The Week That Was: 2014-10-11 (October 11, 2014)
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The Science and Environmental Policy Project

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Quote of the Week: *"You cannot prove a vague theory wrong. If the guess that you make is poorly expressed and the method you have for computing the consequences is a little vague then ….. you see that the theory is good as it can't be proved wrong. If the process of computing the consequences is indefinite, then with a little skill any experimental result can be made to look like an expected consequence."* Richard Feynman [H/t Jo Nova]

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Number of the Week: $70 per barrel?

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THIS WEEK:

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

Intentionally Vague? The above quote is taken from a lecture by Richard Feynman, as it was reproduced on Jo Nova's blog, courtesy of Kevin Marshall. The quote goes to the nature of what is now climate science as practiced by the climate establishment. Global warming caused by human carbon dioxide (CO2) emissions has become climate change and extreme weather events, as if they have never occurred before, Climate change has been happening for hundreds of millions of years, and humans have long termed unusual events as extreme. There is nothing happening today that cannot be found in the historic record. The climate establishment knows this, and places artificial constraints on the historic record. Such actions can be seen in the reports of the UN Intergovernmental Panel on Climate Change (IPCC), which places constraints on the historic record by statements such as since 1950 or after the industrial revolution (about 1750 leaving out the worst of the Little Ice Age and the prior warm period).

The entire effort plays to politicians who wish to appear to be great leaders in fighting something – especially if the enemy cannot be defined; therefore, success cannot be measured. On this largely imaginary battle, reputations are built and significant moneys are spend. As Richard Lindzen, MIT Professor Emeritus of Meteorology, wrote to SEPP: We should … "express thanks for the failures of Kyoto and Copenhagen. Had the proposed regulatory regimes been implemented and had CO2 emissions decreased, the 'pause' would certainly have been attributed to the regulations. Politicians and environmentalists would be declaring the science to be truly 'settled.'" See link under Seeking a Common Ground.

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Judith Curry: Following up on essay by Steven Koonin, "Climate Science is Not Settled," the *Wall Street Journal* published an essay be Judith Curry describing her research with Nicholas Lewis challenging the IPCCD's claimed sensitivity of the planet to a doubling of CO2 in the atmosphere. No doubt the climate establishment will find this essay unsettling as well.

In the essay Curry makes needed frank statements concerning the fact there has been no surface warming trend for about 18 years.

This pause in warming is at odds with the 2007 IPCC report, which expected warming to increase at a rate of 0.2 degrees Celsius per decade in the early 21st century. The warming hiatus, combined with assessments that the climate-model sensitivities are too high, raises serious

questions as to whether the climate-model projections of 21st-century temperatures are fit for making public-policy decisions.

The sensitivity of the climate to increasing concentrations of carbon dioxide is a central question in the debate on the appropriate policy response to increasing carbon dioxide in the atmosphere. Climate sensitivity and estimates of its uncertainty are key inputs into the economic models that drive cost-benefit analyses and estimates of the social cost of carbon.

It is refreshing to see the problems in the orthodox thinking about climate science and the consequences of perhaps erroneous thinking being discussed in main-stream media. Not wishing to hope too much, there are several issues regarding the limited scope of the essay, such as the central limit theorem and the use of surface data.

On his blog, The Reference Frame, Luboš Motl brings up that as empirical studies increase on the sensitivity of the earth to atmospheric CO2 increase, the central limit theorem implies that the range of error would decline, particularly in the upper-end estimates. The normal distribution would become more symmetric and include the possibility of negative values for the earth's sensitivity to CO2. No doubt, if such a paper appeared in a scientific journal, the climate establishment would denounce the journal, which indicates a publication bias. Motl writes:

However, while I this that the paper seems to display lots of expertise and calm heads, there is one aspect of this paper – and lots of other papers – that I find totally inconceivable. It is the asymmetry of the 5%-95% ranges of the climate sensitivity. In particular, the huge values of the "still plausible" long-term climate sensitivity – the upper bound goes up to 4 °C – isn't really possible. – Feedbacks cannot be both positive and high.

On another note: the customary use of surface data, rather than satellite data independently supported by data from weather balloons, is becoming increasingly questionable. The satellite record is over 30 years old, and questions of proper handling of the surface continue to arise. See Articles # 3 and # 4 and links under Seeking a Common Ground, and Measurement Issues.
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Model Issues: Posted on Watts Up With That, Ron Brown, a lecturer at Duke University, points out that real debates in science are not rare. It is because the climate establishment long-ago announced the science is settled, that the myth of science debates being rare continues. He also continues his criticism science, particularly the questionable use of climate models by the climate establishment, which applies to the IPCC. In discussing the average of an assembly of climate models Brown states:

The average of failed models is not a successful model. The average of deterministic microtrajectories is not a deterministic microtrajectory. A microtrajectory numerically generated at a scale inadequate to solve a nonlinear chaotic problem is most unlikely to represent anything like the actual microtrajectory of the actual system. And finally, the system itself realizes at most one of the possible future trajectories available to it from initial conditions subject to the butterfly effect that we cannot even accurately measure at the granularity needed to initialize the computation at the inadequate computational scale we can afford to use.

