

## **The Week That Was: 2018-04-07 (April 7, 2018)** **Brought to You by SEPP ([www.SEPP.org](http://www.SEPP.org))** **The Science and Environmental Policy Project**

**Quote of the Week.** *“The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands in times of challenge and controversy.”* – Martin Luther King Jr.

**Number of the Week:** 0.013%

### **THIS WEEK:**

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

**Adjusting Data:** SEPP Chairman emeritus Fred Singer has an essay in *The Hill*, a newspaper targeted for Capitol Hill, namely the US legislature. In the essay, Singer recognizes the importance of adjusting data. But, there is a right way and a wrong way to go about it. Singer uses actions by the National Oceanic and Atmospheric Administration (NOAA) and its National Climatic Data Center (NCDC) to exemplify both ways. NCDC is now called the National Centers for Environmental Information (NCEI). It is entrusted for “preserving, monitoring, assessing, and providing public access to the **Nation's treasure of climate and historical weather data and information.**” [Boldface added.] According to the American Institute of Physics, NOAA’s enacted budget for Fiscal Year 2018 is \$5.9 billion, up 4% from FY 2017.

Singer believes that NOAA and NCDC (NCEI) have received both justified and unjustified criticism for its treatment of “the Nation’s Treasure.” He writes:

*“It is important for the public to gain some perspective on such changes before indulging in wild accusations. Equally important, NOAA must use more transparency and not only announce data adjustments, but explain them so that reasonable people of goodwill will understand.”*

He explains that adjustments to data for moving weather stations are completely understandable. But, adjustments made to data immediately prior to the Paris Conference are not. It was an effort to explain away “the pause.” Further, Singer believes that the warming shown in the US record in the last decades of the 20<sup>th</sup> century and the beginning of the 21<sup>st</sup> century are unjustified and are inconsistent with other records of surface temperature.

See links under Challenging the Orthodoxy, Defending the Orthodoxy,

<https://www.ncdc.noaa.gov/>, and

[\\*https://twitter.com/FYIscipolicy/status/982372591309590529/photo/1?ref\\_src=twsrc%5Etfw&ref\\_url=https%3A%2F%2Fwww.aip.org%2Ffyi%2F2017%2Fwhite-house-proposes-deep-funding-cuts-noaa](https://twitter.com/FYIscipolicy/status/982372591309590529/photo/1?ref_src=twsrc%5Etfw&ref_url=https%3A%2F%2Fwww.aip.org%2Ffyi%2F2017%2Fwhite-house-proposes-deep-funding-cuts-noaa)

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**Adjusting Data Correctly:** According to Singer, to maintain public confidence and assure accuracy when adjusting data, an organization needs to be transparent and use all appropriate available data to cross check the work. In short, frequent testing is needed. It appears that the team at the Earth System Science Center (ESSC) of the University of Alabama in Huntsville (UAH) has done that.

Some time ago UAH reported that the satellite identified as NOAA-14 (operating in the 1990s and 2000s) was giving questionable readings. This led to spurious warming trends in the four datasets compiled from the data: UAH, RSS (Remote Sensing Systems), NOAA, and UW (University of Washington). Orbital drift is a problem with all satellite measurements, but the problem appeared to be worse with NOAA-14 than any other.

As the ESSC team was preparing the latest version of the UAH dataset, they recognized that the problem with NOAA-14 was becoming severe and implemented two important changes. They stopped using data from NOAA-14 in 2001 and implemented an algorithm (processes or mathematical formulas) to limit the error from readings by other satellites. [Algorithms are useful in correcting errors if there is a consistency in the errors. If there is no consistency in error, their use is doubtful.] A key to realizing there was a problem with NOAA-14 was that it was showing greater warming than NOAA-15, which was launched in the late 1990s.

After they built the latest dataset (Version 6.0) the ESSC team analyzed their earlier version as well as the other three datasets. In this analysis they used datasets from U.S. weather balloons, that had not changed software or instruments for the major part of the NOAA-14 record. These data came from NOAA, the University of Vienna and the University of New South Wales.

This data were coupled with global weather “reanalysis” data from the European Center for Medium Range Forecasts, the Japan Climate Research Group and NASA. Reanalysis data is very important in correcting and updating weather forecasts and, hopefully, improving numerical weather models. This effort gave the ESSC team weather balloon data from 564 stations around the world.

The work was published by the International Journal of Remote Sensing and is available on-line. Based on their analysis, the global (near global) atmospheric warming trend is 0.07 to 0.13°C per decade and the tropical (20°S-20°N) trend is  $+0.10 \pm 0.03^\circ\text{C}$  decade. This is where Mr. Santer’s distinct human fingerprint should be, so prominently emphasized in the Second Assessment Report (AR-2) of the UN Intergovernmental Panel for Climate Change (IPCC).

The importance of the study is illustrated in one sentence:

*“The satellite-monitored layer for this study is commonly referred as the mid-troposphere (TMT) because the peak of energy received by the satellite originates in the mid to upper troposphere with the main weighting function (96% of the signal) going from the surface to 70 hPa.” [To about 60,000 feet, 18,000 meters.]*

The authors estimate that the warming trend of the (nearly) global bulk atmosphere layer is  $0.10 \pm 0.03^\circ\text{C}$  decade. This is where the greenhouse effect occurs. See links under Challenging the Orthodoxy.

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**What Does It Mean?** The analysis by the ESSC team is useful in evaluating the work of the IPCC, the US Global Change Research Program (USGCRP), and their followers. For that reason, one can expect that it will be ignored by those entrenched in Bureaucratic Science. The 40-year icon of CO<sub>2</sub>-caused global warming is that a doubling of CO<sub>2</sub> will result in a warming of 3°C plus or minus 1.5°C, from the Charney Report. The data record discussed above is from 1979 (December 1978) to December 2016, during which time the atmospheric CO<sub>2</sub> concentration rose

from 335 ppm to 404 ppm, an increase of 20.6%. This works out to 0.54% per year for the 38-year record. At that rate it would take about 190 years to double CO<sub>2</sub>.

Assuming the entire calculated warming trend of 0.1 °C per decade is from CO<sub>2</sub> and indirect influences (positive feedbacks such as water vapour) caused by CO<sub>2</sub>, the 38-year trend indicates a doubling of CO<sub>2</sub> would require almost 190 years and cause a warming of less than 2°C. Given natural variation, the warming trend is hardly cause for alarm.

The issue is further complicated by the earlier part of the atmospheric record includes a cooling from aerosols emitted by volcanoes and the later part includes a warming from sea temperatures surface by El Niños. These effects can be removed from the data using widely-accepted statistical techniques such as those employed by Wallace, et al. Using such techniques would reveal the dangerous, “unprecedented” atmospheric warming is insignificant.

Twenty years ago, Richard Lindzen wrote a paper questioning whether CO<sub>2</sub> could cause significant warming. In his conclusion, he stated::

*“Indirect estimates, based on response to volcanoes, suggest sensitivity may be as small as 0.3–0.5°C for a doubling of CO<sub>2</sub>, which is well within the range of natural variability.”*

Of course, the paper has been largely ignored by bureaucratic scientists who prefer to alarm the public rather than accurately discuss science. See links under Challenging the Orthodoxy.

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**Exxon’s Secret Science Revealed?** A reporter for *Legal News Line*, Daniel Fisher, discovered Exxon’s “secret science” claimed in the Public Nuisance complaint by the cities of Oakland and San Francisco against oil companies. It involved a group formed by the American Petroleum Institute called the Global Climate Coalition (GCC). The plaintiff (city) lawyers claimed a memo by GCC contained evidence of scientific knowledge that Exxon was trying to hide from the public. According to the reporter: the secret was a summary of the IPCC AR-2, 1995, which included Mr. Santer’s mysterious distinct human fingerprint, the hot spot, which is still missing, or barely visible, even 20 years later.

