

The Week That Was: 2018-11-03 (November 3, 2018)

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The Science and Environmental Policy Project

Quote of the Week: “*Religion is a culture of faith; science is a culture of doubt.*” — Richard P. Feynman

Number of the Week: 8%

THIS WEEK:

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

Importance of Clouds: MIT Sloan Professor of Meteorology emeritus Richard Lindzen wrote TWTW stating that, in the past weeks, TWTW may have underemphasized the importance of clouds and overemphasized water vapor in their roles of causing climate change. Perhaps TWTW did because the role of El Niños in influencing atmospheric temperatures trends can easily be seen by looking at a graph of the entire record since December 1978. El Niños put a lot of water vapor into the air and temperatures peak quickly, then fall slowly as the moisture drops out. The influence is particularly strong in the Arctic, where there is little water vapor in the atmosphere. But the El Niño influence is not strong in the dry Antarctic, for reasons not clear.

Lindzen states that upper level cirrus clouds may have as great an influence as water vapor, and that poor model treatment of these clouds may be the main issue. (Cirrus clouds are the thin wispy ones composed of ice crystals occurring at altitudes between 16,500 feet (5 km) and 45,000 feet (8.5 km). They can slow both incoming and outgoing radiant energy. In slowing outgoing radiant energy, they can have a significant greenhouse effect, causing the air to warm below them.

However, as Paul Homewood reminds us, a study by Clive Best and Euan Mearns showed a strong correlation between cloud cover and surface temperatures reported by the Hadley Center and the Climatic Research Unit (HADCRUT4) from July 1983 to December 2008 and corresponding cloud cover from the International Satellite Cloud Climatology Project (ISCCP). A decrease in total cloud cover (not just cirrus clouds) corresponded closely with an increase in temperatures. The researchers wrote:

“In conclusion, natural cyclic change in global cloud cover has a greater impact on global average temperatures than CO₂. There is little evidence of a direct feedback relationship between clouds and CO₂.”

Following Homewood’s post, on WUWT, Anthony Watts reminds us that former NASA senior climatologist Roy Spencer wrote on the role of clouds and temperatures in “The Great Global Warming Blunder: How Mother Nature Fooled the World's Top Climate Scientists.”

“The most obvious way for warming to be caused naturally is for small, natural fluctuations in the circulation patterns of the atmosphere and ocean to result in a 1% or 2% decrease in global cloud cover. Clouds are the Earth’s sunshade, and if cloud cover changes for any reason, you have global warming — or global cooling.”

Of course, none of this is conclusive. However, it illustrates the simplistic thinking embodied in the reports of the UN Intergovernmental Panel on Climate Change (IPCC). The earth's climate is the result of two dynamic fluids interacting with each other and the irregularly shaped land. The fluids are placed into chaotic motion by the earth's rotation exposing the fluids and land to uneven warming by energy from the sun. All this is further complicated by changing exposure with the earth's orbit around the sun, variation in the axis of rotation, variation in the energy emitted from the sun, and energy received by the earth from space. The IPCC attempting to explain changes in this complex system with changes of a bit player, carbon dioxide, is like attempting to explain a complex Shakespearian tragedy through the role of a minor character.

For generations scholars have considered "King Lear" to be Shakespeare's greatest but least popular play. This work of genius challenges scholars for an understandable explanation. Trying to explain "King Lear" through the role of a minor character, such as Curan, is absurd. So is the effort to explain a brief period of climate change through the role of carbon dioxide. According to its web site, the IPCC has been operating for 30 years. It is time that it realizes its explanation is failing. See links under Challenging the Orthodoxy and Measurement Issues – Atmosphere.

Importance of Verification: The University of Alabama, Huntsville (UAH), global temperature trend has been updated for October and posted on Roy Spencer's web site. One reader noted a discrepancy between UAH data and the data from RSS (Remote Sensing Systems) and NOAA STAR (Center for Satellite Applications and Research), which show a greater warming trend than is shown in UAH data. John Christy responded to the comment as follows:

"Thank you for the comment. These differences have been noticed and discussed in our publications. For the latest, see Christy et al. 2018 IJRS

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

"You are correct in the differences over the period of NOAA-12 and NOAA-14. As discussed in the paper, as we perform an objective procedure relying on data from the non-drifting (at this time) and better-calibrated NOAA-15 to deal with some of the spurious warming in NOAA-14 whereas RSS and NOAA do not. They retain the warming of NOAA-14 relative to NOAA-15 which lifts their time series higher as you noticed. That is the main reason for the difference. As we show using radiosondes with consistent instrumentation, all satellites have relative warming vs. the sondes in this period, but UAH's is much reduced due to our adjustment procedure. Note that the procedure was developed without any use of the radiosonde information.

"Here are the trend DIFFERENCES for 1979-2005 (period of MSU influence), tropics, satellite minus radiosondes (performed at radiosonde grid areas only). This from Table 3

UAH +0.045 +/- 0.066

RSS +0.116 +/- 0.070

NOAA +0.111 +/- 0.069

UW +0.117 +/- 0.069

"Similarly, for the satellite minus Reanalyses average. (full tropical coverage.)

UAH -0.008 +/- 0.039

RSS +0.066 +/- 0.049

NOAA +0.091 +/- 0.053

UW +0.064 +/- 0.040

“As you can see, UAH is insignificantly different from the other systems, whereas RSS, NOAA and UW are significantly warmer.

By comparing their data with data taken by other methods using different instruments, UAH was able to adjust for orbital drift, in time of day, which occurred with NOAA-14. Why RSS, NOAA STAR, and the University of Washington group (UW) do not adjust for the orbital drift is known only to them. In the 1990s RSS strongly criticized UAH for not adjusting its data for orbital decay.

The difference noted by Christy underscores the need for verification of calculations from one set of instruments with results from different sets of instruments. There may be some quibble as to which set of data better reflects the changing climate, but the main point is clear, the models are significantly overestimating the warming of the atmosphere, where the greenhouse gas effect occurs. See links under Measurement Issues – Atmosphere.

Expanding Speculation as Knowledge? Writing for the Global Warming Policy Foundation, David Whitehouse alerts us to a peculiar change in the latest IPCC report – Special Report 1.5 (SR1.5).

“The IPCC appears to have secretly changed the definition of what constitutes ‘climate’ by mixing existing and non-existing data
“

The definition of ‘climate’ adopted by the World Meteorological Organisation is the average of a particular weather parameter over 30 years. It was introduced at the 1934 Wiesbaden conference of the International Meteorological Organisation (WMO’s precursor) because data sets were only held to be reliable after 1900, so 1901 – 1930 was used as an initial basis for assessing climate. It has a certain arbitrariness, it could have been 25 years.

“For its recent 1.5°C report the IPCC has changed the definition of climate to what has been loosely called “the climate we are in.” It still uses 30 years for its estimate of global warming and hence climate – but now it is the 30 years centred on the present.

“There are some obvious problems with this hidden change of goalposts. We have observational temperature data for the past 15 years but, of course, none for the next 15 years. However, never let it be said that the absence of data is a problem for inventive climate scientists.