Brown attributes much of the failings of orthodox climate science to the nature of the funding by governments. For example, major research universities take a major portion of government grants for their own use (may be 60% of the grant). Though he does not so state, there is no reason for

outsiders to assume that universities will provide objective analysis of such research. See links under Challenging the Orthodoxy.
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Flooding – Predicted and Observed: In a report published by the Global Warming Policy Foundation, Andrew Montford points out that the forecasts by models of rainfall and floods do not match those actually observed. This applies both to the UK and globally. The finding is not a surprise. The models greatly overestimate observed warming, and there is no logical reason to assume they will do better at estimating other components of climate change. See links under Models v. Observations.
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Out of Sync: The Arctic ice is low by late 20th century standards and the Antarctic ice is at the greatest extent ever observed since the start of satellite observations in 1978. Those who wish to be eternally vague can find these events to support their position, even if they are inconsistent. CO2 caused warming should be pronounced at both poles. Focusing on one or the other is misleading. Further, as HH Lamb wrote in the 1980s, there was a pronounced reduction of the Arctic ice in the 1930s and 1940s, followed by an expansion in the 1950s and 1960s. There are no comprehensive records for Antarctic ice prior to the satellite area, so those records do not exist.

The intriguing scientific question, why are the ice extents of the polar regions out of sync? See links under Changing Cryosphere – Land / Sea Ice
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Carbon Tax or Not? The press service, Bloomberg, has a several part series calling for a carbon tax. Based on skimpy evidence, the editorials state that such taxes do not kill jobs and: "The record shows that a well-designed carbon tax can cut harmful emissions in the most economically efficient way: by letting market forces coordinate the effort." The assertion assumes that governments will leave a program generating large revenues alone, without diverting revenues from the intended purposes. Experience indicates such an assumption is a false hope. For example, about 40% of the revenues generated by the US Highway Trust Fund now goes for purposes other than building highways, bridges, etc. Fred Singer offers his own views on carbon taxes. See Article # 1 and links under Cap-and-Trade and Carbon Taxes
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Number of the Week: $70 per barrel? Oil prices are falling. This has led to some to speculate that the US shale-oil boom is over. An article by Donn Dears suggests that the knowledge for extracting oil from dense shale is still advancing, with more oil being extracted per well as technology improves. What is a final break-even point for extracting oil from shale? If the authors of TWTW knew, they would be speculating in oil futures, which they are not. See links under Oil and Natural Gas – the Future or the Past?

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ARTICLES:

For the numbered articles below, please see this week's TWTW at: **www.sepp.org**. The articles are at the end of the pdf.

1. Just Say NO to a Carbon Tax

By S. Fred Singer, American Thinker, Oct 7, 2014
http://www.americanthinker.com/2014/10/just_say_no_to_a_carbon_tax.html

2. "Ditch the 2 °C warming goal." A Comment on Victor-Kennel [Nature, Oct 2]

By S. Fred Singer, Submitted to Nature, Oct 6, 2014
http://www.sepp.org/science_papers/Fred_Singer_10-7-14.doc

3. Comments on the Santer-Stocker Response to Steven Koonin's Essay "Climate Science is not Settled."
By S. Fred Singer, SEPP, Submitted to Wall Street Journal, Oct 3, 2014
http://www.sepp.org/science_papers/Letter_to_the_Editor_WSJ.doc

4. The Global Warming Statistical Meltdown
Mounting evidence suggests that basic assumptions about climate change are mistaken: The numbers don't add up.
By Judith Curry, WSJ, Oct 9, 2014
http://online.wsj.com/articles/judith-curry-the-global-warming-statistical-meltdown-1412901060?mod=hp_opinion

5. Unrealistic Green Expectations
I'm an alternative-energy investor, but let's not kid ourselves: Change will be gradual and needs fossil fuels.
By Jeffrey Leonard, WSJ, Oct 6, 2014
http://online.wsj.com/articles/jeffrey-leonard-unrealistic-green-expectations-1412636904?tesla=y&mod=djemMER_h&mg=reno64-wsj

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NEWS YOU CAN USE:

Climategate Continued

PAGES2K vs the Hanhijarvi Reconstruction
By Steve McIntyre, Climate Audi, Oct 7, 2014
http://climateaudit.org/2014/10/07/pages2k-vs-the-hanjiharvi-reconstruction/
[SEPP Comment: The Non-Mann hockey-stick has major problems as well.]

