The Week That Was: 2017-07-01 (July 1, 2017) Brought to You by SEPP (<u>www.SEPP.org</u>) The Science and Environmental Policy Project

Quote of the Week. "It's a kind of scientific integrity, a principle of scientific thought that corresponds to a kind of utter honesty—a kind of leaning over backwards. For example, if you're doing an experiment, you should report everything that you think might make it invalid—not only what you think is right about it: "– Richard Feynman [H/t Tony Thomas]

Number of the Week: 27.5 times

THIS WEEK:

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

Climategate 2017? Last week TWTW discussed a paper by Santer, et al. that seems to support the view that, generally, global climate models greatly overestimate the warming of the atmosphere. The exception is the model by the Institute of Numerical Mathematics in Moscow. TWTW suspected that the paper may be part of a ruse, a trick, to discredit John Christy's Congressional testimony on December 8, 2015, and February 2, 2016. Christy had stated that global climate models overestimate warming by 2.5 to 3 times. The new Santer paper is similar to one in the *Journal of Climate* on December 21, 2016.

The 2016 Santer paper claimed that the Christy did not properly account for stratospheric cooling. If that cooling is included, the warming projected by the models is **only 1.7 times** what is occurring. Yet, Christy specifically limited the data in his testimony to 50,000 feet, below the stratosphere, to avoid the complexity of the issue. The new Santer paper, published in *Nature Geoscience* on June 19, 2017, has many of the same authors as the previous paper. A noted exception is that Susan Solomon of MIT is not included in the second paper. [Michael Mann is listed as a co-author in the second paper.]

TWTW's speculation that Santer's new paper may be part of a ruse to discredit the testimony of John Christy was re-enforced this week with the publication of a paper by Carl Mears and Frank Wentz in the *Journal of Climate*. Mears and Wentz are co-authors in both prior Santer papers.

Mears and Wentz are principals in Remote Sensing Systems (RSS), competitors with the Earth System Science Center at the University of Alabama in Huntsville (UAH), where John Christy is Director. Both groups calculate temperatures from data from microwave sensors on satellites. The latest revised calculations show a disparity between the two sets of calculations.

As stated in last week's TWTW, Mears claims RSS data better reflects surface data, but TWTW finds surface data highly questionable. Moreover, the latest paper by Mears and Wentz claims their new estimates show an atmospheric warming some 30% larger than previous estimates since the data has been compiled beginning in 1979 (December 1978). The new warming trend is 0.174 C/decade, as compared with 0.134C/decade for 70S-80N from 1979 to 2016. The questions are: are the new adjustments more accurate, and how are they tested?

Christy and Roy Spencer have not had time to respond to the new paper, but TWTW noticed a significant issue with it. As Christy carefully notes in his testimony, the UAH data is

independently verified by direct atmosphere temperature measurements using radiosondes on weather balloons. Mears and Wentz dismiss these data along with the satellite data. Thus, their new calculations on atmospheric temperature trends from satellite data have no independent verification. Surface temperature data do not necessarily verify atmospheric temperature data. Both surface data and satellite data can be influenced by natural variations.

Moreover, surface data can be influenced by human activities other than carbon dioxide and other greenhouse gas emissions. These emissions are core to the entire global warming/climate change controversy. For comments from Spencer on the previous Santer paper and other comments see links under Challenging the Orthodoxy, Defending the Orthodoxy and last week's TWTW.

Scientific Integrity: Given the controversy that may develop over satellite temperature data, it is important to be reminded of the classic lectures given to students by Richard Feynman, Nobel Laurate in Physics. Fortunately, some audio and visual recordings have been saved and are available on YouTube and other means. By coincidence, Tony Thomas has an article on Feynman and scientific integrity in the Australian publication *Quadrant*, along with an audio (and some still pictures). The part on scientific integrity is particularly important. (See above quote).

By focusing on the human causes of climate change, and largely ignoring natural causes, the UN Intergovernmental Panel on Climate Change (IPCC), and its followers such as the US Global Change Research Program (USGCRP), have created a bias in climate science. This bias extends to many scientific societies, "peer reviewed" publications, and universities.

This bias results in overemphasis on human influence, particularly human carbon dioxide (CO2) emissions, and an underestimate of natural influences. This bias can be seen in projections (predictions) of future temperatures, future sea level rise, and results of what is called ocean acidification, better termed as ocean carbonization [H/t Craig Idso]. The benefits of increased CO2 to plants, humanity, and the environment are largely dismissed as with the human benefits of use of fossil fuels.

Tremendous resources have been allocated to address fears of the future, largely stemming from this bias of harmful effects of CO2 and use of fossil fuels. As a result, the entities proclaiming a dire future from increasing atmospheric CO2 are engaged in a disservice to humanity.

As laboratory tests show, increased CO2 will have a minor influence on temperatures, but a great amplification by increased water vapor has not been found, at least thus far. Thus, the claim that CO2 emissions will cause dire global warming has no empirical basis. However, billions of humans who do not have reliable energy free of pollutants that have been demonstrated to cause harm, also live without reliable electricity, a hallmark of modern civilization.

Executives in the new administration, namely the Secretary of Energy Perry and Administrator of the EPA Pruitt, are calling for a Red Team/Blue Team approach to climate science. If this comes to pass, let us hope such an initiative will embody the highest standards of scientific integrity, as discussed by Feynman. See links under Challenging the Orthodoxy, Change in US Administrations, and Review of Recent Scientific Articles by CO2 Science.

US Energy: The Trump administration declared the past week to be "Energy Week," with the president and several executives giving speeches on the importance of the nation developing its

energy resources, particularly fossil fuel resources. This approach is a dramatic change from over three decades of predictions of increasing oil and gas scarcity.

[In 1977, this author was engaged under a Federal contract to review the Nation's Natural Gas model, also reviewing the petroleum model. These models were used to predict a dire future of scarcity. He duly reported that the models were unsuitable for the task, stating the reasons why, and that the Natural Gas model had a severe error in logic, which was revealed in the computer code. Among other reasons for unsuitability, the assumptions in the models had not been adequately tested.]

