The Week That Was: 2019-08-10 (August 10, 2019) Brought to You by SEPP (<u>www.SEPP.org</u>) The Science and Environmental Policy Project

Quote of the Week: ""The aim of science is to seek the simplest explanations of complex facts. We are apt to fall into the error of thinking that the facts are simple because simplicity is the goal of our quest. The guiding motto in the life of every natural philosopher should be, 'Seek simplicity and distrust it'."— Alfred North Whitehead [H/t William Readdy]

Number of the Week: \$20/kWh vs. \$1,250/kWh

THIS WEEK: *By Ken Haapala, President, Science and Environmental Policy Project (SEPP)*

High Standards: On his website, Tony Heller frequently posts newspaper articles from the past showing that claims of "unprecedented" heat or cold are not so, at least for the US, where the public has had good weather reporting in the past. In a post presenting the extreme weather and drought experienced in the US during 1934, Heller's post included an excerpt from the January 1907 Monthly Weather Review which has part of a brief essay by C.A. [TWTW was unable to determine who the writer, C.A., was.] Heller included a link to the entire page and essay. The essay bears repeating. (Edited slightly for understanding.)

"IS NOT HONESTY THE WISEST POLICY?"

"A significant article in the Independent of January 31 narrates the trials of an honest independent thinker, who at the end of a long life is only able to say: "I am a slave to my committee, and always have been; .'and again: "I like to recall the intellectual, as well as spiritual, independence of my grandfather, but that was fifty years ago. *** Men are no longer measured by spirituality, or by intellectual achievements. *** It is a miserable fact, which we must honestly face, that the average man is hypnotized out of his independence and manhood by the rich man of his environment. *** The time has come when he who wishes to be successful must be financially independent of his salary."

"All this may be true of the ministerial, educational, and some other professions, **but it ought not** to be true of the scientific man, and least of all of the meteorologist; and yet we are told that the frosts and freezes in one State, droughts and rains in another, earthquakes in still another, the tornadoes of some regions and the hurricanes of others, are matters about which " mum is the word "; that Weather Bureau men must not publish honest reports on these subjects because of the injury to local business enterprises and land booms, and that when they do make honest reports they must suffer attacks from those who wish to suppress the truth.

"This ought not to be. If a few persons are injured by some unexpected natural phenomenon, Be it earthquake, storm, frost, flood, drought, or stroke of lightning, the rest of the world is interested to know that fact; for it enables us all to be on the lookout for similar occurrences. Forewarned is forearmed, and it is the highest duty of the Weather Bureau to care for the best interests of the whole community. We are supported by the whole nation and owe to it our best service. An active businessman may be justified in booming his own business and the financial interests of his clients, but he protects only a small part of the community; and the law does not allow even him, in helping his own friends, to work any injury to others. The weather, the mineral, agricultural and forest conditions, and the health of the community are among those matters of universal interest about which the whole truth should be known as nearly as we can get at it. Every patriotic citizen must rebel at the idea that a government for the people and by the people shall not be permitted to publish an honest report of data gathered by its own official observers for the use of all the people.

"It is wrong to mutilate or suppress the record of an observation of a phenomenon of nature, but it is also wrong to make a bad use of the record. In fact, it is the misuse of meteorological data, not the observing or publishing, that constitutes a crime against the community. Observation and careful research are to be encouraged as useful. Misrepresentations are to be avoided as harmful. The 'Independent Press' as the 'Voice of the People 'should be not only 'Vox Populi' but 'Vox Dei', repressing all cheats and hoaxes, defending the truth and the best interests of the whole nation as against the self-interest of a few.-C. A. "[Boldface added.]

The Monthly Weather Review was established in 1872 by the Army Signal Corps, then transferred to the Weather Bureau under the Department of Agriculture in 1891. In 1979, the Bureau became part of the newly formed National Oceanic and Atmospheric Administration (NOAA) which subsequently transferred the report to the American Meteorological Society (AMS) in 1974. Unfortunately, the leaders of AMS, NOAA, and other organizations, relied upon for honest reporting, appear to be more prone to the fad of making projections/predictions/forecasts from unvalidated mathematical models and speculating therefrom than actually reporting what is occurring. See links under Change Weather.

Uncertainty Monster: For the past several years, on her website Climate Etc., Judith Curry has discussed what she calls the uncertainty monster, great uncertainty in climate models on what may happen from carbon dioxide (CO2) - caused global warming. The uncertainty monster results in models with long, fat tails, with estimates of warming as high as 10°C (18 °F) from a doubling of CO2. In her last post on the subject, Curry discusses the possible scenarios (storylines) for CO2 emissions and their respective probability. The discussion is important but may be unnecessary for several reasons.

One, laboratory experiments and calculations therefrom indicate that the relationship between CO2 and temperatures is a smooth function that can be described as logarithmic, where the increase in temperatures with increasing CO2 above today's 400 parts per million is approaching zero, but not equal to it.

Two, as much as can be done with observational data, where not all outside influences are controlled, Ross McKitrick and John Christy have presented evidence that the temperature in the "tropical hot-spot" is not increasing. Thus, the amplification of CO2-caused warming by water vapor-caused warming is not occurring where it should, to the point that extent can be measured. Thus, water vapor amplifying CO2-caused warming as described in the Charney Report is not being observed and the global climate models depicting it need to be changed. The Charney Report offered no physical evidence substantiating its claim.

Three, once the influences of volcanoes and El Niños are removed from atmospheric temperature trends, the atmosphere is warming slowly, not alarmingly.

And four, the Atmospheric Infrared Sounder, AIRS, onboard NASA's Aqua satellite, launched 2002 is monitoring infrared radiation from earth into space.

"It comes as a surprise to many, but water vapor is the most dominant greenhouse gas in the Earth's atmosphere. It accounts for about 60% of the greenhouse effect of the global atmosphere, far exceeding the total combined effects of increased carbon dioxide, methane, ozone and other greenhouse gases.

"AIRS advanced technology makes it the most advanced water vapor sensor ever built. And AIRS water vapor data is already improving climate models. Beyond water vapor, AIRS measures all the other primary greenhouse gases including carbon dioxide, the largest source of anthropogenic greenhouse gas, carbon monoxide, methane, and ozone."

And

"The AIRS instrument suite was constructed to obtain atmospheric temperature profiles to an accuracy of 1 kelvin for every 1-kilometer layer in the troposphere and an accuracy of 1 kelvin for every 4-kilometer layer in the stratosphere up to an altitude of 40 kilometers. The temperature profile accuracy in the troposphere matches that achieved by radiosondes launched from ground stations. The advantage of the AIRS suite in orbit is the provision of rapid global coverage as radiosonde coverage of Earth's oceans is practically nonexistent."

These data are not showing appreciable warming since 2002. Unfortunately, entities such as NASA-GISS are now claiming that the new, precise instruments are demonstrating a high quality in their highly manipulated, earlier data. In effect, NASA-GISS is reducing the importance of the new instrumentation. A write-up from NASA-GISS now claims:

"The study also confirms what researchers have been saying for some time now: that Earth's global temperature increase since 1880 – about 2 degrees Fahrenheit, or a little more than 1 degree Celsius – cannot be explained by any uncertainty or error in the data. Going forward, this assessment will give scientists the tools to explain their results with greater confidence."

