

The Week That Was: 2020-02-15 (February 15, 2020)

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The Science and Environmental Policy Project

Quote of the Week: *"Laws are made for men of ordinary understanding and should, therefore, be construed by the ordinary rules of common sense. Their meaning is not to be sought for in metaphysical subtleties which may make anything mean everything or nothing at pleasure."* — Thomas Jefferson (1823)

Number of the Week: January 1736

THIS WEEK:

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

Future Emissions Down, Climate Sensitivity Up? Writing in *American Thinker*, Anthony Watts draws attention to a surprising article in one of the climate establishment's journals, *Nature*. In that article by Zeke Hausfather and Glen Peters, the authors point out that great increases in carbon dioxide (CO₂) emissions are unlikely to take place in the 21st century. Thus, the world will not warm as much as claimed using the standard modeling assumptions common to the global climate models used by the UN Intergovernmental Panel on Climate Change (IPCC). The authors propose that the IPCC modelers moderate their extreme emissions scenario, their storyline.

The unlikely possibility of the extreme increase in CO₂ emissions has been addressed by many sceptics, such as Judith Curry and Roy Spencer, and in the Reports of the Nongovernmental International Panel on Climate Change (NIPCC). Further, the comprehensive physical evidence of warming of the atmosphere, where the greenhouse effect occurs, does not show a dangerous warming as CO₂ is increasing. The scenarios used are secondary to the main issue, the sensitivity of temperatures in the earth's atmosphere to increasing CO₂.

Watts describes what may be the latest trick being used by the IPCC to continue to excite the public in demanding limits on CO₂ emissions, namely the IPCC is changing the standard for the sensitivity of the planet for a doubling of CO₂. This standard was established in 1979 by a committee by US National Academy of Sciences chaired by Jule Charney for whom the committee's report is named.

Influenced by climate modelers, the Charney Report estimated that climate sensitivity to be 3 °C (5.4 °F), give or take 1.5 °C (2.7 °F). This estimate was above previous estimates because the Charney Report assumes an increase in atmospheric water vapor, the dominant greenhouse gas. At the time there was no comprehensive atmospheric physical evidence to support or refute the assumptions.

In 1990, Roy Spencer and John Christy developed the method for estimating temperature trends from satellite data going back to 1979. The assumptions in the Charney Report have been refuted by physical evidence, which has been ignored by the UN IPCC. Thus, in effect the IPCC has been basing its recent reports on a fictional atmosphere, shown not to exist.

In his essay, Anthony Watts discusses that the IPCC may be realizing that its-scenarios for extreme increases in atmospheric CO₂ may be farfetched. During the current round of preparation for the Sixth Assessment Report (AR6), to compensate for expected smaller increases in CO₂ concentration, the IPCC may be increasing its claimed sensitivity of the earth's temperatures to increasing CO₂.-Make the CO₂ monster scarier. The initial reports indicate this is occurring. We will know more within a few months. We will see if US laboratories engaged in atmospheric research will continue using a fictional atmosphere – dramatically departing from the scientific method as described by Richard Feynman and others.

Note that Watts brings up recent work by Roy Spencer. On February 1, Spencer estimated that humanity would probably not double atmospheric CO₂. On February 5, Spencer posted some additional calculations, subsequently discovered a minor error in the later calculations and quickly retracted them. He continues to assert that the UN IPCC still overestimates future CO₂ concentrations in its scenarios. See links under Challenging the Orthodoxy – NIPCC, Challenging the Orthodoxy, Problems in the Orthodoxy.

Nature Arising? Writing on her website, Climate Etc., Judith Curry, a climate modeler who has fallen out of favor, reviews the new set of emissions scenarios for the UN IPCC AR6 and evaluates them using what is called TCRC – Transient Climate Response to Cumulative Carbon Emissions. Curry brings up that natural climate variability plays an important role in climate change (think ice ages and past warm periods). She discusses solar variations, volcanic eruptions, and decadal-scale ocean circulation variability. Curry concludes:

- *“We are starting to narrow the uncertainty in the amount of warming from emissions that we can expect out to 2050*
- *All three modes of natural variability – solar, volcanoes, internal variability – are expected to trend cool over the next 3 decades*
- *Depending on the relative magnitudes of emissions driven warming versus natural variability, decades with no warming or even cooling are more or less plausible.”*

After some discussion, she continues:

“Apart from the ‘wild card’ of volcanic eruptions, the big uncertainty is solar indirect effects. Based on the literature survey that I’ve conducted, solar UV effects on climate seem to be at least as large as TSI effects. [TSI- Total Solar Insolation (exposure to the sun’s rays)] A factor of 2-4 (X TSI) seems completely plausible to me, and serious arguments have been presented for even higher values. I also note here that almost all estimates of ECS/TCR [ECS – Equilibrium Climate Sensitivity] from observations do not include any allowances for uncertainties associated with solar indirect effects. Scafetta (2013) included solar indirect effects in an estimate of ECS and determined an ECS value of 1.35 °C.

“Neither the effects of AMO [Atlantic Multidecadal Oscillation] nor solar indirect effects have been included in attribution analyses of warming since 1950.

“So why does this analysis ‘matter’?”

- *For those that are urgently worried about the impacts of AGW and the need to act urgently to meet deadlines related to emissions, the natural climate variability may help slow down*

the warming over the next few decades, allowing for time to make prudent, cost effective decisions that make sense for the long term.

- *Failure to anticipate and understand periods of stagnant warming or even cooling detracts from the credibility of climate science and may diminish the ‘will to act.’”*

Note that TWTW does not emphasize surface temperature trends because they are subject to many more human influences than atmospheric temperature trends. Even though there is a modest warming of the atmosphere, there is no physical evidence that atmospheric warming would cause a greater warming of the surface. If one accepts surface temperature data, the surface is warming at a far greater rate than the atmosphere. Thus, surface warming is largely due to influences other than CO₂ emissions. This critical separation has not been made by the IPCC. See links under Challenging the Orthodoxy.

Cause and Effect – Milankovitch Cycles and CO₂: Writing in the newsletter Energy Advocate, Professor Emeritus of Physics Howard Hayden brings up a dilemma for the advocates of Al Gore’s view of physics and climate. [No link available.] In his movie, Gore dramatically shows his interpretation of Antarctic ice cores and how CO₂ changes temperatures.

The Fifth Assessment Report of the IPCC (AR5, 2013) recognizes the Milankovitch cycles saying

“Recent modeling work provides strong support for the important role of variations in the Earth’s orbital parameters in generating long-term climate variability.”

The question is by what mechanism would Milankovitch cycles cause changes in CO₂ in the earth’s atmosphere? The Milankovitch theory states: A warming of the oceans by changes in solar energy causes an outgassing of dissolved gasses, especially CO₂ which is the atmospheric gas most readily absorbed by water, with cold water absorbing more than warm water. The IPCC has no such mechanism.

The dilemma is illustrated by an article in Phys.org reporting on a paper published by PNAS. The paper was titled “Orbital pacing and secular evolution of the Early Jurassic carbon cycle.” However, the Phys.org article stated:

“The world is waking up to the fact that human-driven carbon emissions are responsible for warming our climate, driving unprecedented changes to ecosystems, and placing us on course for the sixth mass extinction event in Earth’s history.”

The abstract to the paper states:

Global perturbations to the Early Jurassic environment (~201 to ~174 Ma), notably during the Triassic–Jurassic transition and Toarcian Oceanic Anoxic Event, are well studied and largely associated with volcanogenic greenhouse gas emissions released by large igneous provinces.