Former SEPP Chairman, the late Fredrick Seitz, called the process involved in inserting the terminology of a distinct human fingerprint the worse abuse of the peer review process he had seen in 60 years of American science. Numerous times, Fred Singer and TWTW have brought up the missing hot spot. As stated in the new ESSC paper a weak hot spot, regardless of cause, indicates that the earth is less sensitive to greenhouse gases than claimed by the IPCC:

*“Lower trends would suggest relatively modest sensitivity of the climate system to extra greenhouse gas forcing, while higher trends would support greater sensitivity. Thus, the trend magnitudes are critical, for example, to understanding the response of the climate system to enhanced forcing. In this paper, our focus will be on the credibility of the datasets and associated trends, suggesting reasons for their differences and offering a best estimate based on multiple, independent efforts.”*

A search of the docket for the District Court in the case did not reveal an amended filing by San Francisco, perhaps it had not been entered yet, but it did reveal an amended filing by Oakland. The statements of the reporter are supported. Among other things, the amended filing stated:

*“In February 1996, an internal GCC presentation summarized findings from the 1995 IPCC Second Assessment report and stated that the projected temperature change by 2100 would constitute ‘an average rate of warming [that] would probably be greater than any seen in the past 10,000 years.’” [Note that the rate of warming from 20,000 to 10,000 years ago is more interesting.]*

Is one to assume that by quoting the IPCC, one accepts its highly questionable science? The amended complaint further states: [The numbers are paragraph numbers.]

*110 “Between 1998 and 2014, Exxon paid millions of dollars to organizations to promote disinformation on global warming. During the early- to mid-1990s, Exxon directed some of this funding to Dr. Fred Seitz, Dr. Fred Singer, and/or Seitz and Singer’s Science and Environmental Policy Project (“SEPP”) in order to launch repeated attacks on mainstream climate science and IPCC conclusions, even as Exxon scientists participated in the IPCC. Seitz, Singer and SEPP had previously been paid by the tobacco industry to create doubt in the public mind about the hazards of smoking. Seitz and Singer were not climate scientists.”*

*111 “Exxon’s promotion of fossil fuels also entailed the funding of denialist groups that attacked well-respected scientists Dr. Benjamin Santer and Dr. Michael Mann, maligning their characters and seeking to discredit their scientific conclusions with media attacks and bogus studies in order to undermine the IPCC’s 1995 and 2001 conclusion that human-driven global warming is now occurring.”*

SEPP strongly demands the Cities produce evidence of their accusations, which SEPP asserts are false.

The filing concludes with maps showing a projected sea level rise in 2050. It shows the Oakland Airport and parts of the wealthy community of Alameda underwater. Has the City informed the bond holders and the residents that their securities and homes may be unsaleable because they will be submerged? See links under Litigation Issues -- California

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**In Defense of Oakland and San Francisco:** To substantiate their claims, the cities used Myles Allen of the Environmental Change Institute, School of Geography and the Environment, and Professor in the Department of Physics, University of Oxford. He is a long-time climate alarm advocate, author of IPCC reports, and involved with the Attribution of Climate-related Events (ACE) initiative.

A few slides in his presentation stand out:

- *“Evidence that a detectable signal was not needed to make predictions. (One can make predictions based on nothing.)*
- *Warming is unequivocal (See Singer’s comments above)*
- *Formal comparison of expected responses to known drivers (‘fingerprints’) allowed the null-hypothesis of negligible human influence to be rejected at the 95% confidence level ( $P < 0.05$ ) back in the 1990s*
- *Human-induced warming is now  $1^{\circ}\text{C} \pm 0.15^{\circ}\text{C}$ , about 80% due to  $\text{CO}_2$ ”*

A number of slides were based on sea level rise, including increasing ice loss in the cryosphere.

On *Climate Etc.* Judith Curry summed her review of evidence that sea level rise is accelerating with the statement: “*The concern about sea level rise is driven primarily by projections of future sea level rise.*”

In short, the fears of dire global warming, accelerating sea level rise, etc. are based on global climate models that fail basic tests to accurately predict atmospheric temperatures. Apparently, even the poster child of dire sea level rise, the Maldives, are no longer concerned – they are building a runway to handle the world’s largest passenger plane. See links under Challenging the Orthodoxy, Defending the Orthodoxy, Changing Seas, and Below the Bottom Line.

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**Reverse Osmosis for Tidewater?** The fear of salt water intrusion in coastal communities greatly plays into the hands of those who use highly questionable models to claim major sea level rise in the future. For some US communities, entities of NOAA produced studies greatly exaggerating this risk, and ignoring the real problem: the land is sinking due to ground water extraction. By ignoring the real threat and pretending the false threat, these entities of NOAA have demonstrated they no longer serve public interests or for the public benefit.

In the past, coastal communities had one alternative to solve the problem of sinking land from ground water extraction, build reservoirs and pipelines, either nearby or at considerable distance. For example, Los Angeles and New York City rely on piped water. An alternative has been developed that appears to be cost effective: desalination using reverse osmosis.

The concept has been around for some time, but reverse osmosis can be expensive for desalination because algae thrives in the filters, forcing expensive replacements. The Israelis are widely expanding desalination through reverse osmosis by using porous lava rock for prefiltering the water, removing the algae. Carlsbad, California, implemented a similar system, using layers of anthracite (hard coal), gravel, and sand for filtration. After over a year of operation the operating costs seem reasonable – under \$7 dollars per 1,000 gallons. See links under Other News that May Be of Interest.

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**He Must Go!** EPA Administrator Scott Pruitt has been a lightning rod of criticism against President Trump, as if Mr. Trump needed one. Mr. Pruitt has declared that the EPA will no longer base regulations on science that is not transparent (secret science), eliminated the long-established practice of channeling moneys from government litigation against private companies to politically favored special interest groups, and is now proposing to soften the fuel economic standards for automobiles, a relic of the fear of running out of oil. No wonder why many green politicians and green organizations are demanding he must go. See Article # 1 and links under Change in US Administrations.

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**Junk Electricity?** Power expert Donn Dears has been writing essays on how wind and solar are disrupting the electrical grid. The problems stem from government mandates and the auction system for the grid operator accepting delivery of electricity. The term dispatchable is important, it means that the grid operator can dispatch, transmit, electricity to the consumer when needed. Driven by nature, wind and solar power are not dispatchable (though efforts are being made to make industrial solar dispatchable in appropriate regions.)

The grid can be looked upon as an energized system, serving all on it, consumers and producers. It is similar to a nervous system serving all organs in the human body. Solar and wind power do

not reliably serve all the consumers and producers on the grid. Thus, they can be looked upon as a form of junk food, pleasing to some senses, but not needed or beneficial to the entire system. They can be called junk electricity. See links under Energy Issues – US.

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**Number of the Week: 0.013%.** Another dire emergency of sea level rise from the “collapsing” West Antarctica ice sheet arose this week from a paper in *Nature Geographic*. As stated in previous TWTWs the “collapse” is in geological terms of thousands of years, and the ice sheet is on the Antarctic fault / rift with over 100 geothermal hot spots (active or inactive volcanoes). It is similar to the mid-Atlantic rift that runs through Iceland, providing hot springs, geothermal warming, and electricity to that island. On her web site, Jo Nova calculated that the area of Antarctica covered by ice discussed in the latest crisis is 0.013% of the area of Antarctica covered by ice. The volume of ice is far less, what is smaller than miniscule? See link under Changing Cryosphere – Land / Sea Ice.

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### 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, Barrack Obama, John Kerry, Ernest Moniz, John Holdren and Gena McCarthy 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.

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**Note:** Due to international travel, next week's TWTW may arrive late.

