The Week That Was: 2019-06-22 (June 22, 2019) Brought to You by SEPP (<u>www.SEPP.org</u>) The Science and Environmental Policy Project

Quote of the Week: *"The battle against global warming: an absurd, costly and pointless crusade."*— French Société de Calcul Mathématique SA [H/t Ed Hoskins]

Number of the Week: 1°C

THIS WEEK:

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

The Greenhouse Effect – It's Simple Physics – NOT: One of the disturbing characteristics of many politicians, "experts" on climate science, and even established scientific organizations is to talk about the greenhouse effect as simple physics. It is not. It is a complex process that has been ongoing for billions of years with varying concentrations of atmospheric gases, that have changed significantly. Human emissions of carbon dioxide are not changing the atmosphere to something that has not existed before. One cannot be certain, but the early atmosphere may have been mostly of carbon dioxide, along with smaller amounts of methane, ammonia, nitrogen and water vapor. Today, "dry" atmosphere (from which all water has been removed) is about 78% nitrogen, 21% oxygen, 1% argon and 0.4% carbon dioxide. (Due to rounding, numbers may not equal 100%.)

Of course, dry air only exists in a laboratory, and any calculations based on dry air must be verified by observations. Unfortunately, such necessary observations are ignored by the UN Intergovernmental Panel on Climate Change (IPCC) and its followers such as the US Global Change Research Program (USGCRP). Instead, these organizations add an assumed influence of the importance of water vapor, not one based on observations.

Water vapor varies from considerably less than 1% to about 4% of the actual atmosphere, not dry. Usually, the polar regions have less than 1% water vapor, and the tropics almost 4%. Water vapor creates several problems in estimating the greenhouse effect, including clouds and interfering with the greenhouse effect of other gases. The natural greenhouse gases are water vapor, carbon dioxide, ozone, methane, and nitrous oxide. It is important to realize that convection in the atmosphere mixes all the gases well in the troposphere except for ozone, which largely remains in the stratosphere where it is formed by ultraviolet light.

Separating the troposphere from the stratosphere is the tropopause, where water freezes out. The altitude of the tropopause varies from 18km (59,000 feet) at the equator to 8km (26,000 feet) at the poles. In the troposphere, heat transfer by convection is as important as the heat transfer by infrared radiation from the surface to the atmosphere. The entire system is complex and not easily modeled.

No one fully understands the role of clouds, which, generally, cool during the day and warm during the night. Cirrus clouds, thin, wispy clouds above 20,000 feet (6,000 meters) composed of ice crystals, may be an exception. According to MIT Emeritus Professor of Meteorology Richard

Lindzen, cirrus clouds have a warming effect, and by accumulating and thinning, may have a significant impact on regulating the temperature of the earth.

The manner in which water vapor interferes with the greenhouse effect of other gases is a separate problem, also not well understood. It requires an understanding of molecular physics, which is not sufficiently well developed to make general calculations. Instead, libraries (data bases), such as HITRAN, have been developed from observations to assist in making the calculations for the tens of thousands of molecular transitions that take place at every altitude for all the frequencies of outbound infrared radiation.

In the energy range of the infrared emanating from the earth, the molecules have a wide array of rotational and vibrational states that can change by absorption or emission of infrared radiation, or by collisions with other atmospheric molecules. Separately, solar ultraviolet light has enough energy to dissociate oxygen molecules (O2) into two oxygen atoms (O), which than can combine with other O2 to molecules to produce ozone (O3). Needless to say, the physics is not simple.

On the Power Line blog, John Hinderaker posted an informative 10-minute interview by John Robson, on Climate Discussion Nexus, of William van Wijngaarden at Department of Physics and Astronomy, York University, Canada. Van Wijngaarden received his doctorate in physics at Princeton and has published extensively in fields such as Quantum physics, Brownian motion, the Photoelectric effect, Electromagnetically induced transparency, Ultrahigh precision laser spectroscopy, as well as climate issues of temperature, precipitation, and humidity.

Van Wijngaarden's description of the complexity involved is much needed. As his interviewer, Robson, states:

"But part of understanding science is understanding where the complexities lie, and not getting browbeaten, especially by people who aren't scientists or won't admit science is complex, into believing it's so simple a child can explain it with a crayon."

In other work reviewed by SEPP, van Wijngaarden brought out that, in the current atmosphere, on a per molecule basis, the four greenhouse gases in the troposphere (water vapor, carbon dioxide, methane, and nitrous oxide) have about the same properties to absorb and emit photons. [If molecules re-emitted infrared radiation immediately, the temperature of the atmosphere would not rise because from infrared radiation. By collisions, the CO2 molecules heat the atmosphere; conversely, they can absorb energy by collisions and *cool* the atmosphere if the infrared radiation has a clear path to space.] There are no huge (factors of tent) differences in the ability of the type of greenhouse gas to interfere with outbound infrared radiation. That is, regardless of the gas, the greenhouse effect is approximately the same as for others.

Further, the additional work by van Wijngaarden discusses how water vapor reduces the capability of other greenhouse gases, such as methane (CH4) and nitrous oxide (N2O) to interfere with the greenhouse effect because the frequencies in which these gases interfere with radiative transfer are already covered by water vapor (the frequency saturated). Web searches often reveal specific frequencies in which greenhouse gases interfere with radiative transfer, but too frequently these sites avoid mentioning that the frequencies are already covered (saturated) by water vapor, thus the greenhouse effect of the gas, such as CH4, is minimal.

An often used "term-of-art" is a comb of frequencies, with the narrow spikes for frequencies of infrared radiation interfered with being teeth in the comb. Methane and nitrous oxide have narrow teeth, and photons pass right through them. Because water vapor molecules bounce off nitrogen oxygen, and argon, while gaining and losing photons: it can be said the teeth of water vapor are broad. This gives rise to the term "H2O continuum," which, as van Wijngaarden discusses has no clear meaning and is used as a "fudge factor" or crutch to adjust for the failure of models to make verifiable predictions. As van Wijngaarden states, after pointing out that sometimes climate models fail abysmally:

"That doesn't mean the modelers are dumb folks. But it's just a very difficult thing sometimes to model. Climate is not simple to model."

Since most of the greenhouse effect occurs in the troposphere, and water vapor already broadly absorbs the narrow absorption frequencies of methane and nitrous oxide, their global warming effects are minimal. Also, absorption frequencies of methane and nitrous oxide experience a broadening, but not as significant, water vapor is more dominant. Nevertheless, the UN Intergovernmental Panel on Climate Change (IPCC), and others, have contrived a misleading metric, or measurement, called the global warming potential. For practical observations, the term is meaningless. Yet, "global warming potential of methane" is being used to damage agriculture in the US, New Zealand, and elsewhere.

When one is listening to a politician or "expert" claim the dangers of carbon dioxide, methane, etc., it may be useful to ask oneself "Does this person understand complex natural phenomena such as quantum physics or Brownian motion?" See links under Challenging the Orthodoxy.

Lowering Standards: Last week, TWTW discussed the volunteer work of The Right Climate Stuff research team to address the issue of human-caused (Anthropogenic) Global Warming (AGW). One of the standards The Right Climate Stuff team adhered to was problem identification and specification. Among other things, specification requires that the terms used are clear and not subject to several interpretations; they are cohesive and capture the needed functions; they are complete, adequately describing the scope and limits of the problem; they are consistent, correct, and current.