Large igneous provinces are large masses of igneous rocks formed by large releases of lava and magma (lava is magma that reaches the surface of the earth). Massive volcanic activity will release carbon dioxide. But also, it will release sulfur dioxide, hydrogen sulfide, hydrochloric acid, and carbon monoxide, which are much more worrisome than warming caused by human emissions of CO₂. Further, it would emit massive amounts of particles into the atmosphere, which will cool the earth. It is thought these events occurred when the supercontinent, Gondwana, pulled

apart, eventually leading to the current continents. For some reason, the Phys.org article omitted these details and went on to state:

“The study of past global change events, such as the end-Triassic mass extinction and the Toarcian Oceanic Anoxic Event, as well as the time in between, allows scientists to disentangle the different processes that control global carbon cycle change and constrain tipping points in Earth’s climate system.”

Apparently, Phys.org considers the forces that broke up the supercontinent are insignificant to claimed tipping points in today’s climate system. To grasp how an interesting paper is distorted into an alarming one see links under Changing Earth.

What Climate Crisis? The UN claims of a climate crisis continue to be repeated, diverting resources from more needed issues. An article in the New England Journal of Medicine claiming Australian bushfires were proof of a climate crisis prompted Haapala to post in the journal the following comment:

“Carbon dioxide (CO2) and the greenhouse effect are critical for life on this planet. Green plants require CO2. Without green plants, it is doubtful complex life would exist. Water vapor is the primary greenhouse gas, CO2 is secondary. Without the greenhouse effect much of the earth would freeze at night, making it barren of complex life.

“The claim that life-giving CO2 is a threat causing a climate crisis is extraordinary, requiring extraordinary physical evidence. There is a dearth of physical evidence that CO2 is causing dangerous global warming. The greenhouse effect occurs in the atmosphere. The entire 40-year record of comprehensive atmospheric measurements shows temperatures have warmed slightly. This is the most comprehensive global temperature record existing. What physical evidence shows that greenhouse gases are causing dangerous warming? The problems of bushfires in Australia have been known since Black Thursday in 1851. Bushfires are not physical evidence of a CO2-caused climate crisis.”

See link under Health, Energy, and Climate.

Blacklist: Roger Pielke, whom a Congressman demanded be investigated because he does not support the claim of dangerous global warming, brought up that the website Skeptical Science has a list of those who give what Skeptical Science calls climate misinformation. Some readers of TWTW may find the list useful in identifying those who have been particularly successful in thwarting the evidence-free science used by Skeptical Science and other alarmist groups. The list includes SEPP Chairman emeritus Fred Singer.

The apparent creator is Dana Nuccitelli who gained fame as a co-author of John Cook’s paper on the so-called 97% consensus. Contrary to standard polling techniques, they classified respondents after the poll was taken, based on personal opinion, not based on answers to objective questions. According to the pollsters, astrophysicist Nir Shaviv is one of those classified in the 97%, which Shaviv denounced. See links under Suppressing Scientific Inquiry.

Fear of Famine: Nature Sustainability published a paper claiming most of the increase in food production in China and India since 2000 is “mostly owing to an increase in harvested area through multiple cropping facilitated by fertilizer use and surface- and/or groundwater irrigation.”

Given its position that CO2 is a pollutant, it is not surprising that Nature Sustainability will not mention the benefits of CO2 fertilization.

What is most interesting is that the article states that food production in China and India is up 35 percent since 2000. This increase is a direct contradiction to claims of CO2 increasing poverty and starvation, including such threats discussed by the Pentagon and in the latest US National Climate Assessment. See links under Social Benefits of Carbon Dioxide.

Unreliable and Unpredictable Too: While they do not emit CO2 while operating, readers realize that TWTW considers electrical generation from wind and solar to be inferior to thermal generation, because they are unreliable and undependable. Grid operators must make significant efforts to ensure that the grid is operating within tight tolerances in real power balancing, reliability, disturbance control, frequency, cyber security, etc. The task is made much more difficult by the politically popular introduction of unreliable and undependable sources of generation.

Writing on his website, Not a Lot of People Know That, Paul Homewood demonstrates that wind power is unpredictable. The UK experienced a the sudden spike in wind power output when Storm Ciara arrived, followed by a sharp fall in output, possibly from turbines shutting down, then a sharp increase. No doubt, the roller-coaster was not fun for the grid operator, National Grid.

Homewood followed the posts about the storm and the flooding that occurred after the storm with a post on the unpredictability of wind power. The daily forecasts by National Grid were about one-third over actual generation. Fortunately, the UK has sufficient generation from combined-cycle gas turbines (CCGT) to compensate for the shortfall. But when the CCGT are gone, as the politicians dream, the consequences will be outrageous. See Changing Weather Alternative, Green (“Clean”) Solar and Wind.

Number of the Week: January 1736. January 2020 was unusually warm in central England. According to the Met Office records, temperatures in January 2020 reached the level reached in January 1736. Started in 1659, these are the longest temperature records existing. The hottest January was 1916. At least this record has not been “homogenized” by NOAA or NASA-GISS. Is the warming from 1659 to 1916 an example of dangerous “global warming?” See link under Changing Weather.

NEWS YOU CAN USE:

Censorship

Patrick Moore: I was banned from speaking in Regina over this alternative CO2 point of view

By Patrick Moore, CO2 Coalition, Feb 13, 2020 [H/t John Dunn]

http://co2coalition.org/2020/02/13/patrick-moore-i-was-banned-from-speaking-in-regina-over-this-alternative-co2-point-of-view/?utm_source=Moore%3A+Banned+in+Regina&utm_campaign=Steele+Climate+Change+%26+CA+Wildfires&utm_medium=email

“There is no doubt in my mind that on balance our CO2 emissions are 100 per cent positive for the continuation of life on Earth.”

The Fight-Back Begins: Education Minister Gives British Universities Final Warning On Free Speech

By Rosemary Bennet, The Times, Via GWPF, Feb 7, 2020

<https://www.thegwpf.com/the-fight-back-begins-education-minister-gives-british-universities-final-warning-on-free-speech/>

Suppressing Scientific Inquiry

How Academic ‘Blacklists’ Impede Serious Work On Climate Science

By Roger Pielke, Forbes, Feb 9, 2020

<https://www.forbes.com/sites/rogerpielke/2020/02/09/a-climate-blacklist-that-works-it-should-make-her-unhirable-in-academia/#709671976368>

Link to Skeptical Science enemies list: Climate misinformation by source

Accessed Feb 12, 2020

<https://skepticalscience.com/misinformers.php>

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

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

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

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

Climate Change Reconsidered II: Biological Impacts

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

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

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

Climate Change Reconsidered II: Fossil Fuels

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

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

Download with no charge:

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

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

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

<http://climatechangereconsidered.org/>

Download with no charge:

<https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming>

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

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

Global Sea-Level Rise: An Evaluation of the Data

By Craig D. Idso, David Legates, and S. Fred Singer, Heartland Policy Brief, May 20, 2019
<https://www.heartland.org/template-assets/documents/publications/SeaLevelRiseCCRII.pdf>

Challenging the Orthodoxy

Plausible scenarios for climate change: 2020-2050

By Judith Curry, Climate Etc. Feb 13, 2020

<https://judithcurry.com/2020/02/13/plausible-scenarios-for-climate-change-2020-2050/#more-25721>

We must fight climate extremists before they upend society

By Ross McKittrick, WUWT, Feb 10, 2020

<https://wattsupwiththat.com/2020/02/10/we-must-fight-climate-extremists-before-they-upend-society/>

Climate Change is not a problem: Unless we make it one.