“Global warming is now defined by the IPCC as a speculative 30-year global average temperature that is based, on one hand, on the observed global temperature data from the past 15 years and, on the other hand, on assumed global temperatures for the next 15 years. This proposition was put before the recent IPCC meeting at Incheon, in the Republic of Korea and agreed as a reasonable thing to do to better communicate climate trends. Astonishingly, this new IPCC definition mixes real and empirical data with non-existing and speculative data and simply assumes that a short-term 15-year trend won’t change for another 15 years in the future.

“However, this new definition of climate and global warming is not only philosophically unsound, it is also open to speculation and manipulation. It is one thing to speculate what the future climate

might be; but for the IPCC to define climate based on data that doesn't yet exist and is based on expectations of what might happen in the future is fraught with danger.

“This strategy places a double emphasis on the temperature of the past 15 years which was not an extrapolation of the previous 15 years, and was not predicted to happen as it did. Since around the year 2000, nature has taught us a lesson the IPCC has still not learned.

“With this new definition of climate all data prior to 15 years ago is irrelevant as they are part of the previous climate....”

For purposes of the IPCC, climate change was not significant until 15 years ago? The globe did not warm with the major El Niño of 1998 with temperatures falling off thereafter? Such a view certainly avoids having to explain why temperatures did not reach 1998 levels until the El Niño of 2015-16, as seen in the UAH satellite data. Such an explanation avoids having to explain messy natural variation and the inconvenience of explaining why ice cores show changes in CO₂ followed changes in temperatures. Which is the opposite of what Mr. Gore claimed that changes in temperatures following changes in CO₂. Perhaps the IPCC now considers the climate has been stable until the industrial revolution?

In the approved Summary for Policymakers (SPM) of SR1.5, the specific definition for global warming is found in Box SPM 1, on the next to the last page. It states:

“Global warming: The estimated increase in GMST [Global mean surface temperature] averaged over a 30 - year period, or the 30 - year period centered on a particular year or decade, expressed relative to pre - industrial levels unless otherwise specified. For 30-year periods that span past and future years, the current multi-decadal warming trend is assumed to continue.”

As Anthony Watts points out in WUWT, the fine print in footnote 5 on page SPM-4 of SR1.5 states:

“Present level of global warming is defined as the average of a 30-year period centered on 2017 assuming the recent rate of warming continues.” [Boldface replacing fine print]

The IPCC now describes major changes in its methodology with footnotes in fine print. Is this the IPCC's definition of transparency?

Some may quibble about the importance of this change. However, this UN report was prepared to support an UN agreement to curtail the use of valuable fossil fuels and to buttress the UN demand for billions of dollars in annual payments from developed countries for imaginary damage done by CO₂-caused climate change. According to the IPCC, it was agreed to by all countries represented. However, the U.S may not have approved it. An accounting of the actual voting is not available.

“This Summary for Policymakers was formally approved at the First Joint Session of Working Groups I, II and III of the IPCC and accepted by the 48th Session of the IPCC, Incheon, Republic of Korea, 6 October 2018.” [Subject to edit]

The list of drafting authors is extensive, but not the votes.

There is no established, hard evidence showing CO2 will cause a warming other than laboratory results showing a modest increase in temperatures with increasing CO2 above pre-industrial levels. The warming since pre-industrial times, whatever the cause, has been largely beneficial. Subsequent TWTWs will have additional discussions on SR1.5. See Whitehouse's full article under Challenging the Orthodoxy and links under Defending the Orthodoxy.

Cost of Electricity: Writing in Master Resource, Alan Brooks brings attention to an updated report by the Energy Institute of the University of Texas at Austin, which shows natural gas combined cycle, wind, and residential solar photovoltaic technologies to be the least-expensive ways to generate electricity across much of the United States – assuming unreliable generation of electricity has no cost. According to the report: “The technologies examined for generating electricity included: coal (bituminous and sub-bituminous, with 30% and 90% carbon capture and sequestration [CCS]).”

The report has several major problems. First, except for special cases, CCS does not exist on a commercial scale. Second, the major issue for comparing different types of electricity generation is reliability, not cost of generation. A sensible question would be what are the costs of reliable electricity to a hospital, a subway system, modern office buildings, etc.? The costs of generation avoid the issue reliability; thus, such studies are woefully incomplete. See links under Energy Issues – US.

Additions and Corrections: Anthony Watts graciously carries TWTW on his blog, WUWT. Two readers have made comments that need repeating. One reader correctly stated that US Corporate Average Fuel Economy (CAFE) standards were first enacted in 1975 under President Ford, not President Carter, who followed President Ford. A second reader commented on the development of the new supercritical CO2 Brayton Cycle turbine which does not require a phase change to operate once the gas is compressed to a supercritical fluid in a closed system. The reader stated that if it works, it may be a real game changer such as “fracking” and LED lights. It would be well worth the \$80 million the Department of Energy contributed to the project. See

<http://euanmearns.com/every-big-bit-helps/#more-22657>

Number of the Week: 8% Jo Nova reports on a report by researchers at the London School of Economics and Political Science and Grantham Research Institute on Climate Change and the Environment who calculate that 16 out of 197 countries are on track to meeting their carbon dioxide goals they agreed to in the Paris Agreement. See links under After Paris!

NEWS YOU CAN USE:

Censorship

Climate Dissenting EIKE Files Defamation Suit... Worst Assault On Scientific Dissent In Germany In Decades

By P Gosselin, No Tricks Zone, Oct 31, 2018

<http://notrickszone.com/2018/10/31/dissenting-eike-files-defamation-suit-worst-assault-on-scientific-dissent-in-germany-in-decades/>

Suppressing Scientific Inquiry

Tracking Progress on the Economic Costs of Disasters Under the Indicators of the Sustainable Development Goals

By Roger Pielke Jr., His Blog, Oct 28, 2018

<https://rogerpielkejr.com/2018/10/28/tracking-progress-on-the-economic-costs-of-disasters-under-the-indicators-of-the-sustainable-development-goals/>

Link to paper: Tracking progress on the economic costs of disasters under the indicators of the sustainable development goals

By Roger Pielke, Environmental Hazards, Oct 27, 2018

<https://www.tandfonline.com/doi/abs/10.1080/17477891.2018.1540343?journalCode=tenh20>

“The last time I published this data, it started a campaign led by the Center for American Progress and several climate scientists to have me fired from my job, ultimately resulting in a Congressional investigation of me and my work. The UN SDGs are obviously really exciting!”

