

The Week That Was: 2019-07-06 (July 6, 2019)
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The Science and Environmental Policy Project

Quote of the Week: “There are some ideas so wrong that only a very intelligent person could believe in them.” – George Orwell [H/t John Dunn]

Number of the Week: 2012

THIS WEEK:

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

Beauty in Physics: On his web site, The Reference Frame, string theorist Lubos Motl had a long post reporting his search for the terms beautiful, beauty, and pretty in the Feynman Lectures on Physics (1963). Richard Feynman was a co-recipient of the 1965 Nobel Prize in Physics for his work in Quantum Electrodynamics and an exceptional lecturer who insisted on teaching students introductory physics. Perhaps it is his expression of finding exceptional explanations of complex problems beautiful that makes Feynman’s lectures so memorable. Fortunately, they are available to read online. One of the many examples Molt gives is on Kepler’s laws:

Here are the promised Kepler's laws.

He made voluminous tables, which were then studied by the mathematician Kepler, after Tycho’s death. Kepler discovered from the data some very beautiful and remarkable, but simple, laws regarding planetary motion...

Six years later a new measurement of the size of the earth showed that the astronomers had been using an incorrect distance to the moon. When Newton heard of this, he made the calculation again, with the corrected figures, and obtained beautiful agreement...

If a law does not work even in one place where it ought to, it is just wrong. But the reason for this discrepancy was very simple and beautiful: it takes a little while to see the moons of Jupiter because of the time it takes light to travel from Jupiter to the earth...

“It is hard to exaggerate the importance of the effect on the history of science produced by this great success of the theory of gravitation. Compare the confusion, the lack of confidence, the incomplete knowledge that prevailed in the earlier ages, when there were endless debates and paradoxes, with the clarity and simplicity of this law—this fact that all the moons and planets and stars have such a simple rule to govern them, and further that man could understand it and deduce how the planets should move! This is the reason for the success of the sciences in following years, for it gave hope that the other phenomena of the world might also have such beautifully simple laws.”

What is of particular note is that initially, the moon did not fit into Kepler’s laws. As Feynman stated: “If a law does not work even in one place where it ought to, it is just wrong.” After the distance to the moon was corrected, it fit beautifully.

Feynman begins his Nobel Lecture by stating:

“We have a habit in writing articles published in scientific journals to make the work as finished as possible, to cover all the tracks, to not worry about the blind alleys or to describe how you had the wrong idea first, and so on. So, there isn’t any place to publish, in a dignified manner, what you actually did in order to get to do the work, although, there has been in these days, some interest in this kind of thing. Since winning the prize is a personal thing, I thought I could be excused in this particular situation, if I were to talk personally about my relationship to quantum electrodynamics, rather than to discuss the subject itself in a refined and finished fashion.”

Later in the lecture, describing his experience as an undergraduate trying to tackle the fundamental problems in quantum theory of electricity and magnetism at the time (1947), Feynman states:

“At the young age what I could understand were the remarks about the fact that this doesn’t make any sense, and the last sentence of the book of Dirac I can still remember, ‘It seems that some essentially new physical ideas are here needed’” So, I had this as a challenge and an inspiration. I also had a personal feeling, that since they didn’t get a satisfactory answer to the problem I wanted to solve, I don’t have to pay a lot of attention to what they did do.”

Identifying problems properly (puzzles) in science and solving them seems to be a common characteristic of many who make significant advances in science. Ignoring the problems in science does not result in significant advances. See links under Other Scientific News.

The Greenhouse Effect – Models: As John Christy and others have published, there are significant problems with the global climate models used by the UN Intergovernmental Panel on Climate Change (IPCC) and others including the US Global Change Research Program (USGCRP), which published the Fourth National Climate Assessment Report (NCA4, November 2018) (According to the website on NCA4, one of the purposes of the NCA4 is: *“Analyze current trends in global change, both human-induced and natural, and project major trends for the subsequent 25 to 100 years.”*)

Except for the climate model designed by the Institute of Numerical Mathematics in Moscow, Christy and others have found the climate models used by the UN-IPCC and the USGCRP greatly overestimate the warming trends in the atmosphere, thus do not properly work in the one place they should. In the words of Feynman: They are wrong! Rather than addressing the problem correctly, it appears that the UN-IPCC is reinforcing the wrong solutions.

Now we have the UN Human Rights Commission insisting that the problem the UN has failed to identify correctly will result in “climate apartheid” if the world does not follow its wrong solutions.

Perhaps a major problem is that the Greenhouse Effect is not well understood and that it is not easy to understand. As Professor William van Wijngaarden stated: The "Simple Physics" Slogan is exactly that – a slogan. A possible excuse for failure to model the greenhouse effect is that it’s too hard. The theoretical molecular physics is not sufficiently well understood to create elegant equations describing the tens of thousands of molecular transitions that are involved with infrared radiation (photons) moving from the surface to space. Further, the atmosphere changes

significantly with latitude and with altitude. In the troposphere (roughly from 18km (59,000 feet) at the equator to 8km (26,000 feet) at the poles), convection plays a major role in heat transfer, phase change of water (evaporation at the surface absorbing heat and condensation in the upper troposphere releasing heat) plays an important role. Of course, no one understands the role of clouds which, at lower altitudes, may have a cooling effect while the higher cirrus clouds at altitudes above 20,000 feet (6,000 meters) may have a warming effect.

Adding to the complications is the optical depth or optical thickness of the (clear, noncloudy) atmosphere as altitude changes. The depth is measured in terms of a natural logarithm and, in this instance, relates to distance a photon of a particular frequency can travel before it is absorbed by an appropriate molecule (one that absorbs and re-emits photons of that frequency).

Unlike other natural greenhouse gases, water vapor is not well distributed in the atmosphere. That may be why the IPCC and others exclude it from their models, only to add some effect later in the calculations. However, water vapor is the most important greenhouse gas, and it can significantly reduce the optical depth when it is present and change the influence of other greenhouse gases on outgoing infrared radiation. (Dry air only exists in laboratories.) One can say that above the tropopause, where water vapor freezes out, the atmosphere becomes optically thin. This is where, on a per molecule basis, the influence of CO₂ becomes more important.

However, one should remember that the climate models fail to properly describe the greenhouse effect and they should not be used for government policy, especially for government policy on regulating greenhouse gases. See links under Challenging the Orthodoxy and Defending the Orthodoxy.

Green Fantasies: Previously, Mark Mills of the Manhattan Institute provided a detailed report on many of the unrealistic assumptions and ideas involved the political dreams of replacing fossil fuels and nuclear with alternative energy, namely wind and solar. As he previously stated:

“This ‘new energy economy’ rests on the belief—a centerpiece of the Green New Deal and other similar proposals both here and in Europe—that the technologies of wind and solar power and battery storage are undergoing the kind of disruption experienced in computing and communications, dramatically lowering costs and increasing efficiency. But this core analogy glosses over profound differences, grounded in physics, between systems that produce energy and those that produce information.

“In the world of people, cars, planes, and factories, increases in consumption, speed, or carrying capacity cause hardware to expand, not shrink. The energy needed to move a ton of people, heat a ton of steel or silicon, or grow a ton of food is determined by properties of nature whose boundaries are set by laws of gravity, inertia, friction, mass, and thermodynamics—not clever software.”

It continues to amaze how many people believe that what occurred in miniaturization of electronics will apply to all, or most, manufacturing of physical objects. This is similar to the number of proposals that assume that the decline in costs that occurred when Henry Ford applied standardized parts and production line techniques to automobiles will occur in other types of industries even though the techniques are already known and in use industry wide.

Mills has provided a 41-point summary of some of the highly questionable assumptions involved in making a new economy. The current politicians in California and New York may be gone before they discover to what absurd lengths their emotions took them. See links under Challenging the Orthodoxy.

