

The Week That Was: 2019-02-09 (February 9, 2019)

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The Science and Environmental Policy Project

Quote of the Week: *“On specific energy and climate issues I’m guided by what the data tell me, not by claims made in the scientific literature. This is why you will find me disagreeing with most of the ‘consensus’ views on climate change but not all of them. My main concern for the future of my three grandchildren isn’t climate change, but that the misguided efforts of the people who want to save the world from it will leave them freezing in the dark.”* – Roger Andrews, RIP

Number of the Week: 1.4 million barrels per day (b/d)

THIS WEEK:

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

Roger Andrews RIP: On his web site, Manhattan Contrarian, Francis Menton has an excellent review of what Roger Andrews contributed to our understanding on how fanciful the plans of going 100% renewable are for electricity alone, not to mention the plans for total energy use. As Andrews discussed on several occasions, California is a good example because the California Independent System Operator (CAISO) provides solid data, and California is driving heavily into solar and wind, both requiring storage. TWTW has presented several discussions of the dreams of California politicians and academics as compared with real-life grid data.

Andrews addressed the storage requirements (battery storage was the flavor of the moment) for backing up increasing renewables as idealized by Prof. Mark Jacobson of Stanford University *et al.* Andrews demonstrated that Jacobson’s solution addressed about 1% of the problem. As more renewables come on-line, the California duck (which shows the need for rapid “ramp-up” by traditional sources to maintain grid stability) becomes more extreme; resulting in “ramp-up” that existing thermal and hydro balancing cannot handle. Further, fast ramp-ups will stress the heavy turbines in systems more efficient than simple jet engines, resulting in higher maintenance and shorter life-spans for equipment designed to last decades.

As discussed in the February 24, 2018 TWTW, Andrews demonstrated that preparing for storage needed for renewables requires more than examination of daily requirements; it requires examination of seasonal requirements that vastly exceed the daily requirements. The seasonal electricity droughts would be far more devastating for urbanized California than seasonal precipitation droughts. As Andrews stated:

“Now there’s no question that high levels of intermittent renewables generation will require fast-frequency-response capabilities to ensure grid stability during the day, but what is California doing about seasonal storage, which makes up 99% of its total storage problem?”

“Absolutely nothing. It has yet to recognize its existence.

“And the same goes for everyone else, including the UK, where proposed revisions to the energy storage market concentrate almost entirely on “fast frequency response” (I remember reading

somewhere that according to National Grid any storage exceeding 15 minutes in duration will be superfluous but can't find the reference)."

As discussed in the Nov 24, 2018, TWTW, Roger Andrews did a rough analysis on how much electricity would cost in California if the state goes 100% wind and solar using battery storage. Andrews calculated the total storage balance needed was 25,000 GWh (25 TWh), mainly from November through February. Andrews estimates that wind and solar electricity storage will cost about \$1,000/MWh. (About \$1.00/kWh wholesale, vs present-day 12 cents/kWh retail). These rough calculations have assumptions some may challenge.

Based on estimates by others, wind and solar would cost \$50/MWh without storage. The current EIA estimate of levelized cost of onshore wind is \$48/MWh. (Offshore wind is \$125/MWh; Solar PV \$59/MWh, Solar thermal is unknown). Compared with onshore wind alone, battery storage increases the cost of the electricity generation by 22-times (22-fold).

Without storage, when wind and solar fail, electricity in California would have to come from elsewhere. Unlike Germany, where wind and solar failures tend to somewhat balance out depending on the season, lessening storage costs; in California wind and solar tend to seasonally fail simultaneously.

These calculations go to the extremely important point that wind and solar promoters and many politicians ignore – the costs of reliable, consistent electricity to the consumer. The cost of wind or solar generation may come down, but the costs of storage are devastating. To shift the grid to wind and solar, major technological break-throughs are needed in storage. Deploying more wind and solar does not benefit the public until the storage issues are solved. See links under Challenging the Orthodoxy, <http://euanmearns.com/battery-storage-in-perspective-solving-1-of-the-problem/#more-21010>, <http://euanmearns.com/the-cost-of-wind-solar-power-batteries-included/> and https://www.eia.gov/outlooks/aeo/pdf/electricity_generation.pdf

Green New Deal? The latest fad to hit Washington is the Green New Deal. As linked below, there is already considerable criticism. TWTW will highlight a few points that are not broadly discussed.

It appears that the authors of the deal are as oblivious to the problems of electricity storage with solar and wind generation as are the politicians in California. The above discussion by Roger Andrews applies. Simply put, the proponents of the Green New Deal have no concept of the costs of electricity storage and ignore it. The costs of making electricity consistent and reliable are for someone else to pay – to be determined later.

A major element of the Green New Deal is high-speed rail. The founding fathers considered the several states should be a testing ground for which policies work and which do not. California is providing a good testing ground for high-speed rail. The bullet train between San Francisco and Los Angeles is located strictly within the state. Federal authority is not needed although it received over \$2.5 billion from the 2009 American Recovery and Reinvestment Act (ARRA), or stimulus bill.

The first section is being built in largely rural California from Bakersfield to Fresno with no major terrain obstacles at an initial cost estimate of about \$6 billion. The costs have increased by about \$5 billion and the project has been delayed by 3 years. It is difficult to get reliable numbers on the

actual costs. This segment has none of the difficulties of crossing mountains and going into major urban areas such as the Los Angeles basin. The total project costs are now over \$77 billion, which may be a major underestimate.

The problems with the train illustrate the lack of financial planning and expertise that green idealists have when they propose new plans. The Green New Deal appears to be an exploded version of the Stimulus Bill, ARRA, passed in February 2009 with an estimated cost of \$850 billion. It was claimed this ended the Great Recession in July 2009.

In 2008, the US national debt held by the public was about \$5 trillion, by 2014 it exceeded \$12 trillion (intergovernmental holdings also grew but by not as much). While the privately held national debt more than doubled in six years, the annual growth rate of the Gross Domestic Product (GDP) over the period averaged about 2%, which is considered economic stagnation by many economists. According to the Bureau of Labor Statistics, the 2014 unemployment rate was about 6% and falling at the end of the year. Fiscal stimulus bills dependent on government spending do not work as promoted.

The current GDP increase (2018 Q2 &3) is about 3.8%. The fourth quarter 2018 adjusted U-3 unemployment rate was 3.9 to 3.7%, the lowest levels since 1969. Labor participation rates are increasing, which is a positive economic sign. Many economists consider a U-3 of 4% to be “full employment.” (U-3 is the generally accepted statistic for unemployment rate.) A government spending stimulus is not needed to provide jobs. Even those who lack high school or college diplomas and are on the lower rungs of the economic ladder are finding jobs. One of the major justifications given by promoters for a green new deal does not exist.

To summarize, it appears that a Green New Deal is not needed economically, and it will be contrary to some of the benefits of the original new deal. The Federal Power Act of 1935 placed the interstate transmission of electrical power under Federal control and divided responsibilities for power into generation (local or federal); transmission (federal); and distribution (local). The burden of making electrical power reliable, consistent, and affordable falls under transmission and many federal, state, and local politicians are interfering with this important task.

Further, federal projects for rural electrification, including the Tennessee Valley Authority, Hoover Dam, Bonneville Power Authority (along the Columbia River) provided reliable, affordable central power from the grid. Rural electrification eliminated hundreds of localized “micro-grids” that were providing haphazard power to hundreds of thousands of people in rural areas, such as villages, towns, farms, and ranches. It appears that the Green New Deal is designed to do away with one of the benefits of the original New Deal. See links under Questioning Green Elsewhere, https://en.wikipedia.org/wiki/National_debt_of_the_United_States#/media/File:US_National_Debt_public_intergovernmental.png, <https://countryeconomy.com/gdp/usa?year=2018>, and <https://unemploymentdata.com/charts/current-unemployment-rate-chart/>

Predictions: The global climate models used by the Intergovernmental Panel on Climate Change (IPCC) have not been verified and validated, which requires extensive testing against real world data. The late Vincent Gray convinced the IPCC that it should not use the term *predictions* for the results of such models because the models have not been verified and validated. The IPCC changed the terminology from *predictions* to *projections*.

