

The Week That Was: 2018-07-14 (July 14, 2018)

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The Science and Environmental Policy Project

Quote of the Week: *“The chance is high that the truth lies in the fashionable direction. But, on the off-chance that it is in another direction — a direction obvious from an unfashionable view of field theory — who will find it? Only someone who has sacrificed himself by teaching himself quantum electrodynamics from a peculiar and unfashionable point of view; one that he may have to invent for himself.”* – Richard Feynman "The Development of the Space-Time View of Quantum Electrodynamics," Nobel Lecture (December 11, 1965)

Number of the Week: 3 MMb/d – 4 times more than 2016, or before.

THIS WEEK:

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

Sea Level Hockey-Sticks? Last week’s TWTW discussed the lawsuit by Rhode Island against oil companies, and the claims that dire increases in sea level rise will occur this century. These claims are like those made by Oakland, San Francisco, and New York City. To establish any observational basis for these claims, this week’s TWTW will further explore their sources.

The technical report, “The State of Narraganset Bay and Its Watershed. 2017,” is instructive. Figure 1 (p. 75) and Figure 2 (p. 76) show the decades-long sea level trends in Newport and Providence, RI, of 2.78 +/- 0.16 mm per year (1.1 inches per decade) and 2.25 +/- 0.25 mm per year (0.9 inches per decade), respectively, from the established NOAA publication “Tides and Currents.” Then, Figure 3 (p. 78) shows NOAA projections of a rise of up to 11 feet by the end of the century (extreme case)! How did a rise of 10 inches per century, with an error of about 10%, turn in to rise of 11 feet by the end of the century (280 mm per century to 3352 mm per century)? This increase in rate of rise of more than 10 times that being measured.

The average case in the NOAA projections given in Figure 3 is a sea level rise of 4 feet. This is given a 50% probability of occurring. From the observed data, this is more than 4 times that which should be expected! The citation given is Sweet, et al. 2017 which relates to the 2017 Climate Science Special Report published by the US Global Change Research Program (USGCRP).

Other citations for an acceleration of sea level rise include the UN Intergovernmental Panel for Climate Change (IPCC) Fifth Assessment Report (AR5, 2013), which claimed that global sea level rise was 1.7 mm per year, 0.7 inches per decade, from 1901 to 2010; then jumped to 3.2 mm per year, 1.3 inches per decade, from 1993 to 2010. Satellite altimetry is used to substantiate the higher rate of sea level rise from 1993 to 2016. What caused this sudden increase in rate of sea level rise in 1993? Apparently, no one knows. There is no observational evidence given.

As readers realize, TWTW strongly supports comprehensive atmospheric temperature data taken by satellites. These calculations are strongly supported by direct measurements independently taken by weather balloons. But, TWTW has frequently criticized satellite altimetry data on sea level rise because the data are contradicted by a large body of data from many tidal gages around the world. Although some tidal gages are subject to variation from local conditions, such as plate

tectonics, and readings are noisy, subject to seasonal variation and prevailing winds, long term trends in stable areas remain about 1 to 2 mm per year (4 to 8 inches per century). Tidal gages in tectonically stable areas show no acceleration in sea level rise – an acceleration claimed by those using satellite altimetry data. The current, claimed acceleration appears from satellite altimetry data appear to be the result of faulty calibration of satellite data with tidal gage data.

Independently, Ron Clutz and Paul Homewood have spliced together differences in the rates of sea level rise as measured by tidal gages and IPCC Model Projections. Clutz for Newport, RI, and Homewood for global data. What we see is a familiar shape – Mr. Mann’s hockey-stick.

How many false icons should the public allow the IPCC? Ben Santer’s falsely named “distinct human fingerprint” was featured in AR2, 1995; Mr. Mann’s hockey-stick in AR3, 2001; the Himalayan glaciers melting by mid-21st century in AR4, 2007; and accelerating sea level rise in AR5, 2013-14? At least the previous icons had some observational evidence, no matter how thin or vague. The latest version offers none.

The fingerprint had condensation of water vapor at higher altitudes (about 10 km (33,000 feet) over the tropics) giving off latent heat, no matter the cause. The hockey-stick had the work of Sherwood Idso and others on bristlecone pines in the White Mountains of California, which attributed recent growth to carbon dioxide (CO₂) enrichment. Which was later falsely claimed to be from global warming. The melting of the Himalayas had some glaciers melting; but, as shown later, other glaciers were increasing. There is no strong evidence offered for the latest IPCC icon, the sea level rise hockey-stick, and it is contradicted by strong evidence from tidal gages in stable coastal areas. Should this not be the last false icon?

See links under Defending the Orthodoxy and Changing Seas.

False Analogies: One of the most prevalent false analogies given today is that the technological advances in computer chip manufacturing will occur in other industries. The advances in computer chip miniaturization are stunning, and the effects are prevalent from medicine and space to “down-hole” oil drilling. The promoters of the “alternative energy” industry, or “renewable energy” industry, wind and solar, are prone to such analogies. For example, RTO Insider, supposedly reporting on U.S. regional transmission organizations (RTO's) and independent system operators (ISO's) stated the following from John E. Kelly III, senior vice president for cognitive solutions and research at IBM, at renewable energy conference in Poughkeepsie, New York on Artificial Intelligence (AI).

“AI will transform society and the energy sector, said John E. Kelly III, senior vice president for cognitive solutions and research at IBM.

‘When I joined the company in 1980, my first job was to figure out how do we put 1,000 transistors on a tiny chip for our mainframes; today, we put 15 billion transistors on a chip the size of your fingernail,’ Kelly said.

“He shared how the benefits of AI stem from the exponential curve in data growth. He described how IBM’s Watson platform can absorb 30 years of data in a few minutes and then continue to ‘learn’ as it interacts with people and individual case decisions, whether in health care or the energy industry.

“The world’s fastest supercomputer requires 12 MW to mimic what the human brain performs on 20 W of electricity, Kelly said, but AI can spot what no human could. For example, when ‘Australian energy giant Woodside adopted Watson, the computer determined that most hand injuries occurred around 11 a.m., so the company now sends text messages to rig workers at 10:45 a.m. to remind them to take a break or have a cup of coffee, reducing the accident rate.’

“‘You are going to be disrupted and transformed by this technology,’ Kelly said. ‘We’re finally going to be able to take advantage of the integration of renewable energy and traditional energy in ways that we couldn’t before.’”

The analogy fails. Certainly, miniaturization may enhance the “smart grid.” But, try running a data center on unreliable electricity! Current technology will not make unreliable, weather dependent electricity reliable and resilient, unless there are fundamental breakthroughs in storage. Miniaturization of solar collectors or wind turbines will not enhance the intensity of solar radiation hitting a square meter of land or rooftop or enhance the volume and speed of wind passing through a turbine. But, many, including politicians supporting subsidies, believe that such advances will appear shortly.