Challenging the Orthodoxy
Obama misleads students about climate and energy
By Bob Carter and Tom Harris, WUWT, Oct 8, 2014
http://wattsupwiththat.com/2014/10/08/obama-misleads-students-about-climate-and-energy/

NASA: The Deep Ocean Hasn't Warmed Since 2005 (but we're all gonna die)
By Roy Spencer, His Blog, Oct 6, 2014
http://www.drroyspencer.com/2014/10/nasa-the-deep-ocean-hasnt-warmed-since-2005/

Medics on the March
By John Brignell, Number Watch, Oct 4, 2014
http://www.numberwatch.co.uk/2014_october.htm#medics

A fable continued
By John Brignell, Number Watch, Oct 10, 2014
http://www.numberwatch.co.uk/2014_october.htm#fable
[SEPP Comment: Using a bit of wit to explain the failure of the earth to warm as forecasted by climate models.]

Real Science Debates Are Not Rare

By Robert Brown, WUWT, Oct 6, 2014
http://wattsupwiththat.com/2014/10/06/real-science-debates-are-not-rare/

Declining Bird Populations; Another False Global Warming Alarmism
By Tim Ball, WUWT, Oct 6, 2014
http://wattsupwiththat.com/2014/10/06/declining-bird-populations-another-false-global-warming-alarmism/

New paper finds climate sensitivity to CO2 is only 0.43C, about 7 times less than the IPCC claims [One-seventh]
By Staff Writer, The Hockey Schtick, Oct 9, 2014
http://hockeyschtick.blogspot.com/2014/10/new-paper-finds-climate-sensitivity-to.html

Defending the Orthodoxy
Obama announces new climate change initiative
By Zack Colman, Washington Examiner, Oct 9, 2014
http://washingtonexaminer.com/obama-announces-new-climate-change-initiative/article/2554589

'Moment of Truth' on Emissions
By Joe Niocera, NYT, Oct 6, 2014 [H/t Timothy Wise]
http://www.nytimes.com/2014/10/07/opinion/joe-nocera-moment-of-truth-on-emissions.html?partner=rssnyt&emc=rss&_r=2&assetType=opinion
[SEPP Comment: Calling for Federal control of fracking by controlling methane emissions. Claims that methane is 84 to 86 times more powerful than carbon dioxide over a 20 year span.]

Questioning the Orthodoxy
Undeniable Mood Change With Regards To Quality Of Modelling Grips Climate Science…Trust Gone!
Mood change in climate modeling: Trust in the scientific community is disappearing
By Sebastian Lüning and Fritz Vahrenholt, Trans P Gosselin, Oct 7, 2014
http://notrickszone.com/2014/10/07/undeniable-mood-change-with-regards-to-quality-of-climate-modelling-grips-climate-science-trust-gone/

Guy at Broadbent Institute is pretty sure he rebutted report he hasn't read
Progressive think tank's criticism of Fraser Institute study marked by incompetence and ignorance
By Ross McKitrick, Financial Post, Oct 8, 2014
http://business.financialpost.com/2014/10/08/guy-at-broadbent-institute-is-pretty-sure-he-rebutted-report-he-hasnt-read/
[SEPP Comment: More on the global warming trend. vanishing]

Declining polar bear weights and early breakup dates in WHB, Part I: What's a starving bear?
By Susan Corckford Polar Bear Science, Oct 10, 2014
http://polarbearscience.com/2014/10/10/declining-polar-bear-weights-and-early-breakup-dates-in-whb-part-i-whats-a-starving-bear/#more-6065

Don't Say "Hiatus."
By Matt Briggs, His Blog, Oct 8, 2014 [H/t GWPF]
http://wmbriggs.com/blog/?p=14313

[SEPP Comment: The term hiatus or pause implies that temperatures will begin to rise from CO2 concentrations. We just do not know!]

UN Climate Protocols Would Ravage Nations
By Larry Bell, Newsmax, Oct 6, 2014
http://www.newsmax.com/LarryBell/un-ipcc-climate-warming/2014/10/06/id/598814/

Mass haulouts of female Pacific walrus as a sign of population health
By Susan Crockford, Polar Bear Science, Oct 7, 2014
http://polarbearscience.com/2014/10/07/mass-haulouts-of-female-pacific-walrus-as-a-sign-of-population-health/

'Where's the global warming?' Expert says public are growing sceptical of climate change
THE PUBLIC are becoming ever more sceptical of climate change as they begin to ask 'where is the global warming we were promised?', a leading scientist has claimed.
By Levi Winchester, Express, Oct 6, 2014 [H/t Timothy Wise]
http://www.express.co.uk/news/nature/518497/Exclusive-interview-with-Dr-Benny-Peiser

Social Benefits of Carbon

Regulations could kill your labor-saving home appliances
By Ernest Istoook, Washington Times, Oct 8, 2014
http://www.washingtontimes.com/news/2014/oct/8/regulations-could-kill-your-labor-saving-home-appl/