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### 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](http://www.sepp.org/publications/nipcc_final.pdf)

### ***Challenging the Orthodoxy***

**Yes, NOAA must adjust data — but its climate record really is quite wrong**

By S. Fred Singer, The Hill, Mar 29, 2018

<http://thehill.com/opinion/energy-environment/380635-yes-noaa-must-adjust-data-but-its-climate-record-really-is-quite>

### **Examination of space-based bulk atmospheric temperatures used in climate research**

By Christy, Spencer, Braswell, Junod, International Journal of Remote Sensing, Mar 8, 2018 [H/t WUWT]

<https://www.tandfonline.com/doi/full/10.1080/01431161.2018.1444293>

### **UAH finds a warming error in satellite data, lowers “tropical hotspot” temperature trend, contradicts IPCC models**

By Anthony Watts, WUWT, Apr 6, 2018

<https://wattsupwiththat.com/2018/04/06/uah-finds-a-warming-error-in-satellite-data-lowers-global-temperature-trend-constradicts-ipcc-models/>

### **Weather satellite wanders through time, space, causing stray warming to contaminate data**

By Staff Writers, Phys.org, Apr 5, 2018 [H/t Cooler Heads]

<https://phys.org/news/2018-04-weather-satellite-space-stray-contaminate.html>

[SEPP Comment: A useful article, with an unfortunate title.]

### **Can increasing carbon dioxide cause climate change?**

By Richard S. Lindzen, PNAS, Aug 5, 1997,

<http://www.pnas.org/content/94/16/8335>

### **New Paper: Unseen worlds of Wonder under Our Noses**

By Staff Writers, GWPF, Apr 6, 2018

<https://www.thegwpf.com/new-paper-unseen-worlds-of-wonder-under-our-noses/>

Model falsifiability and climate slow modes

By Christopher Essex and Anastasios A. Tsonis, Physica A: Statistical Mechanics and its Applications, July 15, 2018

<https://www.sciencedirect.com/science/article/pii/S0378437118301766>

### **Does the Greenhouse Gas CO2 cool the climate?**

By S. Fred Singer, American Thinker, Apr 2, 2018

[https://www.americanthinker.com/articles/2018/03/does\\_the\\_greenhouse\\_gas\\_co2\\_cool\\_the\\_climate.html](https://www.americanthinker.com/articles/2018/03/does_the_greenhouse_gas_co2_cool_the_climate.html)

### **Circular reasoning with climate models**

By David Wojick, CFACT, Mar 1, 2018

<http://www.cfact.org/2018/03/01/circular-reasoning-with-climate-models/>

*[SEPP Comment: Excellent description of the circular reasoning used by the IPCC, the USGCRP, and the EPA in its endangerment finding.]*

### **Speculation versus research in climate science**

By David Wojick, C-Fact, Mar 30, 2018

<http://www.cfact.org/2018/03/30/speculation-versus-research-in-climate-science/>

### **Appeasement in the Bizarre World of Climate, Politics, and Big Oil**

Guest Opinion: Dr. Tim Ball, WUWT, Apr 5, 2018

<https://wattsupwiththat.com/2018/04/05/appeasement-in-the-bizarre-world-of-climate-politics-and-big-oil/>

### **Climate Change on Trial**

By Michael Kile, Quadrant, Mr 29, 2018

<http://quadrant.org.au/magazine/2018/04/climate-change-trial/>

Indeed, the credibility of the “relatively young science” of extreme weather attribution, the legitimacy of its ambition to “tease out the influence of human-caused climate change from other factors”, the whole alarmist movement and fate of the UN’s Green Climate Fund, all crucially depend on delivering such a legal argument.

*[SEPP Comment: Creation of the Attribution of Climate-related Events (ACE) initiative. Myles Allen involved.]*

### **Trillions going to waste on climate change ‘groupthink’**

By Harry Wilkinson, The Conservative Woman, Mar 31, 2018

<https://www.conservativewoman.co.uk/trillions-going-to-waste-on-climate-change-groupthink/>

### **Ex-NOAA Climate Scientist: ‘No Role Of CO2 In Any Significant Change Of The Earth’s Climate’**

By Kenneth Richard, No Tricks Zone, Apr 5, 2018

<http://notrickszone.com/2018/04/05/ex-noaa-climate-scientist-no-role-of-co2-in-any-significant-change-of-the-earths-climate/#sthash.vraTrOuE.dpbs>

### **It Is Time to Decrease the Influence of the CIC Swamp Dwellers, Not Scott Pruitt**

By Alan Carlin, Carlin Economics and Science, Apr 6, 2018

<http://www.carlineconomics.com/archives/4314>

### ***Defending the Orthodoxy***

#### **Leaked draft summary of UN special report on 1.5C climate goal – in full**

Read the draft summary for policymakers of the most important climate science report of the year, on the challenge of holding global warming to 1.5C

By Megan Darby, Climate Home News, Feb 13, 2018 [H/t Toshio Fujita]

<http://www.climatechangenews.com/2018/02/13/leaked-draft-summary-un-special-report-1-5c-climate-goal-full/>

Link: IPCC special report on 1.5C - draft summary for policymakers

By Myles Allen, et al. IPCC, Jan 8, 2018

[https://www.scribd.com/document/371415321/IPCC-special-report-on-1-5C-draft-summary-for-policymakers?secret\\_password=xlexc6JWYfplQn1LVaDe#from\\_embed](https://www.scribd.com/document/371415321/IPCC-special-report-on-1-5C-draft-summary-for-policymakers?secret_password=xlexc6JWYfplQn1LVaDe#from_embed)

### **Link to transcript: People of California v. Oil Companies, Mar 21, 2018**

Understanding how carbon dioxide emissions from human activity contribute to global climate change

By Myles Allen, Environmental Change Institute, School of Geography and the Environment & Department of Physics University of Oxford

[http://www.oaklandcityattorney.org/PDFS/Climate%20Change%20Lawsuit/Understanding%20Climate%20Emissions%20\(2\).pdf](http://www.oaklandcityattorney.org/PDFS/Climate%20Change%20Lawsuit/Understanding%20Climate%20Emissions%20(2).pdf)

### **Boston Judge Accepts Climate Necessity Defence, Dismisses Charges**

Guest essay by Eric Worrall, WUWT, Mar 31, 2018

<https://wattsupwiththat.com/2018/03/31/boston-judge-accepts-climate-necessity-defence-dismisses-charges/>

### **Jane Lubchenco, prominent marine ecologist and science leader, to receive 2018 Vannevar Bush Award**

By Staff Writers, NSF, Apr 3, 2018

[https://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=244959&WT.mc\\_id=USNSF\\_62&WT.mc\\_ev=click](https://www.nsf.gov/news/news_summ.jsp?cntn_id=244959&WT.mc_id=USNSF_62&WT.mc_ev=click)

*[SEPP Comment: Under her leadership, NOAA began to debase the “Nation’s Treasure” of historic climate and weather information.]*

### **The Consensus Handbook**

By John Cook, Sander van der Linden, Edward Mailbach, and Stephan Lewandowsky, 2018

[https://www.climatechangecommunication.org/wp-content/uploads/2018/03/Consensus\\_Handbook-1.pdf](https://www.climatechangecommunication.org/wp-content/uploads/2018/03/Consensus_Handbook-1.pdf)

*[SEPP Comment: George Gallop emphasized that those conducting polls must do everything possible to remove bias in their questions, in the sample, and in the interpretation of the results. These pollsters deliberately introduced biases in their questions, samples, and results. Politicians citing their polls should be challenged by asking how do your professional pollsters evaluate the “unbiased” nature of these polls?]*

### **UK Climate Act Not Tough Enough, Say Krebs and Haigh**

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

<https://notalotofpeopleknowthat.wordpress.com/2018/04/04/uk-climate-act-not-tough-enough-say-krebs-and-haigh/>

*[SEPP Comment: Punish the poor more!]*

### ***Questioning the Orthodoxy***

#### **Modern Warming – Climate Variability or Climate Change?**

Guest Post By Renee Hannon, WUWT, Mar 28, 2018

<https://wattsupwiththat.com/2018/03/28/modern-warming-climate-variability-or-climate-change/>

### **New DOE study on methane raises more questions than it answers**

By Anthony Watts, WUWT, Apr 2, 2018

<https://wattsupwiththat.com/2018/04/02/new-doe-study-on-methane-raises-more-questions-than-it-answers/>

Link to abstract: Observationally derived rise in methane surface forcing mediated by water vapour trends

By D.R. Feldman, et al, Nature Geoscience, Apr 2, 2018

<https://www.nature.com/articles/s41561-018-0085-9>

Link to paper:

