

The Week That Was: 2016-12-10 (December 10, 2016)
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The Science and Environmental Policy Project

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Quote of the Week. *“In God we trust, all others bring data.”* – Motto of the Apollo team.

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Number of the Week: 99.98%

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THIS WEEK:

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

Deliberate Ignorance – Where’s The Data? As discussed in the past few TWTWs, the 1979 Charney Report to the National Research Council of the US National Academy of Sciences articulated that there were two components to possible global warming from carbon dioxide (CO₂) and other greenhouse gases. The first component is a warming directly from CO₂. The warming takes place in the atmosphere. Based on laboratory experiments, this warming would be modest, highly logarithmic, and likely beneficial. The second component was proposed by those creating global climate models. This warming is from an increase in atmospheric water vapor, and far more powerful than warming from CO₂. At the time, there was no data to confirm or deny this warming from an increase in water vapor.

Based primarily on calculations with global climate models, the Charney report estimated that *“the most probable global warming for a doubling of CO₂ to be near 3°C with a probable error of ±1.5°C.”* Since the Charney Report, we have had five reports from the UN Intergovernmental Panel for Climate Change, and several reports for the US Global Change Research Program (USGCRP), under various names. Generally, they repeat the findings in the Charney report. Except for the discredited Santer “hotspot” which depended on eliminating data that was inconsistent with the assertion, these reports produce no atmospheric data to confirm or deny the second component of the warming, the more powerful warming from water vapor.

Now, we have comprehensive data of atmospheric temperatures dating from December 1978, independently confirmed by data from weather balloons. In his February 2, 2016, testimony, John Christy, a co-discoverer of the method of calculating atmospheric temperatures from information collected by satellites, produced excellent summaries of the data from satellites, particularly between the surface to 50,000 feet where both components of the greenhouse gas warming should take place, and compared them with global climate models. In general, the models overestimated atmospheric warming by 2.5 times and by 3 times over the tropics, where the water vapor warming should be more pronounced.

As discussed in last week’s TWTW, in making its finding that greenhouse gas emissions endanger human health and welfare (Endangerment Finding), the EPA produced no data, instead relied on three lines of evidence: 1) understanding of the physics of greenhouse gases; 2) a questionable study that late 20th century warming was unusual; and 3) global climate models. The evidence is woefully incomplete.

Further, any warming of the surface is not the same as a warming of the atmosphere, and can be highly influenced by other human activities such as change in land use, change in instrument locations, and change in instrument types. An example of the last type, is a switch in instruments

used to measure surface ocean temperatures. Earlier methods were instruments located on ship water intakes, well below the surface of the water, the current method is to use instrument buoys at the surface. The latter is subject to direct warming from sunlight, unrelated to and CO₂ – caused warming. For example, see NIPCC 2008, p. 19 & 20.

To build a reliable database, any such changes must be carefully calibrated. For surface temperature measurements, all too frequently changes in instruments have not been carefully calibrated. For example, in the US, the use of mathematical adjustments for land surface records is highly questionable, because the results are inconsistent with the historic records of high temperatures.

For satellite measurements, the changes in instrumentation are carefully calibrated, errors are quickly corrected, and deviations are noted. Now, three independent, competitive groups analyze the same data when received.

It is time to petition the EPA for a reconsideration of the Endangerment Finding, stating that there are no data supporting the second component of the global warming theory and that its reliance on global climate models is not scientifically based, because the greatly overestimate atmospheric warming. See links under Challenging the Orthodoxy – NIPCC, Challenging the Orthodoxy, and Defending the Orthodoxy.

If Not CO₂, then What? One of the most scientifically vacuous arguments advanced by the IPCC and its advocates is: “If CO₂ has not caused late 20th century warming, then what?” The paper by Wallace, Christy, and D’Aleo provides the “what” – **changes in the El Niño Southern Oscillation (ENSO) and the Pacific Decadal Oscillation (PDO). Others, including Ian Plimer of Australia and de Freitas et al. of New Zealand, have suggested this may be the case.** The Wallace et al. paper shows strong statistical relationships between changes in ENSO events, coupled with the PDO, and changes in temperatures. **The statistical relationships are far stronger than the one between CO₂ and temperatures.** The Wallace, et al. paper applies to both atmospheric and surface measurements.

This research is being confirmed by other independent research by other groups.

The IPCC has considered the ENSO as weather events, too short for consideration for climate change. But, the changes in the frequency of ENSOs and changes in the PDO are not too short for climate events influencing global temperatures.

Of course, correlation is not causation. This adage came with the development of statistical techniques in the early 20th century, when efforts to use correlation to assert causation produced foolish results. Conversely, without correlation causation is difficult to establish, because many other influences may dominate. That appears to be the case in the CO₂ – temperature relationship, particularly for surface data. See links under Challenging the Orthodoxy – NIPCC and Challenging the Orthodoxy.

Acid – Alkaline Balance: A great misnomer in studies of the influence of increased atmospheric CO₂ is ocean acidification. The term is alarming and wrong. The corrosiveness of a water-based solution is measured by its pH. A pH below 7 is acidic, a pH above 7 is alkaline, which can be very corrosive. The closer the pH is to 7, the less corrosive the solution. SEPP has reviewed no

empirical studies which assert that with increasing atmospheric CO₂, the pH of the oceans will drop below 7 – become acidic.

Yet, we have numerous laboratory studies in which the researchers drop acid, such as hydrochloric acid, into tanks with marine life and consider the results as credible.

Such actions would horrify some tropically fish fanciers who bubble CO₂ through their aquariums to lower the pH below 7, to promote coloration in Amazonian fish such as discus. They would not consider pouring hydrochloric acid in the aquarium, which would kill the life.

That said, increasingly, there are studies showing seasonal, and daily variations in pH, without harm to marine life, such as corals. Some coral reefs have pH gradients with depth or exposure to natural CO₂ seeps.

As stated in the NIPCC Report on Biological Impacts: *“Caution should be applied when interpreting results from laboratory-based studies ... Rising atmospheric CO₂ do not pose a significant threat to aquatic life ... The natural variability of oceanic pH is often much greater than the change in pH levels forecast by IPCC...”*

The difference between the laboratory results and the field results illustrates the need to verify the results of the laboratory in the field. See links under Challenging the Orthodoxy – NIPCC and Review of Recent Scientific Articles by CO₂ Science, both this week and in last week’s TWTW.

Model Issues – Importance of Aerosols in Climate Models: One of the deficiencies in the IPCC approach to understanding climate, is basing the findings on runs of a suite of models. Often these model runs are singular. Yet, as explained by Fred Singer in a paper, model runs produce different results each time. Singer estimates that at least 10 different runs are needed for each model to obtain a reasonable approximation for the results of that model. This is not done.

