# The Week That Was: 2018-03-24 (March 24, 2018) Brought to You by SEPP (<u>www.SEPP.org</u>) The Science and Environmental Policy Project

**Quote of the Week**. "*It is error only, and not truth, that shrinks from inquiry*." – Thomas Paine [H/t William Readdy]

Number of the Week: Up 1.4%

# THIS WEEK:

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

**California Litigation, General:** The public nuisance lawsuits by San Francisco and Oakland against oil companies continue to attract attention by those interested in carbon dioxide (CO2)-caused global warming. Global warming is now generalized into climate change, as promoted by John Holdren, President Obama's science advisor. The change implies warming and cooling, although no one has advanced a credible hypothesis how carbon dioxide causes global cooling, other than by its absence.

Previous TWTWs discussed the filings by the two San Francisco Bay cities in the case, which is now before the US District Court for the Northern California District. The judge has ordered the parties to give a tutorial answering eight specific questions. In addition, various parties have filed amicus curiae (friend of the court) briefs. Of particular interest for TWTW are two briefs: one filed on behalf of three distinguished physicists, Professors William Happer, Steven Koonin and Richard Lindzen; the second filed on behalf of Christopher Monckton, et al. This week, TWTW will discuss the brief by the three professors. It will discuss a minor, but valuable, criticism of the Monckton brief by Roy Spencer, and will discuss that brief more fully next week.

Also, a slide show filed was by Chevron, on behalf of the defendants. That will be discussed briefly, emphasizing the strategy the oil companies appear to be taking. See links under Challenging the Orthodoxy.

**Three Professors:** In their filing, Professors Happer, Koonin and Lindzen (Three Profs) accept the data used by the UN Intergovernmental Panel on Climate Change (IPCC) in its Fifth Assessment Report (AR5) and the Climate Science Special Report (CSSR) by the US Global Change Research Program (USGCRP); and accept the evidence presented in the reports. However, they demonstrate the conclusions in the reports are not established, and, at best, premature. Some human caused-global warming skeptics may be disappointed by this approach because it ignores the fact that atmospheric data is far superior, and more direct, than the surface data used in the reports.

But, from a legal standpoint, this may be a solid approach, because the Three Profs need not argue before a judge why satellite data is superior, or why global climate models are deficient. Instead, they assert:

"Our overview of climate science is framed through four statements:

"1. The climate is always changing; changes like those of the past half-century are common in the geologic record, driven by powerful natural phenomena

2. Human influences on the climate are a small (1%) perturbation to natural energy flows3. It is not possible to tell how much of the modest recent warming can be ascribed to human influences

4. There have been no detrimental changes observed in the most salient climate variables and today's projections of future changes are highly uncertain."

To substantiate the first statement, the Three Profs state that, unfortunately, the common practice in climate science is to present graphs without uncertainty bars, which, when added, show significant uncertainties. Further, recent warmings have been marked by El Niño conditions; yet recent warming is similar to early 20<sup>th</sup> century warming. They also include the historic record and mention the last interglacial period (the Eemian) "when it was the 2C warmer than today and the sea level was 6 meters [20 feet] higher."

To substantiate the second statement the Three Profs use figures appearing in the CSSR on energy flow and radiative forcing (Figs 2.1 & 2.3).

To substantiate the third statement the Three Profs go into a bit of detail in building global climate models, bring up use of sub-grid-scale parameters. They state:

"While these subgrid-scale parametrizations can be based upon observations of weather phenomena, there is still considerable judgment in their formulation. So the models are not, as one often hears, 'just physics' since the parameters in each must be 'tuned' to reproduce aspects of the observed climate."

They assert another major difficulty in the model development, which Fred Singer and others have called circular reasoning.

"A second major problem is that there is no unique tuning that reproduces the historical climate data. Since aerosol cooling plays against GHG warming, a model with low aerosol and GHG sensitivities can reproduce the data as well as a model with high sensitivities. As a result, the GHG sensitivity is today uncertain by a factor of three (as it has been for forty years), therefore enlarging the uncertainty in any projection of future climates."

The IPCC and others have defended this faulty reasoning. To express the problem in algebra, the equation X minus Y equals 3 has an infinite number of solutions, if the relationship between X and Y is maintained. Both terms can be extremely large or extremely small. If one is to use models to estimate the value for greenhouse gases (GHG), one must independently establish the value for aerosols, which the climate modelers have failed to do.

Further, the Three Profs state:

"A third problem is that the models must reproduce the natural variabilities of the climate system, which we've seen are comparable to the claimed anthropogenic changes. Climate data clearly show coherent behaviors on multi-annual, multi-decadal, and multi-centennial timescales, at least some of which are due to changes in ocean currents and the interaction between the ocean and the atmosphere. Not knowing the state of the ocean decades or centuries ago makes it difficult to correctly choose the model's starting point. And even if that were possible, there is no guarantee that the model will show the correct variability at the correct times."

Establishing the starting point for the human influence on the earth's climate dominated by two fluids with changing exposure to a changing sun, and with other external influences, is a herculean task. The claim that the starting point is the start of the industrial revolution, or the start of a network of instrument measurement (US 1880s) is not sufficient.

To substantiate their fourth statement, the Three Profs use the low confidence the IPCC assigns to understanding weather events since 1951 including floods, droughts, severe weather events, cyclones, etc. One does not create certainty by compounding uncertainty. The Three Profs specifically discuss heat waves, sea level rise, and tropical cyclones. They conclude with:

"To summarize this overview, the historical and geological record suggests recent changes in the climate over the past century are within the bounds of natural variability. Human influences on the climate (largely the accumulation of CO2 from fossil fuel combustion) are a physically small (1%) effect on a complex, chaotic, multicomponent and multiscale system. Unfortunately, the data and our understanding are insufficient to usefully quantify the climate's response to human influences. However, even as human influences have quadrupled since 1950, severe weather phenomena and sea level rise show no significant trends attributable to them. Projections of future climate and weather events rely on models demonstrably unfit for the purpose. As a result, rising levels of CO2 do not obviously pose an immediate, let alone imminent, threat to the earth's climate."

After this, the Three Profs follow with answers to the eight questions. It will be interesting to learn how the judge will address this *amicus* brief. See links under Challenging the Orthodoxy.

**Spencer – Use Clear Terminology:** For years, meteorologist William Kininmonth of Australia has asserted that incorrect terminology is being used by the IPCC, which leads to vague or sloppy thinking. The issue of carbon dioxide-caused warming should be studied from the perspective of energy flows through the atmosphere. In assessing the *amicus* brief of Christopher Monckton, et al., Roy Spencer suggests the terms "feedback" and "forcing" are vague and poorly understood. They are not needed for describing the climate system or for modeling that system. The issue is energy flows: is the system in energy equilibrium?

#### Spencer asserts:

# "...How modern 3D coupled ocean-atmosphere climate models work does not depend upon the feedback concept.

"What they DO depend upon is energy conservation: If the system is in energy equilibrium, its average temperature will not change (that's not precisely true, because it makes little sense energetically to average the temperature of all ocean water with the atmosphere, and there can be energy exchanges between these two reservoirs which have vastly different heat capacities. Chris Essex has written on this). The point is that the total heat content of the system in Joules stays the same unless an energy imbalance occurs. (Temperature is focused on so intensely because it determines the rate at which the Earth sheds energy to outer space. Temperature stabilizes the climate system.)" The climate models are essentially weather models, stabilized to run 100-year projections.