Lowering Standards: Increasingly, becomes clear that NASA’s Goddard Institute of Space Studies (NASA-GISS) on Broadway in New York City is becoming more of a political entity than a scientific one. A NASA press release announced:

*“The most complete assessment ever of statistical uncertainty within the GISS Surface Temperature Analysis (GISTEMP) data product shows that **the annual values are likely accurate to within 0.09 degrees Fahrenheit (0.05 degrees Celsius) in recent decades, and 0.27 degrees Fahrenheit (0.15 degrees C) at the beginning of the nearly 140-year record.**”* [Boldface added]

These announced values of small error ranges are astounding and cry out for verification. In 1880, the US was the only large country that had a comprehensive system for measuring temperatures – with few stations in many of what became the 48 states. Those records have been heavily manipulated by those entrusted with them – namely NOAA in Asheville. Through mathematical manipulation, earlier high temperatures have been cooled. Record highs for many states occurred in the 1930s but have disappeared from the national records kept by NOAA and from NASA-GISS. Even before the 1920s, there were vast land areas in Eurasia, Africa, Canada, and South America that were not covered. This is not to mention the lack of coverage of the surface areas of the oceans, 71% of the globe.

According to the IPCC, the earth’s surface is divided into 2,592 grid boxes, each 5 degrees latitude and 5 degrees longitude. Each grid box should have a maximum and minimum temperature each day. As documented by the Nongovernmental International Panel on Climate Change (NIPCC, 2008 p. 9), the greatest number of grid boxes covered with a maximum and minimum temperature reading occurred in the 1970s, with about 1200 boxes. By 1998, the number covered was 600, about 23 percent. By contract, satellite coverage is comprehensive, except for extreme polar regions.

Further, the Automated Weather Observing System (AWOS) and its replacement the Automated Surface Observing System (ASOS) in the US are not precise instruments. According to its User’s Guide specifications, the maximum error for recording ambient temperature is plus or minus 1.8°F for temperatures between minus 58°F and plus 122°F, and an error of plus or minus 3.6°F beyond that range. If temperatures are below freezing the dew point error may be up to 13.9°F. (See Table 1, “Temperature Sensor—Range, Accuracy Resolution”, page 12 in the link below.)

Further, NASA-GISS’s 140-year global record purports to cover areas where there never have been thermometers for any length of time, including vast stretches of Antarctica. As others have expressed, it is very difficult to accept any increased confidence in NASA-GISS’s temperature number, or any confidence in NASA-GISS. It seems self-evident that such claims by NASA/GISS need justification, and clarification if errors have been made. See links under Challenging the Orthodoxy – NIPCC, Measurement Issues – Surface and

<https://www.weather.gov/media/asos/aum-toc.pdf>

**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.

Top vote getters include, but are not limited to: U.S. Rep Alexandria Ocasio Cortez [Always-On-Camera]; Bill Nye, the Science Guy; John Schellnhuber, [Director of Potsdam Center for Climate Impacts, advisor to Pope Francis and Angela Merkel]; Pope Francis; Theresa May [retiring as UK PM, leaving huge presents]; Paul Krugman [NYT columnist and public “intellectual”]; and Greta Thunberg [“the young thing”]. **Voting will close on July 15, extended from June 30**, with the winner announced shortly thereafter.

Number of the Week: 2012. Previously, TWTW expressed that the latest report of the USGCRP, NCA4, November 2018, misled the public as to the vulnerability of US agriculture to rising temperatures. The report concluded that major crops would fail from increasing temperatures. TWTW stated that the main US crops being exported are soybeans (number 1) and maize (corn) (number 2) and that tropical Brazil is a major competitor in both crops. An article in the Wall Street Journal presents a graph of the history of soybean exports, based on numbers from the US Department of Agriculture.

According to the graph, in 1996 the US share of global market in exports of soybeans was 73%, Brazil 11%, and other 16%. In 2018 (projections) it is US 32%, Brazil 52% and Other 16%. In 2011, US soybean exports were 41% of the world market, Brazil exports were 40%. Thereafter, soybean exports from Brazil exceed those of the US. In 2012, US soybean exports were 36% of the world market, Brazil exports were 42%. Brazil has since expanded its lead over the US in soybean exports. [For maize in 2018, US had 38.4% of world exports, Argentina 12.6%, and Brazil 12.2%.

This discrepancy between the claimed effect of high temperatures on soybean production and the reality of surging production in Brazil even at high temperatures appears wrong on its face and requires explanation. It describes the false rigor of the reports by the USGCRP which claims to represent the Department of Agriculture. Brazil is hotter than the US, but soybeans and maize grow well thanks to the use of fertilizer and lime to reduce the acidity of the soils. The USGCRP does not know what is occurring today but makes false predictions into the future. See Article # 1 and <http://www.worldstopexports.com/corn-exports-country/>

NEWS YOU CAN USE:

Science: Is the Sun Rising?

Winter monsoons became stronger during geomagnetic reversal

Revealing the impact of cosmic rays on the Earth’s climate

Press Release, Kobe University, July 3, 2019 [H/t GWPF]

http://www.kobe-u.ac.jp/research_at_kobe_en/NEWS/news/2019_07_03_01.html

Link to paper: Intensified East Asian winter monsoon during the last geomagnetic reversal transition

By Yusuke Ueno, Masayuki Hyodo, Tianshui Yang & Shigehiro Katoh, Nature, Scientific Reports, June 28, 2019

<https://www.nature.com/articles/s41598-019-45466-8>

“New evidence suggests that high-energy particles from space known as galactic cosmic rays affect the Earth’s climate by increasing cloud cover, causing an ‘umbrella effect’.

“When galactic cosmic rays increased during the Earth’s last geomagnetic reversal transition 780,000 years ago, the umbrella effect of low-cloud cover led to high atmospheric pressure in Siberia, causing the East Asian winter monsoon to become stronger. This is evidence that galactic cosmic rays influence changes in the Earth’s climate.”

Cosmic rays seeded clouds during the last geomagnetic reversal

By Jo Nova, Her Blog, July 5, 2019

<http://joannenova.com.au/2019/07/cosmic-rays-seeded-clouds-during-the-last-geomagnetic-reversal/>

Commentary: Is the Sun Rising?

New mathematical formula sheds light on solar activity past and future

Press Release, Northumbria University, July 2, 2019 [H/t GWPF]

<https://www.northumbria.ac.uk/about-us/news-events/news/new-mathematical-formula-sheds-light-on-solar-activity-past-and-future/>

Link to paper: Oscillations of the baseline of solar magnetic field and solar irradiance on a millennial timescale

By V. V. Zharkova, S. J. Shepherd, S. I. Zharkov & E. Popova, Nature, Scientific Reports, June 24, 2019

https://www.nature.com/articles/s41598-019-45584-3.epdf?author_access_token=A3C3uF2a_KdfLu6tWhPNutRgN0jAjWel9jnRnorthumbria%20valemntin%20a3ZoTv0OfqLiUrrLYM3vbIMm11Koq1hXXle2-IVfs44Bmjp2MYf2Z-1ZnDy58U4NwPLzjXSgrWs_flazw8rv0nsxsuIolg7b_X7vZxywug0nMFv84ig==

Climategate Continued

Bellingcat Hack Gets Climategate Timezones Backwards

By Stephen McIntyre, Climate Audit, July 4, 2019

<https://climateaudit.org/2019/07/04/bellingcat-hack-gets-climategate-timezones-backwards/>
[SEPP Comment: The Russians didn't do it!]

Unix metadata: two Russians from Pilsen's twin city credited with ClimateGate

By Luboš Motl, The Reference Frame, July 5, 2019

<https://motls.blogspot.com/2019/07/unix-metadata-two-russians-from-pilsens.html#more>

“One of the huge consequences of the ClimateGate that we have never previously discussed – because it looked unimportant – was that ClimateGate was the event that turned a certain man named Donald J. Trump into a climate skeptic. Before these e-mails, he was recommending the world leaders to wrestle with the climate change! The ClimateGate has largely opened his eyes. He wasn't the only one.”

