere. Most of the mass (about 75-80%) of the atmosphere is in the troposphere. Most types of clouds are found in the troposphere, and almost all weather occurs within this layer. The troposphere is by far the wettest layer of the atmosphere; all of the layers above contain very little moisture.

“The bottom of the troposphere is at Earth's surface. The troposphere extends upward to about 10 km (6.2 miles or about 33,000 feet) above sea level. The height of the top of the troposphere varies with latitude (it is lowest over the poles and highest at the equator) and by season (it is lower in winter and higher in summer). It can be as high as 20 km (12 miles or 65,000 feet) near the equator, and as low as 7 km (4 miles or 23,000 feet) over the poles in winter.”

By the tropopause, liquid water and water vapor freeze out and above it, the concentration is only about 4 ppm. See: <https://scied.ucar.edu/shortcontent/troposphere-overview>

Greenhouse Effect – Water Vapor: It is important not to confuse water vapor with liquid water (fog, clouds, etc.). A good description of water vapor was posted by Weather Street.com:

Water vapor is water in its gaseous state-instead of liquid or solid (ice). Water vapor is totally invisible. If you see a cloud, fog, or mist, these are all liquid water, not water vapor.

Water vapor is extremely important to the weather and climate. Without it, there would be no clouds or rain or snow, since all of these require water vapor in order to form. All of the water vapor that evaporates from the surface of the Earth eventually returns as precipitation - rain or snow.

Water vapor is also the Earth's most important greenhouse gas, accounting for about 90% of the Earth's natural greenhouse effect, which helps keep the Earth warm enough to support life.

When liquid water is evaporated to form water vapor, heat is absorbed. This helps to cool the surface of the Earth. This "latent heat of condensation" is released again when the water vapor condenses to form cloud water. This source of heat helps drive the updrafts in clouds and precipitation systems, which then causes even more water vapor to condense into cloud, and more cloud water and ice to form precipitation.

Interesting facts:

Water Vapor Cools AND Warms the Climate System? When water evaporates from the surface of the Earth, it cools the surface. This keeps the surface from getting too hot. But because that water vapor is also the atmosphere's primary greenhouse gas, water vapor acts to keep the Earth's surface warmer than it would otherwise be.

So which effect is stronger, water vapor's cooling effect or warming effect? Interestingly, it is seldom mentioned in the global warming debate that the surface cooling effect of evaporation (which creates water vapor) is stronger than its greenhouse warming effect.

There is strong disagreement about the assertion above that water vapor accounts for about 90% of the Earth's natural greenhouse effect, many think it is far less. What is critical is that the greenhouse effect makes the earth habitable. It would be about 60 degrees F or 33 degrees C colder if there was no greenhouse effect. See link under: Seeking a Common Ground.

Greenhouse Effect – Idealized Dry Air: One of the huge problems of the IPCC and USGCRP reports on the greenhouse effect is that the calculations ignore liquid water (clouds) and water vapor. There is no such thing as dry air in nature. Even deserts have moisture, often forming as dew in the morning under certain weather conditions.

The only place you can get dry air is in the physics laboratory, where you begin with real air and pump it through a tube so as to pass over a desiccant, a gravel-like chemical whose function is to take out H₂O. At the end of that line, you can capture the dry air into a closed container, which may be as large as an industrial-gas-cylinder; but, nevertheless, it is an entirely artificial gas that does not occur in nature. And it must be kept enclosed to do experiments upon dry air.

All statements pertaining to real air must necessarily include H₂O; and any assertions based on dry air have no relevance to real air. As will be explained in future TWTWs, inclusion of water vapor changes the calculations for other greenhouse gases.

As Richard Lindzen has stated repeatedly, global climate models do not capture clouds (liquid H₂O), nor do they capture changing atmospheric water vapor in their calculations (gaseous H₂O). However, atmospheric temperature trends capture both water vapor and clouds. The global climate modelers need to use the hard evidence being gathered about the changing atmosphere, rather than continue with assumptions made in the 1979 Charney Report. Hard evidence separates meaningful computer simulations from computer games

Prairie Flooding: After a hard, cold winter, the Great Plains, prairie states, such as Nebraska, are suffering from flooding. The spring thaw came quickly, and the ground was frozen solid so it can not absorb melting snow. Tim Ball gives his views about the difficulties experienced in the prairie provinces of Canada. After the great blizzards of the 1880s reaching as far south as Texas, some people were wondering if the Great Plains were suitable for habitation. See links under Changing Weather.

Snow Cover Trends: A comparison of snow cover trends in the Northern Hemisphere between climate models forecasts and observations was performed by Connolly, *et al.* They found the climate models poorly explain the observed trends. “While the models suggest snow cover should have steadily decreased for all four seasons, only spring and summer have exhibited a long-term

decrease and the pattern of the observed decreases for these seasons was quite different from the model predictions.” Two of the authors, Soon and Legates, are members of SEPP’s board. See links under Challenging the Orthodoxy.

Additions and Corrections: Geologist Bill Balgord commented on a poorly worded sentence near the conclusion of last week’s Greenhouse Effect section. Among other items, the word colder was left out. The sentence should have read: Those camping in the desert at night find that it’s much colder than a more non-desert place of comparable altitude and latitude, because water vapor (clouds, humidity) absorbs infrared photons and gives off some photons in a downward direction, resulting in a slower cooling of the surface. TWTW deeply appreciates such observations. Clear communication is one of our objectives.

The section discussing Judith Curry’s findings on hurricanes has been delayed.

Number of the Week: 100% Renewable. Solar Daily had an interesting headline: “Achieving 100 percent renewable energy production.” The article gave some important details. “Costa Rica operated 311 consecutive days in 2018 on renewables driven primarily by hydroelectric power production (75%), followed by geothermal power production (15%), then wind power production (5%), solar power production (4%), and a very small sector of biomass power production (less than 1%).” This was for electricity only, not all energy. What the country did for the other 54 days was not discussed. What it used for energy other than electricity was not discussed.