A second major issue creating significant uncertainty in the results of models is that often the models are run producing estimates for both warming from CO₂ and cooling from aerosols, small particles in the atmosphere. This procedure makes as much logical sense as expecting that solving one simple linear equation with two unknowns will produce a unique solution. The range of solutions is infinite. If imaginary numbers are added, then the range of solutions is imaginary!

The important CLOUD experiment at CERN began to estimate a range of values for aerosols, an important beginning to arrive at empirical bounds for aerosols and for climate models. Until bounds are established, the certainty expressed by the IPCC, the EPA, and the Climate Establishment in these simply is not justified. See links under Challenging the Orthodoxy – NIPCC and Model Issues.

After the Election: An outpouring of outrage over the election of Donald Trump continues. One thing is clear: he is upsetting the Democratic establishment, the Republican establishment, and, above all, the Climate Establishment. His designation of Scott Pruitt for administrator of the EPA will not win accolades among green groups, but Trump did not receive their support in the election. Pruitt is the Attorney General for the State of Oklahoma, and a litigant against the Obama administration’s so-called Clean Power Plan. Expect events to become quite heated in Washington for the remainder of the winter, even though actual Congressional sessions will be

mostly symbolic rather than meaningful. It is impossible to predict what the outgoing administration will do. For a sampling of articles see links under After the Election --.

Post-Election Predictions? Perhaps as a result of the election, in *Polar Bear Science*, Susan Crockford highlights several highly questionable assertions being made by “experts” on Arctic animals about the future. See links under Communicating Better to the Public – Make things up.

Post-normal Science and Thinking: Writing in Power Line, Steven Hayward discusses what he calls “post truth” media. Hayward considers this concept as stemming from a remark by the 19th century philosopher Friedrich Nietzsche: “there are no facts, only interpretation.” The concept was picked up by nihilist philosophers and continues today. Of course, post-normal view is rejected by empirical scientists who believe that facts stem from observations. Perhaps the view is the basis for some people, such as those who identify themselves as from the Union of Concerned Scientists, to label hypothesis testing as “cherry picking.”

Quote of the Week: The quote of the week: *In God we trust, all others bring data.*, was prominently displayed at NASA Space Flight Center near Houston, which controlled the Apollo missions. The activities of this center should not be confused with NASA-GISS, which focuses on surface temperatures. Gavin Schmidt, GISS director, is a listed expert reviewer of the Endangerment Finding and has produced slogans such as carbon dioxide is the “control knob” of the earth’s temperatures. The web site gives his office as on 2880 Broadway, New York, NY. The difference between the science behind NASA-GISS reports and the science behind Apollo missions is greater than the difference between Broadway and the Houston Space Flight Center.

See <http://www.therightclimatestuff.com/>

Number of the Week: 99.98% As stated in last week’s TWTW: According to reports, on Dec. 1, construction of the 1,172-mile Dakota Access Pipeline will be all but finished. The only thing left to build, says its owner, Energy Transfer Partners, will be about 1,100 feet of pipe to be laid beneath Lake Oahe, a sliver of water south of Bismarck, N.D., that is man-created by a dam on the Missouri River. The pipe will be drilled underneath the river bed, and will not disturb it. Laying of the \$3.5 Billion pipeline was 99.98% complete.

This week, the administration killed construction by refusing to issue necessary permits, even though the pipeline developers won past court challenges.

In addition to an enormous increase in National Debt, the US is in the worst economic recovery since the Great Depression. Is there any question why? See links under Washington’s Control of Energy.

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Thank you -- whether you celebrate Hanukkah, Christmas, or other holy days during this time, we wish you and your family happiness in this blessed season and a joyful new year.

Kenneth Haapala, President
Science and Environmental Policy Project (SEPP)

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NEWS YOU CAN USE:

Suppressing Scientific Inquiry – The Witch Hunt

Dem senator: Trump's EPA pick is 'corruption'

By Devin Henry, The Hill, Dec 8, 2016

<http://thehill.com/policy/energy-environment/309432-dem-senator-trumps-epa-pick-is-corruption>

[SEPP Comment: *As corrupt as the "witch hunt" in which Sen. Whitehouse participated?*]

Suppressing Scientific Inquiry – The Witch Hunt – Push-Back

The disclosure that could end Eric Schneiderman's career

Editorial, New York Post, Dec 4, 2016

<http://nypost.com/2016/12/04/the-disclosure-that-could-end-eric-schneidermans-career/>

"A state judge ruled in favor of the Competitive Enterprise Institute, a think tank whose Freedom of Information request the AG had denied. That gave Schneiderman 30 days to cough up documents concerning his agreements with other states' AGs, and with a group of green activists, about their joint persecution of ExxonMobile and other entities for supposed 'climate fraud.'"

Challenging the Orthodoxy -- NIPCC

Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

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

Overcoming Chaotic Behavior of Climate Models

By S. Fred Singer, SEPP, July 2010

http://www.sepp.org/science_papers/Chaotic_Behavior_July_2011_Final.doc

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

[https://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-114-SY-](https://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-114-SY-WState-JChristy-20160202.pdf)

[WState-JChristy-20160202.pdf](https://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-114-SY-WState-JChristy-20160202.pdf)

On the Existence of a “Tropical Hotspot” & The Validity of EPA’s CO2 Endangerment Finding

By Wallace, Christy, and D’Aleo, Independent Researchers, August 2016

<https://thsresearch.files.wordpress.com/2016/10/ef-cpp-sc-2016-data-ths-paper-ex-sum-101416.pdf>

Finally there’s agreement: Ocean cycles are responsible for the missing warming since 2000

By Dr. Sebastian Lüning and Prof. Fritz Vahrenholt, (German text translated, edited by P Gosselin) No Tricks Zone, Dec 9, 2016

<http://notrickszone.com/2016/12/09/a-shower-of-papers-new-climate-models-show-natural-oceanic-cycles-the-recent-major-climate-factor/#sthash.gmqCoVh0.dpbs>

[SEPP Comment: Under: *A Shower of Papers, New Climate Models, Show Natural Oceanic Cycles The Recent Major Climate Factor!*]

Latest on The Myth of More Severe Storms

By Donn Dears, Power For USA, Dec 9, 2016

<https://dddusmma.wordpress.com/2016/12/09/latest-on-the-myth-of-more-severe-storms/>

Defending the Orthodoxy

Carbon Dioxide and Climate: A Scientific Assessment

Ad Hoc Study Group on Carbon Dioxide and Climate

By Jule G. Charney, et al, Climate Research Board, National Academy of Sciences, July 23-27, 1979

<https://www.nap.edu/read/12181/chapter/1#vii>

Endangerment and Cause or Contributed Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act

By Benjamin DeAngelo, et al. EPA – Includes Alan Carlin (an opponent of the finding)

Expert reviewers include: William Emanuel, NASA, Thomas Karl, NOAA, Gavin Schmidt, NASA, Susan Solomon, NOAA, Dec 7, 2009

https://www.epa.gov/sites/production/files/2016-08/documents/endangerment_tsd.pdf

p. 47 (59 on my screen)

5(a) Attribution of Observed Climate Change to Anthropogenic Emissions

How to make climate progress with Trump in the White House

By Daniel Cohan, The Hill, Dec 9, 2016

<http://thehill.com/blogs/pundits-blog/energy-environment/309612-how-to-make-climate-progress-with-trump-in-white-house>

[SEPP Comment: No demand to show the data that CO2 is the cause!]