Critical US organizations should understand the need to test models rigorously. Yet, NASA- Jet Propulsion Laboratory distributed a release citing a study by JPL members claiming predictions from climate models. The lead author stated:

"Our results quantify and give a more visual meaning to the consequences of the predicted warming of the oceans," Aumann said. "More storms mean more flooding, more structure damage, more crop damage and so on, unless mitigating measures are implemented."

Perhaps the JPL should consider an appropriate disclaimer on publications by its employees. See links under Lowering Standards.

A Squabble? A group of 3400 academics from Belgium issued a manifesto on climate. This was rebutted by a Dutch group called the Dutch Climate Intelligence Foundation. Among the points made are:

- The earth is warming – nothing unusual
- 100% human caused – based on what evidence?
- Extreme weather events – not claimed by the IPCC
- Limiting climate change / (a.k.a) global warming is necessary – no proof of cause or need

Other issues involve the practicality of taking action at this time. The extent to which CO₂ is warming the planet is not known – the IPCC ignores the need to understand natural climate change, thus its estimates of the human influence are made with intentional ignorance.

Two other points are important:

- The greatest value of a scientist is his or her independence.
- In Belgium, the climate movement has now also started using children for their ideological cause. What children need to learn is to take a critical look at the facts.

See links under Challenging the Orthodoxy.

Grid-Scale Storage: In a publication by the Global Warming Policy Foundation, Jack Ponton addresses the issues of grid-scale storage of wind power and comes to similar conclusions similar to Roger Andrews's, discussed above. Ponton is Emeritus Professor of Engineering at the University of Edinburgh, a fellow of the Royal Academy of Engineering and of the Institution of Chemical Engineers (of which he is a past vice-president). His main research work was in mathematical modelling of complex engineering phenomena and software development. He has also worked in and with the chemical industry on a range of topics including health and safety issues. A further research interest has been renewable and alternative energy: wave power, biofuels, hydrogen, ocean thermal energy and coal gasification with carbon capture. Until recently he was not interested in wind power. He writes:

"The reason for this is that nearly forty years ago, a colleague and I carried out some simple calculations about the potential for wind power in the UK. We concluded that useful amounts of energy could not be obtained without covering most of the country with wind turbines. At the time we assumed that no-one would consider doing anything quite so foolish."

The technology is quite mature, so dramatic cost savings in greater production are unlikely. Haapala made similar calculations for Northern Virginia in replacing a then-coal fired-power plant serving the region with wind turbines. (The plant is now oil-fired and is being converted to natural gas.). The calculations demonstrate, all of close-in Northern Virginia (including Fairfax, Arlington, and Alexandria) would have to be covered by wind turbines, with tall buildings and trees removed. The type and cost of back-up were not considered.

Greenhouse Gas Effects in the Atmosphere. TWTW's discussion of greenhouse gas effects in the atmosphere last week produced interesting comments, including some on Anthony Watts's web site. Further discussion will be delayed to next week, to include why omission of the primary greenhouse gas, water vapor, distorts calculations of the effects of other greenhouse gases.

Number of the Week: 1.4 million barrels per day (b/d): According to a January Special Report by the US Energy Information Administration (EIA) as of May 2018 (the last month for which EIA has data), Venezuela's crude oil production was 1.4 million barrels per day (b/d). Venezuela's crude oil production has declined rapidly and has fallen to a 30-year low. Yet, as of January 2018, Venezuela had 302 billion barrels of proved oil reserves, the largest in the world.

In October and November of 2018, North Dakota produced 1.4 million barrels per day (b/d). North Dakota is the second largest producing state; Texas produced 4.8 million (b/d) in November. Government control of the oil fields has not served the people of Venezuela well. See <https://www.eia.gov/beta/international/analysis.php?iso=VEN> and https://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbldpd_m.htm

NEWS YOU CAN USE:

Science: Is the Sun Rising?

New paper connects upper stratospheric ozone changes to the solar cycle

By Anthony Watts, WUWT, Feb 4, 2019

<https://wattsupwiththat.com/2019/02/04/new-paper-connects-upper-stratospheric-ozone-changes-to-the-solar-cycle/>

Link to paper: The upper stratospheric solar cycle ozone response

By W.T. Ball, et al. Geophysical Research Letters, Jan 31, 2019

<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018GL081501>

Commentary: Is the Sun Rising?

Amidst Global Warming Hysteria, NASA Expects Global Cooling

By Mike Shedlock, Townhall, Jan 30, 2019

https://finance.townhall.com/columnists/mikeshedlock/2019/01/30/amidst-global-warming-hysteria-nasa-expects-global-cooling-n2540500?utm_source=thdaily&utm_medium=email&utm_campaign=nl&newsletterad=02/08/2019&bcid=600713400c5e414103c69dc935baaf47&recip=4143601

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>

Climate Change Reconsidered II: Fossil Fuels

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, Draft Summary for Policymakers, NIPCC, 2019

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

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, 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

World Cooling – But Rapid Warming Forecast

By David Whitehouse, GWPF, Feb 7, 2019

<https://www.thegwpf.com/world-cooling-but-rapid-warming-forecast/>

[SEPP Comment: Although the surface temperature trend is short term, the divergence between CO₂ and surface temperatures is revealing.]

The planet is no longer warming

Guest Post By Javier, WUWT, Feb 6, 2019

<https://wattsupwiththat.com/2019/02/06/the-planet-is-no-longer-warming/>

[SEPP Comment: IPCC claiming internal variability is less than +/- 0.1 degree C from 1951 to 2010, same as natural forcings! Also, it claims an observed warming of 0.6°C, greenhouse gas warming of about 0.9°C, with another human offset of 0.3°C.]

Dr. Willie Soon versus the Climate Apocalypse

More honesty and less hubris, more evidence and less dogmatism, would do a world of good

By Dr. Jeffrey Foss Canada Free Press, Dec 1, 2018

<https://canadafreepress.com/article/dr-willie-soon-versus-the-climate-apocalypse>

Polar bear lecture in Calgary coming up in April – book Friends of Science event now

By Susan Crockford, Polar Bear Science, Feb 3, 2019

<https://polarbearscience.com/2019/02/03/polar-bear-lecture-in-calgary-coming-up-in-april-book-friends-of-science-event-now/>

[SEPP Comment: The program includes SEPP director Willie Soon and is titled: “Polar Bears and Solar Flares.”]

PAGES2K (2017): Antarctic Proxies

By Steve McIntyre, Climate Audit, Feb 1, 2019

<https://climateaudit.org/2019/02/01/pages2k-2017-antarctic-proxies/>

[SEPP Comment: McIntyre unveiling a black hole in climate research used by the IPCC, thereby showing claims of Antarctic warming over the past two centuries was largely man-made (artificial).]

Climate Foundation Calls Belgian Manifesto By “3400 Academics” Alarmist, Pseudoacademic And Even Refuted By IPCC

By P Gosselin No Tricks Zone, Feb 2, 2019

<http://notrickszone.com/2019/02/02/climate-foundation-calls-belgian-manifesto-by-3400-academics-alarmist-unacademic-and-even-refuted-by-ipcc/>

Dutch Climate Intelligence Foundation Challenges Belgian Climate Alarmists

By Staff Writers, Dutch Climate Intelligence Foundation, Via GWPF, Feb 5, 2019

<https://www.thegwpf.com/dutch-climate-intelligence-foundation-challenges-belgian-climate-alarmists/>

Eulogy For Roger Andrews

By Francis Menton, Manhattan Contrarian, Feb 5, 2019

<https://www.manhattancontrarian.com/blog/2019-2-5-eulogy-for-roger-andrews>

Japan Winter Temperatures, Typhoons Both Defy Alarmist Predictions As 30-Year Trends Go The Other Way

By Kirye, No Tricks Zone, Feb 6, 2019

<http://notrickszone.com/2019/02/06/japan-winter-temperatures-typhoons-both-defy-alarmist-predictions-as-30-year-trends-go-the-other-way/>

Defending the Orthodoxy

Global Temperature in 2018 and Beyond

By James Hansen, Makiko Sato, Reto Ruedy, Gavin Schmidt, Ken Lo, Columbia edu. Feb 6, 2019

http://www.columbia.edu/~jeh1/mailings/2019/20190206_Temperature2018.pdf

“Earth’s energy imbalance, estimated to be currently $+0.75 \pm 0.25$ W/m², is the proximate cause of continued ocean warming and tends to dominate global surface temperature change on decadal and longer time scales. However, global surface temperature on shorter periods is affected by the rate of change of radiative forcings as well as the Southern Oscillation. We plan to write a Communication on this topic within several months, after the El Niño situation becomes clearer.”