Challenging the Orthodoxy -- NIPCC

Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, 2013

<https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf>

Summary: <http://www.nipccreport.org/reports/ccr2a/pdf/Summary-for-Policymakers.pdf>

Climate Change Reconsidered II: Biological Impacts

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

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

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

Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, NIPCC, Nov 23, 2015

<http://climatechangereconsidered.org/>

Download with no charge

<https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming>

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

http://www.sepp.org/publications/nipcc_final.pdf

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, Oct 3, 2018

<http://climatechangereconsidered.org/wp-content/uploads/2018/10/10-05-18-DRAFT-CCRII-Fossil-Fuels-Summary-for-Policy-Makers.pdf>

Challenging the Orthodoxy

Moving the Goalposts, IPCC Secretly Redefines “Climate”

By David Whitehouse, GWPF, Oct 29, 2018

<https://www.thegwpf.com/moving-goalposts-ipcc-secretly-redefines-climate/>

Study: Swiss glaciers mostly melted before industrialization began

By Luboš Motl, the Reference Frame, Oct 22, 2018

<https://motls.blogspot.com/2018/10/study-swiss-glaciers-mostly-melted.html>

Link to paper: 19th century glacier retreat in the Alps preceded the emergence of industrial black carbon deposition on high-alpine glaciers

By Michael Sigl et al., The Cryosphere, Oct 16, 2018

<https://www.the-cryosphere.net/12/3311/2018/tc-12-3311-2018-discussion.html>

Global Temperatures Rose As Cloud Cover Fell In the 1980s and 90s

By Paul Homewood, Not a Lot of People Know That, Oct 31, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/10/31/global-temperatures-rose-as-cloud-cover-fell-in-the-1980s-and-90s/>

Link to earlier post by Clive Best: Do clouds control climate?

By Clive Best, His Blog, **Mar 6, 2014**

<http://clivebest.com/blog/?p=5694>

Data: Global Temperatures Rose As Cloud Cover Fell In the 1980s and 90s

By Anthony Watts, WUWT, Nov 1, 2018

<https://wattsupwiththat.com/2018/11/01/data-global-temperatures-rose-as-cloud-cover-fell-in-the-1980s-and-90s/>

[SEPP Comments: Includes comments by Roy Spencer.]

The Use and Misuse of Models for Climate Policy

By Robert S. Pindyck, Review of Environmental Economics and Policy, **March 11, 2017**

<https://academic.oup.com/reep/article/11/1/100/3066301>

Another Look at Michael Crichton's 'State of Fear' – Part 1

By Bob Tisdale, WUWT, Oct 30, 2018

<https://wattsupwiththat.com/2018/10/30/another-look-at-michael-crichtons-state-of-fear-part-1/>

Defending the Orthodoxy

IPCC Reports: Special report on the impacts of global warming of 1.5 °C above pre-industrial levels

<http://www.ipcc.ch/report/sr15/>

Summary for Policymakers, Oct 6, 2018

http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

Headline Statements

http://report.ipcc.ch/sr15/pdf/sr15_headline_statements.pdf

WHO: 600,000 children died from air pollution in 2016

By Michael Burke, The Hill, Oct 29, 2018

<https://thehill.com/policy/energy-environment/413606-who-600000-children-died-from-air-pollution-in-2016>

Link to press release: More than 90% of the world's children breathe toxic air every day

By Staff Writers, WHO, Oct 29, 2018

<http://www.who.int/news-room/detail/29-10-2018-more-than-90-of-the-world%E2%80%99s-children-breathe-toxic-air-every-day>

[SEPP Comment: The article features a photo of a power plant emitting steam. In many countries indoor air pollution is a big problem, the photo in The Hill makes it trivial. WHO reports regarding PM2.5 in high-income countries are highly questionable.]

IEA Opposed To Cheap Energy For Developing Nations

By Paul Homewood, Not a Lot of People Know That, Oct 31, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/10/31/iea-opposed-to-cheap-energy-for-developing-nations/>

A Radically Realistic Climate Vision

By Barbara Unmüßig, President of the Heinrich Böll Foundation, Project Syndicate, Nov 1, 2018

<https://www.project-syndicate.org/commentary/ipcc-report-overcoming-climate-crisis-by-barbara-unmuessig-2018-11>

Link to: Radical Realism for Climate Justice

By Multiple Writers, Edited by Heinrich Böll Foundation, 2018

<https://www.boell.de/en/radicalrealism>

DiNapoli's half-measures on climate change

By John Ingram, Crain's New York Business, Oct 29, 2018

<https://www.crainsnewyork.com/op-ed/dinapolis-half-measures-climate-change>

“This week's report by the **Nongovernmental International Panel on Climate Change** shows that the window of opportunity for stabilizing the climate is rapidly closing.” [Boldface added]

Link to article on report: Climate Crisis Spurs UN Call for \$2.4 Trillion Fossil Fuel Shift

By Reed Landberg, Chisaki Watanabe, and Heesu Lee, Bloomberg, Oct 8, 2018

<https://www.bloomberg.com/news/articles/2018-10-08/scientists-call-for-2-4-trillion-shift-from-coal-to-renewables?srnd=climate-changed>

[SEPP Comment: The article's author, a retired teacher now with 350.org, confuses NIPCC with UN sponsored IPCC.]

NC governor sets goal of cutting greenhouse gas emissions by 40 percent

By John Bowden, The Hill, Oct 30, 2018

<https://thehill.com/policy/energy-environment/413838-nc-governor-sets-goal-of-cutting-greenhouse-gas-emissions-by-40>

[SEPP Comment: How effectively can the governor implement his executive order?]

Questioning the Orthodoxy

Water Vapor Confirmed as Major Player in Climate Change

By Kathryn Hansen, NASA, Nov 17, 2008

https://www.nasa.gov/topics/earth/features/vapor_warming.html#backtoTop

[SEPP Comment: Contrary to IPCC claims.]

Carbon Folly

By Donn Dears, Power For USA, Oct 30, 2018

<http://ddears.com/2018/10/30/carbon-folly/>

‘Brief Answers to the Big Questions’ and ‘On the Future’ Review: Serious Doubt on Serious Earth

We're still waiting to solve the riddle of existence—with no sign today's physicists are on the right track

By John Horgan, WSJ, Oct 18, 2018

<https://www.wsj.com/articles/brief-answers-to-the-big-questions-and-on-the-future-review-serious-doubt-on-serious-earth-1539909146>

Via GWPF, Titled, How the High Priests of Science Lost Their Status & Prestige

<https://www.thegwpf.com/how-the-high-priests-of-science-lost-their-status-prestige/>

Five Reasons Banning Plastics May Harm the Environment and Consumers

By CEI Staff, CEI, July 13, 2018

<https://cei.org/blog/five-reasons-banning-plastics-may-harm-environment-and-consumers>

Global mortality from storm surges is decreasing

By Laurens M Bouwerand and Sebastiaan N Jonkman, Environmental Research Letters, Via GWPF, Nov 2, 2018

<https://www.thegwpf.com/global-mortality-from-storm-surges-is-decreasing/>

After Paris!