It is becoming increasingly clear that the Trump administration recognizes the importance of the shale revolution, other US oil and gas resources, and will encourage development of them. As such, the administration is ignoring any claims the US has obligations under the Paris Accord. The Obama administration failed to submit this "executive agreement" to the Senate for approval, as required for a binding treaty. See links under Change in US Administrations.

Mission 2020: Since President Trump announced the US withdrawal from the Paris Accord, the complaints by those who anticipated funding from the "international agreement" continue to grow, revealing more of the funding expected by various groups. We have the Green Climate Fund, to which the Obama administration transferred about \$1 billion of an expected \$3 billion. An exact accounting is not available. According to reports, the US obligation was expected to grow to \$23 billion per year, of a total developed-world obligation of \$100 billion per year.

As discussed in last week's TWTW, we have the Mission Innovation pact, which involved a US commitment of over \$6 billion in 2017, increasing to over \$12 billion in 2021. This week revealed the Mission 2020 pact, headed by Christiana Figueres, formerly Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC) and who "led" the negotiations of the Paris Accord. This week, Ms. Figueres signed a letter stating we have three years to stop dangerous (global warming) climate change.

According to reports, Ms. Figueres launched Mission 2020 in April. The Mission 2020 web site states that its goal is obtaining at least \$200 billion public resources and \$800 billion private resources for climate action each year, and that the goal is achievable. Of course, the web site calls the expenditures of One Trillion Dollars a year an "investment." But, international investments of this type may have a negative return – cost the world economy more than the amount put in by severely curtailing economic activity. There seems to be no end in demands of funding for global climate action causes.

The sources of the \$800 billion per year in private resources is not identified. Occasionally, international economists float the idea of a world-wide tax on financial transactions calling it an untapped resource. The views of Ms. Figueres on the economic system that has pulled humanity out of a "hand-to-mouth" existence are expressed elsewhere. See links under Defending the Orthodoxy.

Carbon Capture and Storage: On Wednesday, the operators of the largest "clean coal" power plant under construction in the US, in Kemper County, Mississippi, announced that they no longer plan to utilize coal at the facility. Instead they will utilize natural gas. Having spent seven years and about \$7.5 billion, the operators started testing the coal gasification process last fall and found numerous problems. To stop further capital costs, and protect consumers from associated rate

increases, the Mississippi Public Services Commission gave the plant operators a choice: either operate its coal process at current costs or run the plant entirely on natural gas. The plant operators chose the latter.

The plant was hailed as a demonstration project, but it was not a universal one. The scheme was to pump the CO2 into oil and gas wells, boosting their production. However, such wells are not generally found.

Separately, the Global Warming Policy Foundation published a report by economics professor Gordon Hughes on the economics of Carbon (Dioxide) Capture and Storage (CCS). He found that such plants are not economically viable in the UK, or elsewhere. The problems with carbon capture have not been solved, and storage is not resolved.

The load factor for unreliable, intermittent electricity generation from wind is an additional problem in the UK and elsewhere. To hope to recapture the capital costs, the CCS coal-fired power plants must be run at near maximum capacity, operating 85 to 90% of the time. But pricing structures give low cost wind power a preference, when it is available. Thus, a coal-fired CCS plant would not be paid to operate the number of hours needed to re-capture capital costs and the costs of operations. Will someone now propose subsidies for coal-fired power plants? See links under Carbon Schemes.

Number of the Week: 27.5 times. For the last two weeks, TWTW cited the finding by Management Information Services Inc. (MISI) that, from 2011 through 2016, renewable energy received more than three times as much in federal incentives as oil, natural gas, coal, and nuclear combined. An article by Roger Bezdek, President of MISI, in "World Oil" breaks down the numbers even further. Over these six years, solar, wind, and biomass received \$78 billion, more than three times as much in federal incentives as oil and natural gas combined.

According to EIA calculations of U.S. energy consumption by energy source, 2016, petroleum accounted for 37% of energy consumption, natural gas 29%, for a total of 66% of energy consumption. Correspondingly, biomass accounted for 4.6%, wind 2.1%, and solar 0.6%, for a total of 7.3%.

All too often, some politicians and economists make calculations of what is called Keynesian multipliers, even when such calculations do not empirically apply. Using such procedures, one can state that each dollar in Federal incentives for oil and natural gas has 27.5 times the impact of incentives for wind, solar, and biomass. Of course, the calculation is frivolous, but so are many calculations on the cost of wind or solar without accounting for the cost of necessary back-up. See link under Subsidies and Mandates Forever and

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 five past recipients, Lisa Jackson, Barack Obama, John Kerry, Ernest Moniz and John Holdren are not eligible. Generally, the committee that makes the selection prefers a candidate with a national or international presence. The voting will close on July 30. Please send your nominee and a brief reason why the person is qualified for the honor to Ken@SEPP.org. Thank you. The award will be presented at the annual meeting of the Doctors for Disaster Preparedness in August.

Science: Is the Sun Rising?

More Evidence of an Increase in Cosmic Rays as Sun Approaches Minimum By Paul Dorian, Vencore, Weather, June 26, 2017 <u>https://www.vencoreweather.com/blog/2017/6/26/1200-pm-cosmic-rays-continue-to-rise-as-solar-cycle-approaches-next-minimum</u>

Suppressing Scientific Inquiry

The Science Police By Keith Kloor, Issues in Science and Technology, Summer, 2017 http://issues.org/33-4/the-science-police/

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science Idso, Carter, and Singer, Lead Authors/Editors, 2013 <u>https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf</u> *Summary*: <u>http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf</u>

Climate Change Reconsidered II: Biological Impacts

Idso, Idso, Carter, and Singer, Lead Authors/Editors, 2014 <u>http://www.nipccreport.org/reports/ccr2b/pdf/Full-Report.pdf</u> *Summary*: <u>https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.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, 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>

Challenging the Orthodoxy

Surely You're Crying, Mr Feynman By Tony Thomas, Quadrant, June 28, 2017 http://quadrant.org.au/opinion/qed/2017/06/surely-yourre-crying-mr-feynman/ [SEPP Comment: With a 20-minute audio.]