And

"'Uncertainty is important to understand because we know that in the real world, we don't know everything perfectly, 'said Gavin Schmidt, director of GISS and a co-author on the study. 'All science is based on knowing the limitations of the numbers that you come up with, and those uncertainties can determine whether what you're seeing is a shift or a change that is actually important.'"

It is doubtful that such nonsense from NASA/GISS would have been tolerated in the Weather Bureau of 1907.

Discounting comments from NASA-GISS, it appears that Curry's uncertainty monster is largely a product of models and modelers, not from the physics concerned. Of course, uncertainty exists in physics such as in quantum mechanics, where measurement of both velocity and location of an elementary particle cannot be done with great precision. There is a measurement trade-off.

However, this uncertainty does not mean we cannot acquire the data to estimate the greenhouse effect with reasonable accuracy. In an upcoming TWTW, the greenhouse effect as theoretically captured by global climate models compared to what is actually captured by the models will be discussed. See links under Challenging the Orthodoxy and

https://airs.jpl.nasa.gov/mission_and_instrument/overview, https://airs.jpl.nasa.gov/data/products, and https://climate.nasa.gov/news/2876/new-studies-increase-confidence-in-nasas-measure-ofearths-temperature/

Unexpected UN Report: Compared with recent reports from the UN Intergovernmental Panel on Climate Change (IPCC), the latest special report is surprising mild and many of the conclusions are defensible. For many years, the US Department of Agriculture emphasized that farmers need to conserve the soil through methods such as better tillage, crop rotation and cover crops. Protecting the land from erosion was a common theme.

Protecting the land seems to be the major theme in the latest IPCC report: "Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems." Of course, vegetarians and other anti-meat-eaters claimed the report reinforced their dietary wishes.

In an essay in the Wall Street Journal, vegetarian Bjorn Lomborg disagreed. He wrote:

"... The report correctly points to the need to improve global food systems, but pundits are fixating on the supposed need for people in rich countries to change their dining habits radically. This is an ineffective and unachievable policy response.

"Along with the report, the Intergovernmental Panel on Climate Changes published 20 'headline statements' for policy makers. Only one estimates the effect of dietary responses. It relies on a 2016 paper that finds if the entire world switched to a vegan diet, giving up dairy and eggs as well as meat—what the U.N. calls the 'most extreme scenario'—food-related greenhouse-gas emissions could be cut by up to 70%.

"This sounds more impressive than it is: Only a seventh of all emissions are food-related. Besides, the estimate also assumes that 'people consume just enough calories to maintain a healthy body weight.""

Vegetarian Lomborg also notes:

"Going vegetarian is actually quite difficult. One large U.S. survey from 2014 found 84% of would-be vegetarians abandon the diet in less than a year. A 2015 literature review found switching successfully to vegetarianism reduces individual carbon emissions by the equivalent of 1,190 pounds of carbon dioxide per year. That's only 4.3% of emissions for the average person in a developed country."

Most of the articles discussing the report are a good indication of the ideology driving the publisher. See Article # 2 and links under Defending the Orthodoxy and Agriculture Issues & Fear of Famine.

Not All Reanalysis Data: Last week's TWTW discussed a post by Roy Spencer supporting the use of US Reanalysis Data for surface temperatures. This week, Spencer noted that not all

reanalysis data are of the same quality. He found a statistical bias indicating a spurious warming in the dataset used by the World Meteorological Organization (WMO), ERA5. To TWTW, this spurious warming is not particularly surprising given that the WMO projects warming in areas of Antarctica where there are no thermometers and UAH satellite data shows no warming trends over 40 years. See links under Measurement Issues – Surface.

Battery Power Costly? Energy expert Donn Dears did a simple calculation of the cost of operating a battery-electric vehicle (BEV) as compared with a comparable vehicle with an internal combustion engine (ICE). He used an expected life of 11 years with the BEV requiring a replacement of the battery pack after 8 years or 80,000 miles. He made three sets of estimates for electricity costs and three sets for gasoline costs.

Dears concluded that the cost of ownership for a BEV is never competitive with an ICE vehicle when the cost for electricity is high, even if the cost of gasoline is high, such as in California. A side note, Jo Nova has an amusing photo of an electric car charging point, with a diesel-powered generator. See links under Alternative, Green ("Clean") Vehicles.

Green Power – Concrete and Steel and Mining Too: Mark Mills has been skeptical of claims by green advocates about yet to be demonstrated improvements, such as greatly increased efficiency of wind turbines. In the Wall Street Journal, he discusses the need of concrete and steel and for mining to meet the envisioned "needs" for "green energy", so-called "renewables." Some of the specifics include:

"Building one wind turbine requires 900 tons of steel, 2,500 tons of concrete and 45 tons of nonrecyclable plastic. [Size not specified.] Solar power requires even more cement, steel and glass—not to mention other metals. Global silver and indium mining will jump 250% and 1,200% respectively over the next couple of decades to provide the materials necessary to build the number of solar panels, the International Energy Agency forecasts. World demand for rare-earth elements—which aren't rare but are rarely mined in America—will rise 300% to 1,000% by 2050 to meet the Paris green goals. If electric vehicles replace conventional cars, demand for cobalt and lithium, will rise more than 20-fold. That doesn't count batteries to back up wind and solar grids.

The demand for minerals likely won't be met by mines in Europe or the U.S. Instead, much of the mining will take place in nations with oppressive labor practices. The Democratic Republic of the Congo produces 70% of the world's raw cobalt, and China controls 90% of cobalt refining. The Sydney-based Institute for a Sustainable Future cautions that a global 'gold' rush for minerals could take miners into 'some remote wilderness areas [that] have maintained high biodiversity because they haven't yet been disturbed.'

The enormous environmental damage done in China and the Congo from mining for lithium and cobalt needed for batteries is largely ignored by the western press and the green industry. Instead the green industry is trying to shut down what little mining is occurring in the US. See Article #1 and links under Challenging the Orthodoxy.

SEPP'S APRIL FOOLS AWARD THE JACKSON

The voting is closed and the winner who most closely meets the qualification is being selected. No missing shards here, one hopes.

Number of the Week: \$20/kWh vs. \$1,250/kWh. Using very rough numbers, a research team headed by members of the Institute for Data, Systems, and Society, MIT, estimated that "energy storage capacity below \$20/kWh could enable cost-competitive baseload power" with wind and solar as the primary generation sources. The study is based on 4 locations over 20 years with hourly resolution. However, as Tom Quirk of Australia has repeatedly shown, hourly resolution can be very misleading, hiding generation failures that are brief but when totaled, significant.

In 2018, the US EIA published rough estimates of costs of different battery storage technologies based on technical characteristics. Short term batteries have durations less than 30 minutes, long term have more than 2-hour nameplate duration. The median capacity-weighted average for all technologies is about \$1,250/kWh.

For western civilization to achieve the "green dream" of no fossil fuel use, a great deal of earth moving is needed, also great technological breakthroughs are need. Mobilizing the needed earth movement is possible at great expense and hardship, but the needed technological improvements cannot be commanded or expected. See links under Alternative, Green ("Clean") Energy -- Storage

NEWS YOU CAN USE:

Science: Is the Sun Rising?