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

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

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

Summary: <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

<http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/>
Summary: <https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf>

Climate Change Reconsidered II: Fossil Fuels

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

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

Download with no charge:

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

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

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

<http://climatechangereconsidered.org/>

Download with no charge:

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

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

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

Global Sea-Level Rise: An Evaluation of the Data

By Craig D. Idso, David Legates, and S. Fred Singer, Heartland Policy Brief, May 20, 2019

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

Challenging the Orthodoxy

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

<https://climatediscussionnexus.com/video/> -- Video

<https://climatediscussionnexus.com/videos/the-simple-physics-slogan/> -- Text

90 Leading Italian Scientists Sign Petition: CO2 Impact On Climate “UNJUSTIFIABLY EXAGGERATED” ... Catastrophic Predictions “NOT REALISTIC”

By P Gosselin, No Tricks Zone, July 4, 2019

<https://notrickszone.com/2019/07/04/90-leading-italian-scientists-sign-petition-co2-impact-on-climate-unjustifiably-exaggerated-catastrophic-predictions-not-realistic/>

“In conclusion, given the CRUCIAL IMPORTANCE THAT FOSSIL FUELS have for the energy supply of humanity, we suggest that they should not adhere to policies of uncritically reducing carbon dioxide emissions into the atmosphere with THE ILLUSORY PRETENSE OF CONTROLLING THE CLIMATE.”

A Critique of the Fourth National Climate Assessment

By Robert W. Endlich, Cruces Atmospheric Science Forum, Dec 18, 2018 [H/t Paul Homewood]

<https://casf.me/critique-fourth-national-climate-assessment/>

Inconvenient Energy Realities

By Mark P. Mills, Economics 21.org, July 1, 2019

<https://economics21.org/inconvenient-realities-new-energy-economy>

Link to earlier report: The "New Energy Economy": An Exercise in Magical Thinking

By Mark Mills, Manhattan Institute, March 25, 2019

<https://www.manhattan-institute.org/green-energy-revolution-near-impossible>

Defending the Orthodoxy

United Nations says world may face 'climate apartheid' that pushes over 120 million into poverty by 2030

By Justin Wise, The Hill, June 30, 2019

<https://thehill.com/policy/energy-environment/451053-united-nations-says-world-may-face-climate-apartheid-that-pushes>

Link to UN article: UN expert condemns failure to address impact of climate change on poverty

By Staff, Office of the High Commissioner, UN Human Rights, June 25, 2019

<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24735&LangID=E>

“Even if current targets are met, tens of millions will be impoverished, leading to widespread displacement and hunger,” said the UN Special Rapporteur on extreme poverty and human rights, Philip Alston, in a report released today.

“Climate change threatens to undo the last 50 years of progress in development, global health, and poverty reduction,” Alston said. “It could push more than 120 million more people into poverty by 2030 and will have the most severe impact in poor countries, regions, and the places poor people live and work.”

Fourth National Climate Assessment

By Staff Writers, U.S. Global Change Research program, Accessed July 3, 2019

<https://www.globalchange.gov/nca4>

Europe Must Answer the Climate Call

By Christiana Figueres, Project Syndicate, June 18, 2019

<https://www.project-syndicate.org/commentary/european-emissions-target-paris-agreement-by-christiana-figueres-2019-06>

[SEPP Comment: Last year's winner of the April Fool's Award did not get the \$100 billion a year she was seeking.]

UN Demands Universal Air Conditioning Powered by Renewable Energy

Guest essay by Eric Worrall, WUWT, July 1, 2019

<https://wattsupwiththat.com/2019/07/01/un-demands-universal-air-conditioning-powered-by-renewable-energy/>

Mike Pence's unbelievable answer on whether climate change is a threat

By Chris Cillizza, CNN Editor-at-large, June 24, 2019

<https://www.cnn.com/2019/06/24/politics/mike-pence-climate-crisis/index.html>

“Do you believe think [sic] human-induced climate emergency is a threat to the United States?”

[SEPP Comment: The biggest threat is the thinking that a slowly warming climate coming out of the Little Ice Age creates an emergency.]

Mainewhile: The clock is ticking; do we care?

Change is possible, but only if we're willing to make it happen.

By Heather Martin, The Forecaster, Maine, June 24, 2019

<https://www.pressherald.com/2019/06/24/mainewhile-the-clock-is-ticking-do-we-care/>

Link to report: We have a pretty good idea of when humans will go extinct

By Christopher Ingraham, The Washington Post, Oct 6, 2017

https://www.washingtonpost.com/news/wonk/wp/2017/10/06/we-have-a-pretty-good-idea-of-when-humans-will-go-extinct/?noredirect=on&utm_term=.bb1527f8ec59

[SEPP Comment: Teenagers suing world governments to enact new climate regulations may make great press, but given the years required for the teenage brain to develop into the adult brain, are not those promoting teenage litigation actually guilty of child abuse?]

Moody's Analytics predicts climate change costs up to \$69 trillion by 2100: report

By Rebecca Klar, The Hill, July 3, 2019

<https://thehill.com/policy/energy-environment/451516-moodys-analytics-predicts-climate-change-costs-up-to-69-trillion-by>

[SEPP Comment: Unable to link to new report. The 2018 report had major disclaimers expressing great uncertainty.]

Questioning the Orthodoxy

This immoral policy to put green energy before the world's poorest people

By Harry Wilkinson, The Conservative Woman, July 3, 2019 [H/t GWPF]

<https://www.conservativewoman.co.uk/this-immoral-policy-to-put-green-energy-before-the-worlds-poorest-people/>

[SEPP Comment: Contrary to the UN Human Rights claim more fossil fuel use will cause greater poverty.]

Human CO2 Emissions Have Little Effect on Atmospheric CO2

By Edwin X Berry, International Journal of Atmospheric and Oceanic Sciences, July 4, 2019

<http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=298&doi=10.11648/j.ijaos.20190301.13>

New Study In Journal Of Earth Sciences: Human Activities “Not Responsible For Observed CO2 Increase”

By P Gosselin, No Tricks Zone, July 3, 2019

<https://notrickszone.com/2019/07/03/new-study-in-journal-of-earth-sciences-human-activities-not-responsible-for-observed-co2-increase/>

Link to paper: What Humans Contribute to Atmospheric CO2: Comparison of Carbon Cycle Models with Observations

By Hermann Harde, Earth Sciences, June 12, 2019

<http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=161&doi=10.11648/j.earth.20190803.13>

'Radical' historian Blainey challenges climate-change orthodoxy

By Tony Wright, The Sydney Morning Herald, July 5, 2019 [H/t GWPF]

<https://www.smh.com.au/environment/climate-change/radical-historian-blainey-challenges-climate-change-orthodoxy-20190705-p524e8.html>

“I am a radical,” he said. “I am pro-change.”

The warming effects of CO2 are benign

By Sanjeev Sabhlok, The Times of India, June 28, 2019

<https://timesofindia.indiatimes.com/blogs/seeing-the-invisible/the-warming-effects-of-co2-are-benign/>

“It has been suggested that my support for GM technology will be compromised if I accept the ‘consensus’ in the case of biotechnology but not in the case of climate science.”

“The problem with climate ‘science’, however, is that the data – which are telling us to relax – fly in the face of the strong tendency of its advocates to bully us into a panic. We are asked to drop all common sense and to accept that CO₂ – a monumentally insignificant fraction of the air – is the control knob of the climate.”

Debunking 3 doomster stories about energy & climate

By Larry Kummer, Editor, Fabius Maximus website, July 1, 2019 [H/t WUWT]

<https://fabiusmaximus.com/2019/07/01/debunking-doomster-stories/>

After Paris!