New Santer et al. Paper on Satellites vs. Models: Even Cherry Picking Ends with Model Failure

By Roy Spencer, with notes from John Christy, Spencer's Blog, **Oct 18, 2016** <u>http://www.drroyspencer.com/2016/10/new-santer-et-al-paper-on-satellites-vs-models-even-cherry-picking-ends-with-model-failure/</u>

The truth about the global warming pause

By David Whitehouse, The Spectator, June 29, 2017 [H/t GWPF] https://blogs.spectator.co.uk/2017/06/truth-global-warming-pause/#

"The lesson of the pause is not that the greenhouse effect doesn't exist, but rather that the computer models, which predicted an acceleration in global warming, and on which current policy is based, have proved to be inaccurate."

Getting the message out

By Joseph D'Aleo, CCM, AMS Fellow, ICECAP, June 29, 2017 http://icecap.us/index.php/go/new-and-cool/getting the message out/

Retired 40-Year Veteran German Climatologist: "CO2 A Scapegoat" ... IPCC "A Marketing Organization"

By P Gosselin, No Tricks Zone, June 27, 2017 http://notrickszone.com/2017/06/27/retired-40-year-veteran-german-climatologist-co2-ascapegoat-ipcc-a-marketing-organization/#sthash.1Jto7uA5.dpbs

Defending the Orthodoxy

Major correction to satellite data shows 140% faster warming since 1998

By Zeke Hausfather, Carbon Brief, June 30, 2017

https://www.carbonbrief.org/major-correction-to-satellite-data-shows-140-faster-warming-since-1998

Link to paper: A satellite-derived lower tropospheric atmospheric temperature dataset using an optimized adjustment for diurnal effects

By Carl A. Mears and Frank J. Wentz, RSS, Journal of Climate, June 26, 2017 <u>http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-16-0768.1</u>

Mission 2020: A new global strategy to 'rapidly' reduce carbon emissions

By Zeke Hausfather, Carbon Brief, June 28, 2017 https://www.carbonbrief.org/mission-2020-new-global-strategy-rapidly-reduce-carbon-emissions Link to paper: Three years to safeguard our climate

By Christina Figueres, Nature, June 28, 2017

https://www.nature.com/news/three-years-to-safeguard-our-climate-1.22201

Link to report: 2020 The Climate Turning Point

Preface authors; Potsdam Institute for Climate Impact Research: Stefan Rahmstorf and Anders Levermann

Report writers; Independent Policy Analyst and Writer: Chloe Revill and Victoria Harris <u>http://www.mission2020.global/2020%20The%20Climate%20Turning%20Point.pdf</u>

World has three years left to stop dangerous climate change, warn experts

Former UN climate chief Christiana Figueres among signatories of letter warning that the next three years will be crucial to stopping the worst effects of global warming By Fiona Harvey, The Guardian, UK, June 28, 2017 <u>https://www.theguardian.com/environment/2017/jun/28/world-has-three-years-left-to-stop-dangerous-climate-change-warn-experts</u>

5 Shades of Climate Denial, All on Display in the Trump White House

From 'it's not real' to 'it's not urgent,' take a tour through the many shades of climate change denial wielded by Donald Trump's administration. By Marianne Lavelle, Inside Climate News, June 9, 2017 <u>https://insideclimatenews.org/news/09062017/five-shades-climate-denial-donald-trump-scott-</u> pruitt-rex-tillerson-jobs-uncertainty-white-house

Questioning the Orthodoxy

Global Warming: The Imminent Crisis That Never Arrives By Kerry Jackson, IBD, June 26, 2017 <u>http://www.investors.com/politics/commentary/global-warming-the-imminent-crisis-that-never-arrives/</u>

How the Climate Doomsters Are the Problem, Not the Solution They Claim to Be

By Alan Carlin, Carlin Economics and Science, June 30, 2017 http://www.carlineconomics.com/archives/3705

Honest Climate Debate Will Expose Rigged Science

By Larry Bell, Newsmax, June 26, 2017 http://www.newsmax.com/LarryBell/epa-ipcc-nyu/2017/06/26/id/798190/

Finally, see "Climate Hustle" in Australia — Melbourne, Brisbane, Sydney.

By Jo Nova, Her Blog, June 27, 2017 http://joannenova.com.au/2017/06/finally-see-climate-hustle-in-australia-melbourne-brisbanesydney/

After Paris!

Nation's Mayors Pledge Own Paris Agreement: 'Can't Depend on Our National Government Anymore' By Penny Starr, Breitbart, June 24, 2017 http://www.breitbart.com/big-government/2017/06/24/nations-mayors-pledge-own-parisagreement-cant-depend-on-our-national-government-anymore/

Change in US Administrations

Trump Vows to Unleash the 'Vast Energy Wealth' of the U.S. By Jennifer Dlouhy, Bloomberg, June 29, 2017 <u>https://www.bloomberg.com/news/articles/2017-06-29/trump-said-to-tout-coal-projects-nuclear-aid-in-energy-week</u>?

Trump To Abolish Obama's Green Legacy By Boosting Coal And Nuclear Projects By Andrew Follett, Daily Caller, June 29, 2017

http://dailycaller.com/2017/06/29/trump-to-abolish-obamas-green-legacy-by-boosting-coal-andnuclear-projects/?utm_source=site-share

EPA head launching initiative to 'critique' climate science

By Timothy Cama, The Hill, June 30, 2017

http://thehill.com/policy/energy-environment/340223-epa-head-to-launch-initiative-to-challengeclimate-science

Rick Perry floats adversarial 'red teams' to resolve climate debate

By John Siciliano, Washington Examiner, June 21, 2017 http://www.washingtonexaminer.com/rick-perry-floats-adversarial-red-teams-to-resolve-climatedebate/article/2626723

Consensus enforcers versus the Trump administration

By Judith Curry, Climate Etc. June 24, 2017 https://judithcurry.com/2017/06/24/consensus-enforcers-versus-the-trump-administration/#more-23135

Change in US Administrations -- Favorable

Trump: Paris Accord Rejection Matter Of Sovereignty...Announces "New Era Of American Energy Dominance"!