Recently, New York State has “invested” in schemes that make little practical sense, such as the Buffalo Billion including a “\$750 million, 1.2 million-square-foot, state-built and equipped “Gigafactory” for SolarCity, the solar-panel company co-founded by Elon Musk and since merged into his Tesla Inc.” The factory is in south Buffalo and has been leased to Tesla and is yet to open. With some of the heaviest snows in the East Coast, and cold winters, Buffalo is not an ideal place for solar panels. More importantly, solar power is unreliable.

Four years ago, in discussing renewables replacing fossil fuels, Euan Mearns of Energy Matters, wrote:

*“Much of the energy debate at present is based around the risks associated with energy procurement systems; emissions from burning fossil fuels (FF) and radiation hazards linked to nuclear power. New renewables (wind, solar and wave power) are presented as a risk-free alternative to FF and nuclear. However, what is systematically overlooked by renewables advocates are the risks associated for individuals or for society not having access to **affordable energy when it is needed.**” [Boldface was italics in original]*

In reviewing his earlier comments, Mearns now writes:

“The more I think about it, deliberately introducing expensive stochastic noise into this finely balanced system seems quite insane.”

See links under Energy Issues – Non-US, Alternative, Green (“Clean”) Solar and Wind and Other News That May be Of Interest.

Oil Production: Contrary to what many may believe, technology in oil field drilling and production is not stagnant. The results are quite spectacular, without subsidies or “investments” by government entities. As Article # 2, below, states, a petroleum engineer can track five rigs drilling 24 wells in a complex project that will tap multiple layers of rock simultaneously. The operator can observe the progress of a 2-mile-long horizontal well drilled 10,000 feet underground in a narrow layer, sometimes less than 10 feet (3 meters).

These changes have resulted in fewer people employed in oil, and gas, operations. But, according to Devon Energy, one of the pioneers of horizontal drilling:

“Devon estimates its drilling and construction costs per well are down 40% since 2014, and it has improved its initial production rates, a key metric in determining how much oil a well will produce, by 450% since 2012.

Costs by down 40% and production up by 450% are achievements the “renewable energy” industry only imagines. Fossil fuel energy is benefiting from the advances in computer chip technology in ways that many energy experts do not realize, far more so than wind and solar. See Article # 2 and articles under Oil and Natural Gas – the Future or the Past?

Legal Issues: Mr. Trump’s nomination of US Court of Appeals Court Justice Brett Kavanaugh to fill the position being vacated by Supreme Court Justice Anthony Kennedy is producing comments from many parties, many of which are irrelevant for the purposes of TWTW. Thus far, the most salient points reviewed come from two diverse sources, the individual blog, Manhattan Contrarian, and Inside Climate News. In general, some respect the judge’s opinions that the laws of the nation should be properly constituted, others believe the view is too restrictive. As discussed in last week’s TWTW, over Republican opposition, the last time Democrats controlled the Senate the body enacted rules that a simple majority is all that is needed for the Senate to confirm a presidential nomination to the Supreme Court. See links under Change in US Administrations

Number of the Week: 3 MMb/d – 4 times more. According to weekly statistics from the Energy Information Administration, US exports of crude petroleum reached 3 million barrels per day during the week of June 22. They subsequently fell to 2 million barrels per day, but there is no reason why exports will not again reach 3 million barrels per day soon. By way of contrast, prior to January 2017, weekly exports were less than 700,000 barrels per day, less than 25% of June 22, which was more than 4 times than the maximum reached in 2016, or before. The petroleum world is changing.

The shift in US policy to allow for crude petroleum exports, other than to Canada and Japan, began under the Obama administration, but the administration tried to stop pipelines and drilling on public lands, curtailing the industry.

The 3 MM b/d is equivalent to 10 fully-loaded Very Large Crude Carriers (VLCCs) per week, each with a 2 MMbbl capacity. The supertankers have an average length of about 1,100 feet, with an average beam (or width) of about 200 feet and an average fully loaded draft of 72 feet. These are the most cost-effective way of transporting crude to China and India. According to independent analysts (links unavailable), there is only one terminal on the Gulf Coast that can fill a VLCC — the Louisiana Offshore Oil Port (LOOP) — and pipeline connections from key Texas and Oklahoma oilfields to LOOP are limited. Elsewhere along the Gulf Coast, VLCCs need to be loaded in offshore deep water by using smaller vessels — a slower and more costly process. But the physical restrictions are changing. (Unlike liquefied natural gas (LNG) carriers, the newly opened Panama Canal expansion cannot handle VLCC, because of their draft.)

<https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WCREXUS2&f=W>

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 six past recipients, Lisa Jackson, Barack Obama, John Kerry, Ernest Moniz, John Holdren and Christiana Figueres aka Cruella de Ville 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.

NEWS YOU CAN USE:

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, 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, 2014

<http://www.nipccreport.org/reports/ccr2b/pdf/Full-Report.pdf>

Summary: <https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.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, 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

Challenging the Orthodoxy

Science, Philosophy and Inquiry on a Galactic Scale

A Conversation with Dr. Willie Soon

By Gregoire Canlorbe, Friends of Science, No Date

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

[SEPP Comment: Willie Soon is a member of the SEPP Board of Directors.]

Facts Omitted by Climatists

By Ron Clutz, Science Matters, July 12, 2018

<https://rclutz.wordpress.com/2018/07/11/facts-omitted-by-climatists/>

Link to: Expert Report of Joseph E. Stiglitz

Kelsey Cascadia Rose Juliana, et al v. Untied States of America, US District Court in the District of Oregon, June 28, 2018

https://biotech.law.lsu.edu/blog/document_cw_01-2.pdf

[SEPP Comment: Discussing the “Expert Report” by former World Bank chief economist Joseph Stiglitz on the harm caused by fossil fuels to US District Court in the District of Oregon. He received the Nobel Memorial Prize in Economics for his work on Information Economics. Stiglitz was a lead author of the 1995 IPCC report. “I was one of the lead authors of the 1995 Report of the Intergovernmental Panel on Climate Change, which shared the 2007 Nobel Peace Prize with former Vice President Gore.”]

Whatever Happened to Agenda 21 and Climate Change Policy?

Guest opinion: Dr. Tim Ball, WUWT, July 7, 2018

<https://wattsupwiththat.com/2018/07/07/whatever-happened-to-agenda-21-and-climate-change-policy/>

[SEPP Comment: Although applying to Canada, Tim Ball gives reasons why the UNFCCC has outlived its need and the conditions placed on the treaty by the US Senate should be reviewed. If the conditions have not been met, the US should withdraw.]

