The Week That Was: 2018-01-27 (January 27, 2018) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week. We do not know what the rules of the game are; all we are allowed to do is to watch the playing. Of course, if we watch long enough, we may eventually catch on to a few of the rules. The rules of the game are what we mean by fundamental physics. — Richard Feynman

Number of the Week: Three Years, Up or Down?

THIS WEEK:

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

Skepticism: In an essay titled "Be Skeptical of Those Who Treat Science as an Ideology" appearing in the Wall Street Journal, Dr. Sue Desmond-Hellmann discusses the difference between anti-science and skepticism, and the difference between denialism and skepticism. As an oncologist, faced with treating patients dying with cancer, Dr. Desmond-Hellmann recognized the importance of honesty and integrity in building trust with her patients. She writes: [Boldface added.]

"When I was a practicing oncologist, one way I built trust with patients was to be open and honest about what I knew for certain and what I didn't. On my best days, I didn't just talk; I listened. I answered patients' questions to the best of my knowledge and did follow-up research on the ones I couldn't answer. If I witnessed an outcome I didn't expect, I revisited my assumptions. That's how I applied the scientific method in the wild."

As the CEO of the Bill & Melinda Gates Foundation, Dr. Desmond-Hellmann continues to apply the scientific method.

"I follow a similar approach in my current job. The Bill & Melinda Gates Foundation uses a data-driven, evidence-based decision-making model. When the evidence changes, so does our strategy—as it did with malaria. Once it was clear that controlling the disease world-wide was practically and politically unsustainable, we increased our focus on accelerating elimination in regions where it is feasible now. At the same time, we're continuing to support efforts to save lives and develop the tools that will eventually allow us to eradicate the disease."

"What is undeniable is that the scientific breakthroughs in which we invest, such as new vaccines and hardier crops, help people around the world survive and thrive. **How many more people benefit—and how quickly—will depend in part on public confidence in science**.

"We can rebuild that confidence by uniting around the qualities of the scientific method. As the name suggests, the scientific method is not a belief system, it is a practice. We would all benefit from more practice."

The continuing ability to question and challenge assumptions as data are gathered is essential.

"Skepticism is the lifeblood of scientific progress. By constantly asking whether there is a different answer, a better approach or an alternative view, scientists drive improvements and

innovations that ultimately benefit everyone. It is not "antiscience" to be skeptical—it's definitively pro-science. At a time when people of all ideological stripes are seeking definitive sources of truth, we should all embrace our inner skeptics and turn to the scientific method for a fresh approach to resolve our differences."

Over-confidence to the public, not skepticism, are characteristics of an anti-science attitude.

"But whereas skepticism and uncertainty have always been the heart and soul of science, confidence and certainty are the coin of the realm in much of today's public discourse. Unquestioning confidence is deeply troubling for the scientific community because it is not the currency we trade in, and it has led people in America and around the world to question scientific enterprise itself. We should all be troubled when science is treated as if it were an ideology rather than a discipline."

Whether it is medicine or establishing government energy policy, applying the scientific method, and constantly questioning assumptions as evidence changes is essential.

"The point of science is not to produce doctrine, but to collect and test evidence that points toward conclusions, which in turn inform approaches, treatments and policies based on rigorous research. These conclusions are provisional. Scientific investigation is undertaken to question today's knowledge, to seek new evidence through research and experimentation.

"That is not to say that previous evidence was 'false,' merely that it was less complete. Those surgeons who performed radical mastectomies in the 1980s were acting with the best knowledge available at that time. As the understanding improved, so did the methods. Nor is it to say that current knowledge shouldn't be trusted—there is strong evidence that vaccines save lives, for example, and scant evidence that they cause harm."

The refusal to examine evidence, favorable or unfavorable to a set of assumptions, is harmful.

"Valuing beliefs over science manifests itself as cynicism at best, denialism at worst. Scientists talk about skepticism to assert that nothing should be accepted or rejected without considerable evidence. Denialism—the refusal to accept established facts—is different and dangerous. According to Harvard research, between 2000 and 2005 AIDS denialism in South Africa led to an estimated 330,000 deaths because the government rejected offers of free drugs and grants and dragged its heels on establishing a treatment program."

Although they may be important, science is not advanced by a government gathered consensus, as much as by the practice of continuingly questioning assumptions based on the most rigorous, appropriate evidence. See Article # 1.

Greenland Ice Sheet: There has been strong disagreement among some researchers if the Greenland Ice Sheet is losing mass due to carbon dioxide-caused global warming or due to other means. Researchers from the Artic Research Centre of Aarhus University in Denmark and the Greenland Institute of Natural Resources in Nuuk, Greenland, have discovered a large geothermal "hot spot" area in Northeast Greenland. "'North-East Greenland has several hot springs where the water becomes up to 60 degrees warm and, like Iceland, the area has abundant underground geothermal activity, 'explains Professor Soren Rysgaard, who headed the investigations."

This discovery creates further issues with climate models describing accelerating sea level rise, such as those with the Intergovernmental Panel on Climate Change (IPCC) and its followers with NOAA and NASA. The IPCC Fifth Assessment Report (AR-5) describes a strong relationship between carbon dioxide (CO2) and ice melt, with greater sea level rise based on increased atmospheric CO2.

"It is very likely that the rate of global mean sea level rise during the 21st century will exceed the rate observed during 1971–2010 for all Representative Concentration Pathway (RCP) scenarios due to increases in ocean warming and loss of mass from glaciers and ice sheets. Projections of sea level rise are larger than in the AR4, primarily because of improved modeling of land-ice contributions." The different Representative Concentration Pathway are based on estimates of future CO2 concentrations.

As reported in the November 11, 2017, TWTW, at least in part, Antarctic ice melt appears to be resulting from geothermal activity below the West Antarctic Ice Sheet, with over 130 geothermal hot spots identified near a rift valley below the surface. The practice of attributing an accelerating sea level rise to Antarctic ice melt caused by increased CO2 has long been disturbing. Even the AR-5 Synthesis report recognized that surface temperatures in Antarctic are not rising (p.48).

More disturbing, is that atmospheric temperatures are not rising over the Antarctic as they should be if the expressed greenhouse gas-warming hypothesis is correct. [Note that the satellite measurements do not include the poles.] Since the atmosphere at the Antarctic is not warming significantly, and temperatures at the surface remain well below freezing (except for brief periods on the Antarctic Peninsula, largely outside the Antarctic Circle), there is no logical reason to assume that the cause of any melting is increasing atmospheric CO2.