G20 Deeply Divided on Trade and Climate Change

By Staff Writers, Financial Times, July 1, 2019

<https://www.thegwpc.com/g20-deeply-divided-on-trade-and-climate-change/>

Change in US Administrations

Finally The U.S. (aka Trump) Has Caught On To What The G20 Is About

By Francis Menton, Manhattan Contrarian, July 1, 2019

<https://www.manhattancontrarian.com/blog/2019-7-1-finally-the-us-aka-trump-has-caught-on-to-what-the-g20-is-about>

Science as Political Orthodoxy

By Peter Schwartz, Real Clear Politics, June 28, 2019

https://www.realclearpolitics.com/articles/2019/06/28/science_as_political_orthodoxy_140663.html

“Yet the [NYT] article itself quotes a spokesman who explains the new policy: ‘The previous use of inaccurate modeling that focuses on worst-case emissions scenarios, that does not reflect real-world conditions, needs to be thoroughly re-examined and tested if such information is going to serve as the scientific foundation of nationwide decision-making now and in the future.’ That is, the changed policy reflects only a disagreement over the scientific validity of the projections being made 80 years into the future.”

Social Benefits of Carbon Dioxide

Benny Peiser: The Greening of Planet Earth

By Benny Peiser, Die Weltwoche, Via GWPF, July 4, 2019

<https://www.thegwpc.com/benny-peiser-the-greening-of-planet-earth/>

Matt Ridley: Rejoice in the Lush Global Greening

By Matt Ridley, Die Weltwoche, Via GWPF, July 4, 2019

<https://www.thegwpc.com/matt-ridley-rejoice-in-the-lush-global-greening/>

“As Svante Arrhenius, the Swede who first measured the greenhouse effect, said: ‘By the influence of the increasing percentage of carbonic acid in the atmosphere, we may hope to enjoy ages with more equable and better climates.’”

[SEPP Comment: Actually, Arrhenius calculated the greenhouse effect based on experiments on radiant heat absorption of gases by John Tyndall in 1859. In 1856, the work of Eunice Newton

Footnote had been presented to AAAS by John Henry. Tyndall concluded that water vapor was the strongest absorber.]

Seeking a Common Ground

Christopher Booker Dies Aged 81

By Staff, GWPF, July 3, 2019

<https://www.thegwpf.com/christopher-booker-dies-aged-81/>

Model Issues

Climate models are fudged, says climatologist – Video

Video of Patrick Michaels, Fox News, Via WUWT, July 2, 2019

<https://wattsupwiththat.com/2019/07/02/climate-models-are-fudged-says-climatologist-video/>

Using artificial intelligence to better predict severe weather

Researchers create AI algorithm to detect cloud formations that lead to storms

By Staff Writers, EurekAlert, July 2, 2019 [H/t WUWT]

https://www.eurekalert.org/pub_releases/2019-07/ps-uai070219.php

Measurement Issues -- Surface

New Studies Increase Confidence in NASA's Measure of Earth's Temperature

By Jessica Merzdorf for GSFC News, Greenbelt MD (SPX), May 27, 2019

http://www.spacedaily.com/reports/New_Studies_Increase_Confidence_in_NASAs_Measure_of_Earths_Temperature_999.html

Adjusted “Unadjusted” Data: NASA Uses The “Magic Wand Of Fudging”, Produces Warming Where There Never Was

By Kirye and Pierre Gosselin, No Tricks Zone, June 25, 2019

<https://notrickszone.com/2019/06/25/adjusted-unadjusted-data-nasa-uses-the-magic-wand-of-fudging-produces-warming-where-there-never-was/>

[SEPP Comment: Adjusting the unadjusted to make “new unadjusted-adjusted?”]

Climate scientists fiddling the data again and again and again and again

By Paul Mathews, Climate Scepticism, June 30, 2019 [H/t GWPF]

<https://cliscep.com/2019/06/30/climate-scientists-fiddling-the-data-again-and-again-and-again-and-again/>

The Greatest Scientific Fraud Of All Time -- Part XXIII

By Francis Menton, Manhattan Contrarian, July 3, 2019

<https://www.manhattancontrarian.com/blog/2019-7-3-the-greatest-scientific-fraud-of-all-time-part-xxiii>

Biased data undermine an iconic weather record

Flaws are revealed in a highly cited database that dates back more than two centuries.

By Staff Writers, Nature, July 1, 2019

<https://www.nature.com/articles/d41586-019-02057-x>

Link to paper: Multi-century trends to wetter winters and drier summers in the England and Wales precipitation series explained by observational and sampling bias in early records

By Conor Murphy, et al., Royal Meteorological Society, June 26, 2019

<https://rmets.onlinelibrary.wiley.com/doi/abs/10.1002/joc.6208>

Marc Morano On Bad Data

By Paul Homewood, Not a Lot of People Know That, July 5, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/07/05/marc-morano-on-bad-data/>

Link to paper: An Audit of the Creation and Content of the HadCRUIT4 Temperature Dataset

By John McLean, Robert Boyle Publishing, Oct 2018, (USD \$8.00)

<https://robert-boyle-publishing.com/product/audit-of-the-hadcrut4-global-temperature-dataset-mclean-2018/>

Link to response: #DataGate: Hadley reply to first audit with foggy excuses about problems 2,000 staff didn't find

By Jo Nova, Her Blog, Oct 15, 2019

<http://joannenova.com.au/2018/10/datagate-update-hadley-responds-to-first-audit-with-polite-fog-about-problems-2000-staff-didnt-find/>

“[On MET admitting some errors] That’s nice to know, but begs the question of why a PhD student working from home can find mistakes that the £226 million institute with 2,100 employees could not.”

France’s Fake Record: Weather Agencies Can Alter Datasets, But Can’t Rewrite The Newspapers

By P Gosselin, No Tricks Zone, June 30, 2019

<https://notrickszone.com/2019/06/30/frances-fake-record-weather-agencies-can-alter-data-but-cant-rewrite-the-newspapers/>

Was the Anchorage all-time temperature record aided by airport growth?

By Anthony Watts, WUWT, July 5, 2019

<https://wattsupwiththat.com/2019/07/05/was-the-anchorage-all-time-temperature-record-aided-by-airport-growth/>

[SEPP Comment: Fred Singer has suggested that the relationship between airport growth and surface temperature increases over the past 40 years is worthy of study.]

Measurement Issues -- Atmosphere

UAH Global Temperature Update for June, 2019: +0.47 deg. C

By Roy Spencer, His Blog, July 2, 2019

<http://www.drroyspencer.com/2019/07/uah-global-temperature-update-for-june-2019-0-47-deg-c/>

[SEPP Comment: The UAH data for the lower troposphere, independently verified by weather balloon data using different types of instruments shows June 2019 was hot, but not the “hottest month ever.”

Last month hottest June on record: EU satellite agency

By Staff Writers, Paris (AFP), July 2, 2019

http://www.terraily.com/reports/Last_month_hottest_June_on_record_EU_satellite_agency_999.html

[SEPP Comment: Additional reasons why UAH records are preferable to C3S]

Changing Weather

Record High Temperatures in France: 3 Facts the Media Don’t Tell You

By Roy Spencer, His Blog, July 2, 2019

<http://www.drroyspencer.com/2019/07/record-high-temperatures-in-france-3-facts-the-media-dont-tell-you/>

[SEPP Comment: What about the nearby cold?]