<https://www.dropbox.com/s/d1o8x815an3nbqt/Feldman%202018%20methane.pdf?dl=0>

### **CAP Backs Down When Challenged**

By Roger Pielke Jr. The Climate Fix, Apr 5, 2018

<https://theclimatefix.wordpress.com/2018/04/05/cap-backs-down-when-challenged/>

“When the debate is lost, slander becomes the tool of the loser” – Socrates

### ***After Paris!***

#### **What's Really Happening In The World Of CO2 Emissions?**

By Francis Menton, Manhattan Contrarian, Apr 6, 2018

<http://www.manhattancontrarian.com/blog/2018-4-6-whats-really-happening-in-the-world-of-co2-emissions>

### ***Change in US Administrations***

#### **End EPA's Ideology-Driven Slush Funds**

By Jack Rafuse, Real Clear Energy, Apr 4, 2018

[https://www.realclearenergy.org/articles/2018/04/04/epa\\_must\\_end\\_ideology-driven\\_slush\\_funds\\_110284.html](https://www.realclearenergy.org/articles/2018/04/04/epa_must_end_ideology-driven_slush_funds_110284.html)

“...BP was ordered to pay up to \$8.8 billion to the Natural Resource Damage Assessment Trustees in order to fund restoration work on the Gulf of Mexico. Again, while this may seem related, the money going to coastal restoration was also used to fund projects not directly related to the spill.”

#### **EPA Administrator Scott Pruitt Suspended Obama Era Fuel Standards for 2022. He's Got the Science Right.**

By Patrick Michaels and Ryan Maue, CATO, Apr 4, 2018

<https://www.cato.org/blog/epa-administrator-scott-pruitt-suspended-obama-era-fuel-standards-2022-hes-got-science-right>

#### **Trump Dismantles Another Obama 'Achievement' — Just One More To Go**

Editorial, IBD, Apr 3, 2018

<https://www.investors.com/politics/editorials/fuel-economy-mandate-obama-legacy/>

*[SEPP Comment; The editorial forgets EPA finding that CO2 endangers public health and welfare is based on imaginary science – using long range projections from models that fail basic tests.]*

#### **EPA's Scott Pruitt Begins Repeal Of Obama Climate Regs For Cars, Trucks**

By Michael Bastasch, Daily Caller, Apr 2, 2018

<http://dailycaller.com/2018/04/02/epa-begins-repeal-obama-climate-regs-for-cars/>

### ***Problems in the Orthodoxy***

**A benefit of “ocean acidification” – more herring**

By Anthony Watts, WUWT, Mar 29, 2018

<https://wattsupwiththat.com/2018/03/29/a-benefit-of-ocean-acidification-more-herring/>

Link to paper: Food web changes under ocean acidification promote herring larvae survival

By Michael Sswat, et al, Nature Ecology & Evolution, Mar 19, 2018

<http://www.nature.com/articles/s41559-018-0514-6>

### **EU carbon market emissions rise for first time in 7 years in 2017**

By Susanna Twidale, Reuters, Apr 3, 2018

<https://www.reuters.com/article/us-europe-carbontrading/eu-carbon-market-emissions-rise-for-first-time-in-7-years-in-2017-idUSKCN1HA1J7>

### ***Seeking a Common Ground***

#### **With us or against us: revisiting the facts**

By Martin Livermore, The Scientific Alliance, Apr 6, 2018

<http://scientific-alliance.org/scientific-alliance-newsletter/us-or-against-us-revisiting-facts>

### ***Review of Recent Scientific Articles by CO2 Science***

#### **Which is the Most Accurate Satellite-Derived Temperature Dataset?**

Christy, J.R., Spencer, R.W., Braswell, W.D. and Junod, R. 2018. Examination of space-based bulk atmospheric temperatures used in climate research. *International Journal of Remote Sensing* 39: 3580-3607. Apr 6, 2018

<http://www.co2science.org/articles/V21/apr/a4.php>

#### **The Phenotypic Plasticity of a Colonial Bryozoan**

Swezey, D.S., Bean, J.R., Hill, T.M., Gaylord, B., Ninokawa, A.T. and Sanford, E. 2017. Plastic responses of bryozoans to ocean acidification. *Journal of Experimental Biology* 220: 4399-4409. Apr 5, 2018

<http://www.co2science.org/articles/V21/apr/a3.php>

#### **The Interactive Effects of Elevated CO2 and Gamma Ray Irradiation**

Moghaddam, S.S., Ibrahim, R., Damalas, C.A. and Noorhosseini, S.A. 2017. Effects of gamma stress and carbon dioxide on eight bioactive flavonoids and photosynthetic efficiency in *Centella asiatica*. *Journal of Plant Growth Regulation* 36: 957-969. Apr 4, 2018

<http://www.co2science.org/articles/V21/apr/a2.php>

“And thus we find that more CO2 is good; it improves photosynthesis and frees up carbon molecules to be utilized in other processes, such as the production of antioxidants, which benefit human health.”

#### **Putting Future Projections of Coastal California Sea Level Rise Projections in Context**

Parker, A. and Ollier, C.D. 2017. California sea level rise: Evidence based forecasts vs. model predictions. *Ocean & Coastal Management* 149: 198-209. Apr 3, 2018

<http://www.co2science.org/articles/V21/apr/a1.php>

### ***Measurement Issues -- Surface***

#### **BOM homogenization errors are so big they can be seen from space**

Comparison UAH and BOM temperatures and homogenization Part II

Guest Post by Tom Quirk, Jo Nova's Blog, Apr 2, 2018

<http://joannenova.com.au/2018/04/bom-homogenization-errors-are-so-big-they-can-be-seen-from-space/>

### ***Measurement Issues -- Atmosphere***

#### **UAH Global Temperature Updated for March, 2018: +0.24 deg. C**

By Roy Spencer, His Blog, Apr 2, 2018

<http://www.drroyspencer.com/2018/04/uah-global-temperature-updated-for-march-2018-0-24-deg-c/>

#### **Satellite going AWOL at 28,000km/hr — tracking that Chinese stray machinery**

By Jo Nova, Her Blog, Mar 31, 2018

<http://joannenova.com.au/2018/03/satellite-going-awol-at-28000kmhr-tracking-that-chinese-stray/>

### ***Changing Weather***

#### **ENSO forecast for 2018**

By Jim Johnstone and Judith Curry, Climate Etc. Apr 5, 2018

<https://judithcurry.com/2018/04/05/enso-forecast-for-2018/>

#### **An Empirical Reexamination: How Two Recent Major El Niño Periods Compare**

By Staff Writer, C3 Headlines, Mar 31, 2018 [H/t GWPF]

<http://www.c3headlines.com/2018/03/empirical-reexamination-how-recent-el-ni%C3%B1o-periods-compare-those-stubborn-facts.html>

- “There is no convincing evidence from the empirical temperature record to suggest that the differences/similarities are nothing more than the expected natural variation seen when comparing the two powerful natural climate/weather phenomenon.
- “There is no empirical evidence that higher CO2 levels resulted in the overall higher temp anomalies of the 2015-16 El Niño. With a monthly anomaly average being only +0.35°C higher, that is likely in the realm of natural variance.”

#### **A Record-Breaking Atmospheric River Hits California and Strong Marine Cyclone Offshore of Washington**

By Cliff Mass, Weather and Climate Blog, Apr 7, 2018

<http://cliffmass.blogspot.com/2018/04/a-record-breaking-atmospheric-river.html>

“Just a reminder-- an *atmospheric river* is a narrow current of high moisture values, originating in the tropics and subtropics, that is associated with warm air and heavy rain, particularly when into coastal terrain. In our neck of the woods, atmospheric rivers are often termed a *pineapple express*.” [From an earlier post.]

### ***Changing Seas***

#### **Sea level rise acceleration (or not): Projections for the 21st century**

By Judith Curry, Climate Etc. Apr 2, 2018

<https://judithcurry.com/2018/04/02/sea-level-rise-acceleration-or-not-projections-for-the-21st-century/#more-23990>

“The concern about sea level rise is driven primarily by projections of future sea level rise.”