"Nowhere do the IPCC models invoke, use, assume, or otherwise depend upon any feedback equations. Those equations are just greatly simplified approximations that allow us to discuss how the climate system responds to an imposed energy imbalance. If somebody has published a paper that incorrectly explains the climate system with a feedback equation, that does not invalidate the models." [Boldface added]

"Feedbacks in the IPCC models are diagnosed after the model is run; they are not specified before it is run."

Embodied in Spencer's comments is the issue of starting point, discussed by the Three Profs (see above). According to NASA-GISS, from ice core data, CO2 levels increased from 285 parts per million (ppm) in 1850 to 311 ppm in 1950, or by 26 ppm over the 100 years. Yet, there were pronounced warming periods such as 1910 to 1940 like the late 20<sup>th</sup> century warming, even though CO2 increased by 11 ppm, compared with an increase of over 90 ppm from 1950 to today. (Note, there was a modest cooling from 1940 to about 1975, even though CO2 increased by 21 ppm.) There appears to be no strong justification to accept any particular starting point. See links under Challenging the Orthodoxy and <a href="https://data.giss.nasa.gov/modelforce/ghgases/Fig1A.ext.txt">https://data.giss.nasa.gov/modelforce/ghgases/Fig1A.ext.txt</a>

**Oil Company Strategy?** The filing by BP, et al. included two-part slide presentation for the Tutorial and another slide for a timeline of major developments in climate science. Some journalists reported that the oil companies were accepting the assertions of the IPCC. Skeptics may be disappointed by the presentation.

The presentation was divided into three parts citing the Notice:

"The first part will trace the history of scientific study of climate change, beginning with scientific inquiry into the formation and melting of the ice ages, periods of historical cooling and warming, smog, ozone, nuclear winter, volcanoes, and global warming."

This part included the covers of major reports by the IPCC and the USGCRP, a 1965 quote from President Lyndon Johnson that humans are changing the composition of the atmosphere, and the growth in publications on climate science and climate change. It included the early science of the greenhouse effect by Jean-Baptiste Joseph Fourier (1766-1830) as well as growth in climate modeling.

"The second part will set forth the best science now available on global warming, glacier melt, sea rise, and coastal flooding."

It presented slides on temperature variations, glacier melt, sea level rise, CO2 emissions, the spaghetti maze of climate model projections and a warning of dire sea level rise in San Francisco Bay Area. This part concluded with two slides:

#### "San Francisco Bond Disclosures (2017)"

"The City is unable to predict whether sea-level rise or other impacts of climate change or flooding from a major storm will occur, when they may occur, and if any such events occur, whether they will have a material adverse effect on the business operations or financial condition of the City and the local economy."

#### Oakland Bond Disclosures (2017)

"The City is unable to predict when seismic events, fires or other natural events, such as sea rise or other impacts of climate change or flooding from a major storm, could occur, when they may occur, and, if any such events occur, whether they will have a material adverse effect on the business operations or financial condition of the City or the local economy."

The presentation concluded with a Timeline of Climate Change Science showing that the greenhouse effect has long been known. The time line showed the IPCC AR5 and 2014 USGCRP report were followed by the municipal bond disclosures cited above.

The federal courts may improperly defer to government agencies on issues of science. But, as discussed in February 24 TWTW, attorney Richard Epstein asserts they take fiduciary responsibilities seriously on issues regarding selling bonds to the public.

It is interesting to speculate on the comfort-level the bond counsels and the bond holders have with the current litigation. See links under Litigation Issues – California Cities v. Oil Companies.

**Repeal Endangerment Finding:** The group known as the Concerned Household Electricity Consumers Council (CHECC) submitted a proposal to the EPA in response to EPA's request for comments on its rule making for replacing the Obama Administration's Power Plan. CHECC repeated its petition to reconsider and repeal the Endangerment Finding. EPA veteran Alan Carlin summarizes the press release by CHECC. See links under Challenging the Orthodoxy. \*\*\*\*\*\*\*\*\*\*\*\*\*

**Externalities:** In his blog, Energy Matters, energy analyst Euan Mearns is examining the external costs and benefits of various forms of generating electricity. He states:

"The economics term externality is a cost or benefit accrued by a third party from the actions of others where the third party did not choose to acquire said costs or benefits. The term has been widely adopted by the environmental lobby to describe negative impacts of energy production systems. What is all too often overlooked are the externalised benefits the same energy production systems provide. This post aims to summarise both internal and external costs and benefits of 12 electricity production systems employing 12 different measures."

It is under this concept that economist Nicholas Stern calculated enormous, speculative costs to the British public from carbon dioxide emissions, promoting the passage of the UK Climate Change Act of 2008. As usual, politicians and economists do not pay for their mistakes.

It appears that Mearns is making a rigorous effort to measure costs and benefits of 12 electricity generating systems using 12 metrics to measure them. One metric that appears to be missing is the external benefits of increased carbon dioxide. As the NIPCC reports and CO2 Science show, agriculture, the environment, and humanity are greatly benefiting from increasing CO2. See links under Challenging the Orthodoxy – NIPCC, Review of Recent Scientific Articles by CO2 Science, and Energy Issues – Non-US

**Neo-Colonialism?** Writing in Master Resource, Environmental Scientist Vijay Jayaraj explains his views why developing countries do not object to the Paris agreement, and the weak science on which it is based. It is for fear of damaging trade with the EU, which stipulates it will not ratify trade pacts with any country that does not ratify the Paris agreement. This is similar to what

occurred after the US banned DDT, and efforts were made to ban it world-wide. Millions died of preventable malaria. See link under After Paris!

**Number of the Week: Up 1.4%.** According to the International Energy Agency, CO2 emissions rose 1.4% in 2017, after being flat for three years. See links under Problems in the Orthodoxy.

#### **NEWS YOU CAN USE:**

Science: Is the Sun Rising? The Worsening Cosmic Ray Situation By Tony Phillips, Space Weather Archive, Mar 5, 2018 https://spaceweatherarchive.com/2018/03/05/the-worsening-cosmic-ray-situation/

#### Commentary: Is the Sun Rising?

**Extreme winter weather, such as 'Beast from the East', can be linked to solar cycle** Press Release by University of Exeter, Phys.org, Mar 20, 2018 [H/t GWPF] <u>https://phys.org/news/2018-03-extreme-winter-weather-beast-east.html#jCp</u> Link to paper: Solar cyclic variability can modulate winter Arctic climate By Indrani Roy, Nature, Scientific Reports, Mar 20, 2018 <u>https://www.nature.com/articles/s41598-018-22854-0</u> From the abstract: It is hypothesized that the reduction of ice in the Arctic and a growth in

Eurasia, in recent winters may, in part, be a result of the current weaker solar cycle. [SEPP Comment: Based on one "weak" solar cycle. It will be interesting to see what happens with a series of weak solar cycles.]