Not the hottest ever June, 1998 was hotter and so was most of the last half billion years

By Jo Nova, Her Blog, July 3, 2019

<http://joannenova.com.au/2019/07/not-the-hottest-ever-june-1998-was-hotter-and-so-was-most-of-the-holocene/>

Clickbait climate records: Hot in France but snowpacked in Canada and Colorado

By Jo Nova, Her Blog, June 30, 2019

<http://joannenova.com.au/2019/06/clickbait-climate-records-hot-in-france-but-snowpacked-in-canada-and-colorado/>

France's 70-Day Heat Wave Of 1911 Killed 41,000 In "Uninterrupted Heat", Most Were Babies

By P Gosselin, No Tricks Zone, July 2, 2019

<https://notrickszone.com/2019/07/02/frances-70-day-heat-wave-of-1911-killed-41000-in-uninterrupted-heat-most-were-babies/>

Flaming June? Not Here!

By Paul Homewood, Not a Lot of People Know That, July 5, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/07/04/40200/>

The "Freak" Guadalajara Hailstorm wasn't So Freakish

By Roy Spencer, His Blog, July 1, 2019

<http://www.drroyspencer.com/2019/07/the-freak-guadalajara-hailstorm-wasnt-so-freakish/>

Why Caution Is Needed With Those Hail Pictures In Mexico

By Marshall Shepherd, Forbes, July 2, 2019 [H/t WUWT]

<https://www.forbes.com/sites/marshallshepherd/2019/07/01/why-caution-is-needed-with-those-hail-pictures-in-mexico/#770c247e2cf5>

Link to report: Attribution of Extreme Weather Events in the Context of Climate Change

By Numerous writers, NAS, 2016

<https://www.nap.edu/catalog/21852/attribution-of-extreme-weather-events-in-the-context-of-climate-change>

Changing Climate

New Perspectives on 2,000 Years of North Atlantic Climate Change

A review of recent research advancements takes a deep dive into North Atlantic ocean circulation and its potential role in historical climate shifts

By Sarah Stanley, EOS, June 20, 2019 [H/t Climate Etc.]

<https://eos.org/research-spotlights/new-perspectives-on-2000-years-of-north-atlantic-climate-change>

Link to paper: Variability in the northern North Atlantic and Arctic oceans across the last two millennia: A review

By P. Moffa-Sánchez, et al. *Paleoceanography and Paleoclimatology*, June 18, 2019

<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018PA003508>

Changing Seas

Coral reef totally recovers (for 400th time) and researchers surprised

By Jo Nova, Her Blog, July 2, 2019

<http://joannenova.com.au/2019/07/coral-reef-totally-recovers-for-400th-time-and-researchers-surprised/>

'Teeming with life': New hope for the Great Barrier Reef as island shows remarkable coral growth

By Melissa Martin and Erin Semmler, ABC Coffs Coast, July 1, 2019

<https://www.abc.net.au/news/2019-07-02/new-hope-for-great-barrier-reef-with-remarkable-coral-growth/11268014>

“At a time when portions of the Great Barrier Reef are being devastated by coral decline, Southern Cross University doctoral researcher Kay Davis has found an island near Gladstone has experienced remarkable coral growth.”

Part of the Pacific Ocean Is Not Warming as Expected. Why?

By Kevin Krajick, State of the Planet, June 24, 2019

<https://blogs.ei.columbia.edu/2019/06/24/pacific-ocean-cold-tongue/#.XRD-GJ7t0O4.twitter>Li

Link to letter: Strengthening tropical Pacific zonal sea surface temperature gradient consistent with rising greenhouse gases

By Richard Seager, et al., Nature, Climate Change, June 24, 2019

<https://www.nature.com/articles/s41558-019-0505-x>

NCAR Expert – 25 Feet Of Sea Level Rise [Predicted in 1979]

By Tony Heller, The Deplorable Climate Science Blog, July 5, 2019

<https://realclimatescience.com/2019/07/ncar-expert-25-feet-of-sea-level-rise-by-1999/>

[SEPP Comment: The expert did not specify by which millennium.]

Changing Cryosphere – Land / Sea Ice

Antarctic sea ice is declining dramatically and we don't know why

By Adam Vaughan, New Scientist, July 1, 2019

<https://www.newscientist.com/article/2208180-antarctic-sea-ice-is-declining-dramatically-and-we-dont-know-why/>

Link to paper: A 40-y record reveals gradual Antarctic sea ice increases followed by decreases at rates far exceeding the rates seen in the Arctic

By Claire Parkinson, PNAS, July 1, 2019

<https://www.pnas.org/content/early/2019/06/25/1906556116>

[SEPP Comment: A second question: based on the graph, why did sea ice began increasing about 1994?]

Antarctic Sea Ice lowest in 40 years, but no one knows why — “back to drawing board”

By Jo Nova, Her Blog, July 5, 2019

<http://joannenova.com.au/2019/07/antarctic-sea-ice-lowest-in-40-years-but-no-one-knows-why-back-to-drawing-board/#more-63327>

Scientist Spots High Geothermal Heat Flux In East Greenland – ‘Dramatic Consequences For Ice Basal Melting’

By Kenneth Richard, No Tricks Zone, July 5, 2019

<https://notrickszone.com/2019/07/05/scientist-spots-high-geothermal-heat-flux-in-east-greenland-dramatic-consequences-for-ice-basal-melting/>

Link to paper: Lithosphere thermal thickness and geothermal heat flux in Greenland from a new thermal isostasy method

By Irina M.Artemieva, Earth-Science Reviews, January 2019

<https://www.sciencedirect.com/science/article/pii/S0012825218304847>

Historic hot spells in Churchill, Polar Bear Capital of the World, in late June/early July

By Susan Crockford, Polar Bear Science, June 29, 2019

<https://polarbearscience.com/2019/06/29/historic-hot-spells-in-churchill-polar-bear-capital-of-the-world-in-late-june-early-july/>

Norwegian polar bears continue to thrive in 2019: Svalbard spring study results are in

By Susan Crockford, Polar Bear Science, July 2, 2019

<https://polarbearscience.com/2019/07/02/norwegian-polar-bears-continue-to-thrive-in-2019-svalbard-spring-study-results-are-in/>

Changing Earth

More 'reactive' land surfaces cooled the Earth down

Higher reactivity could explain temperature drop before last ice age

By Staff, Deutsches GeoForschungsZentrum GFZ - Helmholtz-Zentrum Potsdam, Via EurekAlert, July 3, 2019 [H/t WUWT]

https://www.eurekalert.org/pub_releases/2019-07/ggph-ml070219.php

More detailed picture of Earth's mantle

By Staff Writers, Cardiff UK (SPX), May 21, 2019

http://www.spacedaily.com/reports/More_detailed_picture_of_Earths_mantle_999.html

Acidic Waters

Ocean biology experienced dramatic evolutionary shift 170 million years ago

By Brooks Hays, Washington (UPI), Jul 1, 2019

http://www.terraviva.com/reports/Ocean_biology_experienced_dramatic_evolutionary_shift_170_million_years_ago_999.html

“But during the middle of the Jurassic period, calcium carbonate-secreting plankton showed up in large numbers. Their arrival coincided with the emergence of new evolutionary drivers, like predator-prey relationships.

“The abundance of plankton provided a reliable source of nutrition for larger organisms, but more importantly, the deposition of calcium carbonate on the seafloor helped stabilize ocean chemistry. This stability, authors contend in the new study, set the stage for the rapid diversification of marine life during the second half of the Jurassic.”

[SEPP Comment: 170 million years ago, CO2 concentrations may have been 5 times that of today, yet “calcium carbonate-secreting plankton” showed up in large numbers? What about ocean acidification?]

Agriculture Issues & Fear of Famine

Does limited underground water storage make plants less susceptible to drought?