22-minute talk summarizing my views on global warming By Nir Shaviv, Science Bits, Aug 4, 2019 <u>http://www.sciencebits.com/22-minute-talk-summarizing-my-views-global-warming</u> [SEPP Comment: From the ICCC-13 conference organized by The Heartland Institute.]

Climategate Continued

In Search of the Enchanted Larch of Yamal By Charles the Moderator, WUWT, Aug 6, 2019 https://wattsupwiththat.com/2019/08/06/in-search-of-the-enchanted-larch-of-yamal/

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 <u>https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf</u> *Summary*: http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2014 <u>http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/</u> *Summary*: <u>https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf</u>

Climate Change Reconsidered II: Fossil Fuels

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019 <u>http://store.heartland.org/shop/ccr-ii-fossil-fuels/</u> Download with no charge: <u>http://climatechangereconsidered.org/wp-content/uploads/2019/01/Climate-Change-</u> <u>Reconsidered-II-Fossil-Fuels-FULL-Volume-with-covers.pdf</u>

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 <u>http://climatechangereconsidered.org/</u> Download with no charge: <u>https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming</u>

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

My new video – Climate Change Reconsidered II: Fossil Fuels

By Anthony Watts, WUWT, July 14, 2019 https://wattsupwiththat.com/2019/07/14/my-new-video-climate-change-reconsidered-ii-fossilfuels/

Challenging the Orthodoxy

Michael Crichton: Famous novelist, physician, modern-day genius

By John Dale Dunn, American Thinker, Aug 4, 2019

https://www.americanthinker.com/blog/2019/08/michael_crichton_famous_novelist_physician_m_odernday_genius.html

"We must daily decide whether the threats we face are real, whether the solutions we are offered will do any good, whether the problems we're told exist are in fact real problems, or non-problems. ... Every one of us has a sense of the world, and we all know that this sense is in part given to us by what other people and society tell us[.] ...

"I consider our past record of environmental action discouraging, to put it mildly, because even our best intended efforts often have gone awry. At the same time, I think we do not recognize our past failures, and face them squarely. ..."

Ten Causes of Warming: The Layperson's Checklist

Guest post by Jim Steele, WUWT, Aug 8, 2019 https://wattsupwiththat.com/2019/08/08/ten-causes-of-warming-the-laypersons-checklist/

An establishment rebellion

Why the elite loves the eco-warriors. By Fraser Myers, Spiked, Aug 8, 2019 https://www.spiked-online.com/2019/08/08/an-establishment-rebellion/ "By contrast, environmentalist campaigns like Extinction Rebellion are, by their very nature, against freedom. They seek to place new limits on human activity: on industry, on economic growth, on our travel, on our diets, and on childbirth."

Climate uncertainty monster: What's the worst case?

By Judith Curry, Climate Etc. **Oct 11, 2018** <u>https://judithcurry.com/2018/10/11/climate-uncertainty-monster-whats-the-worst-case/</u> Link to slides from the Rand presentations: Climate Change & the Uncertainty Monster By Judith Curry, Climate Forecast Applications Network, August 2018 <u>https://curryja.files.wordpress.com/2018/10/rand-uncertainty1.pdf</u> And: Uncertainty in climate projections By Judith Curry and Mona Behl, Climate Etc. Aug 20, 2018 <u>https://judithcurry.com/2018/08/20/uncertainty-in-climate-projections/</u>

New Michael Moore-Backed Documentary Takes Critical Look at Alternative Energy By Staff AP, Aug 7, 2019

https://ktla.com/2019/08/07/new-michael-moore-backed-documentary-takes-critical-look-atalternative-energy/

Past, present and future progress requires mining

By John Clema, WUWT, Aug 7, 2019 https://wattsupwiththat.com/2019/08/07/past-present-and-future-progress-requires-mining/

Defending the Orthodoxy

Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

By Staff, IPCC, Aug 8, 2019 <u>https://www.ipcc.ch/report/srccl/?mod=article_inline</u> <u>https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM_Approved_Microsite_FINAL.pdf</u> *[SEPP Comment: And if we cut CO2 needed for photosynthesis, we will grow more food?]*

Explainer: 'Desertification' and the role of climate change

Desertification has been described as the "the greatest environmental challenge of our time" and climate change is making it worse.

By Robert McSweeney, Carbon Brief, Aug 6, 2019

https://www.carbonbrief.org/explainer-desertification-and-the-role-of-climate-

change?utm_campaign=RevueCBWeeklyBriefing&utm_medium=email&utm_source=Revue%20 newsletter

[SEPP Comment: Great propaganda photo of eroded land with lots of green!]

Leadership without care

By RK Pachauri, The Pioneer, Aug 7, 2019 [H/t Dennis Ambler] https://www.dailypioneer.com/2019/columnists/leadership-without-care.html

"The writer is former chairman, Intergovernmental Panel on Climate Change, 2002-15" [SEPP Comment: Does title apply to the author who did not care for integrity of the science in the reports the IPCC produced?]

UN Emergency Climate Action Summit

By Donn Dears, Power For USA, Aug 9, 2019 https://ddears.com/2019/08/09/un-emergency-climate-action-summit/

IPCC announces Fatwa on meat eating

By Jo Nova, Her Blog, Aug 9, 2019 http://joannenova.com.au/2019/08/ipcc-announces-fatwa-on-meat-eating/

114 private jets gathered in Sicily to fight carbon emissions

Do their ends justify their means? By Lubos Motl, The Reference Frame, Aug 5, 2019 <u>https://motls.blogspot.com/2019/08/114-private-jets-gathered-in-sicily-to.html</u> [SEPP Comment: Reasons why carbon dioxide indulgencies will not work even though the wealthy would expect them.]

Questioning the Orthodoxy

Google, Groupthink & the Media

The media fosters intellectual conformity. Is Google taking the same path? By Donna Laframboise, Big Picture News, Aug 7, 2019

https://nofrakkingconsensus.com/2019/08/07/google-groupthink-the-media/

"Without any censorship, in the West fashionable trends of thought and ideas are carefully separated from those which are not fashionable; nothing is forbidden, but what is not fashionable will hardly ever find its way into periodicals or books or be heard in colleges. Legally your researchers are free, but they are conditioned by the fashion of the day."

Dismantling Free Markets Won't Solve Biodiversity Threat

The biodiversity threat won't be tackled by alarmist biologist hype and dismantling capitalism. By Matt Ridley, Human Progress, May 9, 2019 <u>https://humanprogress.org/article.php?p=1911</u>

Julia Hartley-Brewer: Don't Panic About Climate Change: The End Isn't Nigh

By Julia Hartley-Brewer, Sunday Express, Aug 5, 2019 https://www.thegwpf.com/julia-hartley-brewer-dont-panic-the-end-isnt-nigh/

The Elites, the Media & the Little People

By Donna Laframboise, Big Picture News, Aug 5, 2019 https://nofrakkingconsensus.com/2019/08/05/the-elites-the-media-the-little-people/

After Paris!