If Costa Rica is the model for California and other states planning major efforts to go renewable, where do they plan to put the dams and rivers needed for hydroelectric power production? Where are the close-to-surface heat sources needed for geothermal? See link under Communicating Better to the Public – Exaggerate, or be Vague?

NEWS YOU CAN USE:

Climategate Continued

Ten Years after Climategate, the Global Warming Fraud Is on Life Support

By David Archibald, American Thinker, Mar 21, 2019

https://www.americanthinker.com/articles/2019/03/ten_years_after_climategate_the_global_warming_fraud_is_on_life_support.html

Censorship

Two Truths at the Heart of Peter Ridd’s Sacking

By Jennifer Marohasy, Her Blog, Mar 19, 2019

<https://jennifermarohasy.com/2019/03/two-truths-at-the-heart-of-peter-ridds-sacking/>

“Peter Ridd has over 100 such technical papers published in scientific journals, including a key rebuttal published in *Marine Geology* (volume 346, pages 392-399). This paper clearly documents and explains methodological flaws in research that purport to show reduced coral calcification rates.”

More Flagrant Alteration Of The Past: Patrick Moore As Founder Of Greenpeace

By Francis Menton, Manhattan Contrarian, Mar 18, 2019

<https://www.manhattancontrarian.com/blog/2019-3-18-more-flagrant-alteration-of-the-past-patrick-moore-as-founder-of-greenpeace>

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, 2013

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

Summary: <http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf>

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, 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, Draft Summary for Policymakers, NIPCC, 2019

<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, 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

Challenging the Orthodoxy

It's Science Time (Happer-led peer review of climate alarmism long overdue)

By Robert Bradley Jr. Master Resource, Mar 19, 2018

<https://www.masterresource.org/debate-issues/its-science-time-happer-led-peer-review-of-climate-alarmism-long-overdue/>

Northern Hemisphere snow cover trends (1967-2018): A comparison between climate models and observations

By Connolly, Connolly, Soon, Legates, Cionco, and Herrera, Posted by Charles the Moderator, WUWT, Mar 22, 2019

<https://wattsupwiththat.com/2019/03/22/northern-hemisphere-snow-cover-trends-1967-2018-a-comparison-between-climate-models-and-observations/>

Busted Hockey Sticks: 35 Non-Global Warming Papers Have Been Published In 2019

By Kenneth Richard, No Tricks Zone, Mar 22, 2019

<http://notrickszone.com/2019/03/22/busted-hockey-sticks-35-non-global-warming-papers-have-been-published-in-2019/>

About the corruption of climate science

By Larry Kummer, WUWT, Mar 17, 2019

<https://wattsupwiththat.com/2019/03/17/about-the-corruption-of-climate-science/>

The “Green New Dealers” Have Lost All Perspective

By Alan Carlin, Carlin Economics and Science, Mar 22, 2019

<http://www.carlineconomics.com/archives/4922>

“Perhaps the worst aspect of the ‘Green New Deal’ (GND) recently proposed by Representative Alexandria Ocasio-Cortez and Senator Edward Markey is that the authors have lost (or possibly never had) all perspective on climate change. They are acting as if climate change were as bad a problem as the Great Depression, and that another ‘New Deal’ is required for the US to survive.”

Defending the Orthodoxy

UN report finds temperature rise is 'locked in' for Arctic

By Miranda Green, The Hill, Mar 13, 2019

<https://thehill.com/policy/energy-environment/433886-un-report-finds-globe-is-past-the-point-of-halting-temperature-rise>

Link to report: Global Linkages: A graphic look at the changing Arctic

By Schoolmeester, T., Gjerdi, H.L., et al. UN Environment Programme,

https://wedocs.unep.org/bitstream/handle/20.500.11822/27687/Arctic_Graphics.pdf?sequence=1&isAllowed=y

Great Lakes bow to impacts of warming

By Daniel Cusick, E&E News reporter, Greenwire, Mar 21, 2019

<https://www.eenews.net/greenwire/2019/03/21/stories/1060127873>

By An Assessment of the Impacts of Climate Change on the Great Lakes

By Scientists and Experts from Universities and Institutions in the Great Lakes Region, Environmental Law & Policy Center, No date

<http://elpc.org/wp-content/uploads/2019/03/Great-Lakes-Climate-Change-Report.pdf>

“Yet, even with increased water management in agricultural, watersheds, climate change will likely reduce crop yields a for both soybean and maize by 10% - 30% by mid-century in the southern parts of the Great Lakes watershed. Soybean and maize production will likely move northward.”

[SEPP Comment: Headed by a lead author of IPCC reports. The authors don't realize that the major competitor to regional soybeans and maize is central Brazil, in the tropics.]

It's abundantly clear that climate change is already having an impact on human rights. And that this impact will only intensify in coming years.

By Kumi Naidoo, Secretary-General of Amnesty International, Accessed Mar 20, 2019

<https://www.amnesty.org/en/what-we-do/climate-change/>

“We are all born with fundamental human rights, yet these rights are under grave threat from climate change. While climate change threatens all of our lives in some way or other, people who experience discrimination are among those likely to be the worst affected. We are all equally deserving of protection from this universal threat.”

[SEPP Comment: Who is responsible for protecting the “right to a stable climate”? Who is responsible for insuring the planet will never undergo another ice age?]

The big problem with climate 'realism'

By Ryan Cooper, The Week, Mar 4, 2019

<https://theweek.com/articles/826608/big-problem-climate-realism>

[SEPP Comment: The author takes a fairytale view of climate realism.]