Latest paper predicting global warming “could be far worse than predicted” is so much hot air

By Christopher Monckton of Brenchley, WUWT, July 9, 2018

<https://wattsupwiththat.com/2018/07/09/latest-paper-predicting-global-warming-could-be-far-worse-than-predicted-is-so-much-hot-air/>

Defending the Orthodoxy

Climate Change 2014: Synthesis Report

Summary for Policymakers

http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf

Climate Change 2013: The Physical Science Basis

By Thomas F. Stocker and Dahe Qin, et al. Working Group I, Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013

http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf

Sea Level Rise

By Sweet, W.V., R. Horton, R.E. Kopp, A.N. LeGrande, and A. Romanou, 2017: in Fourth National Climate Assessment (NCA4), Volume I, 2017

By D.J. Wuebbles, D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock, Eds. US Global Change Research Program, 2017

“This report is an authoritative assessment of the science of climate change, with a focus on the United States. It represents the first of two volumes of the Fourth National Climate Assessment, mandated by the Global Change Research Act of 1990.”

<https://science2017.globalchange.gov/>

The State of Narragansett Bay and Its Watershed, Technical Report

By Staff Writers, Narragansett Bay Estuary Program, 2017

<http://nbep.org/01/wp-content/uploads/2017/09/State-of-Narragansett-Bay-and-Its-Watershed.pdf>

The Guardian view on climate change: a global heatwave

The weather in Britain is only a small part of a global pattern and as the Arctic warms, it will make extreme events into the new, and dangerous, normal

Editorial, The Guardian, July 9, 2018

<https://www.theguardian.com/commentisfree/2018/jul/09/the-guardian-view-on-climate-change-a-global-heatwave>

The U.S. Navy’s Biggest Base Is Sinking

Climate change endangers Norfolk.

By Robert Farley, National Interest, July 5, 2018

<http://nationalinterest.org/blog/buzz/us-navy’s-biggest-base-sinking-25062>

[SEPP Comment: Incompetently done, does not address land subsidence, the major cause.]

Chinese Building Insulation Manufacturers Blamed for Massive “Super Global Warming” CFC Release

Guess essay by Eric Worrall, WUWT, July 9, 2018

<https://wattsupwiththat.com/2018/07/09/chinese-building-insulation-manufacturers-blamed-for-massive-super-global-warming-cfc-release/>

Questioning the Orthodoxy

Climate and Global Warming Issues and Uncertainties

By Don Bogard, NASA, ret., Via Environmentalists for Nuclear USA, July 8, 2018

<http://www.efn-usa.org/environment/item/1883-climate-and-global-warming-issues-and-uncertainties-don-bogard-usofa>

U.S. CO2 Levels Drop Again — So Why Aren’t Green Groups Rejoicing?

Editorial, IBD, July 12, 2018

<https://www.investors.com/politics/editorials/u-s-co2-levels-drop-again/>

Why "Climate Change" Seems To Have Faded From The News

By Francis Menton, Manhattan Contrarian, July 12, 2018

<https://www.manhattancontrarian.com/blog/2018-7-12-why-climate-change-seems-to-have-faded-from-the-news>

After Paris!

Board meeting turns ‘toxic’ as UN climate fund runs low

Rich and poor country representatives clash over policy priorities and replenishment at Green Climate Fund board meeting

By Megan Darby, Climate Home News, July 4, 2018

<http://www.climatechangenews.com/2018/07/03/board-meeting-turns-toxic-un-climate-fund-runs-low/>

Climate Activist Frustration: Nobody is Paying for Our Free Lunch

Guest essay by Eric Worrall, WUWT, July 7, 2018

<https://wattsupwiththat.com/2018/07/07/climate-activist-frustration-nobody-is-paying-for-our-free-lunch/>

Link to article: Trump's Cuts in Climate-Change Research Spark a Global Scramble for Funds
By Natalie Meade, New Yorker, July 7, 2018

<https://www.newyorker.com/news/news-desk/trumps-cuts-in-climate-change-research-spark-a-global-scramble-for-funds>

Change in US Administrations

The left's desire to live in a political silo when it comes to Trump

By Alan M. Dershowitz, Boston Globe, July 6, 2018

https://www.bostonglobe.com/opinion/2018/07/06/the-left-desire-live-political-silo-when-comes-trump/OAS3UzM3lpSTrnTWsJ3z7M/story.html?et rid=1882855922&s_campaign=todaysheadlines:newsletter

[SEPP Comment: From a former political icon of "progressives", now shunned.]

The White House Is Reviewing EPA Proposal to Repeal Obama's CO2 Regulations

By Michael Bastasch, Daily Caller, July 10, 2018

<http://dailycaller.com/2018/07/10/white-house-clean-power-plan/>

Brett Kavanaugh And The Administrative State

By Francis Menton, Manhattan Contrarian, July 10, 2018

<https://www.manhattancontrarian.com/blog/2018-7-10-brett-kavanaugh-and-the-administrative-state>

What Brett Kavanaugh on Supreme Court Could Mean for Climate Regulations

Trump's Supreme Court nominee has a history of opposing regulations Congress didn't explicitly authorize. That could be a problem for greenhouse gas policies.

By Marianne Lavelle, Inside Climate News, July 11, 2018

<https://insideclimatenews.org/news/10072018/brett-kavanaugh-supreme-court-trump-nominee-climate-change-policy-environmental-law>

[SEPP Comment: He believes that legislative power rests with Congress and not in the bureaucracy?]

Climate Change: What Would Kavanaugh Do?

By Patrick Michaels and Trevor Burrus, CATO, July 11, 2018

<https://www.cato.org/blog/climate-change-what-would-kavanaugh-do>

Judge Kavanaugh and the 'Chevron deference'

By Randolph May, Washington Times, July 12, 2018

<https://www.washingtontimes.com/news/2018/jul/12/judge-kavanaugh-and-the-chevron-deference/>

Scott Pruitt's EPA policies reined in a rogue agency and were good for America -- We need them to continue

By Henry I. Miller, Fox News, July 8, 2018

<http://www.foxnews.com/opinion/2018/07/08/scott-pruitts-epa-policies-reigned-in-rogue-agency-and-were-good-for-america-need-them-to-continue.html>

Social Benefits of Carbon

Climate Change, Fossil Fuels, and Human Well Being

By Marlo Lewis, CEI, July 11, 2018

<https://cei.org/blog/climate-change-fossil-fuels-and-human-well-being>

Problems in the Orthodoxy

In The Climate Wars, Two Steps Forward For Every One Back

By Francis Menton, Manhattan Contrarian, July 8, 2018

<https://www.manhattancontrarian.com/blog/2018-7-8-in-the-climate-wars-two-steps-forward-for-every-one-back>

[SEPP Comment: Although the author discusses other salient points, the rainfall comparison of Guatemala with Central Valley, California, is poor. The Central Valley relies on an extensive system of reservoirs and irrigation.]

Seeking a Common Ground

Climate uncertainty & risk

By Judith Curry, Climate Etc. July 8, 2018

<https://judithcurry.com/2018/07/08/climate-uncertainty-risk/#more-24229>

Science, Policy, and Evidence

The Trump Administration's Likely Unwillingness to End the Climate Scam

By Alan Carlin, Carlin Economics and Science, July 13, 2018

<http://www.carlineconomics.com/archives/4516>

“This suggests one of the underlying problems created by government intervention into what should be the free market. Once enough public resources are diverted to private gains, it becomes very difficult to fix the resulting mess. And that is what we have.”