Leaked Transition Team Memo Outlines Trump's Catastrophic Energy Agenda

By Joshua Hill, Clean Technica, Dec 8, 2016

<https://cleantechnica.com/2016/12/08/leaked-transition-team-memo-outlines-trumps-catastrophic-energy-agenda/>

[SEPP Comment: The author states: "I'm a Christian, a nerd, a geek, and I believe that we're pretty quickly directing planet-Earth into hell in a handbasket!"]

Questioning the Orthodoxy

Clearing the air

By Martin Livermore, The Scientific Alliance, Dec 9, 2016

<http://scientific-alliance.org/node/1029>

Has the AGW hypothesis been falsified again?

By Geoff Brown, Australian Climate Sceptics, Dec 10, 2016

<http://theclimatescepticsparty.blogspot.com.au/2016/12/has-agw-hypothesis-been-falsified-again.html>

Link to earlier article: Climate-cooling aerosols can form from tree vapors

Pollution's sulfuric acid not needed to make cloud-seeding particles in the air

By Thomas Sumner, Science News, May 25, 2016

<https://www.sciencenews.org/article/climate-cooling-aerosols-can-form-tree-vapors>

Trump Induced Panic Exposes Media Bias and Ignorance of Climate

Guest Opinion: Dr. Tim Ball, WUWT, Dec 6, 2016

<https://wattsupwiththat.com/2016/12/06/trump-induced-panic-exposes-media-bias-and-ignorance-of-climate/>

“It is not the same people who said tobacco was healthy. This is an apparent reference to the early attempt to link Fred Singer to the tobacco industry. Fred wrote a critical review of the terrible research in the original article claiming to link cancer to second-hand smoke. His review was later supported by others. Environmentalists used to claim Fred was paid by the tobacco companies and in favor of smoking. In fact, Fred has always actively and openly opposed smoking.”

After Brexit!

145 MPs warn Brexit should not lead to cull of climate laws

Greener UK coalition of 13 civil society groups and a fifth of sitting British MPs urge government to safeguard climate and environment laws

By Ed King, Climate Change News, Dec 8, 2016

http://www.climatechangenews.com/2016/12/08/145-mps-warn-brexit-should-not-lead-to-cull-of-climate-laws/?utm_term=0_876aab4fd7-29e55e5f9e-303439889&utm_content=bufferbd8bb&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

After The US Election -- Opposed

EPA fears 'unprecedented disaster' for environment over Scott Pruitt pick

Senate Democrats vow to fight Trump's nominee to lead the EPA, a climate denier who has sued the agency multiple times as attorney general of Oklahoma

By Oliver Milman, Guardian, UK, Dec 8, 2016

<https://www.theguardian.com/environment/2016/dec/08/epa-scott-pruitt-disaster-environment-senate-democrats>

Trump pricks prominent climate skeptic as EPA chief

By David Malakoff, Science Mag, Dec 7, 2016

<http://www.sciencemag.org/news/2016/12/trump-picks-prominent-climate-skeptic-epa-chief>

Trump's EPA pick may struggle to dismantle Obama's environmental legacy

By Valerie Volcovici and David Shepardson, Reuters, Dec 9, 2016

<http://www.reuters.com/article/us-usa-trump-epa-idUSKBN13Y183>

Greens slam Trump's Interior Department pick

By Timothy Cama, The Hill, Dec 9, 2016

<http://thehill.com/policy/energy-environment/309719-greens-slam-trumps-interior-department-pick>

[SEPP Comment: Will she stem the increase in government control of US lands?]

If Trump wants to dismantle Obama's EPA rules, here are all the obstacles he'll face

By Brad Plumer, Vox, Dec 8, 2016

<http://www.vox.com/energy-and-environment/2016/12/7/13855470/donald-trump-epa-climate-regulations>

Three Reasons Trump Doesn't Matter To Energy Policy

By Jeff McMahan, Forbes, Dec 7, 2016

<http://www.forbes.com/sites/jeffmcmahan/2016/12/07/three-reasons-trump-doesnt-matter-to-energy-policy/#75870d512d12>

[SEPP Comment: According to the article: 1. Most effective energy policies are set at the state level, 2. Momentum favors clean energy, and 3. Technology trumps commodity. Why has the emphasis of the greens been on 1) Federal policy such as the Administration's power plan and the EPA; 2) subsidies for wind and solar, and 3) ignoring that solar and wind power cannot be commercially stored.]

Trump Team's Memo Hints at Broad Shake-Up of U.S. Energy Policy

By Catherine Traywick and Jennifer Dlouhy, Bloomberg, Dec 8, 2016

<https://www.bloomberg.com/news/articles/2016-12-09/trump-team-s-memo-hints-at-broad-shake-up-of-u-s-energy-policy>

Trump team wants names at DOE who worked on climate

By Devin Henry, The Hill, Dec 9, 2016

<http://thehill.com/policy/energy-environment/309607-report-trump-memo-probes-obama-climate-work-clean-energy-research>

[SEPP Comment: Great propaganda photo of condensing steam from cooling towers. Could it be from a nuclear power plant?]

Trump Team Memo Hints at Big Shake-Up of U.S. Energy Policy

By Catherine Traywick and Jennifer A Dlouhy, Bloomberg, Dec 8, 2016

<https://www.bloomberg.com/news/articles/2016-12-09/trump-team-s-memo-hints-at-broad-shake-up-of-u-s-energy-policy>

Trump and the End of the West?

If America's president-elect delivers on his promises, the long-term costs – both domestic and international – are likely to outweigh any short-term gains. If he fails to deliver, the long-term costs will fall due much sooner.

By Staff Writers, Project Syndicate, Dec 9, 2016

<https://www.project-syndicate.org/onpoint/trump-and-the-end-of-the-west-2016-12>

[SEPP Comment: A review “of the best thinking on current events and key trends.”]