Questioning the Orthodoxy

Overheating About Global Warming

By Bjørn Lomborg, Project Syndicate, Mar 13, 2019

<https://www.project-syndicate.org/commentary/climate-change-alarmism-scaring-children-by-bjorn-lomborg-2019-03>

Planet-Sized Experiments – we've already done the 2°C test

Guest Post by Willis Eschenbach, WUWT, Mar 17, 2019

<https://wattsupwiththat.com/2019/03/17/planet-sized-experiments/>

Andrew Dessler's Climate Sensitivity Lecture: Some Observations

By Robert Bradley Jr. Master Resource, Mar 20, 2019

<https://www.masterresource.org/dessler-andrew/dessler-rice-lecture-2019/>

Media Touts 'Clear Sign of Human-Caused Climate Change.' Here Are the Facts.

By Marc Morano and ICECAP Staff, ICECAP, Mar 20, 2019

http://icecap.us/index.php/go/political-climate/media_touts_clear_sign_of_human_caused_climate_change_here_are_the_facts1/

After Paris!

The stark reality of CO2 emissions reduction, in one graph

By Anthony Watts, WUWT, Mar 22, 2019

<https://wattsupwiththat.com/2019/03/22/the-stark-reality-of-co2-emissions-reduction-in-one-graph/>

[SEPP Comment: Will it bring us back to the Little Ice Age?]

Change in US Administrations

Expectations High for President's Commission on Climate Security

By H. Sterling Burnett, Climate Change Weekly, Mar 22, 2019

<https://go.pardot.com/webmail/548162/355453684/303c8dced7ca0cb433d3c156df52ffa5cfc5e3db65a6c310f842d7a596c399fe>

Massive Coalition Backs Trump's Climate Science Committee

By Alex Newman, New American, Mar 20, 2019 [H/t WUWT]

<https://www.thenewamerican.com/tech/environment/item/31791-massive-coalition-backs-trump-s-climate-science-committee>

Skeptics see new 'red team, blue team' in White House review

Nick Sobczyk, E&E News reporter, Via GWPF, Mar 20, 2019

<https://www.thegwpf.com/u-s-sceptics-see-new-chance-for-climate-science-review-team/>

Feds' climate 'propaganda' boosts support for Trump panel: 'It's the deep state that says this'

By Valerie Richardson, The Washington Times, March 20, 2019

<https://www.washingtontimes.com/news/2019/mar/20/presidents-commission-climate-security-needed-comb/>

Problems in the Orthodoxy

It's All Over: Germany Kills Ambitious EU Climate Plan

By Staff Writers, GWPF, Mar 22, 2019

<https://www.thegwpf.com/germany-may-kill-ambitious-eu-climate-plan-tomorrow/>

Link to note: European Council meeting (21 and 22 March 2019) – Conclusions

By General Secretariat of the Council, Mar 22, 2019

<https://www.consilium.europa.eu/media/38789/22-euco-final-conclusions-en.pdf>

EU decides to quietly drop “carbon neutrality by 2050”

By Jo Nova, Her Blog, Mar 23, 2019

<http://joannenova.com.au/2019/03/eu-decides-to-quietly-drop-carbon-neutrality-by-2050/#more-63159>

“It’s hard to get excited. Long term targets are meaningless to politicians anyhow. If Merkel cares, it shows how insanely expensive the plan was.”

Seeking a Common Ground

What is Water Vapor

By Staff Writers, Weather Street.com, Nov 27, 2010

http://www.weatherquestions.com/What_is_water_vapor.htm

Review of Recent Scientific Articles by CO2 Science

The Invalidation of Future Sea Level Rise Projections

Watson, P.J. 2018. How well do AR5 sea surface-height model projections match observational rates of sea-level rise at the regional scale? *Journal of Marine Science and Engineering* 6: 11, doi:10.3390/jmse6010011. Mar 22, 2019

<http://www.co2science.org/articles/V22/mar/a13.php>

“In providing the rationale for his paper published in the *Journal of Marine Science and Engineering*, Watson (2018) writes that ‘despite the increasing complexity and resolution of [climate] models, their utility for future projections will always be conditional on their ability to replicate historical and recent observational global and regional data trends of importance (such as temperature, sea level, CO2 trends, etc.).’”

Investigating the Controlling Factors of Coral Calcification

Ross, C.L., DeCarlo, T.M. and McCulloch, M.T. 2019. Environmental and physiochemical controls on coral calcification along a latitudinal temperature gradient in Western Australia. *Global Change Biology* 25: 431-447. Mar 21, 2019

<http://www.co2science.org/articles/V22/mar/a12.php>

“In light of these many findings, Ross et al. conclude their results indicate that ‘corals shift their pH_cf to adapt and/or acclimatize to their localized thermal regimes,’ which ‘biological response is likely to have critical implications for predicting the future of coral reefs under CO2-driven warming and acidification.’

“Indeed, and those implications suggest that coral calcification is a lot more stable than many climate alarmists assume. Such biological control further suggests that corals are likely well-equipped to continue building their skeletons under projections of future increases in oceanic temperature and seawater pH declines.”

Minimal Effects of Ocean Acidification on a Marine Barnacle

Nardone, J.A., Patel, S., Siegel, K.R., Tedesco, D., McNicholl, C.G., O'Malley, J., Herrick, J., Metzler, R.A., Orihuela, B., Rittschof, D. and Dickinson, G.H. 2018. Assessing the impacts of ocean acidification on adhesion and shell formation in the barnacle *Amphibalanus amphitrite*. *Frontiers in Marine Science* 5: Article 369, doi: 10.3389/fmars.2018.00369. March 18, 2019

<http://www.co2science.org/articles/V22/mar/a10.php>

A Holocene Summer Temperature Proxy for Central Quebec

Bajolle, L., Larocque-Tobler, I., Gandouin, E., Lavoie, M., Bergeron, Y. and Ali, A.A. 2018. Major postglacial summer temperature changes in the central coniferous boreal forest of Quebec (Canada) inferred using chironomid assemblages. *Journal of Quaternary Science* 33: 409-420. Mar 15, 2019

<http://www.co2science.org/articles/V22/mar/a9.php>

Model Issues

Climate sensitivity calculator app

By Alberto Zaragoza Comendador, Climate Etc. Mar 18, 2019

<https://judithcurry.com/2019/03/18/climate-sensitivity-calculator-app/>

“Finally, a note of caution. The app, like the scientific literature, uses volcanoes and solar radiation as the only natural forcings. In other words, the app makes the assumption that other natural factors don’t matter. This is obviously absurd for short periods of time, due to oscillations like El Niño.”

