The Week That Was: 2020-05-02 (May 2, 2020) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week: "In God we trust, all others bring data" – Motto of Apollo Team

Number of the Week: 1899, 2000, 1876, 1965, and 1918

THIS WEEK:

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

Harold 'Hal" Doiron, RIP: Apollo scientist Hal Doiron died in his sleep on the morning of April 28 from cancer. During his professional career, Doiron exhibited the best of a modern scientist — using the scientific method to create simulations of that could not be directly experienced or demonstrated by experiments. With a fresh Bachelor of Science degree in Physics, from The University of Louisiana-Lafayette, in 1963 Doiron joined the NASA team developing the Apollo Lunar lander. He helped develop the software for simulating the landing to aid in landing gear design, to avoid toppling and to absorb the energy that would occur on landing. Later, Doiron received his Masters and Ph.D. in Mechanical Engineering from University of Houston.

As Doiron stated, there were no textbooks to follow, no guidelines to use, and if mistakes were made people would die. In short, they had to think outside the box, because there was no box. The leaders of that Apollo team, many from Canada, insisted on the highest level of scientific research to accomplish the goal. To properly simulate (model) what may occur, solid data, measurements, were needed. The Apollo team applied their motto: "In God we trust, all others bring data."

After retiring from NASA, Doiron joined the Reed Tool Co., then involved with petroleum drills. Later, Doiron described the complications of designing a petroleum drill with the sensors desired as a real engineering problem. His efforts and those of others have led to petroleum drilling going from largely "roughneck" to truly high-tech. Measurement while drilling (MWD) include sensors for measuring direction (azimuth), inclination, speed (using accelerometers and magnetometers), rock formation density, porosity, and pressure, and a host of other data that are transmitted to the surface.

Later, Doiron went to McDonnell Douglas Space Systems where, among other activities, he led a team that addressed the pogo stick problem, common to many multi-stage rockets. Near the end of burn out of the first stage, a vibration would occur along the longitudinal axis, that potentially could result in significant, or dangerous, damage. Using the scientific method, the team developed a method of mitigating the pogo stick problem, in part, by establishing buffers to change the frequency of the vibration.

After he officially retired, Doiron helped establish the Right Climate Stuff Team that applied the scientific method to address the fear that carbon dioxide and other greenhouse gases are causing dangerous global warming. Using surface data and the principles of conservation of energy, that team developed and validated a model showing that there was no scientific basis for that fear.

As Doiron stated in a video:

"Using the same scientific method that put the man on the moon,' NASA scientists have concluded there is no climate 'problem.' Doiron noted that the slogan at NASA: was 'In God we trust, all others bring data.' 'I am here to report today: Houston, we do not have a problem. It is impossible to think global warming will cause any problem especially when you look at the benefits of adding CO2 to the atmosphere. We are convinced that we don't have a problem with fossil fuels. There is no problem." [Boldface added]

For those who met him, and had the privilege of talking with him, Hal Doiron will long be remembered for his brilliance, his integrity – his humanity. See links under Challenging the Orthodoxy – Hal Doiron, RIP, and the April 8 & 15, 2017 TWTWs.

Confusing the Issues: With COVID-19 many global warming alarmists, including Al Gore, are asserting that the problems associated with COVID-19 are similar to the problems associated with dangerous CO2-caused global warming. The assertions are false. The problem associated with COVID-19 is lack of good data. As shown in last week's Number of the Week, many countries are not collecting and reporting high quality data on infections, deaths, etc. from COVID-19. Consequently, the modelers are having difficulty establishing a realistic model of what is occurring.

With global warming, the problem is the modelers and the models they create, not the data. As discussed above, Hal Doiron knew that both high quality data and high-quality models are needed to address a complex problem. He insisted that models must be rigorously tested against physical evidence, data. The Right Climate Stuff Team did so against the best surface data available and found there is no global warming problem. TWTW prefers to use the more comprehensive and rigorous atmospheric data and finds there is no global warming problem.

Global climate models are failing because the modelers fail to rigorously test their models against the most important physical evidence. This is a failure of the modelers and the government entities who fund them. The one exception to the IPCC accepted climate modeling failure is the Marchuk Institute of Numerical Mathematics of the Russian Academy of Sciences, in Moscow, which shows no alarming warming.

Dispatchable and Non-Dispatchable: The fear of carbon dioxide-caused global warming is driving many politicians to the false belief that they can control climate change that has been ongoing for hundreds of millions of years by stopping carbon dioxide emissions. As usual, there are certain groups profiting from the fears and producing studies supporting the view that the world can easily convert to alternative sources of electricity such as wind and solar. One such group is the Bloomberg New Energy Finance (BloombergNEF), which is claiming that wind and solar are becoming the cheapest form of new-build technology for both base load and peaking.

As usual, such reports omit a key part – the unreliability and unpredictability of wind and solar. A warning in the February 2020 report of the US Energy Information Administration on "Levelized Cost and Levelized Avoided Cost of New Generation Resources in the Annual Energy Outlook 2020" should give pause to those reading the BloombergNEF reports.

After Table 1b, page 7, the EIA report states:

"EIA evaluated LCOE (Estimated levelized cost of electricity) and LACE for each technology based on assumed capacity factors, which generally correspond to the high end of their likely utilization range. This convention is consistent with the use of LCOE to evaluate competing technologies in baseload operation such as coal and nuclear plants. Although sometimes used in baseload operation, some technologies, such as CC plants, are also built to serve load-following or other intermediate dispatch duty cycles. Combustion turbines that are typically used for peakload duty cycles are evaluated at a 30% capacity factor, which reflects the upper end of their typical economic utilization range. The duty cycle for intermittent resources is not operator controlled, but rather, it depends on weather that will not necessarily correspond to operator dispatched duty cycles. As a result, LCOE values for wind and solar technologies are not directly comparable with the LCOE values for other technologies that may have a similar average annual capacity factor. Consequently, they are shown separately as non-dispatchable technologies. Similarly, hydroelectric resources, including facilities where storage reservoirs allow for more flexible day-to-day operation, generally have high seasonal variation in output. EIA shows them as non-dispatchable to discourage comparison with technologies that have more consistent seasonal availability. The capacity factors for solar, wind, and hydroelectric resources are the average of the capacity factors (weighted or unweighted) for the marginal site in each region, which can vary significantly by region, and will not necessarily correspond to the cumulative projected capacity factors for both new and existing units for resources in AEO2020 or in other EIA analyses." Boldface added

For example, the power station at Grand Coulee Dam is rated at 7,079 MW, and it has a 36% capacity factor. However, it is more useful than a wind "farm" of similar nameplate capacity with the same capacity factor. Unlike 'will-o-the-wisp' wind power, the generators can be turned on or off at will to provide power as needed by simply opening or closing water valves.

In short, cost comparisons between reliable technologies and unreliable technologies contain huge problems and should be avoided. What is the cost of one kWh of midnight solar energy? The credibility of reports using these comparisons are immediately suspect. Last week, TWTW made a comparison between reliable combined cycle natural gas and unreliable offshore wind to give an indication on how many times more expensive offshore wind is (over 6 times). However, these are not firm numbers.

Also, TWTW is disturbed that EIA classifies all Hydroelectric as non-dispatchable. In many instances, such as the Columbia River system, it is very predictable. See links under Energy Issues – US, Alternative, Green ("Clean") Solar and Wind, and https://www.eia.gov/outlooks/aeo/pdf/electricity_generation.pdf

Hockey-Sticking: Michael "Hockey-stick" Mann was elected to the National Academy of Sciences this week. It may be useful to review how influential he was to the UN Intergovernmental Panel on Climate Change (IPCC), particularly in its *Third Assessment Report* (AR-3, 2001). In the Summary for Policy Makers, Figure 1 showed the hockey-stick graph for the

Northern Hemisphere from the year 1000 to 2000, with dramatic increase in temperatures in the last century.