By P Gosselin, No Tricks Zone, June 30, 2017 <u>http://notrickszone.com/2017/06/30/trump-paris-accord-rejection-matter-of-sovereignty-announces-new-era-of-american-energy-dominance/#sthash.CKFWUIDt.dpbs</u>

How Trump's 6 energy initiatives will impact the industry

By Amy Harder, Axios, June 30, 2017 [H/t Cooler Heads] <u>https://www.axios.com/fact-checking-trumps-energy-policy-plans-and-their-impact-</u> 2450534410.html

Change in US Administrations -- Opposed

Burning Down the House

Trump's climate policy ignores our impending – and shared – global disaster By Patricia Williams, The Nation, June 15, 2017 [H/t Timothy Wise] <u>https://www.thenation.com/article/burning-down-the-house/</u>

You know how Trump should celebrate Energy Week? Stop trying to cut innovation research

The president's proposed Energy Department cuts may be more damaging to the fight against climate change than pulling out of the Paris accord. By Ted Nordhaus, USA Today, June 28, 2017

https://www.usatoday.com/story/opinion/2017/06/28/energy-cuts-worse-than-paris-for-climateted-nordhaus-column/431806001/

[SEPP Comment: Overstates the role of the Department of Energy in the shale revolution.]

Social Benefits of Carbon

Importance of CO2 By Donn Dears, Power for USA, June 30, 2017 http://donndears.net/2017/06/30/importance-of-co2/

Problems in the Orthodoxy

Germany 'massively weakened' draft G20 climate plan to appease Trump

Latest draft of German plan for next week's Hamburg meeting contains major concessions to US and opens door for coal projects to be defined as "clean"

By Arthur Neslen, Climate Home, June 29, 2017

http://www.climatechangenews.com/2017/06/29/germany-massively-weakened-draft-g20climate-action-plan-appease-trump/

Review of Recent Scientific Articles by CO2 Science

Placing the 2013 Summer Drought of Southern China in the Proper Perspective Zhao, Y., Shi, J., Shi, S., Yu, J. and Lu, H. 2017. Tree-ring latewood width based July-August SPEI reconstruction in South China since 1888 and its possible connection with ENSO. *Journal* of Meteorological Research **31**: 39-48. June 30, 2017

http://www.co2science.org/articles/V20/jun/a18.php

"Consequently, it is clear that the 2013 severe summer drought of southern China was neither unusual nor unprecedented, and therefore highly unlikely to be a fingerprint of global warming."

Ocean Acidification Improves the Growth and Temperature Tolerance of Eelgrass

Zimmerman, R.C., Hill, V.J., Jinuntuya, M., Celebi, B., Ruble, D., Smith, M., Cedeno, T. and Swingle, W.M. 2017. Experimental impacts of climate warming and ocean carbonation on eelgrass *Zostera marina*. *Marine Ecology Progress Series* **566**: 1-15. <u>http://www.co2science.org/articles/V20/jun/a17.php</u>

"Zimmerman *et al.* (2017) investigate the controversial topic of ocean acidification, **or as they more correctly describe it, ocean** *carbonation.*" [Boldface added]

Mineralogical Plasticity as an Adaptive Response to Overcoming Ocean Acidification

Leung, J.Y.S., Russell, B.D. and Connell, S.D. 2017. Mineralogical plasticity acts as a compensatory mechanism to the impacts of ocean acidification. *Environmental Science & Technology* **51**: 2652-2659. June 27, 2017

http://www.co2science.org/articles/V20/jun/a16.php

In discussing their findings, Leung *et al.* state that "despite minor metabolic depression and no increase in feeding rate, shell growth was faster under OA conditions," with shell lengths *increasing* by approximately 80 percent in the reduced pH treatment (see figure below) relative to ambient conditions. Another surprise was noted in measurements of shell hardness, which were also found to *increase* under OA conditions, and by *a whopping 140%!* Thus, not only did "dreaded" OA increase shell growth, but it produced shells that were harder and less likely to undergo dissolution -- which is a win-win scenario for the future. *[SEPP Comment: Ocean carbonization, going from pH 8.10 to pH 7.85]*

A 500-Year Record of Sea Level from Goa, India

Mörner, N.-A. 2017. Coastal morphology and sea-level changes in Goa, India during the last 500 years. *Journal of Coastal Research* **33**: 421-434.

http://www.co2science.org/articles/V20/jun/a13.php

"As for the *cause* of the Goa sea level oscillations, Mörner says they are "primarily driven by deformations of the dynamic sea level and redistribution of water masses," including (1) changes in evaporation/precipitation that can lower/raise the sea level by 30-40 cm, (2) changes in ocean currents, (3) monsoon regime changes, (4) an east-west redistribution of water masses and (5) a low-high latitude interchange of water masses."

Models v. Observations

Climate Models Over-Estimated Warming

By Graham Lloyd, The Australian, Via GWPF, June 30, 2017 https://www.thegwpf.com/climate-models-over-estimated-warming/

Measurement Issues -- Atmosphere

RSS Adjust Their Temperatures–Guess Which Way? By Paul Homewood, Not a Lot of People Know That, June 30, 2017 <u>https://notalotofpeopleknowthat.wordpress.com/2017/06/30/rss-find-their-missing-warming/</u>

Changing Weather

Christopher Booker: Nice Heatwave, But June 1878 Was Hotter

Christopher Booker, The Sunday Telegraph, Via GWPF, June 25, 2017 https://www.thegwpf.com/christopher-booker-nice-heatwave-but-june-1878-was-hotter/

Growers at Bordeaux winefest unite against climate change

By Alexandra Lesieur, Bordeaux (AFP) June 21, 2017

http://www.seeddaily.com/reports/Growers_at_Bordeaux_winefest_unite_against_climate_change_999.html

"This is the wine industry's new normal: heavy rains, floods, hailstones, drought and sometimes even frost."