Changing Weather

Urban Flooding: We don’t need to live near the rivers anymore.

By Tim Ball, Digital Management, Mar 20, 2019

<https://drtimball.ca/2019/urban-flooding-we-dont-need-to-live-near-the-rivers-anymore/>

“I was involved in water issues across the Prairies for decades. I learned that the pattern is wet and dry cycles. I also realized the government never caught up and never properly understood or resolved the problems. Governments are always on a political cycle that rarely matches the climate cycles.”

The BBC & Cyclone Idai

By Paul Homewood, Not a Lot of People Know That, Mar 21, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/03/21/the-bbc-cyclone-idai/>

So much snow in the Northern Winter ski resorts staying open ’til summer

By Jo Nova, Her Blog, Mar 21, 2019

<http://joannenova.com.au/2019/03/peak-snow-in-the-northern-winter/>

Measuring impact of drought on groundwater resources from space

By Staff Writers, Tempe AZ (SPX), Mar 21, 2019

http://www.terraily.com/reports/Measuring_impact_of_drought_on_groundwater_resources_from_space_999.html

Link to paper: Groundwater Loss and Aquifer System Compaction in San Joaquin Valley During 2012–2015 Drought

By Ojha, Werth, and Shirzaei, JGR Solid Earth, Feb 27, 2019

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018JB016083>

Drought wipes popular Chilean lake from the map

By Miguel Sanchez, Paine, Chile (AFP) March 20, 2019

http://www.terraily.com/reports/Drought_wipes_popular_Chilean_lake_from_the_map_999.html

This Date In 1907

By Tony Heller, The Deplorable Climate Science Blog, Mar 22, 2019

<https://realclimatescience.com/2019/03/this-date-in-1907/>

Changing Climate

Changes in ocean 'conveyor belt' foretold abrupt climate changes by 4 centuries

By Staff Writers, New York NY (SPX), Mar 21, 2019

http://www.terraily.com/reports/Changes_in_ocean_conveyor_belt_foretold_abrupt_climate_changes_by_four_centuries_999.html

Link to paper: Deep-water circulation changes lead North Atlantic climate during deglaciation

By Francesco Muschitiello, et al. Nature Communications, Mar 20, 2019

<https://www.nature.com/articles/s41467-019-09237-3>

“Using a continuous record of deep-water ventilation from the Nordic Seas, we identify a ~400-year lead of changes in high-latitude NADW formation ahead of abrupt climate changes recorded in Greenland ice cores at the onset and end of the Younger Dryas stadial, which likely occurred in response to gradual changes in temperature- and wind-driven freshwater transport.”

[SEPP Comment: Challenges the asteroid/comet hypothesis, unless ocean circulations can predict asteroid hits.]

Changing Cryosphere – Land / Sea Ice

Polar Bear Populations Booming

By John Hinderaker, Power Line, Mar 20, 2019

<https://www.powerlineblog.com/archives/2019/03/polar-bear-populations-booming.php>

With or without icebreaker, Qajaq can't get through, says coast guard

'We're battling ice conditions that we haven't seen in 30 years,' says Minister Steve Crocker

By Staff Writers, CBC, CA, Mar 15, 2019

<https://www.cbc.ca/news/canada/newfoundland-labrador/qajaq-icebreaker-1.5056140>

"We're all at the mercy of Mother Nature, and we feel for the people who are stranded there."

Unprecedented snowfall in Himalayas due to global warming: Scientist

By Staff Writers, Press Trust of India, Mar 18, 2019

https://www.business-standard.com/article/pti-stories/unprecedented-snowfall-in-himalayas-due-to-global-warming-scientist-119031800780_1.html

Un-Science or Non-Science?

Uncertain projections help to reveal the truth about future climate change

By Staff Writers, Exeter UK (SPX), Mar 19, 2019

http://www.terraily.com/reports/Uncertain_projections_help_to_reveal_the_truth_about_future_climate_change_999.html

[SEPP Comment: Also, they may help reveal untruth!]

Lowering Standards

On climate change the BBC is once, twice, eight times a liar

By Paul Homewood, The Conservative Woman, Mar 18, 2019

<https://www.conservativewoman.co.uk/on-climate-change-the-bbc-is-once-twice-eight-times-a-liar/>

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

Achieving 100 percent renewable energy production

By Staff Writers. Bethesda MD (SPX) Mar 22, 2019

http://www.solardaily.com/reports/Achieving_100_percent_renewable_energy_production_999.html

Communicating Better to the Public – Make things up.

Climate Change Is This Generation’s Vietnam War

It's an existential threat to millennials—and older Americans are standing in the way of action.

By Matt Ford, The New Republic, March 14, 2019

<https://newrepublic.com/article/153312/climate-change-generations-vietnam-war>

Lewandowsky on the Right Way to Cry Wolf

By Charles the Moderator, WUWT, Mar 21, 2019

<https://wattsupwiththat.com/2019/03/21/lewandowsky-on-the-right-way-to-cry-wolf/>

Link to paper: Statistical Language Backs Conservatism in Climate-Change Assessments

By Salvador Herrando-Pérez, et al. BioScience, Mar 18, 2019

<https://academic.oup.com/bioscience/article/69/3/209/5382637>

“The scientific evidence for anthropogenic climate change is empirically settled, but communicating it to nonscientific audiences remains challenging.”

[SEPP Comment: *Where is the hard evidence CO2 is causing significant global warming? The IPCC doesn't have it!*]

Communicating Better to the Public – Go Personal.