#### **Errorless Global Mean Sea Level Rise**

Brief Comment by Kip Hansen, WUWT, Apr 2, 2018

<http://wattsupwiththat.com/2018/04/02/errorless-global-mean-sea-level-rise/>

### ***Changing Cryosphere – Land / Sea Ice***

#### **Antarctica's Underwater Ice Is Retreating 5 Times Faster Than It Should Be**

By Brandon Specktor, Live Science, Apr 3, 2018

[https://www.livescience.com/62203-antarctica-underwater-ice-loss.html?utm\\_source=ls-newsletter&utm\\_medium=email&utm\\_campaign=20180403-ls](https://www.livescience.com/62203-antarctica-underwater-ice-loss.html?utm_source=ls-newsletter&utm_medium=email&utm_campaign=20180403-ls)

Link to paper: Net retreat of Antarctic glacier grounding lines

By Hannes Konrad, et al, Nature Geoscience, Apr 2, 2018

<https://www.nature.com/articles/s41561-018-0082-z>

“Between 2010 and 2016, 22%, 3% and 10% of surveyed grounding lines in West Antarctica, East Antarctica and at the Antarctic Peninsula retreated at rates faster than 25 m yr<sup>-1</sup> (the typical pace since the Last Glacial Maximum) and the continent has lost 1,463 km<sup>2</sup> ± 791 km<sup>2</sup> of grounded-ice area.”

### **Panic time: a tiny 0.01% of Antarctica, resting on volcanoes, melts five times faster than nothing**

By Jo Nova, Her Blog, Apr 5, 2018

<http://joannenova.com.au/2018/04/panic-time-a-tiny-0-01-of-antarctica-resting-on-volcanoes-melts-five-times-faster-than-nothing/>

### **Antarctic Temperature Data Contradict Global Warming...”Much Warmer” 105 Years Ago!**

By P Gosselin, No Tricks Zone, Apr 3, 2018

<http://notrickszone.com/2018/04/03/antarctic-temperature-data-contradict-global-warming-much-warmer-105-years-ago/#sthash.6hYQNYvA.dpbs>

### **NASA renews focus on Earth's frozen regions**

By Patrick Lynch, NASA Goddard Space Flight Center, Mar 26, 2018 [H/t Toshio Fujita]

<https://climate.nasa.gov/news/2701/nasa-renews-focus-on-earths-frozen-regions/>

“NASA is also involved in an international effort called the High Mountain Asia Project, which seeks to understand how climate change is affecting glaciers in the Himalayas and water resources for more than 1 billion people in the region.”

### **Snow Cover, Ice Volume Growth Show Global Climate Is A Lot More Than Just “Surface Temperature”**

By P Gosselin, No Tricks Zone, Mar 30, 2018

<http://notrickszone.com/2018/03/30/snow-cover-ice-volume-growth-show-global-climate-is-a-lot-more-than-just-surface-temperature/#sthash.tEcsX4No.dpbs>

### ***Changing Earth***

#### **Earth’s stable temperature past suggests other planets could also sustain life**

By Hannah Hickey, UW News, Apr 2, 2018 [H/t GWPF]

<https://www.washington.edu/news/2018/04/02/earths-stable-temperature-past-suggests-other-planets-could-also-sustain-life/>

Link to paper: Constraining the climate and ocean pH of the early Earth with a geological carbon cycle model

By Joshua Krissansen-Totton, Giada N. Arney and David C. Catling, PNAS, Apr 2, 2018

<http://www.pnas.org/content/early/2018/03/27/1721296115>

#### **New study finds world’s largest desert, the Sahara, has grown by 10 percent since 1920**

Research is the first to assess century-scale changes to the Sahara's boundaries

By Cheryl Dybas, NSF, Mar 29, 2018

[https://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=244804&WT.mc\\_id=USNSF\\_51&WT.mc\\_e v=click](https://www.nsf.gov/news/news_summ.jsp?cntn_id=244804&WT.mc_id=USNSF_51&WT.mc_e v=click)

“The results suggest that human-caused climate change, as well as natural climate cycles, caused the desert's expansion. The geographic pattern of expansion varied from season to season, with the largest differences along the Sahara's northern and southern boundaries.”

*[SEPP Comment: The Sahara has been expanding for thousands of years, a clear example of human cause?]*

### ***Agriculture Issues & Fear of Famine***

#### **Wheat in heat: the 'crazy idea' that could combat food insecurity**

By Mark Hillsdon, The Guardian, Mar 23, 2018 [H/t GWPF]

<https://www.theguardian.com/global-development/2018/mar/23/heat-tolerant-durum-wheat-crazy-idea-food-insecurity>

#### **How Big Water Projects Helped Trigger Africa's Migrant Crisis**

By Paul Homewood, Not a Lot of People Know That, Apr 1, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/04/01/how-big-water-projects-helped-trigger-africas-migrant-crisis/#more-33137>

#### **Lake Chad Might Be Shrinking, But It Has Nothing To Do With Climate Change**

By Paul Homewood, Not a Lot of People Know That, Apr 1, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/04/01/lake-chad-might-be-shrinking-but-it-has-nothing-to-do-with-climate-change/>

#### **During The 800s-1300s AD, Wine Grapes Were Grown At Latitudes Where Polar Bears Now Roam**

By Kenneth Richard, No Tricks Zone, Apr 2, 2018

<http://notrickszone.com/2018/04/02/during-the-800s-1300s-ad-wine-grapes-were-grown-at-latitudes-where-polar-bears-now-roam/#sthash.0GW4vfyC.dpbs>

*[SEPP Comment: The influence of the Gulf Stream is remarkable.]*

### ***Communicating Better to the Public – Do a Poll?***

#### **Gallup: Left Became More Militant About Global Warming Under Trump**

By Anthony Watts, WUWT, Mar 28, 2018

<https://wattsupwiththat.com/2018/03/28/gallup-left-became-more-militant-about-global-warming-under-trump/>

*[SEPP Comment: At least the questions were on global warming, rather than climate change.]*

### ***Questioning European Green***

#### **Fracking, BREXIT and an oil and gas shale bonanza**

By Gary Busch, Lima Charlie News, Apr 4, 2018

<https://limacharlieneews.com/business/fracking-brexite-and-an-oil-and-gas-shale-bonanza/>

#### **Policies Are to Blame for Rising UK Electricity Prices**

By John Constable, GWPF, Apr 2, 2018

<https://www.thegwpe.com/policies-are-to-blame-for-rising-uk-electricity-prices/>

*[SEPP Comment: An increase in “policy costs” of 11% in one year? Wasn't the purpose of the Climate Change Act of 2008 to save money?]*

## **UK Lemmings Charge To The Front!**

By Paul Homewood, Not a Lot of People Know That, Apr 6, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/04/06/uk-lemmings-charge-to-the-front/>

## **A Nomination For The Biggest April Fool: Germany!**

By Francis Menton, Manhattan Contrarian, Apr 1, 2018

<http://www.manhattancontrarian.com/blog/2018-4-1-a-nomination-for-the-biggest-april-fool-germany>

## **Germany's Energiewende predicament**

By Roger Andrews, Energy Matters, Apr 3, 2018

<http://euanmearns.com/germanys-energiewende-predicament/#more-21263>

## ***Litigation Issues***

### **The Children's Crusade (Lawsuit) Against Climate Change**

Guest essay by Dale Leuck, WUWT, Mar 31, 2018

<https://wattsupwiththat.com/2018/03/31/the-childrens-crusade-lawsuit-against-climate-change/>

“... 54-page November 10, 2016 decision by U.S. District Court Judge Ann Aiken denying the defendant's motion to dismiss. [The judge stated:] “...the right to a climate system capable of sustaining human life is fundamental to a free and ordered society (pp.32)...just as marriage is the foundation of the family (pp.32).” Aiken agreed that “...inactions of the government...have ‘so profoundly damaged our home planet that they threaten plaintiff's fundamental constitutional rights to life and liberty”.