[SEPP Comment: When was the climate stable? Growing grapes for fine wine has always been a battle against nature – too hot, too cold, too wet, too dry, etc. The Little Ice Age wiped out wine vineyards in England and parts of Germany. Today, many New World growers wish "to stress" their vines, to achieve complexity in their wines.]

Changing Seas

Global Warming and the Great Barrier Reef.

By Bob Fernley-Jones, The Australian Climate Sceptics Blog, June 30, 2017 http://theclimatescepticsparty.blogspot.com.au/2017/06/global-warming-and-great-barrierreef.html

Is The Rate Of Sea Level Rise Accelerating?

By Paul Homewood, Not a Lot of People Know That, June 29, 2017 https://notalotofpeopleknowthat.wordpress.com/2017/06/29/is-the-rate-of-sea-level-riseaccelerating/

[SEPP Comment: Homewood discusses the questionable work of NOAA, NASA, etc. on sea level rise.]

Changing Cryosphere – Land / Sea Ice

AGU: Extraordinary storms caused massive Antarctic sea ice loss in 2016 By Lauren Lipuma, AGU, Via WUWT, June 23, 2017 <u>https://wattsupwiththat.com/2017/06/23/agu-extraordinary-storms-caused-massive-antarctic-seaice-loss-in-2016/</u>

Agriculture Issues & Fear of Famine

Starvation looms as food runs out in drought-hit Ethiopia By Chris Stein, Warder, Ethiopia (AFP), June 22, 2017 <u>http://www.terradaily.com/reports/Starvation_looms_as_food_runs_out_in_drought-hit_Ethiopia_999.html</u>

Lowering Standards

Christina Figueres Joins The Lancet

By Paul Homewood, Not a Lot of People Know That, June 24, 2017

https://notalotofpeopleknowthat.wordpress.com/2017/06/24/christina-figueres-joins-the-lancet/

"The Lancet Countdown has the potential not only to improve the response to climate change, but to transform it. The collaboration is therefore delighted to announce that Christiana Figueres will join as Chair of its High-Level Advisory Board. Much as she did with the Paris Agreement, Christiana Figueres will help guide the Lancet Countdown to maximise its impact and deliver on the promise of the Paris Agreement."

The Bank of England Is Enslaved by Green Groupthink

By James Delingpole, The Spectator, Via GWPF, June 29, 2017 https://www.thegwpf.com/the-bank-of-england-is-enslaved-by-green-groupthink/

Communicating Better to the Public – Make things up.

Al Gore says climate change is like slavery By Jo Nova, Her Blog, June 24, 2017 http://joannenova.com.au/2017/06/al-gore-says-climate-change-is-like-slavery/

More Fake News from the Climate Change Warriors

By Brian C. Joondeph, American Thinker, June 30, 2017 http://www.americanthinker.com/articles/2017/06/more_fake_news_from_the_climate_change_w arriors.html

Expanding the Orthodoxy

Climate Summit Comes to Chicago

By: Ashmar Mandou, Lawndale News, June 22, 2017 [H/t Dennis Ambler] http://www.lawndalenews.com/2017/06/climate-summit-comes-to-chicago/ [SEPP Comment: Chicago has money to spend for this?]

Questioning European Green

Bootleggers and Baptists in Conservation Bad green policies waste money By Matt Ridley, The Rational Optimist, June 27, 2017 <u>http://www.rationaloptimist.com/blog/bootleggers-and-baptists-in-the-countryside/</u> [SEPP Comment: UK's new secretary of state for environment, food and rural affairs, Michael Gove, faces a major task in trying to clean up poor policies backed by the multinational green organizations.]

Subsidies and Mandates Forever

Oil and Gas in the Capitals

It is that time again. A new administration in Washington, a new federal budget and its priorities being proposed, and tax reform being debated, have all joined to bring the subject of energy subsidies, yet again, to the forefront.

By Roger Bezdek, World Oil, June 2017 http://www.worldoil.com/magazine/2017/june-2017/columns/oil-and-gas-in-the-capitals

Wind News Update: The Failure of RGGI, Ohio Safety First (June 29, 2017)

By Lisa Linowes, Master Resource, June 29, 2017

https://www.masterresource.org/wind-news-insight-linowes/wind-insight-6-29-17/ "The Regional Greenhouse Gas Initiative ('RGGI') is the darling of regulators in the nine participating states that include New England, New York, Delaware and Maryland."

Issues for the Renewable Fuel Standard

Presentation by Terry Dinan, Senior Adviser in CBO's Microeconomic Studies Division, and by David Austin and Ron Gecan, who are Principal Analysts in that division. At the EPA By Terry Dinan, CBO, June 21, 2017 [H/t Timothy Wise]

https://www.cbo.gov/publication/52828?utm_source=feedblitz&utm_medium=FeedBlitzEmail&u tm_content=812526&utm_campaign=0

"The Renewable Fuel Standard (RFS) establishes minimum volumes of various types of renewable fuels that suppliers must blend into the United States' supply of fuel for transportation. Those volumes—as defined by the Energy Independence and Security Act of 2007 (EISA)—are intended to grow each year through 2022. In recent years, the requirements of the RFS have been met largely by blending gasoline with ethanol made from cornstarch. In the future, EISA requires the use of increasingly large amounts of "advanced biofuels," which include diesel made from biomass (such as soybean oil or animal fat), ethanol made from sugarcane, and cellulosic biofuels (made from converting the cellulose in plant materials into fuel)."

[SEPP Comment: An economically obsolete law from 2005 and 2007. The ethanol requirement is not being met because total gasoline consumption is lower than projected in 2007. Regulators are pressuring refiners to increase the ethanol blend above 10%, which would further reduce overall efficiency and can damage some engine components.]

EPA and other Regulators on the March

Junk Science Week: Behind the scientific fraud that claims air pollution is killing people Steve Milloy: Studies about people dying from air pollution are all funded by regulation-happy EPA, based on secret data, rubberstamped by EPA grantees By Steve Milloy, Financial Post, CA, June 21, 2017

http://business.financialpost.com/opinion/junk-science-week-behind-the-scientific-fraud-thatclaims-air-pollution-is-killing-people/wcm/c076478d-92f0-4c60-b81b-9daf3815cad1 [SEPP Comment: The EPA – pick a number and we have a study to support it.]