Review of Recent Scientific Articles by CO2 Science

Impacts of Elevated CO2 on Lead Contaminated Soils

Jia, X., Zhang, C., Zhao, Y., Liu, T. and He, Y. 2018. Three years of exposure to lead and elevated CO2 affects lead accumulation and leaf defenses in *Robinia pseudoacacia* L. seedlings. *Journal of Hazardous Materials* 349: 215-223. July 13, 2018

<http://www.co2science.org/articles/V21/jul/a8.php>

A Freshwater Macrophyte's Response to Elevated Temperature and Elevated CO2

Lopes, A., Ferreira, A.B., Pantoja, P.O., Parolin, P. and Piedade, M.T.F. 2018. Combined effect of elevated CO2 level and temperature on germination and initial growth of *Montrichardia arborescens* (L.) Schott (Araceae): a microcosm experiment. *Hydrobiologia* 814: 19-30. July 12, 2018

<http://www.co2science.org/articles/V21/jul/a7.php>

[SEPP Comment: Not only a food source for animals, the plant is a food staple to many human cultures in the tropics.]

The Interactive Effects of Elevated CO2 and O3 on Chinese Tallow Tree

Wang, H., Zhang, L., Ma, X., Zou, J. and Siemann, E. 2018. The effects of elevated ozone and CO₂ on growth and defense of native, exotic and invader trees. *Journal of Plant Ecology* 11: 266-272. July 11, 2018

<http://www.co2science.org/articles/V21/jul/a6.php>

Projections of Future Peanut Yields in Senegal

Faye, B., Webber, H., Diop, M., Mbaye, M.L., Owusu-Sekyere, J.D., Naab, J.B. and Gaiser, T. 2018. Potential impact of climate change on peanut yield in Senegal, West Africa. *Field Crops Research* 219: 148-159. July 9, 2018

<http://www.co2science.org/articles/V21/jul/a5.php>

“Commenting on these projections, Faye *et al.* write that ‘as peanut is currently the country's most important cash crop, as well as [an] important food security crop, these results are encouraging and in broad agreement with a recent study by Hathie *et al.* (2017) and contrary to the expectation that climate change will inevitably lead to yield losses for West African agriculture mainly for cereals (Roudier *et al.*, 2011; Sultan *et al.*, 2013).”

Measurement Issues -- Surface

The all time record high temperatures for Los Angeles are the result of a faulty weather stations and should be disqualified

By Anthony Watts, WUWT, July 8, 2018

<https://wattsupwiththat.com/2018/07/08/the-all-time-record-high-temperatures-for-los-angeles-are-the-result-of-a-faulty-weather-stations-and-should-be-disqualified/>

[SEPP Comment: *When record keeping began, was the instrument surrounded by cars and asphalt – in 1877?*]

Changing Weather

Five New Studies From Around The World Show Today's Weather Fully Within Range Of Natural Variability!

By P Gosselin, No Tricks Zone, July 13, 2018

<http://notrickszone.com/2018/07/13/five-new-studies-from-around-the-world-show-todays-weather-fully-within-range-of-natural-variability/>

Tornado Stats For 2017

By Paul Homewood, Not a Lot of People Know That, July 11, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/11/tornado-stats-for-2017/>

[SEPP Comment: *Explaining why the record for early years is incomplete.*]

‘Warmest day in history’ claim based on thermometer next to an ice cream truck with its engine running all day to keep its freezer operating

By Thomas Lifson, American Thinker, July 7, 2018

https://www.americanthinker.com/blog/2018/07/warmest_day_in_history_claim_based_on_thermometer_next_to_an_ice_cream_truck_with_its_engine_running_all_day_to_keep_its_freezer_operating.html

Summertime Heat Must Mean Global Warming

By Brian C. Joondeph, American Thinker, July 9, 2018

https://www.americanthinker.com/articles/2018/07/summertime_heat_must_mean_global_warming.html

Changing Seas

New Research Finds Sea Level Rise Claims “Definitely Conjecture”...”Highly Erroneous”...Coastlines Stable Or Growing!

By P Gosselin, No Tricks Zone, July 11, 2018

<http://notrickszone.com/2018/07/11/new-research-finds-sea-level-rise-claims-definitely-conjecture-highly-erroneous-coastlines-stable-or-growing/>

Link to graph of Mean Sea Level at Newport RI, USA 8452660 and IPCC Model Projections

By Ron Clutz, Science Matters, July 2018

<https://rclutz.files.wordpress.com/2018/07/newport-past-projected.png>

Latest Sea Level Junk Science

By Paul Homewood, Not a Lot of People Know That, July 4, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/04/latest-sea-level-junk-science/>

With graph showing two different rates spliced together: Jevrejeva Projections

By Paul Homewood, Not a Lot of People Know That, July 4, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/04/jevrejeva-projections/>

What Happened to Sea-Level Rise?

By Andrew Montford, GWPF, July 12, 2018

<https://www.thegwpf.com/45947-2/>

Link to paper: The State of the World’s Beaches

By Arjen Luijendijk, et al., Nature, Scientific Reports, April 27, 2018

<https://www.nature.com/articles/s41598-018-24630-6>

Coastal Cities Race to Keep Tabs on Rising Seas, Skyrocketing Costs

By Dana Drugmand, Climate Liability News, July 11, 2018

<https://www.climateliabilitynews.org/2018/07/11/sea-level-rise-climate-adaptation/>

Link to study: Mass balance of the Antarctic Ice Sheet from 1992 to 2017

By The IMBIE team, Nature, June 13, 2018

<https://www.nature.com/articles/s41586-018-0179-y>

From abstract: “Here we combine satellite observations of its changing volume, flow and gravitational attraction with modelling of its surface mass balance to show that it lost $2,720 \pm 1,390$ billion tonnes of ice between 1992 and 2017, which corresponds to an increase in mean sea level of 7.6 ± 3.9 millimetres (errors are one standard deviation).”

Changing Cryosphere – Land / Sea Ice

Just look at what the ‘global heat wave’ is doing to polar bear sea ice habitat!

By Susan Crockford, Polar Bear Science, July 10, 2018

<https://polarbearscience.com/2018/07/10/just-look-at-what-the-global-heat-wave-is-doing-to-polar-bear-sea-ice-habitat/>

“Conclusion: I don’t see any startling differences to ice extent in 2018 that could be blamed on the last couple of weeks of ‘global heat’ (aka “summer”) during late June and early July.

“So far, it looks more or less like the same kind of Arctic ice retreat we’ve been seeing for the last 9 years, except slower.”

Communicating Better to the Public – Make things up.

