The Week That Was: 2016-05-14 (May 14, 2016) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Juste of the Week: "Global warming due to greenhouse gasses, is the latest in a

Quote of the Week: "Global warming, due to greenhouse gasses, is the latest in a long series of one-factor theories about a multifactor world. Such theories have often enjoyed great popularity, despite how often they have turned out to be wrong." – Thomas Sowell [H/t Paul Redfern]

Number of the Week: 48% increase

THIS WEEK:

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

A Climate Model That May Work: In his written testimony submitted to the US House Committee on Science, Space & Technology on February 2, John Christy of the University of Alabama in Huntsville presented the results of a basic empirical test. Do the climate models simulate what has occurred in the atmosphere since the advent of comprehensive satellite measurements of atmospheric temperatures in the last few weeks of 1978 – the only comprehensive global measurements of temperatures existing – and independently supported by four datasets from weather balloons, which are not comprehensive. The test period includes the entire satellite record from 1978 through 2015 – 37 years.

As Christy wrote:

"I was able to access 102 CMIP-5 rcp4.5 (representative concentration pathways) climate model simulations of the atmospheric temperatures for the tropospheric layer and generate bulk temperatures from the models for an apples-to-apples comparison with the observations from satellites and balloons. These models were developed in institutions throughout the world and used in the IPCC AR5 Scientific Assessment (2013)."

There were a total of 32 models represented in these 102 simulations. Of these 32 models only one tracked well against global mid-tropospheric temperature variations – the Russian INM-CM4. On average, the models overestimated global warming by 2.5 times that measured.

When comparing mid-tropospheric temperature variations as simulated by the 32 to models with actual observations in the critical tropics, the models did worse. On average, they overestimated warming by 3 times that measured. Again the Russian INM-CM4 outperformed the others.

As Christy fully recognized, such a test is not suitable for prediction or for public policy. For example, the results from the Russian INM-CM4 model came from one simulation. Multiple simulations may produce different results. The model may not capture the various influences on climate correctly, and may fail in the future. But the test clearly shows that long-term projections/predictions from the group of models, ensemble, are unsuitable for public policy that has a dramatic, destructive effect on the economy as proposed by many western governments. Conversely, the Russian model is a start.

An internet search revealed that the Russian INM-CM4 model is the Institute of Numerical Mathematics Coupled Model, version 4.0. The Institute of Numerical Mathematics (INM) is a

division of the Russian Academy of Science. According to its web site, the INM has eleven major research groups including Large/Meso Scale Dynamics of the World Ocean and Russian Peripheral Seas; Modeling and Observation Data Analysis; Role of the World Ocean in the Global Change Processes; Development of Global Climate Models and Creation of Scientific Basis for Studying the Climate Change Predictability; Expert Systems for Assessing Regional Consequences of Global Climate Changes; Numerical Modeling of the Dynamics and Kinetics of Atmospheric Trace Gases and Aerosols; and Determination of the Vegetation Cover Biomass Volume from Space Monitoring Data.

It will be very interesting to see how this model performs in the future. As to the bulk of the other models, waiting for an ensemble of models to perform well may be as futile as waiting for an ensemble of questionable musicians to perform the Beethoven's 5th beautifully, without a conductor. See links under Challenging the Orthodoxy and http://www.inm.ras.ru/inm_en_ver/*********

Proposed Climate Model: Andrew Montford brings up a simplified climate model proposed by J. Ray Bates of the Meteorology and Climate Center, School of Mathematics and Statistics, University College, Dublin, Ireland. The model is available on the web and bears further examination. It has been accepted by the Journal of Earth and Space Science.

Bates divides the globe into two zones – tropical and extratropical. This makes some sense because the characteristics of each are significantly different, over a full year. The tropics ae hot and humid year-round, and the extratropics vary seasonally. Over eighty percent of the earth's surface of the tropics is water, predominately oceans; while about 71 percent of the global is water. Further, the great heat conveyer systems of the global, oceans and atmosphere, transport heat from the tropics to the higher latitudes and atmosphere also transports heat from the surface to outer space.

Speculating, since the atmosphere over the tropics if virtually saturated with the dominant greenhouse gas, water vapor, it may be the heat transfer by the atmosphere from the tropics to outer space that the climate models are not capturing in their overestimation of atmospheric warming.

In his model, Bates uses atmospheric temperatures from satellites, an improvement over the non-comprehensive surface temperatures used in most global climate models.

In his paper, Bates finds that his conclusions are similar to the findings of Lindzen and Choi (2011) and the findings of Mauritsen and Stevens, corrected, (2015) [references in the Bates paper].

A Different Solar Model: Using the approach of an electrical engineer, David Evans further expands his approach to explaining climate change. In the first nineteen essays, Evans developed

the assertion that, in general, climate modelers had made a simple modeling error, a feedback error.

"Heat trapped by increasing carbon dioxide is trapped in the upper troposphere, where it is simply emitted to space by water vapor instead. Add this to the forcing-feedback model that is the basis of climate science, and two things happens: you find the sensitivity to increasing carbon dioxide is about a fifth to a tenth of what the IPCC says it is, and the model finally fits with the observations that water vapor emissions layer did not rise in the last few decades (the missing hotspot). All solved, very neat." [Evans: from comment section at the end of the current post.]

In the current post, Evans attempts to explain the apparent delay between changes in solar irradiance and their effect on the earth's climate. A delay of about one solar cycle (11 years) has been observed by others. Evans uses the electrical engineering concept of notch filters which allow most frequencies to pass through but lessen the intensity of selected frequencies. To Evans, slight variations in cloud cover act as filters. These small variations of cloud cover are difficult to measure. For many researchers, the difficulty with global climate models in dealing with clouds is well recognized. The responses to this post should be interesting. See links under Science: Is the Sun Rising?

Methane Rules: The EPA has announced new rules regulating emissions of methane from new oil and natural gas operations. Similar rules on existing operations are sure to follow. Oil and gas production are one of the few bright spots in the US economy, which has stagnated with about a 2 percent growth rate since the 2007-2008 recession, and low full-time employment. As discussed in the May 7 TWTW, thanks to hydraulic fracturing (occurring on lands not controlled by the Federal government) natural gas prices are down by about 50% from 2000 at the Henry Hub. Also, the US EIA reported:

"In constant 2015 dollars, average annual household energy expenditures peaked at about \$5,300 in 2008. Between 2008 and 2014, average annual household energy expenditures declined by 14.1%. During this period, household expenditures decreased by 17.7% for gasoline, 25.1% for natural gas, and 28.3% for fuel oil. Electricity expenditures declined by a more modest 0.7%. EIA uses these average household energy expenditures to inform its outlooks for summer transportation expenditures and winter heating fuels expenditures."