China's emissions 'could peak 10 years earlier than Paris climate pledge'–Claim Carbon Brief

By Paul Homewood, Not a Lot of People Know That, Aug 8, 2019 <u>https://notalotofpeopleknowthat.wordpress.com/2019/08/08/chinas-emissions-could-peak-10-</u> years-earlier-than-paris-climate-pledge-claim-carbon-brief/

China coal mine approvals surge despite climate pledges By David Stanway, Muyu Xu, Reuters, Aug 6, 2019 [H/t WUWT] https://uk.reuters.com/article/us-china-coal-climate/china-coal-mine-approvals-surge-despiteclimate-pledges-idUKKCN1UW0EM

Change in US Administrations

EPA submits final controversial car emissions rule to the White House By Miranda Green, The Hill, Aug 5, 2019 <u>https://thehill.com/policy/energy-environment/456206-epa-submits-final-controversial-car-</u> <u>emissions-rule-to-the-white</u>

Top climate change scientist quits USDA, says Trump administration tried to bury his study By Chris Mills Rodrigo and Rebecca Beitsch, The Hill, Aug 5, 2019

https://thehill.com/homenews/administration/456153-top-climate-change-scientist-quits-usdasaying-trump-administration

[SEPP Comment; Unable to locate link to study: the important question in "nutrient loss" is how much? Ten percent, 1 percent, one-tenth of one percent? Does it apply to all varieties, or a few varieties? Given the poor quality of research on agriculture issues in the Fourth National Climate Assessment, it cannot be assumed that the scientific method was rigorously applied.]

Seeking a Common Ground

Why You Shouldn't Draw Trend Lines on Graphs Guest essay by Kip Hansen, WUWT, Aug 6, 2019 https://wattsupwiththat.com/2019/08/06/why-you-shouldnt-draw-trend-lines-on-graphs/

Chris Kenny: Sensible Climate Discussion Now Extinct,

By Chris Kenny, The Australian, Via GWPF, Aug 6, 2019 https://www.thegwpf.com/sensible-climate-discussion-now-extinct/

Review of Recent Scientific Articles by CO2 Science

The Positive Impact of Fossil Fuel Use on Terrestrial Net Primary Productivity O'Sullivan, M.O., Spracklen, D.V., Batterman, S.A., Arnold, S.R., Gloor, M. and Buermann, W. 2019. Have synergies between nitrogen deposition and atmospheric CO2 driven the recent enhancement of the terrestrial carbon sink? *Global Biogeochemical Cycles* 33: <u>https://doi.org/10.1029/2018GB005922</u>. Aug 8, 2019 <u>http://www.co2science.org/articles/V22/aug/a1.php</u>

Model Issues

How'd They Calculate That? News Brief by Kip Hansen, WUWT, Aug 7, 2019 <u>https://wattsupwiththat.com/2019/08/07/howd-they-calculate-that/</u> [SEPP Comment: Interesting question: do different models have different priorities in calculations?]

Measurement Issues -- Surface Evidence that ERA5-based Global Temperatures Have Spurious Warming By Roy Spencer, His Blog, Aug 6, 2019 http://www.drroyspencer.com/2019/08/evidence-that-era5-based-global-temperatures-havespurious-warming/ [SEPP Comment: Not particularly surprising given that the WMO projects warming in areas of Antarctica where there are no thermometers and UAH satellite data shows no warming over 40 years.]

Feast your eyes on Streaky Bay's thermometer — **over bitumen for 31 long hot years** By Jo Nova, Her Blog, Aug 9, 2019

http://joannenova.com.au/2019/08/feast-your-eyes-on-streaky-bays-thermometer-over-bitumenfor-31-long-hot-years/

Lady Elliot, Temperature Trends

By Jennifer Marohasy, Her Blog, Aug 3, 2019 https://jennifermarohasy.com/2019/08/lady-elliot-just-a-hot-flush/

New Temperature Reconstruction Shows Asia's Tianshan Mountains Were 1-2°C Warmer During The 1700s

By Kenneth Richard, No Tricks Zone, Aug 8, 2019 <u>https://notrickszone.com/2019/08/08/new-temperature-reconstruction-shows-asias-tianshan-mountains-were-1-2c-warmer-during-the-1700s/</u> Link to paper: A 333-year Record of the Mean Minimum Temperature Reconstruction in the

Western Tianshan Mountains, China By Liang Jiao, et al., Geochronmetria, Aug 9, 2019 https://www.degruyter.com/downloadpdf/j/geochr.2019.46.issue-1/geochr-2015-0104/geochr-

2015-0104.pdf

Measurement Issues -- Atmosphere

July 2019 Maps and Graphs Global Temperature Report By Staff, Earth System Science Center, University of Alabama in Huntsville, August 2019 <u>https://www.nsstc.uah.edu/climate/2019/july2019/201907_map.png</u> <u>https://www.nsstc.uah.edu/climate/2019/july2019/tlt_201907_bar.png</u>

Changing Weather

What An Actual Climate Crisis Looks like By Tony Heller, The Deplorable Climate Science Blog, Aug 9, 2019 https://realclimatescience.com/2019/08/what-an-actual-climate-crisis-looks-like/

So hot that we can see those Urban Heat Islands from space

By Jo Nova, Her Blog, Aug 8, 2019 http://joannenova.com.au/2019/08/we-can-see-the-urban-heat-islands-from-space/

Heatwaves & Flash Floods The "New Normal"? They Always Have, Hayley!

By Paul Homewood, Not a Lot of People Know That, Aug 9, 2019 https://notalotofpeopleknowthat.wordpress.com/2019/08/09/heatwaves-flash-floods-the-newnormal-they-always-have-hayley/#more-40822

Changing Seas

Fort Denison Mean Sea Levels By Geoff, Australian Climate Sceptics Blog, Aug 6, 2019 http://theclimatescepticsparty.blogspot.com/2019/08/fort-denison-mean-sea-levels.html [SEPP Comment: Video describing the rising and falling of Fort Dennison mean sea levels, outside of Sydney.]

Global sea level rise began accelerating '30 years earlier' than previously thought By Aysha Tandon, Carbon Brief, Aug 5, 2019

https://www.carbonbrief.org/global-sea-level-rise-began-accelerating-30-years-earlier-thanpreviously-

thought?utm_campaign=RevueCBWeeklyBriefing&utm_medium=email&utm_source=Revue%2 Onewsletter

Persistent acceleration in global sea-level rise since the 1960s

By Sönke Dangendorf, et al. Nature, Climate Change, Aug 5, 2019

https://www.nature.com/articles/s41558-019-0531-8.epdf?referrer_access_token=-

plgB5TbKKnflZI2-Rp Y9RgN0jAjWel9jnR3ZoTv0POF4mAz6W3bjTqsiopGrbvEY-

iI3I8EWAjZtfQayJrIvMt0tDOoNrzBNPOP S mQqdRkgecvmppnhmBSt3G6jUOH9PWBDY3z

D3UHfeeVoljkaZhWFZCLdX2ml3RANT0PnGPuhz_Oc6fPx72x5syqVv8ZL4jQ6P_3HofMncw DaHICpdTCy_ZpBaP3F06bStMcA-

5_4BOVgEg6QhT25PeWJq2pjaH3w2Q2fv3D1IqlahPKo5WrWLlAnGooucuX7ZCfUrNMPNob 6s5erIer4jBSoawlzJC9zJBfT8vJCx98YfhALAsxLq6FSZ6I1NEA87uG0REPL2qmNswW0xLqjD Paet_mMLxi_K8F6RryigRfoIIyTqjHpQ2SK1VygITVINeoKkiW9pg-

sUu_tyHvhIqaTy&tracking_referrer=www.carbonbrief.org

[SEPP Comment: Measuring global sea level rise from 1968 to 2015 with an accuracy of plus or minus 0.01mm/year???]