Cut Energy Star from the budget

Focus on energy efficiency ignores many things that consumers want: Opposing view By Sam Kazman, USA Today, June 29, 2017 https://www.usatoday.com/story/opinion/2017/06/29/cut-energy-star-competitive-enterprise-

institute-editorials-debates/103294540/

[SEPP Comment: Many "energy saving" devices are time-wasting.]

Energy Issues – Non-US

Britain's Progress On Climate Change Is Stalling, Say CCC

By Paul Homewood, Not a Lot of People Know That, June 30, 2017 https://notalotofpeopleknowthat.wordpress.com/2017/06/30/britains-progress-on-climate-changeis-stalling-say-ccc/

[SEPP Comment: Despite claims that Britain's progress in tackling climate change is stalling, Homewood shows the CO2 Emissions Intensity per GDP has declined dramatically.]

"The De Facto End Of Wind Turbine Forests". New Policy In Germany Sends Powerful Signals!

By P Gosselin, No Tricks Zone, June 28, 2017

http://notrickszone.com/2017/06/28/the-de-facto-end-of-wind-turbine-forests-new-policy-in-germany-send-powerful-signals/#sthash.bUcnthVR.dpbs

Energy Issues – Australia

SA govt to spend \$100m on diesel generators (but could have spent \$8m keeping coal plant instead)

By Jo Nova, Her Blog, June 30, 2017

http://joannenova.com.au/2017/06/sa-govt-to-spend-100m-on-diesel-generators-but-could-have-spent-8m-keeping-coal-plant-instead/

"This \$106m sacrifice is expected to reduce global temperature by 0.000C, but will save the premier from being called a climate denier at dinner parties."

In SA recycling business goes broke due to electricity cost — thank renewables for making recycling impossible

By Jo Nova, Her Blog, June 27, 2017 http://joannenova.com.au/2017/06/in-sa-recycling-businesses-going-broke-due-to-electricity-cost/

Energy Issues -- US

The Appalling Delusion of 100% Renewables, Exposed

By Robert Bryce, National Review, June 24, 2017 http://www.nationalreview.com/article/448846/renewable-energy-national-academy-scienceschristopher-t-m-clack-refutes-mark-jacobson

Renewable energy cost and reliability claims exposed and debunked

Guest essay by Larry Hamlin, WUWT, June 21, 2017 https://wattsupwiththat.com/2017/06/21/renewable-energy-cost-and-reliability-claims-exposedand-debunked/

The fantasy of quick and easy renewable energy

By Samantha Gross, Brookings, June 19, 2017 [H/t Timothy Wise] https://www.brookings.edu/blog/planetpolicy/2017/06/19/the-fantasy-of-quick-and-easyrenewable-energy/ Evaluation of a proposal for reliable low-cost grid power with 100% wind, water, and solar By Christopher Clack, et al. PNAS, June 19, 2017

http://www.pnas.org/content/early/2017/06/16/1610381114

[SEPP Comment: The paper cites work by IPCC, NOAA, NREL, AND IEA, but what is the cost of the transition?]

Letting Oil Haters Run Big Oil

By Steve Milloy, IBD, June 21, 2017

http://www.investors.com/politics/commentary/letting-oil-haters-run-big-oil/

Oil, gas giants could waste trillions in a 2C world: report

By Staff Writers, Vanguard, June 21, 2017 [H/t Toshio Fujita] http://www.vanguardngr.com/2017/06/oil-gas-giants-waste-trillions-2c-world-report/

Washington's Control of Energy

Commentary: Reconsider Obama fracking rules By Steve Everley, Houston Chronicle, June 27, 2017 <u>http://www.chron.com/business/energy/article/Commentary-Research-supports-EPA-s-decision-to-11230177.php?cmpid=twitter-desktop</u> *[SEPP Comment: Unable to link to the specific studies.]*

Trump approves US-Mexico pipeline: 'That'll go right under the wall'

By Timothy Cama, The Hill, June 29, 2017 <u>http://thehill.com/policy/energy-environment/340155-trump-approves-us-mexico-pipeline-thatll-go-right-under-the-wall</u>

Oil and Natural Gas – the Future or the Past?

Clogged oil arteries slow U.S. shale rush to record output By David Caffen, Reuters, June 26, 2017 https://www.reuters.com/article/us-usa-pipelines-analysis-idUSKBN19H0DS

Welcome to the Booming Texas Port at Heart of U.S. Oil Sales

By Sheela Tobben and Laura Blewitt, Bloomberg, June 26, 2017 <u>https://www.bloomberg.com/news/articles/2017-06-26/welcome-to-the-booming-texas-port-at-center-of-u-s-oil-exports</u>

Floating Bridge - West Coast Alternatives For Exporting LPG To Asian Markets

By Housley Carr, RBN Energy, June 21, 2017 <u>https://rbnenergy.com/floating-bridge-west-coast-alternatives-for-exporting-lpg-to-asian-markets</u> LPG – liquefied petroleum gas

Return of King Coal?

Coal on the rise in China, U.S., India after major 2016 drop By Matthew Brown and Katy Daigle, AP, June 26, 2017 <u>http://www.chicagotribune.com/news/nationworld/ct-coal-china-india-us-20170626-story.html</u>

'Clean coal' plant will not use coal, operators announce By Devin Henry, The Hill, June 28, 2017 <u>http://thehill.com/policy/energy-environment/339925-clean-coal-plant-will-not-use-coal-operators-announce</u>

Coal in America Is Already Clean. Why 'Clean Coal' Is a Boondoggle That Needs to End. By Nicolas Loris, The Daily Signal, June 23, 2017 http://dailysignal.com/2017/06/23/coal-america-already-clean-clean-coal-boondoggle-needs-end/