Guest Post by Martin Capages Jr. PhD PE, WUWT, Feb 11, 2020

<https://wattsupwiththat.com/2020/02/11/climate-change-is-not-a-problem-unless-we-make-it-one/>

[SEPP Comment: An overview of 18,000 years of climate change and modeling. Discussing that the United Nations Framework Convention on Climate Change (UNFCCC) erroneously assumes that stabilizing atmospheric greenhouse gases will stabilize temperatures.]

Luke-warming: The climate campaign's cottage industry

By Jay Lehr, CFACT, Feb 4, 2020 [H/t Robert Heath]

<https://www.cfact.org/2020/02/04/luke-warming-the-climate-campaigns-cottage-industry/>

Physics Professor: CO₂'s 0.5°C Impact After Rising To 700 ppm Is So Negligible It's 'Effectively Unmeasurable'

By Kenneth Richard, No Tricks Zone, Feb 13, 2020

<https://notrickszone.com/2020/02/13/physics-professor-co2s-0-5c-impact-after-rising-to-700-ppm-is-so-negligible-its-effectively-unmeasurable/>

Link to paper: Comprehensive Analytical Study of the Greenhouse Effect of the Atmosphere

By Peter Stallinga, Atmospheric and Climate Sciences, Jan 17, 2020

https://www.scirp.org/pdf/acs_2020011611163731.pdf

[SEPP Comment: Based on modeling: "It is shown that it [the model] cannot explain the observed correlation of carbon dioxide and surface temperature. This correlation, however, is readily explained by Henry's Law (outgassing of oceans), with other phenomena insignificant."]

Alternative Energy Can't Replace Hydrocarbons

By Larry Bell, Newsmax, Feb 10, 2020

<https://www.newsmax.com/larrybell/batteries-oil-clean-lithium/2020/02/10/id/953336/>

Defending the Orthodoxy

The Challenging Arithmetic of Climate Action

By Michael Spence, Project Syndicate, Feb 12, 2020

<https://www.project-syndicate.org/commentary/climate-action-carbon-price-distributive-implications-by-michael-spence-2020-02>

Questioning the Orthodoxy

An autopsy of the climate policy debate's corpse

By Larry Kummer, Fabius Maximus website, Feb 12, 2020 [H/t WUWT

<https://fabiusmaximus.com/2020/02/12/climate-policy-debate-is-dead/>

IPCC moves goalposts from 2 to 1.5C — just a part of the PR plan to get more headlines

By Jo Nova, Her Blog, Feb 12, 2020

<http://joannenova.com.au/2020/02/ipcc-moves-goalposts-from-2-to-1-5c-just-a-part-of-the-pr-plan-to-get-more-headlines/>

“It’s all about the framing, never the fact...”

On the Climate Road to Serfdom

By Robert Bradley, Jr. Institute for Energy Research, Jan 17, 2020

<https://www.instituteforenergyresearch.org/climate-change/on-the-climate-road-to-serfdom/>

“Alex Epstein has also emphasized in *The Moral Case for Fossil Fuels* (p. 126) how ‘the popular climate discussion has the issue backward.’

“It looks at man as a destructive force for climate livability, one who makes the climate dangerous because we use fossil fuels. In fact, the truth is the exact opposite; we don’t take a safe climate and make it dangerous; we take a dangerous climate and make it safe. High-energy civilization, not climate, is the driver of climate livability.”

Alarmists busted

By John Robson, Climate Change Nexus, Feb 12, 2020

<https://climatediscussionnexus.com/2020/02/12/alarmists-busted/>

But we were only off by a factor of 10

By John Robson, Climate Change Nexus, Feb 12, 2020

<https://climatediscussionnexus.com/2020/02/12/but-we-were-only-off-by-a-factor-of-10/>

After Paris!

Britain's COP26 climate talks 'can't fail': minister

By Patrick Galey, Paris (AFP) Feb 12, 2020

https://www.terraviva.com/reports/Britains_COP26_climate_talks_cant_fail_minister_999.html

Social Benefits of Carbon Dioxide

Human Activity in China and India Dominates the Greening of Earth, NASA Study Shows

By Abigail Tabor, NASA, Feb 11, 2019 [H/t WUWT]

<https://www.nasa.gov/feature/ames/human-activity-in-china-and-india-dominates-the-greening-of-earth-nasa-study-shows>

Link to paper: China and India lead in greening of the world through land-use management

By Chi Chen, et al., *Nature, Sustainability*, Feb 11, 2019

<https://www.nature.com/articles/s41893-019-0220-7>

Problems in the Orthodoxy

Climate Science does about-face, dials back 'worst-case scenario'

By Anthony Watts, *American Thinker*, Feb 11, 2020

https://www.americanthinker.com/blog/2020/02/climate_science_does_aboutface_dials_back_worstcase_scenario.html

Link to article: Emissions – the ‘business as usual’ story is misleading

Stop using the worst-case scenario for climate warming as the most likely outcome — more-realistic baselines make for better policy.

By Zeke Hausfather and Glen Peters, Nature, Jan 29, 2020

<https://www.nature.com/articles/d41586-020-00177-3>

Seeking a Common Ground

Cass on Adaptation (the realistic climate policy)

By Robert Bradley Jr. Master Resource, Feb 13, 2020

<https://www.masterresource.org/climate-adaptation/cass-adaptation-realism/>

[SEPP Comment: If the threat is well defined by physical evidence.]

Science, Policy, and Evidence

Scientocracy: The Tangled Web of Public Science and Public Policy

Lunch Briefing by Trevor Burrus & Terence Kealey, CATO, and Patrick Michaels & Michelle Minton, Competitive Enterprise Institute, Feb 24, Russell Senate Office Bldg. Room 188

<http://go.cei.org/scientocracy-lunch>

What if Hydraulic Fracking was Banned?

By Staff, ICECAP, Feb 13, 2020

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

Link to full report: What if Hydraulic Fracking was Banned?

By Staff, Global Energy Institute, US Chamber of Commerce, 2020

https://www.globalenergyinstitute.org/sites/default/files/2019-12/hf_ban_report_final.pdf?fbclid=IwAR17N8JaXIezO1FIU6XbU4F xv59uepKeWaTwggZp0sFyCXWD_DUjnOCc4Z4

Bad news for climate alarmists: global carbon dioxide emissions flatlined in 2019

By Anthony Watts, WUWT, Feb 13, 2020

<https://wattsupwiththat.com/2020/02/13/bad-news-for-climate-alarmists-global-carbon-dioxide-emissions-flatlined-in-2019/>

Link to data release: Global CO2 emissions in 2019

Data Release: Global energy-related CO2 emissions flattened in 2019 at around 33 gigatonnes (Gt), following two years of increases

By Staff, IEA, Feb 11, 2020

<https://www.iea.org/articles/global-co2-emissions-in-2019>

Review of Recent Scientific Articles by CO2 Science

Observed Rates of Arctic Warming Fail to Validate Model-based Projections

Huang, J., Ou, T., Chen, D., Lun, Y. and Zhao, Z. 2019. The amplified Arctic warming in the recent decades may have been overestimated by CMIP5 models. *Geophysical Research Letters* 46: 13,338-12,345. Feb 14, 2020

<http://www.co2science.org/articles/V23/feb/a6.php>

[SEPP Comment: According to the post, the models are showing three times the actually occurring rate of the warming of the Arctic since 1880.]