#### As an historic solar minimum approaches, space radiation becoming more hazardous

By Anthony Watts, WUWT, Mar 17, 2018 https://wattsupwiththat.com/2018/03/17/as-an-historic-solar-minimum-approaches-spaceradiation-becoming-more-hazardous/ Link to paper: Update on the worsening particle radiation environment observed by CRaTER and implications for future human deep-space exploration\* By N.A. Schwadron, et al. Space Weather, Feb 22, 2018 https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1002/2017SW001803

#### Approaching 'grand solar minimum' could cause global cooling

By Anthony Watts, WUWT, Mar 18, 2018 https://wattsupwiththat.com/2018/03/18/approaching-grand-solar-minimum-could-cause-globalcooling/

New solar sensor will help monitor sun-to-climate link with greater accuracy By Anthon Watts, WUWT, Mar 16, 2018 https://wattsupwiththat.com/2018/03/16/new-solar-sensor-will-help-monitor-sun-to-climate-linkwith-greater-accuracy/

#### Challenging the Orthodoxy -- NIPCC

**Climate Change Reconsidered II: Physical Science** Idso, Carter, and Singer, Lead Authors/Editors, 2013 <u>https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf</u> *Summary*: <u>http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf</u>

## **Climate Change Reconsidered II: Biological Impacts**

Idso, Idso, Carter, and Singer, Lead Authors/Editors, 2014 <u>http://www.nipccreport.org/reports/ccr2b/pdf/Full-Report.pdf</u> *Summary*: <u>https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf</u>

### 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 <u>http://climatechangereconsidered.org/</u> Download with no charge <u>https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming</u>

# Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008 http://www.sepp.org/publications/nipcc\_final.pdf

#### **Challenging the Orthodoxy**

#### Prominent U.S. Scientists Submit Brief in Climate Science Court Hearing By Staff Writers, Climate Depot, Via GWPF, Mar 21, 2018 <u>https://www.thegwpf.com/prominent-u-s-scientists-submit-brief-in-climate-science-court-hearing/</u> Legal submission by Happer, Koonin, and Lindzen in The People of the State of California, v. B.P. P.L.C., et al., US District Court, Northern District of California, Filed Mar 19, 2018 <u>http://1ggye33lc4653z56mp34pl6t.wpengine.netdna-cdn.com/wpcontent/uploads/2018/03/Tutorial-Professor-Presentation.pdf</u>

# Global warming on trial and the elementary error of physics that caused the global warming scare

By Christopher Monckton of Brenchley, WUWT, Mar 19, 2018 <u>https://wattsupwiththat.com/2018/03/19/global-warming-on-trial-and-the-elementary-error-of-physics-that-caused-the-global-warming-scare/</u>

# **Climate F-Words**

By Roy Spencer, His Blog, Mar 22, 2018 http://www.drroyspencer.com/2018/03/climate-f-words/

#### Lord Monckton Responds

By Roy Spencer, His Blog, Mar 23, 2018 http://www.drroyspencer.com/2018/03/lord-monckton-responds/

# Why CHECC Believes It is Essential to Repeal the EF, Not Replace the CPP

By Alan Carlin, Carlin Economics and Science, Mar 19, 2018 http://www.carlineconomics.com/archives/4276

# Repeal and Not Replace the Clean Power Plan (CPP)

By Staff Writers, ICECAP, Mar 19, 2018

http://icecap.us/index.php/go/politicalclimate/repeal\_and\_not\_replace\_the\_clean\_power\_plan\_cpp/

## **Overheated: How Flawed Analyses Overestimate the Costs of Climate Change**

By Oren Cass, Manhattan Institute, Mar 11, 2018 <u>https://www.manhattan-institute.org/html/overheated-how-flawed-analyses-overestimate-costs-climate-change-10986.html</u>

## **Defending the Orthodoxy**

**Portugal: Nobel Prize winner paints grim picture of climate change future** By Staff Writers, Macau News Agency, Mar 20, 2018 [H/t Dennis Ambler] <u>http://www.macaubusiness.com/portugal-nobel-prize-winner-paints-grim-picture-climate-change-future/</u>

## Climate science 30 years later. What's changed?

By Chelsea Harvey, E&E New, Mar 16, 2018 <u>https://www.eenews.net/climatewire/2018/03/16/stories/1060076561</u> "South Korean economist Hoesung Lee has been chairman of the Intergovernmental Panel on Climate Change since 2015."

# Climate scientist Ben Santer battles 'trickle down ignorance'

How Lawrence Livermore lab research refutes Trump Administration's claims By Lisa Krieger, The Mercury News, Mar 17, 2018 [H/t Howard Hayden] https://www.mercurynews.com/2018/03/17/climate-scientist-ben-santer-battles-trickle-downignorance/ [SEPP Comment: Trickle-down ignorance from the IPCC?]

#### **Questioning the Orthodoxy**

# 200 Non-Hockey Stick Graphs Published Since 2017 Invalidate Claims Of Unprecedented, Global-Scale Warming

By Kenneth Richard, No Tricks Zone, Mar 22, 2018 <u>http://notrickszone.com/2018/03/22/200-non-hockey-stick-graphs-published-since-2017-invalidate-claims-of-unprecedented-global-scale-warming/#sthash.jHoecMOz.dpbs</u>

# On Climate Change, Please Address the Science, Not the Politics

By Tim Ball and Tom Harris, PJ Media, Mar 15, 2018 https://pjmedia.com/trending/climate-change-please-address-science-not-politics/

# **Climate Sooks Can Stop Whimpering**

By David Archibald, Quadrant, Mar 21, 2018 http://quadrant.org.au/opinion/doomed-planet/2018/03/climate-sooks-can-stop-whimpering/

# Claim: Natural Variability will Dominate Until 2074

Guest essay by Eric Worrall, WUWT, Mar 20, 2018 https://wattsupwiththat.com/2018/03/20/claim-natural-variability-will-dominate-until-2074/ Link to paper: Early emergence of anthropogenically forced heat waves in the western United States and Great Lakes By Hosmay Lopez, et al, Nature Climate Change, Mar 19, 2018 https://www.nature.com/articles/s41558-018-0116-y From the abstract: We show that ACC (anthropogenic climate change) dominates heat-wave occurrence over the western United States and Great Lakes regions, with ToE (time of emergence) that occurred as early as the 2020s and 2030s, respectively. In contrast, internal variability governs heat waves in the northern and southern Great Plains, where ToE occurs in the 2050s and 2070s; this later ToE is believed to be a result of a projected increase in circulation variability, namely the Great Plain low-level jet. Thus, greater mitigation and adaptation efforts are needed in the Great Lakes and western United States regions.

[SEPP Comment: What happened to global? Some years ago, global models were considered unsuitable for regional forecasting. Are they now suitable for both global and regional?]