After US Election -- Neutral

Trump's EPA pick will make Obama regret his environmental overreach

By Patrick Michaels, The Hill, Dec 8, 2016

<http://thehill.com/blogs/pundits-blog/energy-environment/309484-trumps-epa-pick-will-make-obama-regret-his>

Pragmatic energy policy recommendations for the Trump administration

By David Gattie, Climate Etc. Dec 8, 2016

https://judithcurry.com/2016/12/08/pragmatic-energy-policy-recommendations-for-the-trump-administration/?utm_content=buffer051fc&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer#more-22576

“Post-Truth” Media Should Look in the Mirror

By Steven Hayward, Power Line, Dec 6, 2016

<http://www.powerlineblog.com/archives/2016/12/post-truth-media-should-look-in-the-mirror.php>

After The US Election -- Favorable

How Trump's Climate Skepticism Can Play a Crucial Role in Achieving His Larger Objectives

By Alan Carlin, Carlin Economics and Science, Dec 9, 2016

<http://www.carlineconomics.com/archives/3234>

Trump's Election Means A Chance For “A Return To Reason In Climate Policy”, German Expert Writes

By P Gosselin, No Tricks Zone, Dec 4, 2016

<http://notrickszone.com/2016/12/04/trump-election-means-a-good-chance-for-a-return-to-reason-in-climate-policy-german-expert-writes/#sthash.yH6Ukfn4.dpbs>

Trump EPA nomination a home run! Scott Pruitt tapped to reform EPA

By Staff Writers, ICECAP, Dec 9, 2016

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

Rolling back environmental progress?

Having achieved major goals, US should refocus EPA and other environmental agencies

By Paul Driessen, ICECAP, Dec 4, 2016

http://icecap.us/index.php/go/icing-the-hype/rolling_back_environmental_progress1/

Problems in the Orthodoxy

SHOCK: The ‘Father of global warming’, James Hansen, dials back alarm

By Anthony Watts, WUWT, Dec 3, 2016

<https://wattsupwiththat.com/2016/12/03/shock-the-father-of-global-warming-james-hansen-dials-back-alarm/>

Seeking a Common Ground

Climate Heretic: to be or not to be?

By Judith Curry, Climate Etc. Dec 5, 2016

<https://judithcurry.com/2016/12/05/climate-heretic-to-be-or-not-to-be/>

‘Truthiness’ and ‘factiness’ in politicized scientific debates

By Judith Curry, Climate Etc. Dec 3, 2016

<https://judithcurry.com/2016/12/03/truthiness-and-factiness-in-politicized-scientific-debates/>

Review of Recent Scientific Articles by CO2 Science

The Growth Benefits of Elevated CO2 Overwhelm the Growth Damages of Ozone on Wheat

Rao, M.V., Hale, B.A. and Ormrod, D.P. 1995. Amelioration of ozone-induced oxidative damage in wheat plants grown under high carbon dioxide. *Plant Physiology* **109**: 421-432. Dec 7, 2016

<http://www.co2science.org/articles/V19/dec/a5.php>

“In other words, the beneficial effects of elevated CO2 not only fully compensated for the dry weight loss due to elevated ozone, it *completely overcame it as if this stress was never present!* And driving this point home, Rao *et al.* write ‘we did not observe an adverse impact of O3 on the shoot biomass of wheat plants grown under high CO2.’”

Massive Corals Can Adapt to End-of-Century CO2 Concentrations

Wall, M., Fietzke, J., Schmidt, G.M., Fink, A., Hofmann, L.C., de Beer, D. and Fabricius K.E. 2016. Internal pH regulation facilitates *in situ* long-term acclimation of massive corals to end-of-century carbon dioxide conditions. *Scientific Reports* **6**: 10.1038/srep30688. Dec 6, 2016

<http://www.co2science.org/articles/V19/dec/a4.php>

[SEPP Comment: Corals adapt to changing pH in natural CO2 seeps – indicating that experiments shocking life in aquariums by suddenly lowering pH are grossly misleading.]

How Birds Regulate their Body Temperatures as Climates Warm

Nilsson, J.-A., Molokwu, M.N. and Olsson, O. 2016. Body temperature regulation in hot environments. *PLOS ONE* 11(8): e0161481.doi:1371/journal.pone.0161481. Dec 5, 2016

<http://www.co2science.org/articles/V19/dec/a3.php>

Models v. Observations

New Paper Debunks Ad Hoc ‘Explanation’ That Antarctic Sea Ice Has Been Growing Since ’80s Due To Human Activity

By Kenneth Richard, No Tricks Zone, Dec 8, 2016

<http://notrickszone.com/2016/12/08/new-paper-debunks-ad-hoc-explanation-that-antarctic-sea-ice-has-been-growing-since-80s-due-to-human-activity/#sthash.ptCeIZjf.dpbs>

Model Issues

CLOUD experiment sharpens climate predictions

Press Release by Matthew Chalmers, CERN, Oct 28, 2016 [H/t Australian Climate Skeptics]

<https://home.cern/about/updates/2016/10/cloud-experiment-sharpens-climate-predictions>

Measurement Issues -- Surface

Despite Denial, Global Temperatures Are Dropping Fast

By David Whitehouse, GWPF, Dec 5, 2016

<http://www.thegwpf.com/despite-denial-global-temperatures-are-dropping-fast/>

November 2016 Sea Surface Temperature (SST) Anomaly Update

By Bob Tisdale, Climate Observations, Dec 6, 2016 [H/t GWPF]

<https://bobtisdale.wordpress.com/2016/12/06/november-2016-sea-surface-temperature-sst-anomaly-update/>

[SEPP Question: A gradual increase in sea surface temperatures, with lots of noise. Is the increase due to gradual warming or change in measurement techniques such as location of instruments?]

Changing Weather

Historic December cold and Lake-effect snows coming

By Joseph D'Aleo, CCM, AMS Fellow, ICECAP, Dec 7, 2016

http://icecap.us/index.php/go/new-and-cool/historic_december_cold_and_lake_effect_snows_coming1/

Changing Seas

3 New Papers: Global Seas Now Rising About 2 Inches Per Century ... Claims Of 1 Meter Rise By 2100 'Sheer Nonsense'

By Kenneth Richard, No Tricks Zone, Dec 5, 2016

<http://notrickszone.com/2016/12/05/3-new-papers-global-seas-now-rising-about-2-inches-per-century-claims-of-1-meter-rise-by-2100-sheer-nonsense/#sthash.u2144p99.dpbs>

[SEPP Comment: The most widely cited estimate suffers from the same problems many alarmist papers do, long-term projections from short-term trends, which may be from local conditions.]