Needless to say, the importance of reliable low-cost energy did not make it into the calculations used by the EPA in determining the benefits and the need for new rules. Instead, the EPA announced: "After reviewing the more than 900,000 comments received on its August 2015 proposal, EPA updated a number of aspects in the final rule that increase climate benefits, including removing an exemption for low production wells and requiring leak monitoring surveys twice as often at compressor stations, which have the potential for significant emissions."

As EPA veteran Alan Carlin states, "The effects on global temperatures [from new controls on methane emissions] will not be measurable even if the regulation achieves everything EPA claims it will. It will, however, increase the cost of natural gas (as well as oil), which will make it less likely that natural gas will be used compared to other energy sources, particularly coal."

Those who have sat through EPA comment sessions with professional listeners, realize that many, if not most, of the comments in favor of EPA rules are little more than speakers taking out pictures of their children and grandchildren saying this is why the rules are important. To the EPA

listeners, the baby pictures are as meaningful for regulation as any rigorous scientific comments. Such is the status of EPA hearings on scientific issues today. See links under EPA and other Regulators on the March

A Legal Loss: As reported in the *Guardian*, a Minnesota administrative law judge found the estimates used by the Public Utilities Commission for the social costs of carbon (SCC) are too low. Instead the judge recommended that costs estimated by, what is now, the US Global Change Research Program (USGCRS) be accepted. The judge ran through the various models and concluded that the climate sensitivity is reasonably considered to be in the 2-4.5°C range. See links under Litigation Issues.

A Legal Gain – RICO-20: On April 22, the Competitive Enterprise Institute (CEI) prevailed it its Virginia Freedom of Information Act against George Mason University (GMU) requesting public records on how a group of academics "the RICO-20" (including six from GMU) used public funds to organize their call for a Federal racketeering investigation (RICO) of entities who disagree with them on climate policy. The Virginia court released the ruling last week, and the University immediately requested the records be withheld pending appeal. On Friday, May 13, the court denied the request and ordered immediate release of the records.

The records will make amusing reading for those who so care, and some are being posted now, with comments. It appears that the actions fit as a conspiracy to deny civil rights under the Civil Rights Act of 1985, but it is unlikely that the current US Justice Department will investigate, given that it gave the investigation of the original RICO complaint by the RICO-20 to the FBI for criminal investigation against those who sued.

Things will be very lively at GMU, where divisions of the law school were named as entities of interest in the lawsuit urged by the RICO-20 and announced by the Attorney General of the Virgin Islands. Apparently, many of those in the RICO-20, and their supporters, expected substantial monetary benefits, including academics at the main campus of George Mason. This will be an ongoing issue for some time. See links under Suppressing Scientific Inquiry – The Witch Hunt – Push-Back

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.

Number of the Week: 48%: Currently, the EIA projects a 48% increase in world energy consumption by 2040 (in BTUs). The increase will largely be in renewables, natural gas, and liquid fuels, ordered by growth rates. The forecasted major sources of energy in 2040 will be liquid fuels, natural gas, and coal. (Natural gas overtaking coal around 2030.) A more complete report is scheduled to be available on May 23, which may include the Administration's energy plan.

No discussion at this time on success, or costs, in making solar and wind sources of electricity dispatchable, to be turned on and off when needed. That is, reliable, predictable, and consistent.

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

NEWS YOU CAN USE:

Science: Is the Sun Rising?

New Science 24: Is that one new Solar force, or two? The Force-ND Hypothesis

By David Evans and Jo Nova, Her Blog, May 10, 2016 http://joannenova.com.au/2016/05/new-science-24-is-that-one-no-

 $\underline{http://joannenova.com.au/2016/05/new-science-24-is-that-one-new-solar-force-or-two-the-force-nd-hypothesis/\#more-44916}$

Suppressing Scientific Inquiry – The Witch Hunt – Push-Back

BREAKING: CEI Defeats RICO-20 Ringleader Shukla In FOIA Lawsuit – Emails to be are made public

By Anthony Watts, WUWT, May 13, 2016

https://wattsupwiththat.com/2016/05/13/breaking-cei-defeats-rico-20-ringleader-shukla-in-foia-lawsuit-emails-to-be-made-public/

[SEPP Comment: Updates include some of the emails that are being released. Could it be a conspiracy of 2 or more people (including the Union of Concerned Scientists) violate the civil rights of others?]

AGs' motives questioned as Exxon climate change 'fraud' probe recalls tobacco windfall By Valerie Richardson, Washington Times, May 12, 2016 [H/t Cooler Heads Digest] http://www.washingtontimes.com/news/2016/may/12/exxon-climate-change-fraud-probe-recalls-tobacco-w/?page=all

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

Prepared Testimony to House Committee on Science, Space & Technology

By John Christy, UAH, Feb 2, 2016

 $\underline{https://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-114-SYWState-JChristy-20160202.pdf}$

How low can ECS go?

By Andrew Montford, Bishop Hill, May 13, 2016

http://bishophill.squarespace.com/blog/2016/5/13/how-low-can-ecs-go.html

Link to paper: Estimating Climate Sensitivity Using Two-zone Energy Balance Models

By J. Ray Bates, Meteorology and Climate Center, School of Mathematics and Statistics,

University College, Dublin, Ireland [Accepted by Earth and Space Science]

http://onlinelibrary.wiley.com/doi/10.1002/2015EA000154/epdf

Defending the Orthodoxy

Global Warming Cited as Wildfires Increase in Fragile Boreal Forest

Scientists say the near-destruction of Fort McMurray last week by a wildfire is the latest indication that the vital boreal forest is at risk from climate change.

By Justin Gillis and Henry Fountain, NYT, May 10, 2016

http://www.nytimes.com/2016/05/11/science/global-warming-cited-as-wildfires-increase-in-fragile-boreal-forest.html?emc=edit th 20160511&nl=todaysheadlines&nlid=59831859& r=0

[SEPP Comment: Apparently these journalists do not realize that the cooling following the warm climate optimum about 8000 years ago killed off much of the northern boreal forests, resulting in extensive "wildfires."]

Questioning the Orthodoxy

Monckton: IPCC climate models speeding out of control compared to real world

By Jo Nova, Her Blog, May 10, 2016

 $\underline{http://joannenova.com.au/2016/05/monckton-ipcc-climate-models-speeding-out-of-control-compared-to-real-world/}$

[SEPP Comment: An amusing new graphic.]

