The Week That Was: 2016-04-02 (April 2, 2016) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week: "Science can purify religion from error and superstition. Religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world, a world in which both can flourish." – Pope John Paul II [H/t Tom Sheahen]

Number of the Week: #1 – Top US Manufactured Good

THIS WEEK:

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

Cooling Down? Writing in Watts Up With That?, geologist Norman Page argues that the fear of unprecedented and dangerous global warming caused by human emissions of carbon dioxide (CO2) will abate by about 2020. Using sections of the Fourth Assessment Repot (AR-4, 2007) of the UN Intergovernmental Panel on Climate Change (IPCC), Page points out that the climate orthodoxy does not know how to test for the reliability of the climate models it uses.

Using proxy data for solar variation, Page asserts that the IPCC erroneously attributes changes due to solar variation for temperature change caused by increasing CO2. As such, the models greatly over estimate future warming, or what he calls Catastrophic Anthropogenic Global Warming (CAGW). According to Page, the short-term cooling that is expected to follow the current El Niño is greatly amplified by a long-term cooling caused by a decline in solar activity. We should be seeing this solar cased cooling by 2020.

Page concludes that the reputation of science is being damaged by establishment climate scientists who have made "two egregious errors of judgment in their method of approach to climate forecasting and thus in their advice to policy makers in successive SPMs [Summary for Policymakers]. First, they based their analyses on inherently untestable and specifically structurally flawed models which included many questionable assumptions. Second they totally ignored the natural, solar driven, millennial and multi-decadal quasi-cycles." Under the current circumstances, useful forecasting is impossible.

"It is fashionable in establishment climate circles to present climate forecasting as a "wicked" problem. [A term used by mathematicians.] I would by contrast contend that by adopting the appropriate time scale and method for analysis it becomes entirely tractable so that commonsense working hypotheses with sufficient likely accuracy and chances of success to guide policy can be formulated.

"If the real outcomes follow the near term forecasts in para 3.3 above [a cooling, found in the article] I suggest that the establishment position is untenable past 2020. This is imminent in climate terms. The essential point of this post is that the 2003 peak in Fig 1 marks a millennial peak which is totally ignored in all the IPCC projections."

No doubt some will dismiss the evidence presented by Page, simply because he is a petroleum geologist. But this would be similar to dismissing the evidence of plate tectonics presented by petroleum geologists.

[As demonstrated in the court filings by some scientists, the major evidence asserted by the EPA in finding the CO2 can cause dangerous warming cannot be found. Further, the models used by the IPCC, and relied upon by the EPA, greatly overestimate the warming of the lower atmosphere, up to 50,000 feet (15,000 meters). This is where the major greenhouse effect occurs, and any amplification of an increased greenhouse effect from CO2 should occur.]

Paris Agreement: In Climate Etc. Judith Curry presents the views of Lucas Bergkamp on the Paris Agreement. The Agreement codifies the work of the IPCC and the UN Framework Convention for Climate Change (UNFCCC), no matter how faulty the science and the models on which it relies are. "Despite these references to science, the relation between the 'best available science' and the Agreement is ambiguous at best and calamitous at worst."

"As the issue of the global temperature 'hiatus' illustrates, the ability of climate science to self-correct and properly inform policy-making is hampered by an inability to reexamine the fundamental assumptions driving the scientific enterprise and its relation to policy-making. Given climate policy's objectives, funding agencies, scientists, and scientific advisors, in turn, are encouraged to provide 'policy-relevant' science supporting the policies pursued by the politicians.

"Rather than attempting to reverse this trend, the Paris Agreement aggravates the current problems by reinforcing the scientistic [sic: scientific] thinking underlying climate policy-making: it codifies the putative causal relations between anthropogenic emissions and global temperature increase, between temperature increase and climate change, and between climate change and adverse impacts. It even intensifies and extends this thinking to make the temperature increase limitation goal more ambitious and to require net zero emissions by the second half of this century.

"With the Paris Agreement, the relation between climate policy-making and science has become even more strained and entrenched. As Kuhn observed, the scientist is 'a solver of puzzles, and the puzzles upon which he concentrates are just those which he believes can be both stated and solved within the existing scientific tradition." Unfortunately, at this juncture, the revolution that is necessary to change the state of affairs requires not only a scientific, but also a political and policy paradigm shift. While the former is already difficult enough to achieve, the Paris Agreement made the latter even harder by increasing the stakes through coupling very substantial financial streams with the dominant hypothesis of human-induced climate change."

Bregkamp provided insights into policy driven science that is resulting in disregard of empirical evidence. As Curry states: "I have no idea how to push the 'reset button' here and salvage climate science. As for energy policy, one can only hope for technological breakthroughs in energy generation, storage and transmission that make all this a moot issue."

Atmospheric Temperatures: Roy Spencer reports that the March global atmospheric temperature, as measured by satellites, and reported by the University of Alabama in Huntsville are lower than they were in February. February was an all-time high. The issue is what will happen in the next few months. Will the temperatures fall, as expected with a weakening El Niño? In what range will they settle? Will it be above, below, or approximately the same as it was before the El Niño? See links under Challenging the Orthodoxy and Changing Weather.

Political Conformity: The Wall Street Journal reports that "the Bank of England, the Financial Stability Board and the European Systemic Risk Board are examining how banks, insurers and pension funds would cope if policies designed to reduce carbon-dioxide emissions led to a sharp drop in the share price of oil, gas and coal companies.

"They are looking at new rules to disclose exposures to both stocks and bonds in such companies, conducting stress tests based on different climate scenarios or even requiring additional capital buffers."

This may be an early step to force these financial institutions to conform to the political policies of the EU and the UNFCCC regarding carbon based fuels. The US sub-prime lending debacle provides a guideline of what may happen.

For years, politicians demanded that banks and other financial establishments expand home mortgage lending to the less well-off or financially less responsible. Credit scores are the best single indicator of the ability, or willingness, to make mortgage payments. Such indicators were dismissed by the politicians and by government sponsored enterprises such as Fannie Mae and Freddie Mac, major guarantors of home lending. The Federal Reserve Bank of Boston even issued a report claiming that real estate values in the US will not fall. After the housing boom, came the housing bust in 2008 and the financial collapse.

Immediately, politicians, such as Christopher Dodds and Barney Frank, who heavily promoted the sub-prime lending, blamed the banks and lending institutions for these loans, which they previously demanded. Conforming to political fads can be a financial disaster.