Changing Cryosphere – Land / Sea Ice

An El Niño year late start to freeze-up on Hudson Bay: bears gearing up to hunt

By Susan Crockford, Polar Bear Science, Dec 5, 2016

<https://polarbearscience.com/2016/12/05/an-el-nino-year-late-start-to-freeze-up-on-hudson-bay-bears-gearing-up-to-hunt/>

[SEPP Comment: A growing cub population in the face of claimed eminent extinction?]

NSIDC Confirm Low Arctic Ice Due To Influx Of Warm Atlantic Water

By Paul Homewood, Not a Lot of People Know That, Dec 6, 2016

<https://notalotofpeopleknowthat.wordpress.com/2016/12/06/nsidc-confirm-low-arctic-ice-due-to-influx-of-warm-atlantic-water/>

Changing Earth

Ancient eclipses show Earth's rotation is slowing

By Sid Perkins, Science Mag, Dec 6, 2016

<http://www.sciencemag.org/news/2016/12/ancient-eclipses-show-earth-s-rotation-slowng>

Link to paper: Measurement of the Earth's rotation: 720 BC to AD 2015

By Stephenson, Morrison, Hohenkerk, Proceedings of the Royal Society A, Dec 7, 2016

<http://rspa.royalsocietypublishing.org/content/472/2196/20160404>

“Overall, Earth's spin has slowed by about 6 hours in the past 2740 years,”

[SEPP Comment: Highly doubtful!]

Communicating Better to the Public – Make things up.

Hudson Bay could be ice-free in winter within 5-10 years, says seal researcher

By Susan Crockford, Polar Bear Science, Dec 7, 2016

<https://polarbearscience.com/2016/12/07/hudson-bay-could-be-ice-free-in-winter-within-5-10-years-says-seal-researcher/>

Polar bears that didn't die from recent sea ice loss will die in 35 yrs, say 'sperts

By Susan Crockford, Polar Bear Science, Dec 7, 2016

<https://polarbearscience.com/2016/12/07/polar-bears-that-didnt-die-from-recent-sea-ice-loss-will-die-in-35-yrs-say-sperts/#more-94018>

What The Weather Channel Don't Want You To Know About Glaciers

By Paul Homewood, Not a Lot of People Know That, Dec 7, 2016

<https://notalotofpeopleknowthat.wordpress.com/2016/12/07/what-the-weather-channel-dont-want-you-to-know-about-glaciers/>

[SEPP Comment: Did the observed glacier melting start in the 1700s in anticipation of fossil fuel use by the industrial revolution (starting about 1850)?]

Expanding the Orthodoxy – The Pope

Pope Francis and climate politics

How the pontiff argues that opposing the Paris treaty stems from profit seeking

By E. Calvin Beisner, Washington Times, Dec 4, 2016

http://www.washingtontimes.com/news/2016/dec/4/pope-francis-and-climate-politics/?utm_source=Cornwall+Alliance+Newsletter&utm_campaign=8fab7101bb-EMAIL_CAMPAIGN_2016_12_05&utm_medium=email&utm_term=0_b80dc8f2de-8fab7101bb-131646629

Questioning European Green

“Climate-Saving” Green Energies In Germany “Also Useless In November”!

A look at the “climate-rescuing” new energies

By Helmut Kuntz, (Translated/edited by P Gosselin), No Tricks Zone, Dec 6, 2016

<http://notrickszone.com/2016/12/06/climate-saving-green-energies-in-germany-also-useless-in-november/#sthash.fOL94qB1.dpbs>

[SEPP Comment: On-shore wind & solar]

UK slashes number of Foreign Office climate change staff

Cuts made to workforce at home and overseas despite ministers saying climate diplomacy should be a top priority

By Adam Vaughan, The Guardian, UK, Dec 7, 2016

<https://www.theguardian.com/environment/2016/dec/07/uk-slashes-number-of-foreign-office-climate-change-staff>

Non-Green Jobs

Shelter Ontario's Citizens from Industrial-Wind's Tempest: III

By Sherri Lange, Master Resource, Dec 9, 2016

<https://www.masterresource.org/windpower-problems/shelter-ontarios-citizens-industrial-winds-tempest-iii/>

“Ontario now has 300,000 job losses in manufacturing in the last 8 years. Much of this is due to the high cost of power, advanced largely by the preferred access and lucrative subsidies to Green Energy, such as wind and solar.”

[SEPP Comment: Part 3 of 3]

The Political Games Continue

Democrats Pay a Price for Being Green

If the party was serious about winning back the Rust Belt, it would strike a smarter balance between the environment and the economy.

By Josh Kraushaar, National Journal, Via GWPF, Dec 7, 2016

<http://www.thegwpf.com/us-democrats-pay-a-price-for-being-green/>

Subsidies and Mandates Forever

Subsidy cash to fire up new dash for gas power

By Emily Gosden, Telegraph, UK, Dec 3, 2016

<http://www.telegraph.co.uk/business/2016/12/03/subsidy-cash-fire-new-dash-gas-power/>

“Instead, the big winners both times were existing coal, gas and nuclear plants – as well as an unexpected boom in new small diesel and gas engines.”

Energy Issues – Australia

South Australia: blackout costs \$367m, normal electricity twice the price, reserve shortfalls coming in January

By Jo Nova, Her Blog, Dec 9, 2016

<http://joannenova.com.au/2016/12/south-australia-blackout-costs-367m-normal-electricity-twice-the-price-reserve-shortfalls-coming-in-january-2/>

More blackout damage — Alcoa smelter to run at just 27% capacity for up to six months

By Jo Nova, Her Blog, Dec 5, 2016

<http://joannenova.com.au/2016/12/more-blackout-damage-alcoa-smelter-to-run-at-just-27-capacity-for-up-to-six-months/>

[SEPP Comment: When the power goes down in energy intensive industries, the damage can be extensive.]

Green leader South Australia gets energy security the diesel way

By Jo Nova, Her Blog, Dec 5, 2016

<http://joannenova.com.au/2016/12/green-leader-south-australia-gets-energy-security-the-diesel-way/>

Industry Warning: Unreliable Wind Energy Threatens South Australian Economy

By Michael Owen and Greg Brown, The Australian, Dec 5, 2016

<http://www.thegwpf.com/industry-warning-unreliable-wind-energy-threatens-south-australian-economy/>

Energy Issues -- US

Shale Drillers All Set To Get Their Party Started

Robin Pagnamenta, The Sunday Times, Via GWPF, Dec 4, 2016

<http://www.thegwpf.com/shale-drillers-all-set-to-get-their-party-started/>

Washington's Control of Energy

Environmental Fears over DAPL Overblown

By Patrick J. Michaels, CATO, Dec 6, 2016

<https://www.cato.org/publications/commentary/environmental-fears-over-dapl-overblown>

[SEPP Comment: DAPL is Dakota Access Pipeline.]