Elevated CO2 Improves the Growth, Yield and Water Use Efficiency of Two Grape Cultivars

Wohlfahrt, Y., Smith, J.P., Tittmann, S., Honermeier, B. and Stoll, M. 2018. Primary productivity and physiological responses of *Vitis Vinifera* L. cvs. Under Free Air Carbon dioxide Enrichment (FACE). *European Journal of Agronomy* 101: 149-162. Feb 12, 2020

<http://www.co2science.org/articles/V23/feb/a5.php>

“The plants were grown in the field at the VineyardFACE experimental site at Hochschule Geisenheim University in the Rheingau wine region of Germany. CO₂ fumigation in the elevated CO₂ treatments was applied during daylight hours only for all days of the year. According to the authors, Riesling was selected ‘as a representative of a white cool climate cultivar having a long tradition of cultivation in Germany,’ whereas the second cultivar, Cabernet Sauvignon, was selected ‘as a warmer climate cultivar and one of the most renowned and widely grown red grape varieties in the world.’”

Rising CO₂ and Increased N Fertilization Improve Maize Defense of the Asian Corn Borer

Xu, H., Xie, H., Wu, S., Wang, Z. and He, K. 2019. Effects of elevated CO₂ and increased N fertilization on plant secondary metabolites and chewing insect fitness. *Frontiers in Plant Science* 10: 739, doi: 10.3389/fpls.2019.00739. Feb 10, 2020

<http://www.co2science.org/articles/V23/feb/a4.php>

Elevated CO₂ Improves Phytoremediation of Cadmium Contaminated Soils

Wu, K., Li, J., Luo, J., Liu, Y., Song, Y., Liu, N., Rafiq, M.T. and Li, T. 2018. Effects of elevated CO₂ and endophytic bacterium on photosynthetic characteristics and cadmium accumulation in *Sedum alfredii*. *Science of the Total Environment* 643: 357-366. Feb 10, 2020

<http://www.co2science.org/articles/V23/feb/a3.php>

Model Issues

Inconsistency between historical and future CMIP5 simulations

By Kenneth Fritsch, Climate Etc. Feb 11, 2020

<https://judithcurry.com/2020/02/11/inconsistency-between-historical-and-future-cmip5-simulations/#more-25714>

Small changes in altitude could reduce airplane contrails

By Brooks Hays, Washington DC (UPI), Feb 12, 2020

https://www.spacedaily.com/reports/Small_changes_in_altitude_could_reduce_airplane_contrails_999.html

“Previous studies have shown that contrails are responsible for just as much warming as the CO₂ emitted by airplanes.

“To better understand the dynamics of airplane contrail emissions and their effects on Earth's climate, Stettler and his colleagues used a combination of climate models.”

Measurement Issues -- Surface

The Rise and Fall of Central England Temperatures; Part 3 2000-2019

Guest post by Tony Brown, WUWT, Feb 15, 2020

<https://wattsupwiththat.com/2020/02/15/the-rise-and-fall-of-central-england-temperatures-part-3-2000-2019/>

ABC suddenly notices the ‘heat island’ effect in cities

By Jo Nova, Her Blog, Feb 13, 2020

<http://joannenova.com.au/2020/02/abc-suddenly-notices-the-heat-island-effect-in-cities/>

ABC (Australian Broadcasting Corporation)

NOAA says January was the hottest in recorded history

By Zack Budryk, The Hill, Feb 13, 2020

<https://thehill.com/policy/energy-environment/482947-noaa-says-january-was-the-hottest-in-recorded-history>

Link to NOAA: January 2020 was Earth's hottest January on record

“The long-term trend of above-average temperatures continues

“In the span of 141 years of climate records, there has never been a warmer January than last month, according to scientists at NOAA's National Centers for Environmental Information.”

By Staff, NCEI, NOAA, Feb 13, 2020

<https://www.noaa.gov/news/january-2020-was-earth-s-hottest-january-on-record>

“January's global land and ocean surface temperatures were 2.05 degrees Fahrenheit **higher the 20th century average**, officials said, adding that temperatures last month broke a record set in January 2016 by 0.04 degrees.” [Boldface added.]

[SEPP Comment: False precision: a characteristic of modern government-funded climate science?]

Changing Weather

Climate Crisis Update—England As Warm As 1736 Last Month!

By Paul Homewood, Not a Lot of People Know That, Feb 13, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/13/climate-crisis-update-england-as-warm-as-1736-last-month/>

A Weak El Nino Transitioning to La Nada

By Cliff Mass, Weather Blog, Feb 14, 2020

<https://cliffmass.blogspot.com/2020/02/a-weak-el-nino-transitioning-to-la-nada.html>

400mm [16 inches] of water dropped from God's Water Bomber and puts out Australian fires

By Jo Nova, Her Blog, Feb 11, 2020

<http://joannenova.com.au/2020/02/400mm-of-water-dropped-from-gods-water-bomber-and-puts-out-australian-fires/>

“Looks like the dams will still fill. Sydney's main dam — the Waragamba was only 42% full a few days ago, now it's 70% full, and most of the fires are out, or will be soon. 16 river systems have flooded, and 13,000 people are being evacuated. Where is that hotter-drier future when you need it?

“Imagine if we could actually predict rainfall?”

Ciara Floods Blamed On Climate Change—Facts Say Otherwise

By Paul Homewood, Not a Lot of People Know That, Feb 11, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/11/ciara-floods-blamed-on-climate-change-facts-say-otherwise/>

But blaming floods on climate change saves the Environment Agency the bother of actually doing anything about it.

Wind Power Drops By A Third As Storm Ciara Arrives

By Paul Homewood, Not a Lot of People Know That, Feb 10, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/10/wind-power-drops-by-a-third-as-storm-ciara-arrives/>

“Just imagine the problems the grid will face when wind capacity is quadrupled and CCGT shut down!”

The Calder Valley Flood Of 1946

By Paul Homewood, Not a Lot of People Know That, Feb 12, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/12/the-calder-valley-flood-of-1946/>

[SEPP Comment: See link immediately above.]

Extremely Favorable Water Supply Outlook for this Summer

By Cliff Mass, Weather Blog, Feb 12, 2020

<https://cliffmass.blogspot.com/2020/02/extremely-favorable-water-supply.html>

Changing Climate

Climate change to create farmland in the north, but at environmental costs, study reveals

By Staff Writers, Guelph, Canada (SPX), Feb 14, 2020

https://www.seeddaily.com/reports/Climate_change_to_create_farmland_in_the_north_but_at_environmental_costs_study_reveals_999.html

Link to paper: The environmental consequences of climate-driven agricultural frontiers

By Lee Hannah, Plos One, Feb 12, 2020

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0228305>

Changing Climate – Cultures & Civilizations

The Lake People’s Story

By Michael Curley, Real Clear Energy, Feb 7, 2020

https://www.realclearenergy.org/articles/2020/02/07/the_lake_peoples_story_483651.html

Changing Seas

Are Ocean Currents Speeding Up ... Or Are They Slowing Down? Nobody Knows

By David Whitehouse, GWPF, Feb 10, 2020

<https://www.thegwpf.com/are-ocean-currents-speeding-up-or-are-they-slowing-down/>

Study Finds Strong Acceleration in Ocean Circulation

By Marlo Lewis, Jr., CEI, Feb 14, 2020

<https://cei.org/blog/study-finds-strong-acceleration-ocean-circulation>

NYUAD researchers find new method to allow corals to rapidly respond to climate change

Reef-building corals transmit epigenetic adaptations to their offspring that can combat the effects of global warming

Press Release, New York University, Feb 11, 2020 [H/t WUWT]

https://www.eurekalert.org/pub_releases/2020-02/nyu-nrf021020.php

Link to paper: Intergenerational epigenetic inheritance in reef-building corals

By Yi Jin Liew, et al., Nature, Climate Change, Feb 10, 2020

<https://www.nature.com/articles/s41558-019-0687-2>

[SEPP Comment: Corals have never done this before?]