Perhaps the annual report of Berkshire Hathaway, with comments by Warren Buffett, can provide guidance to these companies that will face political demands. The company is heavily involved in insurance. As reported in the March 5 TWTW, Berkshire Hathaway has had a 19.2% compounded annual gain for its stockholders from 1965 to 2015. See Article # 3 and http://www.berkshirehathaway.com/2015ar/2015ar.pdf

Past Sea Levels: A paper in *Nature* examines the sea levels in past interglacial periods and finds that the levels were between 6 and 9 meters (20 to 30 feet) higher during the last interglacial (130,000 to 115,000 years ago) than they are now. The paper also notes that the CO2 concentrations were about 280 ppm (compared with about 400 ppm today) and that the global

mean temperature was about 0 to 2° C warmer than today. These findings are generally acceptable.

Additions and Corrections: Several readers, including physicist Donald Rapp have stated TWTW may becoming too dogmatic in its assertions that EPA's finding that greenhouse gas emissions endanger human health has a poor empirical basis. Rapp writes: "But there is a non-zero probability that in the future, human health and welfare will be affected negatively, if not endangered. While we cannot accurately predict that probability, nor can we accurately predict the impacts on human health and welfare, it seems to me that you are posing the question in stark black and white rather than gray."

Rapp is correct, the issue is not black and white. TWTW will try to avoid becoming dogmatic. It does not question the greenhouse effect or that increasing CO2 will cause some warming. The issue is how much, and will that warming be amplified, such as by increased water vapor in the atmosphere above the tropics?

SEPP'S APRIL FOOLS AWARD THE JACKSON

SEPP is conducting its annual vote for the recipient of the coveted trophy, The Jackson, a lump of coal. Readers are asked to nominate and vote for who they think is most deserving, following these criteria:

- The nominee has advanced, or proposes to advance, significant expansion of governmental power, regulation, or control over the public or significant sections of the general economy.
- The nominee does so by declaring such measures are necessary to protect public health, welfare, or the environment.
- The nominee declares that physical science supports such measures.
- The physical science supporting the measures is flimsy at best, and possibly non-existent.

The four past recipients, Lisa Jackson, Barrack Obama, John Kerry, and Ernest Moniz are not eligible. Generally, the committee that makes the selection prefers a candidate with a national or international presence. The voting will close on June 1. Please send your nominee and a brief reason why the person is qualified for the honor to Ken@SEPP.org. Thank you. The award will be presented at the annual meeting of the Doctors for Disaster Preparedness in July 9.

Number of the week: #1 – Top US manufactured good – Refined petroleum products — such as gasoline, fuel oil, jet fuel and liquefied refinery gases. The value of shipments was nearly \$700 billion in 2014 (latest data available), more than four times as much as the No. 2 product, light

trucks, according to Market Watch. The data is from the "Annual Survey of Manufactures: Value of Products Shipments: Value of Shipments for Product Classes" (released 01/08/2016). The next eight are pharmaceuticals, airplanes, automobiles. iron and steel, animal slaughtering, plastics, organic chemicals, and petrochemicals. See link under: Oil and Natural Gas – the Future or the Past?

No TWTW Next Week: Due to travel commitments, there will be no TWTW on the weekend of April 9.

ARTICLES: The Articles section is now at the bottom of TWTW.

NEWS YOU CAN USE:

Science: Is the Sun Rising?

New Science 23: Four mysteries and The Force-X Hypothesis

By Jo Nova, David Evans, Her Blog, Mar 28, 2016

http://joannenova.com.au/2016/03/new-science-23-four-mysteries-and-the-force-x-hypothesis/

Commentary: Is the Sun Rising?

Dive below the sun's surface with this new model of our closest star

By Miriam Kramer, Mashable, Mar 24, 2016 [H/t Clyde Spencer]

http://news.yahoo.com/dive-below-suns-surface-model-180100159.html

Suppressing Scientific Inquiry – The Witch Hunt

Al Gore and State Attorney Generals start another climate witch hunt (Update: schism develops)

By Anthony Watts, WUWT, Mar 29, 2016

 $\underline{\text{http://wattsupwiththat.com/2016/03/29/al-gore-and-state-attorney-generals-start-another-climate-witch-hunt/}$

Attorneys General Create Axis For Global Warming Shakedown

Editorial, IBD, Mar 31, 2016

http://www.investors.com/politics/editorials/attorneys-general-create-axis-for-global-warming-shakedown/

State AGs Join Forces to Ramp Up Investigations of Climate Change Financial Disclosures By Sonal Patel, Power Mag, Mar 30, 2016

http://www.powermag.com/state-ags-join-forces-to-ramp-up-investigations-of-climate-change-financial-disclosures/?hq e=el&hq m=3229656&hq l=5&hq v=5e660500d0

Democratic Attorneys General Refuse to Join Rockefeller-Backed Climate Investigation By Steve Everley, Energy In Depth, Mar 29, 2016

http://energyindepth.org/national/democratic-attorneys-general-refuse-rockefeller-climate-investigation/

"But Democratic attorneys general from New Mexico, Washington, D.C., Rhode Island, Maine, Illinois, Virginia, Maryland, Connecticut, and Vermont – all of whom stood on the stage next to Al Gore today – refused to announce that they would be launching their own investigations. In fact, reporters covering the event struggled to find much of anything new in what the officials

were promising. The Huffington Post even conceded that the AGs 'were vague on what exactly they have planned."

Suppressing Scientific Inquiry – The Witch Hunt – Push-Back

Science Agency Eyes Climate Change Professor's Use of Millions From Taxpayers

By Kevin Mooney, The Daily Signal, Mar 23, 2016

http://dailysignal.com/2016/03/23/science-agency-eyes-climate-change-professors-use-of-millions-from-taxpayers/?utm source=heritagefoundation

Challenging the Orthodoxy -- NIPCC

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

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

Challenging the Orthodoxy

Collapse of the CAGW Delusion: Untenable Past 2020

Guest essay by Dr. Norman Page, WUWT, Mar 24, 2016

http://wattsupwiththat.com/2016/03/24/collapse-of-the-cagw-delusion-untenable-past-2020/

UAH V6 Global Temperature Update for March, 2016: +0.73 deg. C

By Roy Spencer, His Blog, Apr 1, 2016

 $\underline{\text{http://www.drroyspencer.com/2016/04/uah-v6-global-temperature-update-for-march-2016-0-73-deg-c/}$

State of West Virginia, State of Texas, et al. v. EPA,

"Brief of Amici Curiae Scientists in Support of Petitioners Supporting Reversal"

http://www.chamberlitigation.com/sites/default/files/cases/files/2015/Joseph%20S.%20Daleo,%20Harold%20Doiron,%20et%20al.%20Amicus%20Curiae%20Brief%20in%20Support%20of%20Petitioners%20--

%20States%20of%20West%20Virginia,%20Texas,%20et%20al.%20v.%20EPA%20%28ESPS%29.pdf

[SEPP Comment: Appendix I, II, & III specifically address the major issues with the EPA.]