[SEPP Comment: Extrapolating surface trends and ignoring atmospheric trends! Given earth’s internal variability, the authors cannot know the “earth’s energy imbalance.”]

The False Choice Between Economic Growth and Combatting Climate Change

By Carolyn Kormann, The New Yorker, Feb 4, 2019

<https://www.newyorker.com/news/news-desk/the-false-choice-between-economic-growth-and-combatting-climate-change>

[SEPP Comment: The real choice is believing what scientists predicted and what nature shows. Why should economic growth be sacrificed for false predictions?]

Michigan's New Governor Puts Climate Change at Heart of Government

Gretchen Whitmer created a new office of climate and energy and is the 20th governor to join the U.S. Climate Alliance, committing to the Paris climate principles.

By Dan Gearino, Inside Climate News, Feb 5, 2019

<https://insideclimatenews.org/news/05022019/michigan-whitmer-office-climate-change-energy-filnt-water-policies-climate-alliance>

Questioning the Orthodoxy

The Climate Scare: Ever More ShriII, Ever Less Serious

By Francis Menton, Manhattan Contrarian, Feb 7, 2019

<https://www.manhattancontrarian.com/blog/2019-2-7-the-climate-scare-ever-more-shriII-ever-less-serious>

Already a vintage year for climate claptrap

By Chris Morrison, The Conservative Woman, Feb 6, 2019 [H/t GWPF]

<https://www.conservativewoman.co.uk/already-a-vintage-year-for-climate-claptrap/>

Climate Change Friendly “Clean Gas” Movement Gathers Momentum

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

<https://wattsupwiththat.com/2019/02/03/climate-change-friendly-clean-gas-movement-gathers-momentum/>

After Paris!

52 coal mines opened in 5 years to fuel power drive

By Sanjay Dutta, The Times of India, Jan 23, 2018 [H/t GWPF]

<https://timesofindia.indiatimes.com/india/government-opened-52-coal-mines-to-fuel-pm-narendra-modis-electrification-drive/articleshow/67646776.cms>

[SEPP Comment: Rural electrification is occurring.]

India ramps up spending on coal exploration as it slashes funds for mine safety

By Sudarshan Varadhan, Reuters, Feb 1, 2019 [H/t GWPF]

<https://finance.yahoo.com/news/india-ramps-spending-coal-exploration-164148471.html>

China’s Thermal Generation Rose 7.2% In 2018

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

<https://notalotofpeopleknowthat.wordpress.com/2019/02/05/chinas-thermal-generation-rose-7-2-in-2018/>

Link to source: China Energy Portal

Tracking China's transition to sustainable energy | Powered by crowdsourced translation

By Staff Writers, Unofficial, Jan 25, 2019

<https://chinaenergyportal.org/en/2018-electricity-other-energy-statistics/>

China's greenhouse gas emissions rising, undermining Xi's climate push

By Ben Wescott, CNN, Jan 30, 2019 [H/t GWFP]

<https://edition.cnn.com/2019/01/30/asia/china-coal-emissions-climate-change-intl/index.html>

Link to paper: China’s coal mine methane regulations have not curbed growing emissions

By Scott Miller, et al. Nature Communications, Jan 29, 2019

<https://www.nature.com/articles/s41467-018-07891-7>

Change in US Administrations

Trump picks World Bank skeptic David Malpass to lead institution

The Treasury official previously said global organizations like the World Bank ‘have grown larger and more intrusive.’

By Victoria Guida and Ben White, Politico, Feb 5, 2019

<https://www.politico.eu/article/donald-trump-picks-world-bank-skeptic-david-malpass-to-lead-institution/>

Trump admin seeks to roll back light bulb efficiency rule

By Timothy Cama, The Hill, Feb 6, 2019

<https://thehill.com/policy/energy-environment/428832-trump-admin-seeks-to-roll-back-light-bulb-efficiency-rule>

[SEPP Comment: When the efficiency standards were first considered, the probable replacements for incandescent bulbs were compact fluorescent lights. According to eye doctors, fluorescents are harder on human eyes than incandescent bulbs. Although highly efficient, LED lights were not generally available and had significantly higher prices. Thanks to continued research, the costs of LED lights have declined significantly and earlier issues of blue light have been solved. Although more expensive than incandescent, LED lights are not as hard on the eyes as florescent and a better alternative than compact florescent lights implied in previous government regulations. For large-scale institutional use, including office buildings, tube fluorescents will not be replaced for many years.]

Seeking a Common Ground

Climate hypochondria and tribalism vs. ‘winning’

By Judith Curry, Climate Etc. Feb 7, 2019

<https://judithcurry.com/2019/02/07/climate-hypochondria-and-tribalism-vs-winning/#more-24715>

Calling It A ‘War On Science’ Has Consequences

By ACSH Staff, Feb 6, 2019

<https://www.acsh.org/news/2019/02/06/calling-it-%E2%80%98war-science%E2%80%99-has-consequences-13789>

“In order to have a positive impact, the science community cannot rely on aggressive communication tactics. Science needs continuous and broad support, across the ideological spectrum, to engage in research and discovery and to see that these discoveries are put to use.”

[SEPP Comment: A problem arising from the failure to distinguish between ideological beliefs and procedures for understanding nature. These problems are amplified by the willingness of some to engage in personal attacks on the credibility of their opponents by using false or exaggerated claims. The article tries to assess the impact of aggressive language among different political groups.]

Review of Recent Scientific Articles by CO2 Science

Transgenerational Acclimation to Warming of a Reef Fish

Ryu, T., Veilleux, H.D., Donelson, J.M., Munday, P.L. and Ravasi, T. 2018. The epigenetic landscape of transgenerational acclimation to ocean warming. *Nature Climate Change* 8: 504-509. Feb 8, 2019

<http://www.co2science.org/articles/V22/feb/a5.php>

“Given such findings, it is becoming ever so clear that predictions of widespread animal extinctions due to global warming are unlikely to occur. Millions of years of evolution have given them the inherent ability to adapt to almost any environmental change they could realistically face.”

A CO2-Induced Enhancement of Peatland Carbon Sequestration

Newman, T.R., Wright, N., Wright, B. and Sjögersten, S. 2018. Interacting effects of elevated atmospheric CO₂ and hydrology on the growth and carbon sequestration of Sphagnum moss. *Wetlands Ecology and Management* 26: 763-774. Feb 7, 2019
<http://www.co2science.org/articles/V22/feb/a4.php>

Improved Water Use of Four Desert Species Under Elevated CO₂

Li, Q., Lai, L., Zhou, J., Du, H., Guan, T., Zhang, X., Jiang, L., Zheng, Y., Yu, Y., Gao, Y., An, P. and Shimizu, H. 2018. Differential influence of elevated CO₂ on gas exchange and water use efficiency of four indigenous shrub species distributed in different sandy environments in central Inner Mongolia. *Ecological Research* 33: 863-871. Feb 6, 2019
<http://www.co2science.org/articles/V22/feb/a3.php>

The Impact of Diurnal Temperature Range on Stroke Mortality in China

Yang, J., Zhou, M., Li, M., Yin, P., Wang, B., Pilot, E., Liu, Y., van der Hoek, W., van Asten, L., Krafft, T. and Liu, Q. 2018. Diurnal temperature range in relation to death from stroke in China. *Environmental Research* 164: 669-675. Feb 4, 2019
<http://www.co2science.org/articles/V22/feb/a2.php>

Measurement Issues -- Surface

Early 20th Century Warming – Polar Amplification, Model-Data & Model-Model Comparisons

A Guest Post By Bob Tisdale, WUWT, Feb 6, 2019

<https://wattsupwiththat.com/2019/02/06/early-20th-century-warming-polar-amplification-model-data-model-model-comparisons/>

Met Office Try To Hide Forecast Fail

By Paul Matthews, Climate Scepticism, Feb 6, 2019 [H/t Paul Homewood]

<https://cliscep.com/2019/02/06/met-office-try-to-hide-forecast-fail/>

“One thing to notice is that the Met Office has done some major goalpost-moving, switching the baseline from 1981-2010 to 1850-1900, which makes comparisons difficult, but if you compare the two you can easily see that the observations line in the 2019 graph (there are two of them, it’s not explained why or what they are) would fall out of the blue region of the 2016 forecast.