## **Global Warming: The Evolution of a Hoax**

By Dale Leuck, American Thinker, Mar 21, 2018 https://www.americanthinker.com/articles/2018/03/global\_warming\_the\_evolution\_of\_a\_hoax.ht ml

## Burn, Climate Witches, Burn

By Peter Rees, Quadrant, Mar 24, 2018 http://quadrant.org.au/opinion/doomed-planet/2018/03/burn-climate-witches-burn/

## Deceptive language ruins Earth Hour

What we really need is Energy Hour By Tom Harris, Net News Ledger, Mar 23, 2018 http://www.netnewsledger.com/2018/03/23/deceptive-language-ruins-earth-hour/

# Maybe Earth's future isn't so bad after all

Book Review by Anthony Sadar, The Washington Times, Mar 20, 2018 https://www.washingtontimes.com/news/2018/mar/20/book-review-its-better-than-it-looks-bygregg-east/ Review of "It's Better Than It Looks: Reasons for Optimism In an Age of Fear" By Gregg Easterbrook

#### After Paris!

**Chennai, India's Cold Winter vs. Global Warming Hype** By Vijay Jayaraj, Master Resource, March 21, 2018 https://www.masterresource.org/india-international/chennai-energy-vs-climate/

#### John Stossel: Pompeo, Trump and the Paris climate agreement

By John Stossel, Fox News, Mar 21, 2018 http://www.foxnews.com/opinion/2018/03/21/john-stossel-pompeo-trump-and-paris-climateagreement.html

Change in US Administrations Scott Pruitt Will End EPA's Use Of 'Secret Science' To Justify Regulations By Michael Bastasch, Daily Caller, Mar 19, 2018 <u>http://dailycaller.com/2018/03/19/epa-scott-pruitt-secret-science/</u> Link to report: 2017 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act By Staff Writers, OMB, 2017 https://www.whitehouse.gov/wp-content/uploads/2017/12/draft 2017 cost benefit report.pdf

### Pruitt to restrict the use of data to craft EPA regulations

By Timothy Cama, The Hill, Mar 20, 2018 <u>http://thehill.com/policy/energy-environment/379276-pruitt-to-restrict-the-use-of-data-to-craft-epa-regulations</u>

#### Pruitt is expected to restrict science. Here's what it means

By Scott Waldman and Robin Bravender, E&E News, Mar 16, 2018 https://www.eenews.net/climatewire/2018/03/16/stories/1060076559

## Is EPA's Scott Pruitt Planning A Final Blow To Obama's Climate Agenda?

By Michael Bastasch, Daily Caller, Mar 20, 2018 http://dailycaller.com/2018/03/20/exclusive-epa-scott-pruitt-climate/

#### Social Benefits of Carbon Dioxide

Good news is gradual, bad news sudden By Matt Ridley, Rational Optimist, Mar 18, 2018 <u>http://www.rationaloptimist.com/blog/good-news-is-no-news/</u> "The United Nations' Millennium Development goal of halving global poverty by 2015 was met five years early." *[SEPP Comment: In a large part thanks to fossil fuels.]* 

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

Global Emissions Up 1.4% In 2017 By Paul Homewood, Not a Lot of People Know That, Mar 23, 2018 <u>https://notalotofpeopleknowthat.wordpress.com/2018/03/23/global-emissions-up-1-4-in-2017/#more-32946</u> Link to report: Global Energy & CO2 Status Report, 2017 By Staff Writers, IEA, March 2018 <u>http://www.iea.org/publications/freepublications/publication/GECO2017.pdf</u>

#### Seeking a Common Ground

Kathleen Harnett White: 'Social Justice' Energy for the Masses (Part III) By Robert Bradley, Jr. Master Resource, Mar 20, 2018 <u>https://www.masterresource.org/kathleen-ceq/kathleen-harnett-whites-common-sense-marches-part-iii/</u>

#### New paper tries to disentangle global warming from natural ocean variations

By Anthony Watts, WUWT, Mar 15, 2018 https://wattsupwiththat.com/2018/03/15/new-paper-tries-to-disentangle-global-warming-fromnatural-ocean-variations/

Link to paper: Disentangling Global Warming, Multidecadal Variability, and El Niño in Pacific Temperatures

By Robert C. Wills, Tapio Schneider, John M. Wallace, David S. Battisti, Dennis L. Hartmann, Geophysical Research Letters, Mar 15, 2018

https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017GL076327

# Review of Recent Scientific Articles by CO2 Science

# Ocean Acidification Does Not Compromise the Ability of Fish to Cope with High Temperatures

Clark, T.D., Roche, D.G., Binning, S.A., Speers-Roesch, B. and Sundin, J. 2017. Maximum thermal limits of coral reef damselfishes are size dependent and resilient to near-future ocean acidification. *Journal of Experimental Biology* 220: 3519-3526. Mar 23, 2018 <u>http://www.co2science.org/articles/V21/mar/a14.php</u>

[Testing the statement:] ... "theoretical models predict that ocean acidification, caused by increased dissolved CO2, will reduce the maximum thermal limits of fishes, thereby increasing their vulnerability to rising ocean temperatures and transient heatwaves."

## Elevated CO2 Stimulates Growth, Seed Yield and N Uptake in Sunflower

Lakshmi, N.J., Vanaja, M., Yadav, S.K., Maheswari, M., Archana, G., Patil, A and Srinivasarao, C. 2017. Effect of CO2 on growth, seed yield and nitrogen uptake in sunflower. *Journal of Agrometeorology* 19: 195-199. Mar 23, 2018

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

"All things considered, therefore, it would appear that those who grow and those who consume sunflower products will reap significant benefits from the CO2-induced enhancements documented here, as the air's CO2 content continues to rise in the future."

## 35 Years of NDVI Increase in Nepal

Krakauer, N.Y., Lakhankar, T. and Anadón, J.D. 2017. Mapping and attributing Normalized Difference Vegetation Index trends for Nepal. *Remote Sensing* 9: 986, doi:10.3390/rs9100986. Mar 19, 2018

http://www.co2science.org/articles/V21/mar/a10.php

#### Models v. Observations

# Mystery solved: Rain means satellite and surface temps are different. Climate models didn't predict this...

By Jo Nova, Her Blog, Mar 18, 2018

http://joannenova.com.au/2018/03/mystery-solved-rain-means-satellite-and-surface-temps-aredifferent-climate-models-didnt-predict-this/#more-57906

"There are real and significant differences between near surface and lower-troposphere temperatures. The Australia-wide temperature and rainfall data are a clear demonstration of the interaction between temperature and rainfall."

#### **1988 Congressional climate change hearing: claims of accelerating sea level rise – failed** Guest essay by Larry Hamlin, WUWT, Mar 14, 2018

https://wattsupwiththat.com/2018/03/14/1988-congressional-climate-change-hearing-claims-of-accelerating-sea-level-rise-failed/

[SEPP Comment: Featuring Jim Hansen of NASA-GISS and Michael Oppenheimer, then with the Environmental Defense Fund.]

#### Model Issues

**Emergent constraints on climate sensitivity: Part I** By Nic Lewis, Climate Etc. Mar 19, 2018 <u>https://judithcurry.com/2018/03/19/emergent-constraints-on-climate-sensitivity-part-i/#more-23951</u>

Emergent constraints on climate sensitivity in global climate models, Part 2

The four constraints that Caldwell assessed as credible

A guest post by Nic Lewis, Climate Audit, Mar 23, 2018 https://climateaudit.org/2018/03/23/emergent-constraints-on-climate-sensitivity-in-global-climatemodels-part-2/

[SEPP Comment: Second of three parts, links to the first part.]

# Measurement Issues -- Surface

# Since 2008, 0.24°C Of 'Extra' Warming Has Been Added To NASA's 1910-2000 Global Temperatures

By Kenneth Richard, No Tricks Zone, Mar 19, 2018 http://notrickszone.com/2018/03/19/since-2008-0-24c-of-extra-warming-has-curiously-beenadded-to-nasas-1910-2000-global-temperatures/#sthash.kRr17DVp.dpbs [SEPP Comment: Unfortunately, NASA-GISS has the NASA name.]