Defending the Orthodoxy

GOP Congressman Falsely Claims Study 'Confirms The Halt In Global Warming' It doesn't.

By Vanessa Schipani, FactCheck.org, Huffpost, Mar 30, 2016 [H/t Clyde Spencer] http://www.huffingtonpost.com/entry/lamar-smith-climate-charge-us-56fbe5ede4b0daf53aee18d8

"Mann: 'Our study does NOT support the notion of a 'pause' in global warming, only a

Questioning the Orthodoxy

IPCC Needs To Start Over... Already 133 "Consensus-Skeptical" Papers In 2016 ... Over 660 Past Two Years!

By P Gosselin, No Tricks Zone, Mar 27, 2016

http://notrickszone.com/2016/03/27/ipcc-needs-to-start-over-already-133-consensus-skeptical-papers-in-2016-over-660-in-past-two-years/#sthash.LaSI9CsE.dpbs

Three Brand New Peer-Reviewed Papers Refute IPCC Global Warming Science, Climate Models!

By P Gosselin, No Tricks Zone, Mar 28, 2016

http://notrickszone.com/2016/03/28/three-brand-new-peer-reviewed-papers-refute-ipcc-global-warming-science-climate-models/#sthash.G9ygTtFu.dpbs

Answering A Global Warming True Believer

By William Briggs, His Blog, Mar 28, 2016

http://wmbriggs.com/post/18332/

[SEPP Comment: Addressing "tipping points" and a few other issues.]

Another Climate Alarmist Admits Real Motive Behind Warming Scare

Editorial, IBD, Mar 29, 2016 [H/t Timothy Wise]

 $\underline{\text{http://www.investors.com/politics/editorials/another-climate-alarmist-admits-real-motive-behind-warming-scare/}$

AGW Scam exposed yet again.

By Geoff Brown, Climate Skeptics Party, Mar 31, 2016

http://theclimatescepticsparty.blogspot.com.au/2016/03/agw-scam-exposed-yet-again.html

"One has to free oneself from the illusion that international climate policy is environmental policy. This has almost nothing to do with environmental policy anymore..." Ottmar Edenhofer, IPCC Co-Chair of Working Group III of AR-5

New Study Debunks Polar Bear Scare

By Jordan Candler, Patriot Post, Mar 28, 2016 http://patriotpost.us/posts/41571

The Philosophy of Climate Change

Guest essay by Leo Smith, WUWT, Mar 31, 2016

http://wattsupwiththat.com/2016/03/31/the-philosophy-of-climate-change/

After Paris!

Paris agreement: A risk regulation perspective

By Judith Curry, Climate Etc. Mar 28, 2016

https://judithcurry.com/2016/03/28/paris-agreement-a-risk-regulation-perspective/#more-21348

^{*}temporary slowdown*, which was due to natural factors...' A distinction without a difference?"

Clyde Spencer

The Administration's Plan

EPA files 1st defense of Clean Power Plan

By Robert Walton, Utility Dive, Mar 29, 0261

http://www.utilitydive.com/news/epa-files-1st-defense-of-clean-power-plan/416421/

Link to EPA Brief, Mar 28, 3026

https://www.edf.org/sites/default/files/content/epa merits brief - march 28 - 2016.pdf

Over 200 current, former lawmakers back Obama in climate case

By Timothy Cama, The Hill, Apr 1, 2016

http://thehill.com/policy/energy-environment/274893-over-200-current-former-lawmakers-back-obama-in-climate-case

Obama admin defends climate rule as 'eminently reasonable'

By Timothy Cama, The Hill, Mar 28, 2016

 $\underline{http://thehill.com/policy/energy-environment/274501-obama-admin-defends-climate-rule-as-eminently-reasonable}$

The Administration's Plan - Independent Analysis

Renewables are incapable of replacing hydrocarbons at scale

By Kathleen Hartnett White, The Hill, Mar 30, 2016

 $\underline{http://thehill.com/blogs/pundits-blog/energy-environment/274645-renewables-are-incapable-of-replacing-hydrocarbons-at}$

The Administration's Plan - Push-Back

Is It Worth Tripling US Electricity Rates as a Symbolic Gesture?

By Alan Carlin, Carlin Economics and Science, Apr 1, 2016

http://www.carlineconomics.com/archives/2615

Social Benefits of Carbon

Climate Surprise: Why More CO2 is Good for the Earth

By William Briggs, The Stream, Mar 31, 2016

https://stream.org/climate-surprise-co2-good-earth/

"The great thing about professing to 'Save the Planet' is that it absolves you of the need to do anything." Mark Steyn

Seeking a Common Ground

Imagine the horrific fate of the losers after the climate policy debate ends

Guest essay by Larry Kummer, of the Fabius Maximus website, WUWT, Mar 29, 2016 http://wattsupwiththat.com/2016/03/29/imagine-the-horrific-fate-of-the-losers-after-the-climate-policy-debate-ends/

Review of Recent Scientific Articles by CO2 Science

Effects of 12 Years of Water Deficit on Tropical Rainforest Trees

Rowland, L., Lobo-do-Vale, R.L., Christoffersen, B.O., Melem, E.A., Kruijt, B., Vasconcelos, S.S., Domingues, T., Bnks, O.J., Oliveira, A.A.R., Metcalfe, D., Da Costa, A.C.L., Mencuccini, M. and Meir, P. 2015. After more than a decade of soil moisture deficit, tropical rainforest trees maintain photosynthetic capacity, despite increased leaf respiration. *Global Change Biology* **21**: 4662-4672. Mar 30, 2016

http://www.co2science.org/articles/V19/mar/a22.php

Five Decades of Floods and Flood Risk in the Po River Basin of Italy

Domeneghetti, A., Carisi, F., Castellarin, A. and Brath, A. 2015. Evolution of flood risk over large areas: Quantitative assessment for the Po river. *Journal of Hydrology* 527: 809-823. Mar 28, 2016 "Thus, although the *risk* of flooding in the Po river basin has increased over the past half-century due to various anthropogenic pressures (e.g. the expansion of urban and industrial areas into dyke-protected floodplains), actual flood events from a *climatological* or *meteorological* perspective have not -- atmospheric CO2 and temperature increases notwithstanding."