Problems in the Orthodoxy

NASA Scientists Puzzled by Global Cooling on Land and Sea
By Staff Writers, AFP, Oct 6, 2014 [H/t Thomas Burch]
http://www.newsmax.com/newswidget/science-us-climate-oceans/2014/10/06/id/598864/?Dkt_nbr=Newsmax&utm_source=Newsmax&utm_medium=widget&utm_content=5&utm_campaign=widgetphase2?ns_mail_uid=4099112&ns_mail_job=1589243_10072014&s=al&dkt_nbr=gtwfhh1a

Climate fight must expand beyond usual suspects
Editorial, Boston Globe, Oct 6, 2014
http://www.bostonglobe.com/opinion/editorials/2014/10/06/climate-fight-must-expand-beyond-usual-suspects/XXcVQT1F20q0LIbzV2eBhL/story.html

Experts call for widening the debate on climate change
By Staff Writers, Manchester, UK (SPX), Oct 07, 2014
http://www.terradaily.com/reports/Experts_call_for_widening_the_debate_on_climate_change_999.html

Seeking a Common Ground

Paper: TCR, ECS climate sensitivity: 1.3, 1.6 °C
By Luboš Motl, The Reference Frame,, Oct 7, 2014
http://motls.blogspot.com/2014/10/paper-tcr-ecs-climate-sensitivity-13-16.html#more

The scientific method in 61 seconds

By Jo Nova, Her Blog, Oct 9, 2014
http://joannenova.com.au/2014/10/the-scientific-method-in-61-seconds/

Models v. Observations

Rainfall And Floods: Observations More Reliable Than Climate Models
By Staff Writers, GWPF, Oct 10, 2014
http://www.thegwpf.com/rainfall-and-floods-observations-more-reliable-than-climate-models/
Link to paper: Precipitation, Deluge and Flood: Observational evidence and computer modelling
By Andrew Montford, GWPF, 2014
http://www.thegwpf.org/content/uploads/2014/10/Precipitation-Deluge-Flood.pdf

IPCC Models Fail Abominably In Projections of Northern And Southern Hemisphere Temperature
By Frank Bosse and Fritz Vahrenholt, Trans by P Gosselin, No Tricks Zone, Oct 10, 2014
http://notrickszone.com/2014/10/10/ipcc-models-fail-abominably-in-projections-of-northern-and-southern-hemisphere-temperature/

Measurement Issues

Ocean warming in Southern Hemisphere underestimated, scientists suggest
By Staff Writers, Science Daily, Oct 6, 2014
http://www.sciencedaily.com/releases/2014/10/141006094511.htm
Link to papers: Quantifying underestimates of long-term upper-ocean warming
By Durack, et al, Nature Climate Change, Oct 5, 2014
http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2389.html
Deep-ocean contribution to sea level and energy budget not detectable over the past decade
By Llovel, et al. Nature Climate Change, Oct 5, 2014
http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2387.html

Missing heat not in deep oceans but "found" in missing data in upper-ocean instead
By Jo Nova, Her Blog, Oct 9, 2014
http://joannenova.com.au/2014/10/missing-heat-not-in-deep-oceans-but-found-in-missing-data-in-upper-ocean/

New paper shows global sea level rise has greatly decelerated since ~2002, opposite of predictions
By Staff Writer, The Hockey Schtick, Oct 7, 2014
http://hockeyschtick.blogspot.co.uk/2014/10/new-paper-shows-global-sea-level-rise.html

Australia's History of Hot Tempers
By Robert Balic, WUWT, Oct 7, 2014
http://wattsupwiththat.com/2014/10/07/australias-history-of-hot-tempers/

Australian summer maximums "warmed" by 200%
By Jo Nova, Her Blog, Oct 6, 2014
http://joannenova.com.au/2014/10/australian-summer-maximums-warmed-by-200/

Changing Weather

News Flash: 'Extreme Weather Ends'
By Jeffrey Folks, American Thinker, Oct 9, 2014

http://americanthinker.com/2014/10/news_flash_extreme_weather_ends.html

Air pollution increases river-flows
By Staff Writers, Exeter, UK (SPX), Oct 07, 2014
http://www.terradaily.com/reports/Air_pollution_increases_river_flows_999.html
Link to paper: Detection of solar dimming and brightening effects on Northern Hemisphere river flow
By Gednay, et al. Nature Geoscience, Oct 5, 2014
http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo2263.html
[SEPP Comment: See article on decrease in rains. Pertains to aerosols, not carbon dioxide.]

Fall in monsoon rains driven by rise in air pollution
By Staff Writers, Edinburgh, UK (SPX), Oct 07, 2014
http://www.terradaily.com/reports/Fall_in_monsoon_rains_driven_by_rise_in_air_pollution_999.html
[SEPP Comment: See article on increase in rain, river flow immediately above..]