This week, the presidents of the National Academies of Science, Engineering and Medicine announced that they "Affirm the Scientific Evidence of Climate Change." They claim that: "A solid foundation of scientific evidence on climate change exists." Climate has been changing for hundreds of millions of years. What is disturbing is:

"Scientists have known for some time, from multiple lines of evidence, that humans are changing Earth's climate, primarily through greenhouse gas emissions. The evidence on the impacts of climate change is also clear and growing. The atmosphere and the Earth's oceans are warming, the magnitude and frequency of certain extreme events are increasing, and sea level is rising along our coasts."

As described above, the greenhouse effect is not well-understood, and many of the multiple lines of evidence TWTW has reviewed are highly questionable, if not outright exaggerations. It would be interesting to hear the response of these presidents to the question: "What caused the Little Ice Age and brought it to an end?" They certainly lack the scientific rigor exhibited by The Right Climate Stuff research team. See links under Defending the Orthodoxy.

Testing Climate Models: The full transcript of a talk John Christy gave to the Global Warming Policy Foundation on May 8, is now available. In the talk, he covers the small influence carbon dioxide has on temperature trends, details of the failure of climate models to forecast correctly, how poorly the latest climate models are in forecasting, and some observations about changing weather. His conclusions deserve repeating.

"I have three conclusions for my talk:

"Theoretical climate modelling is deficient for describing past variations. Climate models fail for past variations, where we already know the answer. They've failed hypothesis tests and that means they're highly questionable for giving us accurate information about how the relatively tiny forcing, and that's that little guy right there [CO2], will affect the climate of the future.

"The weather we really care about isn't changing, and Mother Nature has many ways on her own to cause her climate to experience considerable variations in cycles. If you think about how many degrees of freedom are in the climate system, what a chaotic nonlinear, dynamical system can do with all those degrees of freedom, you will always have record highs, record lows, tremendous storms and so on. That's the way that system is.

"And lastly, carbon is the world's dominant source of energy today, because it is affordable and directly leads to poverty eradication as well as the lengthening and quality enhancement of human life. Because of these massive benefits, usage is rising around the world, despite calls for its limitation."

See links under Challenging the Orthodoxy. **********

Changing Climate: A CNN broadcast covered a study in Nature, Climate Change, claiming that "Climate change threatens nearly 40% of the world's primates." Certainly, humans do threaten primates, but probably not from global warming. According to Science Daily:

"New biogeographic evidence supports the origin of primates in the Jurassic and the evolution of the modern primate groups -- prosimians, tarsiers, and anthropoids -- by the early Cretaceous,"

Yet, estimates of temperatures during the Jurassic and Cretaceous are up to 15°C warmer than today. Why would a warming threaten primates? This brings up a concern expressed by Richard Lindzen, MIT Professor *emeritus* of Meteorology. He asserts that the major issue of climate change is not global warming or cooling of average global temperatures, because the temperatures in the tropics do not change much. The issue is changing temperature difference between the tropics and the polar regions, which change profoundly.

Lindzen has brought up that hippopotamus-like and crocodile-like fossils have been found in Svalbard (Spitsbergen), about 75 degrees North. Similar findings are being made in Ellesmere Island, Canada, 80 degrees North, northwest of Greenland.

As H.H. Lamb described in "Climate, History and the Modern World," intense weather events are driven by temperature differences. A reduction in temperature differences between the tropics and the polar regions should lead to a reduction in intensity of storms. See links under Defending the

Orthodoxy and <u>https://www.youtube.com/watch?v=AW8PQOw3jNg</u>, and <u>https://www.sciencedirect.com/science/article/pii/S0012821X10003791?via%3Dihub]</u> *****

Extreme Calm? In his Saturday Summary on June 22, Joe Bastardi of WeatherBELL Analytics LLC., discussed the extreme calm of the tropics. Thus far this year, for the first time since 1969, there have been no tropical depressions or storms in the eastern Pacific; since March, there have been no significant tropical storms in the western Pacific; and the Atlantic is "dead." Of course, storms will return. But, should this calm be called extreme weather? See https://www.weatherbell.com/

Real Population Bomb: The Pew Research Center has announced that the UN's projects the world's population will nearly stop growing by the end of the century.

"For the first time in modern history, the world's population is expected to virtually stop growing by the end of this century, due in large part to falling global fertility rates, according to a Pew Research Center analysis of new data from the United Nations.

"By 2100, the world's population is projected to reach approximately 10.9 billion, with annual growth of less than 0.1% - a steep decline from the current rate. Between 1950 and today, the world's population grew between 1% and 2% each year, with the number of people rising from 2.5 billion to more than 7.7 billion."

"The global fertility rate is expected to be 1.9 births per woman by 2100, down from 2.5 today."

The decline in fertility rates is not particularly surprising. During the "Population Bomb" scares of the 1970s, fertility rates were falling in Westernized countries that were prosperous. Apparently, as people become more prosperous and become healthy, the perceived need for children declines. Generally, the world's population has become more prosperous and healthier over the past several decades. See links under Other News that May Be of Interest ***********

SEPP'S APRIL FOOLS AWARD THE JACKSON

SEPP is conducting its 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 seven past recipients, Lisa Jackson, Barrack Obama, John Kerry, Ernest Moniz, John Holdren, Gena McCarthy and Jerry Brown 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: 1°C. Using completely different approaches and working with totally different datasets, both John Christy and William van Wijngaarden came to the same conclusion: a doubling of CO2 would cause an increase in temperatures of about 1°C, assuming no significant natural variation such as solar warming or cooling. This increase is about one-third of the estimates of 3°C plus or minus 1.5°C made in the 1979 Charney Report, based on assumptions now contradicted by evidence. Yet, the estimates remain in the five IPCC Assessment Reports (AR 1 to 5) and, apparently, will remain in the upcoming Assessment Report.

John Christy bases his estimates on 37.5 years of atmospheric temperature trends starting in 1979, adjusted for volcanoes and El Niños, but not for solar variation. The results are similar to what he and his colleague, Richard McNider, published 25 years before, with 25 years less data. There is an upward trend of 0.09 °C per decade which, when compared with increases in CO2, he calculates to imply an increase in temperatures of 1.1 °C from a doubling of CO2.

In a contrasting approach, William van Wijngaarden and his colleagues estimate that doubling the greenhouse gases in troposphere (CO2, methane, N2O) and increasing water vapor by about 6% will result in an increase in temperatures about 1 to 1.5 °C. (It is estimated that an increase of 1°C will increase water vapor by about 6%.) This result is remarkably similar to that of Christy and McNider.

It is clear that the IPCC, and the US Global Change Research Program (USGCRP), are on the wrong path and are misinforming the public as to the effects of increasing CO2. One wonders whether, in their new look, the US National Academies of Science, Engineering and Medicine will recognize that observational data trumps assumptions and models, or whether they will continue the path of bureaucratic science leading to erroneous policies and poor decisions. See links under Challenging the Orthodoxy.

NEWS YOU CAN USE:

Commentary: Is the Sun Rising?

Now entering a deep solar minimum and the latest forecast for solar cycle 25 suggests it may be the weakest cycle in 200 years

By Paul Dorian, Perspecta Weather, June 20, 2019 https://www.perspectaweather.com/blog/2019/6/19/1030-am-now-entering-a-deep-solarminimum-and-the-latest-forecast-for-solar-cycle-25-suggests-it-may-be-the-weakest-cycle-in-200-years

Sun spotless for 33 days straight – airline travelers getting dosed with up to 70 times more radiation [than at sea level]

By Anthony Watts, WUWT, June 21, 2019 https://wattsupwiththat.com/2019/06/21/sun-spotless-for-33-days-straight-airline-travelersgetting-dosed-with-70-times-more-radiation/

Censorship

Freedom to Read, to Think, to Speak

Censorship is gaining traction in Canada. To a frightening degree.