# Uncertainty Mounts...Global Temperature Data Presentation "Flat Wrong", New Danish Findings Show

By P Gosselin, No Tricks Zone, Mar 23, 2018 http://notrickszone.com/2018/03/23/uncertainty-mounts-global-temperature-data-presentation-flat-wrong-new-danish-findings-show/#sthash.kpEa892x.dpbs

Link to paper: Temperature trends with reduced impact of ocean air temperature By Frank Lansner, Jens Olaf Pepke Pedersen, Energy & Environment, Mar 21, 2018 http://journals.sagepub.com/doi/abs/10.1177/0958305X18756670?journalCode=eaea

From the abstract: "We find a lack of warming in the ocean air sheltered temperature data – with less impact of ocean temperature trends – after 1950."

# **Changing Weather**

# SSW Event Was Widely Forecast In Early Feb

By Paul Homewood, Not a Lot of People Know That, Mar 19, 2018 <u>https://notalotofpeopleknowthat.wordpress.com/2018/03/19/ssw-event-was-widely-forecast-in-early-feb/#more-32871</u>

[SEPP Comment: The Sudden Stratospheric Warming featured the splitting of the polar vortex, which has occurred before, though not frequently. Forecasting is difficult.]

# Are Tropical Cyclone Rainfall Rates Increasing?

By Paul Homewood, Not a Lot of People Know That, Mar 23, 2018 <u>https://notalotofpeopleknowthat.wordpress.com/2018/03/23/are-tropical-cyclone-rainfall-rates-increasing/</u>

# Paris Shivers In Coldest Consecutive Late March Days Since 1888

By Mark Vogan, Mark Vogan Weather.com, Mar 20, 2018 [H/t GWPF] http://www.markvoganweather.com/2018/03/20/paris-shivers-in-coldest-late-march-days-since-1888/

# Changing Climate

**The phytoplankton decline, is there anything to it?** By Andy May, WUWT, Mar 15, 2018 <u>https://wattsupwiththat.com/2018/03/15/the-phytoplankton-decline-is-there-anything-to-it/</u> [SEPP Comment: Lengthy post on a real cause of climate change.]

#### **Changing Seas**

#### NOAA — Straight Talk on Sea Level Rise

Guest Essay by Kip Hansen, WUWT, Mar 20, 2018

https://wattsupwiththat.com/2018/03/20/noaa-straight-talk-on-sea-level-rise/

[SEPP Comment: Good explication of issues regarding sea level rise on the US Atlantic Coast. Those at NOAA responsible for data integrity in tidal gauges are to be thanked for keeping the clear statement: "The graphs compare the 95% confidence intervals of relative sea level trends. Trends with the narrowest confidence intervals are based on the longest data sets. Trends with the widest confidence intervals are based on only 30-40 years of data. The graphs give an indication of the differing rates of vertical land motion, given that the absolute global sea level rise is believed to be 1.7 + -0.3 millimeters/year during the 20th century." No doubt, the responsible parties come under great bureaucratic pressure to produce alarming increases in sea level rise.]

#### Sea level rise acceleration (or not). Part V: detection & attribution

By Judith Curry, Climate Etc. Mar 21, 2018 <u>https://judithcurry.com/2018/03/21/sea-level-rise-acceleration-or-not-part-v-detection-attribution-</u> <u>2/#more-23956</u>

#### Changing Cryosphere – Land / Sea Ice

Arctic Ice Volume Growth Surprises As Solar Activity Approaches Near 200-Year Low By P Gosselin, No Tricks Zone, Mar 20, 2018

http://notrickszone.com/2018/03/20/arctic-ice-volume-growth-surprises-as-solar-activityapproaches-near-200-year-low/#sthash.7g88IWFt.dpbs

"Sea surface temperatures have since fallen back to near normal levels and it remains to be seen if a new higher plateau will be established [as] after the 1998 El Nino event. In summary, most of the globe is not behaving as climate scientists expected."

#### Eye-roller Claim: one year of Arctic data enough to proclaim 'danger ahead'

By Anthony Watts, WUWT, Mar 20, 2018

https://wattsupwiththat.com/2018/03/20/eye-roller-claim-one-year-of-arctic-data-enough-to-proclaim-danger-ahead/

Link to paper: Collapse of the 2017 winter Beaufort High: A response to thinning sea ice? By Moore, Schweiger, Zhang, and Steele, Geophysical Research Letters, Mar 19, 2018 https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1002/2017GL076446

#### Lowering Standards

#### Obfuscation

By Donn Dears, Power For USA, Mar 23, 2018 http://ddears.com/2018/03/23/obfuscation/ [SEPP Comment: Unfortunately, the EIA is developing vague concepts, without concrete meaning.]

#### **BBC's Fake Climate Claims Now Becoming A Habit**

By Paul Homewood, Not a Lot of People Know That, Mar 22, 2018 <u>https://notalotofpeopleknowthat.wordpress.com/2018/03/22/bbcs-fake-climate-claims-now-</u> becoming-a-habit/#more-32925

#### **BBC Forced To Retract False Claim About Hurricanes**

By Paul Homewood, Not a Lot of People Know That, Mar 22, 2018

https://notalotofpeopleknowthat.wordpress.com/2018/03/22/bbc-forced-to-retract-false-claim-about-hurricanes/

#### *Communicating Better to the Public – Exaggerate, or be Vague?* Saudi Arabia's existential crisis returns as US shale booms anew

By Staff Writers, Financial Times, Via GWPF, Mar 19, 2018 <u>https://www.thegwpf.com/saudi-arabias-existential-crisis-returns-as-us-shale-booms-anew/</u> [SEPP Comment: What is meant by the fad of terms using "existential" such as "existential crisis?" Is Saudi Arabia questioning the meaning of its existence?"

## Communicating Better to the Public – Make things up.

**Burning Coal and the Permo-Triassic extinction** 

By Roger Andrews, Energy Matters, Mar 21, 2018

http://euanmearns.com/burning-coal-and-the-permo-triassic-extinction/#more-21336

"Having worked as a geologist I know that geologists are among the most imaginative of people when it comes to thinking up exotic theories. But the theory featured in the Guardian article in Blowout Week 220 – that CO2 and other noxious gases emitted from coal seams ignited by lava caused the Permo-Triassic (PT) extinction 250 million years ago, is among the most imaginative yet."

## Fires destroy scores of homes in Tathra because we don't have enough solar panels

By Jo Nova, Her Blog, Mar 23, 2018 <u>http://joannenova.com.au/2018/03/fires-destroy-scores-of-homes-in-tathra-because-we-dont-have-enough-solar-panels/</u>

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

**Climate study: top 20% of U.S. diet blamed for majority of greenhouse gas emissions** By Anthony Watts, WUWT, Mar 20, 2018

https://wattsupwiththat.com/2018/03/20/climate-study-top-20-of-u-s-diet-blamed-for-majority-of-greenhouse-gas-emissions/

Link to paper: Greenhouse gas emissions and energy use associated with production of individual self-selected US diets

By Martin C Heller, et al., Environmental Research Letters, Mar 20, 2018 http://iopscience.iop.org/article/10.1088/1748-9326/aab0ac/meta

[SEPP Comment: Another shoddy poll which will be used to promote high carb, low fat diets?]

#### Communicating Better to the Public – Go Personal.

**Interior Officials Are Citing Coal Execs And Crank Bloggers To Defend Climate Stances** At the federal agency in charge of 20 percent of the U.S. landmass, blogs like "Watts Up With That" trump The New York Times.