Thus, the concept of increasing CO2 is causing increasing sea level rise from polar ice melt embodies two assumptions that need to be established with physical evidence: 1) the extent to which increased CO2 will cause increased temperatures, assumptions or models do not suffice; and 2) the extent to which increased temperatures will cause Antarctic ice melt.

With the new evidence from Greenland, similar issues arise with assumptions on the loss of the Greenland ice mass caused by CO2 contributing to an increase in sea level rise. See links under Changing Cryosphere – Land / Sea Ice and http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf

Global Sea Level Rise Investigation: On her web site, Climate Etc., Judith Curry has begun a series on sea level on observations and causes of global sea level rise for which she appreciates comments. The current post discusses "definitions of sea level and the causes of sea level variations and rise. An overview of the geological record of sea level rise is provided, with a focus on Holocene (the current interglacial). Historical and archaeological evidence (prior to the instrumental period) of sea level variations is also discussed."

Curry reviews a 2016 paper by Kopp, et al., which reinforces the approach used in AR-5. The KOPP paper was slightly modified after a coding error was discovered. The authors are to be thanked for frankly addressing the error. They are not to be condemned or dismissed for reporting an error. For science to progress, such corrections need to be publicly discussed. Unfortunately, some members of the global warming orthodoxy have claimed the atmospheric temperature data from the University of Alabama in Huntsville (UAH) has been discredited because small errors in

calculation of the orbits of satellites have corrected by UAH. Such condemnations are more ideology than proper scientific practice.

As Curry states: Kopp et al. "compiled a global database of regional sea level reconstructions from 24 localities, many with decimeter-scale vertical resolution and subcentennial temporal resolution. Also included are 66 tide-gauge records." Immediately, the issue appears of how representative are the samples of 24 localities and 66 tide-gage records? There are hundreds tide-gage records giving dramatically different results. For example, the Gulf of Bothnia, and in Scandinavia tidal gages show sea levels are **falling**, due to rebound of the land from last Ice Age, called post-glacial rebound or isostatic rebound. Other areas, such as tidewater Virginia, tidal gages show sea levels are **rising** due to land subsidence, primarily from groundwater extraction. Gages at The Battery, show Manhattan may be subsiding, from heavy buildings built on bedrock.

In the Kopp study, the long-term proxy data and the tide-gage data are dominated by the East Coast of the US and by Western Europe, with no proxy data from Scandinavia. The sample appears not to be representative of the coast lines of the world, thus may be of little value. An obligation of research proposing samples are representative is to remove every possible source of bias, not to introduce bias.

A second major issue is the use of semi-empirical models, which Willem de Lange and Robert Carter found to be the most alarmist of all the techniques they reviewed in their study of global sea-level change. In general, these modeling techniques do not explicitly state assumptions, that can be challenged or substantiated by observations. They tend to be built more upon assumptions supporting assumptions, which has little value in understanding the physical world.

A third major issue is excessive precision in estimates of 20th century sea level rise. Adding speculative probability statements only adds doubt to the skeptic.

In sum, the conclusion of the Kopp study that 20th century sea level rise was extremely likely faster than during any of the 27 previous centuries is not substantiated, although there is little doubt that sea levels are higher than they have been since the last interglacial period, the Eemian, about 115,000 to 130,000 years ago. See links under Challenging the Orthodoxy and Changing Seas.

Precision of Ice Core Measurements: Some of the best data we have of historic temperatures are the studies of isotopes of gases and various components of the atmosphere in ice cores, such as Vostok in Antarctica, and GRIP in Greenland. These time-consuming, labor intensive extractions have been carefully handled, for they reveal precious information of the history of the earth's climate for thousands and hundreds of thousands of years.

John Coleman, RIP: For those who were privileged to know him, weather broadcasting pioneer John Coleman will be remembered for his enthusiasm, booming voice, and his humanity. Yet, Coleman angered some of his colleagues for challenging the claim that increasing atmospheric

Oily Litigation: The fact that certain municipalities, such as Oakland, San Francisco, and New York City, are suing certain oil companies, such as Exxon-Mobil, is being enthusiastically supported by many who consider themselves to be environmentalists. The New York City lawsuit and some of its false statements were discussed in last week's TWTW. According to some attorneys, the motives are quite clear – hoping to get big payoffs from oil companies, without disrupting the economy. The actions by Exxon indicate these visions may not be easy to realize. The recent legal claims by these municipalities appear to be inconsistent with filings they made under the Securities Acts of 1933 and 1934 in soliciting investments in their municipal bonds, securities offerings.

Richard Epstein is a legal scholar with the Hoover Institution. He is best known for his writings and studies on classical liberalism, libertarianism and torts. In two different articles he questions the wisdom of the actions of the municipalities, particularly in their blunt claims about the damages the cities will suffer under speculated global warming-caused sea level rise, and the certainty expressed in these claims. Epstein avoids the scientific issues but emphasizes the difference between what the cities have stated in securities offerings, using Oakland as the primary example, and what they claim in the filings against oil companies. Epstein states:

"Making wrongful statements in a securities offering is serious business. The general rules on covenants in securities (which include both stocks and bonds) is one of completeness in which any false statement or any material omission becomes actionable on a strict liability standard, so that there is no forgiveness under Section 11 of the Securities Act of 1933..."

According to the Cornell School of Law, Section 11 1933 Securities Act for Misstatements and / or Omissions applies to every

"Person, director, named, in the registration statement including:

"4) every accountant, engineer, or appraiser, or any person whose profession gives authority to a statement made by him, who has with his consent been named as having prepared or certified any part of the registration statement

(5) every underwriter with respect to such security."

This liability applies with:

"any material errors in a registration statement creates strict liability on the part of the issuer. Along with the issuer, anyone involved with creating the registration statement is also subject to liability."

According to Epstein, the courts take Section 11 of the 1933 Securities Act, which was extended to existing securities in 1934, very seriously. Probably far more seriously than they would take the false claims about individuals, such as Drs. Seitz and Singer, or organizations, such as SEPP.

Manhattan attorney Francis Menton discusses what he thinks of the New York mayor's initiative.

Solar Cheaper that Fossil Fuels? In this era of exaggerated claims, the solar industry and its promoters have few peers. A journalist for Quartz claimed that "Electricity from all forms of renewables will be consistently cheaper than fossil fuels by 2020." His claim came from an announcement by Adnan Amin, who heads the International Renewable Energy Agency (Irena), which released a new report at its annual summit on Jan. 13 in Abu Dhabi. The article has such gems such as: "In developed countries, solar power has become cheaper than new nuclear power." But it does not discuss capacity factor or reliability, dispatchability.