By Donna Laframboise, Big Picture News, June 17, 2019 https://nofrakkingconsensus.com/2019/06/17/freedom-to-read-to-think-to-speak/

Suppressing Scientific Inquiry

Dr. Peter Ridd on the Free Speech Crisis At Universities By Anthony Watts, WUWT, June 20, 2019 https://wattsupwiththat.com/2019/06/20/dr-peter-ridd-on-the-free-speech-crisis-at-universities/

Science 'Revolution Needed to Save Academic Free Speech'

By Staff Writers, The Australian, Via GWPF, June 20, 2019 <u>https://www.thegwpf.com/peter-ridd-uni-revolution-needed-to-save-academic-free-speech/</u> "Professor [Peter] Ridd said the bureaucrats believed 'they are on the side of the angels".

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 <u>https://www.heartland.org/_template-assets/documents/publications/SeaLevelRiseCCRII.pdf</u>

Challenging the Orthodoxy

The "Simple Physics" Slogan

By John Robson, Climate Discussion Nexus, Comments by William van Wijngaarden, Department of Physics and Astronomy, York University, Canada, April 16, 2019 <u>https://climatediscussionnexus.com/video/</u> -- Video <u>https://climatediscussionnexus.com/videos/the-simple-physics-slogan/</u> -- Text

Putting Climate Change Claims to the Test

By John Christy, GWPF, Transcript of talk given May 8, 2019 https://www.thegwpf.com/putting-climate-change-claims-to-the-test/

Climate scientists' motivated reasoning

By Judith Curry, Climate Etc. June 19, 2019 <u>https://judithcurry.com/2019/06/19/climate-scientists-motivated-reasoning/#more-24956</u> "Apart from the rather innocuous title, the paper provides massively important insights into scientific research in general, with substantial implications for climate science." *[SEPP Comment: Curry's comments on her transformation are noteworthy.]*

Climate science's 'masking bias' problem

By Judith Curry, Climate Etc. June 21, 2019

https://judithcurry.com/2019/06/21/climate-sciences-masking-bias-problem/#more-24958

"This [invalid conclusions] is basically the problem that I have with the IPCC assessment reports. Deep in the chapters, there is much good information that is reliable, although the reports relatively ignore some topics. The problem is with the conclusions that are reached (particularly in the Summary for Policy Makers), and inflated levels of confidence that are ascribed to these conclusions."

Climate Red Team Argument Heats Up: Koonin responds to Schmidt

Guest essay by Steve Koonin, WUWT, June 17, 2019

https://wattsupwiththat.com/2019/06/17/climate-red-team-argument-heats-up-koonin-responds-to-schmidt/

Link to video: Certainties and uncertainties in our energy and climate futures Discovery Park Distinguished Lecture Series, Steve Koonin, Purdue University April 16, 2019 https://www.youtube.com/watch?v=FY5gEwZHKI8

Do We Face Dangerous Global Warming?

By J. Scott Armstrong and Kesten Green, Heartland, June 7, 2019 https://www.heartland.org/publications-resources/publications/do-we-face-dangerous-globalwarming-a-presentation-by-j-scott-armstrong-and-kesten-green

"This is the PowerPoint presentation at the Invited Lecture for the Class of 1959 Reunion at Lehigh University, Bethlehem, PA on June 7, 2019"

Defending the Orthodoxy

National Academies Presidents Affirm the Scientific Evidence of Climate Change By McNutt, Mote, and Dzau, Presidents of the National Academies, June 18, 2019 http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=06182019

Climate change threatens nearly 40% of the world's primates, study says

By Scottie Andrew and Saeed Ahmed, CNN, June 17, 2019

https://www.cnn.com/2019/06/17/world/climate-change-40-percent-primates-trnd/index.html Link to paper: Global assessment of primate vulnerability to extreme climatic events By Lyubing Zhang, et al., Nature, Climate Change, https://www.nature.com/articles/s41558-019-0508-

7.epdf?referrer_access_token=picQOCDVSUa1YGPAcSVTCtRgN0jAjWel9jnR3ZoTv0NJH4_q OltsAz4ydZxxSzYjznjpYEZDwObHFYoDhJXI8NVcldw1MLweELvRwyFc5pxdh_R4p4rjv9NcMXJEAo3ZjUkgeRH_cMPeKruiWPLtgAkPupCpDJgpGA2pSraUFcc6D4EM1jVoZMGyAGrLKfBVLD RsOiAjKftf5sdsAaKLxomI0EWkPEZD90_Az-SNFSumIZxtND1XDX36tG0Yq-

hWCVX9nCnCrO-kqzjzjJdA%3D%3D&tracking_referrer=www.cnn.com

New and better way to assess the climate impact of new pipelines

By N. Jonathan Peress, Environmental Defense Fund (EDF), June 11, 2019 <u>http://blogs.edf.org/energyexchange/2019/06/11/new-and-better-way-to-assess-the-climate-impact-of-new-pipelines/</u>

Questioning the Orthodoxy

MIT Doctorate Climate Scientist Slams GW Claims: Based On "Untrustworthy, Falsified Data"..."No Scientific Value"!

In a newly released Kindle book that is set to peeve established climate science, an MIT doctorate climate researcher blasts alarmist claims of a warming planet and illustrates how temperature data are untrustworthy and far too scant to draw sound conclusions.

By Kirye and Pierre Gosselin, No Tricks Zone, June 21, 2019

https://notrickszone.com/2019/06/21/mit-doctorate-climate-scientist-slams-gw-claims-based-onuntrustworthy-falsified-data-no-scientific-value/

German Prof. Writes Activists Have Warped Climate Perception, Why Does Climate Agenda "Lie So Much"?

The weather sensitivity of activists

By Frank Bosse and Prof. Fritz Vahrenholt, (Translated/edited by P. Gosselin), No Tricks Zone, June 15, 2019

https://notrickszone.com/2019/06/15/german-prof-writes-activists-have-warped-climate-perception-why-does-climate-agenda-lie-so-much/

Now They Want to 'Fix' the Climate

By Michael Kile, Quadrant, June 16, 2019 <u>https://quadrant.org.au/opinion/doomed-planet/2019/06/now-they-want-to-fix-the-climate/</u> [SEPP Comment: Creating algae blooms to fix the climate. Don't the greens consider algae blooms an example of what is wrong?]

The Seattle Times Story on Massive Heat Wave Deaths in Seattle: Does it Make Sense? By Cliff Mass, Weather and Climate Blog, June 16, 2019 <u>https://cliffmass.blogspot.com/2019/06/the-seattle-times-story-on-massive-heat.html</u> [SEPP Comment: Cliff Mass understands the difference between real deaths and "virtual" deaths.]

The National Environmental Policy Act Belongs in a Museum

By Kenny Stein, Real Clear Energy, June 19, 2019

https://www.realclearenergy.org/articles/2019/06/19/the_national_environmental_policy_act_belo_ngs_in_a_museum_110451.html

After Paris!