But this is nothing compared with the Summary for Policymakers in the Synthesis Report. Figure SPM-10a shows dramatic increases in CO2 to 2100. The greatest estimate goes to 1000 parts per million (it is currently about 410 ppm). Then Figure SPM-10b shows corresponding increases in the Earth's surface temperatures up to over 5.5 °C above the 1990 baseline. According to the charts, we should be approaching an increase in Earth's surface temperatures of about 1 °C. If increasing greenhouse gases are causing increasing Earth's surface temperatures, we should be having an even greater increase in atmospheric temperatures, which is not occurring. From 1990 to April 2020 the atmospheric temperatures have increased by about 0.5 °C.

Mr. Mann's influence goes beyond the IPCC. In his book, *How Charts Lie: Getting Smarter about Visual Information*, author Alberto Cairo falls completely for the hockey-stick (Chapter 5). He uses the graph (chart) produced by AAAS *Science* showing 10,000 years of temperatures with a hockey stick at the end. Simply because organizations use the name Science, that does not mean they apply the scientific method. The International Commission on Stratigraphy disagrees with the hockey-stick and finds that the earth has been going through cooling phases for the past 8200 years.

See links under Measurement Issues – Atmosphere, Oh Mann! and https://www.ipcc.ch/report/ar3/syr/summary-for-policy-makers/

Elephant Seals: Elephant seal sightings have been increasing on Fidalgo and Whidbey Islands in the Puget Sound, Washington. Immediately, these events were claimed to be evidence of CO2-caused global warming. The unnamed "scientists" involved apparently did not check the history of elephant seal hunting.

Elephant Seals range from Baja California to the Aleutian Islands of Alaska. Once abundant along the northern Pacific Coast, elephant seals were hunted for fine-burning lamp oil. In the 1880s Elephant Seals were considered extinct. Later, a small population was found on Mexico's Guadalupe Island (and killed for scientific research). Later, other populations were found, and in 1922 they were protected by Mexico, and shortly thereafter by the US. Since, they have been slowly expanding their breeding grounds north, up the California coast. Global warming has nothing to do with new sightings. But thanks to hydraulic fracturing and high-tech drilling their oil is no longer needed. See links under Below the Bottom Line and https://www.marinemammalcenter.org/education/marine-mammal-information/pinnipeds/northern-elephant-seal/

SEPP'S APRIL FOOLS AWARD THE JACKSON

Since 2012, SEPP conducted an annual vote for the recipient of the coveted trophy, The Jackson, a lump of coal. Readers are asked to nominate and vote for who they think is most deserving, following these criteria:

• The nominee has advanced, or proposes to advance, significant expansion of governmental power, regulation, or control over the public or significant sections of the general economy.

- The nominee does so by declaring such measures are necessary to protect public health, welfare, or the environment.
- The nominee declares that physical science supports such measures.
- The physical science supporting the measures is flimsy at best, and possibly non-existent.

The eight past recipients, Lisa Jackson (12), Barrack Obama (13), John Kerry (14), Ernest Moniz (15), Michael Mann (16), Christiana Figueres (17), Jerry Brown (18), and AOC (19) are not eligible. Generally, the committee that makes the selection prefers a candidate with a national or international presence. The voting will close on June 30. Please send your nominee and a brief reason why the person is qualified for the honor to Ken@SEPP.org. Thank you.

Number of the Week: 1899, 2000, 1876, 1965, and 1918. From 2015 to 2018 India suffered a prolonged drought. Thanks to modern transportation and agriculture the drought did not lead to mass starvation, as they often did in the past. Examining long term record from 1870 to 2018, researcher Vimal Mishra published his finding in the *Journal of Hydrology*. He identified the top five most severe meteorological and hydrological droughts in India during 1870–2018.

They were in 1899, 2000, 1876, 1965, and 1918. All the deadly droughts were linked with the positive phase of ENSO – the El Niño Southern Oscillation. The UN IPCC and far too many other research organizations focus on the human influence on climate change, particularly CO2 emissions, while ignoring the far more important natural changes in weather. See links under Changing Weather.

NEWS YOU CAN USE:

Commentary: Is the Sun Rising?

Sun is less active than similar stars

By Staff Writers, Katlenburg-Lindau, Germany (SPX), May 01, 2020 https://www.spacedaily.com/reports/Sun is less active than similar stars 999.html

"Since 1610, for example, there have been reliable records of sunspots covering the Sun; the distribution of radioactive varieties of carbon and beryllium in tree rings and ice cores allows us to draw conclusions about the level of solar activity over the past 9000 years."

"However, compared to the entire lifespan of the Sun, 9000 years [of possible understanding] is like the blink of an eye', says MPS scientist Dr. Timo Reinhold, first author of the new study. After all, our star is almost 4.6 billion years old. 'It is conceivable that the Sun has been going through a quiet phase for thousands of years and that we therefore have a distorted picture of our star,' he adds."

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 – Hal Doiron, RIP

RIP: Retired NASA Scientist Hal Doiron, a climate skeptic & a member of the team that developed the Apollo Lunar Module landing software

By Staff, Climate Depot, Apr 28, 2020

https://www.climatedepot.com/2020/04/28/rip-retired-nasa-scientist-hal-doiron-a-climate-skeptic-a-member-of-the-team-that-developed-the-apollo-lunar-module-landing-

 $\underline{software/?utm_source=feedburner\&utm_medium=email\&utm_campaign=Feed\%3A+ClimateDep_ot+\%28Climate+Depot\%29}$

Harold H. 'Hal' Doiron, Ph.D.

By Staff, The Heartland Institute

https://www.heartland.org/about-us/who-we-are/harold-h-hal-doiron-phd

The Right Climate Stuff

Webmaster Jim Peacock, Accessed May 1, 2020 https://www.therightclimatestuff.com/

Challenging the Orthodoxy - Wilfred Beckerman, RIP

Wilfred Beckerman Obituary

By Guy Leech, GWPF, Apr 29, 2020

https://www.thegwpf.com/wilfred-beckerman-obituary/

Challenging the Orthodoxy

Some Dilemmas of Climate Simulations

By Wallace Manheimer, WUWT, Apr 27, 2020

https://wattsupwiththat.com/2020/04/27/some-dilemmas-of-climate-simulations/

Media, Politics, and Climate Change, a Response to Wang and Hausfather

By Wallace Manheimer, Forum on Physics and Society, April 2020 https://www.aps.org/units/fps/newsletters/202004/media.cfm

Model Madness – Parallels Between Failed Climate Models And Failed Coronavirus Models

By Anthony Watts, WUWT, Apr 30, 2020

 $\underline{https://wattsupwiththat.com/2020/04/30/model-madness-parallels-between-failed-climate-models-and-failed-coronavirus-models/$

New Northern Hemisphere Temperature Reconstructions Are Devoid Of Michael Mann-Like Hockey Sticks

By Kenneth Richard, No Tricks Zone, Apr 27, 2020

https://notrickszone.com/2020/04/27/new-northern-hemisphere-temperature-reconstructions-are-devoid-of-michael-mann-like-hockey-sticks/

Costly Climate Policies Must Be Abandoned To Save Economy

Press Release, Global Warming Policy Foundation, Apr 27, 2020

https://www.thegwpf.com/costly-climate-policies-must-be-abandoned-to-save-economy/

Link to report: The Climate Noose: Business, Net Zero and the IPCC'S Anticapitalism

By Rupert Darwall, GWPF, 2020

https://www.thegwpf.org/content/uploads/2020/04/The-Climate-Noose.pdf

Defending the Orthodoxy

UN chief: don't use taxpayer money to save polluting industries

António Guterres calls for coronavirus aid to be directed at firms with green credentials By Fiona Harvey, The Guardian, Apr 28, 2020

https://www.theguardian.com/environment/2020/apr/28/un-chief-dont-use-taxpayer-money-to-save-polluting-industries

Will Truth Prevail?