Only 16 countries are even aiming to reach their Paris targets

By Jo Nova, Her Blog, Oct 31, 2018

<http://joannenova.com.au/2018/10/only-16-countries-are-even-aiming-to-reach-their-paris-targets/>

Link to report: Aligning national and international climate targets

By Michal Nachmany and Emily Mangan, London School of Economics and Political Science and Grantham Research Institute on Climate Change and the Environment, Oct 29, 2018

<http://www.lse.ac.uk/GranthamInstitute/publication/targets/>

Bolsonaro in, Merkel out: the Paris climate gang is breaking up

In 2015, a group of countries banded together to shape the global climate pact, but political turmoil is pulling the alliance apart

By Sara Stefanini, Climate Home News, Oct 31, 2018 [H/t GWPF]

<http://www.climatechangenews.com/2018/10/31/bolsonaro-merkel-paris-climate-gang-breaking/>

China's Thermal Power Continues To Rise—Up 6.9% So Far This Year

By Paul Homewood, Not a Lot of People Know That, Oct 31, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/10/31/chinas-thermal-power-continues-to-rise-up-6-9-so-far-this-year/>

Paris-Signing China Cultivates Fossil Fuels Over Renewables As Paris-Rejecting USA's Emissions Keep Falling

By Kenneth Richard, No Tricks Zone, Oct 29, 2018

<http://notrickszone.com/2018/10/29/paris-signing-china-cultivates-fossil-fuels-over-renewables-as-paris-rejecting-usas-emissions-keep-falling/>

Location of large mystery source of banned ozone depleting substance uncovered

By Anthony Watts, WUWT, Oct 29, 2018

<https://wattsupwiththat.com/2018/10/29/location-of-large-mystery-source-of-banned-ozone-depleting-substance-uncovered/>

Link to paper: Continued Emissions of the Ozone-Depleting Substance Carbon Tetrachloride From Eastern Asia

By M.F. Lunt, et al, Geophysical Research Letters, Oct 29, 2018

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018GL079500>

Its dispersive use was banned, not its use.

A once popular solvent, used by dry cleaners, CCl₄ was formerly widely used in fire extinguishers, as a precursor to refrigerants and as a cleaning agent. Refrigerants such as R-11 and R-12 have been banned under the Montreal Protocol

[SEPP Comment: Will tracing CO₂, which varies naturally, be any easier than tracing CCl₄?]

Nitrogen Dioxide Sense and Nonsense

Guest Post by Willis Eschenbach, WUWT, Oct 29, 2018

<https://wattsupwiththat.com/2018/10/29/nitrogen-dioxide-sense-and-nonsense/>

[SEPP Comment: No NO₂ problems in New Zealand, where the government is claiming it must be controlled as a greenhouse gas.]

Change in US Administrations

Automakers fight Trump's auto emissions rollback

By Timothy Cama, The Hill, Oct 29, 2018

<https://thehill.com/policy/transportation/automobiles/413729-automakers-fight-trumps-auto-emissions-rollback>

“Companies had emphatically encouraged the Environmental Protection Agency (EPA) and Department of Transportation (DOT) to undo the Obama administration's plans to ratchet up greenhouse gas emissions and fuel efficiency rules for cars through 2026.

“But now they're trying to stop the agencies from going too far in the other direction and freezing the standards in 2020.”

[SEPP Comment: Apparently the headline writer did not read the article.]

Seeking a Common Ground

Does the U.S. (and green tech) have a looming technology-security minerals crisis?

By Paul Driessen, WUWT, Oct 28, 2018

<https://wattsupwiththat.com/2018/10/28/does-the-u-s-and-green-tech-have-a-looming-technology-security-minerals-crisis/>

Review of Recent Scientific Articles by CO₂ Science

The Impact of Elevated CO₂ on Plant-Insect Interactions

Boullis, A., Francis, F. and Verheggen, F. 2018. Aphid-hoverfly interactions under elevated CO₂ concentrations: oviposition and larval development. *Physiological Entomology* 43: 245-250., Nov 2, 2018

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

The Resilience of Juvenile Rockfish to Ocean Acidification and Hypoxia

Davis, B.E., Komoroske, L.M., Hansen, M.J., Poletto, J.B., Perry, E.N., Miller, N.A., Ehlman, S.M., Wheeler, S.G., Sih, A., Todgham, A.E. and Fanguie, N.A. 2018. Juvenile rockfish show resilience to CO₂-acidification and hypoxia across multiple biological scales. *Conservation Physiology* 6: coy038; doi:10.1093/conphys/coy038. Nov 1, 2018

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

The Combined Effects of Elevated CO₂ and Temperature on Two Wheat Cultivars

Prakash, V., Dwivedi, S.K., Kumar, S., Mishra, J.S., Rao, K.K., Singh, S.S. and Bhatt, B.P. 2017. Effect of elevated CO₂ and temperature on growth and yield of wheat grown in sub-humid climate of eastern Indo-Gangetic Plain (IGP). *Mausam* 68: 499-506, Oct 31, 2018

<http://www.co2science.org/articles/V21/oct/a18.php>

The Response of Maize to Atmospheric CO₂ Enrichment

Xie, X., Li, R., Zhang, Y., Shen, S. and Bao, Y. 2018. Effect of elevated [CO₂] on assimilation, allocation of nitrogen and phosphorus by maize (*Zea Mays* L.). *Communications in Soil Science and Plant Analysis* 49: 1032-1044. Oct 29, 2018

<http://www.co2science.org/articles/V21/oct/a17.php>

Measurement Issues -- Atmosphere

UAH Global Temperature Update for October, 2018: +0.22 deg. C

By Roy Spencer, His Blog, Nov 2, 2018

<http://www.drroyspencer.com/2018/11/uah-global-temperature-update-for-october-2018-0-22-deg-c/>

Link to paper: Examination of space-based bulk atmospheric temperatures used in climate research

By John R. Christy, Roy W. Spencer, William D. Braswell & Robert Junod, International Journal of Remote Sensing, Mar 8, 2018

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

Measurement Issues – Missing Heat

FRIDAY FUNNY – At Long Last, Kevin Trenberth’s Missing Heat May Have Been Found! Repeat, May Have Been

By Bob Tisdale, WUWT, Nov 2, 2018

<https://wattsupwiththat.com/2018/11/02/friday-funny-at-long-last-kevin-trenberths-missing-heat-may-have-been-found-repeat-may-have-been/>

Changing Weather

Long range ENSO forecasting extended one year

By Staff Writers, Pohang, South Korea (SPX) Oct 17, 2018

http://www.terraviva.com/reports/Long_range_ENSO_forecasting_extended_one_year_999.html

Link to paper: Predicting El Niño Beyond 1-year Lead: Effect of the Western Hemisphere Warm Pool

By Jae-Heung Park, Jong-Seong Kug, Tim Li & Swadhin K. Behera, Nature, Oct

<https://www.nature.com/articles/s41598-018-33191-7>

Aloha Winds Over Puget Sound

By Cliff Mass, Weather and Climate Blog, Nov 1, 2018

<http://cliffmass.blogspot.com/2018/11/aloha-winds-over-puget-sound.html>

Changing Climate

Greenland Ice Sheet has already caused nearly five metres sea-level rise

New calculations show the true extent of ice melt from the Greenland ice sheet over the past 23,000 years.