The Voice Of The Lobster

Guest Post by Willis Eschenbach, WUWT, Feb 14, 2020

<https://wattsupwiththat.com/2020/02/14/the-voice-of-the-lobster/>

[SEPP Comment: Yet the Maine lobster survives.]

Changing Cryosphere – Land / Sea Ice

Media's Horribly Dishonest Antarctica Propaganda

By Jim Steele, WUWT, Feb 9, 2020

<https://wattsupwiththat.com/2020/02/09/medias-horribly-dishonest-antarctica-propaganda/>

Climate Alarmists Fleeing To Antarctica

By Tony Heller, Real Climate Scientist, Feb 10, 2020

<https://realclimatescience.com/2020/02/climate-alarmists-fleeing-to-antarctica/>

[SEPP Comment: *It's getting cold in the Arctic, so let's go to Antarctica!*]

Arctic Sea Ice Sees “Dramatic Recovery And Expansion”... Northern Europe January Cooling 30 Years!

By Kirye and Pierre Gosselin, No Tricks Zone, Feb 12, 2020

<https://notrickszone.com/2020/02/12/arctic-sea-ice-sees-dramatic-recovery-and-expansion-northern-europe-january-cooling-30-years/>

Arctic sea ice has shown resiliency in recent years

By Paul Dorian, PerspectaWeather, Feb 12, 2020

<https://www.perspectaweather.com/blog/2020/2/13/715-am-arctic-sea-ice-has-shown-resiliency-in-recent-years>

[SEPP Comment: *With the shift in AMO, will freezing polar bears become the new fear?]*

Polar bear habitat at mid-winter as extensive as 2013 & better than 2006

By Susan Crockford, Polar Bear Science, Feb 14, 2020

<https://polarbearscience.com/2020/02/14/polar-bear-habitat-at-mid-winter-as-extensive-as-2013-better-than-2006/>

Kilimanjaro To Be Ice-Free By 2020

By Tony Heller, Real Climate Science, Feb 13, 2020

<https://realclimatescience.com/2020/02/kilimanjaro-to-be-ice-free-by-2020/>

“At this rate, all of the ice will be gone between 2010 and 2020,” said Lonnie Thompson, geologist at Ohio State University. ‘And that is probably a conservative estimate.’” [Feb 20, 2001]

Changing Earth

Earth's solar system position plays a major role in climate change

By Jak Connor, CO2 Coalition, Feb 11, 2020

<http://co2coalition.org/2020/02/11/earths-solar-system-position-plays-a-major-role-in-climate-change/>

Link to paper: Scientists show solar system processes control the carbon cycle throughout Earth's history

Press Release, Trinity College, Dublin, Via Phys.org, Feb 10, 2020

<https://phys.org/news/2020-02-scientists-solar-carbon-earth-history.html>

Link to paper: Orbital pacing and secular evolution of the Early Jurassic carbon cycle

By Marisa S. Storm, et al., PNAS, Feb 10, 2020

<https://www.pnas.org/content/early/2020/02/04/1912094117>

Agriculture Issues & Fear of Famine

1988 – Global Warming To Sharply Reduce Rice Yields

By Tony Heller, Real Climate Science, Feb 12, 2020

<https://realclimatescience.com/2020/02/1988-global-warming-to-sharply-reduce-rice-yields/>
[SEPP Comment: the news clip also stated: “James Hansen, director of NASA’s Goddard Institute of Space Studies, said a ‘remarkable’ cooling trend caused by unusual Pacific Ocean currents in the second half of this year [1988] forced him to re-assess his highly publicized assertion at the Senate hearing this summer that 1988 would be a record -setter.”

Carbon Sins Bring Locust Plague

By Tony Heller, Real Climate Science, Feb 13, 2020

<https://realclimatescience.com/2020/02/carbon-sins-bring-locust-plague/>

Un-Science or Non-Science?

Less Is More in Climate Change, Not Just Fashion

By Tim Worstall, Adam Smith Institute, Feb 13, 2020 [H/t GWPF]

<https://www.adamsmith.org/blog/less-is-more-in-climate-change-not-just-fashion>

Link to report: Global Futures Report: A landmark study into the global economic impacts of nature loss.

By Staff, World Wildlife Fund, Accessed Feb 14, 2020

<https://www.wwf.org.uk/globalfutures>

“Global Futures is a landmark study using cutting-edge modelling to explore the global economic impacts of natural capital depletion.”

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

BP’s Net Zero Accounting Trick

By Paul Homewood, Not a Lot of People Know That, Feb 14, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/14/bps-net-zero-accounting-trick/>

“The final catch all is new technology. If CCS can be made to work, maybe BP will one day be able to produce all of the oil and gas it wants, safe in the knowledge that it can be burnt emission free.

“But I suspect that is still a long way in the future. Until then the world still needs their product, with or without green accounting tricks.”

Communicating Better to the Public – Make things up.

Unprecedented panic: For the first time ever, half of life on Earth will be wiped out by tiny 0.5C rise

By Jo Nova, Her Blog, Feb 14, 2020

<http://joannenova.com.au/2020/02/unprecedented-panic-for-the-first-time-ever-half-of-life-on-earth-will-be-wiped-out-by-tiny-0-5c-rise/>

Link to article: Recent responses to climate change reveal the drivers of species extinction and survival

By Cristian Román-Palacios and John J. Wiens, PNAS, Feb 10, 2020

<https://www.pnas.org/content/early/2020/02/04/1913007117>

Storm Of The Century? Don’t Be Silly, Met Office

By Paul Homewood, Not a Lot of People Know That, Feb 10, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/10/storm-of-the-century-dont-be-silly-met-office/>

“This episode highlights how the Met Office has lost all sense of objectivity, and instead are intent on hyping every bit of bad weather to play to their climate agenda.”

Doomsday Clock moves to 100 seconds to midnight -- closest point to nuclear annihilation since Cold War

The Doomsday Clock moved to 100 seconds to midnight – the closest symbolic point from an “apocalypse” since 1953.

By Chris Ciaccia, Fox News, Jan 23, 2020

<https://www.foxnews.com/science/doomsday-clock-2020-update>

[SEPP Comment: Not having an agreement to stop CO2 emissions is as dangerous to humanity as nuclear annihilation?]

Rhetoric melts ice sheets

By John Robson, Climate Change Nexus, Feb 12, 2020

<https://climatediscussionnexus.com/2020/02/12/rhetoric-melts-ice-sheets/>

Guardian’s Maps Of Climate Catastrophe

By Paul Homewood, Not a Lot of People Know That, Feb 12, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/12/guardians-maps-of-climate-catastrophe/>

“At this rate, the Guardian’s 1 meter sea level rise will arrive by AD 2546!”

Communicating Better to the Public – Do a Poll?

Poll Results: Climate Is Always Low Priority

There is no evidence that climate change has ever been a top concern for most Americans.

By Donna Laframboise, Big Picture News, Feb 10, 2020

<https://nofrackingconsensus.com/2020/02/10/poll-results-climate-is-always-low-priority/>

Strong Economy Lifts Climate Boat – New Infographic

When the economy falters, so does public support for climate action.

By Donna Laframboise, Big Picture News, Feb 12, 2020

<https://nofrackingconsensus.com/2020/02/12/strong-economy-lifts-climate-boat-new-infographic/>

Communicating Better to the Public – Go Personal.