Donald Trump is using Stalinist tactics to discredit climate science

A panel to promote an alternative explanation for climate change would be disastrous. Yet that’s what White House officials want

By Michael Mann and Bob Ward, The Guardian, Mar 20, 2019

<https://www.theguardian.com/commentisfree/2019/mar/20/donald-trump-stalinist-techniques-climate-science>

Ignorance Is Strength, Dissent Is Stalinist

By Marlo Lewis, Jr. CEI, Mar 21, 2019

<https://cei.org/blog/ignorance-strength-dissent-stalinist>

See link immediately above.

Communicating Better to the Public – Use Propaganda

Leading Swiss Publisher Calls Climate Movement A “Mass Trance” ...Climate Hysteria Understood As “Absolute Truth”

By P Gosselin, No Tricks Zone, Mar 16, 2019

<http://notrickszone.com/2019/03/16/leading-swiss-publisher-calls-climate-movement-a-political-mass-trance-climate-hysteria-understood-as-absolute-truth/>

Communicating Better to the Public – Use Propaganda on Children

Feds push climate alarmism to our children

By David Wojick, CFact, Mar 22, 2019 [H/t Cooler Heads]

<https://www.cfact.org/2019/03/22/feds-push-climate-alarmism-to-our-children/>

Sixty Minutes on the Kiddie Climate Lawsuit: Hypocrisy Squared

By Robert Endlich, Master Resource, Mar 18, 2019

<https://www.masterresource.org/climate-lawsuits/sixty-minutes-kiddie-climate-lawsuit/>

Questioning European Green

Marcel Crok: A Historic Victory for Holland's Climate Sceptics Party

By Marcel Crok, GWPF, Mar 21, 2019

<https://www.thegwpf.com/marcel-crok-a-historic-victory-for-hollands-climate-sceptics-party/>

Forum [Climate Sceptics Party] big winner in provincial elections, set to take 13 senate seats

By Staff Writer, Dutch News.nl, Mar 21, 2019

<https://www.dutchnews.nl/news/2019/03/forum-big-winner-in-provincial-elections-set-to-take-12-senate-seats/>

'Over-zealous' Germany energy transition risking industrial competitiveness - Wacker CEO

By Staff Writer, ICIS News, Mar 19, 2019

<https://www.icis.com/explore/resources/news/2019/03/19/10335807/-over-zealous-germany-energy-transition-risking-industrial-competitiveness-wacker-ceo/>

The Real Cost Of Decarbonisation Revealed By Sir David MacKay In 2011

By Paul Homewood, Not a Lot of People Know That, Mar 21, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/03/21/the-real-cost-of-decarbonisation-revealed-by-sir-david-mackay-in-2011/>

Tory peer's firm is paid £500,000 from energy companies set to profit from fossil fuel boiler ban HE helped push through

John Selwyn Gummer key figure behind decision to ban fossil fuel home heating

His consultancy Sancroft International has received thousands in fees

Ban recommended by Committee on Climate Change which Mr Gummer chairs

Already being investigated by Lords standards for £600,000 payment from 'green' businesses such as Johnson Matthey, which sells hydrogen technology

By David Rose, Sunday Mail, UK, Mar 16, 2019

<https://www.dailymail.co.uk/news/article-6818199/Tory-peers-firm-paid-500-000-energy-companies-set-profit-fossil-fuel-boiler-ban.html>

Questioning Green Elsewhere

"No Regrets" Climate Policy: First, Do No Harm

By Robert Bradley, Master Resource, Mar 21, 2019

<https://www.masterresource.org/climate-policy/no-regrets-climate-policy/>

On The "Cost" Of The Green New Deal

By Francis Menton, Manhattan Contrarian, Mar 21, 2019

<https://www.manhattancontrarian.com/blog/2019-3-20-on-the-cost-of-the-green-new-deal>

The Corruption of Science and Economics and the Green New Deal

By Gamaliel Isaac, American Thinker, Mar 21, 2019

https://www.americanthinker.com/articles/2019/03/the_corruption_of_science_and_economics_and_the_green_new_deal.html

Congo's miners dying to feed world's hunger for electric cars

Exploited by Chinese firms, workers as young as nine risk their lives to feed the world's growing hunger for cobalt. Christina Lamb reports from Kolwezi

By Christina Lamb, The Sunday Times, Via GWPF, Mar 21, 2019

<https://www.thegwpf.com/green-killers-congo-miners-dying-electric-cars/>

Progressives Say No to Meat, But the World Thinks Otherwise

By Steve Goreham, Heartland, Mar 22, 2019

<http://blog.heartland.org/2019/03/progressives-say-no-to-meat-but-the-world-thinks-otherwise/>

2018 Study Finds 'Unsustainable' Smartphone CO2 Emissions To Reach 125 Megatons Per Year By 2020

By Kenneth Richard, No Tricks Zone Mar 18, 2019

<http://notrickszone.com/2019/03/18/2018-study-finds-unsustainable-smartphone-co2-emissions-to-reach-125-megatons-per-year-by-2020/>

Link to paper: Assessing ICT global emissions footprint: Trends to 2040 & recommendations

By Lotfi Belkhir and Ahmed Elmeligi, Journal of Cleaner Production, Mar 10, 2018

<https://www.sciencedirect.com/science/article/pii/S095965261733233X>

Large fund firms' support for combating climate change is all talk, as proxy voting record shows bottom performance

By Eric Rosenbaum, CNBC, Mar 18, 2019

<https://www.cnbc.com/2019/03/18/large-fund-firms-support-for-combating-climate-change-is-all-talk.html>

The Political Games Continue

Dems introduce bill to protect science research from political interference

By Rachel Frazin, The Hill, Mar 14, 2019

<https://thehill.com/policy/energy-environment/434157-dem-lawmakers-introduce-bill-to-protect-science-research-from>

[SEPP Comment: Would it apply to Al Gore?]