By Alexander C. Kaufman and Chris D'Angelo, Huff Post, Mar 10, 2018 [H/t Dennis Ambler] <u>https://www.huffingtonpost.co.uk/entry/interior-climate-change-crank-blogs\_us\_5aa2df63e4b086698a9da922</u>

# Questioning European Green

Green No More: Climate & Environment Only a Side Issue for Germany\s New Coalition – Report

By Staff Writers, Clean Energy Wire, Mar 19, 2018 [H/t GWPF]

https://www.cleanenergywire.org/news/new-econ-min-pledges-lower-business-power-prices-sideissue-climate/climate-and-environment-only-side-issue-germanys-new-grand-coalition-report

"The coalition agreement has been a "document of cowardice" as it scraps the 2020 climate target and postpones the coal exit indefinitely, and the parties' protection of carmakers points in a similar direction, the authors [of an op-ed] say."

#### Germany's War On Diesel Takes A Setback...Environment Ministry Activism Exposed, Absurd Risk Claims

By P Gosselin, No Tricks Zone, Mar 17, 2018

http://notrickszone.com/2018/03/17/germanys-war-on-diesel-takes-a-setback-environmentministry-activism-exposed-absurd-risk-claims/#sthash.Hpy8NIEu.VrX3hJGM.dpbs

# Green Jobs

# Governor Cuomo Announces Formal Request for New York Exclusion From Federal Offshore Drilling Program

Governor Also Announces \$1.4 Billion in Awards for 26 Large-Scale Renewable Energy Projects, the Largest Single Commitment to Renewable Energy by a State in U.S. History By Staff Writers, New York State Energy Research and Development Authority, Mar 9, 2018 <u>https://www.nyserda.ny.gov/About/Newsroom/2018-Announcements/2018-03-09-Governor-Cuomo-Announces-Formal-Request-for-New-York-Exclusion-From-Federal-Offshore-Drilling-Program</u>

"In addition, offshore drilling endangers New York's progressive efforts to move toward cleaner, smarter energy solutions, including the nation-leading \$1.4 billion investment dedicated to renewable energy projects. The awarded projects include 22 solar farms, demonstrating that large-scale solar power is now economically viable across New York State for the first time. The projects are expected to generate enough clean, renewable energy to power more than 430,000 homes and reduce carbon emissions by more than 1.6 million metric tons, the equivalent to taking nearly 340,000 cars off the road." [Boldface added]

[SEPP Comment: Is the governor proposing to move New York to southwest Arizona? Snowload maps show the burden ranging from 45 to 85 pounds per square foot, with annual snowfalls ranging from 50 to 330 inches (120 to 850 cm). Will the snow affect the performance of large-scale solar power?]

# GOP governor's bill would spend \$1.4B on climate adaptation

By Benjamin Storrow, E&E News, Mar 16, 2018 <u>https://www.eenews.net/climatewire/2018/03/16/stories/1060076567</u> [SEPP Comment: At least this \$1.4 billion is not for building solar panels in the snowbelt.]

# **Funding Issues**

# Congress' spending deal rejects Trump's proposed EPA, energy cuts

By Josh Siegel, Washington Examiner, Mar 21, 2018 [H/t Cooler Heads] https://www.washingtonexaminer.com/policy/energy/congress-spending-deal-rejects-trumpsproposed-epa-energy-cuts

**Spending bill includes major wildfire overhaul** By Timothy Cama, The Hill, Mar 22, 2018

http://thehill.com/policy/energy-environment/379736-spending-bill-includes-major-wildfireoverhaul [SEPP Comment: No mention of controlled burns, fire breaks, or controlling vegetation growth following wet winters in the West.]

#### Litigation Issues

**Court lifts freeze on Bayou Bridge project** By Ellen M. Gilmer, E&E News, Mar 16, 2018 <u>https://www.eenews.net/energywire/2018/03/16/stories/1060076547</u> [SEPP Comment: Another effort to use the poorly written National Environmental Policy Act to stop development in Louisiana.]

## Litigation Issues – California Cities v. Oil Companies

Response by Chevron Corporation California v. BP, et al. Mar 21, 2918 [The slide presentation.] http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/casedocuments/2018/20180321\_docket-317-cv-06011\_na.pdf

## Chevron asks judge to toss lawsuits, unveils strategy

By Anne C. Mulkern, E&E News, Mar 20, 2018 https://www.eenews.net/greenwire/2018/03/20/stories/1060076839 Link to Defendants' Motion to Dismiss People of CA v. Oil Companies, Mar 20, 2018 https://www.eenews.net/assets/2018/03/20/document\_gw\_20.pdf

"These actions should be dismissed because Plaintiffs have failed to state a claim for relief under federal common law. In addition, Plaintiffs' claims are barred by the foreign affairs doctrine, the Commerce Clause, the Due Process Clause, and the First Amendment; because Plaintiffs have failed to sufficiently allege causation; and for other reasons set forth below."

#### Oil Giant Accepts Climate Consensus, Denies Responsibility for Warming

Lawyers for Chevron in climate suit argue energy demand, not extraction, drives emissions By Debra Kahn, Scientific American, Mar 22, 2018 [H/t Cooler Heads] https://www.scientificamerican.com/article/oil-giant-accepts-climate-consensus-deniesresponsibility-for-warming/

# Federal Judge Dismissed Claim Of A Conspiracy To Suppress Global Warming Science

By Michael Bastasch, Daily Caller, Mar 21, 2018 [H/t Cooler Heads] http://dailycaller.com/2018/03/21/federal-judge-conspiracy-exxon-chevron/

#### Fossil fuels are the problem, say fossil fuel companies being sued

By Nathanael Johnson, Grist, Mar 21, 2018 https://grist.org/article/fossil-fuels-are-the-problem-say-fossil-fuel-companies-being-sued/

(Hot) Air Let Out of California's Global Warming Lawsuit By William Briggs, The Stream, Mar 22, 2018 https://stream.org/hot-air-let-out-of-californias-climate-change-lawsuit/

TABLES TURNED: Alarmists Now 'Deny' Climate Science While Big Oil Defends ItBy Michael Bastasch, Daily Caller, Mar 21, 2018http://dailycaller.com/2018/03/21/chevron-agrees-global-warming/

#### **Energy Issues – Non-US**

# The Externalities of Energy Production Systems

By Euan Mearns, Energy Matters, Mar 19, 2018

http://euanmearns.com/the-externalities-of-energy-production-systems/#more-21117

"The economics term externality is a cost or benefit accrued by a third party from the actions of others where the third party did not choose to acquire said costs or benefits. The term has been widely adopted by the environmental lobby to describe negative impacts of energy production systems. What is all too often overlooked are the externalised benefits the same energy production systems provide. This post aims to summarise both internal and external costs and benefits of 12 electricity production systems employing 12 different measures."

# Brian Monteith: We must act now to keep the lights on or it might be too late

By Brian Monteith, The Scotsman, Mar 19, 2018

https://www.scotsman.com/news/opinion/brian-monteith-we-must-act-now-to-keep-the-lights-onor-it-might-be-too-late-1-4708054

[SEPP Comment: Reviewing some of the Russian "investments in Green Power" – anti-fracking and other efforts.]

# Gas Demand Peaks In Winter

By Paul Homewood, Not a Lot of People Know That, Mar 21, 2018 <u>https://notalotofpeopleknowthat.wordpress.com/2018/03/21/gas-demand-peaks-in-winter/</u> "It seems we are no nearer solving the problem of how we heat our homes and at the same time meet decarbonisation targets."