Salby Sees Little CO2 Driving Mechanism ... Skeptical View Of CO2 Science Is In Fact 'Textbook Science'

By Kenneth Richard, No Tricks Zone, May 13, 2016

http://notrickszone.com/2016/05/13/salby-sees-little-co2-driving-mechanism-skeptical-view-of-co2-science-is-in-fact-textbook-science/#sthash.U7PeMngB.dpbs

[SEPP Comment: Question some of Salby's statements such as humans are largely not the cause of recent increases in CO2 – part of it may be due to ocean outgassing, but how much?]

After Paris!

Climate: The Real 'Worrisome Trend' (Part I: Faulty Science)

By Joe D'Aleo, Master Resource, May 11, 2016

https://www.masterresource.org/debate-issues/real-worrisome-trend-i/

Climate: The Real 'Worrisome Trend' (Part II: Policy and Intent)

By Joe D'Aleo, Master Resource, May 12, 2016

https://www.masterresource.org/debate-issues/real-worrisome-trend-ii/

Seeking a Common Ground

New presentation: Society of Petroleum Engineers

By Judith Curry, Climate Etc. May 9, 2016

 $\underline{\text{https://judithcurry.com/2016/05/09/new-presentation-society-of-petroleum-engineers/\#more-21520}$

"To those of you who give presentations on this topic, please feel free to use any of my slides."

Review of Recent Scientific Articles by CO2 Science

How Heat Mortality Associations Changed Between 1985 and 2012

Gasparrini, A., Guo, Y., Hashizume, M., Kinney, P.L., Petkova, E.P., Lavigne, E., Zanobetti, A., Schwartz, J.D., Tobias, A., Leone, M., Tong, S., Honda, Y., Kim, H. and Armstrong, B.G. 2015. Temporal Variation in Heat-Mortality Associations: A Multi-country Study. *Environmental Health Perspectives* **123**: 1200-1207. May 12, 2016

http://www.co2science.org/articles/V19/may/a9.php

All things considered, therefore, Gasparrini *et al.* concluded there was "a statistically significant decrease in the relative risk for heat-related mortality in 2006 compared with 1993 in the majority of countries included in the analysis," even though global temperatures kept creeping upward throughout much of this time period.

Projections of Future Spring Wheat Yields on the Canadian Prairies

Qian, B., De Jong, R., Huffman, T., Wang, H. and Yang, J. 2016. Projecting yield changes of spring wheat under future climate scenarios on the Canadian prairies. *Theoretical and Applied Climatology* **123**: 651-669. May 11, 2016

http://www.co2science.org/articles/V19/may/a8.php

"And thus it would appear that the prairies of Canada have the ability to produce even more spring wheat than they do currently, even if -- and especially if -- the atmosphere's CO2 concentration and temperature would rise as predicted by the world's climate alarmists."

A Test of the CanCM4 Model in Forecasting Rainfall Over Malaysia

Salimun, E., Tangang, F., Juneng, L., Zwiers, F.W. and Merryfield, W.J. 2016. Skill evaluation of the CanCM4 and its MOS for seasonal rainfall forecast in Malaysia during the early and late winter monsoon periods. *International Journal of Climatology* **36**: 439-454. May 10, 2016 http://www.co2science.org/articles/V19/may/a7.php

Models v. Observations

The Transient Climate Response (TCR) revisited from Observations (once more) Guest essay by Frank Bosse, WIWT. May 11, 2016

https://wattsupwiththat.com/2016/05/11/the-transient-climate-response-tcr-revisited-from-observations-once-more/

Model Issues

Betting Your Future on Computer Models

By Donn Dears, Power For USA, May 13, 2016

https://dddusmma.wordpress.com/2016/05/13/betting-your-future-on-computer-models/

Climate Modeling Dominates Climate Science

By Patrick J. Michaels and David E. Wojick, Cato, May 13, 2016

http://www.cato.org/blog/climate-modeling-dominates-climate-science

Measurement Issues -- Surface

Can We Trust Snow Extent Data?

By Paul Homewood, Not a Lot of People Know That, May 9, 2016

https://notalotofpeopleknowthat.wordpress.com/2016/05/09/can-we-trust-snow-extent-data/

Some Like It Hotter

By Tony Thomas, Quadrant, May 9, 2016

http://quadrant.org.au/opinion/doomed-planet/2016/05/like-hotter/

[SEPP Comment: NASA-GISS modifying surface data at Adelaide Airport.]

Changing Weather

'2016 El Nino strongest yet but not linked to global warming'

By Voon Miaw Ping, Bernama, Malaysia, May 9, 2016

https://www.malaysiakini.com/news/340780#.VzB0zw-3sCA.twitter

"The current El Nino phenomenon that has brought prolonged drought and sweltering heat to Malaysia is the strongest of the 20 over the last 60 years, but there is no concrete evidence to link its heat intensity to global warming, says an expert...Climatologist and oceanographer Prof Dr Fredolin Tangang of Universiti Kebangsaan, Malaysia."

Drought links

By Andrew Montford, Bishop Hill, May 11, 2016

http://bishophill.squarespace.com/blog/2016/5/11/drought-links.html

"But if you read his links you find only support for the hypothesis that drought causes migration. With no evidence that climate change causes droughts to become more intense or more prevalent, our green friends are left to insert the word "climate change" whereever they can, and to hope that nobody notices what they are up to."

How better weather forecasting can help stretch water supplies

Reservoir managers look to storm predictions to make smarter choices about dam operations By Matt Weiser, ENSIE, May 12, 2016

http://ensia.com/features/how-better-weather-forecasting-can-help-stretch-water-supplies/?utm_content=buffer341eb&utm_medium=social&utm_source=twitter.com&utm_camp_aign=buffer

Rain is constant, videos are van Goghized

A comment about two interesting enough papers.

By Luboš Motl, The Reference Frame, May 12, 2016

http://motls.blogspot.com/2016/05/rain-is-constant-videos-are-van-goghized.html#more

"The trends seem to be zero: all of the deviations are safely below two sigma. There's no significant signal. Note that the longer periods, especially from 1850, produce more precise values for the 'basically zero' trend, despite the fact that they depend on some 'ancient' data, because the noise from a larger number of years averages out more accurately."

Study Finds "No significant global precipitation change from 1850 to present"

By Paul Homewood, Not a Lot of People Know That, May 10, 2016

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2016/05/10/study-finds-no-significant-global-precipitation-change-from-1850-to-present/}$

Questioning assumptions

By Martin Livermore, The Scientific Alliance, May 13, 2016

http://scientific-alliance.org/node/993

Link to paper: Trends in Extreme Weather Events since 1900 – An Enduring Conundrum for Wise Policy Advice

By Kelly, MJ, Journal of Geography & Natural Disasters, Feb 17, 2016

http://www.omicsgroup.org/journals/trends-in-extreme-weather-events-since-1900--an-enduring-conundrum-for-wise-policy-advice-2167-0587-1000155.pdf

[SEPP Comment: According to the paper, the scientific literature provides strong evidence that the first of the 20^{th} century had more extreme weather than the second half.]