Global Man-made CO2 emissions 1965 – 2018: BP data

By Ed Hoskins, His Blog, June 17, 2019 [H/t GWPF] https://edmhdotme.wordpress.com/global-man-made-co2-emissions-1965-2018-bp-data/

China's Coal Bi-Polarity Expedites the Death of the Paris Agreement

By Vijay Jayaraj, Master Resource, June 20, 2019

https://www.masterresource.org/uncategorized/chinas-coal-bi-polarity-expedites-the-death-of-the-paris-agreement/

"The situation of the Paris agreement has been made more difficult because of the open embrace of coal by India, the U.S., Japan, South Korea, Australia, Brazil, Poland, Indonesia, South Africa, and others. The list, along with China, includes the top three emitters of CO2 and the top three consumers of coal."

Change in US Administrations

Trump proposal nixes review of long-term climate impacts

By Rebeca Beitsch, The Hill, June 21, 2019

https://thehill.com/policy/energy-environment/449790-trump-proposal-nixes-review-of-longterm-climate-impacts

Link to guidance: Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions

By Staff Writers, Council on Environmental Quality (CEQ), Accessed June 21, 2019 <u>https://www.whitehouse.gov/wp-content/uploads/2017/11/CEQ-NEPA-Draft-GHG-Guidance-0331-ZA03-Final-062119</u> Web-Version.pdf

[SEPP Comment: We cannot predict short-term temperature impacts of increasing greenhouse gasses, yet many politicians insist we should predict long-term impacts?]

Social Benefits of Carbon Dioxide

Earth system models underestimate carbon fixation by plants in the high latitudes By Alexander J. Winkler, Ranga B. Myneni, Georgii A. Alexandrov & Victor Brovkin, Nature Communications, Feb 21, 2019 [H/t WUWT] https://www.nature.com/articles/s41467-019-08633-z

Problems in the Orthodoxy

An EU proposal to slash carbon emissions to net zero by 2050 was blocked by four countries By Ivana Kottasová, CNN, June 21, 2019

https://edition.cnn.com/2019/06/20/europe/eu-net-zero-emission-intl/index.html

"Veto votes from Poland, the Czech Republic, Hungary and Estonia meant the proposed 2050 emissions target became a mere footnote, which specified that a 'large majority of member states' should achieve climate neutrality by 2050."

[SEPP Comment: What is "Climate Neutrality?" When has the climate ever been "neutral?"]

Carbon neutrality 2050: Visegrád saves Europe again

By Luboš Motl, The Reference Frame, June 21, 2019 https://motls.blogspot.com/2019/06/carbon-neutrality-2050-visegrad-saves.html

EU gas investment undermines bloc's climate goals: analysis

By Staff Writers, AFP, June 18, 2019 https://www.ednh.news/eu-gas-investment-undermines-blocs-climate-goals-analysis/

Oregon governor authorizes state police to bring GOP lawmakers back to capital for climate vote

By Tal Axelrod, The Hill, June 20, 2019 https://thehill.com/homenews/state-watch/449583-oregon-gov-allows-state-police-to-bringrepublican-lawmakers-back-to /SEPP Comment: The Governor is rounding up the needed lawmakers, will they be forced to vote

Seeking a Common Ground

a certain way?]

An Open Letter to Lisa Raitt, MP By Ross McKitrick, His Blog, June 17, 2019 https://www.rossmckitrick.com/ https://www.rossmckitrick.com/uploads/4/8/0/8/4808045/dear_lisa.pdf

"This business of Twitter mobs and so-called fact-checking only goes one way. They love to claim that policy discussions should be based on science, but they don't really mean it. They will overlook any utterance, no matter how inane or extreme, if it promotes the cause of climate alarm."

A Red Team Review of Climate Crisis Assertions

By Paul Driessen, Townhall, June 18, 2019 https://townhall.com/columnists/pauldriessen/2019/06/18/a-red-team-review-of-climate-crisisassertionsn2548491?utm_source=thdaily&utm_medium=email&utm_campaign=nl&newsletterad=06/19/20 19&bcid=600713400c5e414103c69dc935baaf47&recip=4143601

The Empty Radicalism of the Climate Apocalypse

By Ted Nordhaus, Issue in Science and Technology, Summer, 2019 https://issues.org/the-empty-radicalism-of-the-climate-apocalypse/ "What would it mean to get serious about climate change?" [SEPP Comment: Arguing for technological change, not a war on climate change.]

Review of Recent Scientific Articles by CO2 Science

European Beech Growth in Response to Rising CO2 and UV-B Radiation

Uchytilová, T., Krejza, J., Veselá, B., Holub, P., Urban, O., Horácek, P. and Klem, K. 2019. Ultraviolet radiation modulates C:N stoichiometry and biomass allocation in Fagus sylvatica saplings cultivated under elevated CO2 concentration. *Plant Physiology and Biochemistry* 134: 103-112. June 17, 2019

http://www.co2science.org/articles/V22/jun/a7.php

"In light of the above, it would appear that European beech trees will experience little, if any, biomass reductions in the future if UV radiation levels increase. But, if the air's CO2 content continues to rise, which it most likely will, great growth benefits will ensue via its aerial fertilization effect, resulting in a large stimulation of plant biomass both above and below ground."

Arctic Shorebird Breeding Response to Climate Warming

Weiser, E.L., Brown, S.C., Lanctot, R.B., Gates, H.R., Abraham, K.F., Bentzen, R.L., Bety, J., Boldenow, M.L., Brook, R.W., Donnelly, T.F., English, W.B., Flemming, S.A., Franks, S.E., Gilchrist, H.G., Giroux, M.-A., Johnson, A., Kendall, S., Kennedy, L.V., Koloski, L., Kwon, E., Lamarre, J.-F., Lank, D.B., Latty, C.J., Lecomte, N., Liebezeit, J.R., Mckinnon, L., Nol, E., Perz, J., Rausch, J., Robards, M., Saalfeld, S.T., Senner, N.R., Smith, P.A., Soloviev, M., Solovyeva, D., Ward, D.H., Woodard, P.F. and Sandercock, B.K. 2019. Effects of environmental conditions on reproductive effort and nest success of Arctic-breeding shorebirds. *Ibis* 160: 608-623., June 19, 2019

http://www.co2science.org/articles/V22/jun/a8.php

Changing Weather

The Great Lakes: An AGW Showpiece By Donn Dears, Power For USA, June 19, 2019 https://ddears.com/2019/06/19/the-great-lakes-an-agw-showpiece/

How Politics Distorts the Science of Floods

By Jim Steele, Landscapes and Cycles, June 12, 2019 http://landscapesandcycles.net/science-of-floods.html

Changing Climate

Scientists solve long-standing mystery: Why atmospheric carbon dioxide was lower during ice ages

By Staff Writer, National Science Foundation, June 17, 2019 <u>https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=298738&WT.mc_id=USNSF_1</u> Link to paper: Air-sea disequilibrium enhances ocean carbon storage during glacial periods By S. Khatiwala, A. Schmittner and J. Muglia, Science Advances, June 12, 2019 <u>https://advances.sciencemag.org/content/5/6/eaaw4981.abstract</u> *[SEPP Comment: Article and abstract do not address why temperatures drop before CO2 drops.]*

Dry Hot North German Summers Were More Common 1000 Years Ago, Scientists Report By P Gosselin, No Tricks Zone, June 19, 2019

https://notrickszone.com/2019/06/19/dry-hot-north-german-summers-were-more-common-1000years-ago-scientists-report/

Changing Climate – Cultures & Civilizations

Climate change affected the people of the Amazon before Europeans arrived By Brooks Hays, Washington (UPI) Jun 17, 2019 <u>http://www.terradaily.com/reports/Climate_change_affected_the_people_of_the_Amazon_before</u> <u>Europeans_arrived_999.html</u> Unable to link to paper.