Five things to watch in Dakota Access pipeline fight

By Timothy Cama, The Hill, Dec 5, 2016

<http://thehill.com/policy/energy-environment/308884-five-things-to-watch-for-in-the-dakota-access-pipeline-fight>

How Trump could decide fate of pipeline dispute

By Daniel A. Medina and Chiara Sottile, CNBC, Dec 5, 2016

<http://www.cnn.com/2016/12/05/how-trump-could-decide-fate-of-pipeline-dispute.html>

Opponents seek to tie up Dakota pipeline for years

By Devin Henry, The Hill, Dec 5, 2016

<http://thehill.com/policy/energy-environment/308833-opponents-seek-to-tie-up-dakota-pipeline-for-years>

The Real Dakota Access Pipeline Victim Is the Construction Company

By William Yeatman, Foundation for Economic Education, Nov 23, 2016

https://fee.org/articles/the-real-dakota-access-pipeline-victim-is-the-construction-company/?utm_medium=related_widget

Oil and Natural Gas – the Future or the Past?

America can double its oil production, says fracking pioneer Harold Hamm

By Tom DiChristopher, CNBC, Dec 1, 2016

<http://www.cnn.com/2016/12/01/america-can-double-its-oil-production-says-fracking-pioneer-harold-hamm.html>

US Shale Gas Is Powering Mexico

By Staff Writers, The American Interest, Dec 1, 2016

<http://www.the-american-interest.com/2016/12/01/us-shale-gas-is-powering-mexico/>

Return of King Coal?

Coal: Reports of its Death...

By Editors, Real Clear Energy, Dec 8, 2016

http://www.realclearenergy.org/charticles/2016/12/08/httpwwwrealclearenergyorgcharticles20161208coal_reports_of_its_death_110138.html

Oil Spills, Gas Leaks & Consequences

Fracking-Contaminated Groundwater: The Myth that Failed

By Timothy Benson, Real Clear Energy, Dec 6, 2016

<http://www.realclearenergy.org/articles/2016/12/06/fracking-contaminated-groundwater-the-myth-that-failed-110135.html>

Nuclear Energy and Fears

Tests confirm that Germany's massive nuclear fusion machine really works

Harnessing the power of the Sun.

By Fiona MacDonald, Science Alert, Dec 6, 2016

<http://www.sciencealert.com/tests-confirm-that-germany-s-massive-nuclear-fusion-machine-really-works>

Link to paper: Confirmation of the topology of the Wendelstein 7-X magnetic field to better than 1:100,000

By T. Sunn Pedersen, et al, Nature Communications, Nov 30, 2016

<http://www.nature.com/articles/ncomms13493>

Germany's Wildly Complex Fusion Reactor Is Actually Working

The Wendelstein 7-X reactor, which uses a complex design called a stellerator, is performing just like it was predicted to.

By Avery Thompson, Popular Mechanics, Dec 6, 2016

<http://www.popularmechanics.com/science/energy/a24172/fusion-reactor-working/>

Russia: Leader in Nuclear Power

By Donn Dears, Power For USA, Dec 6, 2016

<https://dddusmma.wordpress.com/2016/12/06/russia-leader-in-nuclear-power/>

Entergy to shutter Michigan Palisades nuclear plant in 2018

By Robert Walton, Utility Dive, Dec 8, 2016

<http://www.utilitydive.com/news/entergy-to-shutter-michigan-palisades-nuclear-plant-in-2018/431968/>

Alternative, Green ("Clean") Solar and Wind

Helicopter De-Icing For Wind Turbines

By Paul Homewood, Not a Lot of People Know That, Dec 8, 2016

<https://notalotofpeopleknowthat.wordpress.com/2016/12/08/helicopter-de-icing-for-wind-turbines/>

New Research: Solar Panels Less Green Than You Think

By Ben Webster, The Times, Via GWPF, Dec 7, 2016

<http://www.thegwpf.com/new-research-solar-panels-less-green-than-you-think/>

Link to paper; Re-assessment of net energy production and greenhouse gas emissions avoidance after 40 years of photovoltaics development

By Louwen, van Sark, Faaij & Schropp, Nature Communications, Dec 6, 2016

<http://www.nature.com/articles/ncomms13728>

[SEPP Comment: How long does the effective life of PV panels have to be before they pay for their "carbon debt"?]

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

US Energy Dept. Toots Geothermal Horn, With Lithium Bonus

By Tina Casey Clean Technica, Dec 2, 2016

<https://cleantechnica.com/2016/12/02/us-energy-dept-toots-geothermal-horn-lithium-bonus/>

Alternative, Green ("Clean") Vehicles

BMW CFO downbeat about electric cars and their ability to generate profit

By Steve Hanley, Teslarati, Dec 7, 2016

<http://www.teslarati.com/bmw-cfo-downbeat-ev-battery-profit/>

Other Scientific News

The real plague affecting science? It isn't fraud

By Ivan Oransky and Adam Marcus, Stat News, Dec 1, 2016 [H/t GWPF]

<https://www.statnews.com/2016/12/01/plague-science-research-fraud/>

[SEPP Comment: Cutting corners may be the real problem.]

Other News that May Be of Interest

Don't Cry Over Dead Trade Agreements

Dani Rodrik, Professor of International Political Economy at Harvard University's John F. Kennedy School of Government, Project Syndicate, Dec 8, 2016

<https://www.project-syndicate.org/commentary/no-mourning-dead-trade-agreements-by-dani-rodrik-2016-12>

[SEPP Comment: Are trade agreements obsolete in an era of free trade?]

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BELOW THE BOTTOM LINE:

Time's nearly up!

By Staff Writers, Climate Change Predictions.org, Dec 7, 2016

<http://climatechangepredictions.org/uncategorized/7456>

"A major new report on global warming slated to be released Friday raises new fears that the earth's climate is changing faster than anyone thought possible.

Today, 500 of the world's top scientists are meeting behind closed doors to finish a landmark report on global warming, and the picture they paint is not pretty.

They say significant changes in the climate could start happening within the next 10 years.

"We're hoping that it will convince people, you know, that climate change is real," said Kenneth Denman, co-author of the Intergovernmental Panel on Climate Change (IPCC) report.

The report predicts an increase in heat waves, intense tropical storms and hurricanes, a sharp rise in sea level and continued melting of the world's snow and glaciers."

[abcnews, 30 Jan 2007"](#)

[SEPP Comment: Still waiting for the melting of the Himalayas!]