‘Ahuman Manifesto’: The Final Solution to Climate Change

By Robert Bradley Jr. Master Resource, Feb 10, 2020

<https://www.masterresource.org/deep-ecology/the-final-climate-solution/>

“This book is a delightful provocation and invitation: to imagine a world without humans and to think of what we can do to get there. It is an urgent call for action.”

“— Christine Daigle, Professor of Philosophy, Brock University, Canada”

Communicating Better to the Public – Use Children for Propaganda

Open Letter To Greta

By Paul Homewood, Not a Lot of People Know That, Feb 11, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/11/open-letter-to-greta/>

“But we, the creative enterprisers, will not go back to the Dark Ages.”

Expanding the Orthodoxy

Deceptive rhetoric at Davos could bring disaster

There is nothing ‘cohesive’ or ‘sustainable’ about ‘solutions’ demanded by WEF ‘stakeholders’

By Paul Driessen, WUWT, Feb 10, 2020

<https://wattsupwiththat.com/2020/02/10/deceptive-rhetoric-at-davos-could-bring-disaster/>

[SEPP Comment: More on those who claim that a climate disaster taking tens of thousands of years has a greater impact on humanity than a 50-megaton nuclear bomb taking seconds. They have abandoned time, the fourth dimension.]

EU Parliament urges ECB to put climate at heart of strategy review

By Chloé Farand, Climate Home News, Feb 12, 2020 [H/t Cooler Heads]

<https://www.climatechangenews.com/2020/02/12/eu-parliament-urges-ecb-to-put-climate-at-heart-of-strategy-review/>

“European lawmakers have called on the European Central Bank (ECB) to put climate change at the centre of the bank’s review of its monetary policy strategy this year, endorsing the bank’s chief vision for “gradually eliminating” carbon assets.”

There’s nothing democratic about this climate assembly

This is a cynical attempt to lend a democratic gloss to eco-austerity.

By Ben Pile, Spiked, UK, Feb 11, 2020 [H/t Paul Homewood]

<https://www.spiked-online.com/2020/02/11/theres-nothing-democratic-about-this-climate-assembly/>

[SEPP Comment: Environmentalism has nothing to do with democracy, except when convenient.]

Questioning European Green

Dominic Lawson: Talking Green Is easy; It’s Being Green That’s Hard

By Dominic Lawson, The Times, Via GWPF, Feb 9, 2020

<https://www.thegwpf.com/dominic-lawson-talking-green-is-easy-its-being-green-thats-hard/>

“Last June a group of scientists led by Professor Richard Herrington, the Natural History Museum’s head of earth science, warned the government that to replace all cars on British roads with EVs, UK demand for the batteries needed would require almost twice the world’s current yearly supply of cobalt, the total amount of neodymium produced globally every year, three-quarters of the world’s annual supply of lithium and at least half its copper supply.”

The Fightback Begins

By Paul Homewood, Not a Lot of People Know That, Feb 10, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/10/the-fightback-begins/>

“The public have been encouraged to believe that building a few windmills and planting a few trees would be enough to cure the climate. Now that reality day is looming ever closer, it is no longer possible for the eco lobby to hide the truth any longer.”

Germany’s Green New Deal Begins To Deliver: Industry Sees “Horrible Numbers”, A “Disaster”!

By P Gosselin, No Tricks Zone, Feb 11, 2020

<https://notrickszone.com/2020/02/11/germanys-green-new-deal-begins-to-deliver-industry-sees-horrible-numbers-a-disaster/>

Michael Gove: “The country that pioneered the Industrial Revolution ... [has] a responsibility to lead a Green ... Revolution.”

By Eric Worrall, WUWT, Feb 13, 2020

<https://wattsupwiththat.com/2020/02/13/michael-gove-the-country-that-pioneered-the-industrial-revolution-has-a-responsibility-to-lead-a-green-revolution/>

[SEPP Comment: The US, the country that pioneered the use of rock oil (petroleum), has the responsibility to stop drilling? Can it replace kerosene with whale oil?]

Questioning Green Elsewhere

Gambling With Freedom

By Donn Dears, Power For USA, Feb 11, 2020

<https://ddears.com/2020/02/11/gambling-with-freedom/>

Why The Green New Deal Would Destroy The Environment

The Green New Deal is anything but 'clean' or 'green.' Even the relatively modest numbers of solar and wind installations in the United States today are causing serious environmental damage.

By Paul Driessen, The Federalist, Feb 12, 2020

<https://thefederalist.com/2020/02/12/why-the-green-new-deal-would-destroy-the-environment/>

Money & Power: New FOIA'd Documents Offer Ugly Candor About 'Green Energy'

By Chris Horner, Real Clear Energy, Feb 10, 2020

https://www.realclearenergy.org/articles/2020/02/10/money_and_power_new_foia_documents_offer_ugly_candor_about_green_energy_483867.html

Funding Issues

EU chief pleads to save green deal in budget holed by Brexit

By Marc Burleigh, Strasbourg, France (AFP) Feb 12, 2020

[https://www.energy-](https://www.energy-daily.com/reports/EU_chief_pleads_to_save_green_deal_in_budget_holed_by_Brexit_999.html)

[daily.com/reports/EU_chief_pleads_to_save_green_deal_in_budget_holed_by_Brexit_999.html](https://www.energy-daily.com/reports/EU_chief_pleads_to_save_green_deal_in_budget_holed_by_Brexit_999.html)

"If we do not set aside the funds... we will simply fail to achieve a climate neutral Europe' by 2050 as planned, she told the European Parliament."

Litigation Issues

How the Left Occupies Attorneys General Offices: A Case Study in Capture

By Chris Horner, Real Clear Energy, Feb 11, 2020

[https://www.realclearenergy.org/articles/2020/02/11/how_the_left_occupies_attorneys_general_of](https://www.realclearenergy.org/articles/2020/02/11/how_the_left_occupies_attorneys_general_offices_a_case_study_in_capture_483932.html)
[fices_a_case_study_in_capture_483932.html](https://www.realclearenergy.org/articles/2020/02/11/how_the_left_occupies_attorneys_general_offices_a_case_study_in_capture_483932.html)

Cap-and-Trade and Carbon Taxes

AEP's Latest Fossil Fuel Rant

By Paul Homewood, Not a Lot of People Know That, Feb 13, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/13/aeps-latest-fossil-fuel-rant/>

"What I find strangest in AEP's rants is his confusion. At one level he is claiming that renewables will become so wonderfully cheap that the bottom will fall out of the oil market. But then he will go on to talk about the need for draconian carbon taxes, politically enforced divestments and St Greta.

"Well, which is it?"

[SEPP Comment: AEP is journalist Ambrose Evans-Pritchard of The Telegraph, UK]

EU Threatens Carbon Tariffs In Climate Trade War Warning Shot To Brexit Britain

By Staff, Sunday Telegraph, Via GWPF, Feb 9, 2020

<https://www.thegwpf.com/eu-threatens-carbon-tariffs-in-climate-trade-war-warning-shot-to-brexit-britain/>

Subsidies and Mandates Forever

Wind Giants in Germany Are Not So Keen on Market Rates After All

Seeing risks in Angela Merkel's climate policy, utilities are seeking contracts-for-difference in 2022 auction.

By Brian Parkin and William Wilkes, Bloomberg Green, Feb 10, 2020

<https://www.bloomberg.com/news/articles/2020-02-10/wind-giants-in-germany-are-not-so-keen-on-market-rates-after-all>

Europe storm leads to negative electricity prices

By Die kalte Sonne, (Translated/edited by P. Gosselin), No Tricks Zone, Feb 14, 2020

<https://notrickszone.com/2020/02/14/green-energies-professors-solution-to-volatile-wind-energy-install-even-more-wind-turbines/>

“Every wind turbine and every photovoltaic system needs a backup. And anyone who has ever wondered why the wind countries of Denmark and Germany have such high electricity prices knows the reason. We are paying for a double power infrastructure. The prices will not decrease with an increasing share of renewable energies, but rather will continue to rise.”