A student scientist contemplates power and the denial of scholarship.

By Drew Pendergrass, Harvard Magazine, May-June 2020 [H/t Vera Trafton]

https://harvardmagazine.com/2020/05/jhj-undergraduate-will-truth-prevail

"I had recently read Merchants of Doubt, co-authored by professor of the history of science Naomi Oreskes, which outlines how a small group of contrarian, industry-funded scientists misled the public about the dangers of both tobacco and human-caused climate change. By sowing doubt, exaggerating scientific uncertainty, and creating their own institutions to publish junk papers that would never survive peer review, these individuals undermined public trust in consensus science, delaying action on dangerous problems for years. Their funders made a fortune in the meantime." [SEPP Comment: "Truth" without evidence is belief, not knowledge. Thus, assertions and innuendos about "industry funded" scientists will continue in organizations that do not understand the difference.]

Questioning the Orthodoxy

The Simon Abundance Index 2020

By Gale L. Pooley and Marian L. Tupy, Human Progress, Apr 22, 2020

https://humanprogress.org/article.php?p=2620

[SEPP Comment: Unfortunately, the article suffers from false precision.]

It can't work, can it?

By John Robson, Climate Discussion Nexus, Apr 29, 2020

https://climatediscussionnexus.com/2020/04/29/it-cant-work-can-it/

[SEPP Comment: Discusses Moore's film in the light of expanding prosperity and the false claim of peak oil.]

New Video By German Geologist Casts Doubt Over Exclusively Man-Made Global Warming

By P Gosselin, No Tricks Zone, Apr 26, 2020

https://notrickszone.com/2020/04/26/new-video-by-german-geologist-casts-doubt-over-exclusively-man-made-global-warming/

Hopefulness Despite 2.9 Billion Lost Birds

By Jim Steele, Landscapes and Cycles, Accessed May 1, 2020

http://landscapesandcycles.net/hopefulness-despite-2-9-billion-lost-birds.html

[SEPP Comment: Describing increasing and decreasing bird species populations with human impacts.]

Endangered bumblebee sees population bounce back thanks to the revival of lost flower meadows by the National Trust

By Paul Homewood, Not a Lot of People Know That, Apr 30, 2020

https://notalotofpeopleknowthat.wordpress.com/2020/04/30/endangered-bumblebee-sees-population-bounce-back-thanks-to-the-revival-of-lost-flower-meadows-by-the-national-trust/

From Green Blindness to a New Reality

Guest opinion by Wim Röst, WUWT, Apr 27, 2020

https://wattsupwiththat.com/2020/04/27/from-green-blindness-to-a-new-reality/

The Pentagon's Cracked Climate Crystal Ball

By John Robson, Climate Discussion Nexus, Apr 5, 2020

https://climatediscussionnexus.com/videos/the-pentagons-cracked-climate-crystal-ball/

Link to report: An Abrupt Climate Change Scenario and Its Implications for United States National Security

By Peter Schwartz and Doug Randall, DOD, Oct 2003

https://grist.files.wordpress.com/2004/02/abruptclimatechange2003.pdf

"We have created a climate change scenario that although not the most likely, is plausible, and would challenge United States national security in ways that should be considered immediately." [SEPP Comment: Did DOD use the most extreme hockey-stick scenario created in the 2001 IPCC report? If so, a counter team would be needed.]

After Paris!

Now back to our regularly scheduled crisis

By John Robson, Climate Discussion Nexus, Apr 29, 2020

https://climatediscussionnexus.com/2020/04/29/now-back-to-our-regularly-scheduled-crisis/

"According to an old Chinese proverb, when there is food on the table there are many problems. When there is no food on the table, there is one problem."

[SEPP Comment: The show must go on!]

Change in US Administrations

Groups threaten suit as Interior repeatedly fills top posts with 'temporary' leaders

By Rebecca Beitsch, The Hill, Apr 28, 2020

 $\underline{https://thehill.com/policy/energy-environment/495056-groups-threaten-suit-as-interior-repeatedly-\underline{fills-top-posts-with}}$

[SEPP Comment: The slow roll of approvals by the opposing party is having an effect.]

Problems in the Orthodoxy

China Fires Up Coal Power Plant Construction

By Paul Homewood, Not a Lot of People Know That, May 1, 2020

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2020/05/01/china-fires-up-coal-power-plant-construction/}$

"China approved nearly 10 gigawatts (GW) of new coal-fired power generation capacity in this year's first quarter, roughly equal to the amount approved for all of last year, amid a broader scramble to jumpstart an economic hobbled by the Covid-19 epidemic."

"In comparison, UK coal-fired capacity was 12 GW at the end of 2018."

EU Leaders Remain at Loggerheads Over Economic Solidarity

By Jamie Dettmer, Voice of America, Apar 28, 2020 [H/t GWPF]

https://www.voanews.com/economy-business/eu-leaders-remain-loggerheads-over-economic-solidarity

Macron's Luddite charter: grimly predictable and utterly unworkable

By Harry Wilkinson, Global Vision, Apr 27, 2020 [H/t GWPF]

https://globalvisionuk.com/macrons-luddite-charter-grimly-predictable-and-utterly-unworkable/

Michael Moore Strikes Back: Defends Anti Renewable Energy "Planet of the Humans" By Eric Worrall, WUWT, Apr 27, 2020

 $\frac{https://wattsupwiththat.com/2020/04/27/michael-moore-strikes-back-defends-anti-renewable-energy-planet-of-the-humans/}{}$

Seeking a Common Ground

Covid-19 — A Reminder to Reason

By Ivry Zagury-Orly, B.Sc., and Richard M. Schwartzstein, M.D. New England Journal of Medicine, Apr 28, 2020

https://www.nejm.org/doi/full/10.1056/NEJMp2009405?query=RP

"Even as we acknowledge that the world now feels strange and that doctors are susceptible to human anxieties, we should remember to accept uncertainty rationally and beware of potential undesirable consequences of our instinctive desire to see patterns in what may be random happenstance. Our mission as healers, in a situation such as the Covid-19 pandemic, makes us feel compelled to do something. As doctors trained in the scientific method, however, we are committed to practicing evidence-based medicine, which is premised on the ability to interpret scientific reports on supposed diagnostic and therapeutic advances. We need to

retain a healthy skepticism and remember the principle of clinical equipoise, particularly when considering interventions that could cause harm. Otherwise, in our effort to "do good" for our patients, we may fall prey to cognitive biases and therapeutic errors." Boldface added

The Generation That Faced Hunger, Polio, and War Would Be Ashamed

By Cal Thomas, The Daily Signal, Apr 28, 2020

https://www.dailysignal.com/2020/04/28/the-generation-that-faced-hunger-polio-and-war-would-be-ashamed/?utm_source=rss&utm_medium=rss&utm_campaign=the-generation-that-faced-hunger-polio-and-war-would-be-

<u>ashamed&mkt_tok=eyJpIjoiT1RoaU9EQTVZakV5TWpZdyIsInQiOiJHb2hGQlZIKzhPdnNpUWIPSmJ4bGdrenIxd0hjQ1dBOHkrU29hMXo1WVExSURRXC9uakRmT3NqMjlGRWM4WXdoT3pDVUFHbHg5VGlQUE8wRTZId2lDUnJcL1RPR3NiSTBzWG1ONVVXaHdrK2R3dHg3YlppWHhjb2N4SUdkU3Y4R0ZIIn0%3D</u>

"Attitude is key. That's what my parents and grandparents taught me, not so much in words, but by their example."