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ARTICLES:

1. To Mars by Economy Class: A Perfect Project For Trump

By S. Fred Singer, American Thinker, Dec 9, 2016

http://www.americanthinker.com/articles/2016/12/to_mars_by_economy_class_a_perfect_project_for_trump.html

"President Trump can "make America great again" by planning a surprising and easily affordable human exploration mission to the red planet Mars and its two moonlets Phobos and Deimos: PH-D, for short. JFK is remembered by many people mainly for putting Americans on the Moon, but he really just initiated the program.

"The two moonlets of Mars were discovered in 1877 at the US Naval Observatory in Washington, DC. They are in near-circular, near-equatorial orbits around Mars. Deimos, smaller than the island of Manhattan, orbits at a distance of 6.9 Martian radii; Phobos, about five times larger than Deimos, is at 2.8 radii, with its orbit shrinking because of tidal friction; it will be gone in just a few million years. In past lectures, I have joked that the dinosaurs might have seen more Martian moons, now gone, "if they had had better telescopes."

“Notice that I did not suggest colonization of Mars -- the current rage, a replay of the massive, wildly expensive and technologically infeasible Empire Project of the 1950s, envisioned by space pioneer Wernher von Braun. Unfortunately, this premature emphasis on colonization tends to color even realistic manned Mars projects as fantasy. Nor do I favor the business-as-usual continuation of unmanned missions to Mars, promising the eventual return of Mars samples for analysis in terrestrial labs.

“The feds have traditionally supported exploration -- including basic science, which does not promise an immediate pay-off. Indeed, that has been the rationale for building multibillion-dollar particle accelerators for high-energy physics and telescopes for astronomy. So the PH-D project, as I have nicknamed it, would fit right in -- a combination of good science and high adventure. Even its cost is relatively modest -- about \$30 billion over 10-20 years, well within the current NASA budget, and about that of a half-dozen unmanned Mars missions. Its scientific return would be many times greater. Its public and international impact would be tremendous.

No Showstoppers

“The PH-D project is basically a manned transfer from Earth orbit to Mars orbit, taking about six months; there don't seem to be any showstoppers at all. A rough calculation has convinced me that ordinary chemical propulsion is quite sufficient -- no need for any exotic schemes that require lengthy development. Any simple fuel, like kerosene, suffices, and any of the available oxidizers can do the job. No special rocket engine is needed; existing ones will do -- as explained below. And propulsion is surprisingly cheap -- only a few percent of the total project cost; more than 95% of the cost is engineering and design -- and the US has many well-qualified engineers.

“Electric power -- again no problem. Of course, solar photo-voltaic becomes more difficult at Mars distance, where solar energy is less than half that at Earth orbit. But the Russians have space-tested nuclear reactors, and units are available for purchase. I estimate that 100 kilowatts should do nicely and would even provide an adequate reserve of power. [The U.S. uses plutonium electro-thermal generators on its deep-space missions.]

“Other issues, relating to maintenance and life support of astronauts, present no problems either; they have been mostly solved in the International Space Station. As in the ISS, one would recycle liquid waste, but not solid waste. With cheap propulsion and essentially unlimited payload, one simply carries more food and water. The same argument applies to maintaining a healthy breathing atmosphere.

“Radiation is usually cited as the major health risk; but propellants turn out to be the most effective shield, especially against heavily ionizing particles of the incident galactic cosmic radiation -- GCR. Once the astronauts set up their base on Deimos, the preferred destination, they can construct also a more permanent shelter against the omni-directional cosmic rays, the unidirectional meteor showers, and the occasional solar eruptions that can lead to penetrating particle radiation. Note that none of that protection is present in the ISS, but Deimos itself provides shielding against unidirectional radiation; it is only necessary to move to the opposite side.

“Absence of gravity can lead to long-term health problems. The answer here, as in the ISS, is regular exercise, aided by artificial gravity from a centrifuge; such a scheme should be tested in the ISS.

Scenario of Deimos Base

“Assemble propellants in low-earth orbit -- LEO; then send to Deimos as “slow freight” – including a nuclear reactor, spare habitat, spare rocket engine, penetrators and rover vehicles equipped for return of samples; release penetrators that will provide also seismic data, and some rovers while underway to Mars. Send one habitat, two rovers and some of the propellant to Phobos -- for use on the later sortie to Phobos and Mars surface.

“Test the habitat-lab while in LEO with 5 astronauts aboard; then send them to Deimos on a “fast express” trajectory. Upon arrival, shield and activate the reactor; surround the habitat-lab with rocket propellants to provide additional shielding; set up a GPS system and weather satellites for Mars.

“Start sample-return program, analyzing initial samples -- and call for follow-up samples from different Martian locations or different depths, based on the initial analyses– all the while consulting with experts on Earth.

Sortie to Phobos and Mars Surface

“Two astronauts depart for Phobos and meet two rovers, collect samples of regolith and deeper, and send them back to Deimos base, then move on for a powered landing on a preselected Mars site, meet rover vehicle there, collect samples, set up an experimental equipment, and then take off for return to Phobos and thence to Deimos base. Note that take-off from Mars requires only our small rocket -- while a direct return to Earth would have required a special, high-thrust rocket, capable of lifting the large propellant load necessary for transit to Earth.

Deimos Base vs Mars Base

“There is no question that a Deimos base is easier to set up, much cheaper, safer, and better in all respects than a base on Mars. Besides, it can be accomplished much sooner, perhaps within 10-15 years.

“A Mars base does not confer mobility, does not provide a view of the rovers; from Deimos one can view the surface from pole to pole for up to 40 hours. [Deimos is in a near-synchronous orbit, with an orbital period of 30.3 hours, just a little longer than the spin period, 24.7 hours, of the planet.]

“On Mars, because of its gravity field, meteor impacts are more frequent and also more energetic; there is interference from Mars’ atmosphere, from winds, and from dust storms—while on Deimos one gets a ‘free’ vacuum, essential for most lab instruments, such as mass spectrometers, electron microscopes, etc.

Scientific Questions: Planetology (and learn also about the early history of Planet Earth)

“The origin of Phobos and Deimos is a real puzzle: Initially, I applied a modified (‘push-pull’) tidal theory[1] to extrapolate their present orbits backward in time; but I do not believe they are captured asteroids -- although that’s what many textbooks claim; it’s just too improbable. Nor were they formed along with Mars; it leads to an unstable solution. I now believe they are the

remnants of a Mars-moon --M-m, captured gravitationally, akin to Earth-Moon, but into a retrograde orbit; the other, heavier fragments of the M-m have already spiraled in and disappeared, impacting on or near Mars' equator.