Inconvenient Study: Sea level rise likely not to drown low-lying Pacific atolls

By H. Sterling Burnett, WUWT, Aug 5, 2019

https://wattsupwiththat.com/2019/08/05/inconvenient-study-sea-level-rise-likely-not-to-drown-low-lying-pacific-atolls/

Link to paper: Physical modelling of the response of reef islands to sea-level rise By Tuck, Kench, Ford, and Messelink, Gelology, July 5, 2019

 $\label{eq:https://pubs.geoscienceworld.org/gsa/geology/article-abstract/572047/physical-modelling-of-the-response-of-reef-islands?redirectedFrom=fulltext$

Changing Cryosphere – Land / Sea Ice

For Most Of The Last 10,000 Years, Greenland Ice Sheet and Glacier Volume Was Smaller Than Today

By Kenneth Richard, No Tricks Zone, Aug 5, 2019 https://notrickszone.com/2019/08/05/for-nearly-all-of-the-last-10000-years-greenland-ice-sheetand-glacier-volume-was-smaller-than-today/

Alaska waters with no sea ice are not a problem for Pacific walrus or polar bears

By Susan Crockford, Polar Bear Science, Aug 7, 2019

https://polarbearscience.com/2019/08/07/alaska-waters-with-no-sea-ice-are-not-a-problem-for-pacific-walrus-or-polar-bears/

[SEPP Comment: The success of the Marine Mammal Act indicates dangerous carbon dioxidecaused climate change?]

Nothing Happening In The Arctic

By Tony Heller, The Deplorable Climate Science Blog, Aug 9, 2019 https://realclimatescience.com/2019/08/nothing-happening-in-the-arctic-3/

Not predicted: more sea ice than average in southern-most Arctic first week of August

By Susan Crockford, Polar Bear Science, Aug 9, 2019 https://polarbearscience.com/2019/08/09/not-predicted-more-sea-ice-than-average-in-southernmost-arctic-first-week-of-august/

Changing Earth

Drop of ancient seawater rewrites Earth's history

By Staff Writers, Johannesburg, South Africa (SPX) Aug 05, 2019 <u>http://www.terradaily.com/reports/Drop_of_ancient_seawater_rewrites_Earths_history_999.html</u> Link to paper: Deep hydrous mantle reservoir provides evidence for crustal recycling before 3.3 billion years ago By Alexander V. Sobolev, et al. Nature, July 25, 2019 <u>https://www.nature.com/articles/s41586-019-1399-5</u>

Groundwater reserves in Africa may be more resilient to climate change than first thought

By Mark Cuthbert and Richard Taylor, The Conversation, Aug 7, 2019 [H/t GWPF] <u>https://theconversation.com/groundwater-reserves-in-africa-may-be-more-resilient-to-climate-change-than-first-thought-120948</u>

[SEPP Comment: Not thought, or not known, by whom?]

Acidic Waters

Strange coral spawning improving Great Barrier Reef's resilience

By Staff, Press Release, The University of Queensland, AU, Aug 6, 2019 [H/t GWPF] https://www.uq.edu.au/news/article/2019/08/strange-coral-spawning-improving-great-barrierreef%E2%80%99s-resilience/

Link to paper: Split spawning increases robustness of coral larval supply and inter-reef connectivity

By Karlo Hock, et al., Nature, Communications, Aug 1, 2019 https://www.nature.com/articles/s41467-019-11367-7

Study considers sensory impacts of environmental change on ocean species

Lays groundwork for more research on communication pathways in the sea By Staff, NSF, Aug 1, 2019

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=298977&WT.mc_id=USNSF_1

"Studies of how global environmental change is impacting marine organisms have long focused on physiological effects—for example, an oyster's decreased ability to build or maintain a strong shell in an ocean that is becoming more acidic due to excess levels of carbon dioxide." [SEPP Comment: Hardly compelling when ocean waters will remain alkaline.]

Agriculture Issues & Fear of Famine

Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

By Staff, IPCC, Aug 8, 2019

https://www.ipcc.ch/report/srccl/?mod=article_inline [SEPP Comment: And if we cut CO2 needed for photosynthesis, we will grow more food?]

The UN's Food Police

By Paul Homewood, Not a Lot of People Know That, Aug 9, 2019 <u>https://notalotofpeopleknowthat.wordpress.com/2019/08/09/the-uns-food-police/</u> [SEPP Comment: An interview of Marc Morano of CFACT.]

We must change food production to save the world, says leaked report

Cutting carbon from transport and energy 'not enough' IPCC finds By Robin McKie. The Guardian. Aug 4. 2019 [H/t Climate Depot] <u>https://www.theguardian.com/environment/2019/aug/03/ipcc-land-use-food-production-key-toclimate-crisis-leaked-report</u>

To Slow Global Warming, U.N. Warns Agriculture Must Change

By Rebecca Hersher, and Allison Aubrey, NPR, Aug 8, 2019 https://www.npr.org/sections/thesalt/2019/08/08/748416223/to-slow-global-warming-u-n-warnsagriculture-must-change

Lowering Standards

Malfeasant Omissions? German Flagship ARD Broadcasting One-Sided, Drama-Making Sea Level Reporting

By P Gosselin, No Tricks Zone, Aug 9, 2019

https://notrickszone.com/2019/08/09/malfeasant-omissions-german-flagship-ard-broadcastingone-sided-drama-making-sea-level-reporting/

[SEPP Comment: The public should not expect unbiased newscasts from publicly funded stations?]

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

Throwing cold water on extreme heat hype By Paul Homewood, Not a Lot of People Know That, Aug 9, 2019 <u>https://notalotofpeopleknowthat.wordpress.com/2019/08/09/throwing-cold-water-on-extreme-heat-hype/</u>

Global warming brings increasing wildfire risk to rainy parts of the Pacific Northwest By Tom James, AP, Aug 4, 2019

https://www.oregonlive.com/pacific-northwest-news/2019/08/global-warming-brings-increasing-wildfire-risk-to-rainy-parts-of-the-pacific-northwest.html

Media Ignore Vast Summer Cold Across Northern Hemisphere; Southern USA, Russia See "Record Lows" In July

By P Gosselin, No Tricks Zone, Aug 3, 2019 https://notrickszone.com/2019/08/03/media-ignore-vast-summer-cold-across-northernhemisphere-southern-usa-russia-see-record-lows-in-july/

Siberia forest fires spark potential 'disaster' for Arctic By Maria Panina, Phys.org, July 30, 2019 https://phys.org/news/2019-07-siberia-forest-potential-disaster-arctic.html

Communicating Better to the Public – Make things up.

Anthropocene: "it will be the rocks that have the final say" about this fake word. Guest geology by David Middleton, WUWT, Aug 7, 2019 https://wattsupwiththat.com/2019/08/07/anthropocene-it-will-be-the-rocks-that-have-the-finalsay-about-this-fake-word/ [SEPP Comment: Dismissing non-science.]