[SEPP Comment: During high winds, when the turbines are working, they cannot give the electricity away. But during low winds or heavy storms, they must have backup. The consumer pays for both good times and bad times.]

Green Subsidies Will Continue To Push Up Power Prices For Years To Come

By Paul Homewood, Not a Lot of People Know That, Feb 11, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/11/green-subsidies-will-continue-to-push-up-power-prices-for-years-to-come/>

After Three Record Breaking Years, Is The U.S. Wind Energy Boom Over?

By Irina Slav, Oil Price.com, Feb 6, 2020

<https://oilprice.com/Energy/Energy-General/After-Three-Record-Breaking-Years-Is-The-US-Wind-Energy-Boom-Over.html#>

Energy Issues – Non-US

Political Suicide Note: UK Government Considers Banning Gas Heating & Cooking

By Staff, The Sunday Telegraph, Via GWPF, Feb 8, 2020

<https://www.thegwpf.com/political-suicide-note-uk-government-plans-banning-gas-heating-cooking/>

The U.S. Still Imports A Lot Of Oil

By Jude Clemente, Forbes, Feb 12, 2020

<https://www.forbes.com/sites/judeclemente/2020/02/12/the-us-still-imports-a-lot-of-oil/#483f1e91e2ac>

[SEPP Comment: The headline avoids the real issue brought up in the article – imports from political unstable regions.]

Energy Issues – Australia

Australian grid has major near miss: SA Islanded for two weeks

By Jo Nova, Her Blog, Feb 12, 2020

<http://joannenova.com.au/2020/02/australian-grid-has-major-near-miss-sa-islanded-for-two-weeks/>

Energy Issues -- US

How the Media Misleads Americans

By Donn Dears, Power For USA, Feb 14, 2020

<https://ddears.com/2020/02/14/how-the-media-misleads-americans/>

[SEPP Comment: The electrical grid is similar to the internet?]

US Energy Dominance: The Case for Unbridled Optimism

Energy Dominance Will Keep America Great

By Jason Isaac Real Clear Energy, Feb 12, 2020

https://www.realclearenergy.org/articles/2020/02/12/us_energy_dominance_the_case_for_unbridled_optimism_484001.html

U.S. energy-related carbon dioxide emissions lowered in 2019: report

By Rachel Franzin, The Hill, Feb 11, 2020

<https://thehill.com/policy/energy-environment/482601-us-energy-related-carbon-dioxide-emissions-lowered-in-2019-report>

Link to report: Global CO2 emissions in 2019

Data Release: Global energy-related CO2 emissions flattened in 2019 at around 33 gigatonnes (Gt), following two years of increases

By Staff, EIA, Feb 11, 2020

<https://www.iea.org/articles/global-co2-emissions-in-2019>

Dominion Latest to Set Net-Zero Carbon Goal

By Aaron Larson, Power Mag, Feb 12, 2020

<https://www.powermag.com/dominion-latest-to-set-net-zero-carbon-goal/>

[SEPP Comment: No comment what it would do to the consumer's electricity bill. The perverse characteristic of a regulated utility: as long as the legislation approves it, Dominion can spend all it wants and still make a profit, no matter how costly to the consumer.]

Stop Playing Games With America's Energy Future

By Samuel Davis Jr., Real Clear Energy, Feb 11, 2020

https://www.realclearenergy.org/articles/2020/02/11/stop_playing_games_with_americas_energy_future_483924.html

Washington's Control of Energy

Oil production on public lands exceeds 1 billion barrels

By Rebecca Beitsch, The Hill, Feb 11, 2020

<https://thehill.com/policy/energy-environment/482590-oil-production-on-public-lands-exceeds-1-billion-barrels>

Link to data: Natural Resources Revenue Data

By Staff, Department of Interior, Accessed Feb 12, 2020

<https://revenuedata.doi.gov/?tab=tab-production>

Ocasio-Cortez Explains Why She's Sponsoring A Bill To Ban Fracking Across The US

By Chris White, Daily Caller, Feb 12, 2020

<https://dailycaller.com/2020/02/12/green-new-deal-ocasio-cortez-fracking/>

Oil and Natural Gas – the Future or the Past?

US Chamber of Commerce: What if we banned frac'ing?

By David Middleton, WUWT, Feb 11, 2020

<https://wattsupwiththat.com/2020/02/11/us-chamber-of-commerce-what-if-we-banned-fracing/>

Crude Summit: Tillerson sees long road for fossil fuels

By Chris Baltimore, Argus, Feb 4, 2020

<https://www.argusmedia.com/en/news/2063637-crude-summit-tillerson-sees-long-road-for-fossil-fuels>

Engineering Group: American Gas Turbines Will Remain Relevant But Need Advancement

By Sonal Patel, Power Mag, Feb 12, 2020

<https://www.powermag.com/engineering-group-american-gas-turbines-will-remain-relevant-but-need-advancement/>

Link to book: Advanced Technologies for Gas Turbines

By Staff, National Academies of Sciences, Engineering, and Medicine. 2020, Expected October 2020

<https://www.nap.edu/catalog/25630/advanced-technologies-for-gas-turbines>

Return of King Coal?

DOE Announces Additional \$64 Million for Clean Coal Projects

By Darrell Procter, Power Mag, Feb 7, 2020

<https://www.powermag.com/doe-announces-additional-64-million-for-clean-coal-projects/>

“The evolving U.S. energy mix requires cleaner, more reliable, and highly efficient plants,” said Assistant Secretary for Fossil Energy Steven Winberg. “Technologies developed for the Coal FIRST initiative will lead to just that—reliable, highly efficient plants with zero or near-zero emissions.”

Oil Spills, Gas Leaks & Consequences

Deepwater Horizon spill larger than previously believed: study

By Rachel Frazin, The Hill, Feb 13, 2020

<https://thehill.com/policy/energy-environment/482961-deepwater-horizon-spill-larger-than-previously-believed-study>

Link to paper: Invisible oil beyond the Deepwater Horizon satellite footprint

By Igal Berenshtein, Science Advances, Feb 12, 2020

<https://advances.sciencemag.org/content/6/7/eaaw8863>

“Here, we use in situ observations and oil spill transport modeling to examine the full extent of the DWH spill, focusing on toxic-to-biota (i.e., marine organisms) oil concentration ranges.”

[SEPP Comment: *What about the marine organisms that ate the oil?*]

Alternative, Green (“Clean”) Solar and Wind

Are Large-Scale Solar Projects Doomed To Fail?

By Haley Zaremba, Oil Price.com, Feb 9, 2020 H/t Bernie Kepshire]

<https://finance.yahoo.com/news/large-scale-solar-projects-doomed-180000940.html>

The Unpredictability Of Wind Power

By Paul Homewood, Not a Lot of People Know That, Feb 14, 2020

<https://notalotofpeopleknowthat.wordpress.com/2020/02/14/the-unpredictability-of-wind-power/>

Germans On Course To Permanently Ruining Remaining Forests – To Protect The Climate
Of good trees and bad trees: an unimaginable story

By Die kalte Sonne (Text translated by P Gosselin), No Tricks Zone, Feb 9, 2020
<https://notrickszone.com/2020/02/09/germans-on-course-to-permanently-ruining-its-remaining-forests-to-protect-the-climate/>

Alternative, Green (“Clean”) Vehicles

Is It Really The End Of Internal Combustion Engines & Petroleum In Transport?