Plants adapted to Mediterranean climate may be more flexible in face of unpredictable rains

By Staff Writers, NSF, July 2, 2019

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=298811&WT.mc_id=USNSF_1

Link to paper: Low Subsurface Water Storage Capacity Relative to Annual Rainfall Decouples Mediterranean Plant Productivity and Water Use From Rainfall Variability

By W.J. Hahm, et al, Geophysical Research Letters, May 28, 2019
<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2019GL083294>

Sad – Experts Say We Starved To Death In 1975

By Tony Heller, The Deplorable Climate Science Blog, July 5, 2019
<https://realclimatescience.com/2019/07/sad-experts-say-we-starved-to-death-in-1975/>

Lowering Standards

Himalayan Glaciers–The Story The BBC Refuse To Tell You

By Paul Homewood, Not a Lot of People Know That, June 30, 2019
<https://notalotofpeopleknowthat.wordpress.com/2019/06/30/himalayan-glaciers-the-story-the-bbc-refuse-to-tell-you/#more-40035>

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

The end is nigh: the rise of middle-class apocalypticism

Everything is a ‘catastrophe’ now
By Mark Palmer, The Spectator, Via GWPF, July 2, 2019
<https://www.thegwpf.com/the-end-is-nigh-the-rise-of-middle-class-apocalypticism/>

Communicating Better to the Public – Make things up.

Millions Of Species Going Extinct? Well, Maybe Only 600 !

By Paul Homewood, Not a Lot of People Know That, July 1, 2019
<https://notalotofpeopleknowthat.wordpress.com/2019/07/01/millions-of-species-going-extinct-well-maybe-only-600/>

“Sled Dogs In Water” Climate Alarmism Photo Gets Exposed As Bogus By Danish Experts

By P Gosselin, No Tricks Zone, June 29, 2019
<https://notrickszone.com/2019/06/29/sled-dogs-in-water-climate-alarmism-photo-gets-exposed-as-bogus-by-danish-experts/>

Communicating Better to the Public – Go Personal.

Oreskes: huge amount of water disappears in nuclear power plants

By Luboš Motl, The Reference Frame, July 4, 2019
<https://motls.blogspot.com/2019/07/oreskes-huge-amount-of-water-disappears.html>
“Naomi Oreskes is a top influential climate alarmist. She is one of the co-mothers or propagators of the ludicrous “97% consensus” meme. When I was at Harvard faculty, she found out I wasn’t a climate fearmonger so she sent one of the e-mails to the whole Harvard hierarchy above me, demanding my punishment.”

NYT: Trump Advisor Dubbed Auto Makers “the Opposition” in Vehicle Emissions Standoff

Guest essay by Eric Worrall, WUWT, July 3, 2019
<https://wattsupwiththat.com/2019/07/03/claim-trump-advisor-dubbed-auto-makers-the-opposition-in-vehicle-emissions-standoff/>

Expanding the Orthodoxy

Climate change could threaten dogs with diseases pushing into new parts of the USA

By Elizabeth Weise, USA Today, June 15, 2019
<https://www.usatoday.com/story/news/nation/2019/06/15/climate-change-could-hurt-your-dog-diseases-spread-into-new-areas/1414608001/>

Questioning European Green

Global warming: the UK's expensive and futile gesture politics – Part 1

By Ruth Lea, The Conservative Woman, June 29, 2019

<https://www.conservativewoman.co.uk/global-warming-the-uks-expensive-and-futile-gesture-politics-part-1/>

Delingpole: What I Learned on My Undercover Mission Among the Greenies at Glastonbury...

By James Delingpole, Breitbart, July 2, 2019 [H/t Toshio Fujita]

<https://www.breitbart.com/europe/2019/07/02/delingpole-my-undercover-mission-among-greenies-glastonbury/>

'People are not listening': Glastonbury revellers slam 'disgusting' amounts of rubbish that are piling up at festival despite organisers' attempts to cut waste and ban plastic with 'leave no trace' pledge

By Jack Elsom, Daily Mail, June 30, 2019

<https://www.dailymail.co.uk/news/article-7197381/Glastonbury-revellers-slam-disgusting-mess-despite-organisers-attempts-cut-waste.html>

Questioning Green Elsewhere

Endangered Science

By Aynsley Kellow, Quadrant, July 1, 2019

<https://quadrant.org.au/magazine/2019/07/endangered-science/>

“...I delivered a Brisbane Club lecture which drew on my recently published book *Science and Public Policy: The Virtuous Corruption of Virtual Environmental Science*, dealing with the common phenomenon of ‘noble cause corruption’ in environmental science. I suggested, somewhat whimsically, Kellow’s Law of Endangered Species, which specified that sightings of endangered species were likely to be clustered around sites of proposed developments—for two reasons. First, development proposals were subject to environmental assessments before approval which frequently turned up evidence of an endangered species previously unknown there. Second, the discovery of an endangered species provides a trump card for those opposing a development using politics or ‘lawfare.’”

The Cost to Society of Radical Environmentalism

By Allan M.R. MacRae, B.A.Sc., M.Eng., ICECAP, July 4, 2019

http://icecap.us/index.php/go/political-climate/the_cost_to_society_of_radical_environmentalism1/

Link to full article: *The Cost of Society of Radical Environmentalism*

By Allan M.R. MacRae, Tropical Hot Spot Research, July 4, 2019

<https://thsresearch.wordpress.com/2019/07/04/the-cost-of-society-of-radical-environmentalism/>

Unilateral US Decarbonization Could Have Serious Economic Consequences

By Alan Carlin, Carlin Economics and Science, June 29, 2019

<http://www.carlineconomics.com/archives/5048>

Litigation Issues

States sue EPA for tougher regulation of asbestos

By Rebecca Beitsch, The Hill, July 1, 2019

<https://thehill.com/policy/energy-environment/451189-states-sue-epa-for-tougher-regulation-of-asbestos>

“It is widely acknowledged that asbestos is one of the most harmful and toxic chemicals known to humankind,” California Attorney General Xavier Becerra said...

[SEPP Comment: More harmful and toxic than VX, a nerve agent? What nonsense! White asbestos has not been demonstrated to be harmful.]

Cap-and-Trade and Carbon Taxes

EU’s Rising Carbon Prices Fuels Industrial Exodus Fears

By Staff, Financial Times, Via GWPF, July 5, 2019

<https://www.thegwpf.com/eus-rising-carbon-prices-fuels-industrial-exodus-fears/>

EPA and other Regulators on the March

Are PM2.5 Regulations Appropriate?

By Donn Dears, Power For USA, July 2, 2019

<https://ddears.com/2019/07/02/are-pm2-5-regulations-appropriate/>

EPA Releases Cyanobacteria Assessment Network (CyAN) Mobile Application in the Google Play™ Store

By Staff Writers, EPA Office of Public Engagement, July 2, 2019

Link to CYAN: EPA's Cyanobacteria Assessment Network Application (CyAN),

<https://play.google.com/store/apps/details?id=com.topcoder.epa>

Energy Issues – Non-US

EU sharpens torture tools as Swiss showdown escalates into energy war

By Ambrose Evans-Pritchard, The Daily Telegraph, Via GWPF, July 3, 2019

<https://www.thegwpf.com/eu-sharpens-torture-tools-as-swiss-showdown-escalates-into-energy-war/>

“Swiss hydro-power – 60pc of its electricity output – is ‘dispatchable’ and in a sense plugs the intermittency gap when the sun stops shining in Baden-Württemberg, Bavaria or Burgundy. It is the ‘Alpine battery’ for German and French solar.”

Oil and Natural Gas – the Future or the Past?

‘Race to the Bottom:’ The U.S.-Russia Gas War Has Sent Prices Plummeting in Europe

By Katherine Dunn, Fortune, July 2, 2019

<https://fortune.com/2019/07/02/us-russia-gas-prices/>

[SEPP Comment: Price competition is a race to the bottom?]