Changing Seas

Protecting US from rising sea levels will cost \$400 billion over next 20 years, study finds By Chris Mills Rodrigo, The Hill, June 20, 2019

https://thehill.com/policy/energy-environment/449617-study-protecting-us-from-rising-sea-levels-will-cost-400-billion

Link to report: Hight Tide Tax: The Price to Protect Coastal Communities form Rising Seas By LeRoy and Wiles, The Center for Climate Integrity: Resilient Analytics, June 2019 https://img1.wsimg.com/blobby/go/cd8b5217-ae9e-4883-bfe9eca0ae80b14e/downloads/ClimateCosts2040_Report-v5.pdf?ver=1561060134516 "Under scenarios deemed 'more plausible' by researchers, see levels could rise almost

"Under scenarios deemed 'more plausible' by researchers, sea levels could rise almost 40 inches by the end of the century if the world fails to reign in emissions more stringently." [SEPP Comment: "More plausible" does not mean based on any hard evidence.]

World's 76 Best Tide Gauges (100+ Years Of Data) Show A Mean 0.34 mm/yr Rise, 'Negligible' Acceleration

By Kenneth Richard, No Tricks Zone, June 20, 2019

https://notrickszone.com/2019/06/20/worlds-76-best-tide-gauges-100-years-of-data-show-a-mean-0-34-mm-yr-rise-negligible-acceleration/

Link to paper: A realistic expectation of sea level rise in the Mexican Caribbean By Albert Borett, Journal of Ocean Engineering and Science, June 12, 2019 https://www.sciencedirect.com/science/article/pii/S2468013319300567

"...the sea level rise by 2050 and by 2100 in the Mexican Caribbean, and more specifically in the North-East side of the Yucatan peninsula, in between Cancun and Playa del Carmen, where the most part of the touristic developments of the Yucatan is located. The forecast is based on the relative sea level result for Key West, the closest long-term trend (LTT) tide gauge, the relative sea level results for all the other LTT tide gauge records of the world, and the absolute velocity of GPS domes located close to the Key West tide gauge, and in between Cancun and Playa del Carmen. The likely change of the sea level is 67 to 76 mm higher by 2050, and 201 to 223 mm higher by 2100, with reference to the values of 2018."

"The likely relative sea level rise is 201 to 223 mm higher by 2100 (7.9 to 8.7 inches)" [SEPP Comment: Consistent with what Fred Singer predicted in NIPCC, 2008, and close to the average of 200mm / century of the last 2000 years.]

Changing Cryosphere – Land / Sea Ice

Arctic Sea Ice 8000 Years Ago less Than Half Of Today's, Yet Polar Bears Thrived! By P Gosselin, No Tricks Zone, June 14, 2019 <u>https://notrickszone.com/2019/06/14/arctic-sea-ice-8000-years-ago-less-than-half-of-todays-yet-polar-bears-thrived/</u>

Ice Melting In Greenland? That's What It Does In Summer!

By Paul Homewood, Not a Lot of People Know That, June 20, 2019 https://notalotofpeopleknowthat.wordpress.com/2019/06/20/ice-melting-in-greenland-thats-whatit-does-in-summer/

Cold War Spy Satellites Reveal Substantial Himalayan Glacier Melt

Ice melt in the mountain range today is twice as fast as it was before 2000, once-secret images show

By Chelsea Harvey, E&E News, Via Scientific American, June 20, 2019

https://www.scientificamerican.com/article/cold-war-spy-satellites-reveal-substantial-himalayan-glacier-melt/

Link to paper: Acceleration of ice loss across the Himalayas over the past 40 years By J. M. Maurer, J. M. Schaefer, S. Rupper3 and A. Corley, Science Advances June 19, 2019 <u>https://advances.sciencemag.org/content/5/6/eaav7266</u> See link immediately below.

Himalayan Glacier Loss Is Due to Many Factors

By David Whitehouse, GWPF, June 21, 2019

https://www.thegwpf.com/himalayan-glacier-loss-is-due-to-many-factors/

Link to paper: Climatic warming in the Tibetan Plateau during recent decades By Xiaodong Liu and Baode Chen, Royal Meteorological Society, Nov 22, 2000 https://rmets.onlinelibrary.wiley.com/doi/abs/10.1002/1097-

0088%2820001130%2920%3A14%3C1729%3A%3AAID-JOC556%3E3.0.CO%3B2-Y

Link to second paper: Warming and drying trends on the Tibetan Plateau (1971–2005) By Hong Xie, Jiansheng Ye, Xiuming Liu and Chongyi E, Theoretical and Applied Climatology, Sep 18, 2019

https://link.springer.com/article/10.1007%2Fs00704-009-0215-9 See link immediately above.

Boaty McBoatface mission gives new insight into warming ocean abyss

By Charles the Moderator, WUWT, June 17, 2019 https://wattsupwiththat.com/2019/06/17/boaty-mcboatface-mission-gives-new-insight-intowarming-ocean-abyss/

Changing Skies

Noctilucent Clouds and the Curious Cold of Summer Viewed by SSMIS By Roy Spencer, His Blog, June 15, 2019

http://www.drroyspencer.com/2019/06/noctilucent-clouds-and-the-curious-cold-of-summerviewed-by-ssmis/

Acidic Waters

"Surprise" Climate change, 900ppm CO2, acidification is good news for squid

By Jo Nova, Her Blog, June 17, 2019

http://joannenova.com.au/2019/06/surprise-climate-change-900ppm-co2-acidification-is-good-news-for-squid/

Link to paper: Aerobic performance of two tropical cephalopod species unaltered by prolonged exposure to projected future carbon dioxide levels

By Blake L. Spady, et al., Conservation Physiology, June 7, 2019

https://academic.oup.com/conphys/article/7/1/coz024/5512142

"Holy Calamari. Sperm whales are going to love climate change. So are squid. "Burn oil and save the whales."

Agriculture Issues & Fear of Famine

In a warming world we may get overun by cheap soy and corn

By Jo Nova, Her Blog, June 17, 2019

http://joannenova.com.au/2019/06/in-a-warming-world-we-may-get-overun-by-cheap-soy-andcorn/

Link to paper: Elevated CO2 and temperature increase grain oil concentration but their impacts on grain yield differ between soybean and maize grown in a temperate region By Yunfa Qiao, Science of The Total Environment, May 20, 2019 <u>https://www.sciencedirect.com/science/article/pii/S0048969719306370?via%3Dihub</u> [SEPP Comment: Don't tell those who prepared the US National Climate Assessment.]

Wheat myth debunked

The pervasive myth that intensive breeding has made modern wheat cultivars weaker and more dependent on pesticides and fertilisers is debunked by a major new stud

Press Release by Rod Snowdon, University of Queensland, June 17, 2019 [H/t WUWT] https://www.eurekalert.org/pub_releases/2019-06/uoq-wmd061419.php Link to paper: Breeding improves wheat productivity under contrasting agrochemical input levels By Kai P. Voss-Fels, et al., Nature, Plants, June 17, 2019 https://www.nature.com/articles/s41477-019-0445-5

Back to the Dark Ages: German Greens Look to Ban All Industrial Farming

By Staff Writers, Daily Telegraph, June 17, 2019 https://www.thegwpf.com/back-to-the-dark-ages-german-greens-look-to-ban-all-industrialfarming/

Communicating Better to the Public – Make things up.