Anthropocene: The Media’s Fake Geological Epoch

By Donna Laframboise, Big Picture, July 6, 2018

<https://nofrackingconsensus.com/2018/07/06/anthropocene-the-medias-fake-geological-epoch/>

Study: Fossil fuels contribute to ‘petro-masculinity

By Toni Airaksinen, Campus Reform, July 6, 2018

<https://www.campusreform.org/?ID=11098>

Link to paper: Petro-masculinity: Fossil Fuels and Authoritarian Desire

By Cara Daggett, Millennium: Journal of International Studies, June 20, 2018

<http://journals.sagepub.com/doi/abs/10.1177/0305829818775817?journalCode=mila&>

Opening lines of the abstract: “As the planet warms, new authoritarian movements in the West are embracing a toxic combination of climate denial, racism and misogyny. Rather than consider these resentments separately, this article interrogates their relationship through the concept of petro-masculinity, which appreciates the historic role of fossil fuel systems in buttressing white patriarchal rule.”

Roads Melt In Oz “Winter Heatwave”!!

By Paul Homewood, Not a Lot of People Know That, July 8, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/08/roads-melt-in-oz-winter-heatwave/>

Communicating Better to the Public – Do a Poll?

UK Survey: Brits Are Chilled About Global Warming

Press Release, GWPF, July 11, 2018

<https://www.thegwpf.com/uk-survey-brits-are-chilled-about-global-warming/>

Link to survey: Key Findings: How will Britain navigate the global, social, economic and Brexit challenges of the near future?

By Phillips, D. et al., The National Centre for Social Research, 2018

http://bsa.natcen.ac.uk/media/39285/bsa35_key-findings.pdf

“The British public are not as worried about major global challenges as the experts who work on them. Public concern about the threat of climate change and technology replacing their jobs is relatively low.”

Communicating Better to the Public – Go Personal.

Trump’s Psychopathology Is Getting Worse

By Jeffrey Sachs, Brandy Lee, Project Syndicate, July 3, 2018

<https://www.project-syndicate.org/commentary/trump-psychological-problems-getting-worse-by-jeffrey-d-sachs-and-bandy-x-lee-2018-07>

“Most pundits interpret the US president’s outbursts as playing to his political base, or preening for the cameras, or blustering for the sake of striking future deals. In fact, Trump suffers from several psychological pathologies that render him a clear and present danger to the world.”

“We should not remain immobilized by fear of a future disaster. A leader with dangerous signs of paranoia, lack of empathy, and sadism should not remain in the presidency, lest he commit devastating damage. Any appropriate measure to remove the danger – the ballot box, impeachment, or invocation of the US Constitution’s 25th Amendment – would help restore our safety.”

[SEPP Comment: We don’t understand him; therefore, he must be a psychopath?]

Expanding the Orthodoxy

Church of England to withdraw funds from polluting firms that fail to tackle climate change

By Paul Homewood, Not a Lot of People Know That, July 13, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/13/church-of-england-to-withdraw-funds-from-polluting-firms-that-fail-to-tackle-climate-change/>

From the Daily Mail: “The Archbishop of York Dr John Sentamu said the comforts provided by the modern economy 'come at great cost to the natural environment and spiritual health'.”

The Political Games Continue

Western lawmakers introduce bills to amend Endangered Species Act

By Timothy Cama, The Hill, July 12, 2018

<http://thehill.com/policy/energy-environment/396785-western-lawmakers-introduce-bills-to-amend-endangered-species-act>

Litigation Issues

CA Cities File Appeal In Effort To Avoid Exxon's Possible Lawsuit Against Them

By P. David Yates, Forbes, July 11, 2018

<https://www.forbes.com/sites/legalnewsline/2018/07/11/ca-cities-file-appeal-in-effort-to-avoid-exxons-possible-lawsuit-against-them/?source=bloomberg#47096996268f>

“Several California cities and counties found to be hypocrites by a Texas judge recently filed briefs requesting a Texas appellate court dismiss ExxonMobil's effort to depose numerous officials and an attorney involved in orchestrating climate change litigation against the oil industry.”

[SEPP Comment: The Texas case is based on Exxon citing failure of cities to include “alleged near-certain doom in their bond offerings to potential investors...”

Rhode Island's Climate Lawsuit: On Thin Ice

By Allen Brooks, Master Resource, July 12, 2018

<https://www.masterresource.org/climate-lawsuits/rhode-island-climate-lawsuit/>

Cap-and-Trade and Carbon Taxes

Carbon Taxes Are Uneconomic And Misanthropic

By H. Sterling Burnett, IBD, July 13, 2018

<https://www.investors.com/politics/commentary/carbon-taxes-uneconomic/>

'Sense of Congress' Resolution on a Carbon Tax (parsing the argument)

By Robert Bradley Jr, Master Resource, July 10, 2018

<https://www.masterresource.org/carbon-tax/sense-house-resolution-carbon-tax/>

Subsidies and Mandates Forever

How Low Sulphur Fuels will Affect the Oil Industry

By Donn Dears, Power For USA, July 10, 2018

<http://www.carbonfolly.com/2018/07/10/how-low-sulphur-fuels-will-affect-the-oil-industry/>

[SEPP Comment: An issue not raised: on what authority is this mandate implemented?]

The Road to Zero Plan Leads Nowhere

By Paul Homewood, Not a Lot of People Know That, July 11, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/11/the-road-to-zero-plan-leads-nowhere/>

[SEPP Comment: A UK plan to spend tens of billions?]

EPA and other Regulators on the March

It Is Time to Move Beyond the Linear No-Threshold Theory for Low-Dose Radiation Protection

By John Cardarelli and Brant Ulsh, Dose response: An International Journal, April-June, 2018
<http://journals.sagepub.com/doi/full/10.1177/1559325818779651>

EPA takes next step toward replacing Obama-era climate rule

By Timothy Cama, The Hill, July 10, 2018
<http://thehill.com/policy/energy-environment/396298-trump-admin-moves-forward-on-replacing-obama-epa-climate-rule>

Incoming EPA chief: ‘This is the right job for me.’

By Brady Dennis and Juliet Eilperin, Washington Post, July 6, 2018
https://www.washingtonpost.com/news/energy-environment/wp/2018/07/06/incoming-epa-chief-this-is-the-right-job-for-me/?utm_term=.902e2ef5238a

Energy Issues – Non-US

BP launches \$28bn Azerbaijan gas pipeline

By Staff Writers, Phys.org, July 2, 2018
<https://phys.org/news/2018-07-bp-28bn-azerbaijan-gas-pipeline.html>

Energy and Man Part 2

Energy stores and energy flows in relation to human behaviour
By Euan Mearns. Energy Matters, July 12, 2018
<http://euanmearns.com/energy-and-man-part-2/>

Delingpole: Trump Is Right – Germany’s Green Energy Suicide Is a Threat to the West

By James Delingpole, Breitbart, July 12, 2018
<https://www.breitbart.com/big-government/2018/07/12/russians-benefit-while-germany-goes-green/>

Energy Issues -- Australia

Claim: The World will Want to Buy Australia’s Carbon Credits

Guest essay by Eric Worrall, WUWT, July 9, 2018
<https://wattsupwiththat.com/2018/07/09/claim-the-world-will-want-to-buy-australias-carbon-credits/>

Ten years late the ACCC says rooftop solar deals must stop

By Jo Nova, Her Blog, July 12, 2018
<http://joannenova.com.au/2018/07/ten-years-late-the-accs-says-rooftop-solar-deals-must-stop/>
“The ACCC [Australian Competition & Consumer Commission] is a powerful body created to protect consumers in Australia. Now, after ten years of poor people being forced to pay for middle and upper class solar panels in a kind of semi-secret subsidy-tax, NOW, it says maybe it is time to stop?”