COVID discussion thread V

By Judith Curry, Climate Etc. Apr 30, 2020

https://judithcurry.com/2020/04/30/covid-discussion-thread-v/#more-26047

"A round up of recent interesting articles"

Insects: Largest Study to Date Confirms Declines on Land, But Finds Recoveries in Freshwater

By Staff, German Centre for Integrative Biodiversity Research, Via GWPF, May 1, 2020 https://www.thegwpf.com/largest-study-to-date-confirms-declines-on-land-recoveries-infreshwater/

Link to paper: Meta-analysis reveals declines in terrestrial but increases in freshwater insect abundances

By Roel van Klink, AAAS Science, Apr 24, 2020

https://science.sciencemag.org/content/368/6489/417

Science, Policy, and Evidence

Tale of two panics — Covid & Climate

By David Wojick, CFACT, Apr 27, 2020

https://www.cfact.org/2020/04/27/tale-of-two-panics-covid-climate/

"What is really needed in both cases is freedom and reality. Freedom from computer driven fear, freedom from fear driven mandates, and the reality that the problem being solved by collapse never existed in the first place."

Ministerial math, scientific skepticism and the Chinese virus

By Christopher Monckton of Brenchley, WUWT, Apr 30, 2020

https://wattsupwiththat.com/2020/04/30/ministerial-math-scientific-skepticism-and-the-chinese-virus/

Review of Recent Scientific Articles by CO2 Science

Elevated CO2 Alleviates Salt Stress in Cucumber Seedlings

Li, S., Li, Y., Gao, Y., He, X., Zhang, D., Liu, B. and Li, Q. 2020. Effects of CO2 enrichment on non-structural carbohydrate metabolism in leaves of cucumber seedlings under salt stress. *Scientia Horticulturae* 265: 109275. May 1, 2020

http://www.co2science.org/articles/V23/may/a1.php

Six Decades of Coral Reef Resilience on Jarvis Island, Central Pacific Ocean

Barkley, H.C., Cohen, A.L., Mollica, N.R., Brainard, R.E., Rivera, H.E., DeCarlo, T.M., Lohmann, G.P., Drenkard, E.J., Alpert, A.E., Young, C.W., Vargas-Ángel, B., Lino, K.C., Oliver, T.A., Pietro, K.R. and Luu, V.H. 2018. Repeat bleaching of a central Pacific coral reef over the past six decades (1960-2016). *Communications Biology* 1: 177, DOI: 10.1038/s42003-018-0183-7. Apr 29, 2020

http://www.co2science.org/articles/V23/apr/a13.php

"So, what does all the above suggest? It suggests an incredible resilience for a coral reef community that has repeatedly experienced dramatic fluctuations in ocean temperature and biogeochemical change. And, it suggests rising atmospheric CO2 and rising ocean temperatures over the course of the past century have had no measurable impact on either the frequency or severity of El Niño warming events."

Assessing the Relative Risk of Temperature-related Mortality in Kuwait

Alahmad, B., Shakarchi, A., Alseaidan, M. and Fox, M. 2019. The effects of temperature on short-term mortality risk in Kuwait: A time-series analysis. *Environmental Research* 171: 278-284. Apr 27, 2020

http://www.co2science.org/articles/V23/apr/a12.php

[SEPP Comment: The risk of cold weather mortality is slightly higher than warm weather mortality in Kuwait?]

Models v. Observations

Still Flying Blind: Can Meteorologists Help Epidemiologists with Coronavirus?

By Cliff Mass, Weather Blog, Apr 29, 2020

https://cliffmass.blogspot.com/2020/04/still-flying-blind-can-meteorologists.html

Seal behavior helps scientists predict changes in Antarctic krill distribution

By Brooks Hays, Washington DC (UPI), Apr 28, 2020

https://www.spacedaily.com/reports/Seal_behavior_helps_scientists_predict_changes_in_Antarctic_c_krill_distribution_999.html

"Researchers used the data to build a model capable of simulating the effects of climate change on the krill distribution along the western Antarctic Peninsula. The published the results of their modeling efforts this week in the journal Nature Climate Change."

[SEPP Comment: Publishing another new model before the researchers tested it? No link to paper.]

Model Issues

It's official, the models are getting warmer

By John Robson, Climate Discussion Nexus, Apr 29, 2020

https://climatediscussionnexus.com/2020/04/29/its-official-the-models-are-getting-warmer/

Link to report: Latest Earth System Models predict more global warming than their predecessors By Mark Zelinka, Lawrence Livermore National Laboratory, Mar 25, 2020

 $\underline{https://usclivar.org/research-highlights/latest-earth-system-models-predict-more-global-warming-their-predecessors}$

Link to paper: Causes of Higher Climate Sensitivity in CMIP6 Models By Mark Zelinka, et al. Geophysical Research Letters, Jan 3, 2020 https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2019GL085782

From the abstract: "Here we show that the closely related effective climate sensitivity has increased substantially in Coupled Model Intercomparison Project phase 6 (CMIP6), with values spanning 1.8–5.6 K across 27 GCMs and exceeding 4.5 K in 10 of them. This (statistically insignificant) increase is primarily due to stronger positive cloud feedbacks from decreasing extratropical low cloud coverage and albedo."

[SEPP Comment: As usual, the climate models can "predict" without demonstrating evidence that they can predict. According to the Charney Report, increasing water vapor would significantly amplify any warming from CO2. What is causing the decreasing extratropical low cloud coverage and albedo? The lack of water vapor?]

Key-indicator analysis, the Chinese virus and the climate scam

By Christopher Monckton of Brenchley, WUWT, Apr 28, 2020

 $\frac{https://wattsupwiththat.com/2020/04/28/key-indicator-analysis-the-chinese-virus-and-the-climate-scam/$

Measurement Issues -- Surface

1919 or 2019? St. John's Edition

By John Robson, Climate Discussion Nexus, Apr 29, 2020

https://climatediscussionnexus.com/2020/04/29/1919-or-2019-st-johns-edition/

Measurement Issues -- Atmosphere

UAH Global Temperature Update for April 2020: +0.38 deg. C

By Roy Spencer, His Blog, May 1, 2020

http://www.drroyspencer.com/2020/05/uah-global-temperature-update-for-april-2020-0-38-deg-c/?fbclid=IwAR1Q5Kob3xbvf-DpegPBbqYQrboOrgxHM3VetN3SMf BjJ6KHrY HA63s k

Link to: Global Temperature Report April 2020, Earth System Science Center, UAH

Map: https://www.nsstc.uah.edu/climate/2020/april2020/202004 map.png

Graph: https://www.nsstc.uah.edu/climate/2020/april2020/202004_bar.png

"In April 2020, the Northern Hemisphere experienced its 2nd largest 2-month drop in temperature in the 497-month satellite record."

[SEPP Comment: With no drop in atmospheric CO2 as measured at Mauna Loa Observatory. See link immediately below.]

Is Atmospheric CO2 Declining from the Covid Economic Collapse?

By Cliff Mass, Weather Blog, Apr 26, 2020

 $\underline{https://cliffmass.blogspot.com/2020/04/is-atmospheric-co2-declining-from-covid.html\#comment-form}$

"The bottom line of this blog is this: CO2 levels are not falling, and it is difficult to see much impact on the rate of rise. And it will be a good opportunity to talk about some aspects of the variation of CO2 in the atmosphere.

[SEPP Comment: In general, Mass asserts that CO2 is a major contributor to global warming. TWTW disagrees.]