Arctic could face another scorching annus horribilis

By Camille Bas-Wohlert, Copenhagen (AFP), June 19, 2019

http://www.spacedaily.com/reports/Arctic_could_face_another_scorching_annus_horribilis_999.html

"The number of polar bears in the Arctic has decreased by around 40 percent in the past decade due the shrinking ice, according to the US Geological Survey." [SEPP Comment: Yet polar bear populations are increasing.]

Trump winds back anti coal legislation, while New York ramps it up

By Jo Nova, Her Blog, June 20, 2019

http://joannenova.com.au/2019/06/trump-winds-back-anti-coal-legislation-may-kill-80000-people-or-not/

"One academic analysis estimates that over a decade the repeal could lead to 36,000 deaths, and that other Trump environment rollbacks could lead to a total to 80,000 deaths."

Link to paper: A Breath of Bad Air: Cost of the Trump Environmental Agenda May Lead to 80 000 Extra Deaths per Decade

By David Cutler, Francesca Dominici, JAMA Forum, (Journal of American Medical Association), June 12, 2019

https://jamanetwork.com/journals/jama/fullarticle/2684596?appid=scweb&appid=scweb&alert=ar ticle

[SEPP Comments: The JAMA Forum accepts "virtual deaths" over hard evidence?]

'Chernobyl' Provided The Climate Change Metaphor That 'Game Of Thrones' Failed To Deliver

By Dani Di Placido, Forbes, June 17, 2019

https://www.forbes.com/sites/danidiplacido/2019/06/17/chernobyl-provided-the-climate-changemetaphor-that-game-of-thrones-failed-to-deliver/#294c741c5d71

"Game of Thrones failed to properly finish its story, to connect our modern-day climate crisis to Tolkienesque fantasy."

[SEPP Comment: One could argue that the White Walkers in Game Of Thrones exhibited the behavior of Green Zombies.]

Inslee knocks carbon move: Trump's 'undying loyalty to coal CEOs is literally killing Americans'

By Rebecca Klar, The Hill, June 19, 2019

https://thehill.com/homenews/campaign/449374-inslee-knocks-dirty-air-rule-trumps-undying-loyalty-to-coal-ceos-is

[SEPP Comment: More virtual deaths?]

Communicating Better to the Public – Do a Poll?

Most Germans do not compromise on holidays for climate: survey By Xuxin, Xinhua, June 18, 2019 [H/t GWPF] http://www.xinhuanet.com/english/2019-06/18/c 138153926.htm

Expanding the Orthodoxy

Talk About Excitement: New York To Become The "Global Leader" On Climate!By Francis Menton, Manhattan Contrarian, June 19, 2019https://www.manhattancontrarian.com/blog/2019-6-19-talk-about-excitement-new-york-to-

become-the-global-leader-on-climate

"The [Climate Leadership and Community Protection Act] requires New York to get 70 percent of its electricity from renewable sources like wind, solar and hydropower by 2030 and shift entirely to carbon-free power a decade later."

[SEPP Comment: New York replacing China as the "Real Climate Leader?"]

Thousands of big energy reps at UN climate talks: monitor

By Patrick Galey, Paris (AFP), June 19, 2019 http://www.terradaily.com/reports/Thousands of big energy reps at UN climate talks monitor

<u>999.html</u>

Questioning European Green

A pledge to abolish sin

By Matt Ridley, Rational Optimist, June 17, 2019 http://www.rationaloptimist.com/blog/net-zero/

"In Britain last year, generously using the Final Energy Consumption metric, 4 per cent of energy came from wind and solar, 3 per cent from nuclear and less than 1 per cent from hydro, the three zero-carbon sources. The common misconception that wind and solar are bigger contributors comes from forgetting that electricity is just 20 per cent of energy: the rest is heat, transport and industry."

Dominic Lawson: Your Legacy Isn't Worth a Trillion Quid, Mrs. May

By Dominic Lawson, The Sunday Times, Via GWPF, June 16, 2019 <u>https://www.thegwpf.com/dominic-lawson-your-legacy-isnt-worth-a-trillion-quid-mrs-may/</u> "The prime minister is going down in a blaze of vanity and arrogance" "Industrial electricity prices . . . are getting increasingly uncompetitive: in 2010 they were about average for a western economy; now they are 28% more expensive."

UK needs to show its steel in manufacturing

IT IS a sad state of affairs when Britain announces the closure of yet another keystone manufacturing business. Steel is part of our everyday lives but, from now on, we will need to buy most of it in from abroad.

By Jim Ratcliffe, Express, UK, June 16, 2019

https://www.express.co.uk/comment/expresscomment/1141182/uk-manufacturing-decline-steelindustry

Questioning Green Elsewhere

Without Mining There Is No 'Green Revolution'

By Stephen Moore, Townhall, June 18, 2019

https://townhall.com/columnists/stephenmoore/2019/06/18/without-mining-there-is-no-green-revolution-

 $\frac{n2548426?utm_source=thdaily\&utm_medium=email\&utm_campaign=nl\&newsletterad=06/18/20}{19\&bcid=600713400c5e414103c69dc935baaf47\&recip=4143601}$

Steel, Cement, and CO2

By Donn Dears, Power For USA, June 21, 2019 https://ddears.com/2019/06/21/steel-cement-a%E2%80%8Bn%E2%80%8Bd-co2/ [SEPP Comment: To save on cement, can we anchor wind turbines with tie-downs?]

The Ultimate Absurdity: Green New Deal Would Not Provide Significant Climate Benefits

By Alan Carlin, Carlin Economics and Science, june 16, 2019 http://www.carlineconomics.com/archives/5028

Big-Idea Energy Alternatives Are Costly and Puny

By Larry Bell, Newsmax, June 17, 2019 https://www.newsmax.com/larrybell/biofuels-charging-stations-sun/2019/06/17/id/920710/

Reality Bites Joe Biden's "Clean Energy Revolution"

By Paul Driessen, GWPF, June 17, 2019 https://www.thegwpf.com/reality-bites-joe-bidens-clean-energy-revolution/

Solar Power to Hit the Wall in Nevada

By Norman Rogers, American Thinker, June 18, 2019 https://www.americanthinker.com/articles/2019/06/solar power to hit the wall in nevada.html

The Western world's trash crisis is about to get very, very real

Opinion: Wealthy countries may have to introduce emergency measures to protect public health and the environment

By Mikko Paunio, Financial Post, June 19, 2019

https://business.financialpost.com/opinion/the-western-worlds-trash-crisis-is-about-to-get-very-very-real

[SEPP Comment: Efficient disposal of plastics, incineration, is prohibited by regulations and recycling laws.]