How Unusual was the California Nevada Drought of 2012-2015?

Hatchett, B.J., Boyle, D., Putnam, A.E. and Bassett, S.D. 2015. Placing the 2012-2015 California-Nevada drought into a paleoclimatic context: Insights from Walker Lake, California-Nevada, USA. *Geophysical Research Letters* **42**: 8632-8640. Mar 28, 2016 http://www.co2science.org/articles/V19/mar/a20.php

Models v. Observations

Ocean temperatures predict U.S. heat waves 50 days out

Pacific pattern forms in advance of hot days in eastern U.S.

Press Release by Staff Writers, NSF, Mar 28, 2016

http://www.nsf.gov/news/news_summ.jsp?cntn_id=138086&WT.mc_id=USNSF_51&WT.mc_ev = click

Model Issues

Potential stabilizing points to mitigate tipping point interactions in Earth's climate

By Gaucherel and Moron, *International Journal of Climatology*, Mar 30, 2016 [H/t Climate Etc.] http://onlinelibrary.wiley.com/doi/10.1002/joc.4712/abstract

"We are claiming that today, it is extremely difficult to guess the fate of the global climate system as TP sensitivity depends strongly on the definition of the model."

Measurement Issues -- Surface

Impact of CFSv2 Model Fix on 2016 La Nina Forecast

By Roy Spencer, His Blog, Mar 31, 2016

http://www.drroyspencer.com/2016/03/impact-of-cfsv2-model-fix-on-2016-la-nina-forecast/

NOAA tweaks their poorly performing Climate Forecast System model to remove 'cold bias'

By Anthony Watts, WUWT, Mar 29, 2016

http://wattsupwiththat.com/2016/03/29/noaa-tweaks-their-poorly-performing-climate-forecast-system-model-to-remove-cold-bias/

[SEPP Comment: See link immediately above.]

When Will The World Really Be 2 Degrees Hotter Than It Used To Be?

By Eric Holthaus, Five Thirty Eight, Mar 23, 2016 [H/t Timothy Wise] http://fivethirtyeight.com/features/when-will-the-world-really-be-2-degrees-hotter-than-it-used-to-be/

Changing Weather

El Nino is Weakening Rapidly

By Cliff Mass, Weather Blog, Mar 29, 2016 http://cliffmass.blogspot.com/2016/03/el-nino-is-weakening-rapidly.html

Changing Climate

Inconvenient new study: Canadian Arctic had significantly warmer summers a few thousand years ago

By Anthony Watts, WUWT, Mar 23, 2016

http://wattsupwiththat.com/2016/03/23/inconvenient-new-study-canadian-arctic-had-significantly-warmer-summers-a-few-thousand-years-ago/

Link to paper: Multiproxy paleoecological evidence of Holocene climatic changes on the Boothia Peninsula, Canadian Arctic

By Marie-Claude Fortin, Konrad Gajewski, Quaternary Research, Mar 22, 2016 http://www.sciencedirect.com/science/article/pii/S003358941600017X

[SEPP Comment: Verifies the findings of H.H. Lamb in the 1982 "Climate, History, and the Modern World."]

Changing Climate – Cultures & Civilizations

Research suggests Florida's ancient past offers clues about sea level rise today

By Staff Writers, Washington Post, Via Tampa Bay Times, Mar 29, 2016 [H/t Clyde Spencer] http://www.tampabay.com/news/environment/globalwarming/research-suggests-floridas-ancient-past-offers-clues-about-sea-level-rise/2271098

[SEPP Comment: SEPP has long noted that sea levels in Florida were significantly higher during the last interglacial period than today and that sea levels have been rising since the last glacial maximum.]

Changing Seas

Study: There is no real evidence for a diminishing trend of the Atlantic Meridional Overturning Circulation

By Anthony Watts, WUWT, Mar 23, 2016

http://wattsupwiththat.com/2016/03/23/study-there-is-no-real-evidence-for-a-diminishing-trend-of-the-atlantic-meridional-overturning-circulation/

Link to paper: There is no real evidence for a diminishing trend of the Atlantic meridional overturning circulation

By Parker and Ollier, Journal of Ocean Engineering and Science, January 2016 http://www.sciencedirect.com/science/article/pii/S246801331500008X

From the abstract: "It is concluded that no available information has the due accuracy and time coverage to show a clear trend outside the inter-annual and multi-decadal variability in the direction of increasing or decreasing strength over the last decades."

An answer to: Is the rise in sea levels accelerating?

Guest essay by: Jan Kjetil Andersen, WUWT, Mar 28, 2016

http://wattsupwiththat.com/2016/03/28/an-answer-to-is-the-rise-in-sea-levels-accelerating/

Analysis Of Literature Shows Hansen's Recently Published Sea Level Paper Is A Scientific Outlier

By P Gosselin, No Tricks Zone, Mar 31, 2016

http://notrickszone.com/2016/03/31/analysis-of-literature-shows-hansens-recently-published-sea-level-paper-is-a-scientific-outlier/#sthash.h2SCQmpN.dpbs

Changing Cryosphere – Land / Sea Ice

More Of The Usual Hype About Arctic Ice

By Paul Homewood, Not a Lot of People Know That

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2016/03/30/more-of-the-usual-hype-about-arctic-ice/}$

Arctic sea ice wintertime extent sees a record low

By Anthony Watts, WUWT, Mar 29, 2016

http://wattsupwiththat.com/2016/03/29/arctic-sea-ice-wintertime-extent-sees-a-record-low/

Late winter surge in sea ice habitat and the resilience of Svalbard polar bears

By Susan Crockford, Polar Bear Science, Mar 31, 2016

https://polarbearscience.com/2016/03/31/late-winter-surge-in-sea-ice-habitat-and-the-resilience-of-svalbard-polar-bears/

Why does the Antarctic sea ice trend resist decline?