Changing Climate

$1000\ year\ rainfall\ study\ suggests\ droughts\ and\ floods\ used\ to\ be\ longer,\ worse$

By Jo Nova, Her Blog, May 12, 2016

 $\underline{http://joannenova.com.au/2016/05/1000-year-rainfall-study-suggests-droughts-and-floods-used-\underline{to-be-longer-worse/}}$

Link to paper: An ice core derived 1013-year catchment-scale annual rainfall reconstruction in subtropical eastern Australia

By C.R. Tozer et al. Hydrol. Earth Syst. Sci. May 11, 2016

http://www.hydrol-earth-syst-sci.net/20/1703/2016/

Ancient species form 'snapshot' of primates stressed by climate change

By Staff Writers, Lawrence KS (SPX), May 11, 2016

http://www.terradaily.com/reports/Six_new_fossil_species_form_snapshot_of_primates_stressed_by_ancient_climate_change_999.html

"The point is that primates [34 million years ago], just like primates today, are more sensitive to a changing climate than other mammals."

[SEPP Comment: Illustrating the importance of developing the ability to adapt – as humans did.]

Fears of Global Cooling Very Real In 1970s ... Scientists Devised Ways To WARM The Planet!

Scientists devised schemes to warm the climate in the 1960s-70s

By Kenneth Richard, No Tricks Zone, May 10, 2016

 $\frac{http://notrickszone.com/2016/05/10/fears-of-global-cooling-very-real-in-1970s-scientists-devised-ways-to-warm-the-planet/\#sthash.HT1hhd0L.dpbs}$

Study: extreme cold from climate change may have killed off Neanderthals

New research suggests climate change may have contributed to extinction of Neanderthals

By Anthony Watts, WUWT, May 11, 2016

 $\underline{https://wattsupwiththat.com/2016/05/11/study-extreme-cold-from-climate-change-may-have-killed-off-neanderthals/}$

Changing Seas

False Climate Alarm: Starfish Babies Return In Droves To Pacific Coast After Massive Die-Off

By Staff Writers, AP, Via GWPF (With link the old story of warming killing starfish), May 9, 2016

http://www.thegwpf.com/false-climate-alarm-starfish-babies-return-in-droves-to-pacific-coast-after-massive-die-off/

Sentinel's first map of sea-surface 'hills and valleys'

By Jonathan Amos, BBC, May 10, 2016 [H/t Clyde Spencer]

http://www.bbc.com/news/science-environment-36255957

[SEPP Comment: Sea level isn't level – and its changing!]

Sea Levels In The Holocene

By Paul Homewood, Not a Lot of People Know That, May 13, 2016

https://notalotofpeopleknowthat.wordpress.com/2016/05/13/sea-levels-in-the-holocene/

"There is no evidence that the current rate of increase is in any way abnormal, and the history of the last few thousand years tells us that we are not going to get the inundations promised."

9 mm/year of sea level rise in South East Florida? Only if you cherry-pick

Claims are only possible by cherry-picking the multidecadal oscillation with a short time window Guest essay by Albert Parker, WUWT, May 11, 2016

 $\underline{https://wattsupwiththat.com/2016/05/11/9-mmyear-of-sea-level-rise-in-south-east-florida-only-if-you-cherry-pick/}$

How much does groundwater contribute to sea level rise?

By Staff Writers, Laxenburg, Austria (SPX), May 08, 2016

http://www.terradaily.com/reports/How_much_does_groundwater_contribute_to_sea_level_rise_9 99.html

"Previous studies, including estimates used in the IPCC Fifth Assessment Report, had assumed that nearly 100% of extracted groundwater ended up in the ocean. The new study improves on previous estimates by accounting for feedbacks between the land, ocean, and atmosphere. It finds that number is closer to 80%."

Molted elephant seal skin leeching mercury into coastal waters

Previous research has linked both elephant seal molting and sea lion feces to spikes in coastal mercury levels.

By Brook Hays, UPA, Sep 8, 2016

http://www.upi.com/Science_News/2015/09/08/Molted-elephant-seal-skin-leeching-mercury-into-coastal-waters/7841441741573/

New scrutiny for a slowing Atlantic conveyor

By Eric Hand, Science, May 13, 2016 [H/t Climate Etc.]

http://science.sciencemag.org/content/352/6287/751?utm_campaign=wnews_sci_2016-05-12&et rid=35400449&et cid=482478

Changing Cryosphere – Land / Sea Ice

Arctic Sea Ice Loss Not Leading to Colder Winters

By Paul C. "Chip" Knappenberger and Patrick J. Michaels, Cato, May 11, 2016

http://www.cato.org/blog/arctic-sea-ice-loss-not-leading-colder-winters

Link to paper: What Caused the Recent "Warm Arctic, Cold Continents" Trend Pattern in Winter Temperatures?

By Sun, Perlwitz, and Hoerling, Geophysical research Letters, May 8, 2016

http://onlinelibrary.wiley.com/doi/10.1002/2016GL069024/full

Arctic ice area: safely higher in 2016 than in 2007

By Luboš Motl, the Reference Frame, May 9, 2016

http://motls.blogspot.com/2016/05/arctic-ice-area-safely-higher-in-2016.html

Beaufort Sea fractured ice due to strong Beaufort Gyre action – not early melt

By Susan Crockford, Polar Bear Science, May 12, 2016

 $\underline{https://polarbearscience.com/2016/05/12/beaufort-sea-fractured-ice-due-to-strong-beaufort-gyre-action-not-early-melt/\#more-82368$

[SEPP Comment: It is too thick ice, not early melt, that causes starvation in certain bear populations.]

Changing Earth

Earth's upper mantle moving up and down 'like a yo-yo'

By Staff Writers, Cambridge UK (SPX), May 12, 2016

http://www.terradaily.com/reports/Map_of_flow_within_the_Earths_mantle_finds_the_surface_m oving up and down like a yo yo 999.html

Early Earth's air weighed less than half of today's atmosphere

By Staff Writers, Seattle WA (SPX), May 11, 2016

http://www.terradaily.com/reports/Early_Earths_air_weighed_less_than_half_of_todays_atmosphere_999.html

[SEPP Comment: Has the increase in atmospheric pressure caused a global warming?]

Agriculture Issues & Fear of Famine

The Era Of Great Famines Is Over

By Alex De Waal, New York Times, Via GWPF, May 10, 2016

http://www.thegwpf.com/the-era-of-great-famines-is-over/

"Famine isn't caused by overpopulation, and as Ethiopia's experience shows, it's not a necessary consequence of drought. Politics creates famine, and politics can stop it."