Some research questions -- and learn also about the early history of Planet Earth

- 1. Why do Phobos and Deimos, presumably related, look so different? Is it just the regolith and is it based on the difference in their orbits?*
- 2. Are Ph and D solid rock or rubble piles?*
- 3. Are there tiny moonlets orbiting Mars between Ph and D?*
- 4. Explore orbiting dust at Ph and D.*
- 5. Explore evidence for ancient impacts of fragments near Mars' equator.*
- 6. Establish history of Mars' obliquity by tracing W-182 tungsten isotope, from the radioactive decay of hafnium.*
- 7. Was capture of M-m essential in heating Mars by tidal friction to produce its iron core?*

Scientific Questions -- Meteorology And Climatology -- and test theories of causes of climate change and ice ages

- 1. Test forecast models developed for Earth on Mars weather predictions.*
- 2. Test current climate models against Mars observations: predictions of dust storms; test analyses of Martian polar -layer deposits against ice-age theories and periods of oscillation of Mars obliquity, precession and orbit eccentricity.*

Scientific Questions -- Crypto-Life And Paleo-Life

"Is life unique to the Earth -- as some believe? This is a very basic issue with philosophical and even theological overtones

"Look for hidden life forms, taking into account that life may have developed several times, independently, at different locations, and been wiped out subsequently. These life forms may be ephemeral and unable to survive for more than a few hours -- hence undetectable in Mars samples returned to Earth, as currently planned. It may be advisable to develop also techniques for detecting life in situ, for ultra-fresh sampling.

"Ancient life, now dead, may be detectable in some sort of fossil form. Its formation likely required the presence of liquid water -- i. e., survival of oceans, lakes, or simply pools of water for a sufficient length of time. Note that these life forms may not have been based on carbon, but possibly on silicon. Note also that use of a Deimos base minimizes chances of both forward and back-contamination of Mars with terrestrial biota.

Conclusion

“We believe that the scientific yield of the PH-D mission more than justifies such a project. Its impact on the public here and abroad would be akin to the Apollo project and fully supports president Trump’s goal of “making America great again.”

2. A Lawyer for a Lawless EPA

Scott Pruitt can restore respect for the states in environmental policy.

Editorial, WSJ, Dec 7, 2016

http://www.wsj.com/articles/a-lawyer-for-a-lawless-epa-1481155238?mod=whatnext&cx_navSource=cx_picks&cx_tag=poptarget&cx_artPos=1#cxrecs

The editorial states:

“As Donald Trump rolls out his domestic-policy nominees, Democrats are discovering to their horror that more often than not he meant what he said. The latest evidence is the President-elect’s intention to nominate Oklahoma Attorney General Scott Pruitt to run the Environmental Protection Agency.

“There was a time when Republican EPA administrators were liberals in GOP power suits. Think William Reilly under George H.W. Bush or Christine Todd Whitman under George W. Bush. They more or less agreed with the left’s command-and-control model of environmental regulation, and they’d pile more costs on the private economy.

“The Democratic Party’s green extremism, especially on climate change, has made such Republicans obsolete. President Obama couldn’t get his climate-change agenda through a Democratic Congress, so he ordered the EPA to impose it on the 50 states by diktat. The agency reinterpreted statute after ancient statute as its bureaucrats saw fit, daring the courts to stop them. Think of the Clean Power Plan to put the coal industry out of business, the carbon endangerment rule, grabbing authority to call any pond or puddle a “waterway,” and so much more.

“Mr. Pruitt’s first job will be restoring respect for the Constitution and cooperative federalism in EPA rule-making. He knows how to do this because he led the legal charge by the states against EPA abuses, including the victory of a Supreme Court stay on the Clean Power Plan as it moves through the appellate courts. If he is confirmed by the Senate, Mr. Pruitt could order the EPA’s lawyers to inform the courts that the agency no longer stands by the legal interpretation behind the Clean Power Plan.

“Democrats will attack Mr. Pruitt as a climate-change “denier,” but his only offense is disagreeing with them on energy policy. The irony is that Mr. Pruitt will probably do more for the environment than Mr. Obama ever did because he will make sure that rules issued by the EPA are rooted in law and thus won’t be overturned in court.”

3. Not So Risky Climate Business

A new study dismantles the logic of oil and gas ‘systemic risk.’

Editorial, WSJ, Dec 8, 2016

<http://www.wsj.com/articles/not-so-risky-climate-business-1481243362>

SUMMARY: (No link to the study) The editorial states:

“Among the many doomsday scenarios floated by the climate-change lobby is a theory that asks: What if an abrupt change in policy strands fossil-fuel resources in the ground, which in turn crashes oil companies and then the global economy? IHS consulting recently released a rebuttal to this “carbon bubble” babble, and the dismantling deserves more attention.

“Daniel Yergin and Elena Pravettoni of IHS looked at whether oil and gas assets pose a “systemic risk” to the world financial system, a danger floated by more than a few regulators. No less than Bank of England Governor Mark Carney warned in 2015 that limits on carbon could crater asset valuations and “potentially destabilize markets,” as the damage rippled through insurers and banks with portfolios in oil.

“Regardless of forced carbon reductions or temperature spikes, the switch to alternative fuels will take decades. For some perspective, the authors note that the oil industry started up in 1859 but did not overtake coal as the world’s largest energy source for about a century. Barring some technological breakthrough, no one expects oil to be a minority source of energy before 2050. Financial markets and insurance contracts can manage risks as they evolve year-to-year or even day-to-day.”

“Perhaps the strongest evidence that oil companies won’t blow up the world economy is that they’ve been stress-tested by the recent crash in commodity prices. Some 82 global oil companies burned off 42% of their value between June 2014 and December 2015, or about \$1.4 trillion in market capitalization. Yet the report notes that since oil dipped below \$100 a barrel in 2014, the Dow Jones Industrial Average has risen 6%.

“The panic over climate risk is really a pretext for more regulation. Mr. Carney chairs the Financial Stability Board, an international outfit that exists to flag financial risks and offer itself as the answer. An FSB task force later this month will deliver “guidelines for voluntary disclosure” that could cover assets and risk practices for oil companies as well as their investors. The report will likely be submitted to major country financial ministers for approval.

“Mr. Carney and the FSB are playing to climate activists, who want to use such disclosure as ammunition to pound pension and other investment funds to divest from fossil-fuel companies. Mr. Carney has also highlighted the climate-change free-speech probe led by New York’s Attorney General Eric Schneiderman, which is based on flimsier evidence than even Mr. Carney’s conjectures.

“The real financial risks are from Mr. Carney’s attempt to turn certain kinds of legal investments into political targets. The political allocation of capital into housing was one of the root causes of the 2008 panic. Let’s not politicize energy investing in the same way.”

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