By Anthony Watts, WUWT, Mar 24, 2016

http://wattsupwiththat.com/2016/03/24/why-does-the-antarctic-sea-ice-trend-resist-decline/

Agriculture Issues & Fear of Famine

One crop breeding cycle from starvation

By Staff Writers, Urbana IL (SPX), Mar 30, 2016

http://www.seeddaily.com/reports/One_crop_breeding_cycle_from_starvation_999.html

Link to paper: One crop breeding cycle from starvation? How engineering crop photosynthesis for rising CO2 and temperature could be one important route to alleviation

By Johannes Kromdijk, Stephen P. Long, Proceedings of the Royal Society B, Mar 9, 2016 http://rspb.royalsocietypublishing.org/content/283/1826/20152578

[SEPP Comment: Strongly question opening premise in the abstract: "Global climate change is likely to severely impact human food production. This comes at a time when predicted demand for primary foodstuffs by a growing human population and changing global diets is already outpacing a stagnating annual rate of increase in crop productivity." Food production is increasing significantly.]

Un-Science or Non-Science?

Scientists nearly double sea level rise projections for 2100, because of Antarctica

By Brady Dennis and Chris Mooney, The Washington Post, Mar 30, 2016 [H/t Timothy Wise] <a href="https://www.washingtonpost.com/news/energy-environment/wp/2016/03/30/antarctic-loss-could-double-expected-sea-level-rise-by-2100-scientists-say/?hpid=hp_rhp-top-table-main_arctic-1pm%3Ahomepage%2Fstory

Link to paper: Contribution of Antarctica to past and future sea-level rise

By DeConto & Pollard, Nature, Mar 31, 2016

http://www.nature.com/articles/nature17145.epdf?referrer access token= -

po 6w0YyoyoAOTBjaj-9RgN0jAjWel9jnR3ZoTv0M-

pvJMg7VLINRa2mnTNsvXE walr5kLcSaXAbIeg24vmaYSI-

ipyMZIWWW8iRbXSFIb32SB9lAG7tjQvfd2xyv BmVaPCB-

XTSjMR A1qXB8XLnrKF34of4ZHW7QDS56fxpp-YqqxbCt8f0vdNs g-

jbeKpjSCEJ6MjSQAfV5Li-nlwLh40oAw7LbpN7c 4c4nbr-

zsXVMHlygwcb2uyeLIR2DRKNHLyfJ1m-

mNfwRHaiH1AnMOcLBgmJI4TamMgpa4iaXBjDqgJMwH1jNqHpYyCPuRX9HYHl118zJNkB

4M9xOh5y cG0zfpf30jFE-9r-

YNVVZp7MCIvkbgkG9uen&tracking referrer=www.washingtonpost.com

It seems to me that the concern over hydrofracturing is based on the unstated assumption that a place that isn't currently experiencing significant warming will suddenly start warming and produce significant surface water on the glaciers. — Clyde Spencer

Oh noes! Model says: Sea-Level rise from Antarctic ice sheet could double

By Anthony Watts, WUWT, Mar 30, 2016

 $\underline{\text{http://wattsupwiththat.com/2016/03/30/oh-noes-model-says-sea-level-rise-from-antarctic-ice-sheet-could-double/}$

Communicating Better to the Public – Do a Poll?

An Ungrateful Nation Turns Its Back On Fracking

Editorial, IBD, Mar 29, 2016

http://www.investors.com/politics/editorials/an-ungrateful-nation-turns-its-back-on-fracking/

Questioning European Green

Estimating life-time costs for Renewable Energy in Europe

Guest Post by Ed Hoskins, Energy Matters, Mar 30, 2016

http://euanmearns.com/estimating-life-time-costs-for-renewable-energy-in-europe/

- "Electricity generation by using gas-fired installations is significantly cheaper than Renewables in terms of both installation capital cost and Operation and Maintenance costs, even when accounting for the cost of fuel.
- The € 1.1 trillion capital costs already spent on Renewables in Europe would have been sufficient to re-equip the whole 1,000 Gigawatt European electricity generating fleet with Gas-fired power stations producing electricity for the grid effectively at ~90% capacity."

How to Kill an Industry

Germany's massive push into renewable energy has a dark side. As green policies drive up the cost of power, entire industries are shrinking.

By Kreuger, Theil, and Williams, Handelsblatt, Mar 24, 2016

 $\underline{https://global.handelsblatt.com/edition/396/ressort/companies-markets/article/how-to-kill-anindustry}$

Handelsblatt is the English-language edition of Germany's leading business daily.

Germany's Failing Energiewend, Part 1

By Donn Dears, Power For USA, Mar 29, 2016

https://dddusmma.wordpress.com/2016/03/29/germanys-failing-energiewend-part-1/

Germany's Failing Energiewende, Part 2

By Donn Dears, Power For USA, Apr 1, 2016

https://dddusmma.wordpress.com/2016/04/01/germanys-failing-energiewende-part-2/

- "The most expensive electricity, produced by wind and solar, is dispatched first.
- The least costly electricity must be dispatched after wind and solar.
- Coal-fired power plants are being dismantled because they can't sell the low-cost electricity they produce."

UK Steel Crisis: GWPF Calls On Government To Scrap Unilateral Climate Policies By Staff Writers, GWPF, Mar 30, 2016

http://www.thegwpf.com/uk-steel-crisis-gwpf-calls-on-government-to-scrap-unilateral-climate-policies/

Questioning Green Elsewhere

Obama-Backed Green Energy Company Goes Bankrupt — **After Getting Billions From Taxpayers**

By Michael Bastasch, The Daily Caller, Mar 30, 2016

http://dailycaller.com/2016/03/30/obama-backed-green-energy-company-goes-bankrupt-aftergetting-billions-from-taxpayers/

The pro-labor union group Good Jobs First reported last year Abengoa has "received \$605 million in grants and allocated tax credits; \$464 million came from Section 1603 and most of the rest from Energy Department research grants." That's on top of the \$2.7 billion the company got in DOE loans.