“With a bit of image blending, it’s fairly easy to confirm this:”

2018 officially ranks as the 4th hottest year on record for Earth

By Amanda Schmidt, AccuWeather staff writer, Feb 6, 2019

<https://www.accuweather.com/en/weather-news/2018-becomes-fourth-warmest-year-on-record-nasa-noaa-report/70007362>

Link to NOAA report: Assessing the Global Climate in 2018

For the globe, 2018 becomes fourth warmest year on record

By Staff Writers, NOAA National Centers for Environmental Information, Feb 6, 2019

<https://www.ncei.noaa.gov/news/global-climate-201812>

[SEPP Comment: Interestingly, NOAA does not show surface temperatures for the polar regions where there are no thermometers, NASA-GISS does. NOAA states: “Please Note: Gray areas represent missing data.” In most of these areas NASA-GISS generally shows warming. Also, NASA-GISS shows surface cooling of the Antarctic, where satellite atmospheric trends show warming.]

2018 Temperature Prediction Competition: We Have a Winner!

By Staff Writers, GWPF, Feb 8, 2019

<https://www.thegwpf.com/2018-temperature-prediction-competition-we-have-a-winner/>

“The average prediction by GWPF readers was 0.59°C, and the median was 0.63°C. GWPF readers therefore did quite a lot better than the paid experts at the Met Off.”

Reassessing Model Projections for Hot Days from RCPs –

An Aussie Perspective

Guest Blogger B Basil Beamish, WUWT, Feb 4, 2019

<https://wattsupwiththat.com/2019/02/04/reassessing-model-projections-for-hot-days-from-rcps/>

Changing Weather

Australia’s Record Hot January: Mostly Weather, Not Climate Change

By Roy Spencer, His Blog, Feb 4, 2019

<http://www.drroyspencer.com/2019/02/australias-record-hot-january-mostly-weather-not-climate-change/>

Six weeks ago Australian Met Bureau predicted a dry month for Townsville

By Jo Nova, Her Blog, Feb 7, 2019

<http://joannenova.com.au/2019/02/six-weeks-ago-australian-met-bureau-predicted-a-dry-month-for-townsville/>

See link immediately below.

Townsville floods again: 1881, 1892, 1946 and 1953. It’d be climate change if it stopped flooding

By Jo Nova, Her Blog, Feb 6, 2019

<http://joannenova.com.au/2019/02/townsville-floods-again-1881-1892-1946-and-1953-itd-be-climate-change-if-it-stopped-flooding/>

See link immediately above.

Vortices Of Controversy...Experts Slam Polar Vortex-Global Warming Claim, Suggest Public Trickery

Cold in the USA: That’s got to be climate change, right?

By Die kalte Sonne (German text translated/edited in the English by P Gosselin), No Tricks Zone, Feb 3, 2019

<http://notrickszone.com/2019/02/03/polar-vortex-of-controversy-experts-slam-polar-vortex-global-warming-claim-suggest-public-trickery/>

Changing Climate

Leading German Geologist Calls Notion Of “Climate Tipping Points” Scientific Hype By Opportunistic Scientists

By P. Gosselin, No Tricks Zone, Feb 5, 2019

<http://notrickszone.com/2019/02/05/leading-german-geologist-calls-notion-of-climate-tipping-points-scientific-hype-by-opportunistic-scientists/>

Study shows that Vikings enjoyed a warmer Greenland

By Staff Writers, Evanston IL (SPX) Feb 07, 2019

http://www.spacedaily.com/reports/Study_shows_that_Vikings_enjoyed_a_warmer_Greenland_999.html

Link to paper: Medieval warmth confirmed at the Norse Eastern Settlement in Greenland
By G. Everett Lasher and Yarrow Axford, *Geology*, Feb 6, 2019

<https://pubs.geoscienceworld.org/gsa/geology/article-abstract/568708/medieval-warmth-confirmed-at-the-norse-eastern>

[SEPP Comment: The study is based on aquatic insect traces in lake sediments.]

How predatory plankton created modern ecosystems after 'Snowball Earth'

By Staff Writers, Munich, Germany (SPX) Feb 04, 2019

http://www.spacedaily.com/reports/How_predatory_plankton_created_modern_ecosystems_after_Snowball_Earth_999.html

Link to paper: Bisnorgammacerane traces predatory pressure and the persistent rise of algal ecosystems after Snowball Earth

By Lennart M. van Maldegem, et al. *Nature, Communications*, Jan 29, 2019

<https://www.nature.com/articles/s41467-019-08306-x>

Lost ice age found in the African desert

By Staff Writers, Morgantown WV (SPX), Feb 05, 2019

http://www.spacedaily.com/reports/Lost_ice_age_found_in_the_African_desert_999.html

First description of subglacial megalineations from the late Paleozoic ice age in southern Africa

By Graham Andrews, et al. *Plos One*, Jan 30, 2019

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0210673>

Changing Seas

Sea level rise whiplash

By Judith Curry, *Climate Etc.* Feb 8, 2019

<https://judithcurry.com/2019/02/08/sea-level-rise-whiplash/>

Study: Climate change will alter ocean colors by 2100

By John Bowden, *The Hill*, Feb 5, 2019

<https://thehill.com/policy/energy-environment/428485-study-climate-change-will-alter-ocean-colors-by-2100>

Link to paper: Ocean colour signature of climate change

By Stephanie Dutkiewicz, et al. *Nature Communications*, Feb 4, 2019

<https://www.nature.com/articles/s41467-019-08457-x>

[SEPP Comment: Does not define what is meant by climate change. Apparently, the argument is that warming will slow ocean circulation.]

Oyster Evidence Affirms Sea Levels Were Up To 3.8 Meters Higher Than Today 6000 Years Ago

By Kenneth Richard, *No Tricks Zone*, Feb 7, 2019

<http://notrickszone.com/2019/02/07/oyster-evidence-affirm-sea-levels-were-up-to-3-8-meters-higher-than-today-6000-years-ago/>

Link to paper: Relative sea-level highstands in Thailand since the Mid-Holocene based on 14C rock oyster chronology

By G.J.H. Oliver and J.P. Terry, *Palaeogeography, Palaeoclimatology, Palaeoecology*, March 2019

<https://www.sciencedirect.com/science/article/pii/S0031018218306023>

[SEPP Comment: Has the land been rising?]

Changing Cryosphere – Land / Sea Ice

Fake News about Holes in Antarctic Glaciers

By Brian C. Joondeph, American Thinker, Feb 7, 2019

https://www.americanthinker.com/articles/2019/02/fake_news_about_holes_in_antarctic_glaciers.html

“CNN is breathless over a ‘Gigantic hole two-thirds the size of Manhattan discovered in Antarctic glacier.’”

[SEPP Comment: For New Yorkers, Manhattan is one-half the continent?]