Post Hazelwood: Snowy Hydro dam now three quarters empty

By Jo Nova, Her Blog, July 13, 2018
<http://joannenova.com.au/2018/07/post-hazelwood-snowy-hydro-dam-now-three-quarters-empty/>

NIC’s [National Infrastructure Commission] Review Ignores The Real Energy Problems

By Paul Homewood, Not a Lot of People Know That, July 10, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/10/nics-review-ignores-the-real-energy-problems/>

“As the description states, the graph illustrates how much electricity will still need to come from coal or gas in 2030, even under extremely optimistic scenarios.

“Above all though, it shows that for much of the year, we will need 40GW or more of “spare” capacity, and maybe as much as 70GW at peak times.”

Energy Issues -- US

Zombie Coal Plants Show Why Trump's Emergency Plan Is No Cure-All

Two old Virginia power plants already operate under federal emergency authority. They don't meet pollution standards, and one failed and has been offline for weeks.

By John Cushman, Inside Climate News, July 9, 2018

<https://insideclimatenews.org/news/09072018/coal-power-plant-pollution-summer-heat-wave-emergency-order-virginia-dominion-trump-perry>

[SEPP Comment: Were they available for the intense cold in December-January, when the grid was severely tested?]

Oil and Natural Gas – the Future or the Past?

The End of Oil and Gas

By Andy May, WUWT, July 7, 2018

<https://wattsupwiththat.com/2018/07/07/the-end-of-oil-and-gas/>

[SEPP Comment: A reminder of false prophecies.]

U.S. Is Set to Become World's Top Oil Producer, Government Says

By Jessica Summers, Bloomberg, July 11, 2018

<https://www.bloombergquint.com/markets/2018/07/10/u-s-set-to-become-world-s-top-oil-producer-government-says>

Return of King Coal?

In ironic twist, drive for clean energy creates Asian coal boom

Public outcry over dirty fuel overshadowed by power needs of growing economies

By Shotaro Tani, Nikkei Asian Review, July 9, 2018 [H/t GWPF]

<https://asia.nikkei.com/Business/Markets/Commodities/In-ironic-twist-drive-for-clean-energy-creates-Asian-coal-boom>

“We believe that long-term fundamental [demand] for coal is [strongly] supported by developing countries in Southeast Asia, India, China and even OECD North Asia countries, all of which still depend on coal for electricity generation,” said Garibaldi Thohir, CEO of Adaro, in a written response to a question from the Nikkei Asian Review. “Despite [the] renewable energy push, thermal coal will still be preferred due to its affordability and abundant reserves in the region.”

Swiss Re Stops Insuring Businesses With High Exposure to Thermal Coal

The move is part of Swiss Re's commitment to “a progressive and structured shift away from fossil fuels.

By Julia Pyper, GTM, July 5, 2018

<https://www.greentechmedia.com/articles/read/swiss-re-stops-insuring-businesses-with-30-percent-exposure-to-thermal-coal#gs.5BrotFY>

[SEPP Comment: Will it insure generation from wind and solar?]

Nuclear Energy and Fears

China's nuclear industry shows potential to overpower rivals

Tech gains and low costs put more reactor export deals within reach

By Yasuo Takechi and Tallulah Lutkin, Nikkei Asian Review, July 3, 2018

<https://asia.nikkei.com/Spotlight/Asia-Insight/China-s-nuclear-industry-shows-potential-to-overpower-rivals>

[SEPP Comment: Leading the world in nuclear reactor construction with 17 to second largest, India, with 7.]

Alternative, Green (“Clean”) Solar and Wind

Overheard at New York Renewable Energy Conference

By Michael Kuser, RTO Insider, July 2, 2018 [H/t Toshio Fujita]

<https://www.rtoinsider.com/nyiso-artificial-intelligence-offshore-wind-renewable-energy-conference-95645/>

Why Are We Doing This? A Trove Of New Research Documents The Folly Of Renewable Energy Promotion

By Kenneth Richard, No Tricks Zone, July 9, 2018

<http://notrickszone.com/2018/07/09/why-are-we-doing-this-a-trove-of-new-research-documents-the-folly-of-renewable-energy-promotion/>

Climate Change: Your Catastrophic Electric Bill Ahead

Falmouth Massachusetts Is Ground Zero For Poorly Placed Wind Turbines In USA. Politicians Put The Cart Before The Horse Ignored The Public

By Frank Haggerty, Falmouth Patch, July 10, 2018 [H/t ICECAP]

<https://patch.com/massachusetts/falmouth/climate-change-your-catastrophic-electric-bill-ahead>

“Adding wind turbines into the ‘energy mix’ didn't help prevent the power outages. They guaranteed that they would happen.”

[SEPP Comment: Creating a problem by putting funds needed for local distribution into unreliable generation.]

Wind and solar are called clean for a reason

By Michael Goggin, Opinion, The Hill, July 8, 2018

<http://thehill.com/opinion/energy-environment/395954-wind-and-solar-are-called-clean-for-a-reason>

Sunny skies see solar surge across UK

For around an hour on Saturday, solar was the UK’s main source of electricity, with a share of more than 27%

By Jonny Bairstow, Energy Live News, July 3, 2018

<https://www.energylivenews.com/2018/07/03/sunny-skies-see-solar-surge-across-uk/>

[SEPP Comment: But, how does solar do during winter nights?]

Energy & Environmental Newsletter:

By John Droz, Jr. Master Resource, July 9, 2018

<https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-environmental-newsletter-july-9-2018/>

Alternative, Green (“Clean”) Energy -- Other

Shorrock's Pot Of Gold

Don't Cry For Me ~~Argentina~~ Swansea Bay

By Paul Homewood, Not a Lot of People Know That, July 9, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/07/09/shorrock-pot-of-gold/#more-34406>

[SEPP Comment: How a promoter can profit from a losing concept!]