Video response by Professor Gautam Kalghatgi, Feb 4, 2020

<https://www.thegwpf.com/is-it-really-the-end-of-internal-combustion-engines-petroleum-in-transport/>

Carbon Schemes

The GOP’s Carbon Capture Dodge

However you slice it, carbon capture and sequestration (CCS) is an expensive futility and greenwashing boondoggle masquerading a policy alternative for managing the climate hysteria via technology.

By Steve Milloy, American Greatness, Feb 12, 2020 [H/t Cooler Heads]

<https://amgreatness.com/2020/02/12/the-gops-carbon-capture-dodge/>

Health, Energy, and Climate

The Climate Crisis and Clinical Practice

By Renee Salas, MD, The New England Journal of Medicine, Feb 13, 2020

<https://www.nejm.org/doi/full/10.1056/NEJMp2000331?query=TOC>

“Collaboration is the driving force behind the Climate Crisis and Clinical Practice initiative that is being launched in Boston on February 13, 2020, with the first of what we, the organizers, hope will be numerous symposia held throughout the United States and elsewhere.”

Global cost of air pollution \$2.9 trillion a year: NGO report

By Marlowe Hood, Paris (AFP), Feb 12, 2020

https://www.terradaily.com/reports/Global_cost_of_air_pollution_29_trillion_a_year_NGO_report_999.html

“By far the most costly pollutant is microscopic fine particulate matter (PM 2.5), which accounts for more than two trillion dollars per year in damages, measured in health impacts, missed work days and years lost to premature death.

“Deaths, years of life lost and years lived with disability due to PM 2.5 exposure are drawn from the Global Burden of Disease, published in 2018 by PNAS.”

[SEPP Comment: Indoor burning of traditional fuels for heating and cooking are dangerous. But to expand these problems as general health problems is questionable. Unable to locate the NGO report or the study published by PNAS.]

Other News that May Be of Interest

Smartphone Weather Apps. Can You Trust Them?

By Cliff Mass, Weather Blog, Feb 8, 2020

<https://cliffmass.blogspot.com/2020/02/smartphone-weather-apps-can-you-trust.html>

The First Review of How Innovation Works and Other News

By Matt Ridley, His Blog, Feb 11, 2020

<http://www.rationaloptimist.com/blog/first-review-of-how-innovation-works/>

“Throughout the book, the author delivers fascinating histories of technology that we take for granted. Many hands contributed to the developments of the steam engine, automobile, and

computer. Ridley makes a convincing case that obsessive trial and error works better than inspiration and illustrates with insightful accounts of Edison, the Wright brothers, and Marconi. Some breakthroughs are inexplicable. People hauled luggage for a century, but the wheeled suitcase only appeared in the 1970s.”

BELOW THE BOTTOM LINE:

Is carbon dioxide making it harder to THINK straight? Rising CO2 levels may hinder cognitive function and could decrease decision-making efficiency by 50 PERCENT in 2100, study says

By James Pero, Daily Mail, Dec 19, 2019 [H/t GWPF]

<https://www.dailymail.co.uk/sciencetech/article-7811739/Higher-CO2-levels-hinder-ability-think-decrease-decision-making->

[efficiency.html?utm_source=CCNet+Newsletter&utm_campaign=f5d5ec77f0-EMAIL_CAMPAIGN_2020_02_13_05_48&utm_medium=email&utm_term=0_fe4b2f45ef-f5d5ec77f0-20157985&mc_cid=f5d5ec77f0&mc_eid=a4f47ad7e7](https://www.dailymail.co.uk/sciencetech/article-7811739/Higher-CO2-levels-hinder-ability-think-decrease-decision-making-)

Carbon emissions may have a drastic impact on cognitive function

Researchers say that CO2 may decrease classroom decision making

It could reduce decision making by as much as 50 percent in 2100, they say

“Research presented by scientists at the annual American Geophysical Union and submitted to the journal GeoHealth suggests that increased CO2 may soon diminish humans' capacity to think clearly.”

[SEPP Comment: In the AGU presentation, are publications by the UN offered as clear proof?]

We Have A Winner: Tallest Climate Tale of 2019

By Staff, GWPF, Feb 12, 2020

<https://www.thegwpf.com/we-have-a-winner-tallest-climate-tale-of-2019/>

3: Children Risk Early Marriage: Climate Change One of the Factors

By Nayema Nusrat, Inter Press Service, Dec 9, 2019

<https://reliefweb.int/report/world/children-risk-early-marriage-climate-change-one-factors>

#2: British chips are now one inch shorter due to climate change

By Olivia Rosane, Ecowatch, Via World Economic Forum, Feb 8, 2019

<https://www.weforum.org/agenda/2019/02/british-chips-now-one-inch-shorter-due-to-climate-change/>

#1: Is carbon dioxide making it harder to THINK straight? (See link immediately above)

‘50 Things to Slow Climate Change’ (voluntary today, mandatory tomorrow?)

By Robert Bradley Jr., Master Resource, Feb 11, 2020

<https://www.masterresource.org/climate-pessimism-mentality/50-actions-climate-change/>

ARTICLES

Better Pipes for Safer Oil Transport

Minnesota regulators approve a greener way to move fossil fuels.

Editorial, WSJ, Feb 10, 2020

https://www.wsj.com/articles/better-pipes-for-safer-oil-transport-11581380350?mod=opinion_lead_pos2

TWTW Summary: Unlike the Obama Administration that used many tricks to stop pipelines, the Trump Administration appears to be leaving such decisions to local officials to the extent possible. The editorial states:

Climate-change activists want to ban fossil fuels, and that means opposing all pipelines that move oil from producers to the market. Green activists succeeded in delaying Enbridge's Line 3 in the Upper Midwest for more than a year, but last week the oil pipeline cleared a key regulatory hurdle. That's good news for the environment.

*The proposed Line 3 would run nearly 350 miles through Minnesota, and in 2018 the state's Public Utilities Commission voted to let the \$2.6 billion project proceed. Opponents sued, claiming the initial **13,500-page environmental review wasn't adequate**. An appeals court rejected most of the claims but ruled that the review needed to further address the risks of a spill in the Lake Superior watershed. That revised review took another 16 months but last week won approval from the Public Utilities Commission. [Boldface added]*

The comment on the environmental review demonstrates that the National Environmental Policy Act (NEPA) has become a make paperwork exercise, wasting resources.

The Minnesota chapter of 350.org called the decision 'immoral' and said the commission 'has chosen to stand for climate chaos.' Winona LaDuke, the executive director of Honor the Earth, said the commission's vote was 'egregious' and that the pipeline reflects 'the craziness of Canada and the US at the end of the fossil fuel era.' Line 3 still needs to secure federal and state permits before it can break ground, and self-proclaimed 'water protectors' have vowed to continue their obstructionism.

But allowing Line 3 to proceed is the best way to protect the environment in Minnesota and beyond. The new pipeline would replace the old Line 3, which was built more than 50 years ago. That aging pipe now can't operate at full capacity because of corrosion and seam cracking, and Enbridge estimates it will require some 7,000 repairs by 2035. The new Line 3 would come equipped with the latest technology for the prevention and early detection of spills.

Environmentalists would prefer to shut down the old Line 3 without replacing it. But demand for oil endures, and without a pipeline it would reach consumers by road or rail. The risks of a spill persist, and the alternative methods of transportation are more carbon-intensive than pipelines.

Credit Minnesota's Public Utilities Commission for recognizing these realities. As usual, climate-change absolutists brook no dissent in their demands for the fantasy of a world without fossil fuels.