Scientists: W. Antarctica’s Thwaites Glacier Is NOT Melting Due To A Progressively Warming Climate

By Kenneth Richard, No Tricks Zone, Feb 4, 2019

<http://notrickszone.com/2019/02/04/scientists-w-antarctic-thwaites-glacier-is-not-melting-due-to-a-progressively-warming-climate/>

Antarctic meltwater streams shed light on longstanding hydrological mystery

By Staff Writers, Boulder CO (SPX) ,Feb 04, 2019

http://www.spacedaily.com/reports/Antarctic_meltwater_streams_shed_light_on_longstanding_hydrological_mystery_999.html

Link to paper: Transit Times and Rapid Chemical Equilibrium Explain Chemostasis in Glacial Meltwater Streams in the McMurdo Dry Valleys, Antarctica

A. N. Wlostowski, M. N. Gooseff, D. M. McKnight and W. B. Lyons, Geophysical Research Letters, Nov 30, 2018

<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018GL080369>

Report: Himalayans could lose third of its glaciers by 2100

By Aris Folley, The Hill, Feb 5, 2019

<https://thehill.com/policy/energy-environment/428471-himalayans-could-lose-third-of-its-glaciers-to-rising-temperatures>

Link to report: The Hindu Kush Himalaya Assessment: Mountains, Climate Change, Sustainability and People

Editors, Philippus Wester, et al. International Centre for Integrated Mountain Development (ICIMOD), 2019

<https://link.springer.com/book/10.1007%2F978-3-319-92288-1>

“The report also assessed that the region could suffer a temperature increase by up to 8 degrees Fahrenheit if leading climate change targets aren’t met.

“‘This is a climate crisis you have not heard of,’ Philippus Wester, one of the study’s lead authors, told The New York Times on Monday.”

Changing Earth

Revising the history of big, climate-altering volcanic eruptions

By Anthony Watts, WUWT, Feb 6, 2019

<https://wattsupwiththat.com/2019/02/06/revising-the-history-of-big-climate-altering-volcanic-eruptions/>

Agriculture Issues & Fear of Famine

Recognition of Important Work and implications For Climate Change and Society.

Guest Opinion: Dr. Tim Ball, WUWT, Feb 3, 2019

<https://wattsupwiththat.com/2019/02/03/recognition-of-important-work-and-implications-for-climate-change-and-society/>

Soil: The Invaluable Resource That Underscores Urban/Rural Disconnect. Part 1.

By Tim Ball, Digital Management, Feb 5, 2019

<http://drtimball.ca/2019/soil-the-invaluable-resource-that-underscores-urban-rural-disconnect-part-1/>

Un-Science or Non-Science?

Melting ice sheets may cause 'climate chaos' according to new modelling

By Staff Writers, Montreal, Canada (SPX) Feb 07, 2019

http://www.spacedaily.com/reports/Melting_ice_sheets_may_cause_climate_chaos_according_to_new_modelling_999.html

Global environmental consequences of twenty-first-century ice-sheet melt

By Nicholas Golledge, et al., Nature, Feb 6, 2019

<https://www.nature.com/articles/s41586-019-0889-9>

From the abstract: “Government policies currently commit us to surface warming of three to four degrees Celsius above pre-industrial levels by 2100, which will lead to enhanced ice-sheet melt.”

Matt McGrath Bangs His Global Warming Drum-But Is Anybody Listening?

By Paul Homewood, Not a Lot of People Know That, Feb 8, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/02/08/matt-mcgrath-bangs-his-global-warming-drum-but-is-anybody-listening/>

BBC Headline: “Climate change: World heading for warmest decade, says Met Office”

Lowering Standards

Warming Seas May Increase Frequency of Extreme Storms

By Staff Writers, NASA-Jet Propulsion Laboratory, Jan 28, 2019

<https://www.jpl.nasa.gov/news/news.php?feature=7319>

Link to paper: Increased Frequency of Extreme Tropical Deep Convection: AIRS Observations and Climate Model Predictions

By Hartmut H. Aumann, Ali Behrangi, and Yuan Wang, Geophysical Research Letters, Dec 3, 2018

<https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2018GL079423>

AAAS Runs Dishonest Glyphosate Story, Then Deletes It. Is Politics To Blame?

By Alex Berezow, ACSH, Feb 5, 2019

<https://www.acsh.org/news/2019/02/05/aaas-runs-dishonest-glyphosate-story-then-deletes-it-politics-blame-13786>

Communicating Better to the Public – Make things up.

Climate change spreads AIDS

By Jo Nova, Her Blog, Feb 3, 2019

<http://joannenova.com.au/2019/02/climate-change-spreads-aids/>

“It all goes to show that climate change is the most useless phrase in the English language.”

Communicating Better to the Public – Go Personal.

John Christy: Guilty as Charged (DeSmogBlog’s air ball)

By Robert Bradley Jr. Master Resource, Feb 5, 2019

<https://www.masterresource.org/christy-john-climate-scientist/christy-desmogblog/>

Oreskes et al. amicus brief to CA global warming lawsuits implodes

By Anthony Watts and Guest Russell Cook, WUWT, Feb 8, 2019

<https://wattsupwiththat.com/2019/02/08/oreskes-et-al-amicus-brief-to-ca-global-warming-lawsuits-implodes/>

Communicating Better to the Public – Use Propaganda on Children

Kids in climate lawsuit ask to block fossil fuel production on federal land

By Timothy Cama, The Hill, Feb 8, 2019

<https://thehill.com/policy/energy-environment/429105-kids-in-climate-lawsuit-ask-to-block-fossil-fuel-production-on>

Expanding the Orthodoxy

UN Has No Authority Over Me – But Is Working Hard to Change That

By Donna Laframboise, Big Picture News, Feb 4, 2019

<https://nofrackingconsensus.com/2019/02/04/un-has-no-authority-over-me-but-is-working-hard-to-change-that/>

What Happens When We Sign a UN Treaty?

By Donna Laframboise, Big Picture News, Feb 6, 2019

<https://nofrackingconsensus.com/2019/02/06/what-happens-when-we-sign-a-un-treaty/>

“...the committees that monitor UN treaties distort the democratic self-governing process...[they] are foreign political actors, existing outside the legally constituted democratic framework...they take sides within a democratic system of which they are not part, in a type of asymmetric political warfare.”

Questioning European Green

Germany’s Power Grid Overhaul to Cost Billions More Than Expected

By Brian Parkin, Bloomberg, Feb 4, 2019

<https://www.bloomberg.com/news/articles/2019-02-04/germany-s-power-autobahns-will-cost-billions-more-than-expected>

“Network cost may rise more than 50 percent to \$59 billion

“Upgrade needed as Merkel seeks 65% share for green power

“Grid upgrade expenses are tacked on to consumers’ bills.”

New, No-Growth Proposal with “Earth Overshoot Day”

By Donn Dears, Power For USA, Feb 8, 2019

<http://ddears.com/2019/02/08/new-no-growth-proposal-with-earth-overshoot-day/>

[SEPP Comment: *The world will not be perfect until we return to substance living for all but me?*]

Members of the CCC

By Paul Homewood, Not a Lot of People Know That, Feb 7, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/02/07/members-of-the-ccc/>

The CCC is supposed to offer *independent advice to government on building a low-carbon economy and preparing for climate change*, but this is plainly not possible given its current set up.” [Italics in original]

Questioning Green Elsewhere

Green New Deal: The Secret Republican Weapon?

By Kimberley Strassel, WSJ, Via GWPF, Feb 8, 2019

<https://www.thegwpf.com/green-new-deal-the-secret-republican-weapon/>

The Same Old Deal

By The Editors, National Review, Feb 8, 2019

<https://www.nationalreview.com/2019/02/green-new-deal-left-has-only-one-idea-control/>

Green New Deal Would Barely Change Earth's Temperature. Here Are the Facts.

By Nicolas Loris, Daily Signal, Feb 7, 2019

<https://www.dailysignal.com/2019/02/07/green-new-deal-would-barely-change-earths-temperature-here-are-the-facts/>

“Don’t worry, though. These Green New Deal proponents do admit they can’t quite get everything done in 10 years. According to the FAQ sheet:

‘ We set a goal to get to net-zero, rather than zero emissions, in 10 years because we aren’t sure that we’ll be able to fully get rid of farting cows and airplanes that fast, but we think we can ramp up renewable manufacturing and power production, retrofit every building in America, build the smart grid, overhaul transportation and agriculture, plant lots of trees and restore our ecosystem to get to net-zero.’”