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

Hydro storage is an anti-generator that destroys 20-30% of the electricity fed into it

By Jo Nova, Her Blog, July 9, 2018

<http://joannenova.com.au/2018/07/hydro-storage-is-an-anti-generator-that-destroys-20-30-of-the-electricity-fed-into-it/>

[SEPP Comment: Jo Nova's terminology is incorrect. Pumped hydro-storage was conceived as a means of storing excess electricity from reliable thermal plants (coal and nuclear) when not needed. Otherwise the heat goes to waste. The system does not destroy electricity. A 75% efficiency for any thermodynamic system is quite good. Pumped storage was not conceived, and not shown to suitable for back-up, for unreliable solar and wind. Energy Matters has had many posts on its failures as back-up for unreliable solar and wind.]

Alternative, Green ("Clean") Vehicles

Tesla Buyers Hear Clock Ticking as \$7,500 Credit Phases Out

By Sarah Gardner, Bloomberg, July 12, 2018 [H/t Cooler Heads]

<https://www.bloomberg.com/news/articles/2018-07-12/tesla-buyers-hear-clock-ticking-as-7-500-tax-credit-phases-out>

California Dreaming

California meets greenhouse gas reduction goal years early

By Christopher Weber, AP, July 12, 2018

<https://apnews.com/942b5a251fac413a84fc4eb93a67c46c/California-meets-greenhouse-gas-reduction-goal-years-early>

[SEPP Comment: No mention of increased electricity costs.]

Tesla strikes another mammoth energy storage deal in California

Lithium-ion battery projects are becoming economically viable.

By Megan Geuss, ArsTechnica, July 2, 2018

<https://arstechnica.com/information-technology/2018/07/california-utility-looks-to-add-gigawatt-hours-of-battery-storage-before-2020/>

"The Tesla installation is expected to discharge 182.5MW for 4 hours (hence, the 730MWh number)."

Health, Energy, and Climate

Undercooked: An Expensive Push to Save Lives and Protect the Planet Falls Short

Millions of lives were at stake. Hillary Clinton was on board. Money poured in. And yet the big aims behind an effort to tackle the plague of third-world cooking fires has produced only modest gains.

By Sara Morrison, ProPublica, July 12, 2018 [H/t GWPF]

<https://www.propublica.org/article/cookstoves-push-to-protect-the-planet-falls-short>

[SEPP Comment: For centuries, indoor burning of fuels without proper ventilation has been a source of diseases. The Global Alliance for Clean Cookstoves had a good idea, thwarted by global warming madness.]

Environmental Industry

“Big Hydro Power Win”

By Donn Dears, Power For USA, July 13, 2018

<http://www.carbonfolly.com/2018/07/13/big-hydro-power-win/>

[SEPP Comment: Further evidence that some in the green industry will oppose all forms of generating reliable electricity.]

Greenpeace’s Nazca Vandalism: Half-Truths & Trifling Consequences

By Donna Laframboise, Big Picture, July 13, 2018

<https://nofrackingconsensus.com/2018/07/13/greenpeaces-nazca-vandalism-half-truths-trifling-consequences/>

Other Scientific News

New Holocene geological subdivisions. The Anthropocene nowhere to be found.

By Javier, WUWT, July 9, 2018

<https://wattsupwiththat.com/2018/07/09/new-holocene-geological-subdivisions-the-anthropocene-nowhere-to-be-found/>

Link to explanation of latest stage: Collapse of civilizations worldwide defines youngest unit of the Geologic Time Scale

By Staff Writers, Durham University, July 6, 2018

<https://www.dur.ac.uk/earth.sciences/news/?itemno=35201>

Other News That May be Of Interest

Cuomo’s Buffalo Billion was beyond corrupt

By E.J. McMahon, New York Post, July 13, 2018

<https://nypost.com/2018/07/13/cuomos-buffalo-billion-was-beyond-corrupt/>

BELOW THE BOTTOM LINE:

Russian mining firm places seal with Trump's face on asbestos products

By Justin Wise, The Hill, July 11, 2018

<http://thehill.com/policy/energy-environment/396427-russian-mining-firm-places-seal-of-trumps-face-on-asbestos-products>

More couch potatoes!

By Staff Writers, Climate Change Predictions.org. July 10, 2018

<http://climatechangepredictions.org/uncategorized/9871>

“According to an August report by the nonprofit National Wildlife Federation, climate change is creating obstacles that can impede our time in the outdoors — namely, by increasing the number of pests.

“Nature is critical to health, says Martha Berger, a children’s health officer with the U.S. Environmental Protection Agency. Climate change, she added, could ‘further alienate kids from nature.’” Huffington Post, 6 Sep 2014

More stings

By Staff Writers, Climate Change Predictions.org. July 9, 2018

<http://climatechangepredictions.org/uncategorized/9869>

“Insect stings have been on the rise in Alaska, and experts think that global warming could be to blame.

“Jeffrey Demain, director of the Allergy, Asthma, and Immunology Center of Alaska in Anchorage, ‘We think climate and temperature changes are creating a more favorable environment for their survivability.’

“Demain and other experts believe this scenario could be part of a worldwide trend of stinging insects spreading northward in response to climate change.” National Geographic, 16 Jul 2008

ARTICLES:

1. Pruitt Leaves a Proud Legacy at the EPA

His political offense wasn't ethics but his forthright challenge to the myth of renewable energy.
By George Melloan, WSJ, July 11, 2018

https://www.wsj.com/articles/pruitt-leaves-a-proud-legacy-at-the-epa-1531347048?mod=hp_opin_pos3

SUMMARY: The former deputy editor of the Journal editorial page writes:

“Scott Pruitt wasn't chased out of the EPA because of his ethical lapses but because he was derailing the environmental left's radical effort to tighten its grip on the U.S. economy. Mr. Pruitt was implementing President Trump's executive order to scuttle Barack Obama's Clean Power Plan, which would have forced sharp cutbacks in the use of fossil fuels, at great cost to consumers and with little purpose.

“Under President Obama, the EPA's bureaucrats became the shock troops of a new 'green revolution'—quite different from the one that revolutionized agriculture. Mr. Trump chose Mr. Pruitt to lead the counterrevolution. Accordingly, Mr. Pruitt scotched the agency's encouragement of 'sue and settle' litigation that effectively gave outside lobbyists the power to set EPA policies.”

“Further horror of horrors, the president pulled the U.S. out of the Paris Agreement, ending the longstanding collaboration between the EPA and the United Nations Intergovernmental Panel on Climate Change. Governments throughout the world have already spent hundreds of billions of dollars to meet U.N. goals for reducing emissions of carbon dioxide. Last July, Danish scholar Bjorn Lomborg predicted the cost of implementing the Paris Climate Accord would hit \$2 trillion by 2030.

“CO₂ is a natural component of the air we breathe and without it there would be no life on earth. The U.N.'s alarms about a CO₂ 'greenhouse' causing global warming are based on dubious computer models. As the Cato Institute's Pat Michaels and Ryan Maue observed on this page last month, global surface temperature hasn't risen significantly since 2000.

“The stakes are high. Government restrictions on carbon emissions have spawned a large renewable-energy industry specializing in solar panels and windmills. In places where those industries have best thrived, such as Germany and Australia, the result has been unreliable power at sharply higher cost. Germans pay roughly three times what Americans pay for electricity, according to the International Energy Agency.