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

Effect of ocean acidification on shellfish depends on other stressors

"Ocean acidification is likely to progress along our coastline as a patchwork of hotspots," said researcher Kristy Kroeker.

By Brook Hays, UPI, May 9, 2016

http://www.upi.com/Science_News/2016/05/09/Effect-of-ocean-acidification-on-shellfish-depends-on-other-stressors/5521462821577/

[SEPP Comment: Press Release?? No link to paper.]

Scientist Credibility Unhurt by Climate Advocacy, Study Suggests

In a social science experiment, a fictitious meteorologist who advocates climate policy stances retains credibility among test subjects.

By Lily Strelich, EOS, May 9, 2016 [H/t Climate Etc.]

https://eos.org/articles/scientist-credibility-unhurt-by-climate-advocacy-study-suggests NO link to study.

[SEPP Comment: It will be interesting if the George Mason University Center for Climate Change Communication will conduct a similar study in two months, with a description of the actions of the RICO-20. Will EOS publish it?]

Communicating Better to the Public - Make things up.

The World's First "Climate Refugees"

By Roger Andrews, Energy Matters, May 13, 2016

http://euanmearns.com/the-worlds-first-climate-refugees/

[SEPP Comment: Sea levels have been rising for 18,000 years, but it is a new discovery to the US Department of Housing and Urban Development!]

Pesticide regs could solve honeybee decline, experts say

By Tim Devaney, The Hill, May 10, 2016

http://thehill.com/regulation/energy-environment/279414-pesticide-regs-could-solve-honeybee-decline-experts-say

Link to survey: Colony Loss 2015-2016: Preliminary Results

By Staff Writers, Bee Informed, May 4, 2016

https://beeinformed.org/results/colony-loss-2015-2016-preliminary-results/

"Note: This is a preliminary analysis. Sample sizes and estimates are likely to change. A more detailed final report is being prepared for publication in a peer-reviewed journal at a later date." [SEPP Comment: According to the chart, it appears that the "total annual loss" starts in 2010-11, with the inclusion in summer loss. Yet there is no summer loss included before that date, only winter loss, for which there is no significant change. Is this chartsmanship – crafting misleading charts?]

Communicating Better to the Public – Go Personal.

Why Cliff Mass Is a Very Dangerous Weatherperson

By Charles Mudede, The Stranger, May 6, 2016 [H/t Climate Etc.]

 $\frac{http://www.thestranger.com/slog/2016/05/06/24054552/why-cliff-mass-is-a-very-dangerous-weatherperson}{}$

[SEPP Comment: Frequently, TWTW links to forecasts from Cliff Mass and finds that, although he is convinced of the harm of human influence on climate, he remains objective.]

Communicating Better to the Public – Use Propaganda on Children

John Cook wins award as Friend of Planet for feeding fallacies to school children By Jo Nova, Her Blog, May 13, 2016

http://joannenova.com.au/2016/05/john-cook-wins-award-as-friend-of-planet/

"Whatever else happens at schools, children must never ever question Big-Government Science. (That might lead them to question big-government grants!)."

Questioning European Green

Report: Coal Phaseout to Cost €72 Billion

Germany is moving toward a future driven by renewable energy, but questions are rising about whether it can afford to do so. A new study estimates the country's exit from coal power, which provides 40 percent of electricity, would cost taxpayers €72 billion.

By Klaus Stratmann, Handelsblatt, Via GWPF May 9, 2016

https://global.handelsblatt.com/edition/425/ressort/companies-markets/article/report-coal-phaseout-to-cost-e72-billion

The Rising Cost Of The Climate Change Act

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

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2016/05/11/the-rising-cost-of-the-climate-change-act-2/}$

[SEPP Comment: UK government fiddling the books, again!]

Cold steel

By John Brignell, Number Watch, UK, May 2016 http://www.numberwatch.co.uk/2016%20%20May.htm

"Different variations on this theme of zealot-inspired economic suicide promoted by the enemy within appear throughout the declining West. The watermelon government of the USA, for example, used its democracy-bypass agent, the EPA, to mount a destructive attack on its own coal industry; only to be confounded by the well-established principle that if you artificially make a vital technology too expensive another takes its place."

Breakdowns force National Grid to issue power supply crunch alert

By Paul Homewood, Not a Lot of People Know That, May 11, 2016 https://notalotofpeopleknowthat.wordpress.com/2016/05/11/breakdowns-force-national-grid-to-issue-power-supply-crunch-alert/

Questioning Green Elsewhere

What Happens to an Economy When Forced to Use Renewable Energy?

By Robert Bryce, Manhattan Institute, Via ICECAP May 2016

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

climate/what happens to an economy when forced to use renewable energy1/Link to original: http://www.manhattan-institute.org/sites/default/files/IB-RB-0516.pdf

Green Jobs

European clean tech industry falls into rapid decline

Investment in low-carbon energy in Europe last year plummeted by more than half to \$58bn, the lowest level in a decade, analysis shows

By Fiona Harvey, Guardian, UK, Mar 23, 2016 [H/t GWPF]

 $\underline{\text{http://www.theguardian.com/environment/2016/mar/23/european-clean-tech-industry-falls-into-rapid-decline}$

"But he [the chairman of Bloomberg New Energy Finance] also pointed to mistakes made by policymakers in member states, which he said had created a "boom-bust" cycle by initially showing strong support for renewables then rapidly rowing back as they feared the expense of successful subsidies."

Litigation Issues

Obama White House showed 'bad faith' in global-warming case, judge rules

Third rebuke of administration's transparency this year

By Stephen Diana, The Washington Times, May 9, 2016

http://www.washingtontimes.com/news/2016/may/9/obama-wh-shows-bad-faith-global-warming-case-judge/

Peabody coal's contrarian scientist witnesses lose their court case

Peabody Energy brought contrarians Spencer, Happer, and Lindzen to testify on their behalf, but the judge wasn't convinced by their case

By John Abraham, Guardian, UK, May 2, 2016

http://www.theguardian.com/environment/climate-consensus-97-per-cent/2016/may/02/peabody-coals-contrarian-scientist-witnesses-lose-their-court-case

Link to ruling; State of Minnesota, Office of Administrative Hearings

For the Public Utilities Commission, MPUC 3-999/CI-14-643, No date

 $\frac{https://mn.gov/oah/assets/2500-31888-environmental-socioeconomic-costs-carbon-report_tcm19-222628.pdf$

Subsidies and Mandates Forever

UK's attractiveness for renewables investment plummets to all-time low

UK routinely topped annual league table run by Ernst & Young but has slid to 13th place due to government's 'non-committal approach'

By Fiona Harvey, Guardian, UK, May 10, 2016

 $\underline{http://www.theguardian.com/environment/2016/may/10/uks-attractiveness-for-renewables-investment-plummets-to-all-time-low}$

Link to report: RECAI: Renewable Energy country attractiveness index, Sep 2015

By Ben Warren, et al. Ernst & Young, September 2015

http://www.ey.com/Publication/vwLUAssets/RECAI-45-September-15-

LR/\$FILE/RECAI 45 Sept 15 LR.pdf#page=35

[SEPP Comment: Reliability in subsidies and mandates are needed by the renewable industries. Before supplying reliable financial subsidies, why do not the industries produce reliable output?]