Measurement Issues – Energy Flow

Heat transfer by infrared radiation in the atmosphere

By Walter M. Elsasser, Harvard Meteorological Studies No. 6, Harvard University, Blue Hill Meteorological Observatory, Milton, Massachusetts, **1942**.

https://archive.org/details/ElsasserFull1942/page/n1/mode/2up

Changing Weather

Dry scientific findings

By John Robson, Climate Discussion Nexus, Apr 29, 2020

https://climatediscussionnexus.com/2020/04/29/dry-scientific-findings/

Link to paper: Long-term (1870–2018) drought reconstruction in context of surface water security in India

By Vimal Mishra, Journal of Hydrology, Jan 2020

https://www.sciencedirect.com/science/article/pii/S0022169419309631

Link to sea surface temperatures: Extended Reconstructed Sea Surface Temperature, Version 5 (ERSSTv5): Upgrades, Validations, and Intercomparisons

By Boyin Huang, et al. Journal of Climate, Oct 2017

https://journals.ametsoc.org/doi/10.1175/JCLI-D-16-0836.1

"All the deadly droughts were linked with the positive phase of ENSO." [El Nino Southern Oscillations]

Changing Climate

Chinese Scientists: It Was Warmer In China During Medieval Warm Period Than Today

By Zhixin Hao, Maowei Wu, Yang Liu, Xuezhen Zhang & Jingyun Zheng, Journal of Geographical Sciences, January 2020, Via GWPF, Apr 29, 2020

https://www.thegwpf.com/chinese-scientists-it-was-warmer-in-china-during-medieval-warm-period-than-today/

Changing Seas

Terence Corcoran: Change coming to the Canadian Arctic — but it's no looming catastrophe

A new federal report is a welcome cool-headed antidote to hot Arctic alarmism

By Terence Corcoran, Financial Post, Apr 29, 2020 [H/t GWPF]

https://business.financialpost.com/opinion/terence-corcoran-change-coming-to-the-canadian-arctic-but-its-no-looming-catastrophe

Link to press release: Government of Canada releases first report on the state of the marine ecosystems in the Canadian Arctic

By Jane Deeks, Public Report – Canada's Oceans Now: Arctic Ecosystems, 2019, April 2020 https://www.canada.ca/en/fisheries-oceans/news/2020/04/government-of-canada-releases-first-report-on-the-state-of-the-marine-ecosystems-in-the-canadian-arctic.html

Link to report: Public Report – Canada's Oceans Now: Arctic Ecosystems, 2019

By Staff, Public Report – Canada's Oceans Now: Arctic Ecosystems, 2019, April 2020

http://www.dfo-mpo.gc.ca/oceans/soto-rceo/arctic-arctique/publications/public-report/indexeng.html

Changing Cryosphere – Land / Sea Ice

Arctic will have iceless summer by 2050: study

By Kaelan Deese, The Hill, Apr 22, 2020

https://thehill.com/policy/energy-environment/494203-study-arctic-will-have-iceless-summer-by-2050

Link to paper: Arctic Sea Ice in CMIP6

By Dirk Notz, et al, Geophysical Research Letters, Apr 17, 2020

https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019GL086749

NASA says Antarctica and Greenland lost enough ice to fill Lake Michigan over last 16 years

By J. Edward Moreno, The Hill, Apr 30, 2020

 $\underline{https://thehill.com/policy/energy-environment/495604-nasa-says-antarctica-and-greenland-lost-enough-ice-to-fill-lake}$

Link to paper: Pervasive ice sheet mass loss reflects competing ocean and atmosphere processes By Ben Smith, et al., AAAS Science, Apr 30, 2020

https://science.sciencemag.org/content/early/2020/04/29/science.aaz5845

[SEPP Comment: Using the same photo of a polar bear that appeared in an article of the Arctic. Not many polar bears in Antarctica or central Greenland.]

Polar Ice Surprises! Svalbard Well Over Average, Arctic Ice Remains Steady, Antarctic Ice Growing

Polar ice showing longer term stability. No basis for behind claims of a rapid melt.

By Kirye and Pierre Gosselin, No Tricks Zone, Apr 28, 2020

https://notrickszone.com/2020/04/28/polar-ice-surprises-svalbard-well-over-average-arctic-ice-remains-steady-antarctic-ice-growing/

Coronavirus shutdown forces research project to miss critical start of Arctic ice melt

By Susan Crockford, Polar Bear Science, Apr 28, 2020

https://polarbearscience.com/2020/04/28/coronavirus-shutdown-forces-research-project-to-miss-critical-start-of-arctic-ice-melt/

[SEPP Comment: The researchers are not as tough as those who sailed on The Fram.]

5 New Studies: High Mountain Asia Glaciers Are Advancing, Surging...And This Is A 'Natural Phenomenon'

By Kenneth Richard, No Tricks Zone, Apr 30, 2020

https://notrickszone.com/2020/04/30/4-new-studies-high-mountain-asia-glaciers-are-advancing-surging-and-this-is-a-natural-phenomenon/

Changing Earth

How catastrophic outburst floods may have carved Greenland's 'grand canyon'

By Staff Writers, Amherst MD (SPX), May 01, 2020

https://www.spacedaily.com/reports/How_catastrophic_outburst_floods_may_have_carved_Green lands_grand_canyon_999.html

[SEPP Comment: Question the analogy, that Greenland's canyon was formed in a manner similar to the Columbia River. If it existed, the vast reservoir of water was in Greenland's existing canyon, not that the canyon was carved by a reservoir water running through it.]

Agriculture Issues & Fear of Famine

Rice genetically engineered to resist heat waves can also produce up to 20% more grain By Erik Stokstad, AAAS Science, Apr 21, 2020

https://www.sciencemag.org/news/2020/04/rice-genetically-engineered-resist-heat-waves-can-also-produce-20-more-grain

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

BBC Plug Renewables, But Ignore What Really Keeps Our Grid Afloat

By Paul Homewood, Not a Lot of People Know That, Apr 29, 2020

https://notalotofpeopleknowthat.wordpress.com/2020/04/29/bbc-plug-renewables-but-ignore-what-really-keeps-our-grid-afloat/

Green Deals are the best way to turbo-charge economic recovery from Covid-19-AEP [The Telegraph]

By Paul Homewood, Not a Lot of People Know That, Apr 30, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/04/30/green-deals-are-the-best-way-to-turbo-charge-economic-recovery-from-covid-19-aep/

Communicating Better to the Public - Make things up.

How the Chinese virus punishes the stupid, the innumerate, the panicky and the extreme

By Christopher Monckton of Brenchley, WUWT, Apr 27, 2020

https://wattsupwiththat.com/2020/04/27/how-the-chinese-virus-punishes-the-stupid-the-innumerate-the-panicky-and-the-extreme/

[SEPP Comment: Monckton demonstrates how "climate communicator" Cook misleads with charts.]

Al Gore: Climate Crisis and the Covid-19 Pandemic Are Linked

By Jeff Poor, Breitbart, Apr 27, 2020 [H/t Bernie Kepshire]

https://www.breitbart.com/clips/2020/04/27/al-gore-climate-crisis-and-the-covid-19-pandemic-are-linked/

"And we're seeing it [wind and solar] cheaper as a source of electricity in two-third, quarters of the world than fossil fuel, and soon, in a few years, in 100 percent of the world..."

Climate science deniers at forefront of downplaying coronavirus pandemic

Vocal influencers such as the conspiracy theorist Alex Jones and the Heartland Institute are hitting back at a time when people's trust in science is rising

By Emily Holden, The Guardian, Apr 25, 2020 [H/t Bernie Kepshire]

 $\frac{https://www.theguardian.com/world/2020/apr/25/climate-science-deniers-downplaying-coronavirus-pandemic}{}$

Communicating Better to the Public - Go Personal.