Democrats offer legislation to counter White House climate science council

By Miranda Green, The Hill, Mar 12, 2019

<https://thehill.com/policy/energy-environment/433704-new-bill-aims-to-counter-controversial-white-house-climate-security>

Dem divisions deepen over approach to climate change

By Miranda Green, The Hill, Mar 22, 2019

<https://thehill.com/policy/energy-environment/435231-dem-divisions-deepen-over-approach-to-climate-change>

Litigation Issues

DC moves closer to climate lawsuit against Exxon

By Miranda Green, The Hill, Mar 18, 2019

<https://thehill.com/policy/energy-environment/434590-dc-building-team-for-exxon-climate-challenge>

Public Power, Private Gain: Private Attorneys Use AG's Office To Target Exxon for Big Payday

By Erin Mundahl, Inside Sources, Mar 20, 2019

<https://www.insidesources.com/dc-ag-preparing-to-go-after-exxon-and-a-big-payday/>

DC Attorney General's Exxon Investigation Raises Questions of Profit Motive, Impartiality

By Spencer Walrath, Energy in Depth, Mar 20, 2019

<https://eidclimate.org/dc-attorney-general-biased-investigation-exxon/>

[SEPP Comment: Energy in Depth is a research program of the independent Petroleum Association of America.]

Judge temporarily halts drilling on Wyoming public lands over climate change

By Maranda Green, The Hill, Mar 20, 2019

<https://thehill.com/policy/energy-environment/434948-judge-temporarily-bans-drilling-on-public-lands-citing-climate>

[SEPP Comment: One of the judges that Senator Harry Reid changed Senate rules to get appointed.]

New Hearing, Old Tricks: #Exxonknew Takes Debunked Testimony to Parliament

By Lea Giotto, Energy in Depth, Mar 20, 2019

<https://eidclimate.org/new-hearing-old-tricks-exxonknew-takes-debunked-testimony-to-parliament/>

Energy in Depth is a publication by the Independent Petroleum Association of America

Venezuela Ordered to Pay ConocoPhillips \$8.7B

By Andreas Exarheas, Rigzone, Mar 13, 2019

https://www.rigzone.com/news/venezuela_ordered_to_pay_conocophillips_87b-13-mar-2019-158366-article/

[SEPP Comment: Collection on assets in US possible?]

EPA and other Regulators on the March

EPA head says climate change threat '50-75 years out

By Zack Budryk, The Hill, Mar 20, 2019

<https://thehill.com/policy/energy-environment/434884-epa-head-says-climate-change-threat-50-75-years-out>

CEI Supports EPA's Proposed Revision of Power Plant Rule

By Marlow Lewis, CEI, Mar 19, 2019

<https://cei.org/blog/cei-supports-epas-proposed-revision-power-plant-rule>

EPA bans consumer sales of lethal chemical found in paint strippers

By Maranda Green, The Hill, Mar 15, 2019

<https://thehill.com/policy/energy-environment/434298-epa-bans-commercial-sales-of-lethal-chemical-found-in-paint>

Energy Issues – Non-US

Are Heat Pumps Cheaper To Run Than Conventional Gas Boilers? [UK]

By Paul Homewood, Not a Lot of People Know That, Mar 17, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/03/17/are-heat-pumps-cheaper-to-run-than-conventional-gas-boilers/>

“The simple reality is that heat pumps, both ground and air source are not cheaper to run than a conventional gas boiler. On the contrary, without government subsidies they are considerably more expensive.

“It is true that they are much cheaper to run than conventional electric heating systems, but that is another matter entirely.”

Dutch Govt To Start Turning Off Gas Supply To Households

By Paul Homewood, Not a Lot of People Know That, Mar 22, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/03/22/dutch-govt-to-start-turning-off-gas-supply-to-households/>

GWPF Welcomes New-Found Energy Realism of Cumbrian Councillors,

Press Release, GWPF, Mar 20, 2019

<https://www.thegwpf.com/gwpf-welcomes-new-found-energy-realism-of-cumbrian-councillors/>

New £165m coal mine in Cumbria 'unanimously approved' by councilors despite escalating climate change crisis

Demand and jobs 'outweighs' global warming concerns, Lib Dem committee chair says

By Tom Embury, Independent, Mar 19, 2019

<https://www.independent.co.uk/environment/cumbria-coal-mine-woodhouse-coliery-climate-change-a8830046.html>

Energy Issues – Australia

“Market Bloodbath”: Too many new remote renewables projects means high losses

By Jo Nova, Her Blog, Mar 18, 2019

<http://joannenova.com.au/2019/03/market-bloodbath-too-many-new-remote-renewables-projects-means-high-losses/#more-63078>

Energy Issues -- US

EIA projects U.S. energy-related CO2 emissions will remain near current level through 2050

By Owen Comstock, et al. EIA, Mar 20, 2019

<https://www.eia.gov/todayinenergy/detail.php?id=38773>

EIA AEO shows U.S. CO2 emissions 1 billion metric tons below 2007 peak in 2050

Guest essay by Larry Hamlin, WUWT, Mar 23, 2019

<https://wattsupwiththat.com/2019/03/23/eia-aeo-shows-u-s-co2-emissions-1-billion-metric-tons-below-2007-peak-in-2050/>

Link to report; Annual Energy Outlook, 2019

By Staff Writers, EIA, Jan 24, 2019

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

Water and Fracking

By Donn Dears, Power For USA, Mar 5, 2019

<https://ddears.com/2019/03/05/water-and-fracking/>

Oil and Natural Gas – the Future or the Past?