Nuclear Energy and Fears

Russia to tow controversial nuclear power station to Arctic: report

By Chris Mills Rodrigo, The Hill, July 1, 2019

<https://thehill.com/policy/energy-environment/451126-russia-to-tow-controversial-nuclear-power-station-to-arctic-report>

Alternative, Green (“Clean”) Solar and Wind

New Solar + Battery Price Crushes Fossil Fuels, Buries Nuclear

By Jeff McMahan, Forbes, July 1, 2019

<https://www.forbes.com/sites/jeffmcmahan/2019/07/01/new-solar--battery-price-crushes-fossil-fuels-buries-nuclear/#753275635971>

"This is the lowest solar-photovoltaic price in the United States," said James Barner, the agency's [LA Board of Water and Power Commissioners] manager for strategic initiatives, "and it is the largest and lowest-cost solar and high-capacity battery-storage project in the U.S. and we believe in the world today. So this is, I believe, truly revolutionary in the industry."
It's half the estimated cost of power from a new natural gas plant.

Gone with the Wind: Inefficiency and Hazardous Nature of Wind Energy Impedes Renewable Crusade

By Vijay Jayaraj, American Thinker, June 29, 2019

https://www.americanthinker.com/articles/2019/06/gone_with_the_wind_inefficiency_and_hazardous_nature_of_wind_energy_impedes_renewable_crusade.html

Link to report: Annual Energy Outlook: 2019

U.S. Energy Information Administration, January 24, 2019

<https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf>

Europe 'could get 10 times' its electricity needs from onshore wind, study says

By Josh Gabbatiss, Carbon Brief, July 5, 2019

https://www.carbonbrief.org/europe-could-get-10-times-its-electricity-needs-from-onshore-wind-study-says?utm_campaign=RevueCBWeeklyBriefing&utm_medium=email&utm_source=Revue%20newsletter

Link to paper: The future of European onshore wind energy potential: Detailed distribution and simulation of advanced turbine designs

By David Severin Ryberg, et al., Energy, Sep 1, 2019

<https://www.sciencedirect.com/science/article/abs/pii/S0360544219311818>

"Usage of futuristic turbine designs for future energy system designs is crucial."

[SEPP Comment: Assumes technologies for generation and storage that have not been developed. Relying on future technologies can be disastrous.]

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

Zambia, Zimbabwe set date for building hydro dam

By Staff Writers, Lusaka (AFP), July 2, 2019

http://www.terradaily.com/reports/Zambia_Zimbabwe_set_date_for_building_hydro_dam_999.html

Alternative, Green ("Clean") Vehicles

Brits Lose Interest in Green Cars as Government Cuts Subsidies

By Staff, The Times, Via GWPF, July 5, 2019

<https://www.thegwpf.com/brits-lose-interest-in-green-cars-as-government-cuts-subsidies/>

Carbon Schemes

Coal Unit CCUS Retrofits More Economic Than Many Alternatives, NETL Study Suggests

By Sonal Patel, Power Mag, July 3, 2019

https://www.powermag.com/coal-unit-ccus-retrofits-more-economic-than-many-alternatives-netl-study-suggests/?mkt_tok=eyJpIjoiTkdNeU5XVmhNekZpTXprNSIsInQiOiJZNGJCUHJhRTICbEVkOE55dW8zcHdETHg3eIgrNk1YRHgwRHRsVEEd4MTBiUkFHhWJlElouERtRmhyUG9Tcyt6RTBQOG00UVhQaW9QelY0MGZSeXNrMVNvcDZkMTIPZ09XY3pcLzNqMGISWHpWUX1cWdqS1BkbFdcL0VVSUZSOTNhIn0%3D

California Dreaming

California Mandates Zero-Emission Buses at Its Largest Airports

Transporting passengers from airport terminals to parking lots, rental car agencies and hotels is getting cleaner in California.

By Justin Gerdes, GTM, June 28, 2019

<https://www.greentechmedia.com/articles/read/california-mandates-zero-emission-buses-at-its-largest-airports#gs.nnm0te>

[SEPP Comment: Do horses qualify?]

Solar Power Triumph: Los Angeles Announces The End of Fossil Fuel

Guest essay by Eric Worrall, WUWT, July 3, 2019

<https://wattsupwiththat.com/2019/07/03/solar-power-triumph-los-angeles-announces-the-end-of-fossil-fuel/>

Health, Energy, and Climate

Deaths Attributed to Heat, Cold, and Other Weather Events in the United States, 2006–2010

By Jeffrey Berko, et al., National Health Statistics Reports, July 30, 2014

<https://www.cdc.gov/nchs/data/nhsr/nhsr076.pdf>

“About 31% of these deaths were attributed to exposure to excessive natural heat, heat stroke, sun stroke, or all; 63% were attributed to exposure to excessive natural cold, hypothermia, or both; and the remaining 6% were attributed to floods, storms, or lightning.”

But it's good for the renewables religion: Electricity doubles, cold deaths up one third

By Jo Nova, Her Blog, July 1, 2019

<http://joannenova.com.au/2019/07/sacrificed-for-the-renewables-religion-electricity-doubles-cold-deaths-up-one-third/>

No, 5G Isn't Mutating, Killing Or Cancering You

By Alex Berezow, ACSH, June 27, 2019

<https://www.acsh.org/news/2019/06/27/no-5g-isnt-mutating-killing-or-cancering-you-14120>

Environmental Industry

Greens Scrambling to Demonize the Climate Impacts of Natural Gas

Guest essay by Eric Worrall, WUWT, July 2, 2019

<https://wattsupwiththat.com/2019/07/02/greens-scrambling-to-demonize-the-climate-impacts-of-gas/>

Other Scientific News

Nobel Lecture, 1965

The Development of the Space-Time View of Quantum Electrodynamics

By Richard P. Feynman, California Institute of Technology, December 11, 1965

http://www.feynmanlectures.caltech.edu/info/other/Feynmans_Nobel_Lecture.pdf

Innocence of beauty in Feynman lectures on physics

By Lubos Motl, The Reference Frame, July 2, 2019

<https://motls.blogspot.com/2019/07/innocence-of-beauty-in-feynman-lectures.html>

Link to Feynman Lectures on Physics

By Richard Feynman, Caltech, Accessed July 5, 2019

<http://www.feynmanlectures.caltech.edu/>

A new normal: Study explains universal pattern in fossil record

By Staff Writers, Santa Fe NM (SPX), Jul 01, 2019

http://www.terraily.com/reports/A_new_normal_Study_explains_universal_pattern_in_fossil_record_999.html

Link to paper: Nonequilibrium evolution of volatility in origination and extinction explains fat-tailed fluctuations in Phanerozoic biodiversity

By Rominger, Fuentes, and Marquet, Science Advances, June 26, 2019

<https://advances.sciencemag.org/content/5/6/eaat0122>

Theoretical physicists unveil one of the most ubiquitous and elusive concepts in chemistry

SISSA scientists provide a rigorous quantum mechanical explanation of the concept of atomic oxidation number and solve a long-standing conundrum in the physics of ionic conductors, thus paving the way to accurate simulations of a broad class of materials

By Staff Writers, EurekAlert, July 1, 2019 [H/t Toshio Fujita]

https://www.eurekalert.org/pub_releases/2019-07/sisd-tpu062819.php

Scientists capture atomic motion in four dimensions for the first time

By Brooks Hays, Washington (UPI), Jun 27, 2019

http://www.spacedaily.com/reports/Scientists_capture_atomic_motion_in_four_dimensions_for_the_first_time_999.html

Tumultuous Clouds of Jupiter

By Staff, NASA, Accessed July 4, 2019 [H/t WUWT]

<https://www.nasa.gov/image-feature/tumultuous-clouds-of-jupiter>

Time-lapse Sequence of Jupiter's North

<https://www.nasa.gov/feature/jpl/time-lapse-sequence-of-jupiter-s-north>

Chaotic Clouds of Jupiter

<https://www.nasa.gov/image-feature/jpl/chaotic-clouds-of-jupiter>

Other News that May Be of Interest

Assault on Western Civilization

By Walter Williams, Townhall, July 3, 2019

https://townhall.com/columnists/walterewilliams/2019/07/03/assault-on-western-civilization-n2549297?utm_source=thdaily&utm_medium=email&utm_campaign=nl&newsletterad=07/03/2019&bcid=600713400c5e414103c69dc935baaf47&recip=4143601

“There's a reason why the West leads the world in terms of scientific innovation, wealth, and military might and it has little to do with genetics. Instead, it's the environment of freedom, both in the market for goods and in the idea marketplace.”