The 10 Most Insane Requirements Of The Green New Deal

By David Harsanyi, ICECAP, Feb 8, 2019

http://icecap.us/index.php/go/political-climate/the_10_most_insane_requirements_of_the_green_new_deal/

The Green New Deal is a leftist politician’s worst enemy

By David Wojick, C-Fact, Feb 8, 2019

<http://www.cfact.org/2019/02/08/the-green-new-deal-is-a-politicians-worst-enemy/>

Funding Issues

End the US Stranglehold on the World Bank

By Jesse Griffiths, Project Syndicate, Feb 7, 2019

<https://www.project-syndicate.org/commentary/trump-malpass-world-bank-president-by-jesse-griffiths-2019-01>

[SEPP Comment: Is the politicized World Bank needed?]

The Political Games Continue

Hearing – Climate Change: The Impacts and the Need to Act

By Judith Curry, Climate Etc. Feb 6, 2019

<https://judithcurry.com/2019/02/06/hearing-climate-change-the-impacts-and-the-need-to-act/#more-24706>

House Democrats Held the First Climate Change Hearings in Six Years. It Was a Mess

By Michael Bastasch, Daily Caller, Feb 6, 2019

<https://dailycaller.com/2019/02/06/house-democrats-climate-hearings/>

“Top House Democrats finally got their wish to hold the first hearings on global warming in six years Wednesday, but both committee hearings meandered into discussions of civil rights, race and apocalyptic warnings without much talk about science.”

House Climate Hearing off to Bad Start

By Marlo Lewis, Competitive Enterprise Institute, Feb 6, 2019

<https://cei.org/blog/house-climate-hearing-bad-start>

Record Lobster Production Defies Alarmist Climate Scare

Guest essay by James Taylor, WUWT, Feb 8, 2019

<https://wattsupwiththat.com/2019/02/08/record-lobster-production-defies-alarmist-climate-scare/>

“On February 7, Democrats in the House Natural Resources Subcommittee on Water, Oceans, and Wildlife held hearings with the purpose of raising concern about global warming. Democrats called a witness from a Massachusetts lobster association claiming global warming is reducing the number and availability of lobsters to harvest in New England, specifically in the Gulf of Maine. The witness claimed that ocean acidification is making it more difficult for lobsters to calcify their shells and reach maturity.”

Litigation Issues

Court to reconsider ordering EPA to ban pesticide

By Timothy Cama, The Hill, Feb 7, 2019

<https://thehill.com/policy/energy-environment/429042-court-to-reconsider-ordering-epa-to-ban-pesticide>

Cap-and-Trade and Carbon Taxes

The Basic Reason Carbon Taxes Are a Bad Idea

By Alan Carlin, Carlin Economics and Science, Feb 8, 2019

<http://www.carlineconomics.com/archives/4849>

“Government taxation should be designed to minimize its adverse effects on the economy, not maximize these effects.”

Carbon Taxes: A Letter from Canada

Promises of revenue neutrality don't survive contact with the real world.

By Peter Shawn Taylor, National Review, Feb 8, 2019 [H/t Cooler Heads]

<https://www.nationalreview.com/2019/02/carbon-taxes-lessons-from-canada/>

Why I Won't Sign Onto Climate Leadership Council's Plan

By Economist Charles Steele, Real Clear Energy, Feb 6, 2019

https://www.realclearenergy.org/articles/2019/02/06/why_i_wont_sign_on_to_climate_leadership_councils_plan_110390.html

EPA and other Regulators on the March

EPA polluter enforcement hit historic lows in 2018

By Timothy Cama and Maranda Green, The Hill, Feb 8, 2019

<https://thehill.com/policy/energy-environment/429184-epa-polluter-enforcement-hit-historic-lows-in-2018>

[SEPP Comment: Is the purpose of the EPA to protect the public from known threats, or to level fines for violating imaginary threats?]

Energy Issues – Non-US

Western Europe Power Mix In January

By Paul Homewood, Not a Lot of People Know That, Feb 8, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/02/03/western-europe-power-mix-in-january/#more-37509>

[SEPP Comment: Hydro 15%, Coal 12%, Gas 21%, Nuclear 29% totalling 77%. Time to turn these off?]

Jim Ratcliffe: Government is using 'slippery' manoeuvres to kill off British fracking

By August Graham, City A.M. Feb 4, 2019 [H/t GWPF]

<http://www.cityam.com/272673/jim-ratcliffe-government-using-slippery-manoevres-kill-off>

Tony Lodge: Britain Must Build More Gas Power Plants Now

By Tony Lodge, The Times, Via GWPF, Feb 4, 2019

<https://www.thegwpf.com/more-gas-power-plants-now/>

Cottam Coal Power Station To Close

By Paul Homewood, Not a Lot of People Know That, Feb 7, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/02/07/cottam-coal-power-station-to-close/>

“Cottam is rated at 2000MW, so will take a large chunk out of the current 13000MW of coal fired capacity.”

Britain's Reliance On Gas

By Paul Homewood, Not a Lot of People Know That, Feb 7, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/02/07/britains-reliance-on-gas/>

Breaking Germany's Coal Addiction

By Johan Rockström and Owen Gaffney, Project Syndicate, Feb 7, 2019

<https://www.project-syndicate.org/commentary/germany-coal-deadline-climate-change-by-johan-rockstr-m-and-owen-gaffney-2-2019-02>

[SEPP Comment: The two experts from the Potsdam Institute for Climate Impact Research fail to address the glaring issue: What is sustainable about electricity generation that is unreliable and inconsistent?]

France Moves to Halt Russia's Nord Stream 2 Gas Pipeline

By Staff Writers, The Times, Via GWPF, Feb 8, 2019

<https://www.thegwpf.com/france-moves-to-halt-russias-nord-stream-2-gas-pipeline/>

Drill, China, drill: State majors step on the gas after Xi calls for energy security

By Chen Aizhu, Meng Meng, Reuters, Feb 1, 2019 [H/t GWPF]

<https://www.reuters.com/article/us-china-oil-exploration-analysis/drill-china-drill-state-majors-step-on-the-gas-after-xi-calls-for-energy-security-idUSKCN1PQ3PO>

Energy Issues – Australia

Legally it's the wrong time? Coal mine rejected by judge who hopes to change weather

By Jo Nova, Her Blog, Feb 9, 2019

<http://joannenova.com.au/2019/02/legally-its-the-wrong-time-coal-mine-rejected-by-judge-who-hopes-to-change-weather/#more-62557>

“Sometimes we have laws, and sometimes it's the wrong time for them”

Energy Issues -- US

Microgrids

By Donn Dears, Power For USA, Feb 5, 2019
<http://ddears.com/2019/02/05/microgrids/>

America Just Witnessed A Miracle — Energy Independence

By Allen Fuller, IBD, Feb 7, 2019
<https://www.investors.com/politics/commentary/energy-independence-fracking-u-s/>

Oil industry's future not as bright as government expects

By Chris Tomlinson, Houston Chronicle, Feb 4, 2019
<https://www.houstonchronicle.com/business/columnists/tomlinson/article/Oil-industry-s-future-not-as-bright-as-13579097.php>

As Westchester [NY] Clamors for Gas, ConEd Wants Others to Cut Back

By Jim Efstathiou Jr, Bloomberg, Feb 7, 2019 [H/t Cooler Heads]
<https://www.bloomberg.com/news/articles/2019-02-07/as-n-y-s-rich-clamor-for-gas-coned-wants-customers-on-a-diet>

Oil and Natural Gas – the Future or the Past?

Who Will Feed The LNG Monster?

By Robert Rapier, Forbes, Feb 6, 2019
<https://www.forbes.com/sites/rrapier/2019/02/06/who-will-feed-the-lng-monster/#42683e5e6a4e>
[SEPP Comment: Are the EIA projections of LNG exports overly optimistic?]