Tax on solar and batteries 'shocks industry, green and consumer groups'

By Staff Writers, Voxy, NZ, Apr 1, 2016 [H/t GWPF]

http://www.voxy.co.nz/business/5/247775

Non-Green Jobs

Bill Carmichael: Green zealots to blame for steel's decline

By Bill Carmichael, Yorkshire Post, Apr 1, 2016 [H/t GWPF]

http://www.yorkshirepost.co.uk/news/opinion/bill-carmichael-green-zealots-to-blame-for-steel-s-decline-1-7827922

Green Taxes Threaten To Kill Steel Industry As Tata Quits Britain

By Robert Lea, The Times, Via GWPF, Mar 29, 2016

 $\underline{http://www.thegwpf.com/punitive-green-taxes-kill-uk-steel-industry-as-tata-quits-britain/}$

How is Britain going green? By shutting down industry

Britain has the highest energy costs in Europe, thanks to decisions taken not in Brussels but in Whitehall

Editorial, The Spectator, Via GWPF, Mar 30, 2016

http://www.thegwpf.com/how-is-britain-going-green-by-shutting-down-industry/

The Big Green job-killing machine

By Ron Arnold, ICECAP, Apr 2, 2016

http://icecap.us/index.php/go/political-climate/the big green job killing machine1/

Funding Issues

Why are U.S. Taxpayers Supporting Numerous Duplications of Effort in the US Global Change Research Program (USGCRP)?

Guest Post by Bob Tisdale, WUWT, Mar 29, 2016

http://wattsupwiththat.com/2016/03/29/why-are-u-s-taxpayers-supporting-numerous-duplications-of-effort-in-the-us-global-change-research-program-usgcrp/

Who funds the European Science Foundation?

By Staff Writer, Clean Energy Pundit, Sep 22, 2014

http://cleanenergypundit.blogspot.com/2014/09/who-fundsthe-european-science.html

Litigation Issues

Conservatives' New Strategy to Curb the Executive Branch, Administrative Power

By Josh Siegel, The Daily Signal, Mar 28, 2016

http://dailysignal.com/2016/03/28/conservatives-new-strategy-to-curb-the-executive-branch-administrative-

power/?utm_source=heritagefoundation&utm_medium=email&utm_campaign=morningbell&mk t_tok=3RkMMJWWfF9wsRonu6vNde%2FhmjTEU5z16e8sXa6yhokz2EFye%2BLIHETpodcM TcRhPb7YDBceEJhqyQJxPr3NLtQN191pRhLiDA%3D%3D

"In 1984, the Supreme Court set the so-called Chevron doctrine, which created the precedent that courts defer to executive branch agencies in deciding how to interpret ambiguous statutes that the executive branch administers."

Subsidies and Mandates Forever

On the eve of the UK subsidy cut, the future is looking glum for European solar

By Sam Pothecary, PV Magazine, Mar 31, 2016 [H/t GWPF]

http://www.pv-magazine.com/news/details/beitrag/on-the-eve-of-the-uk-subsidy-cut--the-future-is-looking-glum-for-european-solar 100023960/#axzz44ZNiN5F9

Solar incentives sunset as states grapple with tight budgets

By Susan Montoya Bryan, AP, Mar 23, 2016

 $\underline{http://bigstory.ap.org/article/8150b0cb958446658b978f604826ad65/solar-incentives-sunset-states-grapple-tight-budgets}$

"Thousands of homeowners and small businesses in New Mexico — the second sunniest state in the nation — have invested nearly a quarter billion dollars in roof-top solar and related labor thanks to a program fueled by tax credits."

[SEPP Comment: If roof-top solar cannot make it without tax credits in the second sunniest state in the nation, what value does it have for most of the nation.]

Taxpayers Are Footing Bill for Solar Project That Doesn't Work

By David Kreutzer, Daily Signal, Mar 29, 2016 [H/t Timothy Wise]

http://dailysignal.com/2016/03/29/taxpayers-are-footing-bill-for-solar-project-that-doesnt-work/ [SEPP Comment: With Brightsource having strategic investors including Chevron and BP, are subsidies to Ivanpah actually subsidies to oil companies?]

Energy Issues - Non-US

UK Energy Stats For 2015

By Paul Homewood, Not a Lot of People Know That, Mar 11, 2016

https://notalotofpeopleknowthat.wordpress.com/2016/03/31/uk-energy-stats-for-2015/

Link to Report: UK Energy Statistics, 2015 & Q4 2015

By Staff Writers, Department of Energy & Climate Change, Mar 31, 2016

https://www.gov.uk/government/news/uk-energy-statistics-statistical-press-release-march-2016

China's biggest coal firm set to boost exports

By Staff Writers, The Star, Mar 30, 2016 [H/t GWPF]

http://www.thestar.com.my/business/business-news/2016/03/30/chinas-biggest-coal-firm-set-to-boost-exports/

"China Shenhua Energy Co may boost coal exports as much as eight-fold as weakening domestic demand and stricter environmental rules force the company to look to overseas buyers."

Facing Grid Constraints, China Puts a Chill on New Wind Energy Projects

The move underscores the country's growing pains as it seeks to combat climate change and air pollution through rapid low-carbon energy growth.

By Coco Liu, Inside Climate News, Mar 28, 2016 [H/t GWPF]

http://insideclimatenews.org/news/28032016/china-wind-energy-projects-suspends-clean-energy-climate-change

[SEPP Comment: Unlike many western politicians, it appears the leaders of China are not willing to sacrifice the economy for ideology. Although the article does discuss subsidies briefly, it does not mention the role of subsidies from the West.]

Energy Issues -- US

America's Energy Resilience, Visualized

By Staff Writers, The American Interest, Mar 30, 2016

http://www.the-american-interest.com/2016/03/30/americas-energy-resilience-visualized/

Link to EIA report: EIA report shows decline in cost of U.S. oil and gas wells since 2012

By Staff Writers, EIA, Mar 30, 2016

http://www.eia.gov/todayinenergy/detail.cfm?id=25592

Oil and Natural Gas – the Future or the Past?

Russia pulls 10 millionth barrel of oil from Arctic north

Oil company Gazprom Neft said it's shown extreme production can happen safely.

By Daniel Graeber, UPI, Mar 22, 2016

 $\underline{http://www.upi.com/Business_News/Energy-Industry/2016/03/22/Russia-pulls-10-millionth-barrel-of-oil-from-Arctic-north/6411458640056/$

Opinion: Think nothing is made in America? Output has doubled in three decades

U.S. manufacturing isn't dead; factories are running at close to a record pace

By Rex Nutting, Market Watch, Mar 28, 2016

 $\underline{\text{http://www.marketwatch.com/story/us-manufacturing-dead-output-has-doubled-in-three-decades-}} 2016-03-28$

Return of King Coal?

Cleaning Out Taxpayers

By Ryan Alexander, Taxpayers for Commonsense, Mar 23, 2016 [H/t Timothy Wise]

http://www.taxpayer.net/media-center/article/cleaning-out-taxpayers

[SEPP Comment: Legacy costs can be a problem from traditional industries, also from wind power.]