By Kristian Sjøgren, Science Nordic, Sep 28, 2018

<http://sciencenordic.com/greenland-ice-sheet-has-already-caused-nearly-five-metres-sea-level-rise>

“The regional measurements show that historically, southeast Greenland and northwest Greenland have lost the most ice. Up to 40 per cent of all ice loss came from these two areas--much more than scientists had previously estimated.”

“It shows that satellite measurement alone are not enough to estimate loss of ice sheet mass. It’s essential to have direct observations, otherwise we will underestimate the contribution of Greenland ice melt to global sea level rise,” says Ahlstrøm.”

[SEPP Comment: Out of about 120 meters, with another 7.5 meters to go?]

Changing Seas

New Study Reveals 90% of Global Atolls Are Stable or Growing

By Staff Writers, GWPF & WIREs Climate Change, Oct 29, 2018

<https://www.thegwpf.com/new-study-reveals-90-of-global-atolls-are-stable-or-growing/>

Link to paper: A global assessment of atoll island planform changes over the past decades
By Virginie K. E. Duvat, Institut du Littoral et de l'Environnement,, University of la Rochelle-
Institut du Littoral et de l'Environnement, University of la Rochelle-CNRS, La Rochelle, France
CNRS, La Rochelle,, France, Sep 19, 2018

<http://sci-hub.tw/10.1002/wcc.557>

Seas are rising everywhere except around Islands

By Jo Nova, Her blog, Nov 1, 2018

<http://joannenova.com.au/2018/11/seas-are-rising-everywhere-except-around-islands/>

“No habitable island, none, got smaller.”

Coastal Flooding? Blame It On Climate Change!

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

<https://notalotofpeopleknowthat.wordpress.com/2018/11/01/coastal-flooding-blame-it-on-climate-change/>

Coastal Erosion Is Nothing New

By Paul Homewood, Not a Lot of People Know That, Oct 31, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/10/31/coastal-erosion-is-nothing-new/>

Link to list: Britain’s top 10 abandoned coastal villages

By Ben Custard, Countryfile, June 15, 2017

<https://www.countryfile.com/countryfile/britains-top-10-abandoned-coastal-villages/>

Changing Cryosphere – Land / Sea Ice

How the Greenland ice sheet fared in 2018

It's time for the Greenland ice sheet's annual health report, brought to you by scientists from the Danish Meteorological Institute and Polar Portal.

By Ruth Mottram, et al., DMI, Oct27, 2018

<http://sciencenordic.com/how-greenland-ice-sheet-fared-2018>

[SEPP Comment: Is Greenland becoming obese?]

Arctic sea ice habitat for polar bears is like a big pond that dries up partially in summer

By Susan Crockford, Polar Bear Science, Oct 30, 2018

<https://polarbearscience.com/2018/10/30/arctic-sea-ice-habitat-for-polar-bears-is-like-a-big-pond-that-dries-up-partially-in-summer/>

[SEPP Comment: Nothing like during the little ice age!]

Where [Antarctic] Icebergs Go to Die

By Anthony Watts, WUWT, Oct 31, 2018

<https://wattsupwiththat.com/2018/10/31/where-icebergs-go-to-die/>

Changing Earth

Just another bunch of old volcanoes we didn’t know about, found off Tasmania

By Jo Nova Her Blog Nov 2, 2018

<http://joannenova.com.au/2018/11/just-another-bunch-of-old-volcanoes-we-didnt-know-about-found-off-tasmania/#more-61413>

Agriculture Issues & Fear of Famine

5 Major Crops In The Crosshairs Of Climate Change

By Dan Charles, NPR, Oct 25, 2018

<https://www.npr.org/sections/thesalt/2018/10/25/658588158/5-major-crops-in-the-crosshairs-of-climate-change>

“Nothing says Iowa quite like fields of corn. Climate models, though, see a different future. They're predicting that a warming climate will bring several changes, most of them bad for growing corn. Rain will come less often, and when it comes, the storms will be more intense — neither of which is helpful for a crop that demands frequent rains, but doesn't do a good job of preventing soil erosion. In addition, corn suffers when it gets too hot — especially when it's too hot at night.”

[SEPP Comment: Does the reporter have any idea of the great increases in crop yields in wheat, maize, soybeans, etc.??]

Lowering Standards

More misleading alarmism from BBC and Met Office

By Paul Matthews, Climate Scepticism, Nov 2, 2018

<https://cliscep.com/2018/11/02/more-misleading-alarmism-from-bbc-and-met-office/>

Met Office's Latest Extreme Weather Report

By Paul Homewood, Not a Lot of People Know That, Nov 2, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/11/02/met-offices-latest-extreme-weather-report/>

[SEPP Comment: Is the Met Office marching in lock-step with Mr. Mann?]

Communicating Better to the Public – Make things up.

“100s of Millions of People will Die” – ACF Climate Change Warning about Breaching the 1.5C Limit

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

<https://wattsupwiththat.com/2018/10/31/100s-of-millions-of-people-will-die-acf-climate-change-warning-about-breaching-the-1-5c-limit/>

Communicating Better to the Public – Do a Poll?

80% of Australian don't want the government to put renewables ahead of costs, health, housing, jobs etc.

By Jo Nova, Her Blog, Oct 30, 2018

<http://joannenova.com.au/2018/10/80-of-australian-dont-want-the-government-to-put-renewables-ahead-of-costs-health-housing-jobs-etc/>

[SEPP Comment: Of 13 categories of which up to 3 were selected, cost of living is the dominant category for all groups (60%) to the question “What do Australians want their government to address? Are increasing energy costs a problem?]

Communicating Better to the Public – Use Propaganda

‘Most important years in history’: Major UN report sounds last-minute climate alarm

By Karl Mathiesen and Natalie Sauer, EURACTIV, Updated Oct 25, 2018

<https://www.euractiv.com/section/climate-environment/news/most-important-years-in-history-major-un-report-sounds-last-minute-climate-alarm/>

Questioning European Green

4 Charts Expose Abominable Inadequacy Of Europe’s Wind Energy ...”Power Collapses Within Minutes”

By P Gosselin, No Tricks Zone, Nov 2, 2018

<http://notrickszone.com/2018/11/02/4-charts-expose-abominable-inadequacy-of-europes-wind-energy-power-collapses-within-minutes/>

Germany Goes Green ...Shocking Video How “Wind Turbine Plantations” Are Ruining The Country’s Natural Heritage

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

<http://notrickszone.com/2018/10/30/germany-goes-green-shocking-video-how-wind-turbine-plantations-are-ruining-the-countrys-natural-heritage/>

[SEPP Comment: A great looking crop in concrete and steel!]

UK Emission Cuts “mostly a result of the decline of its manufacturing industries.”