# Government scrutinises energy security amid Russia tensions

By Jullian Ambrose, Telegraph, UK, Mar 17, 2018 https://www.telegraph.co.uk/business/2018/03/17/government-scrutinises-energy-security-amidrussia-tensions/

# Merkel Looks to LNG to Cut Germany's Dependence on Russian Gas

By Anna Shiryaevskaya and Brian Parkin, Bloomberg, Mar 19, 2018 <u>https://www.bloomberg.com/news/articles/2018-03-19/merkel-looks-to-lng-to-cut-germany-s-dependence-on-russian-gas</u>

# We must turn off the Russian gas tap and get fracking

By Harry Wilkinson, The Conservative Woman, UK, Mar 18, 2018

<u>https://www.conservativewoman.co.uk/we-must-turn-off-the-russian-gas-tap-and-get-fracking/</u> "The fantasy that we can rely on renewables to supply our energy needs has been trashed by the National Grid, which has now acknowledged that it is not feasible to switch to electric heating on the scale required to reduce greenhouse gas emissions to 80 per cent of 1990 levels by the middle of this century."

# Russia Says Its Gas Is Best Deal for Europe Amid U.K. Spat

By Elena Mazneva and Annmarie Hordern, Bloomberg, Mar 19, 2018 <u>https://www.bloomberg.com/news/articles/2018-03-18/russia-says-its-natural-gas-is-the-best-deal-on-offer-for-europe</u>

**The Shape I'm In - Why the Big Spread Between WCS and WTI Crudes Will Stick Around** By Housley Carr, RBN Energy, Mar 20, 2018 https://rbnenergy.com/the-shape-im-in-why-the-big-spread-between-wcs-and-wti-crudes-will-stick-around

### Energy Issues – Australia

[South] Australia's Liberals win state election in blow for renewables lobby By Alison Bevege, Reuters, Mar 17, 2018 [H/t GWPF] <u>https://www.reuters.com/article/us-australia-politics-southaustralia/australias-liberals-win-state-</u> election-in-blow-for-renewables-lobby-idUSKCN1GT0GS

## Energy Issues -- US

The United States exported more natural gas than it imported in 2017 By Michael Mobilia, EIA, Mar 19, 2018 https://www.eia.gov/todayinenergy/detail.php?id=35392

## Brunswick Co. commissioners strike offshore drilling from agenda

By Alex Guarino, Local News, North Carolinia, Mar 19, 2018 http://www.wect.com/story/37761436/brunswick-co-commissioners-strike-offshore-drilling-fromagenda [SEPP Comment: Decided not to vote on the issue pushed by Sierra Club, etc.]

## **Coal Cuts Dangerously Clip Texas Power Capacity**

By Larry Bell, Newsmax, Mar 19, 2018 <u>https://www.newsmax.com/larrybell/epa-solar-wind/2018/03/19/id/849432/</u> [SEPP Comment: Lack of back-up to wind may cause problems.]

#### **Russia Agents Attempted to 'Influence' and 'Directly Undermine' U.S. Natural Gas, House** Report Finds

By Erin Mundahl, Inside Sources, Mar 16, 2018 http://www.insidesources.com/russian-agents-tried-to-influence-directly-undremine-us-naturalgas-house-report-finds/

#### Subsidies and Mandates Forever

Scottish Power chief: You're bonkers if you think we will build offshore wind 'subsidy-free' By Brendan Coyne, The Energist, Mar 21, 2018 https://theenergyst.com/scottish-power-chief-youre-bonkers-think-will-build-offshore-windsubsidy-free/

#### EPA and other Regulators on the March

**Energy Department Petitioned To Stop Making Dishwashers Even Crappier [Slower]** By Tim Pearce, Daily Caller, Mar 22, 2018 <u>http://dailycaller.com/2018/03/22/energy-dept-petition-dishwashers/</u> [SEPP Comment: The time required to do a load of dishes has increased from one hour to 2.5 hours, to save energy?]

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

Europe's cold shoulder to Russian gas could lift US LNG export goals By Harry Weber and Ross Wyeno, Platts, Mar 19, 2018 https://www.platts.com/latest-news/natural-gas/houston/europes-cold-shoulder-to-russian-gascould-lift-21594084

### Nuclear Energy and Fears

**Five reasons nuclear energy will rebound in 2018** By Jarret Adams, WNN, Mar 7, 2018 <u>http://www.world-nuclear-news.org/V-Five-reasons-nuclear-energy-will-rebound-in-2018-07031801.html</u>

## Alternative, Green ("Clean") Solar and Wind

Chasing Sunbeams: Taming the Sun and Solar Energy By Norman Rogers, American Thinker, Mar 18, 2018 <u>https://www.americanthinker.com/articles/2018/03/chasing\_sunbeams\_emtaming\_the\_sunem\_and\_solar\_energy.html</u> [SEPP Comment: Putting a few hard numbers to the sunbeam dream.]

## Twenty-One Bad Things About Wind Energy — and Three Reasons Why

By John Droz, Jr., Master Resource, March 22, 2018

https://www.masterresource.org/droz-john-awed/21-bad-things-wind-power-3-reasons-why/

"1 – Wind proponents are not asked to independently PROVE the merits of their claims before (or after) their product is forced on the public.

2 – There is no penalty for making bogus assertions or dishonest claims about their product's "benefits," so each successive contention is more grandiose than the last.

3 – Promoting wind is a political agenda that is divorced from real science. A true scientific assessment is a comprehensive, objective evaluation with transparent real world data – not on carefully massaged computer models and slick advertising campaigns, which are the mainstay of anti-science evangelists promoting political agendas."

# Health, Energy, and Climate

# The Neglected Menace of Pollution

By Philip Landrigan and Richard Fuller, Project Syndicate, Mar 20, 2018 <u>https://www.project-syndicate.org/commentary/benefits-of-pollution-control-strategies-by-philip-</u> j-landrigan-and-richard-fuller-2018-03

Link to study: The Lancet Commission on pollution and health, Oct 19, 2017 http://www.thelancet.com/commissions/pollution-and-health

Pollution is one of the great existential challenges of the twenty-first century. It threatens the stability of ecosystems, undermines economic development, and compromises the health of billions of people. Yet it is often overlooked, whether in countries' growth strategies or in foreign-aid budgets, like those of the European Commission and the US Agency for International Development. As a result, the threat continues to grow.

[SEPP Comment: Pollution has been a problem since the beginning of humanity and continues to be a problem in developing countries.]

# A side benefit of climate action: Saving millions of lives

By Chelsea Harvey, E&E News, Mar 20, 2018

https://www.eenews.net/climatewire/2018/03/20/stories/1060076781

Link to paper: Quantified, localized health benefits of accelerated carbon dioxide emissions reductions

By Shindell, Faluvegi, Seltzer & Shindell, Nature, Climate Change, Mar 19, 2018 http://www.nature.com/articles/s41558-018-0108-y

Link to health reports: Air Pollution

By Staff Writers, WHO, Accessed Mar 23, 2018 <u>http://www.who.int/airpollution/en/</u> [SEPP Comment: Further examples why the Supreme Court decision terming CO2 is a pollutant under the US Clean Air Act and can be regulated by the EPA is an international health disaster

#### Oh Mann!

Steve McIntyre discovers another hockey stick By Anthony Watts, WUWT, Mar 20, 2018 https://wattsupwiththat.com/2018/03/20/steve-mcintyre-discovers-another-hockey-stick/

#### Other News that May Be of Interest

Dumping Is Bad By Donn Dears, Power For USA, Mar 20, 2018 http://ddears.com/2018/03/20/dumping-is-bad/

#### How Tariffs Dampen the Energy Boom

A trade war would prevent American manufacturers from taking advantage of abundant hydrocarbons. By Rupert Darwall, WSJ, Via GWPF, Mar 22, 2018 https://www.thegwpf.com/rupert-darwall-how-tariffs-dampen-americas-energy-boom/

## **BELOW THE BOTTOM LINE:**

#### Witches

By Staff Writers, Climate Change Predictions.org, Mar 23, 2018 http://climatechangepredictions.org/uncategorized/1532

"In rural Tanzania, murders of elderly women accused of witchcraft are a very common form of homicide. And when Tanzania suffers unusual rainfall — either drought or flooding — witch-killings double, according to research by Edward Miguel, an economist at the University of California, Berkeley.