Time Magazine: Arctic Nearing 'Point of No Return' From Climate Change

By Thomas Williams, Brietbart, Aug 3, 2019 https://www.breitbart.com/environment/2019/08/03/time-magazine-arctic-nearing-point-of-noreturn-from-climate-change/

July heatwave up to 3C hotter due to climate change

By Patrick Galey, Paris (AFP), Aug 2, 2019

http://www.terradaily.com/reports/July_heatwave_up_to_3C_hotter_due_to_climate_change_999. html

[SEPP Comment: And the extreme cold in eastern Europe, Russia was from CO2- caused global warming?]

Communicating Better to the Public – Go Personal.

Fake news: an open letter to the Editor of the Washington Post By Christopher Monckton of Brenchley, WUWT, Aug 5, 2019 <u>https://wattsupwiththat.com/2019/08/05/fake-news-an-open-letter-to-the-editor-of-the-washington-post/</u>

Climate Expert or UN certified Seer? Joelle Gergis does "gut-wrenching" grieving horror, volcanic rage

By Jo Nova, Her Blog, Aug 5, 2019 http://joannenova.com.au/2019/08/climate-expert-or-un-certified-seer-joelle-gergis-does-gutwrenching-grieving-horror-volcanic-rage/

Communicating Better to the Public – Use Propaganda

Can we avert a climate change apocalypse by hacking the planet's atmosphere? And should we?

By Anna Salleh, ABC News, AU, July 23, 2019 {H/t PV Sheriden] https://www.abc.net.au/news/science/2019-07-24/climate-hacking-to-avoid-a-global-warmingapocalypse/11300460

Communicating Better to the Public – Use Propaganda on Children

Extinction Rebellion means "Suppress resistance to one's government." By Chris Kenny, Australian Climate Sceptics, Aug 6, 2019 http://theclimatescepticsparty.blogspot.com/2019/08/extinction-rebellion-means-suppress.html

Greta Throws Journalists Out of Climate Summit

By Fabienne Kinzelmann and Andrea Cattani Bick, Swiss News, Via GWPF, Aug 9, 2019 https://www.thegwpf.com/green-mini-dictator-greta-throws-news-journalists-out-of-climatesummit/

[SEPP Comment: Teen-age thinking taken to new levels of thinking? Or is it teen-age behavior?]

Expanding the Orthodoxy

Climate Rent-Seeking Backfiring on Chemours As Economic Reality Intrudes By Ben Lieberman, CEI, Aug 9, 2019

https://cei.org/blog/climate-rent-seeking-backfiring-chemours

Questioning European Green

Green Energy Transition Flops as Global Demand for Fossil Fuels Is Growing By Staff, Financial Times, Aug 3, 2019 https://www.thegwpf.com/green-energy-transition-flops-as-global-demand-for-fossil-fuels-isgrowing/

"Coal, oil and gas still expected to contribute 85% of primary power supply by 2040."

EU's Energy Policy Makes Brexit Seem More Reasonable

By Larry Bell, Newsmax, Aug 5, 2019 https://www.newsmax.com/larrybell/cnn-may-green-fisa/2019/08/05/id/927314/

Committee On Climate Change Budget Rose By 36% Last Year

By Paul Homewood, Not a Lot of People Know That, Aug 7, 2019 <u>https://notalotofpeopleknowthat.wordpress.com/2019/08/07/committee-on-climate-change-budget-rose-by-36-last-year/</u>

Germany: 'Meat tax' on the table to protect the climate

Meat is relatively cheap for consumers in Germany. But that could all be about to change as lawmakers from across the political spectrum back proposals aimed at climate protection and animal welfare.

By Staff, D/W, Aug 7, 2019 https://www.dw.com/en/germany-meat-tax-on-the-table-to-protect-the-climate/a-49924795

Questioning Green Elsewhere

'Sustainability' Accounting: Subjectivism Compounded (political numbers pollution) By Robert Bradley Jr. Master Resource, Aug 8, 2019 https://www.masterresource.org/sustainable-development/sustainability-accounting-subjective

https://www.masterresource.org/sustainable-development/sustainability-accounting-subjectivism-compounded/

Kiwi Climatology: Land of the Long White Clods

By Walter Starck, Quadrant, Aug 9, 2019 https://quadrant.org.au/opinion/doomed-planet/2019/08/kiwi-climatology-land-of-the-long-whiteclods/

"The whole idea of tearing the heart out of a nation's economy to reduce methane emissions from livestock is an unbelievable display of scientific, technological and economic ignorance. It goes far beyond simply not knowing or being mistaken."

[SEPP Comment: Despite claims by the IPCC, in the atmosphere, the greenhouse effect of methane is negligible on this planet as Starck explains.]

Seattle eyes its own 'green new deal'

By John Ryan, KUOW, Aug 1, 2019 [H/t Gordon Fulks] https://www.kuow.org/stories/city-council-eyes-green-new-deal-for-seattle [SEPP Comment: What will a carbon friendly Seattle look like? Deserted? Will the ferries rely on sails and oars?]

Funding Issues Climate Hysteria: Follow the Money

By Michael Kile, Quadrant, Aug 11, 2019

https://quadrant.org.au/opinion/doomed-planet/2019/08/climate-hysteria-follow-the-money/ "Don't be tricked, dear reader, by a "higher purpose" assertion or the constant 'climate change' alarmism. And don't be casual about causality. The misguided quest to' save the planet' is based on a false premise. Carbon dioxide is not a pollutant, nor is it the primary driver of the Earth's ever-changing climate. Go tell it on the mountain."

Litigation Issues

Fraud and corruption bring big payoffs

California judges provide stage for kangaroo court justice over Roundup weedkiller By Paul Driessen, WUWT, Aug 4, 2019 https://wattsupwiththat.com/2019/08/04/fraud-and-corruption-bring-big-payoffs/

Bayer Proposes Paying \$8 Billion to Settle Roundup Cancer Claims

By Jef Feeley, Joel Rosenblatt, and Tim Loh, Bloomberg, Aug 9, 2019 <u>https://www.bloomberg.com/news/articles/2019-08-09/bayer-is-said-to-seek-8-billion-roundup-cancer-claim-settlement</u>

EPA and other Regulators on the March

EPA proposes rolling back states' authority over pipeline projects By Rebecca Beitsch, The Hill, Aug 9, 2019 <u>https://thehill.com/policy/energy-environment/456901-epa-proposes-rolling-back-states-authorities-over-pipeline-projects</u>

Energy Issues – Non-US

German Agency For Disaster Preparedness Calls On Citizens To "Be Ready For Widespread Blackouts"

By P Gosselin, No Tricks Zone, Aug 7, 2019 https://notrickszone.com/2019/08/07/german-agency-for-disaster-preparedness-calls-on-citizensto-be-ready-for-widespread-blackouts/

[SEPP Comment: Warning of blackouts from natural disasters from climate change such as droughts, heat waves and floods, cyber-attacks, and erratic grid fluctuations.]