USDA Helps Farms and Small Businesses Conserve Energy and Save Costs

By Staff Writers, USDA, May 10, 2016

https://content.govdelivery.com/accounts/USDAOC/bulletins/1484b8d

[SEPP Comment: And why did farmers and ranchers immediately switch to the grid when given the opportunity? It was reliable?]

EPA and other Regulators on the March

EPA Is At It Again

By Alan Carlin, Carlin Economics and Science, May 13, 2016 http://www.carlineconomics.com/archives/2696

EPA finalizes stronger methane emission rules

By Devin Henry, The Hill, May 12, 2016

http://thehill.com/policy/energy-environment/279671-epa-finalizes-stronger-new-methane-leak-rules

"The EPA's new standards are stronger than those it proposed last summer. The rule, if fully implemented, will reduce 520,000 short tons of methane in 2025, or the equivalent of 11 million metric tons of carbon dioxide. The EPA's proposed rule would have cut up to 400,000 short tons of methane."

An Out-Of-Control EPA Loses Yet Another Court Case

By John Merline, IBD, May 10, 2016

http://www.investors.com/politics/capital-hill/an-out-of-control-epa-loses-yet-another-court-case/

Getting the Lead Out of Flint Disinformation

By Steven Hayward, Power Line, May 10, 2016

http://www.powerlineblog.com/archives/2016/05/getting-the-lead-out-of-flint-disinformation.php "According to data from the Centers for Disease Control, in the mid-1970s 88 percent of children *nationwide* had blood lead levels above 10 micrograms per deciliter (ug/dl).

"For two years, about 5 percent of the children in Flint recorded blood lead levels greater than 5 m/d. This is a very moderate level for a short period of time. In every single year before 2010, Flint was above this number; usually far, far above."

Energy Issues - Non-US

EIA projects 48% increase in world energy consumption by 2040

By Staff Writers, EIA, May 12, 2016

http://www.eia.gov/todayinenergy/detail.cfm?id=26212

Fossil Fuels Will Still Provide 75 Percent Of Energy In 2040, Despite Trillions In Green Subsidies

By Andrew Follett, Daily Caller, May 12, 2016

http://dailycaller.com/2016/05/12/fossil-fuels-will-provide-75-percent-of-energy-in-2040-despite-trillions-in-green-subsidies/

Exporting Emissions To China

By Paul Homewood, Not a Lot of People Know That, May 13, 2016

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2016/05/13/exporting-emissions-to-china/2016/05/exporting-emissions-to-china/2016/05/expo$

"Forget the guilt trip. However much we are importing [the UK] from China, its effect on their emissions is negligible."

Fracking Ban Plays Into Putin's Hands, Claims Former Government Asdviser

By Paris Gourtsoyannis, The Times, Via GWPF, May 12, 2016

http://www.thegwpf.com/fracking-ban-plays-into-putins-hands-claims-former-government-asdviser/

How a pair of key oil-inventory reports can be so wildly different

By Myra P. Saefong, Market Watch, May 11, 2016

http://www.marketwatch.com/story/how-a-pair-of-key-oil-inventory-reports-can-be-so-wildly-different-2016-05-11?mod=mw share twitter

[SEPP Comment: Or why betting on short-term market fluctuations can be painful.]

Jeremy Grantham publishes epic mea culpa admitting he got the commodities bubble all wrong

By Bob Bryan, Business Insider, UK, May 10, 2016 [H/t GWPF]

http://uk.businessinsider.com/jeremy-grantham-admits-he-was-wrong-2016-5?r=US&IR=T

[SEPP Comment: Now, will he admit he got the climate scare bubble all wrong?]

Energy Issues -- US

Energy-Related Carbon Emissions Are Declining—Yet Again [US]

By Merrill Matthews, Institute for Policy Innovation, May 10, 2016 [H/t Timothy Wise] http://us2.campaign-

archive2.com/?u=236713c0eb5508a7a8a8c680e&id=ad65a069ad&e=979f069593

Data Everywhere, But Not a Byte to Use

By Donn Dears, Power For USA, May 10, 2016

https://dddusmma.wordpress.com/2016/05/10/data-everywhere-but-not-a-byte-to-use/

"Reducing the use of electricity so as to cut CO2 emissions is the wrong objective for capturing and using data.

The big payoff will come from using digital data to improve quality, reliability and costs ... for manufacturers, utilities, drillers, airlines, etc., and customers."

[SEPP Comment: Smart grids will not make unreliable electricity from wind or solar smart.]

Washington's Control of Energy

Obama pressed to create new Grand Canyon monument

By Timothy Cama, The Hill, May 14, 2016

http://thehill.com/policy/energy-environment/279901-obama-pressed-to-create-new-grand-canyon-monument

[SEPP Comment: Rather than accompanying the article with a photo of the already protected Grand Canyon, why not show a photo of the over million acres of desolate scrub land, rich in uranium deposits?]

Oil and Natural Gas – the Future or the Past?

After the Boom: A shale driller embraces its 'lifetime' match

By Bill Holland, SNL, May 5, 2016

https://www.snl.com/InteractiveX/Article.aspx?cdid=A-36342128-13613

Resilient U.S. drillers squeezing out more oil than expected, Goldman [Sachs] says

By Collin Eaton, Fuel Fix, May 9, 2016

http://fuelfix.com/blog/2016/05/09/resilient-u-s-drillers-squeezing-out-more-oil-than-expected-goldman-says/

[SEPP Comment: Unlike the wind and solar power industries, they are not demanding reliable subsidies.]

Return of King Coal?

Chinese Coal Giant's Emissions to Fall after Upgrades

By Staff Writers, PR Newswire, May 12, 2016 [H/t GWPF]

 $\frac{http://www.prnewswire.com/news-releases/chinese-coal-giants-emissions-to-fall-after-upgrades-300267512.html$

[SEPP Comment: Installing scrubbers as found in the West.]