Atlantic Hurricane Season Among Weakest in Decades
By Danica Coto, AP, Oct 8, 2014 [H/t GWPF]
http://abcnews.go.com/International/wireStory/atlantic-hurricane-season-weakest-83-26049872

US predicts lower heating bills this winter
By Jonathan Fahey, AP, Oc5t 7, 2014 [H/t Clyde Spencer]
http://hosted2.ap.org/APDEFAULT/f70471f764144b2fab526d39972d37b3/Article_2014-10-07-US--Winter%20Heating%20Costs/id-aa7159eb53b848c8bc51b21084053e52

Changing Seas

Evidence of deep ocean cooling?
By Judith Curry, Climate Etc. Oct 5, 2014
http://judithcurry.com/2014/10/05/evidence-of-deep-ocean-cooling/#more-17028
[SEPP Comment: More on the missing heat problem, that may not be missing.]

Claim: Livermore scientists suggest ocean warming in Southern Hemisphere underestimated
By Anthony Watts, WUWT, Oct 6, 2014
http://wattsupwiththat.com/2014/10/06/claim-livermore-scientists-suggest-ocean-warming-in-southern-hemisphere-underestimated/

Changing Cryosphere – Land / Sea Ice

HH Lamb & Cooling In The Arctic
By Paul Homewood, Not a lot of People Know That, Oct 8, 2014
http://notalotofpeopleknowthat.wordpress.com/2014/10/08/hh-lamb-cooling-in-the-arctic/
[SEPP Comment: The recent Arctic warming trend happened before.]

Antarctic Sea Ice Reaches New Record Maximum
By Staff Writers, Greenbelt MD (SPX), Oct 08, 2014
http://www.spacedaily.com/reports/Antarctic_Sea_Ice_Reaches_New_Record_Maximum_999.html

Changing Earth

Explosive Findings on Volcanoes' Climate Influence

By Patrick J. Michaels and Paul C. Knappenberger, CATO, Oct 10, 2014

http://www.cato.org/blog/explosive-findings-volcanos-climate-influence

[SEPP Comment: Does volcanoes influence tree ring growth by temperature changes or declines in in photosynthesis?]

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

AGW Causes everything including a freezing Antarctic.

By Anthony Cox, Australian Climate Skeptics, Oct 9, 2014

http://theclimatescepticsparty.blogspot.com.au/2014/10/agw-causes-everything-including.html

Another Study Uses Scare Tactics To Tout Climate Risk

By Merrill Matthews, Jr. IBD, Oct 7, 2014 [H/t Timothy Wise]

http://news.investors.com/ibd-editorials-on-the-right/100714-720650-scaring-businesses-into-taking-costly-action-on-global-warming.htm?p=full

Communicating Better to the Public – Make things up.

EPA chief: Climate skeptics 'sad'

By Laura Barron-Lopez, The Hill, Sep 25, 2014

http://thehill.com/policy/energy-environment/218875-epa-chief-climate-skeptics-hiding-behind-the-economy

[SEPP Comment: Assuming the model are correct, even though they are failing.]

Tabloid Climatology from the Max Planck Institute : "The findings show that no place is safe from climate change."

By Anthony Watts, WUWT, Oct 9, 2014

http://wattsupwiththat.com/2014/10/09/tabloid-climatology-from-the-max-planck-institute-the-findings-show-that-no-place-is-safe-from-climate-change/

When sea levels rise, high tides will spill into communities far more often, study says

By Darryl Fears, Washington Post, Oct 8, 2014

http://www.washingtonpost.com/national/health-science/when-sea-levels-rise-high-tides-will-spill-into-communities-far-more-often-study-says/2014/10/07/57723596-4d8c-11e4-babe-e91da079cb8a_story.html

"He had one quibble: that its findings are based on a single scenario — a sea-level rise of four feet by the end of the century."

Communicating Better to the Public – Go Personal.

What States' Attorneys General Can Do About Climate Deniers

By Robert F. Kennedy Jr, Senior Attorney, National Resources Defense Council, Oct 1, 2014 [H/t Paul Driessen]

http://www.huffingtonpost.com/robert-f-kennedy-jr/jailing-climate-deniers_b_5912596.html

Expanding the Orthodoxy

White House pushes climate protections for natural resources

By Timothy Cama, The Hill, Oct 9, 2014

http://thehill.com/policy/energy-environment/220309-white-house-pushes-climate-protections-for-landscapes-natural

Link to FACT SHEET: Building community resilience by strengthening America's natural resources and supporting green infrastructure
By Staff Writers, Council on Environmental Quality, Oct 8, 2014
http://www.whitehouse.gov/administration/eop/ceq/Press_Releases/October_8_2014
The Climate Action Plan recognizes that even as we act to curb the carbon pollution that is driving climate change, we must also improve our ability to prepare for the climate impacts we are already seeing across the country.