Litigation Issues

Fort Lauderdale Deals Another Blow to Climate Litigation Campaign By Erin Mundahl, Energy in Depth, June 4, 2019 [H/t WUWT] https://eidclimate.org/fort-lauderdale-deals-another-blow-to-climate-litigation-campaign/

Cap-and-Trade and Carbon Taxes

Canada Tory leader vows to scrap carbon tax, put cap on large emitters if elected By Staff Writers, AFP, June 20, 2019

https://www.france24.com/en/20190620-canada-tory-leader-vows-scrap-carbon-tax-put-cap-large-emitters-elected

Subsidies and Mandates Forever

Government Restarts Subsidies to Wind and Solar, This Time by the Back Door

Press Release GWPF, June 16, 2019

https://www.thegwpf.com/government-restarts-subsidies-to-wind-and-solar-this-time-by-the-back-door/

Energy Issues – Non-US

Massive blackout hits tens of millions in South America By Paul Byrne and Luis Henao, AP, June 16, 2019 https://apnews.com/a29b1da1a91542faa91d68cf8e97a34d

Energy Issues – Australia

The World's Most Insane Energy Project Moves Ahead

Australia approves Adani coal mine, endangering the Great Barrier Reef and, well, civilization By Jeff Goodell, Rolling Stone, June 14, 2019

https://www.rollingstone.com/politics/politics-news/adani-mine-australia-climate-change-848315/

"Thanks to President Trump and his transparent and perverse desire to enrich his golfing buddies in the fossil fuel industry and to accelerate the climate crisis, the U.S. is the most notorious climate criminal in the world right now. But the Aussies are giving us a run for our money." [SEPP Comment: The voters seek reliable electricity?]

Poor Timing for Al Gore's Climate Panic Poppycock

By Judith Sloan, The Australian, Via GWPF, June 18, 2019 https://www.thegwpf.com/poor-timing-for-al-gores-climate-panic-poppycock/

Energy Issues -- US

Alaska key to U.S. energy security

By Mike Sommers, Anchorage Daily News, June 6, 2019

https://www.adn.com/opinions/2019/06/06/alaska-key-to-us-energy-security/

"It's all good news for the Trans-Alaska Pipeline System, or TAPS — backbone of Alaska energy and critical pillar of U.S. energy security. TAPS throughput is ticking up, and new finds in National Petroleum Reserve Alaska, or NPR-A, could singlehandedly increase its volume by 18%."

NY lawmakers approve sweeping climate bill aiming for net-zero carbon emissions by 2050 By Chris Mills Rodrigo, The Hill, June 20, 2019

https://thehill.com/policy/energy-environment/449607-ny-lawmakers-approve-sweeping-climatebill-aiming-for-net-zero

Oil and Natural Gas – the Future or the Past?

UK's 'biggest' onshore gas field discovered near Hull [Yorkshire] By Julia Bradshaw, Daily Telegraph, Via GWPF, June 17, 2019 https://www.thegwpf.com/uks-biggest-onshore-gas-field-discovered-near-hull/

Return of King Coal?

Hopes for climate progress falter with coal still king across Asia

A depressing picture of global power generation has coal still firmly on top. And in a vicious cycle, the very heatwaves and winter freezes high carbon emissions cause seem to be increasing them

By Jillian Ambrose, The Guardian, June 15, 2019

https://www.theguardian.com/business/2019/jun/15/climate-crisis-coal-asia-power-generation-fossil-fuels

Nuclear Energy and Fears

Why the Chernobyl Nuclear Reactor Exploded

HBO's 'Chernobyl' is a story about political power, not the dangers of nuclear energy, and it's important to know what really happened.

By Matthew Gault, Vice, June 4, 2019

https://www.vice.com/en_us/article/597k9x/why-the-chernobyl-nuclear-reactor-exploded

"In the wake of the show's popularity, some viewers expressed on social media that nuclear power is too dangerous to use. Craig Mazin, writer-producer of Chernobyl, weighed in on Twitter in April, writing, 'The lesson of Chernobyl isn't that modern nuclear power is dangerous. The lesson is that lying, arrogance and suppression of criticism is dangerous.""

[SEPP Comment: Strongly question the statement in the article: "The catastrophe spread radiation across Russia and Europe and has killed thousands in the years since it occurred."]

Yucca Mountain is the safest spot for nuclear waste. We should pay Nevada to use it.

By Alex Berezow, USA Today, June 14, 2019

https://www.usatoday.com/story/opinion/2019/06/14/yucca-mountain-facility-should-used-store-nuclear-waste-column/1351433001/

Alternative, Green ("Clean") Solar and Wind

Finally "world first" study on nine houses shows wind towers make pulsing noise for 3.5 km By Jo Nova, Her Blog, June 21, 2019

http://joannenova.com.au/2019/06/finally-world-first-study-on-nine-houses-shows-wind-towersmake-pulsing-noise-for-3-5-km/

Link to article: Can wind turbines disturb sleep? Research finds pulsing audible in homes up to 3.5km away

By Nicole Hasham, Sydney Morning Herald, June 18, 2019

https://www.smh.com.au/environment/sustainability/can-wind-turbines-disturb-sleep-research-finds-pulsing-audible-in-homes-up-to-3-5km-away-20190617-p51yik.html

Link to research: Establishing the physiological and sleep disruption characteristics of wind farm versus traffic noise disturbances in sleep

By Peter G Catcheside, et al., Flinders University, Adelaide Institute for Sleep Health https://www.researchgate.net/lab/Wind-Farm-Noise-and-Sleep-Peter-G-Catcheside

Energy & Environmental Newsletter: June 17, 2019

By John Droz Jr. Master Resource, June 17, 2019 <u>https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-environmental-</u> newsletter-june-17-2019/

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

Record efficiency for a [natural] gas engine

By Christian Bach, Swiss Federal Laboratories for Materials Science and Technology, Phys.org, June 20, 2019

https://phys.org/news/2019-06-efficiency-gas.html

BBC Advert For Hydrogen Trains

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

https://notalotofpeopleknowthat.wordpress.com/2019/06/21/bbc-advert-for-hydrogentrains/#more-40015

[SEPP Comment: The atmosphere of Jupiter is about 90% hydrogen. Think of the green jobs created by building a pipeline to Jupiter.]

Alternative, Green ("Clean") Vehicles

'Climate Emergency': Ireland Set to Ban Private Cars By Paul Homewood, Not a Lot of People Know That, June 21, 2019 <u>https://notalotofpeopleknowthat.wordpress.com/2019/06/21/climate-emergency-ireland-set-to-ban-private-cars/</u>

Ireland to ban sales of new petrol and diesel cars by 2030

By Staff Writers. London (AFP), June 18, 2019

http://www.spacedaily.com/reports/Ireland_to_ban_sales_of_new_petrol_and_diesel_cars_by_20 30_999.html

"The government hopes to have 950,000 electric vehicles on Irish roads by then, supported by a network of charging stations."

California Dreaming

California lawmakers are turning cap-and-trade into the slush fund critics long feared By Charles the moderator, WUWT, June 17, 2019 <u>https://wattsupwiththat.com/2019/06/17/california-lawmakers-are-turning-cap-and-trade-into-the-</u> slush-fund-critics-long-feared/

Other Scientific News

A Rover for Phobos and Deimos

By Staff Writers, Le Bourget, France (SPX), Jun 21, 2019 <u>http://www.marsdaily.com/reports/A_Rover_for_Phobos_and_Deimos_999.html</u> [SEPP Comment: Fred Singer has long advocated that Phobos or Deimos be a base for exploration of Mars.]