The actual report states:

"Record low auction prices for solar PV in Dubai, Mexico, Peru, Chile, Abu Dhabi and Saudi Arabia in 2016 and 2017 confirm that the LCOE can be reduced to USD 0.03/kWh from 2018 onward, given the right conditions. These include: a regulatory and institutional framework favourable to renewables; low offtake and country risks; a strong, local civil engineering base; favourable taxation regimes; low project development costs; and excellent solar resources." (p 7)

In other words, in desert regions at low latitudes, with government subsidies, solar power can become inexpensive, provided someone else is responsible when electricity is needed at night or on rainy days. As energy analyst Roger Andrews wrote when examining a renewable energy project on King Island, Tasmania:

"It's clear that the low prices for intermittent wind and solar bid at recent capacity auctions apply only when the local grid assumes all responsibility for balancing and grid stability. When wind and solar have to stand on their own feet it's a different ball game."

See links under Communicating Better to the Public – Make things up and Energy Issues – Non-US

Green Fleet Sunk? The US Department of Defense (DOD) concerns of energy sources in a time of war have long been valid. Before oil became dominant, coaling stations were established in the Pacific. Some of these stations became sources of refueling with oil and providing re-supply. Thus, it was not unrealistic when DOD began to explore alternative sources of fuel, when Washington was gripped with the fear the world would run out of oil in the 1970s. Or later, when Washington feared that all the oil resources would be controlled by countries hostile to US interests.

Further, when many in Washington were convinced that burning of oil and other fossil fuels may cause dangerous global warming / climate change, DOD planning responded with National Defense Strategy that these pages find far-fetched. Some of the applications, such as renewable energy on the battlefield were outlandish.

According to reports, the summary of the new National Defense Strategy signed by Defense Secretary James Mattis makes no mention of "global warming" or "climate change" and little

mention of energy issues, "except that the U.S. would 'foster a stable and secure Middle East' and 'contributes to stable global energy markets and secure trade routes."

Apparently, the Green Fleet has gone the way of wooden ships. See links under Change in US Administrations

Number of the Week – Three Years, Up or Down? We have two conflicting headlines: 1) "Temps jumped a half-degree over 3 years. 'Just remarkable'"; and 2) "Oceans Cool Off Previous 3 Years." Both discuss sea surface temperatures, and the seas cover over 70% of the earth's surface. But the conclusions are different; yet, not wrong. Both headlines deal with the large, recent El Niño. The first headline covers the period of 2014-2016. The second headline covers the period the recent fall in temperatures, and goes back to March 2014 (for Northern Hemisphere, earlier for Southern Hemisphere, Tropics, and Global).

The "jump" that was remarkable is gone. The apparent conflict illustrates that understanding the El Niño Southern Oscillation (ENSO), and other natural variability, is critical for understanding the human influence on climate Yet, they are largely ignored by the IPCC, and its followers including NOAA, and NASA.

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

Sea-Level Change: Living With Uncertainty

By Willem P. de Lange and Robert M. Carter, The Global Warming Policy Foundation, 2014

https://www.thegwpf.org/content/uploads/2014/05/Sea-level-report.pdf

What do the Ice Core Bubbles Really Tell Us?

Guest Opinion: Dr. Tim Ball, WUWT, Jan 20, 2018

https://wattsupwiththat.com/2018/01/20/what-do-the-ice-core-bubbles-really-tell-us/

Climate Alarmism Is Based on GCMs and Thus on Nothing [Global Climate Models]

By Alan Carlin, Carlin Economics and Science, Jan 27, 2018

http://www.carlineconomics.com/archives/4151

"So what do I propose to use to take the place of the expensive and useless climate GCMs? In a word: Top-down econometric studies based on appropriate simultaneous equations. Econometrics has long been used by large businesses and academics with considerable success and does not suffer the problems from trying to portray a chaotic system using linear equations."

Can Anything Good Come from CO2?

By Neil Frank, American Thinker, Jan 21, 2018

http://www.americanthinker.com/articles/2018/01/can anything good come from co2.html

The Cosmogenic Isotope Record and the Role of The Sun in Shaping Earth's Climate

By Euan Mearns, Energy Matters, Jan 22, 2018

http://euanmearns.com/the-cosmogenic-isotope-record-and-the-role-of-the-sun-in-shaping-earths-climate/#more-20724

The Climate Chronicles – a new book by Joe Bastardi

By Anthony Watts, WUWT, Jan 19, 2018

https://wattsupwiththat.com/2018/01/19/the-climate-chronicles-a-new-book-by-joe-bastardi/

Challenging the Orthodoxy - John Coleman

In Memory of John Coleman

By Joseph D'Aleo, ICECAP, Jan 22, 2018

http://icecap.us/index.php/go/political-climate/in memory of john coleman1/

San Diego's high-kicking weatherman John Coleman dies

By Gary Robbins, San Diego Union Tribune, Jan 21, 2018

http://www.sandiegouniontribune.com/weather/sd-me-john-coleman-20180121-story.html

John S. Coleman, Weather Channel Co-Founder, Dies at 83

By Tiffany Hsu, NYT, Jan 21, 2018

https://www.nytimes.com/2018/01/21/obituaries/john-coleman-co-founder-of-the-weather-channel-dies-at-83.html?emc=edit th 180123&nl=todaysheadlines&nlid=59831859

Defending the Orthodoxy

Nuclear Weapons, Climate Change Require Urgent Action; UN

By Michael Jones, ABC Live, Jan 17, 2018 [H/t Toshio Fujita]

http://abclive.in/nuclear-weaponsclimate-change-un/

Industrial pollution cools Earth. Here's why that's a bummer

Chelsea Harvey, E&E News, Jan 22, 2018

https://www.eenews.net/climatewire/2018/01/22/stories/1060071531

Link to paper: Climate impacts from a removal of anthropogenic aerosol emissions By B.H. Samset, et al. Geophysical research Letters, Jan 8, 2018 http://onlinelibrary.wiley.com/doi/10.1002/2017GL076079/full

Questioning the Orthodoxy

3 New (2018) Papers Link Modern Warming And Past Cooling Periods To High, Low Solar Activity

By Kenneth Richard, No Tricks Zone, Jan 22, 2018

http://notrickszone.com/2018/01/22/3-new-2018-papers-link-modern-warming-and-past-cooling-periods-to-high-low-solar-activity/#sthash.rPBXtfNM.dpbs

Crucial Climate Verdict, Fledgling Evidence

By Donna Laframboise, Big Picture News, Jan 26, 2018

https://nofrakkingconsensus.com/2018/01/26/crucial-climate-verdict-fledgling-evidence/

"When making its most important decisions, the IPCC relies on unpublished research that hasn't been seen, examined, or tested by the larger scientific community."