Alarmists Pull Out All the Stops
By Donn Dears, Power For USA, Oct 10, 2014
https://dddusmma.wordpress.com/2014/10/10/alarmists-pull-out-all-the-stops/
[SEPP Comment: Exposing another "global" commission with few members.]

World's Largest Re-Insurer "Munich Re" $ponsors 2014 "Extreme Weather Congress" In Hamburg!
By P Gosselin, No Tricks Zone, Oct 6, 2014
http://notrickszone.com/2014/10/06/worlds-largest-re-insurer-munich-re-ponsors-2014-extreme-weather-congress-in-hamburg/
[SEPP Comment: Hoping to sell more insurance policies?]

Questioning European Green
German Federal Analysis Sees "Massive Threats To Security And Reliability Of Electric Power Supply System"!
By P Gosselin, No Tricks Zone, Oct 8, 2014
http://notrickszone.com/2014/10/08/german-federal-analysis-sees-massive-threats-to-security-and-reliability-of-electric-power-supply-system/

EU abandons 'dirty' label for tar sands oil
By Barbara Lewis, Reuters, Oct 7, 2014 [H/t GWPF]
http://www.reuters.com/article/2014/10/07/us-energy-eu-canada-tarsands-idUSKCN0HW0YS20141007

Non-Green Jobs
Navitus Bay: £100 million annual economic loss and around 2,000 jobs at risk
By Staff Writers, Bournemouth Borough Council, Oct 8, 2014 [H/t GWPF]
http://www.bournemouth.gov.uk/NewsEvents/News/October-2014/Navitus-Bay-100-million-annual-economic-loss-and-around-2,000-jobs-at-risk-.aspx
[SEPP Comment: Estimated loss from a new off-shore wind farm.]

Funding Issues
African countries demand $7 billion for green fund by December
By Sophie Yeo, RTCC, Oct 8, 2014 [H/t GWPF]
http://www.rtcc.org/2014/10/07/african-countries-demand-7-billion-for-green-fund-by-december/

Hey UCS, Maybe It's Time We Stopped Wasting Money Studying a Problem And Spent That Money Adapting to It
By Bob Tisdale, WUWT, Oct 9, 2014
http://wattsupwiththat.com/2014/10/09/hey-ucs-maybe-its-time-we-stopped-wasting-money-studying-a-problem-and-spent-that-money-adapting-to-it/

Litigation Issues

The Dark Side of Green Justice
Review: 'Law of the Jungle' by Paul Barrett
By Lachlan Markay, Washington Free Beacon, Oct 4, 2014 [H/t Timothy Wise]
http://freebeacon.com/issues/the-dark-side-of-green-justice/

Cap-and-Trade and Carbon Taxes

California Moves to Revoke Carbon Credits After Inquiry
By Lynn Doan, Bloomberg, Oct 8, 2014 [H/t WUWT]
http://www.bloomberg.com/news/2014-10-08/california-moves-to-revoke-carbon-credits-after-inquiry.html
[SEPP Comment: The clause: "The companies operated projects that delivered refrigerants, proven to destroy the earth's ozone layer," is too strong]

Carbon Taxes Don't Kill Jobs
Editorial, Bloomberg, Sep 30, 2014
http://www.bloombergview.com/articles/2014-09-30/carbon-taxes-don-t-kill-jobs

Do Carbon Taxes Just Feed the Beast?
Editorial, Bloomberg, Oct 1, 2014
http://www.bloombergview.com/articles/2014-10-01/do-carbon-taxes-just-feed-the-beast

Doubt Climate Change? Then Support Carbon Taxes
Editorial, Bloomberg, Oct 2, 2014 [H/t Timothy Wise]
http://www.bloombergview.com/articles/2014-10-02/doubt-climate-change-then-support-carbon-taxes

EPA and other Regulators on the March

EPA Pulls An IRS And Admits To Losing Agency Text Messages
By Michael Bastasch, Daily Caller, Oct 8, 2014 [H/t Timothy Wise]
http://dailycaller.com/2014/10/08/epa-pulls-an-irs-and-admits-to-losing-agency-text-messages/

EPA contradicts itself with Clean Water Act rule, federal agency says
By Sean Higgins, Washington Examiner, Oct 7, 2014
http://washingtonexaminer.com/epa-contradicts-itself-with-clean-water-act-rule-federal-agency-says/article/2554465?utm_campaign=Washington%20Examiner:%20Politics%20Today&utm_source=Washington%20Examiner:%20Politics%20Today%20-%2010/07/14&utm_medium=email

EPA sends smog rule to White House
By Zack Colman, Washington Examiner, Oct 8, 2014
http://washingtonexaminer.com/epa-sends-smog-rule-to-white-house/article/2554576?utm_campaign=Washington%20Examiner:%20Politics%20Today&utm_source=Washington%20Examiner:%20Politics%20Today%20-%2010/09/14&utm_medium=email