Energy Issues – Australia

Australian Government Sues Wind Farm Operators Over the 2016 South Australian Blackout

Guest essay by Eric Worrall, WUWT, Aug 10, 2019 <u>https://wattsupwiththat.com/2019/08/10/australian-government-sues-wind-farm-operators-over-</u> the-2016-south-australian-blackout/

How to destroy the solar industry — lesson from the Socialist republic of Victoria By Jo Nova, Her Blog, Aug 6, 2019 <u>http://joannenova.com.au/2019/08/how-to-destroy-the-solar-industry-lesson-from-the-socialist-</u> republic-of-victoria/

Energy Issues -- US

Americans Need a Balanced Energy Portfolio By David Holt, Real Clear Energy, Aug 6, 2019 https://www.realclearenergy.org/articles/2019/08/06/americans_need_a_balanced_energy_portfoli o_110464.html /SEPP Comment: How are erratic sources balanced?]

Houston's 'Sustainability' Planning: More Climate Pork

By Charles Battig, Master Resource, Aug 7, 2019 https://www.masterresource.org/uncategorized/houstons-sustainability-planning-more-climatepork/

D.C.'s Climate Litigation Hypocrisy

By Clara McGrail, Energy in Depth, Aug 1, 2019 https://eidclimate.org/d-c-s-climate-litigation-hypocrisy/

Oil and Natural Gas – the Future or the Past?

How the US shale revolution changed the face of geopolitics By John Hulsman, City A.M., July 8, 2019 https://www.cityam.com/how-the-us-shale-revolution-changed-the-face-of-geopolitics/

Surf's Up: Second wave of LNG is here

By Sergio Chapa, Houston Chronicle, July 26, 2019 https://www.houstonchronicle.com/business/energy/article/Surf-s-Up-Second-wave-of-LNG-ishere-14149273.php

Return of King Coal?

India expects coal capacity to swell by a fifth in three years

Chief Engineer at the country's Federal Power Ministry, Ghanshyam Prasad, said coal capacity is likely to reach 238GW by 2022 By Jonny Bairstow, Energy Live, Aug 5, 2019 <u>https://www.energylivenews.com/2019/08/05/india-expects-coal-capacity-to-swell-by-a-fifth-in-three-years/</u>

Oil Spills, Gas Leaks & Consequences

Natural Gas Pipeline In Kentucky Explodes, Killing 1, Injuring 5 By Charles Kennedy, Oil Price.com, Aug 1, 2019 https://oilprice.com/Latest-Energy-News/World-News/Natural-Gas-Pipeline-In-Kentucky-Explodes-Killing-1-Injuring-5.html

Wait...Who's Trying to Beat Climate Change?

By Paul Vallely, Townhall, Aug 10, 2019 https://townhall.com/columnists/majgenpaulvallely/2019/08/10/waitwhos-trying-to-beat-climatechange-

 $\frac{n2551433?utm_source=thdaily\&utm_medium=email\&utm_campaign=nl\&newsletterad=08/10/20}{19\&bcid=600713400c5e414103c69dc935baaf47\&recip=4143601}$

Alternative, Green ("Clean") Solar and Wind

Georgia Power Pushes Back on Forced Solar (in the Crony Briar Patch) By Jim Clarkson, Master Resource, Aug 6, 2019 <u>https://www.masterresource.org/clarkson-jim/georgia-power-forced-solar/</u>

Expensive Especially For Home Owners! Wind Turbines Can Decrease Property Values By Up To 23%, German Study Finds!

By P Gosselin, No Tricks Zone, Aug 6, 2019

https://notrickszone.com/2019/08/06/expensive-especially-for-home-owners-wind-turbines-candecrease-property-values-by-up-to-23-german-study-finds/

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

EU Wood Burning Under Fire

Wood Pellets Draw Fire as Alternative to Coal A lawsuit says European policy on using pellets will increase greenhouse-gas emissions; 'burning gas would release far less carbon dioxide,' expert says By Charlie McGee, WSJ, Via GWPF, Aug 7, 2019 https://www.thegwpf.com/eu-wood-burning-under-fire/

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

How much energy storage costs must fall to reach renewable energy's full potential By Charles the Moderator, WUWT, Aug 8, 2019 https://wattsupwiththat.com/2019/08/08/how-much-energy-storage-costs-must-fall-to-reach-

renewable-energys-full-potential/

Link to paper: Storage Requirements and Costs of Shaping Renewable Energy Toward Grid Decarbonization

By Micah S. Ziegler, et al. Joule, Aug 7, 2019

https://www.cell.com/joule/fulltext/S2542-4351(19)30300-9

Link to EIA estimates: Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-May 2019

https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_6_07_b

[SEPP Comment: Wind capacity seem to be unrealistically high. Using EIA data for 2018, an independent analysist gets 32.8% not EIA's 37.4%.]

Link to storage estimates: Costs of different battery storage technologies depend on technical characteristics

By Staff EIA, June 1, 2018 https://www.eia.gov/todayinenergy/detail.php?id=36432

Alternative, Green ("Clean") Vehicles

Economics of Battery-Powered Vehicles, Part 2 By Donn Dears, Power For USA, Aug 6, 2019 https://ddears.com/2019/08/06/economics-of-battery-powered-vehicles-part-2/

The diesel generator behind the electric car charging point By Jo Nova, Her Blog, Aug 7, 2019 http://joannenova.com.au/2019/08/the-diesel-generator-behind-the-electric-car-charging-point/

Automakers Need to Start Worrying About the Batteries Lurking in Older EVs By Matt Posky, The Truth About Cars, Aug 5, 2019 [H/t Cooler Heads]

https://www.thetruthaboutcars.com/2019/08/automakers-need-to-start-worrying-about-thebatteries-lurking-in-older-evs/

Nissan: Green Car Junkie as Casualty? By Wayne Lusvardi, Master Resource, Aug 5, 2019 https://www.masterresource.org/electric-vehicles/nissan-a-casualty-or-junkie-of-green-carmandates/

Environmental Industry

Anti-5G Activists Are Also Real-Life Ghostbusters By Alex Berezow, ACSH, July 29, 2019 https://www.acsh.org/news/2019/07/29/anti-5g-activists-are-also-real-life-ghostbusters-14186

Other Scientific News

How NASA Will Protect Astronauts From Space Radiation at the Moon By Lina Tran, NASA, Greenbelt, Aug 7, 2019 [H/t WUWT] https://www.nasa.gov/feature/goddard/2019/how-nasa-protects-astronauts-from-space-radiationat-moon-mars-solar-cosmic-rays

'Spin' found in over half of clinical trial abstracts published in top psychiatry journals

Findings raise concerns about potential impact on doctors' treatment decisions By Staff. BMJ, Via EurekAlert, Aug 5, 2019 https://www.eurekalert.org/pub_releases/2019-08/b-fi080119.php

Other News that May Be of Interest

Stupid News By John Stossel, Townhall, Aug 7, 2019 https://townhall.com/columnists/johnstossel/2019/08/07/stupid-newsn2551293?utm_source=thdaily&utm_medium=email&utm_campaign=nl&newsletterad=08/07/20 19&bcid=600713400c5e414103c69dc935baaf47&recip=4143601 [SEPP Comment: Comparing "big news headlines" with actually significant events.]