Bitcoin and global warming: a key similarity between two religions

By Luboš Motl, The Reference Frame, Jan 20, 2018

https://motls.blogspot.com/2018/01/bitcoin-and-global-warming-key.html

Man-Made Climate Change-Settled Science or Dogma?

By Wayne McLaughlin, American Thinker, Jan 25, 2018

http://www.americanthinker.com/articles/2018/01/manmade_climate_change_settled_science_or_dogma.html

After Paris!

Green Myth Exposed: China CO2 Emissions Jumped by 4% Last Year

By Staff Writers, NYT, Via GWPF, Jan 26, 2018

https://www.thegwpf.com/green-myth-exposed-chinas-co2-emissions-jump-by-7-last-year/

Change in US Administrations

Mattis Takes Global Warming Out Of The National Defense Strategy

By Michael Bastasch, Daily Caller, Jan 19, 2018

http://dailycaller.com/2018/01/19/mattis-takes-global-warming-out-of-the-national-defense-strategy/?utm_source=site-share

Link to report: Summary of the 2018 National Defense Strategy of the United States of America By Staff Writers, DOD, 2018

https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf

State of the Union: Trump Has Much to Take Credit for on Energy, Environment, and Climate

By Myron Ebell, CEI, Jan 26, 2018

https://cei.org/blog/state-union-trump-has-much-take-credit-energy-environment-and-climate

Trump attracts big energy investment, tax reform admirers in Davos

By John Siciliano, Washington Examiner, Jan 26, 2018 [H/t Cooler Heads]

http://www.washingtonexaminer.com/trump-attracts-big-energy-investment-tax-reform-admirers-in-davos/article/2647200

Social Benefits of Carbon

Oh noes! Increased carbon dioxide making more flowers in tropical forests

By Anthony Watts, WUWT, Jan 19, 2018

 $\underline{https://wattsupwiththat.com/2018/01/19/oh-noes-increased-carbon-dioxide-making-more-flowers-in-tropical-forests/}$

Link to paper: Long-term increases in tropical flowering activity across growth forms in response to rising CO2 and climate change

By Pau, Okamoto, Calderon & Wright, Global Change Biology, Dec 19, 2017 http://onlinelibrary.wiley.com/doi/10.1111/gcb.14004/abstract

Seeking a Common Ground

Make replication studies 'a normal and essential part of science,' Dutch science academy says

By Matt Warren, Science, Jan 16, 2018 [H/t Toshio Fujita]

http://www.sciencemag.org/news/2018/01/make-replication-studies-normal-and-essential-part-science-dutch-science-academy-says

Link to report: Make Replication Studies a Normal Part of Science

By Staff Writers, Akademie Van Wetenschappen, Jan 15, 2018

https://knaw.nl/en/news/news/make-replication-studies-a-normal-part-of-science

Driving change

By Martin Livermore, The Scientific Alliance, Jan 25, 2018 http://scientific-alliance.org/scientific-alliance-newsletter/driving-change

Study: Arctic ocean 'methane bomb' really isn't anything to worry about

By Anthony Watts, WUWT, Jan 17, 2018

 $\underline{https://wattsupwiththat.com/2018/01/17/study-arctic-ocean-methane-bomb-really-isnt-anything-to-worry-about/}$

Link to paper: Limited contribution of ancient methane to surface waters of the U.S. Beaufort Sea shelf

By Katy Sparrow, et al., Science Advances, Jan 17, 2018 http://advances.sciencemag.org/content/4/1/eaao4842

Review of Recent Scientific Articles by CO2 Science

Three Decades of Sea Ice Cover Trends in the Bohai Sea

Yan, Y., Shao, D., Gu, W., Liu, C., Li, Q., Chao, J., Tao, J. and Xu, Y. 2017. Multidecadal anomalies of Bohai Sea ice cover and potential climate driving factors during 1988-2015. *Environmental Research Letters* 12: 094014. Jan 25, 2018,

http://www.co2science.org/articles/V21/jan/a14.php

"In light of the above findings, it appears that sea ice cover in the Bohai Sea is not quite as sensitive to CO2-induced global warming as climate model projections/theory suggest it should be. Rather, in apparent defiance, it has behaved in an *opposite* manner!"

The Relationship Between Symbiotically-fixed Nitrogen and Soybean Yield Under Elevated CO2

Li, Y., Yu, Z., Liu, X., Mathesius, U., Wang, G., Tang, C., Wu, J., Liu, J., Zhang, S. and Jin, J. 2017. Elevated CO2 increases nitrogen fixation at the reproductive phase contributing to various yield responses of soybean cultivars. *Frontiers in Plant Science* 8: 1546, doi: 10.3389/fpls.2017.01546. Jan 24, 2018

http://www.co2science.org/articles/V21/jan/a13.php

"The above findings reveal that soybean yields will increase in the future in response to benefits provided by rising atmospheric CO2. Furthermore, those yields will increase without the addition of soil N fertilizer, as the results of this study clearly show that it was a CO2-induced stimulation of nitrogen-fixation by symbiotic bacteria that provided the nitrogen necessary to increase seed yields."

The Impact of Hypoxia and Ocean Acidification at the Upper Thermal Limits of Three Fish Species

Ern, R., Johansen, J.L., Rummer, J.L. and Esbaugh, A.J. 2017. Effects of hypoxia and ocean acidification on the upper thermal niche boundaries of coral reef fishes. *Biology Letters* 13: 20170135. Jan 22, 2018

http://www.co2science.org/articles/V21/jan/a12.php

Model Issues

'Worse than we thought' - climate models underestimate future polar warming

By Anthony Watts, WUWT, Jan 23, 2018

 $\underline{https://wattsupwiththat.com/2018/01/23/worse-than-we-thought-climate-models-underestimate-future-polar-warming/}$

Link to paper: Eocene greenhouse climate revealed by coupled clumped isotope-Mg/Ca thermometry

By David Evans, et al., PNAS, Jan 22, 2018

http://www.pnas.org/content/early/2018/01/12/1714744115

[SEPP Comment: Based on research of a period before India joined Asia, no Asia Minor, and Caribbean Seaway open.]