Oil Spills, Gas Leaks & Consequences Bacteria Are Eating Most Of The 2010 BP Oil Spill By Andrew Follett, The Daily Caller, June 27, 2017 http://dailycaller.com/2017/06/27/bacteria-are-eating-most-of-the-2010-bp-oil-spill/ Link to paper: Simulation of *Deepwater Horizon* oil plume reveals substrate specialization within a complex community of hydrocarbon degraders By Ping Hu, et al. PNAS, June 26, 2017 http://www.pnas.org/content/early/2017/06/20/1703424114

Nuclear Energy and Fears

The Curse of Hinkley Point By John Constable, GWPF, June 27, 2017 https://www.thegwpf.com/the-curse-of-hinkley-point/

Alternative, Green ("Clean") Solar and Wind

Peak demand and the winter wind By Roger Andrews, Energy Matters, June 30, 2017 http://euanmearns.com/peak-demand-and-the-winter-wind/ Link to press release: Wind power can provide energy on coldest days By Staff Writers, Met Office, June 26, 2017 http://www.metoffice.gov.uk/news/releases/2017/study-shows-potential-for-wind-energy-oncoldest-days [SEPP Comment: Exposing fairytales.]

Wind power's big bet: turbines taller than skyscrapers

By Stine Jacobsen and Vera Eckert, Reuters, June 27, 2017 <u>http://www.reuters.com/article/us-windpower-megaturbines-insight-idUSKBN19I118</u> "These massive machines will each stand 300 meters tall – almost as high as London's Shard, western Europe's tallest building - with 200-metre rotor spans that will stretch the length of two football fields."

Wind Power's Future in U.S. Could Be Thwarted by Grassroots Opposition

By Thomas A. Hemphill and Mark J. Perry, Real Clear Energy, June 25, 2017 <u>http://www.realclearenergy.org/articles/2017/06/25/wind_powers_future_in_us_could_be_thwarte</u> <u>d by grassroots opposition 110238.html</u>

"The International Energy Agency estimates 13.8 percent of the total world energy supply was produced from renewable-energy sources in 2014. Of the renewable energy, 10.1 percent came from biofuels and waste, while 2.4 percent came from hydro sources. The remaining 1.3 percent was from "other renewables"—geothermal, wind, and solar, with wind providing 0.46 percent of global energy consumption in 2014. That prompted science writer Matt Ridley to observe that when rounded to the nearest whole number, 'there is still no wind power on earth.""

India, China: Clean dust, pollution off solar panels every two months, and still lose up to 35% of production?

By Jo Nova, Her Blog, June 28, 2017 http://joannenova.com.au/2017/06/india-china-clean-dust-pollution-off-solar-panels-every-twomonths-and-still-lose-up-to-35-of-production/#more-54047

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

Bad Penny By Donn Dears, Power For USA, June 27, 2017 http://donndears.net/2017/06/27/bad-penny/

Study finds: Corn better used as food than biofuel

By Anthony Watts, WUWT, June 21, 2017 https://wattsupwiththat.com/2017/06/21/study-finds-corn-better-used-as-food-than-biofuel/ Link to paper: Critical Zone services as environmental assessment criteria in intensively managed landscapes By Richardson and Kumar, Earth's Future, June 20, 2017 http://onlinelibrary.wiley.com/doi/10.1002/2016EF000517/full

Alternative, Green ("Clean") Vehicles

International Energy Agency: In Order To Limit Temperature Increase Below 2° C The Number Of Electric Cars Needs To Reach 600 Million By 2040.

By Kirill Klip, Executive Chairman of International Lithium Corp, His Blog, June 25, 2017 http://kirillklip.blogspot.com/2017/06/international-energy-agency-in-orderto.html#.WVArvNW3YQc.twitter

Norway Wrestles with Costly EV Subsidies (world leader at a crossroads)

By Allen Brooks, Master Resource, June 27, 2017

https://www.masterresource.org/electric-vehicles/norway-ev-costs/

"It appears from all the EV data we have examined worldwide that no country has crossed that gap from early movers/EV advocates to mass market appeal. It is all about battery costs, range anxiety, and subsidies. Until there are significant technological breakthroughs, government subsidies cannot be abandoned."

China Is About to Bury Elon Musk in Batteries

Factories are adding enough capacity to power the equivalent of nearly 1.5 million Model S vehicles By Ryan, Bloomberg, June 28, 2017 <u>https://www.bloomberg.com/news/articles/2017-06-28/china-is-about-to-bury-elon-musk-in-batteries</u>

China's EV Problem: Battery Depletion

B Allen Brooks, Master Resource, June 28, 2017 https://www.masterresource.org/electric-vehicles/ev-driver-acceptance/

Carbon Schemes

New Report: CCS Would Make Renewables And Nuclear Energy Look Cheap By Staff Writers, GWPF, June 28, 2017 https://www.thegwpf.com/new-report-ccs-would-make-renewables-and-nuclear-energy-lookcheap/ Link to paper: The Bottomless Pit: The Economics of Carbon Capture and Storage By Gordon Hughes, GWPF, 2017

https://www.thegwpf.org/content/uploads/2017/06/CCS-Report.pdf

The Questionable Economic Feasibility of Carbon Capture Technology

By Roger O'Neill, CEI, June 29, 2017 https://cei.org/blog/questionable-economic-feasibility-carbon-capture-technology

California Dreaming

California Issues 'Travel Ban' on Some Red States

By Jarrett Stepman, The Daily Signal, June 28, 2017

http://dailysignal.com/2017/06/28/california-enacts-travel-ban-on-some-redstates/?utm_source=TDS_Email&utm_medium=email&utm_campaign=MorningBell&mkt_tok= $\frac{eyJpIjoiWlRjMk16TmpZakU1T0dFMyIsInQiOiJHa2lvVzlpS2hJR1RsZ1E5QzkxRnlRNGw4W}{m5JakpRSHZmd1RvaDdwNzlmRklCS2VCUUhCeW5FR1lqWWsrbEZ2RlpTajJod096bFM0SFF}\\ 3eFdVdGp3emlXczlqQlorc0ZBdldkczNiRmMrb1wvZ2poYzNoTlY1ZFo4QVZ4MHJsUGkifQ%}\\ \underline{3D\%3D}$

[SEPP Comment: Will Soviet style exit visas be next?]