African smoke is fertilizing Amazon rainforest and oceans

Link to paper: African biomass burning is a substantial source of phosphorus deposition to the Amazon, Tropical Atlantic Ocean, and Southern Ocean By Anne E. Barkley, et al., PNAS, July 29, 2019 https://www.pnas.org/content/early/2019/07/23/1906091116

India's hyperloop plans were all talk-until now

By Staff, Quartz, Aug 6, 2019 [H/t Toshio Fujita] https://tribunecontentagency.com/article/indias-hyperloop-plans-were-all-talk-until-now/

BELOW THE BOTTOM LINE:

Geoengineering vs. volcanic activity for a cooler climate By Anthony Watts, WUWT, Aug 6, 2019 https://wattsupwiththat.com/2019/08/06/geoengineering-vs-volcanic-activity-for-a-cooler-climate/

Solar power from Australia to light up Singapore

The ambitious project may take more than a decade to finish, but the technology is almost ready

By K.G. Chan, Asia Times, July 19, 2019 [H/t WUWT] https://www.asiatimes.com/2019/07/article/solar-power-from-australia-to-light-up-singapore/

Some "Climate" Humor For The Week

By Francis Menton, Manhattan Contrarian, Aug 8, 2019 https://www.manhattancontrarian.com/blog/2019-8-8-some-climate-humor-for-the-week

ARTICLES

1. If You Want 'Renewable Energy,' Get Ready to Dig

Building one wind turbine requires 900 tons of steel, 2,500 tons of concrete and 45 tons of plastic. By Mark P. Mills, WSJ, Aug 5, 2019 https://www.wsj.com/articles/if-you-want-renewable-energy-get-ready-to-dig-11565045328

Edited by TWTW, Mills begins:

Democrats dream of powering society entirely with wind and solar farms combined with massive batteries. Realizing this dream would require the biggest expansion in mining the world has seen and would produce huge quantities of waste.

'Renewable energy' is a misnomer. Wind and solar machines and batteries are built from nonrenewable materials. And they wear out. Old equipment must be decommissioned, generating millions of tons of waste. The International Renewable Energy Agency calculates that solar goals for 2050 consistent with the Paris Accords will result in old-panel disposal constituting more than double the tonnage of all today's global plastic waste. Consider some other sobering numbers:

A single electric-car battery weighs about 1,000 pounds. Fabricating one requires digging up, moving and processing more than 500,000 pounds of raw materials somewhere on the planet. The alternative? Use gasoline and extract one-tenth as much total tonnage to deliver the same number of vehicle-miles over the battery's seven-year life.

When electricity comes from wind or solar machines, every unit of energy produced, or mile traveled, requires far more materials and land than fossil fuels. That physical reality is literally visible: A wind or solar farm stretching to the horizon can be replaced by a handful of gas-fired turbines, each no bigger than a tractor-trailer."

After discussing specifics found in the text above, Mills continues:

"What's more, mining and fabrication require the consumption of hydrocarbons. Building enough wind turbines to supply half the world's electricity would require nearly two billion tons of coal to produce the concrete and steel, along with two billion barrels of oil to make the composite blades. More than 90% of the world's solar panels are built in Asia on coal-heavy electric grids.

"Engineers joke about discovering 'unobtanium,' a magical energy-producing element that appears out of nowhere, requires no land, weighs nothing, and emits nothing. Absent the realization of that impossible dream, hydrocarbons remain a far better alternative than today's green dreams."

2. Vegetarianism as Climate Virtue Signaling

First World solipsism misses the point of a new U.N. report. By Borg Lomborg, WSJ, Aug 8, 2019

https://www.wsj.com/articles/vegetarianism-as-climate-virtue-signaling-11565301932 Edited by TWTW: In addition to what is presented above, Mr. Lomborg, the president of the Copenhagen Consensus Center and author of "The Skeptical Environmentalist" writes:

"Rather than false hopes about dietary change, the focus should be on improving agricultural practices. First, organic food is bad for sustainability. A 2017 paper found organic farming takes 70% more land on average to produce the same amount of produce as conventional methods. Making U.S. agricultural production entirely organic would require converting an area larger than California and Texas combined into farmland.

"Second, agricultural yields must increase. The Green Revolution of the 1970s spread fertilizers and modern practices, making a lasting difference in Asia and South America. A second Green Revolution is needed to make agriculture even more efficient.

"This means more spending on agricultural research and development, from conventional breeding to genetic modification and even artificial meat, which makes vegetarianism a more plausible choice. Copenhagen Consensus research estimates that increasing research spending by \$8 billion a year would increase crop yields annually by an additional 0.4%. This might sound modest, but it would improve food security, reduce prices, and achieve social good worth more than \$30 for every dollar invested.

"Focusing only on vegetarianism is more about virtue signaling than improving the food system. Instead of shaming people for eating hamburgers, let's ramp up agricultural R&D. ************

3. Another Day in Bureaucratic Hell

A legal fight with the EPA shows the worst of the administrative state. Editorial, WSJ, Aug 8, 2019 https://www.wsj.com/articles/another-day-in-bureaucratic-hell-11565304309

Edited by TWTW; the editorial states:

"Modern bureaucratic government can sometimes be difficult to navigate. But this summer a federal appeals court in Washington, D.C., issued a ruling on the administrative state that would make Kafka smile.

"The story begins in 2007 when Congress expanded the renewable fuel standard. The law set targets for how much ethanol and biodiesel must be blended into America's fuel supply. In typical dereliction of legislative duty, Congress delegated much of the implementation to the Environmental Protection Agency. As one stipulation, the EPA was told to perform "periodic reviews" of the law's results, including "the impacts of the requirements described in subsection (a)(2)."

"First problem: There is no subsection (a)(2). This provision does not exist.

"Second problem: For years the EPA never performed any formal periodic review, at least not identified as such.

"In 2017 Valero Energy filed a lawsuit. As an owner of refineries, Valero is required to either blend renewables into its products or buy compliance credits called RINs. Each year refiners spend hundreds of millions of dollars on these credits. Valero would naturally be upset at the EPA's failure to review how the renewable plan was working, as the law seemed to require. So the company asked the judiciary to step in.

"A district court in Texas sided with the EPA. Since the law specified only 'periodic' review, without dictating a timetable, the court ruled that the EPA could do it, essentially, whenever. The agency 'has a duty to conduct these reviews,' the judge wrote, 'but discretion to determine when and how often.' To steal an old Conan O'Brien gag, maybe the EPA would get around to it in the year 3000."

Then came the appeals, the editorial continues:

"The company sought help from the D.C. Circuit Court of Appeals. No dice. On June 25 the court dismissed the case for lack of jurisdiction. The EPA's interpretive document could not be reviewed, wrote Judge Sri Srinivasan, because it 'does not constitute final agency action.' He cited a two-part test. First, a 'final' action can't be 'merely tentative or interlocutory.' Second, it must result in legal consequences or determine some party's rights or obligations.

"The EPA's document 'imposes no obligations, prohibitions, or restrictions, 'he wrote. 'Nor does it affect EPA's legal obligation to conduct periodic reviews. Rather, it leaves the world just as it found it.' As a technical matter of law, this may be correct and simply another lovely day in the administrative state.

"But for Valero, this is a saga of bureaucratic hell. Congress writes a law, giving power to the EPA. Sloppy drafting creates a citation to nowhere. The EPA fails to conduct a formal review and then, after being sued, claims it did so all along. When the regulated company cries foul, it's told that 'periodic' merely means 'not never.' Then the EPA's avowal of its own compliance is deemed unreviewable.

"This is what democracy looks like?"