Measurement Issues -- Surface

Temps jumped a half-degree over 3 years. 'Just remarkable'

By Chelsea Harvey, E&E News, Jan 25, 2018

https://www.eenews.net/climatewire/2018/01/25/stories/1060071871

Link to paper: Big Jump of Record Warm Global Mean Surface Temperature in 2014-2016 Related to Unusually Large Oceanic Heat Releases

By Yin, Overpeck, Peyser & Stouffer, Geophysical Research Letters, Jan 16, 2018

http://onlinelibrary.wiley.com/doi/10.1002/2017GL076500/abstract?campaign=wolacceptedarticle

Oceans Cool Off Previous 3 Years

By Ron Clutz, Science Matters, Jan 19, 2018 [H/t GWPF]

https://rclutz.wordpress.com/2018/01/18/oceans-cool-off-previous-3-years/

New York's Temperature Record Massively Altered By NOAA

By Paul Homewood, Not a Lot of People Know That, Jan 25, 2018

 $\frac{https://notalotofpeopleknowthat.wordpress.com/2018/01/25/new-yorks-temperature-record-massively-altered-by-noaa/\#more-31926}{massively-altered-by-noaa/\#more-31926}$

By Paul Homewood, Not a Lot of People Know That, Jan 26, 2018 https://notalotofpeopleknowthat.wordpress.com/2018/01/26/syracuse-uhi/

TOBS At Ithaca

By Paul Homewood, Not a Lot of People Know That, Jan 26, 2018 https://notalotofpeopleknowthat.wordpress.com/2018/01/26/tobs-at-ithaca/#more-31967 [SEPP Comment: More evidence of NOAA and NASA-GISS cooking the books – temperature records

Changing Weather

Japan forecasting breakthrough could improve weather warnings

By Staff Writers, AFP, Jan 17, 2018 [H/t Toshio Fujita]

 $\underline{\text{http://www.dailymail.co.uk/wires/afp/article-5279911/Japan-forecasting-breakthrough-improve-weather-warnings.html}$

"It takes a long time to verify whether a new technology can be put to real use," [Weather agency scientist.].

Natural Disaster Costs Are Actually DECLINING, Despite Global Warming Fears

By Michael Bastasch, Daily Caller, Jan 25, 2018 [H/t Cooler Heads]

http://dailycaller.com/2018/01/25/economy-grows-natural-disaster-global-warming/

Veteran Hurricane Forecasting Guru Predicts 2018 Season Could Even Be Worse Than Last Year's Destructive Season

By P Gosselin, No Tricks Zone, Jan 25, 2018

http://notrickszone.com/2018/01/25/veteran-hurricane-forecasting-guru-predicts-2018-season-could-even-be-worse-than-last-years-destructive-season/#sthash.kArfN8QH.dpbs

Arctic poised to unleash another massive cold outbreak for Eastern US

By Anthony Watts, WUWT, Jan 25, 2018

https://wattsupwiththat.com/2018/01/23/arctic-poised-to-unleash-another-massive-cold-outbreak-for-eastern-us/

Changing Climate

Impact of Climate Change on Human Evolution: The Odyssey from Africa

By Phil Salmon, Climate Etc. Jan 25, 2018

 $\underline{https://judithcurry.com/2018/01/25/impact-of-climate-change-on-human-evolution-the-odyssey-from-africa/\#more-23785}$

Changing Seas

Sea level rise acceleration (or not): Part II – The geological record

By Judith Curry, Climate Etc. Jan 24, 2018

https://judithcurry.com/2018/01/24/sea-level-rise-acceleration-or-not-part-ii-the-geological-record/

Link to one paper: Temperature-driven global sea-level variability in the Common Era

By Robert Kopp, et al. PNAS, Mar 15, 2016, Corrected Sep 20, 2016

http://www.pnas.org/content/113/11/E1434.full

http://www.pnas.org/content/113/38/E5694

Bangladesh: The Deep Delta Blues

Guest essay by Kip Hansen, WUWT, Jan 24, 2018

https://wattsupwiththat.com/2018/01/24/bangladesh-the-deep-delta-blues/

[SEPP Comment: Land subsidence is ignored by those promoting fear of rising seas.]

Changing Cryosphere – Land / Sea Ice

Heat loss from Earth's interior triggers ice sheet slide towards the sea

Press Release, Aarhus University, Science Daily, Jan 22, 2018

https://www.sciencedaily.com/releases/2018/01/180122091321.htm

Link to paper: High geothermal heat flux in close proximity to the Northeast Greenland Ice Stream

By Rysgaard, Bendtsen, Mortensen & Skjr, Scientific Reports, Jan 22, 2018 [H/t Bill Balgord] https://www.nature.com/articles/s41598-018-19244-x

Groundbreaking AGW-Undermining Study: Greenland's Warming, Ice Loss Due To Geothermal Heat

By Kenneth Richard, No Tricks Zone, Jan 24, 2018

http://notrickszone.com/2018/01/24/groundbreaking-agw-undermining-study-greenlands-warming-ice-loss-due-to-geothermal-heat/#sthash.pM3wa9xK.dpbs

Megawatts and Milliwatts!

By Paul Homewood, Not a Lot of People Know That, Jan 23, 2018 https://notalotofpeopleknowthat.wordpress.com/2018/01/23/megawatts-and-milliwatts/ [SEPP Comment: A prompt correction of an error in units.]

In the Arctic, More Rain May Mean Fewer Musk Oxen

By Carl Zimmer, NYT, Jan 18, 2018

https://www.nytimes.com/2018/01/18/science/musk-oxen-climate-

change.html?emc=edit th 180119&nl=todaysheadlines&nlid=59831859

Link to paper: Climate Degradation and Extreme Icing Events Constrain Life in Cold-Adapted Mammals

By Berger, Hartway, Gruzdev & Johnson, Scientific Reports, Jan 18, 2018

https://www.nature.com/articles/s41598-018-19416-9

[SEPP Comment: Doubtful if Musk Oxen will be as an attractive icon as the polar bear.]

Changing Earth

Early Holocene polar bear skeleton from Norway vs. other ancient remains

By Susan Crockford, Polar Bear Science, Jan 24, 2018

 $\underline{https://polarbearscience.com/2018/01/24/early-holocene-polar-bear-skeleton-from-norway-vs-other-ancient-remains/\#more-114030}$

Link to Press Release: The Finnøy polar bear

By Ragnhild Nordahl Næss, University of Stavanger, Jan 23, 2018

https://phys.org/news/2018-01-finny-polar.html

[SEPP Comment: The press release states: The sea is 40 metres **above** the current level. [Boldface added]. The area must have experienced tremendous rebound from depression by glacial ice over the past 12,000 years.]

Agriculture Issues & Fear of Famine

Today's Food Production Is A Modern Agricultural Miracle So Why Is It Under Attack? By Steve Goreham, Daily Caller, Jan 24, 2018

http://dailycaller.com/2018/01/24/todays-food-production-is-a-modern-agricultural-miracle-so-why-is-it-under-attack/

Lowering Standards

BBC Gets It Wrong Again on Global Warming

Press Release, GWPF, Jan 24, 2018

https://www.thegwpf.com/bbc-gets-it-wrong-again-on-global-warming/

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

Lewandowsky's genius solution to Fake News — Ban it and do cheap smears!