## ***Litigation Issues -- California***

### **Climate plaintiffs amend suit after judge scolds them on ‘smoking gun’ memo that wasn't**

By Daniel Fisher, Legal News Line, Apr 5, 2018 [H/t WSJ]

<https://legalnewsline.com/stories/511383378-climate-plaintiffs-amend-suit-after-judge-scolds-them-on-smoking-gun-memo-that-wasn-t>

### **City of Oakland and the People of California v. BP P.L.C.**

First Amended Complaint for Public Nuisance, US District Court, Northern California, San Francisco, Apr 3, 2018

[http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2018/20180403\\_docket-317-cv-06011\\_complaint.pdf](http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2018/20180403_docket-317-cv-06011_complaint.pdf)

### **Climate chaos claims continue causing consternation**

Guest essay by Paul Driessen, WUWT, Mar 31, 2018

<https://wattsupwiththat.com/2018/03/31/climate-chaos-claims-continue-causing-consternation/>

### **Investors stunned over oil producer's climate-change exemption**

By Amy Harder, Axios, Apr 2, 2018

<https://www.axios.com/oil-producers-climate-change-exemption-e3887656-42c0-4510-ad0d-6118cc3aef94.html>

## **Fossil Fuels Under Fire**

By H. Sterling Burnett, Climate Change Weekly # 282, Apr 3, 2018

<https://www.heartland.org/news-opinion/news/fossil-fuels-under-fire>

## **Climate Change Movement Retreats to California Courts**

By Richard O. Faulk, Real Clear Politics, Mar 30, 2018

[https://www.realclearpolitics.com/articles/2018/03/30/climate\\_change\\_movement\\_retreats\\_to\\_california\\_courts.html](https://www.realclearpolitics.com/articles/2018/03/30/climate_change_movement_retreats_to_california_courts.html)

## **Climate Change Trial Starts on Rough Footing for Environmentalists**

By Haris Alic, Washington Free Beacon, Apr 2, 2018

<http://freebeacon.com/issues/climate-change-trial-starts-rough-footing-environmentalists/>

## ***EPA and other Regulators on the March***

### **Pruitt Allies Warn Trump — Fire Him And Your Agenda Comes To A Grinding Halt**

By Michael Bastasch, Daily Caller, Apr 5, 2018 [H/t Cooler Heads]

<http://dailycaller.com/2018/04/05/pruitt-allies-warn-trump-firing-him/>

## ***Energy Issues – Non-US***

### **India is now the world's third-largest electricity producer**

By Susma UN, Quartz India, Mar 26, 2018

<https://qz.com/1237203/india-is-now-the-worlds-third-largest-electricity-producer/>

“Over the last five years, India put up 99.21 GW of additional capacity. Of this, 91.73 GW came from thermal sources, 5.48 GW from hydro, and 2 GW from nuclear sources.”

*[SEPP Comment: If the numbers are correct 0% came from wind and solar.]*

### **Claim: Your wood stove affects the climate more than you might think**

By Anthony Watts, WUWT, Apr 3, 2018

<https://wattsupwiththat.com/2018/04/03/194702/>

Link to paper: Cooling aerosols and changes in albedo counteract warming from CO2 and black carbon from forest bioenergy in Norway

By Anders Arvesen, et al, Nature, Feb 19, 2018

<https://www.nature.com/articles/s41598-018-21559-8>

### **Why China's winter fuel crisis is a cold, hard lesson in the law of unintended consequences**

As officials raced to fulfil a central government decree to cut coal use, the impact on gas supplies appears to have been overlooked

By Viola Zhou, South China Morning Post, Dec 19, 2017

<http://www.scmp.com/news/china/policies-politics/article/2124800/why-chinas-winter-fuel-crisis-cold-hard-lesson-law>

*[SEPP Comment: Residential heating with coal creates problems.]*

## ***Energy Issues – Australia***

### **In a fake free market 2000MW = 1000MW and Liddell coal is worth more destroyed than sold**

By Jo Nova, Her Blog, Apr 6, 2018

<http://joannenova.com.au/2018/04/in-a-fake-free-market-2000mw-1000mw-and-liddell-is-worth-more-destroyed-than-sold/>

## ***Energy Issues -- US***

### **Who's Responsible for Keeping the Lights On?**

By Donn Dears, Power For USA, Apr 6, 2018

<http://ddears.com/2018/04/06/whos-responsible-for-keeping-the-lights-on/>

### **More on the Auction Fiasco**

By Donn Dears, Power For USA, Apr 3, 2018

<http://ddears.com/2018/04/03/more-on-the-auction-fiasco/>

### **Troubled FirstEnergy Companies Seek Bankruptcy Protection**

By Sonal Patel, Power Mag, Apr 1, 2018

<http://www.powermag.com/troubled-firstenergy-companies-seek-bankruptcy-protection/>

*[SEPP Comment: Apparently, it is consolidating into regulated markets.]*

### **FirstEnergy Solutions Files Deactivation Notice for Three Competitive Nuclear Generating Plants in Ohio and Pennsylvania**

By Staff Writers, PRN News, Mar 28, 2018 [H/t Toshio Fujita]

<https://www.prnewswire.com/news-releases/firstenergy-solutions-files-deactivation-notice-for-three-competitive-nuclear-generating-plants-in-ohio-and-pennsylvania-300621346.html>

- 4,048 Megawatts of Electricity Generating Capacity to Retire by 2021
- Plants to Continue Normal Operations in Interim
- Company Seeks Policy Solutions as Alternative to Deactivation

### **Energy Hogs: Can World's Huge Data Centers Be Made More Efficient?**

The gigantic data centers that power the internet consume vast amounts of electricity and emit 3 percent of global CO2 emissions. To change that, data companies need to turn to clean energy sources and dramatically improve energy efficiency.

By Fred Pearce, Yale Environment, Apr 3, 2018

<https://e360.yale.edu/features/energy-hogs-can-huge-data-centers-be-made-more-efficient>

*[SEPP Comment: And demand other consumers absorb the cost of maintenance of the grid.]*

### **Another Small Dose Of Realism On The Prospects For A 100% Renewable Grid**

By Francis Menton, Manhattan Contrarian, Apr 4, 2018

<http://www.manhattancontrarian.com/blog/2018-4-4-another-small-dose-of-realism-on-the-prospects-for-a-100-renewable-grid>

### **On Energy Cost Trends (applying caution to the big talk of energy transformation)**

By Michael Lynch, Master Resource, Mar 29, 2018

<https://www.masterresource.org/energy-cost-trends/energy-cost-trends/>

### **Clean Power Plan**

Speakers square off in Wyoming over Clean Power Plan repeal during final of four meetings

By Heather Richards, Casper Star Tribune (Wyoming), Apr 1, 2018

[http://trib.com/business/energy/speakers-square-off-in-wyoming-over-clean-power-plan-repeal/article\\_8468ca95-e2c9-5ef9-8cac-541626a991ef.amp.html](http://trib.com/business/energy/speakers-square-off-in-wyoming-over-clean-power-plan-repeal/article_8468ca95-e2c9-5ef9-8cac-541626a991ef.amp.html)

### ***Washington's Control of Energy***

**US power sector carbon emissions intensity drops to lowest on record (because EPA forced coal power closure)**

By Anthony Watts, WUWT, Apr 4, 2018

<https://wattsupwiththat.com/2018/04/04/us-power-sector-carbon-emissions-intensity-drops-to-lowest-on-record-because-epa-forced-coal-power-closure/>

### ***Oil and Natural Gas – the Future or the Past?***

#### **China owns world's second largest shale gas field**

By Staff Writers, China Daily, Via GWPF, Apr 5, 2018

<https://www.thegwpf.com/china-owns-worlds-second-largest-shale-gas-field/>

### **Exports of LNG**

U.S. liquefied natural gas exports quadrupled in 2017

By Staff Writers, EIA, Mar 27, 2018

<https://www.eia.gov/todayinenergy/detail.php?id=35512>

### **Shale Revolution 3.0: Bahrain Hits (Black) Gold with Biggest Shale Discovery in World**

By Staff Writers, The Times, Via GWPF, Apr 5, 2018

<https://www.thegwpf.com/shale-revolution-3-0-bahrain-hits-black-gold-with-biggest-shale-discovery-in-world/>