Energy Issues – Non-US

Dutch grab of arctic oil angers Greenpeace
By Daniel J. Graeber, Amsterdam, Netherlands (UPI) Oct 6, 2014
http://www.oilgasdaily.com/reports/Dutch_grab_of_arctic_oil_angers_Greenpeace_999.html

Hinkley Point nuclear plant to cost £24.5bn
Britain's first new nuclear plant in a generation has been granted state aid approval
By Emily Gosden, Telegraph, UK, Oct 8, 2014
http://www.telegraph.co.uk/finance/newsbysector/energy/11148193/Hinkley-Point-nuclear-plant-to-cost-34bn-EU-says.html?utm_source=Daily+Carbon+Briefing&utm_campaign=cacbcb51d2-DAILY_BRIEFING&utm_medium=email&utm_term=0_876aab4fd7-cacbcb51d2-303435821&utm_source=Weekly+Carbon+Briefing&utm_campaign=589b8aa84e-Carbon_Brief_Weekly_111114&utm_medium=email&utm_term=0_3ff5ea836a-589b8aa84e-215218249

Scotland power shortage warning as coal plant faces closure
Households face dimmed lights and flickering TV sets if Longannet power plant is forced to close, ScottishPower claims
By Emily Gosden, Telegraph, UK, Oct 3, 2014
http://www.telegraph.co.uk/earth/energy/11139853/Scotland-power-shortage-warning-as-coal-plant-faces-closure.html

Coal likely to remain India's energy focus as country battles for jobs
By Manipadma Jena, Thomson Reuters, Foundation, Oct 7, 2014 [H/t GWPF]
http://www.trust.org/item/20141007135757-bi2zg
Investing in renewable energy could cost India jobs in the short run, warns a government report that could influence the direction of energy investment by India's new jobs-focused administration.

The World's 10 Biggest Energy Gluttons
By Staff Writers, Washington DC (SPX), Oct 07, 2014
http://www.oilgasdaily.com/reports/The_Worlds_10_Biggest_Energy_Gluttons_999.html
[SEPP Comment: On per capita basis, some surprises.]

London sees few land value concerns with fracking
By Daniel J. Graeber, London (UPI), Oct 6, 2014
http://www.oilgasdaily.com/reports/London_sees_few_land_value_concerns_with_fracking_999.html

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Don't expect energy boom to uproot global oil politics
By Zack Colman, Washington Examiner, Oct 9, 2014
http://washingtonexaminer.com/dont-expect-energy-boom-to-uproot-global-oil-politics/article/2554570?utm_campaign=Washington%20Examiner:%20Politics%20Today&utm_source=Washington%20Examiner:%20Politics%20Today%20-%2010/09/14&utm_medium=email

Biden: 'Energy revolution' calls for more investment in alternatives
By Timothy Cama, The Hill, Oct 10, 2014
http://thehill.com/policy/energy-environment/220439-biden-energy-boom-calls-for-more-investment-in-alternatives
[SEPP Comment: The shale revolution did not require government subsidies, why should the alternative "revolution" require subsidies?']

Oil and Natural Gas – the Future or the Past?

Fracking Gets Better
By Donn Dears, Power For USA, Oct 7, 2014
https://dddusmma.wordpress.com/2014/10/07/fracking-gets-better/

Shale Boom Tested as Sub-$90 Oil Threatens U.S. Drillers
By Isaac Amsdorf, Bloomberg, Oct 8, 2014 [H/t GWPF]
http://www.bloomberg.com/news/2014-10-07/shale-boom-tested-as-sub-90-oil-threatens-u-s-drillers.html

Fracking Pioneer Deserves To Win Nobel Peace Prize
By Stephen Moore, IBD, Oct 7, 2014 [H/t Timothy Wise]
http://news.investors.com/ibd-editorials-viewpoint/100714-720647-nobel-peace-prize-should-go-to-fracking-pioneer.htm?p=full
[SEPP Comment: George Mitchell who earlier developed the process of extracting natural gas from shale may be more appropriate. Certainly as deserving as Al Gore.]

Nuclear Energy and Fears

Emission-free nuclear industry blasts EPA plan
By Zak Colman, Washington Examiner, Oct 8, 2014
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Cost of Summer AP1000s increases
By Staff Writers, WNN, Oct 3, 2014
http://www.world-nuclear-news.org/NN-Cost-of-Summer-AP1000s-increases-0310144.html

Alternative, Green ("Clean") Solar and Wind

First-ever global life cycle assessment of renewable energy future
By Staff Writers, phys.org, Oct 6, 2014
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By Hertwich, et al, PNAS, Oct 6, 2014
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Carbon Schemes

Corruption, calamity and silliness
By Andrew Montford, Bishop Hill, Oct 7, 204
http://bishophill.squarespace.com/blog/2014/10/7/corruption-calamity-and-silliness.html
More detailed report: Energy: CCS – the fantasy continues
By Richord North, EUReferndum, Oct 10, 2014
http://eureferendum.com/blogview.aspx?blogno=85237
[SEPP Comment: The costs of the experiment in Canada are greatly underestimated by government.]