By Jo Nova, Her Blog, Jan 25, 2018

 $\underline{\text{http://joannenova.com.au/2018/01/lewandowskys-genius-solution-to-fake-news-ban-it-and-do-cheap-smears/}$

The Carbon Sense Newsletter, January 2018 — Coral Sea Battles

By Viv Forbes, The Australian Climate Sceptics Blog, Jan 26, 2018

http://theclimatescepticsparty.blogspot.com.au/2018/01/the-carbon-sense-newsletter-january.html

Communicating Better to the Public – Make things up.

Electricity from all forms of renewables will be consistently cheaper than fossil fuels by 2020

By Aksht Rathi, Quartz, Jan 15, 2018 [H/t Toshio Fujita]

 $\underline{https://qz.com/1179753/by-2020-renewable-electricity-will-be-consistently-cheaper-than-fossil-fuel-power/}$

Link to report: Renewable Power Generation Costs in 2017

By Staff Writers, International Renewable Energy Agency (IRENA), Jan 2018

https://www.irena.org/publications/2018/Jan/Renewable-power-generation-costs-in-2017

Expanding the Orthodoxy

Climate change, AI and harassment – the hottest topics at this year's Davos

By Richard Partington, The Guardian, UK, Jan 20, 2018 [H/t WUWT]

 $\underline{https://www.theguardian.com/business/2018/jan/20/davos-2018-wef-hottest-topics-climate-change-harassment-donald-trump}$

Questioning European Green

Europe's Energy Crack-Up

Europeans scold while the U.S. leads

By Rupert Darwall, National Review, Jan 22, 2018

http://www.nationalreview.com/article/455628/europe-bogus-clean-energy-schemes-european-union-coal?utm source=CCNet+Newsletter&utm campaign=7fbb3cc66f-

EMAIL_CAMPAIGN_2018_01_26&utm_medium=email&utm_term=0_fe4b2f45ef-7fbb3cc66f-20141189

Germany Falling Short of Emissions Targets

Energy transformation had been a priority of Chancellor Angela Merkel

By Andrea Thomas, WSJ, Jan 24, 2018

https://www.wsj.com/articles/germany-falling-short-of-emissions-targets-1516813406?

Via GWPF: Green Flop: Germany Will Have to Pay for Renewables & Failing EU Emissions Targets

https://www.thegwpf.com/green-flop-germany-will-have-to-pay-for-renewables-failing-euemissions-targets/

Catching Up With the New E.U. Emissions Targets Will Cost Germany a Trillion Euros By Kyree Leary, Futurism.com, Jan 22, 2018

https://futurism.com/catching-up-new-e-u-emissions-targets-cost-germany-trillion-euros/

Unstable Green Power Grids: German ARD Television Tells Citizens To Start Getting Used To Blackouts!

By P Gosselin, No Tricks Zone, Jan 26, 2018

http://notrickszone.com/2018/01/26/unstable-green-power-grids-german-ard-television-tells-citizens-to-start-getting-used-to-blackouts/#sthash.CCMqvlE7.dpbs

"In other words, Germany's days of a stable power grid are over, and don't expect then to return."

UK to miss legal climate targets without urgent action, official advisers warn

Vague ambitions, such as banning new petrol cars by 2040, must be turned into solid plans, says the Committee on Climate Change

By Damian Carrington, Guardian, UK, Jan 17, 2018 [H/t Energy Matters]

https://www.theguardian.com/environment/2018/jan/17/uk-to-miss-legal-climate-targets-without-urgent-action-official-advisers-warn

UK Renewable Electricity: Dead, Alive or Living Dead?

By John Constable: GWPF, Jan 23, 2018

 $\underline{https://www.thegwpf.com/uk-renewable-electricity-dead-alive-or-living-dead/}$

Link to report: Renewable energy planning database monthly extract

By Staff Writers, Gov. UK, Updated Jan 18, 2018

 $\underline{https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract}$

"After years of astonishingly generous income support, costing consumers upwards of £20 billion since 2002, the industry has become aware that the patience of government and Treasury, to say nothing of consumers, is wearing thin, and rather than simply urging the necessity of their technologies in climate policy they have preferred to suggest that they are, as the FT puts it, 'maturing'"

New EU Rules To Allow Burning Of Whole Trees For Biomass

By Paul Homewood, Not a Lot of People know That, Jan 26, 2018

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2018/01/26/new-eu-rules-to-allow-burning-of-whole-trees-for-biomass/}$

The green plan should use human ingenuity

Top down command is not the way to improve the environment By Matt Ridley, The Rational Optimist, Jan 22, 2018 http://www.rationaloptimist.com/blog/let-a-thousand-flowers-bloom-1/

Funding Issues

Scientists sue EPA over its policy on advisory boards

By Jacqueline Thomsen, The Hill, Jan 23, 2018

http://thehill.com/policy/energy-environment/370419-scientists-sue-epa-over-policy-blocking-scientists-with-epa-grants

[SEPP Comment: Scientists who receive money from corporations are automatically considered biased. Those who receive money from government regulatory agencies are not?]

The Mercers, Trump's Billionaire Megadonors, Ramp Up Climate Change Denial Funding

The New York financiers' donations to climate misinformation think tanks are finally attracting the scrutiny long reserved for the Koch brothers and Exxon Mobil.

By Alexander Kaufman, HuffPost, Jan 25, 2018

https://www.huffingtonpost.com/entry/mercers-climate-denial us 5a6a4661e4b06e253265e832

Link to cited paper: Learning from mistakes in climate research

By Benestad, Nuccitelli, Lewandowsky, Hayhoe, Hygen, van Dorland, and Cook, Theoretical and Applied Climatology, Aug 20, 2015

https://link.springer.com/article/10.1007/s00704-015-1597-5

Trump EPA revives Obama proposal to block controversial Alaska mine

By Timothy Cama, The Hill, Jan 26, 2018

http://thehill.com/policy/energy-environment/371001-trump-epa-revives-obama-proposal-to-block-alaska-mine

Litigation Issues

Global Warming and Bond Offerings

By Richard Epstein, Forbes, Jan 22, 2018

https://www.forbes.com/sites/richardepstein/2018/01/22/global-warming-and-bond-offerings/#5dfa0e923c05

[SEPP Comment: Have the municipalities committed fraud?]

Is Global Warming A Public Nuisance?