For sale in Texas: natural gas at record low price

By Scott DiSavino, Reuters, Feb 5, 2019
<https://www.reuters.com/article/us-natgas-waha-pipelines/for-sale-in-texas-natural-gas-at-record-low-price-idUSKCN1PU1V9>

Exxon plans \$10 billion Texas natural gas export terminal

By Timothy Cama, The Hill, Feb 5, 2019
<https://thehill.com/policy/energy-environment/428557-exxon-plans-10-billion-texas-natural-gas-export-terminal>

Everglades open for oil drilling after court ruling

A Tallahassee appeals court reversed a decision by the state's Department of Environmental Protection Tuesday, ultimately granting Kanter Real Estate the authority to drill.

By Samantha Gross, Tampa Bay Times, Feb 5, 2019
<http://www.tampabay.com/florida-politics/buzz/2019/02/05/everglades-open-for-oil-drilling-after-court-ruling/>

Bank Of America: Oil Demand Growth To Hit Zero Within A Decade

By Nick Cunningham, Oil Price.com, Feb 5, 2019
<https://oilprice.com/Energy/General/Bank-Of-America-Oil-Demand-Growth-To-Hit-Zero-Within-A-Decade.html>

[SEPP Comment: Doing nothing creates a stable oil use? Why do anything?]

China En Route To Being World's Largest LNG Market

By Paul Homewood, Not a Lot of People Know That, Feb 8, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/02/08/china-en-route-to-being-worlds-largest-lng-market/>

Alternative, Green (“Clean”) Solar and Wind

Wind Power Stats Reveal 2018 Was a Huge Year, and There's More to Come

It's off to a flying start.

By Mike Brown, Inverse, Feb 5, 2019

<https://www.inverse.com/article/53029-wind-power-stats-reveal-2018-was-a-huge-year-and-there-s-more-to-come>

Link to report: Renewable Energy Could "Effectively Be Free" by 2030, Says UBS Analyst
Cheap, clean energy is the way of the future for industry.

By Josie Rhodes Cook, inverse, Aug 13, 2019

<https://www.inverse.com/article/48017-by-2030-renewable-energy-costs-will-be-effectively-zero-says-ubs-researcher>

[SEPP Comment: No discussion on who pays the costs of making this unreliable and erratic source reliable and stable, useful for modern civilization.]

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

The Obvious Biomass Emissions Error

By Steve Goreham, Before It's News, Feb 6, 2019

<https://beforeitsnews.com/v3/environment/2019/2595459.html>

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

Can Grid-Scale Storage Solve The Intermittency Problem?

By Paul Homewood, Not a Lot of People Know That, Feb 7, 2019

<https://notalotofpeopleknowthat.wordpress.com/2019/02/07/can-grid-scale-storage-solve-the-intermittency-problem/>

Link to paper: Grid-Scale Storage: Can it solve the intermittency problem?

By Jack Ponton, GWPF, 2018

https://www.thegwpf.org/content/uploads/2019/02/GridStorageWeb-1.pdf?utm_source=CCNet+Newsletter&utm_campaign=eb36f45324-EMAIL_CAMPAIGN_2019_02_07_10_28_COPY_01&utm_medium=email&utm_term=0_fe4b2f45ef-eb36f45324-20144013

Alternative, Green (“Clean”) Vehicles

AAA: Cold weather can cut electric car range over 40 percent

By Tom Krisher, AP, Feb 7, 2019

<https://www.apnews.com/04029bd1e0a94cd59ff9540a398c12d1>

“At 20 degrees, the average driving range fell by 12 percent when the car’s cabin heater was not used. When the heater was turned on, the range dropped by 41 percent, AAA said.”

[SEPP Comment: The article does not discuss use of air conditioners in summer, which apparently are not as severe in reducing range as heating in cold weather.]

Good Night BONJOUR

By Klaus L.E. Kaiser, Australian Climate Sceptics Blog, Feb 3, 2019

<http://theclimatescepticsparty.blogspot.com/2019/02/good-night-bonjour.html>

[SEPP Comment: Did the cold do the Quebec company in?]

Health, Energy, and Climate

Health Literacy: Understanding The Physician's Explanations Are A Big Problem

By Chuck Dinerstein, ACSH, Feb 5, 2019

<https://www.acsh.org/news/2019/02/05/health-literacy-understanding-physicians-explanations-are-big-problem-13785>

Other Scientific News

Magnetic north pole leaves Canada, on fast new path

By Staff Writers, Washington (AFP), Feb 5, 2019

http://www.gpsdaily.com/reports/Magnetic_north_pole_leaves_Canada_on_fast_new_path_999.html

Some Bacteria Can Eat Cleaning Products

By Ada McVean, ACSH, Feb 6, 2019

<https://www.acsh.org/news/2019/02/06/some-bacteria-can-eat-cleaning-products-13791>

Researchers investigate a billion years of coexistence between plants and fungi

By Staff Writers, Blacksburg VA (SPX) Feb 07, 2019

http://www.terraily.com/reports/Researchers_investigate_a_billion_years_of_coexistence_between_plants_and_fungi_999.html

Link to paper: Contemporaneous radiations of fungi and plants linked to symbiosis

By François Lutzoni, Nature Communications, Dec 21, 2018

<https://www.nature.com/articles/s41467-018-07849-9>

Other News that May Be of Interest

Empty Planet: The Shock of Global Population Decline

By David Goodhart, The Sunday Times, Via GWPF, Feb 4, 2019

<https://www.thegwpf.com/empty-planet-the-shock-of-global-population-decline/>

Limiting human interactions with predatory mammals in Florida

By Bill Balgord, Treasure Coast Palm, Feb 5, 2019

<https://www.tcpalm.com/story/opinion/contributors/2019/02/05/limiting-human-interactions-predatory-mammals-florida/2768268002/>

Peter Foster: Climate activists cheer corporate ‘carbon disclosures’ — and regular investors get burned

PG&E has been the very model of climate concern. Fat lot of good it seems to have done them

By Peter Foster, Financial Post, Feb 5, 2019

<https://business.financialpost.com/opinion/peter-foster-climate-activists-cheer-corporate-carbon-disclosures-and-regular-investors-get-burned>

BELOW THE BOTTOM LINE:

More tipping points

By Staff Writers, Climate Change Predictions.org, Feb 8, 2019

<http://climatechangepredictions.org/uncategorized/5895>

“An average global temperature rise of 7.2F (4C), considered a dangerous tipping point, could happen by 2060, causing droughts around the world, sea level rises and the collapse of important ecosystems.

“The Arctic could see an increase in temperatures of 28.8F (16C), while parts of sub Saharan Africa and North America would be devastated by an increase in temperature of up to 18F (10C). “Britain’s temperature would rise by the average 7.2F (4C) which would mean Mediterranean summers and an extended growing season for new crops like olives, vines and apricots. “However deaths from heat waves will increase, droughts and floods would become more common, diseases like malaria may spread to Britain and climate change refugees from across the world are likely to head to the country. “Dr Richard Betts, Head of Climate Impacts at the Met Office Hadley Centre, said the new study showed how important it was to try and reduce emissions.” The Telegraph (UK), 27 Sep 2009

No more water

By Staff Writers, Climate Change Predictions.org, Feb 6, 2019

<http://climatechangepredictions.org/uncategorized/10305>

“Half of humanity could face water shortages by 2050 if the world lets the financial crisis distract it from fighting global warming, a key UN climate change summit of more than 185 countries has been told.

“Intergovernmental Panel on Climate Change chairman Rajendra Pachauri told an opening meeting that many people had still not woken up to the risks of climate change if the world failed to act.

“He cited projections that the number of people living in river valleys and facing water stress could quadruple from more than 1 billion in 1995 to more than 43 billion by 2050, that a third of species could face extinction, that the Greenland and west Antarctic ice sheets could melt, triggering massive sea-level rises.