Robert Bryce: Guilty as Charged (DeSmog hit piece boomerangs)

By Robert Bradley Jr. Master Resource, Apr 28, 2020

https://www.masterresource.org/bryce-robert/desmog-blog-robert-bryce/

Communicating Better to the Public – Use Propaganda

Climate Activists Want Michael Moore's Doc Panning Green Energy Banned, Say It's Chock Full Of Misinformation

By Chris White, Daily Caller, Apr 26, 2020 [H/t WUWT]

https://dailycaller.com/2020/04/26/michael-moore-planet-of-humans-green-new-deal/

Civil War On the Left: Michael Moore Against the Greens

By Steven Hayward, Power Line, Apr 27, 2020

 $\underline{https://www.powerlineblog.com/archives/2020/04/civil-war-on-the-left-michael-moore-against-\underline{the-greens.php}}$

Mandatory climate change classes plan for Scottish leaders

By Martin Williams, The Herald, Apr 25, 2020 [H/t GWPF]

https://www.heraldscotland.com/news/18404742.mandatory-climate-change-classes-plan-scottish-leaders/

Oxford University Parade Their Green Credentials

By Paul Homewood, Not a Lot of People Know That, Apr 29, 2020

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2020/04/29/oxford-university-parade-their-green-credentials/}$

"I now await details of Oxford's plans to stop heating buildings, driving cars, flying, and how they will manage without electricity for their computers."

Communicating Better to the Public – Use Propaganda on Children

Climate Change Propaganda For 7-Year Olds

By Paul Homewood, Not a Lot of People Know That, Apr 27, 2020

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2020/04/27/climate-change-propaganda-for-7-vear-olds/}$

Expanding the Orthodoxy

"Global public tells the United Nations: Take action on climate change and the environment"

By Eric Worrall, WUWT, Apr 28, 2020

 $\underline{https://wattsupwiththat.com/2020/04/28/global-public-tells-the-united-nations-take-action-on-climate-change-and-the-environment/}$

[SEPP Comment: Polls failed, so create "public opinion."]

Questioning European Green

Corona Crisis: Federation Of German Industry Calls On EU To Review Unilateral 2030 Climate Goals

By Staff, Bundesverband der Deutschen Industrie e.V., Via GWPF, Apr 28, 2020 https://www.thegwpf.com/federation-of-german-industry-calls-on-eu-to-review-unilateral-2030-climate-goals/

German Handelsblatt Commentary: Climate Protection Plans "Will Not Last" In Wake Of COVID-19 Crisis

By P Gosselin, No Tricks Zone, May 1, 2020

https://notrickszone.com/2020/05/01/german-handelsblatt-commentary-climate-protection-plans-will-not-last-in-wake-of-covid-19-crisis/

[SEPP Comment: What if climate does not need protection?]

Questioning Green Elsewhere

Lockdown madness is a triumph of the precautionary principle

By Lubos Motl, The Reference Frame, Apr 29, 2020

https://motls.blogspot.com/2020/04/lockdown-madness-is-triumph-of.html#more

Funding Issues

New York Progressives Officially Determine That All Wealth Comes From The Tooth Fairy By Francis Menton, Manhattan Contrarian, Apr 26, 2020

https://www.manhattancontrarian.com/blog/2020-4-26-new-york-progressives-officially-determine-that-all-wealth-comes-from-the-tooth-fairy

National Taxpayers: Here Are A Few Things You Will Be Paying For If You Bail Out New York

By Francis Menton, Manhattan Contrarian, Apr 29, 2020

https://www.manhattancontrarian.com/blog/2020-4-29-national-taxpayers-here-are-a-few-things-you-are-paying-for-if-you-bail-out-new-york

"We currently have a hugely cost-effective, zero-carbon-emissions nuclear power plant called Indian Point, about 40 miles North of New York City, supplying about 25 - 30% of the City's power. At the urging of environmental activists, one unit of the plant is now set to close down on April 30, 2020 (tomorrow!), and the second unit a year from now on April 30, 2021. The plant pays millions of dollars of annual property taxes to the localities where it is located. There is a \$56 million fund in the state budget to cover the localities for this prospective loss of revenue. Thanks for taking care of that one for us, flyover people!"

BlackRock's ESG Mandates Could Bring On Business Ruin

By Dan Eberhart, Real Clear Energy, April 29, 2020

https://www.realclearmarkets.com/articles/2020/04/29/blackrocks_esg_mandates_could_bring_on_business_ruin_490258.html

"Environmental, Social, and Governance (ESG) refers to the three central factors in measuring the sustainability and societal impact of an investment in a company or business." – Wikipedia [SEPP Comment: Or they may undermine the financial strength of Blackrock – selling sub-prime electricity.]

Dr. Fauci Backed Controversial Wuhan Lab with Millions of U.S. Dollars for Risky Coronavirus Research

By Fred Guterl, Newsweek, Apr 28, 2020

https://www.newsweek.com/dr-fauci-backed-controversial-wuhan-lab-millions-us-dollars-risky-coronavirus-research-1500741

The Political Games Continue

Coronavirus Emergency Is No Reason for Delaying Energy Project Approvals

By Ben Lieberman, CEI, May 1, 2020

https://cei.org/blog/coronavirus-emergency-no-reason-delaying-energy-project-approvals

Grist on Joe Biden's Climate Podcast: "The whole thing sounds like a voicemail two of your grandparents left you"

By Eric Worrall, WUWT, Apr 27, 2020

https://wattsupwiththat.com/2020/04/27/grist-on-joe-bidens-climate-podcast-the-whole-thing-sounds-like-a-voicemail-two-of-your-grandparents-left-you/

Link to article: Joe Biden has a podcast, and there's an episode on climate change By Zoya Teirstein, Grist, Apr 27, 2020

https://grist.org/politics/joe-biden-has-a-podcast-yes-and-theres-an-episode-about-climate-change/

Litigation Issues

Stanford Prof. Can't Muzzle 'Planet Of The Humans,' Must Pay Defendants' Legal Fees In SLAPP Suit

By Robert Bryce, Forbes, Apr 30, 2020

https://www.forbes.com/sites/robertbryce/2020/04/30/stanford-professor-cant-muzzle-planet-of-the-humans-must-pay-defendants-legal-fees-in-slapp-suit/#5a4ec027e0ac

Subsidies and Mandates Forever

Wind Power: Subsidy after Subsidy after Subsidy

By Robert Bradley Jr. Master Resource, Apr 27, 2020

https://www.masterresource.org/production-tax-credit-ptc/wind-power-subsidy-after-subsidy-after-subsidy/

"Such would qualify as the 13th federal subsidy extension for wind power, dating back to 1992. Yet back in 1986, amid California's wind subsidies, a representative of the American Wind Energy Association (AWEA) stated: 'The U.S. wind industry has ... demonstrated reliability and performance levels that make them very competitive.'"

The Seinfeld Strategy for Climate Change

By James Freeman, The Wall Street Journal, Via GWPF, Apr 30, 2020 https://www.thegwpf.com/the-seinfeld-strategy-for-climate-change/

Earth Day Hangover? Wait Until You See the Tab

By Jason Isaac, Real Clear Energy, April 28, 2020

https://www.realclearenergy.org/articles/2020/04/28/earth_day_hangover_wait_until_you_see_the tab 490235.html

Link to: The Siren Song that Never Ends: Federal Energy Subsidies and Support from 2010 to 2019

https://files.texaspolicy.com/uploads/2020/04/23135621/Bennett-LP-Federal-Energy-Subsidies.pdf

[SEPP Comment: Figure 5: Federal subsidies per unit of electricity generated, 2010 to 2019 (2019 USD/MWh) gives an idea of the disproportionate subsidies going to solar and wind. Worse, these subsidies ae going primarily for deployment of unreliable methods of electricity generation.]

Renewable energy loses steam as Asian subsidies wane

Capacity growth slows, and coronavirus risks disrupting supply chains By Shuhei Ochiani and Kanoko Sakamoto, Nikkei Asian Review, Apr 25, 2020 https://asia.nikkei.com/Business/Energy/Renewable-energy-loses-steam-as-Asian-subsidies-wane

EPA and other Regulators on the March

EPA COV-19 Environmental Justice Grant Funding

By Roger Caiazza, WUWT, May 1, 2020

https://wattsupwiththat.com/2020/05/01/epa-cov-19-environmental-justice-grant-funding/ [SEPP Comment: Designing a way to make ventilators run on unreliable wind?]