By Richard Epstein, Hoover Institution, Jan 15, 2018 [H/t Real Clear Energy] https://www.hoover.org/research/global-warming-public-nuisance

Another Candidate For Stupidest Litigation In The Country

By Francis Mention, Manhattan Contrarian, Jan 24, 2018

 $\underline{http://manhattancontrarian.com/blog/2018/1/24/another-candidate-for-stupidest-litigation-in-the-country}$

Even environmental lawyers are climate skeptics

By Sam Rolley, Personal Liberty, Jan 22, 2018

https://personalliberty.com/even-environmental-lawyers-climate-skeptics/

EPA and other Regulators on the March

EPA loosens rules on some 'major' air pollution sources

By Timothy Cama, The Hill, Jan 25, 2018

http://thehill.com/policy/energy-environment/370786-epa-loosens-rules-on-some-major-air-pollution-sources

[SEPP Comment: Removing a regulatory block that improvements cannot reduce real pollution once classified.]

EPA pushes unified national fuel emissions standard

By Miranda Green, The Hill, Jan 25, 2018

http://thehill.com/policy/energy-environment/370720-epa-pushes-unified-national-fuel-emissions-standard

Idle wells on BLM land up, but numbers can't be trusted — IG

By Pamela King, E&E News, Jan 24, 2018

https://www.eenews.net/energywire/2018/01/24/stories/1060071753

"BLM, an Interior Department agency, failed to properly implement a **2012** instructional memorandum directing state BLM directors to improve data input into the Automated Fluid Minerals Support System." [Boldface added]

Energy Issues – Non-US

A first look at the King Island, Tasmania, Renewable Energy Integration Project

By Roger Andrews, Energy Matters, Jan 24, 2018

http://euanmearns.com/a-first-look-at-the-king-island-tasmania-renewable-energy-integration-project/#more-20846

"It's clear that the low prices for intermittent wind and solar bid at recent capacity auctions apply only when the local grid assumes all responsibility for balancing and grid stability. When wind and solar have to stand on their own feet it's a different ball game."

Energy Issues – Australia

Madness and misinformation in renewables-land: South Australia brags they didn't have to "load shed"

By Jo Nova, Her Blog, Jan 22, 2018

 $\underline{http://joannenova.com.au/2018/01/madness-and-misinformation-in-renewables-land-south-\underline{australia-brags-they-didnt-have-to-load-shed/}$

[SEPP Comment: The ideal political solution to cutting electricity to industries during times of limited supply – Eliminate industries.]

South Australia blows up cheap electricity, jobs, wealth, in ideological anti-coal quest By Jo Nova, Her Blog, Jan 25, 2018

 $\underline{http://joannenova.com.au/2018/01/south-australia-blows-up-cheap-electricity-jobs-in-ideological-anti-coal-quest/}$

Energy Issues – US

Growth in Electricity Consumption – Part 1

By Donn Dears, Power For USA, Jan 26, 2018

http://www.powerforusa.com/2018/01/26/growth-in-electricity-consumption-part-1/

HID light is a high intensity discharge light which do not have a filament.

[SEPP Comment: What is wrong? Conversion from incandescent bulbs to LED lights did not require a congressional mandate or government subsidies?]

Puerto Rico to privatize its power system

By Miranda Green and Rafael Bernal, The Hill, Jan 22, 2018

 $\underline{http://the hill.com/regulation/energy-environment/370200-puerto-rico-to-privatize-its-power-system}$

Propping Up Biofuels With The RFS Is Killing Independent Refiners

By David Blackmon, Forbes, Jan 26, 2018 [H/t Cooler Heads]

https://www.forbes.com/sites/davidblackmon/2018/01/26/propping-up-biofuels-with-the-rfs-is-killing-independent-refiners/#72b3b5fd5a50

New York pushes energy storage to solve renewable power's biggest problem

By Josh Siegel, Washington Examiner, Jan 16, 2018

http://www.washingtonexaminer.com/new-york-pushes-energy-storage-to-solve-renewable-powers-biggest-problem/article/2645645

Oil and Natural Gas – the Future or the Past?

UK Shale Horizontal Drilling Under Way, Fracturing to Follow

By Matt Zborowski, Staff Writer, Journal of Petroleum Technology [H/t GWPF] https://www.spe.org/en/jpt/jpt-article-detail/?art=3821

Hail Shale: USA Set to Overtake Saudi Arabia and Russia in Oil Production

By Staff Writers, the Financial Times, Via GWPF, Jan 21, 2018

https://www.thegwpf.com/hail-shale-usa-set-to-overtake-saudi-arabia-and-russia-in-oil-production/

IEA Sees 'Explosive' Growth in U.S. Oil Output as Prices Rally

By Angelina Rascouet, Bloomberg, Jan 19, 2018

https://www.bloomberg.com/news/articles/2018-01-19/iea-sees-explosive-growth-in-u-s-oil-output-as-prices-rally

Malthusianism circa 1948 (running out of oil, etc.)

By Robert Bradley, Jr. Master Resource, Jan 24, 2018

https://www.masterresource.org/malthusianism/anti-energy-1948/

Nuclear Energy and Fears

New nuclear power plant coming to Idaho Falls

By Katie Keleher, KIDK 3 News, Jan 23, 2018 [H/t Toshio Fujita]

 $\frac{http://www.localnews8.com/news/idaho-falls/new-nuclear-power-plant-coming-to-idaho-falls/689548938}{falls/689548938}$

Alternative, Green ("Clean") Solar and Wind

24-Hour Solar Energy: Molten Salt Makes It Possible, and Prices Are Falling Fast

Molten salt storage in concentrated solar power plants could meet the electricity-on-demand role of coal and gas, allowing more old, fossil fuel plants to retire.

By Robert Dieterich, Inside Climate News, Jan 16, 2018 [H/t Real Clear Energy]

https://insideclimatenews.org/news/16012018/csp-concentrated-solar-molten-salt-storage-24-hour-renewable-energy-crescent-dunes-nevada

[SEPP Comment: The falling prices are bids, not actual costs.]

Trump's Tariffs on Solar Mark Biggest Blow to Renewables Yet

By Brian Eckhouse, Ari Natter, and Chris Martin, Bloomberg, Jan 23, 2018 https://www.bloomberg.com/news/articles/2018-01-22/trump-taxes-solar-imports-in-biggest-blow-to-clean-energy-yet

Alternative, Green ("Clean") Vehicles

Electric Vehicle Report Card

By Donn Dears, Power For USA, Jan 23, 2018

http://www.powerforusa.com/2018/01/23/electric-vehicle-report-card/

California Dreaming

Costs Balloon for California's High-Speed Rail

Even though the project will cost \$2.8 billion more than planned, Gov. Jerry Brown still thinks it's worth it: "It'll last for 100 years, after all you guys are gone."