“Dr Pauchari said ‘everybody was distracted’ by the financial crisis, but that it should not stop firm action ‘once the dust settles, give it a month or two’”.The Age (Australia), 3 Dec 2008 – screen copy held by this website

ARTICLES:

1. A Green New Deal in Profile

Falmouth spent \$10 million on wind turbines. Now it’s losing money.

Editorial, WSJ, Feb 4, 2019

<https://www.wsj.com/articles/a-green-new-deal-in-profile-11549325968>

The editorial states:

“Democrats are pushing a Green New Deal to end the use of fossil fuels and rely entirely on renewable energy. The Cape Cod town of Falmouth, Mass., offers a cold gust of reality on such ambitions with its experience on a \$10 million wind-energy investment.

“In 2009 and 2011, Falmouth broke ground on two wind turbines on 314 acres of city land next to the wastewater-treatment facility and dog pound. It paid for the first turbine with a \$5 million, 20-year municipal bond, and it received \$5 million in federal stimulus money to build the second. Falmouth planned to sell some of the energy it generated to the electrical grid of utility company Eversource, formerly known as NStar, so the city anticipated the turbines would generate \$1 million to \$2 million in annual profit.

“Residents quickly grew disillusioned. The turbines rose nearly 400 feet, and light flickered eerily through the blades, which whirled in a circle big enough for a 747. Barry and Diane Funfar, who lived fewer than 1,700 feet away, began suffering from headaches.

“Ms. Funfar struggled to sleep, and her husband’s heart started to pound. ‘The problems were unbelievable,’ Ms. Funfar says. ‘Barry couldn’t live with them. He was bothered every minute [the turbines] were running. I was bothered, too.’

“After further discussion of health issues a real-estate appraiser testifying that homes close to the turbines had lost 20% of their value, the editorial continues:

“In 2015 the Massachusetts Appeals Court ordered Falmouth to turn off one of its turbines, ruling that it lacked proper permitting. And in 2017 Barnstable County Judge Cornelius Moriarty ordered both turbines shut down as a public nuisance. ‘We had our home paid for before the turbines, and now we owe more than it’s probably even worth—over \$500,000,’ Ms. Funfar says. ‘We wanted to leave it to our kids, but if we died today, our kids couldn’t afford the home.’

“Falmouth is taking a ‘daunting’ financial hit, says town manager Julian Suso. Insurance covered most of Falmouth’s legal fees and nuisance settlements, but the remaining liability is ‘certainly in excess of \$100,000,’ he says. On Jan. 15, selectmen voted 4-1 against relocating the turbines within town limits, with one abstention. It will cost between \$1 million and \$2 million to dismantle and remove them.

“Falmouth will also spend the next 11 years paying off the remaining \$3.6 million in bonds it floated to pay for the first turbine. The stimulus grant covered the cost of the second turbine on condition that it operates as an ‘energy efficient project.’ So unless Falmouth can find someone else to take the turbine, get it running, and persuade regulators that this meets its contractual obligations, the town will be on the hook for another \$5 million. That’s a lot of wasted money in a town with fewer than 32,000 residents.

“Environmentalists dismiss concerns that wind turbines may cause health problems, even as they peddle unscientific claims that shale drilling poisons water and causes cancer. But there’s no such thing as zero-risk energy and, as Falmouth learned the hard way, not-in-my-backyard sentiments extend from drilling pads to wind farms. This green new deal was a bad deal all around.”

2. ‘Empty Planet’ Review: A Drop in Numbers

Governments stoke fears about overpopulation, but the reality is that fertility rates are falling faster than most experts can readily explain.

By Lyman Stone, WSJ, Feb 6, 2019

<https://www.wsj.com/articles/empty-planet-review-a-drop-in-numbers-11549497631>

SUMMARY: The reviewer writes:

“Is a dangerous population explosion imminent? For decades we’ve been told so by scientific elites, starting with the Club of Rome reports in the 1970s. But in their compelling book ‘Empty Planet: The Shock of Global Population Decline,’ Canadian social scientist Darrell Bricker and journalist John Ibbitson lay out the opposite case: ‘The great defining event of the twenty-first century,’ they say, ‘will occur in three decades, give or take, when the global population starts to decline. Once that decline begins, it will never end.’

“Their book is a vital warning to the world that the risks associated with population have been catastrophically misread: Governments and activists have spent decades fighting the specter of overpopulation, but now face the looming demographic calamity of global population collapse. Fewer people participating in the economy will mean slower economic growth, less entrepreneurship, rising inequality and calamitous government debt.

“Pulling examples from extensive on-the-ground research in settings as disparate as São Paulo favelas, Seoul universities and Nairobi businesses, the authors combine a mastery of social-science research with enough journalistic flair to convince fair-minded readers of a simple fact: Fertility is falling faster than most experts can readily explain, driven by persistent forces. In Brazil and China astonishing numbers of women opt for permanent sterilization well before the end of their fertile years (half of Chinese couples take this route). In South Korea and Japan women delay childbirth until their 30s or forgo it altogether. There even has been an unexpected collapse in fertility among Hispanics in the United States: They, like most of America’s other ethnic groups, now have below-replacement birth rates. The drivers of global fertility decline are here to stay.

“So why exactly is everyone still worried about the opposite problem? The authors pin the blame on faulty assumptions by the population establishment, as represented by the U.N. Population Division. They don’t use the United States as an example, but I will: The U.N.’s most recent population forecasts suggest that the average U.S. total fertility rate from 2015 to 2020 should be 1.9 children per woman. In reality, CDC data shows U.S. fertility has averaged about 1.8 children per woman from 2015 to 2018. In 2019, early indications are that fertility will probably be nearer 1.7 children per woman.

“Never mind their being reliable for long-run forecasts, the U.N. fertility estimates are 5% to 10% off even in the present. As Messrs. Bricker and Ibbitson point out, U.N. forecasts are substantially out-of-step with existing data from many countries, including China, India and Brazil. As a result of these mistakes, the most widely used population benchmarks in the world are probably wrong. The future will have far fewer people than the U.N. suggests; perhaps billions fewer.

“‘Empty Planet’ succeeds as a long-overdue skewering of population-explosion fearmongers. But the book seems more confused about what should be done. The authors, for instance, repeatedly assert that falling fertility is a consequence of women’s empowerment: In virtually every country where gender equality improved in the last 50 years, fertility rates declined correspondingly. Yet at the same time, Messrs. Bricker and Ibbitson seem to argue that greater gender equality will increase fertility. ‘Maybe a third child won’t set back [a woman’s] career,’ they write, ‘because [her partner] throws himself into parenting every bit as much as she does.’

“There are many reasons to work for greater gender equality, but this is not one of them. Surveys of women’s fertility desires show that women in rich countries uniformly have fewer children than they say they desire: If we lived in a society where women had perfect control of their own reproduction, fertility would be higher, not lower. But rich countries are precisely the ones with the most gender equality—so there is no reason to think that gender equality is associated with more women achieving their fertility goals.

“A similar confusion afflicts the authors’ vision for how to fight population decline. The authors (correctly) write that ‘immigrants may soon be hard to come by. Fertility is declining everywhere, even in the poorest countries. And incomes are rising in nations that once were very poor, decreasing the incentive to leave.’ The implication? Migrant-receiving countries will be less able in the future to depend on immigration for population growth.

“Of course, there are plenty of immigrants today to prop up growth, and the authors sensibly suggest the U.S. should adopt a Canadian-style merit-based system—letting in more people, but with selective standards. But then the authors go on to worry that, by giving in to ‘nativist, anti-immigrant sentiments,’ the United States of America ‘will throw away the very tool that has been the secret to its greatness.’”

After briefly discussing immigration policy and fertility rates among immigrants, the reviewer concludes:

“Population decline is a new problem, and not well understood: Western societies have not faced its effects since the bubonic plague. Messrs. Bricker and Ibbitson can perhaps be forgiven, then, for their inconsistency on what to do about low fertility. They have done crucial work to start a conversation. Let’s hope it goes somewhere before it’s too late.”

Mr. Stone is an Adjunct Fellow at the American Enterprise Institute and a Research Fellow at the Institute for Family Studies.