### ***Return of King Coal?***

#### **A new coal war frontier emerges as China and Japan compete for energy projects in Southeast Asia**

Frederick Kuo says Southeast Asia's appetite for coal has spurred a new geopolitical rivalry between China and Japan as the two countries race to provide high-efficiency, low-emission technology

By Frederick Kuo, South China Morning Post, Apr 1, 2018 [H/t GWPF]

<http://www.scmp.com/comment/insight-opinion/article/2139667/new-coal-war-frontier-emerges-china-and-japan-compete-energy>

### ***Nuclear Energy and Fears***

#### **Should Nuclear Energy Be a U.S. National Security Concern?**

By Erin Mundahl, Inside Sources, Mar 29, 2018

<http://www.insidesources.com/nuclear-energy-should-be-a-us-national-security-concern/>

### **Minnesota May Be Next to Support Nuclear Plants**

By Aaron Larson, Power Mag. Mar 29, 2018

[http://www.powermag.com/minnesota-may-be-next-to-support-nuclear-plants/?mkt\\_tok=eyJpIjoiTURRNFl6QXhNamt4TkRaayIsInQiOiJoZ21SaTNjOWRvZDBWZXFpdG1qR3NWRXdtaK5abkFab2dwZHRFRExDcXFBZlXhXS09TTnNyN0VhR24zUjhxMEdnNjhBTUZnTllmZDh6WGdXVndndUdUZWtTT0VTbzc2ejQ5RThlWU13NWp0SVNWT0M5Y1wvNTg1N0ZQcEJ0ZEVzcGlifQ%3D%3D](http://www.powermag.com/minnesota-may-be-next-to-support-nuclear-plants/?mkt_tok=eyJpIjoiTURRNFl6QXhNamt4TkRaayIsInQiOiJoZ21SaTNjOWRvZDBWZXFpdG1qR3NWRXdtaK5abkFab2dwZHRFRExDcXFBZlXhXS09TTnNyN0VhR24zUjhxMEdnNjhBTUZnTllmZDh6WGdXVndndUdUZWtTT0VTbzc2ejQ5RThlWU13NWp0SVNWT0M5Y1wvNTg1N0ZQcEJ0ZEVzcGlifQ%3D%3D)

### **Nuclear and coal energy company files for bankruptcy**

By Miranda Green, The Hill, Apr 2, 2018

<http://thehill.com/policy/energy-environment/381275-nuclear-and-coal-energy-company-files-for-bankruptcy>

### ***Alternative, Green (“Clean”) Solar and Wind***

#### **Relying on renewables alone significantly inflates the cost of overhauling energy**

Evidence points to the need for a broader range of clean power beyond just wind and solar.

By James Temple, MIT Technology Review, Feb 26, 2018

<https://www.technologyreview.com/s/610366/relying-on-renewables-alone-would-significantly-raise-the-cost-of-overhauling-the-energy/>

*[SEPP Comment: With typical propaganda photo and misleading caption: “A solar farm in Hughsville, Maryland supplies enough electricity for 600 homes.” How many hours a day?]*

### **OVO’s Fake Renewable Claims**

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

<https://notalotofpeopleknowthat.wordpress.com/2018/04/04/ovos-fake-renewable-claims/>

“Even if you’re paying for 100% renewable electricity, no supplier can guarantee that the electricity coming into your home is from a renewable source.”

### **The Road To Hell Is Paved With Solar Panels – “Solar Road” fails miserably**

\$4.5 million project generates just \$36.86 worth of electricity so far

Guest Post by Willis Eschenbach, WUWT, Apr 4, 2018

<https://wattsupwiththat.com/2018/04/04/the-road-to-hell-is-paved-with-solar-panels/>

*[SEPP Comment: Solar roads, parking lots, etc. do not have much value, except to gullible politicians.]*

### **Energy & Environmental Newsletter: April 2, 2018**

By John Droz, Master Resource, Apr 2, 2018

<https://www.masterresource.org/alliance-for-wise-energy-decisions/energy-environmental-newsletter-april-2-2018/>

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

#### **Want to Use the Earth to Heat Your Home? Investors Try to Help**

By Chris Martin, Bloomberg Technology, Mar 27, 2018

[https://www.bloomberg.com/news/articles/2018-03-27/want-to-use-the-earth-to-heat-your-home-investors-try-to-help?utm\\_medium=email&utm\\_source=newsletter&utm\\_term=180329&utm\\_campaign=climatechanged](https://www.bloomberg.com/news/articles/2018-03-27/want-to-use-the-earth-to-heat-your-home-investors-try-to-help?utm_medium=email&utm_source=newsletter&utm_term=180329&utm_campaign=climatechanged)

*[SEPP Comment: Residential geothermal makes sense in some regions.]*

### ***California Dreaming***

#### **Trump admin sues California over state bill on land rights**

By Miranda Green, The Hill, Apr 2, 2018

<http://thehill.com/policy/energy-environment/381315-trump-admin-sues-california-over-state-bill-on-land-rights>

*[SEPP Comment: Can a state control the federal lands in its jurisdiction? If so, many federal monuments, wilderness areas, parks, leases for mineral extraction, etc. will be modified.]*

### ***Health, Energy, and Climate***

#### **Junk Science Journalism: “Lyme disease the first epidemic of climate change.”**

Guest ridiculing by David Middleton, WUWT, Apr 3, 2018

<https://wattsupwiththat.com/2018/04/03/junk-science-journalism-lyme-disease-the-first-epidemic-of-climate-change/>

*[SEPP Comment: A new Stockholm syndrome, or the revenge of the mummy? Lyme disease is common in southern Sweden and was first described over 100 years ago. Apparently, it was found in a 5300-year old mummy. See below.]*

### **History of Lyme Disease**

By Staff Writers, Bay Area Lyme Foundation, Accessed Apr 3, 2018

<https://www.bayarealyme.org/about-lyme/history-lyme-disease/>

### ***Oh Mann!***

#### **Mann and Lewandowsky's polar bear paper enters bizarroland: Climate change leads to more...neurosurgery for polar bears?**

By Anthony Watts, WUWT, Apr 3, 2018

<https://wattsupwiththat.com/2018/04/03/mann-and-lewandowskys-polar-bear-paper-enters-bizarroland-climate-change-leads-to-moreneurosurgery-for-polar-bears/>

### ***Other Scientific News***

#### **Is there life adrift in the clouds of Venus?**

By Terry Devitt for UW News, Space Daily Madison WI (SPX) Apr 03, 2018 [H/t Toshio Fujita]

[http://www.spacedaily.com/reports/Is\\_there\\_life\\_adrift\\_in\\_the\\_clouds\\_of\\_Venus\\_999.html](http://www.spacedaily.com/reports/Is_there_life_adrift_in_the_clouds_of_Venus_999.html)

[SEPP Comment: *It's the atmospheric pressure at the surface that makes the planet too hot, not CO2.*]

#### **What Ancient African Huts Reveal About Earth's Magnetic Flips**

Minerals in clays from the Iron Age may help scientists better understand how and why the magnetic poles swap places.

By Michael Greshko, National Geographic, Mar 5, 2018 [H/t Howard Hayden]

[https://news.nationalgeographic.com/2018/03/earth-magnetic-field-south-atlantic-anomaly-africa-science/?utm\\_source=NatGeocom&utm\\_medium=Email&utm\\_content=inside\\_20180402&utm\\_campaign=Content&utm\\_rd=1873914](https://news.nationalgeographic.com/2018/03/earth-magnetic-field-south-atlantic-anomaly-africa-science/?utm_source=NatGeocom&utm_medium=Email&utm_content=inside_20180402&utm_campaign=Content&utm_rd=1873914)

Link to paper: New Archeomagnetic Directional Records From Iron Age Southern Africa (ca. 425–1550 CE) and Implications for the South Atlantic Anomaly

By Vincent Hare, et al. Geophysical Research Letters, Feb 15, 2018

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2017GL076007>

### ***Other News that May Be of Interest***

#### **How a New Source of Water Is Helping Reduce Conflict in the Middle East**

Scientists and others look to desalination as a way to unite longtime adversaries in a common cause.