By Paul Homewood, Not a Lot of People Know That, Nov 2, 2018

<https://notalotofpeopleknowthat.wordpress.com/2018/11/02/uk-emission-cuts-mostly-a-result-of-the-decline-of-its-manufacturing-industries/>

Questioning Green Elsewhere

Green Madness: \$2 Billion Solar Subsidies to Send Household Bills Through the Roof

By Staff Writers, The Australian, Oct 27, 2018

<https://www.thegwpf.com/green-madness-2-billion-solar-subsidies-to-send-household-bills-through-the-roof/>

Funding Issues

UN Climate Summit costs Rise with CO2 Emissions, Now Exceed \$150 Million, [a year]] Economist Says

By Michael Bastasch, Daily Caller, Oct 29, 2018

<https://dailycaller.com/2018/10/29/un-climate-summit-costs-rising/>

The Political Games Continue

Five energy and environment ballot questions to watch

By Timothy Cama, The Hill, Oct 28, 2018

<https://thehill.com/policy/energy-environment/413433-five-energy-and-environment-ballot-questions-to-watch>

Midterm Elections: 5 States Could Wreck Their Economies In Futile Fight Against 'Climate Change'

Editorial, IBD, Oct 30, 2018

<https://www.investors.com/politics/editorials/midterm-elections-global-warming/>

Litigation Issues

With Congress and Trump on sidelines, climate change battle moves to courts

“As climate change impacts get worse and worse and there is still no action, we could see a lot more of this,” a law professor said.

By James Rainey, NBC News, Oct 26, 2018

<https://www.nbcnews.com/science/environment/congress-trump-sidelines-climate-change-battle-moves-courts-n924651>

Link to litigation: NYS v. Exxon

https://ag.ny.gov/sites/default/files/summons_and_complaint_0.pdf

Future Generations' Sue the USA over Global Warming

By T.R. Clancy, American Thinker, Oct 30, 2018

https://www.americanthinker.com/articles/2018/10/future_generations_sue_the_usa_over_global_warming.html

Subsidies and Mandates Forever

Government Motors Lives Up to its Name

By Donn Dears, Power For USA, Nov 2, 2018

<http://ddears.com/2018/11/02/government-motors-lives-up-to-its-name/>

Cost Of Green Subsidies Rises To £66bn In Next 5 Years

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

<https://notalotofpeopleknowthat.wordpress.com/2018/11/01/cost-of-green-subsidies-rises-to-66bn-in-next-5-years/>

Energy Issues – Non-US

The UK'S Autumn Budget and Environmental Policy; A Tale of a (Recyclable) Tub

By John Constable: GWPF, Oct 31, 2018

<https://www.thegwpf.com/the-uks-autumn-budget-and-environmental-policy-a-tale-of-a-recyclable-tub/>

“The United Kingdom’s Chancellor of the Exchequer, Mr Philip Hammond delivered his Autumn Budget, 2018, on Monday the 29th of October. Although silent on many environmental issues it contains clear indications that the Treasury is persisting in its attempt gradually to introduce technology neutral carbon taxation to replace income support subsidies to renewables. If successful, this attempt will represent a major and by and large desirable change of direction.”

The Scale of the Seismicity “Problem”

By Andrew Montford, GWPF, Oct 29, 2018

<https://www.thegwpf.com/48321-2/>

Sorry China, Shipping Costs Make Europe a LNG Hot Spot Right Now

By Anna Shiryayevskaya, Bloomberg, Oct 25, 2018

<https://www.bloomberg.com/news/articles/2018-10-25/sorry-china-shipping-costs-make-europe-a-lng-hot-spot-right-now>

Europe set to get cargoes from U.S. to Russia to Angola
Spot shipping rates near record let traders optimize flows
[SEPP Comment: Over a very short time.]

As Public Gets Used to Micro-Tremors Caudrilla Wants Relaxation of Quake Rules

By Staff Writers, The Times, Via GWPF, Oct 30, 2018

<https://www.thegwpf.com/as-public-gets-used-to-constant-micro-tremors-cuadrilla-wants-relaxation-of-quake-rules/>

Energy Issues -- US

Renewables Lose To Natural Gas In Power Market

By Allen Brooks, Master Resource, Oct 31, 2018

<https://www.masterresource.org/energy-economics-2/renewable-loses-natural-gas/>

Viewpoint: The advantages of Small Modular Reactors

By Staff Writers, WNN, Oct 28, 2018

<http://www.world-nuclear-news.org/Articles/Viewpoint-The-advantages-of-Small-Modular-Reactors>

US utility uses drones for nuclear plant inspections

By Staff Writers, WNN, Oct 29, 2018 H/t Toshio Fujita]

<http://www.world-nuclear-news.org/Articles/US-utility-uses-drones-for-nuclear-plant-inspectio>

Alternative, Green (“Clean”) Solar and Wind

100 Percent Renewables—Poor Policy for Ratepayers

By Steve Goreham, Master Resource, Oct 29, 2018

<https://www.masterresource.org/hundred-percent-renewable-energies/100-percent-renewable-bad/>

FT Funny: We can Solve Climate Change by Developing Affordable Green Energy

Guest essay by Eric Worrall, WUWT, Oct 29, 2018

<https://wattsupwiththat.com/2018/10/29/ft-funny-we-can-solve-climate-change-by-developing-affordable-green-energy/>

[SEPP Comment: When the cost of electricity storage becomes zero.]

Scotland’s wind exports to England and the myth of a 100% renewable Scotland

By Roger Andrews, Energy Matters, Oct 31, 2018

<http://euanmearns.com/scotlands-wind-exports-to-england-and-the-myth-of-a-100-renewable-scotland/#more-22691>

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

Paradigm Shift? The ‘Belief’ That Bioenergy Is Climate-Friendly Is Now Recognized As A ‘Major Error’

By Kenneth Richard, No Tricks Zone, Nov 1, 2018

<http://notrickszone.com/2018/11/01/paradigm-shift-the-belief-that-bioenergy-is-climate-friendly-is-now-recognized-as-a-major-error/>

Link to one paper: Opinion: Reconsidering bioenergy given the urgency of climate protection

By John M. DeCicco and William H. Schlesinger, PNAS, Sep 25, 2018

<http://www.pnas.org/content/115/39/9642>

Alternative, Green (“Clean”) Vehicles

Airline vows to switch to electric planes on short-haul routes by 2030

By Avery Anapol, The Hill, Oct 30, 2018

<https://thehill.com/policy/energy-environment/413904-airline-vows-to-switch-to-electric-planes-on-short-haul-routes-by>

Health, Energy, and Climate

Coal power plant regulations neglect a crucial pollutant

By Mike Williams, Phys.org, Oct 29, 2018

<https://phys.org/news/2018-10-coal-power-neglect-crucial-pollutant.html>

Link to paper: Air quality and health benefits from potential coal power plant closures in Texas

By Brian Strasert, Su Chen Teh & Daniel S. Cohan, Journal of the Air & Waste Management Association, Oct 19, 2018

<https://www.tandfonline.com/doi/full/10.1080/10962247.2018.1537984>

"Particulate matter is the deadliest of all air pollutants, and it's not just causing deaths in the way that you might think," Cohan said. "It's not only by respiratory diseases, but it's also causing increases in rates of heart attacks and strokes. These particles are small enough to pass through the alveoli and enter the bloodstream. That lets them cause damage on all aspects of our bodily systems."