"In bad years, the killings explode,' Professor Miguel said. He believes that if climate change causes more drought years in Tanzania, the result will be more elderly women executed there and in other poor countries that still commonly attack supposed witches."

New York Times, 13 Apr 2008

#### Penguins pining away

By Staff Writers, Climate Change Predictions.org, Mar 19, 2018 http://climatechangepredictions.org/uncategorized/9631

"Penguins and post-El Niño stress disorder. It seems that Galápagos penguin may suffer from post-El Niño stress disorder.

"After the strong El Niño events of 1982?83 and 1997?98 populations declined by more than 60%, according to F. Hernán Vargas of the University of Oxford and colleagues.

"They also looked at what this means for the future of the species and found a 30% chance it will disappear entirely within 100 years, if El Niño events keep happening with the same frequency. "If, however, the frequency increases, as predicted by some climatologists, the risk becomes greater. A doubling of the strong events leads to an 80% of extinction within 100 years." New Scientist, 31 Aug 2007

## **ARTICLES:**

1. How Pennsylvania Slashed Coal Emissions Without Alienating Industry New regulation gave power plants flexibility to cut smog-forming emission in half while remaining efficient By Kris Maher, WSJ, Mar 21, 2018 <u>https://www.wsj.com/articles/how-pennsylvania-slashed-coal-emissions-without-alienating-</u> industry-1521633601

SUMMARY: The journalist writes:

Coal-fired power plants in Pennsylvania cut smog-forming emissions by more than half last year, in a rare regulatory effort that has won support from both industry officials and environmentalists.

Emissions of nitrogen oxides, or NOx, at the state's six power plants that burn newly mined coal exclusively fell 60% last year from the year earlier to 23,133 tons.

At the 50-year-old Keystone Generating Station in the rural southwestern part of the state, emissions of nitrogen oxides fell 54% to 6,095 tons last year from the prior year, even though the plant burned more coal in 2017.

Industry experts credit a state regulation for the reductions. The rule, which took effect in January 2017, lowered the rate at which power plants and other sources can emit NOx. For power plants, it requires use of a potentially costly pollution control, in which ammonia is injected to reduce NOx, but only during times of high power usage, when the method is most cost-effective.

Vince Brisini, director of environmental affairs at Olympus Power LLC, an owner of the big Keystone plant and another nearby coal-burning plant, said he hadn't ever seen emissions fall so rapidly across a state. He also said the regulation provides enough flexibility for power plants to run cost-effectively.

"This regulation will not force any coal-fired units to retire," Mr. Brisini said.

The article shows a chart that nitrogen oxides were highest in Pennsylvania among 7 upper midwest states in 2014 and have dropped by more than two-thirds to be second to Illinois. Although the conversion from coal to natural gas helped, in part, the journalist states further:

In Pennsylvania, a rule known as the Reasonably Available Control Technology II was implemented so that the state could meet the federal 2008 standard of 75 parts per billion of ozone within its own borders.

The Pennsylvania rule requires power plants to operate existing pollution controls more often in a way that factors in the chemistry of electricity generation and allows the plants to continue to run efficiently, say industry officials.

Under the rule, companies are operating at lower emissions rates at times of high demand, including on hot summer days when they are most likely to contribute to ozone, industry experts

say. Before, companies were allowed to emit NOx at higher rates, and some had banked allowances enabling them to emit even more.

"The beauty of the rule that Pennsylvania adopted is that it found a way to strike a balance," said Dave Flannery, legal counsel for the Midwest Ozone Group. He said requiring the use of controls that use ammonia during periods of low demand, for example, would have increased costs dramatically. The association's members include power generation and industrial companies.

Of course, Northeastern states, which have eliminated coal-fired power plants and have high electricity costs complain Pennsylvania is not doing enough. The journalist concludes with a quote from Mr. Brisini:

#### 2. Fine-Tune Your B.S. Detector: You'll Need It

In the digital age, misinformation—from nonsense to lies—spreads faster than ever and is becoming an area of serious research By Elizabeth Bernstein, WSJ, Mar 19, 2018 https://www.wsj.com/articles/fine-tune-your-b-s-detector-youll-need-it-1521471721

"Do you have a good B.S. detector? You need one in our digital age.

"The skill of spotting false information—rubbish, nonsense and, yes, fake news—is so important these days that scientists have begun serious research on it. They're attempting to quantify when and why people spread it, who is susceptible to it, and how people can confront it.

"This month in Atlanta, at the annual conference of the Society for Personality and Social Psychology, a group of psychologists and other scientists presented a symposium on their research. The title? "Bullshitting: Empirical and Experiential Examinations of a Pervasive Social Behavior."

"B.S. is a form of persuasion that aims to impress the listener while employing a blatant disregard for the truth, the researchers explained. It can involve language, statistics and charts and appears everywhere from politics to science. This definition closely adheres to the one presented by the philosopher and Princeton emeritus professor Harry Frankfurt in his nowclassic 2005 book "On Bullshit." Dr. Frankfurt explored how B.S. is different than lying because liars know the truth and push it aside while B.S.ers don't necessarily care about the truth at all.

"Of course this isn't new. But false information moves faster and farther these days, thanks to social media. A new study conducted by researchers at Massachusetts Institute of Technology, published earlier this month in the journal Science, analyzed the spread of 126,000 rumors tweeted by 3 million people over more than 10 years and found that false news spreads faster than truth. "We have reached epidemic levels of information pollution, and we need to do something about it," says Jevin West, a professor of information science at the University of Washington. Dr. West co-created a class launched last year at the university, "Calling Bullshit," that teaches students how to spot and refute the way data, such as statistics and charts, can be manipulated to make false arguments. More than 60 schools have requested permission to use the materials to set up classes of their own, Dr. West says.

"Some people spread false information unknowingly. But others simply don't care if what they're posting is untrue, Dr. West says, and pass along the information as a way to signal their views and values to their group. Philosophers call this tribal epistemology.

"Website algorithms often favor salacious stories. (YouTube came under fire last month for the way its recommendation algorithm promotes conspiracy-theory videos aimed at viewers on both the left and the right.) And millions of bots—computer programs that can appear to be real people—also spread false information across the internet.

After some discussion, the journalist provides some tips such as: Check the source. If it sounds to be too good to be true, it probably is; Ask questions; Ask for evidence; and Pay attention to people who discount evidence, a red flag.

TWTW comment: The advice may apply for those wading through bureaucratic science as well. \*\*\*\*\*\*\*\*\*\*\*