Oil Spills, Gas Leaks & Consequences

Oil-eating bacteria came to the rescue after BP spill

By Marlowe Hood, Paris (AFP), May 9, 2016

http://www.oilgasdaily.com/reports/Oil-

eating bacteria came to the rescue after BP spill 999.html

Link to letter: Reconstructing metabolic pathways of hydrocarbon-degrading bacteria from the Deepwater Horizon oil spill

By Dombrowski, et al. Nature Microbiology, May 9, 2016

http://www.nature.com/articles/nmicrobiol201657

Alternative, Green ("Clean") Solar and Wind

AWED Energy & Environmental Newsletter:

By John Droz, Jr, Master Resource, May 9, 2016

https://www.masterresource.org/alliance-for-wise-energy-decisions/awed-energy-environmental-newsletter-may-9-2016/

IRS Overreach on Wind Power: Likely Illegal

By Lisa Linowes, Wind Action, May 11, 2016

http://www.windaction.org/posts/44987-irs-overreach-on-wind-power-likely-illegal#.VzUQnL56CKI

Alternative, Green ("Clean") Energy -- Other

Renewable Transport Fuel May Be Bad, But It Is Cheap(er)

By John Constable, GWPF, May 8, 2016

http://www.thegwpf.com/renewable-transport-fuel-may-be-bad-but-it-is-cheaper/

Alternative, Green ("Clean") Vehicles

Column: Elon Musk, crony capitalist king

By Eric Peters, Detroit News, May 9, 2016

http://www.detroitnews.com/story/opinion/2016/05/09/elon-musk-tesla-crony/84169496/

Tesla throws cold water on its own hype by admitting huge risks in building the Model 3 By Michael Hilzik, LA Times, May 11, 2016

http://www.latimes.com/business/hiltzik/la-fi-hiltzik-tesla-admits-20160511-snap-story.html

"The company hasn't yet finalized the design for the Model 3, hasn't selected its parts suppliers, isn't sure it can produce and deliver the car in volume and on time, and still needs to do "extensive testing" to make sure the car can meet quality standards and government regulations." [from SEC filing.]

Electric Cars Are Not Necessarily Clean

Your battery-powered vehicle is only as green as your electricity supplier

By David Biello, Scientific American, May 11, 2016

http://www.scientificamerican.com/article/electric-cars-are-not-necessarily-clean/

Environmental Industry

Feds hand greens 'big' victory over coal

By John Siciliano, Washingon Examiner, May 9, 2016

http://www.washingtonexaminer.com/feds-hand-greens-big-victory-over-coal/article/2590829

Greens: Methane rules on existing drilling rigs should come next

By Devin Henry, The Hill, May 12, 2016

 $\frac{http://thehill.com/policy/energy-environment/279748-greens-methane-rules-on-existing-drilling-rigs-should-come-next}{}$

This Liberal Media Outlet [Mother Jones] Says Fracking To Blame For Green Civil War

By Andrew Follett, Daily Caller, May 11, 2016

http://dailycaller.com/2016/05/11/this-liberal-media-outlet-says-fracking-is-causing-the-green-civil-war/

Other Scientific News

Magnetic Reconnection - Major space weather effect measured for the first time

By Jo Nova, Her Blog, May 14, 2016

 $\underline{\text{http://joannenova.com.au/2016/05/magnetic-reconnection-major-space-weather-effect-measured-for-the-first-time/\#more-48801}$

Link to paper: Electron-scale measurements of magnetic reconnection in space

By Burch, et al, Science, May 12, 2016

http://science.sciencemag.org/content/early/2016/05/10/science.aaf2939

BELOW THE BOTTOM LINE:

Evolutionary Psychologists Claim Religion Is Explained By Energy Use. Seriously.

Here's Why They're Wrong

By William Briggs, The Stream, May 12, 2016

https://stream.org/evolutionary-psychologists-claim-religion-explained-energy-use/

Link to paper: Increased Affluence Explains the Emergence of Ascetic Wisdoms and Moralizing Religions

By Baumard, et al. Current Biology, Jan 5, 2015

http://www.sciencedirect.com/science/article/pii/S0960982214013724

Terrorist Economics

By Steven Hayward, Power Line, May 9, 2016

http://www.powerlineblog.com/archives/2016/05/terrorist-economics.php

"Everyone is having fun mocking the latest travesty of our airline security theater: the removal of a person described as "a 40-year-old man — with dark, curly hair, olive skin and an exotic foreign accent" from an American Airlines plane in Philadelphia because an adjacent passenger was alarmed at his ominous looking scribblings on a piece of paper.

"Turns out the man was doing math." [Economics!]

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. A Climate Courtroom Crusade Scorches Due Process

Attorneys general demand Exxon's files without first asking a judge—a case of the fox guarding the hens

By Philip Hamburger, WSJ, May 11, 2016

http://www.wsj.com/articles/a-climate-courtroom-crusade-scorches-due-process-1463007726

SUMMARY: The professor of law at Columbia University challenges New York Attorney General's announcement claiming that a coalition will hold fossil fuel companies accountable:

"The First Amendment, ladies and gentlemen, does not give you the right to commit fraud," he said."

"The threat to scientific inquiry and political speech is obvious. Not so widely recognized is the underlying violation of due process. Start with the fact that Mr. Schneiderman and the other

attorneys general have relied, as their opening move, on a nonjudicial subpoena to force the disclosure of information."

"Traditionally, federal and state governments could demand testimony, papers or other information in only very limited ways. A legislative committee could call witnesses and insist that they appear and testify. But an attorney general who wanted to rifle through a private company's filing cabinet had to get a warrant signed by a judge based on probable cause, or had to ask a court overseeing a grand jury to issue a subpoena.

"Otherwise the attorney general had to wait until he brought civil or criminal charges, and in a criminal case he could get only a very limited version of discovery. As the founding generation knew from experience, government demands for papers could be dangerous.

"Much has changed over the past century. When civil discovery of evidence, now a common process, evolved in the late 19th and early 20th centuries, some states, for the sake of convenience, allowed subpoenas for such purposes to be signed not by judges, but by clerks, and then even by parties in cases. The subpoena power thus began to drift out of the hands of the judiciary.

"Although this initial step was trivial, it offered legitimacy for what followed: Over the 20th century, Congress gave administrative agencies, from the Agriculture Department to the Department of Health and Human Services, statutory authority to issue subpoenas in their own name. And state legislators have granted such power to their equivalent agencies.

"All sorts of administrators, at both levels of government, thereby acquired an expansive power to demand information without initially working through a judge. This was bad enough, but it gets worse. Lawmakers also granted subpoena authority to their attorneys general. New York did so in 1921. Even prosecutors thus can now read through private papers on demand.