EPA's independent science board says 'secret science' proposal may 'reduce scientific integrity'

By Rebecca Beitsch, The Hill, Apr 28, 2020

https://thehill.com/policy/energy-environment/495115-epas-independent-science-board-says-secret-science-proposal-may

[SEPP Comment: Transparency reduces integrity?]

Energy Issues – Non-US

UK Energy Trends 2019

By Paul Homewood, Not a Lot of People Know That, Apr 30, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/04/30/uk-energy-trends-2019/

Link to National statistics, Energy Trends: UK total Energy

By Staff, Department for Business, Energy & Industrial Strategy, Apr 30, 2020

https://www.gov.uk/government/statistics/total-energy-section-1-energy-trends

"The main news is that wind, solar and hydro combined still only account for a pitiful 4% of total energy consumption, despite the tens of billions of subsidies thrown at them:"

Global carbon dioxide emissions predicted to plunge 'unprecedented' 8 percent this year By Rachel Frazin, The Hill, Apr 30, 2020

https://thehill.com/policy/energy-environment/495442-earths-co2-emissions-predicted-to-plunge-unprecedented-8-percent

Link to report: Global Energy Review 2020

The impacts of the COVID-19 crisis on global energy demand and CO2 emissions

By Staff, IEA, Apr 2020

https://www.iea.org/reports/global-energy-review-2020

[SEPP Comment: Another false prediction by IEA?]

Gridwatch's Leo Smith On Renewable's Instability

By Paul Homewood, Not a Lot of People Know That, Apr 30, 2020

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2020/04/30/gridwatchs-leo-smith-on-renewables-instability/}$

"This however is not the instability which is the matter of concern here, what is a matter of concern is the grid frequency – nominally 50Hz± not a lot."

"And what happens if the frequency, now hardly controlled by spinning turbines, drops due to a temporary overload?

"THEY [inverters] SHUT DOWN AND DISCONNECT THEMSELVES!"

Low Electricity Demand and System Balancing Problems during The UK's Coronavirus Lockdown

By John Constable, GWPF, Apr 25, 2020

https://www.thegwpf.com/low-electricity-demand-and-system-balancing-problems-during-the-uks-coronavirus-lockdown/

Energy Issues – Australia

Australian energy security on the brink

By Rafe Champion, WUWT, Apr 30, 2020

https://wattsupwiththat.com/2020/04/30/australian-energy-security-on-the-brink/

Energy Issues -- US

The Economic Thicket of Generating Cost Comparisons

By Kennedy Maize, Power Mag, Mar 31, 2020

https://www.powermag.com/the-economic-thicket-of-generating-cost-comparisons/

Link to Comparing the costs of intermittent and dispatchable electricity generating technologies," By Paul Joskow, American Economic Review, May 2011

https://www.researchgate.net/publication/227357598 Comparing the Costs of Intermittent and Dispatchable Electricity Generating Technologies

[SEPP Comment: States problems of using LCOE alone. Does not consider the main deficiency which is the loss involved when an intermittent generator cannot produce when needed.]

Our love of the cloud is making a green energy future impossible

By Mark Mills, Tech Crunch, Apr 25, 2020

https://techcrunch.com/2020/04/25/our-love-of-the-cloud-is-making-a-green-energy-future-impossible/

Antitrust Protectionism: Domestic Independent Producers Charge "Dumping" against Oil Imports

By Robert Bradley Jr. Master Resource, Apr 30, 2020

https://www.masterresource.org/protectionism/antitrust-protectionism-oil-dumping-then-and-now/ [SEPP Comment: Exposing absurd legal claims during times of shifting markets, particularly consumption.]

Major electric company sets goal for net-zero emissions by 2050

By Rachel Frazin, The Hill, Apr 28, 2020

 $\underline{\text{https://thehill.com/policy/energy-environment/495095-major-electric-company-sets-goal-for-net-zero-emissions-by-2050}$

"Duke Energy, which provides electricity to 7.7 million customers in six states, said Tuesday that it plans to reduce its emissions by phasing out its use of coal while increasing its use of renewable energy."

Renewables Risk Taking Longer to Match Fossil Fuels on Price

By Brian Parkin and William Wilkes, Bloomberg, Via Financial Post, Apr 27, 2020 https://business.financialpost.com/pmn/business-pmn/renewables-likely-to-take-longer-to-match-fossil-fuels-on-price

"Before the pandemic, the outlook for clean power reflected expectations of ever-improving technology, falling costs, and generous government subsidies at a time when it became less profitable to burn coal. Renewable energy's move to becoming consistently cheaper than coal or gas was expected from around 2021, BNEF forecast."

No link to Bloomberg New Energy Finance (BNEF) report

Oil and Natural Gas – the Future or the Past?

"Petroentrepreneurs" are Environmentalists Too (DEPA tribute rings true)

By Robert Bradley Jr. Master Resource, Apr 29, 2020

https://www.masterresource.org/fossil-fuel-utility/oil-gas-producers-are-environmentalists-too/

"Fossil fuels would never brag, but they offer more versatility to create modern comforts than probably any other natural resource."

Nuclear Energy and Fears

Indian Point Unit 2 Will Shut Down April 30

By Darrell Proctor, Power Mag, Apr 27, 2020

https://www.powermag.com/indian-point-unit-2-will-shut-down-april-30/

Indian Point nuclear-reactor shutdown a huge blow to New York's environment

By Robert Bryce, New York Post, Apr 29, 2020

https://nypost.com/2020/04/29/indian-point-nuclear-reactor-shutdown-a-huge-blow-to-nys-environment/

Alternative, Green ("Clean") Solar and Wind

Michael Moore's "Planet Of The Humans" Skewers Renewables, Delivers Same Old Anti-Human Malthusianism By Robert Bryce, Forbes, Apr 23, 2020

https://www.forbes.com/sites/robertbryce/2020/04/23/michael-moores-planet-of-the-humansskewers-renewables-delivers-same-old-anti-human-malthusianism/#2f2fcd8873dc

What's the Cheapest New-Build Power Technology?

By Aaron Larson, Power Mag, Apr29, 2020

https://www.powermag.com/whats-the-cheapest-new-build-power-technology/

[SEPP Comment: The link to the "new report" links to the 2019 report that cites some of the problems of each form of generation.].

Oh Mann!

Mann elected to National Academy of Sciences

Press Release, Penn State, Apr 29, 2020 [H/t WUWT]

https://www.eurekalert.org/pub releases/2020-04/ps-met042820.php

Other Scientific News

New findings suggest laws of nature not as constant as previously thought

Press Release, University of New South Wales, Apr 27, 2020 [H/t WUWT]

https://www.eurekalert.org/pub releases/2020-04/uons-nfs042620.php

"In a paper published in prestigious journal Science Advances, scientists from UNSW Sydney reported that four new measurements of light emitted from a quasar 13 billion light years away reaffirm past studies that have measured tiny variations in the fine structure constant.

"UNSW Science's Professor John Webb says the fine structure constant is a measure of electromagnetism - one of the four fundamental forces in nature (the others are gravity, weak nuclear force and strong nuclear force)."

[SEPP Comment: Unable to locate a new paper by Webb on the fine structure constant.]

Other News that May Be of Interest

Evidence of Late Pleistocene human colonization of isolated islands beyond Wallace's Line

By Staff Writers, Jena, Germany (SPX), May 01, 2020

https://www.terradaily.com/reports/Evidence of Late Pleistocene human colonization of isolat ed islands beyond Wallaces Line 999.html

Link to paper: Isotopic evidence for initial coastal colonization and subsequent diversification in the human occupation of Wallacea

By Patrick Roberts, et al. Nature Communications, Apr 29, 2020

https://www.nature.com/articles/s41467-020-15969-4

From the abstract: "We argue that our data provides clear insights into the huge adaptive flexibility of our species, including its ability to specialize in the use of varied environments, particularly in comparison to other hominid species known from Island Southeast Asia."