Oil Spills, Gas Leaks, Similar Issues & Consequences

Fracking linked to most induced earthquakes in Western Canada

By Staff Writers, San Francisco CA (SPX), Mar 30, 2016

http://www.oilgasdaily.com/reports/Fracking not_wastewater_disposal___linked_to_most_ind uced_earthquakes in Western Canada 999.html

[SEPP Comment: Article mixes concepts, making any claims vague. Also, the study period began in 1985, well before any deep underground hydraulic fracturing of dense shale.]

Nuclear Energy and Fears

China's advanced meltdown-free nuclear plant gets core component

By Staff Writers, Beijing (Sputnik), Mar 23, 2016

http://www.nuclearpowerdaily.com/reports/Chinas_Advanced_Meltdown_Free_Nuclear_Plant_G ets Core Component 999.html

Japan scraps 6th nuclear reactor since tsunami disaster over heavy safety costs

By Staff Writers, The Straits Times, Mar 25, 2016

http://www.straitstimes.com/asia/east-asia/japan-scraps-6th-nuclear-reactor-since-tsunami-disaster-over-heavy-safety-costs

New nuclear: one size fits all?

By Martin Livermore, The Scientific Alliance, Apr 1, 2016

http://scientific-alliance.org/node/986

[SEPP Comment: On the possible advantages of Small Modular Reactors (SMR)]

Alternative, Green ("Clean") Solar and Wind

Dept of Energy [EIA] to Greenies: Sod Off!

By Steven Hayward, Power Line, Mar 27, 2016

http://www.powerlineblog.com/archives/2016/03/dept-of-energy-to-greenies-sod-off.php

Link to report: Wind and Solar Data and Projections from the U.S. Energy Information

Administration: Past Performance and Ongoing Enhancements

By Staff Writers, EIA, March 2016

http://www.eia.gov/forecasts/aeo/supplement/renewable/pdf/projections.pdf

AWED Energy & Environmental Newsletter: March 28, 2016

By John Droz, Jr. Master Resource, Mar 28, 2016

https://www.masterresource.org/alliance-for-wise-energy-decisions/awed-newsletter-3-28-2016/

Ivanpah's Problems Could Signal the End of Concentrated Solar in the U.S.

Canceled solar thermal projects are likely to mean the technology's future is dim in the U.S., so companies are looking overseas.

By Richard Martin, MIT Technology Review, Mar 24, 2016

https://www.technologyreview.com/s/601083/ivanpahs-problems-could-signal-the-end-of-concentrated-solar-in-the-us/

[SEPP Comment: Articles in the review have generally supported the orthodox view and the Administration's energy plans. The author wrote "Coal Wars: The Future of Energy & The Fate of the Planet."]

Renewables are useless: The Evidence is Overwhelming

Guest essay by Eric Worrall, WUWT, Mar 29, 2016

http://wattsupwiththat.com/2016/03/29/renewables-are-useless-the-evidence-is-overwhelming/ [SEPP Comment; The headline is too strong. Renewables can be very useful in isolated situations with limited, not critical, requirements.]

Other Scientific News

Longer-term weather forecasts will provide enormous benefit

By Staff Writers, Washington DC (SPX), Mar 30, 2016

http://www.terradaily.com/reports/Longer_term_weather_and_environmental_forecasts_will_prov_ide_enormous_benefit_999.html

Other News that May Be of Interest

Bird Migration on Radar: What Weather Conditions Encourage Our Feathered Friends

By Cliff Mass, Weather Blog, Mar 31, 2016

http://cliffmass.blogspot.com/2016/03/bird-migration-on-radar-what-weather.html

Cruise Ship to Dare the North West Passage

Guest essay by Eric Worrall, WUWT, Mar 30, 2016

http://wattsupwiththat.com/2016/03/30/cruise-ship-to-dare-the-north-west-passage/

[SEPP Comment: How about the old-fashion way, with sail and no modern navigation gear?]

Protecting the sea

Sustainable exploitation or no-take zones in marine protected areas?

By Matt Ridley, Rational Optimist, Mar 27, 2016

http://www.rationaloptimist.com/blog/marine-protected-areas/

Sorry, But The Real Unemployment Rate Is 9.8%, Not 5%

Editorial, IBD, Apr 2, 2016

http://www.investors.com/politics/editorials/sorry-but-the-real-unemployment-rate-is-9-8-not-5/

BELOW THE BOTTOM LINE:

Hotter and meaner

By Staff Writers, Climate Change Predictions.org, Mar 30, 2016 http://climatechangepredictions.org/uncategorized/6007

"Naomi Klein, best selling author and social activist, said climate change would exacerbate social problems such as racism and inequality, predicting Australia would become "meaner" as it gets hotter.

"You see that in Australia where the treatment of migrants is a profound moral crisis," she said.

"It's clear that as sea levels rise that this mean streak and open racism is going to become more extreme – climate change is an accelerant to all those other issues."

The Guardian, 17 Aug 2015 "

Kill the Deniers — a government-funded fantasy play where "guns" solve climate issues By Jo Nova, Her Blog, Apr 1, 2016

http://joannenova.com.au/2016/04/kill-the-deniers-govt-funded-fantasy-play-where-guns-solve-climate-issues/

ARTICLES:

Please note that articles not linked easily or summarized here are reproduced in the Articles Section of the full TWTW that can be found on the web site under the date of the TWTW.

1. Science, Religion and the Big Bang Theory

By Thomas P. Sheahen, American Thinker, Mar 27, 2016

http://www.americanthinker.com/articles/2016/03/science_religion_and_the_big_bang_theory.ht ml

SUMMARY: Tracing the development of the Big Bang Theory from calculations based on General Theory of Relatively, physicist Tom Sheahen gives a lucid example of the capability of science and religion. "Working independently, Georges Lemaitre, a Belgian Catholic priest, solved Einstein's equations for a universe starting at time t = 0 and expanding from a singular

point to its present size." Initially rejected by Einstein and others, the theory became accepted as better telescopes were developed.

"In 1950, a most interesting backstage drama took place, which shows what real scientists think about even the best scientific theories. Pope Pius XII saw that the Big Bang theory coincided nicely with the narrative in Chapter one of the Book of Genesis, and considered making it a doctrine of faith, declaring it true. Obviously that would have been a huge accolade for Lemaitre, a permanent vindication of his theory.