Engineers Remember the Making of the Lunar Module

By Jeff O' Heir, ASME, Jul 1, 2019 [H/t Toshio Fujita]

<https://www.asme.org/topics-resources/content/engineers-remember-the-making-of-the-lunar-module>

BELOW THE BOTTOM LINE:

Fire destroys Jim Beam warehouse, bourbon flows into river

By Bruce Schreiner, AP, July 3, 2019

<https://www.apnews.com/a5f382c5eff7430eb3f6fdc7b47bce6a>

“No injuries were reported, Chandler said. The fire was contained but was allowed to burn until midday Wednesday, he said. [Woodford County Emergency Management Director Drew Chandler]

“The longer it burns, the more of the distilled spirits burn with it,’ he said in a phone interview. ‘So when they go to put it out, there will be less contaminated runoff that goes into a drinking-water tributary.’”

[SEPP Comment: Depends on one’s priorities: does water contaminate bourbon, or bourbon contaminate water? Kidding aside, what about the air pollution caused by the fire?]

Solar Powered Bitcoin Mining: Fake power for fake mining of fake gold?

Guest “you gotta be kidding me” by David Middleton, WUWT, July 3, 2019

<https://wattsupwiththat.com/2019/07/03/solar-powered-bitcoin-mining-fake-power-for-fake-mining-of-fake-gold/>

ARTICLES

1. Farmers Built a Soybean Export Empire Around China. Now They’re Fighting to Save It.

Trade tensions have hammered sales of soybeans to the Chinese, a major export market it took U.S. agriculture decades to create

By Jesse Newman, WSJ, July 4, 2019

https://www.wsj.com/articles/farmers-built-a-soybean-export-empire-around-china-now-theyre-fighting-to-save-it-11562260248?mod=hp_lead_pos5

SUMMARY: The article begins with:

“The U.S. Farm Belt is fighting to prevent an industry nightmare—the loss of its best customer for its biggest export.

“The customer is China and the export is soybeans, of which the U.S. shipped \$21 billion abroad in 2017, far more than anything else farmers grow. That marked a tripling in two decades, the fruit of a sweeping effort, by nearly every arm of U.S. agriculture, to build a once-obscure crop into a blockbuster.

“Then last year, sunk by a bitter trade dispute, American soybean exports to China plunged 74% by volume. Brazil raced to fill the gap, while prices paid to U.S. farmers recently slid to a seven-year low.”

The article goes into details of the trade dispute, then continues with:

“Because two main crops, soybeans and corn, dominate the U.S. farm economy, unwinding a large part of the system established over decades would entail real difficulties. Pioneer’s Mr. Schickler said long-lasting tariffs would spur U.S. farmers to plant fewer soybean acres and agricultural companies to divert resources from them.

“Brazil, which overtook the U.S. as the world’s biggest soybean exporter several years ago, stands to gain ground. The U.S. share of world soybean exports is expected to drop to 31% this

season, the lowest on record, while Brazil's portion is forecast to swell to 52%, which would be its largest ever.

“At an agricultural forum in Beijing last fall, according to Mr. Schickler, China's deputy agriculture minister said China would not easily forget the current standoff, and China is building alternatives for soybean imports so it will never again be so dependent on a single source.

“‘It was just that black and white,’ Mr. Schickler said. ‘China doesn't care about this year or next year—they think in terms of centuries.’

He said Brazil's ambassador to China told the group his country was working to become China's most reliable supplier.

The article concludes with comments about the tactics being undertaken by the US Soybean Export Council

2. How Bloomberg Pays to Prosecute the Trump EPA

Through NYU, he pays ‘pro bono’ lawyers to advance his agenda in state attorney-general offices.

By Chris Horner and Victoria Toensing, WSJ, July 5, 2019

https://www.wsj.com/articles/how-bloomberg-pays-to-prosecute-the-trump-epa-11562360993?mod=hp_opin_pos2

SUMMARY: The authors give details in efforts to politicize state attorneys general:

The State Energy and Environmental Impact Center, a group created by former New York City Mayor Michael Bloomberg in 2017, is hiring and placing lawyers in the offices of state attorneys general. The mission of the group, which is led by a former Interior Department official and housed at New York University's law school, is to provide ‘direct legal assistance to interested attorneys general on specific administrative, judicial or legislative matters involving clean energy, climate change and environmental interests of regional and national significance.’ At least one of the two Bloomberg ‘special assistant attorneys general’ placed in the office of New York Attorney General Letitia James is involved with the prosecution of Exxon Mobil for its supposed offense of ‘climate denial.’

Emails obtained under a public-records law show that the center submits detailed biweekly reports to Bloomberg Philanthropies. State legal officers taking money from private funders to pursue policy outcomes desired by those funders is inherently suspect. It also raises questions about the laws governing gifts, campaign contributions and bribes. To the extent these Bloomberg-funded lawyers are involved in prosecutions, it raises serious due-process concerns as well.

The NYU law center's principal focuses are thwarting Trump administration policies and advancing a green agenda. ‘The gist is that Bloomberg is funding through NYU some fellowship positions for midcareer environmental litigators to be farmed out to State Attorneys General to join the fight against Trump's rollback of our environmental protection laws and regulations,’ wrote Maryland's Deputy Attorney General Carolyn Quattrocki in a November 2017 email to colleagues. Bloomberg-funded lawyers are currently assisting in dozens of lawsuits against both

the Trump administration's regulatory reforms and private entities involved in any business contrary to the green agenda.

The office of New York's then-Attorney General Eric Schneiderman asked the NYU center to send two Bloomberg-funded lawyers in 2017 because it was understaffed and wanted to 'expand' litigation against the Trump administration and private parties. Without a privately underwritten special assistant attorney general, Mr. Schneiderman's office claimed, it would have trouble 'opposing the Scott Pruitt nomination as EPA administrator, advocating for the United States to remain in the Paris Climate Accord,' and pursuing other green political goals, such as 'building models for two different types of common law cases to seek compensation and other relief for harm caused by fossil-fuel emissions.'

Virginia Attorney General Mark Herring's application got straight to the point. His office would use Bloomberg resources 'to advance the agenda represented by' the donor. Only the intervention of the state Legislature stopped him from doing so.

After discussing the actions of Maryland Attorney General Brian Frosh the authors conclude: he has no legal authority to enter into arrangements he has done. They go on:

The scheme is more troubling the closer one looks. Mr. Bloomberg is a major donor to Democratic politicians and causes. He has made electing progressive attorneys general his priority. Two Bloomberg-funded groups, Independence USA PAC and Everytown USA for Gun Safety, put more than \$2 million into electing and re-electing Mr. Herring.

The State Energy and Environmental Impact Center has placed at least 11 special assistants in eight attorney-general offices. There could be more, but the center has stopped announcing new placements, possibly as a result of scrutiny from groups like ours. If no other state joins Virginia in standing up to Mr. Bloomberg's scheme, there is no limiting principle on partisan appropriation of public legal offices other than that the donor and the cause be acceptable in certain polite circles. These agreements to serve a donor-driven agenda threaten the legitimacy and important work of attorneys general offices. This apparent trade in buying and selling official functions demands a full public airing and unbiased reckoning.

Mr. Horner is an attorney and member of the board of directors of Government Accountability and Oversight PC. Ms. Toensing is a partner in the law firm diGenova & Toensing, which represents GAO in its lawsuit against the Maryland Attorney General.