The Myth That Oil Demand Is Coming to an End

By Robert Lyman, GWPF, Mar 18, 2019

<https://www.thegwpf.com/the-myth-that-oil-demand-is-coming-to-an-end/>

Texas report: Pennsylvania 2nd only to us in natural gas production

By Stephen Huba, Tribune-Review, (PA) Mar 13, 2019

<https://triblive.com/news/pennsylvania/texas-report-pennsylvania-second-only-to-us-in-natural-gas-production/>

Link to: State of Energy Report

By Staff Writers, Texas Independent Producers and Royalty Owners Association, 2019

http://tipro.org/index.php?option=com_content&view=article&id=258

Alternative, Green (“Clean”) Solar and Wind

Wind turbine infrasound as a weapon

By Charles the Moderator, WUWT, Mar 19, 2019

<https://wattsupwiththat.com/2019/03/19/wind-turbine-infrasound-as-a-weapon/>

Links to Video

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

Geothermal plant 'triggered earthquake' in S. Korea

By Staff Writers, Seoul (AFP), March 20, 2019

http://www.terraily.com/reports/Geothermal_plant_triggered_earthquake_in_S_Korea_999.htm
↓

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

World's Biggest Battery to Boost Solar in Texas Oil Country

By Chris Martin, Bloomberg, Feb 13, 2019

<https://www.bloomberg.com/news/articles/2019-02-13/texas-may-get-a-new-boast-amid-plans-for-world-s-largest-battery>

“The 495-megawatt storage system would be built in tandem with a solar farm of the same size in Borden County, Texas.”

[SEPP Comment: How long will it last?]

Alternative, Green (“Clean”) Vehicles

The war against the internal combustion engine by CARB and US EPA is not based on real scientific evidence—examples

Guest post by Albert Parker, WUWT, Mar 22, 2019

<https://wattsupwiththat.com/2019/03/22/the-war-against-the-internal-combustion-engine-by-carb-and-us-epa-is-not-based-on-real-scientific-evidence-examples/>

California Dreaming

NOAA: ‘Incredible’ amounts of snow in California’s snowpack

By Anthony Watts, WUWT, Mar 16, 2019

<https://wattsupwiththat.com/2019/03/16/noaa-incredible-amounts-of-snow-in-californias-snowpack/>

The Right Way For California To Divest From Natural Gas

By Tim O’Connor, Senior Director, California Energy Program, Forbes, Mar 18, 2019

<https://www.forbes.com/sites/edfenergyexchange/2019/03/18/the-right-way-for-california-to-divest-from-natural-gas/#547a82df57e4>

[SEPP Comment: Ignores the main issue, what will deliver reliable, consistent (dispatchable) electricity on demand?]

Environmental Industry

The Media & the WWF Torture Scandal

News organizations have turned their own journalists into WWF cheerleaders.

By Donna Laframboise, Big Picture News, Mar 20, 2019

<https://nofrackingconsensus.com/2019/03/20/the-media-the-wwf-torture-scandal/>

The WWF Expose, the Media & Earth Hour

By Donna Laframboise, Big Picture News, Mar 18, 2019

<https://nofrackingconsensus.com/2019/03/18/the-wwf-expose-the-media-earth-hour/>

Other News that May Be of Interest

With Declining Orcas and Salmon, Why Do We Allow the Shellfish Industry to Poison Our Coastal Waters With Herbicides and Pesticides?

By Cliff Mass, Weather and Climate Blog, Mar 17, 2019

<https://cliffmass.blogspot.com/search?updated-max=2019-03-19T08:07:00-07:00&max-results=1&start=3&by-date=false>

Dead whale washed ashore with 88 pounds of plastic in its stomach

By Avery Anapol, The Hill, Mar 18, 2019

<https://thehill.com/policy/energy-environment/434495-dead-whale-found-with-88-pounds-of-plastic-in-its-stomach>

[SEPP Comment: What type of whale and how much did it weigh?]

Fish from Ohio river that once caught fire now safe to eat

By Owen Daugherty, The Hill, Mar 19, 2019

<https://thehill.com/policy/energy-environment/434717-fish-from-ohio-river-that-once-caught-fire-now-safe-to-eat>

BELOW THE BOTTOM LINE:

Precautionary Principle: We Must Ban Driving to Whole Foods

By Alex Berezow, ACSH, Mar 18, 2019

<https://www.acsh.org/news/2019/03/18/precautionary-principle-we-must-ban-driving-whole-foods-13889>

UN climate conferences to end!

By Staff Writers, Climate Change Predictions.org, Mar 17, 2019

<http://climatechangepredictions.org/uncategorized/6640>

“Car travel should be cut by 80%, road construction halted and public transport boosted if Australia is to meet carbon emission targets, energy experts have warned.

“‘The car is doomed,’ Monash University associate professor Damon Honnery said, discussing the findings of a soon-to-be-published research paper, Mitigating Greenhouse: Limited Time Options, written with Dr Patrick Moriarty.

“‘People are going to have to fundamentally change the way they think about travel and make much more use of non-motorised travel such as cycling and walking.’

“Dr Moriarty also believes there must be big reductions in air travel. ‘An overseas trip might become a once-in-a-lifetime experience rather than an annual event,’ he said.

“The Age (Australia), 3 Mar 2008 – screen copy held by this website”

Staring down barrel

By Staff Writers, Climate Change Predictions.org, Mar 21, 2019

<http://climatechangepredictions.org/uncategorized/5826>

“And how far will it go? Climate forecasts have long noted that every increase in global temperature heightens the odds of runaway global warming, beyond any human control. Continued overheating could unlock more methane from Arctic regions beyond Siberia.

“It could cripple the vital ability of plants and oceans to absorb CO2 from the atmosphere, turning them into gushing sources of new CO2 that accelerate the superheating even further. The ice caps that help cool the Earth by reflecting sunlight into space could vanish. In the end, the relentless rise in temperature could induce a cataclysmic venting of billions of tons of methane from the oceans.

“It seems likely that we are staring down the barrel of the full force, worst-case scenarios studied by the IPCC and other research organizations’

alternet.org, 12 Oct 2005” [Boldface added]

ARTICLES:

1. Is There a Green Rational Deal?

Congressional Democrats propose a fantastically expensive plan to fix precisely nothing.