"Instead of rejoicing at this, Lemaitre himself talked the Pope out of it. Lemaitre explained that NO theory in physics, however elegant or reliable, is truly final. Every theory can always be revised; every theory can be contradicted (and thereby destroyed) by a single experiment. Lemaitre knew his history well: only a century earlier, "the ether" seemed a sure thing."

2. Certainty, Climate Change, Church and State

America was formed on a basic premise of the separation of church and state, but the climate religion blends the two together.

Letters, WSJ, Mar 30, 2016

http://www.wsj.com/articles/certainty-climate-change-church-and-state-1459357600

"Regarding David B. Rivkin Jr. and Andrew M. Grossman's "Punishing Climate-Change Skeptics" (op-ed, March 24): The shift by global-warming alarmists to criminalize dissent dramatizes how soundly they are losing the battle. They long ago lost the battle for public support, with global warming ranking near or at the bottom of national surveys of voters' concerns.

"Surveys of climate scientists, even those heavily biased in favor of climate alarmism, find extensive disagreement on the underlying science and doubts about its reliability. The indisputable fact remains that the science isn't settled about the causes, effects and severity of global warming. And skeptical scientists must be free from threat of criminal prosecution to continue their search for answers and solutions."

Dan Miller, Chicago

"Current moves to brand global-warming skeptics as "heretics" reaffirms that this isn't about science, but rather a secular religion that serves a most unholy alliance of interest groups. The foundation of true science is constant doubt and an unwavering commitment to the empirical process of discovery. In contrast, religions have historically been founded on a system of unquestioned belief, control, disregard for compliant nonbelievers and the persecution of outright heretics. The global-warming cause célèbre thus mimics in a tidy technological package the religious precepts of guilt (I carbonize), penance (I submit to government supervision and taxes) and absolution (I am redeemed as "green"). As such, the doctrine is well-suited for recruitment among the primarily urban intellectuals who eschew traditional religion but still hunger for redemption.

"America was formed on a basic premise of the separation of church and state, but the climate religion blends the two together."

Barry B. Bannister, Baltimore

"The Catholic Church opposed and suppressed Galileo Galilei to preserve its worldview and power. Today, fossil-fuel industry spokesmen and market fundamentalists oppose and suppress climate-change science to preserve their worldview and power. Galileo was eventually vindicated by history; evidence and logic overcame entrenched self-interest. Climate scientists—not climate skeptics—are more analogous to heroic heretics in their battles with deeply rooted self-interest. Charles Gessert, Duluth, Minn.

"Whatever compels the closed minds of elites who should know better, one doesn't have to go back to Galileo's persecution to find reason for humility. Recall during the eugenics movement of the early 20th century the castigation of dissenters: Teddy Roosevelt saw deniers as fostering "race suicide," Margaret Sanger fretted over the production of "human weeds" and Justice Oliver Wendell Holmes opined that "three generations of imbeciles are enough." World leaders were self-assured about eugenics until Hitler gave them pause."

Em. Prof. Richard Saunders, Dartmouth College, Canaan, N.H.

3. Regulators Examine Financial Risks of Climate Change

Exploring disclosure rules and stress tests based on different climate scenarios By Gabriele Steinhauser, WSJ, Mar 29, 2016 http://www.wsj.com/articles/regulators-examine-financial-stability-risks-to-climate-change-oil-exposure-1459444688

SUMMARY: The reporter writes: "Regulators around the globe are researching potential risks to financial stability from a failure to contain climate change or a sudden collapse in the value of fossil-fuel assets.

"Institutions such as the Bank of England, the Financial Stability Board and the European Systemic Risk Board are examining how banks, insurers and pension funds would cope if policies designed to reduce carbon-dioxide emissions led to a sharp drop in the share price of oil, gas and coal companies.

"They are looking at new rules to disclose exposures to both stocks and bonds in such companies, conducting stress tests based on different climate scenarios or even requiring additional capital buffers.

"The regulators' concerns rest on scientific assessments that much of the world's known fossil-fuel reserves would have to stay underground if governments want to limit global warming to 2 degrees Celsius above preindustrial levels. If they aim to contain average temperature increases to 1.5 degrees, as set out in an international climate deal sealed in Paris in December, the so-called carbon budget would shrink even more.

"That has triggered fears that a poorly managed switch to less-polluting energy sources, such as solar or wind power, could cause selloffs of fossil-fuel companies and broader economic problems caused by energy shortages.

"Insurers are particularly threatened by climate change. Rising sea levels and other environmental changes already have cut into their businesses, properties in certain areas are becoming too expensive to insure, extreme weather and storms are bound to increase payouts and, finally, a devaluation of their investments in fossil-fuel companies could erode capital cushions, says Mr. Waygood.

4. Earthquake Risk Increased in Energy-Intensive States, USGS Says

About seven million people live, work in parts of U.S. vulnerable for induced temblors; largest concentrations in Texas, Oklahoma

By Erin Ailworth, WSJ, Mar 28, 2016

http://www.wsj.com/articles/earthquake-risk-increased-in-energy-intensive-states-usgs-says-1459187500

SUMMARY: No link to maps: The reporter writes:

"The states most at risk of such man-made quakes—Oklahoma, Kansas, Texas, Colorado, New Mexico, and Arkansas—are largely concentrated in regions where the energy industry disposes of millions of gallons of wastewater that is produced during the oil-and-gas drilling and pumping process. [Boldface added.]

"It has become commonplace to inject wastewater pumped from oil-and-gas wells, a super salty, often chemical-laced mix, back underground into special water disposal wells. That water injection process often happens at high pressure. The practice may help trigger movement along fault lines, according to a growing body of research that links wastewater disposal to an increasing number of earthquakes in states where energy companies have intensified their operations, though some prominent shale producers have been vocal critics of those geologic reports."

"The Oklahoma Corporation Commission, or OCC, which regulates the state's oil and gas industry, has spent the last year cracking down on the use of wastewater disposal wells.

"Regulators have asked Oklahoma disposal well operators across a swath more than 10,000-square-miles wide to reduce the volume of wastewater they inject into about 600 wells by about 40%. That amounts to a cumulative decrease of more than 800,000 barrels of water a day.

"Tim Baker, Oklahoma's chief oil-and-gas regulator, has stopped all administrative approval of disposal wells capable of handling more than 20,000 barrels a day—no matter how far from earthquake activity they are located. Operators may still apply to operate such wells, but now need special approval directly from OCC commissioners.