NASA Explores Our Changing Freshwater World

By Ellen Gray, NASA, June 12, 2019 [H/t Toshio Fujita] https://climate.nasa.gov/news/2880/nasa-explores-our-changing-freshwater-world/

Other News that May Be of Interest

Police say Extinction Rebellion Heathrow drone protest activists could face life in jail By Patrick Grafton-Green, Evening Standard, June 15, 2019 <u>https://www.standard.co.uk/news/london/extinction-rebellion-heathrow-drone-protest-police-say-activists-could-face-life-in-jail-a4167986.html</u>

Pew: World population expected to virtually stop growing by 2100 By Rebecca Klar, The Hill, June 17, 2019 https://thehill.com/homenews/news/448909-pew-world-population-expected-to-virtually-stopgrowing-by-2100

Link to report: World's population is projected to nearly stop growing by the end of the century By Cilluffo and Ruiz, Pew Research Center, June 17, 2019

https://www.pewresearch.org/fact-tank/2019/06/17/worlds-population-is-projected-to-nearly-stopgrowing-by-the-end-of-the-century/

Link to data: World Population Prospects, 2019

The 2019 Revision of World Population Prospects

By Staff Writers, Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 2019

https://population.un.org/wpp/

BELOW THE BOTTOM LINE:

SUN-to-LIQUID produces solar kerosene from sunlight, water and carbon dioxide By Staff Writers, Zurich, Switzerland (SPX), Jun 18, 2019

http://www.solardaily.com/reports/SUN_to_LIQUID_produces_solar_kerosene_from_sunlight_w ater and carbon_dioxide_999.html

"This intense solar flux, verified by the flux measurement system developed by the German Aerospace Center (Deutsches Zentrum fur Luft- und Raumfahrt; DLR) makes it possible to reach reaction temperatures of more than 1500 degrees Celsius within the solar reactor positioned at the top of the tower."

Adaniphobia: Ministers cry, Anti coal protesters glue themselves to a crosswalk

Master Plan: Let's fight extinction ...by gluing ourselves to a road. By Jo Nova, Her Blog, June 19, 2019 <u>http://joannenova.com.au/2019/06/adaniphobia-ministers-cry-anti-coal-protesters-glue-themselves-to-a-crosswalk/</u>

ARTICLES

1. EPA Overturns Obama-Era Clean Air Rules for Power Plants

New plan, aimed at boosting coal-fired plants, would limit the agency's ability to mandate tougher greenhouse-gas-emissions regulations By Timothy Puko, WSJ, June 19, 2019 <u>https://www.wsj.com/articles/epa-overturns-obama-era-clean-air-rules-for-power-plants-11560963259?mod=hp_listb_pos4</u>

SUMMARY: The journalist writes:

"The Trump administration moved to try to revive the coal-power industry Wednesday, overturning Obama administration policies aimed at stemming climate change and adopting rules that could allow older power plants to continue operating.

"The new plan, signed by Environmental Protection Agency Administrator Andrew Wheeler, replaces rules that sought to mandate a national shift away from coal to cleaner sources of power, including natural gas, wind and solar. The EPA move faced an immediate pushback from environmental groups and some state and city governments.

"The Obama-era rules had been blocked by legal challenges from 26 states, industry groups and others that cited concerns including the costs of compliance and the EPA's authority to enact such a sweeping change. Mr. Wheeler said the new Affordable Clean Energy rules will restore authority to states, but require some power plants to adopt newer technology to remain in operation.

"'These provisions will give states and the private sector the regulatory certainty they need to invest in new technologies that are more efficient and reduce emissions," Mr. Wheeler said. "We are trying to address climate change. But we are trying to do it within the authority Congress has given us.""

The articles continues with objections from environmentalist claiming the new rules don't go far enough citing UN reports of catastrophic climate change.

2. The Future Isn't What It Used to Be

There's one trend you can count on: Most predictions turn out to be wrong. By Andy Kessler, WSJ, June 16, 2019 <u>https://www.wsj.com/articles/the-future-isnt-what-it-used-to-be-</u> <u>11560714338?mod=hp_opin_pos2</u>

SUMMARY: The investor / columnist Kessler writes:

"Founded in 1867, the Keuffel & Esser Co. commissioned a study of the future for its 100th anniversary. If you're of a certain vintage, you might have used a K&E slide rule. Their 'visionary' study was a huge dud, missing completely the electronic-calculator boom that came a few years later. They shut down their slide-rule engravers in 1976. As Mark Twain said, 'It's difficult to make predictions, especially about the future.' Or was it Niels Bohr? Maybe Yogi Berra?

"My father was a proud member of the Book of the Month Club. Bored on a visit home in 1989, I devoured that month's selection, 'Megamistakes' by Baruch College professor Steven Schnaars, where I read about K&E's study. The book's message was simple: Don't be fooled by prevailing opinion, and don't extend trend lines into the future. Mr. Schnaars chronicles how 1950s jet-age thinking morphed into '60s dreams of a space-age utopia. A 1966 study by conglomerate TRW forecast manned lunar bases by 1977, autonomous vehicles by 1979 and intelligent robot soldiers by the '90s. AT&T 's Picturephone service, ultrasonically cleaned dishes, cheap energy forever, future shock everywhere—all wrong.

"Of course, the 1973 oil embargo changed everything. But by the end of the '70s, expensive oil was considered permanent and the future was about scarcity and energy saving and we'd all be driving small cars with CB radios and living in R. Buckminster Fuller-inspired geodesic domes. General Electric even ramped up production of small refrigerators. Mistakes!

"Then the '80s came along. A bull market and cheap oil lifted the '70s fog, but everyone believed the Japanese would soon rule the world since they were kicking our butts in manufacturing and the Imperial Palace in Tokyo was worth more than all the real estate in California. Personal computers were mere toys. Oh, and the Soviet Union was a world superpower. Megamistakes!

"After the '87 crash and first Iraq war, the prospects for economic growth in the '90s were dim. Then Netscape and its browser went public in 1995 and we were off to the races again. By 1999 techno-utopia was in full swing, and all you needed was a good name like burnmoney.com to raise millions and be worth kazillions. Gigamistake!

"The Nasdaq's dot-bomb implosion and 9/11 changed the mood quickly. In 2003 I tried to pitch a book about Silicon Valley and Wall Street and was told nobody would care about them ever again and asked if I knew anything about bioterrorism or Islamic fundamentalism. Uh, no. But I wish I knew about house or derivative flipping—that's what the aughts were about, until the Great Recession. The 2010s were about holding cash, maybe in your mattress, vs. owning stocks. Oops— Apple, Amazon and Microsoft would soon flirt with trillion-dollar valuations. Teramistake?

"Mr. Schnaars advised discounting extrapolations, playing down historical precedent, challenging assumptions, and distinguishing fads from growth markets. Easier said than done. The future happens, just not the way most people think. How you pick your investments, your job and even where you live can end up a dead end or the most vibrant upside imaginable. Choose carefully, but as Mr. Schnaars suggested, think for yourself.

"Today low interest rates mean risk is on and caution is old-fashioned. Companies sell at 20 times revenues instead of earnings."

After a discussion about electric cars and current fads he continues:

"My experience is that people tend to overestimate the absurd, like Elon Musk's dreams of building a hyperloop and colonizing Mars, and underestimate the mundane, like improvements in messaging and shopping. I'm usually bullish until dreams become hallucinations. Technology develops in S curves: Things start slow, go into hyperbolic growth, and then roll over. That's why 'the singularity'—self-improving, unrestrained artificial intelligence—probably won't happen. Don't extend the trend.

"The tempests of change blow hard. Reading the prevailing winds, we're all about to become robot-replaced, drone-delivered-synthetic-meat-eating, augmented-reality-helmet-wearing, bitcoin-spending, fruit-flavored-vaping, neutered democratic socialists chirping 'Comrade' and streaming 'The Handmaid's Tale' Season 10, 'Dystopia's Discontents,' on our watches while collecting universal basic income. You don't need a slide rule to calculate the megamistakes."