By Daniel Vock, Governing, Jan 25, 2018 [H/t Cooler Heads]

http://www.governing.com/topics/transportation-infrastructure/gov-costs-delays-california-high-speed-rail.html

California aims to get 5 million zero-emission cars on the road

By Miranda Green, The Hill, Jan 26, 2018

http://thehill.com/policy/energy-environment/370971-california-governor-announces-multibillion-dollar-investment-to

It's the Weather, Governor Brown (peddling climate hypochondria for political gain)

By Bob Endlich, Master Resource, Jan 22, 2018

https://www.masterresource.org/california-energy-policy/weather-governor-brown/

Other Scientific News

NASA: Massive Asteroid will zoom near Earth on February 4th – at 76,000 mph

By Anthony Watts, WUWT, Jan 20, 2018

 $\frac{https://wattsupwiththat.com/2018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-4th-at-76000-mph/}{2018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-4th-at-76000-mph/}{2018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-4th-at-76000-mph/}{2018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-4th-at-76000-mph/}{2018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-4th-at-76000-mph/}{2018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-massive-asteroid-will-zoom-near-earth-on-february-1018/01/20/nasa-earth-on-february-1018/01/20/nasa-earth-on-february-1018/01/20/nasa-earth-on-february-1018/01/20/nasa-earth-on-february-1018/01/20/nasa-earth-on-february-1018/01/20/01/2$

"We have been tracking this asteroid for over 14 years and know its orbit very accurately," said Paul Chodas, manager of NASA's Center for Near-Earth Object Studies at the Jet Propulsion Laboratory, Pasadena, California. "Our calculations indicate that asteroid 2002 AJ129 has no chance — zero — of colliding with Earth on Feb. 4 or any time over the next 100 years."

Other News that May Be of Interest

Genius Was Behind Apollo's Lunar Legacy

By Larry Bell, Newsmax, Jan 25, 2018

https://www.newsmax.com/larrybell/callway-faget-mercury-naca/2018/01/16/id/837479/

New Diagnostic Devices Will Save Lives and Money

By Matt Ridley, The Rational Optimist, Jan 22, 2018

http://www.rationaloptimist.com/blog/diagnostic-devices-are-coming/

Single Gene Linked To Severe Obesity In Humans

By Julianna LeMieux, ACSH, Jan 12, 2018

https://www.acsh.org/news/2018/01/12/single-gene-linked-severe-obesity-humans-12381

Link to paper: Loss-of-function variants in ADCY3 increase risk of obesity and type 2 diabetes By Niels Grarup, et al, Nature Genetics, Jan 8, 2018

https://www.nature.com/articles/s41588-017-0022-7

Second paper: Loss-of-function mutations in ADCY3 cause monogenic severe obesity

By Saeed, Bonnefond, and Froguel, Nature Genetics, Jan 8, 2018

https://www.nature.com/articles/s41588-017-0023-6

The Decay of Truth

A new study looks at the diminishing role of facts and analysis in public life.

By George Will, National Review, Jan 24, 2018 [H/t GWPF]

 $\underline{\text{http://www.nationalreview.com/article/455742/truth-decay-study-facts-analysis-play-diminishing-role-public-life}$

BELOW THE BOTTOM LINE:

Science Pushed To Back Burner, As Swiss Outlaw Live Lobster Boiling

By Erik Lief, ACSH, Jan 19, 2018

https://www.acsh.org/news/2018/01/19/science-pushed-back-burner-swiss-outlaw-live-lobster-boiling-12443

"By stunned, the government says the crustaceans must instead be prodded with an electrical device before they are boiled, to produce "mechanical destruction" of the brain."

[SEPP Comment: But, the lobster has no brain, so how can one destroy it?]

Here's how fed shutdown affects the pygmy rabbit

By Michael Doyle, E&E, Greenwire, Jan 19, 2018 https://www.eenews.net/greenwire/2018/01/19/stories/1060071447

I knew it all along!

By Staff Writers, Climate Change Predictions http://climatechangepredictions.org/uncategorized/5676

"An international team, including members from Imperial College London and the Zoological Society of London, has constructed a complete evolutionary tree tracing the history of all 4,500 mammals on Earth that puts the major diversification 10-15 million years after asteroid strike, casting into doubt the role the dinosaur die-off played in the success of our present day mammals. "Around 55 million years ago, the mid-latitude mean annual temperatures went up by up to 5 deg C over about 20,000 years. 'It was a much bigger increase in temperature than we've had so far, but within the range that we might get within the next century (never mind 20,000 years),' said Prof Andy Purvis from Imperial College London.

"It looks like a later bout of 'global warming' may have kick-started today's diversity – not the death of the dinosaurs."

The Telegraph (UK), 29 Mar 2007

ARTICLES:

1. Be Skeptical of Those Who Treat Science as an Ideology

Scientific knowledge is always provisional. The point is to produce evidence, not doctrine. By Sue Desmond-Hellmann, WSJ, Jan 19, 2018 [H/t Martin Stickley] https://www.wsj.com/articles/be-skeptical-of-those-who-treat-science-as-an-ideology-1516403457

SUMMARY: The key points of the article are summarized in the This Week section, above.

2. China Sucks Gas Out of Global Market as It Shifts From Coal

Move boosts LNG price and leaves swaths of industry in China struggling with limited gas supplies

By Sarah McFarlane and Nathaniel Taplin, WSJ, Jan 23, 2018 https://www.wsj.com/articles/china-sucks-gas-out-of-global-market-amid-shift-from-coal-1516703401

SUMMARY: Smog form coal is a major problem in the cities in China. The authors write:

"The world's No. 2 economy is cutting back on coal after President Xi Jinping made a cleaner environment a key priority at last Fall's Communist Party Congress.

That has left swaths of industry in China struggling with limited gas, including giants like German chemical company BASF SE and local producer Yunnan Yuntianhua Co., as supplies are diverted to households that had previously relied on coal for heating."

As new supply as limited prices in natural gas, China demand has busted the Liquified Natural Gas (LNG) industry. Behind Japan, China is now the second largest importer of LNG.

"Analysts say that given Beijing's very public commitment to improving air quality, the shift away from coal is unlikely to lose urgency over the medium term. But neither will Chinese policy makers let citizens freeze, meaning that gas supplies will continue to be diverted to households."

"China has committed to increasing gas's share of its energy mix to 10% by 2020 from its current level of around 7%. That could increase annual gas demand by more than 50% from 2016 levels to 325 billion cubic meters, according to Bernstein." [An energy analyst.]

The shift to natural gas over coal is projected to continue.