[SEPP Comment: No abstract, no measurements of actual death rates. Seems to be built on speculative EPA 2.5 pm models.]

Oh Mann!

It's not rocket science: Climate change was behind this summer's extreme weather

By Michael E. Mann, Washington Post, Nov 2, 2018 [H/t John McClaughry]

https://www.washingtonpost.com/opinions/its-not-rocket-science-climate-change-was-behind-this-summer-extreme-weather/2018/11/02/b8852584-dea9-11e8-b3f0-62607289efee_story.html?utm_term=.2cc289156752&wpisrc=nl_opinions&wpm=1

Link to paper: Projected changes in persistent extreme summer weather events: The role of quasi-resonant amplification

By Michael E. Mann, Stefan Rahmstorf, Kai Kornhuber, Byron A. Steinman, Sonya K. Miller, Stefan Petri and Dim Coumo, Science Advances, AAAS, Oct 31, 2018

<http://advances.sciencemag.org/content/4/10/eaat3272>

"Climate-change deniers love to point to scientific uncertainty as justification for inaction on climate. But uncertainty is a reason for even more concerted action. We already know that projections historically have been too optimistic about the rates of ice sheet collapse and sea-level rise."

[SEPP Comment: Apparently Mr. Mann's knowledge comes from models that are not validated and have been demonstrated to be wrong – greatly over-estimating atmospheric warming. Both increase in sea level rise and ice sheet collapse come from such poorly tested models. Is uncertainty of the bullet firing a reason to play Russian Roulette?]

Environmental Industry

Environmental group adds \$20 million more investment to midterm elections

By Miranda Green, The Hill, Nov 1, 2018

<https://thehill.com/policy/energy-environment/414296-environmental-group-adds-20-million-more-investment-to-midterm>

[SEPP Comment: To the League of Conservation Voters spending \$80 million on political campaigns is an investment?]

Wild animal population has plunged 60 percent since 1970: report

By Aris Folley, The Hill, Oct 30, 2018

<https://thehill.com/policy/energy-environment/413771-wild-animal-population-has-plunged-60-since-1970-report>

[SEPP Comment: Amusingly, the article on a World Wildlife Fund (WWF) report has a photo of a polar bear, whose populations are stable or increasing.]

Other Scientific News

Explaining the Twin Paradox

By S. Fred Singer, American Thinker, Sep 8, 2018

https://www.americanthinker.com/blog/2018/09/explaining_the_twin_paradox.html

My Definition of a Scientist

By Frank Schnell, ACSH, Oct 31, 2018

<https://www.acsh.org/news/2018/10/31/my-definition-scientist-13561>

1 in 4 Statisticians Say They Were Asked to Commit Scientific Fraud

By Alex Berezow, ACSH, Oct 30, 2018

<https://www.acsh.org/news/2018/10/30/1-4-statisticians-say-they-were-asked-commit-scientific-fraud-13554>

Other News that May Be of Interest

Buzz Aldrin: A Man Second to None

By Larry Bell, Newsmax, Oct 29, 2018

<https://www.newsmax.com/larrybell/apollo-armstoring-cold-war-moon/2018/10/29/id/888417/>

BELOW THE BOTTOM LINE:

The Media Puts a New Spin on Migrant Caravan Coverate – They’re Fleeing Global Warming

By Michael Bastasch, Daily Caller, Oct 31, 2018

<https://dailycaller.com/2018/10/31/media-caravan-global-warming/>

[SEPP Comment: According to some, climate change causes everything?]

Stand Down

By Staff Writers, Climate Change Predictions.org, Oct 31, 2018

<http://climatechangepredictions.org/uncategorized/10130>

“Most advanced countries spend at least 2% of GDP on standing armies, navies and air forces even though the chance of having to repel an invasion is extremely remote.

“Destroyers, submarines, fighter aircraft, bombers, tanks and artillery are useless against terrorism and low-level threats and as aids to peacekeeping missions.

“In Australia’s case, the chances of needing a sophisticated standing defence force to repel an invasion over the next 50 years would be no greater than one in 100.

“The consequences of defeat in total war may be slavery, which is preferable to the annihilation of civilisation and most of the species on the planet – the possible consequence of going beyond the climate change tipping point.” Kenneth Davidson, senior columnist, The Age, 24 Jul 2008 – screen copy held by this website

But some like it hot!

By Staff Writers, Climate Change Predictions.org, Nov 1, 2018

<http://climatechangepredictions.org/uncategorized/5796>

“Dr David Viner, of the Climatic Research Unit at the University of East Anglia, said that Mediterranean resorts would become no-go areas for holidaymakers in the summer months due to rising temperatures.

“As a result, tourists would soon be forced to shift further north for summer holidays, to regions such as northern France, the Baltic and the UK.” The Telegraph, (UK), 19 Nov 2005

ARTICLES:

1. How Greens Humiliate Themselves

Their latest lawsuit would have Exxon pretend that climate policy is succeeding.

By Holman Jenkins, WSJ, Oct 30, 2018

https://www.wsj.com/articles/how-greens-humiliate-themselves-1540939433?mod=hp_opin_pos2

SUMMARY: The journalist writes:

“Despite its general lack of merit, a lawsuit by the New York attorney general’s office is an entertaining symbol of all that has gone wrong with the green movement in the era of climate-change politics.

“Exxon is accused of failing to adopt sufficiently penitential accounting for its oil and gas projects in light of climate regulations that, ahem, don’t exist. Indeed, politicians around the world have declined to enact the green wish list even when given the chance, notwithstanding their endless verbal opposition to climate change.

“Presume for a moment the accusations against Exxon are accurate. Then greens should actually be glad because Exxon has spared them future embarrassment when the company is forced to increase the recorded value of its assets to account for the failure of green politics to deliver the expected carbon regulations.

“Words are challenged to express how laughable this case is. Before getting lost in distinctions that Exxon internally draws (and the attorney general muddles) between project-specific costs and policies that would suppress demand for fossil fuels generally, let’s remember a few things.

“Like all businesses, Exxon seeks to take only those risks that will pay off, and has every incentive to anticipate future regulatory costs correctly. The attorney general’s office and its green backers have an entirely different purpose: They want Exxon to use its internal disciplines to prevent oil and gas development even if it would pay off.

“The mood ring the greens are wearing is not a pretty color. They can’t enact meaningful curbs through the political process. They failed to use the courts to hold Exxon and others liable for global warming, never mind that the damages they sought would have been paid by producing more oil and gas (and therefore more greenhouse gases).

“They have not succeeded in slowing the increase in atmospheric carbon dioxide, but now are suing Exxon for not pretending otherwise in its accounting. It’s almost as if extorting Exxon’s participation in a fantasy of green success has become a substitute for actual green success.