NASA develops COVID-19 prototype ventilator in 37 days

By Staff Writers, Pasadena CA (JPL). Apr 24, 2020

https://www.spacedaily.com/reports/NASA develops COVID 19 prototype ventilator in 37 d ays 999.html

US Air Force's X-37B preparing for next space flight

By Staff Writers, Washington DC (Sputnik), May 01, 2020

https://www.spacewar.com/reports/US Air Forces X 37B preparing for next space flight 999 .html

[SEPP Comment: Amusingly, the source of the news is RIA Novosti, a Russian state-operated news agency.]

U.S. Navy releases three 'unidentified aerial phenomena' videos

By Ben Wolfgang, The Washington Times, Apr 27, 2020

https://www.washingtontimes.com/news/2020/apr/27/us-navy-releases-three-unidentified-aerial-phenome/?utm_source=Boomtrain&utm_medium=manual&utm_campaign=evening&utm_term=evening&utm_content=evening&bt_ee=N4dkVv2pFLTVhZ55kl%2BHp4hC4GKsFATFf6qAg7me7rI%3D&bt_ts=1588018449405

Link to videos

https://www.navair.navy.mil/foia/sites/g/files/jejdrs566/files/2020-04/1%20-%20FLIR.mp4

BELOW THE BOTTOM LINE:

The Green Read: Will coronavirus help nature reclaim the Earth?

There are signs of wildlife flourishing in the absence of humans, but COVID-19 has also slowed conservation efforts.

By Nick Clark, Al Jazeera News, Apr 29, 2020 [H/t WUWT]

https://www.aljazeera.com/indepth/features/green-read-coronavirus-nature-reclaim-earth-200429062358033.html

[SEPP Comment: The quote at the end on why trust science from Naomi Oreskes completes the sick joke.]

Elephant seals sightings increase on Fidalgo, Whidbey Islands

By Staff, KGMI News, Apr 28, 2020 [H/t Ken Schlichte]

https://kgmi.com/news/007700-elephant-seals-sightings-increase-on-fidalgo-whidbey-islands/
"Scientists say this could be a sign of warming waters as a result of global climate change and as time goes on, these animals could be a common sight in the Puget Sound."

[SEPP Comment]

Paleontologists identify most dangerous place on Earth

By David Middleton, WUWT, Apr 28, 2020

https://wattsupwiththat.com/2020/04/28/paleontologists-identify-most-dangerous-on-earth/Geology and paleontology of the Upper Cretaceous Kem Kem Group of eastern Morocco By Nizar Ibrahim, et al. ZooKeys, Apr 21, 2020 [H/t WUWT] https://zookeys.pensoft.net/article/47517/

Whaley Bridge Dam Collapse Due To Poor Design & Maintenance, Not Climate Change By Paul Homewood, Not a Lot of People Know That, Apr 29, 2020 https://notalotofpeopleknowthat.wordpress.com/2020/04/29/whaley-bridge-dam-collapse-due-to-poor-design-maintenance-not-climate-change/#more-44562

ARTICLES

'Biography of Resistance' Review: When Bacteria Fight Back

Bacteria are devious organisms always ready to resist attack. To defeat the diseases they cause requires robust testing and transparent analysis.

By David Shaywitz, WSJ, Apr 29, 2020

https://www.wsj.com/articles/biography-of-resistance-review-when-bacteria-fight-back-11588198137?mod=opinion reviews pos1

A timely theme emerging from the history of resistance is the importance of measurement, robust testing and transparent analysis.

TWTW Summary: In reviewing the book by Muhammad H. Zaman, Biography of Resistance: The Epic Battle Between People and Pathogens, the Dr. Shaywitz, a physician-scientist, states:

"In 1918, an influenza pandemic ravaged the globe, infecting more than 500 million people and killing more than 50 million. Yet while the virus weakened the afflicted, it was a later bacterial infection in the lungs that was ultimately responsible for most of the deaths. Bacteria existed on the planet 3.5 billion years before us and apparently haven't quite forgiven us for arriving.

"As we learn from Muhammad H. Zaman's timely 'Biography of Resistance,' bacteria are devious one-cell organisms whose battles with each other over the millennia have led them to develop a remarkable range of weapons in the quest for survival. They are a source of potent antibiotics, what one might call natural poisons, to be directed at a foe. Indeed, many powerful medicines, such as streptomycin and erythromycin, are derived from bacteria. Yet bacteria have also evolved powerful mechanisms to resist attack—tightening their borders, for instance, or expelling a toxin. Each time we develop an effective drug, Mr. Zaman shows through a series of 35 loosely linked vignettes, the targeted bacteria figure out a way to beat it back—to resist.

"Bacterial resistance turns out to be pervasive and unconfined to the modern era of manufactured drugs. It can be found in microbes recovered from the far reaches of remote caves and in the gut flora (microbiome) of people who have lived entirely apart from Western civilization and its expansive pharmacopeia, like the Yanomami of South America and aboriginal populations in Australia.

"Though resistance may be perennial, bacterial exposure to modern antibiotics accelerates its development. As Mr. Zaman reminds us, Alexander Fleming, the discoverer of penicillin, warned of this escalating warfare in his 1945 Nobel Prize address: 'It is not difficult to make microbes resistant to penicillin in the laboratory by exposing them to concentrations not sufficient to kill them, and the same thing has occasionally happened in the body.' If prescribed antibiotics aren't taken for the proper length of time, or if the drug quality is poor (a particular problem in less affluent countries), or if the medicine is taken reflexively rather than when needed (a common dilemma for American pediatricians confronted by anxious parents demanding treatment for a child's viral illness)—then, in each case, bacteria are given a chance to refine their defenses."

After discussing a few disagreements about who was first, the reviewer concludes:

"Even so, more than a few of Mr. Zaman's portraits are admiring. A timely theme emerging from the history of resistance is the importance of measurement, robust testing and transparent analysis. Mr. Zaman describes Tore Midtvedt's pioneering use of an early IBM mainframe, complete with punch cards, to inventory antibiotic resistance in Norway; Danish microbiologist Frank Møller Aarestrup's analysis of latrines from international flights to compare global resistance rates; and U.S. Navy physician King Holmes's doggedness in tracking down the source of resistant venereal disease among sailors docked in the Philippines. We come to recognize the value of—and need for—rapid, point-of-care tests, and we hear echoes of familiar tensions: A

resistance mechanism originally isolated from a patient in India, and named after the city of origin, New Delhi, prompted an outcry from the Indian government in 2010.

"As Mr. Zaman observes, drug companies played a critical role in the production of penicillin in World War II and for several decades invested heavily in antibiotic research. More recently, though, they have turned their attention to areas like oncology, driven by basic economics. "Companies investing in antibiotics," Mr. Zaman explains, "are likely to lose money." To offset this pipeline gap, a national-security-focused government organization partnered in 2016 with Dr. Anthony Fauci and the National Institutes of Health to spur antibiotics innovation. At the same time, some physicians—like Joanne Liu, the former president of Médecins Sans Frontières—worry about yoking antibiotics to national security and thus, in their view, weaponizing health care.

"Antibiotic resistance is a global problem—a disease present in Karachi one day may arrive in Reno, Nev., the next—yet the same connectivity that has spread resistance has eased collaboration across borders. Mr. Zaman's optimism—based on a 'belief in human ingenuity, the vast reserves of natural treasures that are untapped, and the power of coming together'—is welcome, though not always easy to share. Still, his sense of urgency is irresistible."