By Holman Jenkins, WSJ, Mar 15, 2019

<https://www.wsj.com/articles/is-there-a-green-rational-deal-11552688345>

[SEPP Comment: *Dreams cost nothing, only the implementation costs money!*]

SUMMARY: The journalist writes:

“Put me down as doubting the Green New Deal means we’re now about to have a serious policy debate about climate. If we did, how would Democrats stop taxpayers from discovering the following: For a minuscule fraction of the cost of the Green New Deal, we could fix the biggest piece of the climate problem by injecting particles into the air sufficient to block 1% of sunlight hitting earth.

“No, this would not cure every risk (or end every theorized benefit) associated with higher atmospheric CO2. But it would neutralize the biggest putative risk, namely a warming of the planet. Gernot Wagner, a Harvard economist specializing in climate, is the latest to run the numbers. He estimates that such a program would cost around \$2 billion a year. His findings are in line with estimates made by other reputable researchers.

“This non-eye-popping sum represents about 0.1% of the estimated world-wide annual cost of stabilizing atmospheric CO2 by midcentury (which ain’t happening). Using words precisely, it would be infinitely more cost-effective than the Green New Deal, which addresses only U.S. emissions and therefore would solve nothing.

“A 2008 paper by the liberal scholar Cass Sunstein offers an insight that should have informed our thinking all along. Donald Trump is right: China and India might be happy to hold our coat but they won’t be joining us in the climate fight. And without their full participation, the climate fight cannot successfully achieve any goal.

“So let’s have a debate. To be remotely useful, the press would have to rediscover a concept it has religiously avoided in the discussion so far: cost and benefit. Reporters would have to learn something about the climate science they hug to their breast as an infallible gospel in a foreign language they haven’t bothered to learn.

“They could start by noticing that the Intergovernmental Panel on Climate Change, the accepted authority, has failed to improve upon a 40-year-old guesstimate that a doubling of atmospheric CO₂ would lift global temperature somewhere between 2.7 and 8.1 degrees Fahrenheit.

“The IPCC does not claim this wide and baggy range is even reliable, only that it comports with a variety of computer simulations. If the IPCC could validate any of these simulations, it could also offer a narrower, more useful range.

“Still, we have to proceed on some basis, so what are the implications?

If the world adopts the widely prescribed goal of holding temperature increase to 3.6 degrees above the preindustrial average, it might require forestalling 300 billion tons of future emissions—or perhaps 900 billion tons.

“We might spend \$2 trillion a year and avoid 6.3 degrees of additional warming—or maybe only 0.9 degrees.

“Global society is not irrational for being unwilling to spend \$2 trillion annually on so uncertain a basis. Consider a recent U.S. report that was abysmally covered in the media. Government scientists, without being especially upfront about it, combined extreme worst-case assumptions both for future emissions and for how much warming might result from a given amount of emissions.

“They came up with a shocking forecast of a U.S. temperature increase of 11 degrees Fahrenheit by 2090. Even so, their estimate of the annual damage to the U.S. economy was a manageable \$500 billion, or about 0.8% of national income assuming a meager 1.6% annual growth rate between now and then.

Now don’t spit out your coffee. A worst-case outcome is a risk worth reducing for the U.S. and the world if it can be done cost effectively. But this means taking account of costs and benefits; it means confronting the incentives of other countries—neither of which the Green New Deal does.

“Is there a saner, no-regrets approach? The only one I can see would consist of the following: Invest in battery research and work to remove the irrational obstacles to nuclear power. Adopt a carbon tax as a pro-growth tax reform and hope the example catches on. Even if it doesn’t, any low-carbon energy technologies that emerge, if they are efficient and competitive, will be adopted by other countries.”

After a few political comments, the journalist concludes with:

“A cynic might even say Congress’s real climate policy has always been to milk the issue and then revert to Plan B: The \$2 billion option of trying to block enough sunlight to offset any warming caused by CO₂.”

2. Norsk Hydro Is Hit by Ransomware Cyberattack

The company, one of the world's largest aluminum producers, says its operations were crippled
By Alistair MacDonald and Dominic Chopping, WSJ, Mar 19, 2019

<https://www.wsj.com/articles/norsk-hydro-hit-by-extensive-cyberattack-11553004589>

SUMMARY: The journalists write:

“Norsk Hydro AS said it suffered a ransomware cyberattack Tuesday that crippled computers and production at the aluminum and energy giant.

“The Norwegian company, whose business includes mining, smelting and renewable-energy generation, said the virus had been isolated to keep it from spreading further internally, though it was uncertain when operations would return to normal.

“Let me be clear, the situation for Hydro is quite severe. The entire computer network is down,” said Norsk Hydro finance chief Eivind Kallevik, who noted the virus first surfaced in the company’s U.S. operations.

“In a ransomware attack, hackers scramble the files of victims and demand ransom to decrypt them again. Mr. Kallevik said the attack on Norsk Hydro, which he described as involving an “encryption virus,” was followed by a ransom demand.

“In a well-known attack in 2017, so-called WannaCry ransomware affected businesses, hospitals and government agencies around the world.

After speculating on the software used, the journalists continue:

“In February, Altran said the French National Cybersecurity Agency confirmed that the company was attacked with “a crypto locker virus using a never-before-seen code that was nondetectable by best-in-class firewall and IT defense mechanisms.”

“A number of U.S. utilities have been hit by Russian hackers. The intrusion into the control rooms of the nation’s power grid could have caused blackouts, federal officials have said; and top Trump administration officials have pushed for action to defend the country’s electricity system and other critical industries, particularly against cyberattacks from China, Iran, North Korea and Russia.

“To reduce the risk of cyberattacks from external networks, utility companies and manufacturers often ‘air gap’ their computer systems, meaning they aren’t connected to the internet. It is unclear to what extent Norsk Hydro cordoned off its systems.”