Other Scientific News

Solved: The mystery of unexplained 'bright nights'

By Anthony Watts, WUWT, June 22, 2917 <u>https://wattsupwiththat.com/2017/06/22/solved-the-mystery-of-unexplained-bright-nights/</u> Link to paper: WINDII Airglow Observations of Wave Superposition and the Possible Association with Historical "Bright Nights" By Shepherd and Cho, Geophysical Research Letters, June 6, 2017 <u>http://onlinelibrary.wiley.com/doi/10.1002/2017GL074014/abstract</u>

The Truth about Northwest UFOs

By Cliff Mass, Weather and Climate Blog, June 27, 2017 http://cliffmass.blogspot.com/2017/06/the-truth-about-northwest-ufos.html [SEPP Comment: The photos are stunning.]

Other News that May Be of Interest

Bureaucracy in America By Steven Hayward, Power Line, June 27, 2017 <u>http://www.powerlineblog.com/archives/2017/06/bureaucracy-in-america-2.php</u> Brief review of Bureaucracy in America: The Administrative State's Challenge to Constitutional Government (Studies in Constitutional Democracy) Hardcover – By Joseph Postell, Amazon, June 27, 2017 <u>https://www.amazon.com/exec/obidos/ASIN/0826221238/amazon0156-20/</u>

The Administrative Threat

By Scott Johnson, Power Line, June 26, 2017 http://www.powerlineblog.com/archives/2017/06/the-administrative-threat.php Review of Is Administrative Law Unlawful? By Philip Hamburger, Amazon, May 27, 2017 https://www.amazon.com/exec/obidos/ASIN/022632463X/amazon0156-20/ A New Old Regime By Scott Johnson, National Review, July 31, **2014** http://www.nationalreview.com/article/384183/new-old-regime-scott-w-johnson "James Madison famously proclaimed 'a political truth of the highest intrinsic value' in Federalist 47: 'The accumulation of all powers, legislative, executive, and judiciary, in the same hands, whether of one, a few, or many, and whether hereditary, self-appointed, or elective, may justly be pronounced the very definition of tyranny.'"

BELOW THE BOTTOM LINE:

Mother Earth gets a voice!

By Staff Writers, Climate Change Predictions, June 27, 2017 http://climatechangepredictions.org/uncategorized/8349 "Bolivia's climate summit has had moments of joy, levity and absurdity. Yet underneath it all, you can feel the emotion that provoked this gathering: rage against helplessness.

The Bolivian government got the ball rolling by proposing four big ideas:

- that nature should be granted rights that protect ecosystems from annihilation (a 'Universal Declaration of Mother Earth Rights');
- that those who violate those rights and other international environmental agreements should face legal consequences (a 'Climate Justice Tribunal');
- that poor countries should receive various forms of compensation for a crisis they are facing but had little role in creating ('Climate Debt');
- and that there should be a mechanism for people around the world to express their views on these topics ('World People's Referendum on Climate Change')."

<u>A New Climate Movement In Bolivia, By Naomi Klein – Countercurrents.org, 23 Apr 2010</u>

ARTICLES:

1. The Shale Revolution's Staggering Impact in Just One Word: Plastics

Petrochemicals, once simply a cheap byproduct, are powering a U.S. manufacturing boom and export bonanza

By Christopher M. Matthews, WSJ, June 25, 2017

https://www.wsj.com/articles/the-shale-revolutions-staggering-impact-in-just-one-word-plastics-1498411792

SUMMARY: After a brief introduction of the changes brought about by hydraulic fracturing for oil and gas, the reporter writes:

"That boom in drilling has expanded the output of oil and gas in the U.S. more than 57% in the past decade, lowering prices for the primary ingredients Dow Chemical Co. DOW -0.56% uses to make tiny plastic pellets. Some of the pellets are exported to Brazil, where they are reshaped into the plastic pouches filled with puréed fruits and vegetables.

"Tons more will be shipping soon as Dow completes \$8 billion in new and expanded U.S. petrochemical facilities mostly along the Gulf of Mexico over the next year, part of the industry's largest transformation in a generation.

"The scale of the sector's investment is staggering: \$185 billion in new U.S. petrochemical projects are in construction or planning, according to the American Chemistry Council. Last year, expenditures on chemical plants alone accounted for half of all capital investment in U.S. manufacturing, up from less than 20% in 2009, according to the Census Bureau.

"Integrated oil firms including Exxon Mobil Corp. and Royal Dutch Shell PLC are racing to take advantage of the cheap byproducts of the oil and gas being unlocked by shale drilling. The companies are expanding petrochemical units that produce the materials eventually used to fashion car fenders, smartphones, shampoo bottles and other plastic stuff being bought more and more by the world's burgeoning middle classes."

After further discussion of the booming industry the report continues:

"Human beings have been using pliable materials found in nature, such as rubber, for centuries. But when Leo Baekeland, a Belgian-born American chemist, invented the first fully synthetic

plastic derived from coal in 1907, it set off the modern consumer era, flooding the market with cheap durable goods almost entirely derived from fossil fuels.

Chemists can take the carbon atoms found in fossil fuels and rearrange them to create chains of atoms longer than those found in nature, which in turn can be used to make everything from nylon stockings to PVC piping.

Oil and gas byproducts, including ethane, butane and propane, are sent to huge furnaces called 'steam crackers,' which use superheated steam fed at high pressure to break apart molecules. Ethane is cracked into a smaller molecule, ethylene. The majority of ethylene in turn is used to make a plastic called polyethylene, and formed into pellets.

Millions of these U.S.-made pellets will be loaded into 25 kilogram sacks and sent via cargo ships to factories around the world, where they will be melted and shaped into plastic products.

By the end of the decade, energy consultancy PCI Wood Mackenzie estimates the U.S. chemical industry will have increased its capacity to make ethylene by 50%.

The world consumed more than 147 million metric tons in 2016 of ethylene and will need more than 186 million tons by 2023 to meet global demand, according to the consultancy. It said U.S. exports of polyethylene, the plastic pellets, are expected to reach \$10.5 billion by 2020.