“The idea that ‘renewables’ are some kind of modern planet-saving technology is preposterous. Other than fire, renewables were mankind’s only energy sources for eons. Primitive people built their huts with solar-fired mud bricks. The 15th-century European explorers relied on the wind to fill their sails. ‘The Rime of the Ancient Mariner’ described the well-known peril of being becalmed on the vast ocean with water everywhere, “nor any drop to drink.” Modern mariners, with ships driven by fossil-fueled turbines, seldom face that problem.

“It’s hardly a new discovery that renewables don’t work when the sun doesn’t shine and the wind doesn’t blow. What is less understood is that even when governments force public utilities to buy renewables, power companies still have to use fossil fuels or uranium to keep the grid up and running when the sun and wind are off duty. So renewable power is superfluous to power companies, but its cost reduces their ability to finance baseload power plants. The result is either higher electricity bills or an unreliable grid. Consumers get punished either way.

“Even the Bonneville Power Administration, a grand government hydropower complex that provides the U.S. Northwest with 28% of its electricity, has been plagued with this problem as the requirement to make way for government-subsidized wind and solar reduces its ability to utilize its system efficiently. Said a BPA statement in January: ‘Our power customers have expressed serious concerns that BPA’s recent pattern of rising costs and rates is unsustainable.’

“Matters are even worse in some of the countries where parties of the environmentalist left have been more successful. At the behest of its Greens, Germany shut down not only coal plants but also some nuclear facilities after the meltdown at the badly designed Fukushima plant in Japan. High electricity costs were an important factor, along with the refugee influx, in Chancellor Angela Merkel’s election debacle last year.

“Australia’s left used to boast that their nation had more solar panels per capita than anywhere else in the world. They said less about Australia’s household electricity costs—also among the world’s highest. When South Australia suffered blackouts in the summer of 2006, politicians began to realize something was amiss. Last October, Australian Prime Minister Malcolm Turnbull scrapped plans to set new renewables targets, and his government expects to have a new, more reliable, energy plan by next month. It may include such irreligious means as renewed use of the country’s plentiful coal deposits.

“Mr. Trump dumped the Paris Agreement to stop the U.S. from going the way of Germany and Australia. Mr. Obama had drunk the U.N. Kool-Aid, echoing the claim that global warming was an existential threat to the planet. His 2015 Clean Power Plan was designed to reduce CO2 emissions from the electric-power sector by 32% from 2005 levels by 2030, notably through greater dependence on wind and solar.

“When Mr. Obama launched the CPP (sans congressional legislation) it drew challenges from 150 entities, including 27 states, 24 trade associations, 37 rural electrical cooperatives and three labor unions, the EPA reported. Taking those complaints seriously, the Trump administration moved to scrap the plan. This will save up to \$33 billion in compliance costs by 2030, according to a new EPA estimate.

“Mr. Pruitt’s successor at the EPA, acting director Andrew Wheeler, will now take the sniper fire. But consider this: Enviro-shaman Al Gore warned in ‘Earth in the Balance’ that the planet was in imminent peril from global warming fully 26 years ago. Yet temperature readings from weather

stations and satellites today show that the earth's sundry climates are pretty much what they were then. Hyderabad still gets very hot in summer, as it has for centuries, and Yakutsk gets very cold in winter, ditto. San Francisco is pretty nice year-round, except for the fog and the politics.

2. Oil's New Technology Spells End of Boom for Roughnecks

One of the last industries where blue-collar laborers can earn high salaries is being transformed as artificial intelligence and automation replace workers

By Christopher Matthews, WSJ, July 10, 2018

<https://www.wsj.com/articles/oils-new-technology-spells-end-of-boom-for-roughnecks-1531233085>

SUMMARY: Tracing the oil industry 20-year job experience of a worker with only a high school education, the journalist reports that jobs paying in six figure salaries in the oil industry for those with a minimal education are becoming increasingly scarce. Many of the jobs are being replaced by automated control systems. The journalist writes further:

“Baker Hughes, a GE company that is the successor to GE Oil & Gas, said it is focusing on recruiting high-tech workers, increasingly from Silicon Valley. ‘You need to combine talent from the tech industry with oil and gas expertise,’ said Binu Mathew, who was hired from Oracle Corp. in 2013 and heads the company’s newly created digital products division. ‘[Everyone] understands this is going to change the industry.’

“Major oil companies and smaller shale producers including Chevron Corp. Devon Energy Corp. Baker Hughes and EOG Resources Inc. are recruiting computer scientists, who develop algorithms and other tech tools.

“At Devon’s WellCon center—short for well construction—in Oklahoma City, a small team of engineers and scientists monitor every well the company is drilling and fracking across the U.S.

“From several screens, Kyle Haustveit, a 28-year-old completions engineer—he has a bachelor’s in petroleum engineering—watches the company’s ‘Showboat’ development, where five rigs are drilling 24 wells in a complex project in Kingfisher County, Okla., that will tap multiple layers of rock simultaneously.

“One screen displays the progress as a 2-mile-long horizontal well is drilled 10,000 feet underground. A graph tracks the budgetary impacts in real time using customized software. If the drill bit goes outside the sweet spot where the company believes oil and gas to be—an area sometimes no more than 10 feet across—dollar signs tick up and a call is made to workers in the field to adjust equipment.

“Another screen tracks four fracking crews working within a square mile. Mr. Haustveit is collecting data on how the sand, water and chemicals the crews pump to release oil and gas from the rock affect the pressure on the other wells. He will feed it, along with microseismic and acoustic data captured by fiber-optic cables, into a program that will use machine learning to determine the best way to frack to produce the most oil as quickly as possible.

“‘I grew up in a small town in North Dakota, so I thought all oil and gas happened in the field,’ Mr. Haustveit said. ‘I didn’t have a clue that this is what it would be like.’

“The center was manned by about 80 people monitoring 40 rigs before the 2014 oil bust. Today, roughly a dozen people monitor the company’s 21 active rigs. Tony Vaughn, Devon’s chief operating officer, said the transition was difficult but has improved the company’s operational efficiency. ‘It required a lot of people with an old-school mind-set to leave the company, frankly,’ he said.

“Devon has around 3,100 employees, down from 5,500 in December 2014. The company laid off 300 workers in April.

“Devon estimates its drilling and construction costs per well are down 40% since 2014, and it has improved its initial production rates, a key metric in determining how much oil a well will produce, by 450% since 2012.

“The company has invested more than \$100 million in technologies ranging from fiber-optic cables to augmented reality. Some of the most significant returns have come from centralizing and organizing data. The company had to scan millions of pieces of paper just to get a handle on what it had. Now, everyone has access to real-time drilling software companywide.

The article concludes by the journalist discussing the negative impact the reduction in manual jobs is having in Western rural communities.