By Rowan Jacobsen, ENSIA, **July 19, 2016**

<https://ensia.com/features/water-desalination-middle-east/>

#### **Nation's Largest Seawater Desalination Plant Marks One-Year Anniversary**

Press Release, Claud "Bud" Lewis Carlsbad Desalination Plant, **Dec 14, 2016**

<http://www.carlsbaddesal.com/news/nations-largest-seawater-desalination-plant-marks-one-year-anniversary>

"The Carlsbad plant uses reverse osmosis to produce a highly reliable supply, day-in and day-out, regardless of weather or climate conditions, and it is blended with water from other sources for regional distribution. It costs about a half-cent to produce a gallon of drinking water at the plant. Desalinated water costs typical homeowners in the region about an additional \$5 per month, in line with the low end of projections when the project was approved in late 2012."

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### **BELOW THE BOTTOM LINE:**

**New runway construction begins at Maldives international airport**

By Staff Writers, Maldives Independent, Mar 15, 2018 [H/t Paul Homewood]

<http://maldivesindependent.com/business/new-runway-construction-begins-at-maldives-international-airport-136515>

“The 3,400-meter-long, 60-meter-wide runway will open the airport to the Airbus A380 jetliner, the world’s largest passenger airline, Adil previously said.”

[SEPP Comment: Will they hold underwater cabinet meetings on the runway?]

### **Fore!**

By Staff Writers, Climate Change Predictions.com. March 29, 2018

<http://climatechangepredictions.org/uncategorized/1582>

“An environmental expert in St Andrews has warned the year 2050 could see the town’s famous golf course, the Old Course, crumble into the North Sea. Professor Jan Bebbington, director of the St Andrews Sustainability Institute, has visualised the effect of climate change on Scotland in 50 years.” BBC News, 13 Oct 2008

### **Cliches not threatened**

By Staff Writers, Climate Change Predictions.com. March 31, 2018

<http://climatechangepredictions.org/uncategorized/1673>

“A study published in the June 10 issue of the journal Nature clearly demonstrates changes in species ranges as butterflies shift north to track a changing climate as the planet warms up.

“Camille Parmesan, Ph D., and her co-investigators found that out of 57 species studied in Europe and North Africa, 35 of which there were data for both the northern and southern range boundaries, two thirds had shifted northward. Most of the remaining one third remained stable.

“‘This puts the nail in the coffin,’ said Parmesan of the results. ‘It’s black and white’.”

University of California, Santa Barbara, 10/6/99

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## **ARTICLES:**

### **1. Coffee Won’t Kill You, But CAFE Might**

While these downsized cars are more fuel-efficient, they are also less crashworthy.

By Sam Kazman, WSJ, Apr 4, 2018

<https://www.wsj.com/articles/coffee-wont-kill-you-but-cafe-might-1522880249>

The general counsel of CEI argues against federal government corporate average fuel economy (CAFE) standards because people are being killed. He writes:

*“On Monday EPA Administrator Scott Pruitt announced he is re-examining the stringent standards set by the Obama administration in 2012. This might finally bring some honesty to the issue of CAFE’s lethal effects and push the safety issue to the forefront of the debate over government efficiency mandates. Or it might not.*

*“To call it a coverup isn’t hyperbole. CAFE kills people by causing cars to be made smaller and lighter. While these downsized cars are more fuel-efficient, they are also less crashworthy. In 1992 in Competitive Enterprise Institute v. NHTSA, a lawsuit my organization brought with Consumer Alert, a federal appeals court ruled that the agency had “obscured the safety problem” through a combination of “fudged analysis,” “statistical legerdemain” and “bureaucratic mumbo-jumbo.” In the court’s view, nothing in the record “appears to undermine the inference that the 27.5 mpg standard kills people.”*

*“How many people? A 1989 Harvard-Brookings study estimated the death toll at between 2,200 and 3,900 a year. Similarly, a 2002 National Academy of Sciences study estimated that CAFE had contributed to up to 2,600 fatalities in 1993. This was at a relatively lenient CAFE level of 27.5 miles per gallon. Under what the Obama administration had in store, CAFE would soon approach levels twice as stringent.*

*“These inconvenient truths should have led the government to change its approach to CAFE. At least the standards didn’t get worse for about a decade throughout the 1990s, despite environmentalist demands for a stricter—and therefore more lethal—approach. But then CAFE was swept up in climate-change politics.*

*“Advocates of stringent standards claim that automotive technologies have advanced since that 1992 court ruling, making vehicle mass less significant. But the basic relationship between size and safety has not changed. The Insurance Institute for Highway Safety, which closely monitors crashworthiness, still provides the same advice it has been giving for years: “Bigger, heavier vehicles are safer.”*

*“CAFE advocates like Consumer Reports treat lighter cars as merely a question of comfort, not crashworthiness. Car makers and dealers may express concerns about safety in the abstract, but considerations of politics and marketing make them hesitant to discuss hard numbers.*

*“In his announcement, Mr. Pruitt proved admirably blunt in characterizing the Obama CAFE standards as based on “politically charged expediency” and assumptions “that didn’t comport with reality.” Let’s hope he’ll be similarly candid about CAFE’s risks. A lethal program that’s been in effect for decades deserves one thing above all—an accounting.”*

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## **2. ‘Meltdown’ Review: Flirting With Disaster**

Thanks to dense networks and the complacency of groupthink, small glitches can cascade into catastrophic failures. David A. Shaywitz reviews “Meltdown” by Chris Clearfield and András Tilcsik.

By David A. Shaywitz, WSJ, Apr 2, 2018

<https://www.wsj.com/articles/meltdown-review-flirting-with-disaster-1522708270>

SUMMARY: Clearfield and Tilcsik are, respectively, a business school professor and a former derivatives trader. They wrote about the failures at Three Mile Island and of capital firms using computer driven trading. The authors of the book state the failures stem from two variables:

*“The first is complexity: the extent to which a system is linear and observable (like an assembly line) or interconnected and largely invisible. The second is coupling: the degree to which a system possesses ‘slack’—allowance for the time and flexibility to manage problems. Our determination to increase complexity and wring out inefficiencies, the authors warn, moves us into a danger zone and set us up for calamity.”*

The reviewer continues:

*“Avoiding disasters requires more than just speaking up, of course. ‘Dissent makes no difference if no one listens,’ Messrs. Clearfield and Tilcsik remind us, but listening proves to be difficult. When your beliefs are challenged, the authors write, your body reacts as if you suddenly spotted a wild animal—‘your heart beats faster and your blood pressure rises.’ This physiological response*

*aligns with decades of psychological studies showing subjects adjusting their opinions to match the group.*

*“Managers who overcome these instincts and encourage divergent opinions, the authors say, are more likely to avoid disaster. After a National Transportation Safety Board study of airplane crashes revealed that most happened when the more senior pilot was in command—generally because the less experienced officer was reluctant to point out any errors he observed—a new training program focused on changing hierarchical cockpit norms was launched and ultimately embraced by the industry.*

*“Perhaps the most important lesson of ‘Meltdown’ is captured by a series of studies performed by Evan Apfelbaum and his colleagues at MIT. They found that, as much as we’re predisposed to agree with a group, our willingness to disagree increases dramatically if the group is diverse; deference dissipates. Homogeneity may facilitate ‘smooth, effortless interactions,’ according to the authors, but diversity drives better decisions.*

*“Organizations can keep themselves honest by leveraging ‘strangers,’ individuals who understand enough to be relevant but are removed enough to see things differently. NASA’s Jet Propulsion Laboratory, for example, embeds designated outsiders—JPL engineers with an independent line of reporting—within teams to provide a fresh perspective and flag problems.*

*“Despite occasionally having the feel of a business journal article that was extended against its will into a book-length text, ‘Meltdown’ effectively conveys why addressing systemic failures is both difficult and essential: difficult because it’s so much more comfortable to rely on gut instinct and trust familiar colleagues than to insist on structured approaches and solicit the views of others; essential because we are moving into the danger zone and need all the help we can get.”*

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