"The Supreme Court upheld the subpoena power of agencies in United States v. Morton Salt (1950), on the theory that administrators are exercising the power of a grand jury. This is improbable, but it is even more improbable for prosecutors, who lead grand jury proceedings. Having a role in facilitating grand juries, a prosecutor cannot, by himself, be assumed to act as one. Even if the Morton Salt argument really justifies administrative subpoenas, it cannot explain an attorney general's subpoena.

"Nor can the dangers of giving a subpoena power to prosecutors be waved away. In a grand jury, a judge oversees the proceedings to prevent excessive intrusions into private papers and lives. In a government agency, the administrator typically is not an elected official, and therefore is not using the subpoena power to generate public support for his own political campaign. But when an attorney general issues a subpoena, the opposite conditions prevail: There is no ongoing judicial supervision and far too much politics.

"Regrettably, this evasion of judicial subpoenas is only the beginning of the due-process problem, for Mr. Schneiderman and other attorneys general have the power to bring not simply administrative, but criminal, charges on the basis of the information they force out of private parties. They thereby dangerously combine the roles of grand jury and prosecutor.

"If Mr. Schneiderman were bringing a civil case, he could seek discovery only after filing a complaint about a concrete injury, and his demands would be subject to judicial supervision,

including protective orders to narrow their scope. If he were bringing a criminal case, he would have difficulty getting much information at all from the defendant through discovery.

"But with the usurped subpoena power, he can engage in a roving investigation, unlimited by any formal accusation, and then can use the results to bring criminal charges. This is a dangerous amalgam of grand-jury and prosecutorial power in one person. Mr. Schneiderman's subpoena to Exxon Mobil thus stands apart. His ability to demand information in this way is a quintessential case of the fox guarding the henhouse.

"The threats to privacy in our society are not merely technological; they also are legal. In addition to electronic surveillance, nonjudicial subpoenas allow government to examine private documents as if they were an open book. And as shown by Mr. Schneiderman, when attorneys general can issue such subpoenas, a valuable judicial power becomes a prosecutorial threat to liberty and due process."

2. How Emerging Nations Can Use Data to Curb Pollution

By Sam Ori, WSJ, Apr 25, 2016

http://blogs.wsj.com/experts/2016/04/25/how-emerging-nations-can-use-data-to-curb-pollution/

SUMMARY: The executive director of the Energy Policy Institute at University of Chicago proposes how regulators in developing countries with strong legal air-quality standards can better control pollution by adapting actions such as those by India's Gujarat without expensive energy technology or heavy-handed government intervention. They need reliable information near real-time.

"Pollution regulators there have developed the country's first standards for low-cost and reliable pollution monitoring. This network of continuous emissions monitoring systems is beginning to allow regulators to rapidly pinpoint where pollution is occurring and if policies are working. That kind of information could be the basis of multiple policy innovations—from simply doing a better job of detecting and punishing violations to creating regional pollution emissions trading networks that would rapidly and cost-effectively improve air quality for large whole cities and states."

[Multiple] "innovative approaches use the same basic strategy: collect and analyze data, test cost-effective policies, and scale what works. And, there is certainly no shortage of creative ideas to test. Delhi discovered this recently when nearly 250 ideas poured in from students, entrepreneurs, nonprofits, businesses and citizens from throughout India for an Innovation Challenge launched in partnership with the University of Chicago. Like the other approaches, the winning idea (or ideas) will be rigorously tested and if successful implemented in Delhi—perhaps even becoming a prototype for other cities."

3. Venezuela's Hunger Is No Game

Inflation hit 180% in late 2015. Little food is available, and most people can't afford it. By Mary Anastasia O'Grady, WSU, May 8, 2016 http://www.wsj.com/articles/venezuelas-hunger-is-no-game-1462738401

The commentator for Latin America writes: "In his craving for power, the late Hugo Chávez pledged to redistribute Venezuela's wealth to the poor masses. The god-father of '21st-century

socialism' seems to have been unaware that the resources he promised to shower on his people had to first be produced.

"Fifteen years into the Bolivarian revolution, Venezuela is facing dire food shortages. A crisis may still be averted—but only with a sharp reversal of the policies that have destroyed the country's productive capacity. A nation either has to produce what it consumes or must import it. What it imports is paid for with foreign exchange from exports or debt.

"Venezuela has long relied on oil dollars to pay for imports. But it also has grown corn, sorghum and rice, and it has had cattle, poultry and fishing industries. Now the nation is in trouble not only because of lower oil revenues and institutionalized corruption but also because government policies have badly damaged domestic production.

"Among the many stupidities that socialism promotes is the idea that by imposing price controls and forbidding profits, government can make food both cheap and widely available.

"The opposite is true, and Venezuela proves the rule. An August-September 2015 survey by the multi-university, Caracas-based social and economic research project Encovi found that 87% of those polled reported that they did not have sufficient income for food. Their privation is a result of artificially holding down prices, which creates shortages. Consumers are forced to scurry about black markets looking for what they need and then pay dearly for it—if they can. They face killer inflation which, according to the central bank, was 180.9% on an annual basis in the fourth quarter of 2015, up from 82.4% in the first quarter of last year.

"Hunger is only a symptom of a broader economic collapse, all along the production chain, brought on by state diktat."

"Protein is hard to come by. Eggs have all but disappeared from grocery stores. In October, seven tuna canneries employing 3,000 people had to close because they could not get dollars from the central bank to pay foreign suppliers who provide the materials for production like fish and cans. Basic medicines like aspirin have vanished."

4. History of Energy Forecasts Leaves Room for Humility

Supposedly a report from the CIA declared that we were running out of natural gas. Letters, WSJ, May 10, 2016

http://www.wsj.com/articles/history-of-energy-forecasts-leaves-room-for-humility-1462913817

"Regarding R. Tyler Priest's review of Mason Inman's "The Oracle of Oil" (Bookshelf, April 26): The oil story miscue wasn't the only energy boo-boo of the 1970s. I remember being ordered to shut off my gas lamp as the government mandated a reduction in gas consumption. Utility companies discontinued the connection of new gas furnaces, so I had to install an oil furnace in my new home. Supposedly a report from the CIA declared that we were running out of natural gas.

"Then a major New York City bank's economics department calculated that by 1980 OPEC would hold most of the world's money. Forecasts by such reliable entities went up in smoke as we

weathered the OPEC embargo and oil price explosion. And as we can all attest, we weren't running out of natural gas. We should all be wary of similar forecasts that are being made by those who claim to be professionals in areas such as the impact of budget deficits and global warming."

Thomas E. Nugent, Charleston, S.C.

[SEPP Comment: What is now the Department of Energy had state-of-the-art computer models "proving" the US was running out of natural gas and the world out of oil by the end of the 20th century.]