“The lawsuit is the last dribble of the grand inquisition launched by now-departed Attorney General Eric Schneiderman, subsidized (as we later learned) by outside climate lobbyists. Mr. Schneiderman was forced to leave office in May due to his practice of hitting women he was dating. He set out originally to prove that Exxon had lied about climate science, which Mr. Schneiderman apparently believed is devoid of uncertainties. (Exxon had pointed to uncertainties.)

That fell through, perhaps when his staff opened any of the reports of the United Nations Intergovernmental Panel on Climate Change. These not only testify to the continuing

uncertainties, but ironically have themselves become a five-volume testament to science's inability to reduce these uncertainties despite tens of billions invested in climate science.

"Here's another embarrassment. Since climate change moved to center stage and became the holy cause of the green movement 20 years ago, greenhouse gases have grown faster than ever. The climate-change lobby has devolved into an angry cult. It does not seek to build bridges to others. It has run, by now, an exhaustive experiment showing conclusively that hysterical doom-mongering and vilifying skeptics as the equivalent of Holocaust deniers is a recipe for political failure.

"Most of all, it has abdicated on the crucial grounds of cost and benefit, though it's entirely possible to envision climate-related policies that would meet a cost-benefit test. Investing in basic science and research is almost always high-return. All governments must tax something; most governments tax hundreds of things. A carbon tax is one strategy that could command support across the political spectrum if sold with a touch of the conciliatory mind-set that is crucial to democracy.

"The idea was not alien to the green movement, before it went insane. In the 1990s, environmentalists promoted a 'double dividend' strategy—in which a carbon tax would be used to reduce taxes on socially useful activities like work and investment. As Resources for the Future's Richard Morgenstern said in a 1996 paper: 'Taxes on labor discourage work effort; those on savings reduce the pool of capital available for investment; and those on investment discourage risk-taking.'"

After a few words on politics and extreme views the journalist concludes:

"No less observable is the bad faith of the New York attorney general's office. It debases itself and the law by trying to invent some kind of complaint against Exxon merely as payback for its green allies."

2. 'Saudi America' Review: The Truth About Fracking?

The author claims that an entire industry is overloaded with debt and poised for collapse. The reality seems to be quite different. R. Tyler Priest reviews "Saudi America" by Bethany McLean. By R. Tyler Priest, WSJ, Oct 31, 2018

<https://www.wsj.com/articles/saudi-america-review-the-truth-about-fracking-1541025548>

SUMMARY: After introducing the author of "Saudi America" as previously exposing accounting irregularities at Enron, the Associate professor of history and geography at the University of Iowa and the author of "The Offshore Imperative: Shell Oil's Search for Petroleum in Postwar America" writes:

Ms. McLean is now trying to make the case that shaky financing has set up the fracking industry for a similar collapse. In 'Saudi America: The Truth About Fracking and How It's Changing the World,' she argues that the industry is so overloaded with debt that it may never generate free cash flow. Half of this slim volume is preoccupied with the spectacular rise and fall of Chesapeake Energy's Aubrey McClendon, whom Ms. McLean casts as the face of the industry. She echoes Forbes magazine's epithet, calling him 'America's most reckless billionaire.' Skeptical about the 'rosy claims of American energy independence, and how it would restore the country's depleting geopolitical power,' she says that the 'truth about fracking' is that it is

unsustainable. McClendon's death in a March 2016 car accident was 'the punctuation marking the end of an era.'

Except that it clearly was not. The short sellers Ms. McLean relied upon for her Enron reporting may have turned out to be right, but that doesn't mean the ones she quotes frequently in 'Saudi America,' such as Jim Chanos of Kynikos Associates and David Einhorn of Greenlight Capital, are equally prescient about shale. 'If it weren't for historically low interest rates,' she writes, 'it's not clear there would even have been a fracking boom.' That assessment exaggerates the burden of debt and plays down the technological breakthroughs that helped make the U.S. the world's largest producer of both oil and natural gas. There is more to this story than Aubrey McClendon and cheap money.

"From 2014 to 2016, poor returns on capital and negative cash flow were serious concerns for frackers. But that's a common problem for any rapidly growing, capital-intensive industry. It has been a regular—though not permanent—feature of the petroleum business for 150 years. Ms. McLean focuses on a period when the industry suffered one of the worst price collapses in its history. Many exploration and production companies went bankrupt, but they were primarily undercapitalized or had invested in marginal resources at the outset. If Ms. McLean's analysis were correct, the market downturn after 2014 would have created much more carnage than it did. Now that prices have recovered, fracking is starting to generate free cash flow, especially for the larger independents with sturdier balance sheets, better lease positions and the ability to innovate. By drastically reducing production costs in places such as the Permian Basin in West Texas, U.S. shale operators have been able to beat Saudi Arabia in a price war and emerge healthier than before.

"In a book meant to be read quickly, Ms. McLean often dashes off quick points that are poorly reasoned. She asserts, for example, that the growth of U.S. oil-and-gas exports has undermined America's security interests abroad, noting that U.S. shale has emboldened Russia's Vladimir Putin to use oil and gas as political tools. But she fails to consider how Russia's power would have been bolstered if oil prices had continued to rise past \$147 a barrel in 2008. Ms. McLean also suggests that America's new energy abundance has exacerbated instabilities in oil-exporting countries such as Nigeria and Venezuela and could potentially create a power vacuum in the Middle East. This raises the question of whether Ms. McLean would prefer the U.S. be more dependent on energy from the Middle East and stable—yet stably corrupt—regimes in Venezuela and Nigeria. Moreover, if fracking is as financially unviable as Ms. McLean argues, she would have to admit that the problems it poses for American foreign policy are not long-term.

"We are 'losing the race' to a renewable energy future, Ms. McLean concludes, by hitching our hopes to the promise of a 'Saudi America.' Despite the Trump administration's pro-fossil-fuel policies, Ms. McLean insists that oil and gas are on their way out, to be replaced by renewables sooner than we think. Describing herself as 'stunned' to learn that several large private-equity investors were turning away from oil and gas 'for the simple reason that they didn't think the profits would be there for much longer,' she seems unaware that in the time since the mid-2014 crash private-equity firms have raised more than \$50 billion to pour into shale drilling.

"Ms. McLean is glib about how easy the shift away from fossil fuels will be. She recommends a controversial 2015 study by Stanford University professor Mark Jacobson, who declared that a complete transition to renewables in this country by 2050 is 'technically and economically

feasible with little downside.’ A group of 21 scholars in the Proceedings of the National Academy of Sciences, however, found major faults with the study’s methods and conclusions.

“The race to protect humanity from the worst effects of climate change surely depends upon decarbonizing our energy system, but fracking has a role to play in the long process of adjustment. The oil that fracking produces in the U.S. causes less environmental harm than that extracted in many other parts of the world, and natural gas from shale is a vital ‘bridge fuel’ for reducing carbon-dioxide emissions throughout our energy sector. As Ms. McLean’s antihero, Aubrey McClendon, once implored: ‘Embrace natural gas to reduce our importation of oil and embrace natural gas to reduce our consumption of coal.’”