World's First Post-Combustion CCS Coal Unit Online in Canada

By Gail Reitenbach, Power, Oct 6, 2014
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[SEPP Comment: See link immediately above.]

Environmental Industry

The inhumanity of the environmentalist, part 234
By Andrew Montford, Bishop Hill, Oct 6, 2014
http://www.bishop-hill.net/blog/2014/10/6/the-inhumanity-of-the-environmentalist-part-234.html

Other Scientific News

CryoSat unveils secrets of the deep
By Staff Writers, Paris (ESA), Oct 07, 2014
http://www.spacedaily.com/reports/CryoSat_unveils_secrets_of_the_deep_999.html

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BELOW THE BOTTOM LINE:

Imaginary hottest "fingerprints" found in extreme weather by failed models
By Jo Nova, Her Blog, Oct 5, 2014
http://joannenova.com.au/2014/10/imaginary-hottest-fingerprints-found-with-broken-models-in-extreme-weather/#more-38642

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ARTICLES:

1. Just Say NO to a Carbon Tax
By S. Fred Singer, American Thinker, Oct 7, 2014
http://www.americanthinker.com/2014/10/just_say_no_to_a_carbon_tax.html

Compared to a carbon tax, a tax on all forms of energy represents a lesser evil; neither tax will "save the climate." Excessive regulation and the quest for non-CO2-emitting energy have added extra costs -- mimicking an energy tax without adding revenues to the US Treasury.

I am against instituting a carbon tax, but my reasons are rather different from the conventional ones. I see three major problems with any proposed carbon tax:

**It irrationally discriminates against some forms of energy and subsidizes others.

**It ignores the considerable benefits of atmospheric carbon dioxide in promoting the growth of plants, advancing agriculture, and lowering the cost of food for a growing world population.

**Focusing on a carbon tax emphasizes the idea that Carbon Dioxide is a pollutant

-- a claim that is rapidly becoming scientifically unacceptable.

Assuming we can maintain a revenue-neutral tax stream, I favor an energy tax (BTU tax) over a carbon tax, and will explain why.

Consumption taxes
A carbon tax is of course a consumption tax that raises the price of all manufactured goods and their transportation. Its burden falls most heavily on households in lower income brackets, which spend a larger fraction of their income on essential goods and services. Yet many economists

favor a consumption tax as a more effective way of financing government operations and promoting economic growth – than other forms of taxation, like taxes on income or capital.

Many politicians have favored a consumption tax from time to time. A good example was presidential candidate Herman Cain, who proposed a consumption tax when he ran for the Republican nomination in 2012. Economists who favor such a tax often insist that it must be revenue-neutral, by reducing some other taxes so as to keep total revenue constant. This means it is not superimposed on other taxes -- although in the current political environment there's no guarantee this will happen.

But let's first discuss the drawbacks of alternatives, such as a VAT (Value-Added Tax) or a Federal sales tax. As is the case for all consumption taxes, these are all regressive; some adjustments will have to be made to protect low-income households. Aside from that, we should compare the four methods in the matter of efficiency and the cost involved in running such a tax.

A VAT is the most invasive of all of these taxes, involves large amounts of book-keeping, inspections, control, and other costs. European experience with a VAT has shown that it must be at least 15% of the value of goods to make any sense.

A Federal sales tax has some of the same problems as a VAT. In addition, one can visualize a large amount of cheating going on -- especially if the tax is 10% or greater and provides incentives for such behavior. And there are always the problems of defining exemptions for certain goods and for particular classes of users.

Collecting the Energy Tax

An energy tax is the simplest because it can be applied at a small number of choke points: at oil refineries and at electric power stations. In other words, instead of being collected at millions of points like a VAT or a sales tax, collections take place at only several hundred points and can be just as effective. We already have a Federal tax on gasoline -- so it will be only a matter of increasing its amount; a federal tax on electricity does not appear to present much of an administrative problem.

The major advantage of an energy tax over a tax on emitted carbon dioxide is that it does not discriminate against coal, our cheapest and most plentiful fuel for electric power. Nor does it provide an implicit subsidy for hydro, nuclear, solar, and wind. Once it is recognized that CO2 is not a pollutant (in the sense of having adverse effects on climate), it can be seen that an energy tax is much preferable to a CO2 tax.

Note: We've had suggestions of an energy tax before; it was often known as a BTU tax. It must be realized that there will be some forms of energy that will avoid being taxed under the proposed collection scheme. It then becomes necessary to see if it is worthwhile to capture such a form of energy or whether to ignore it because it's so small.

Neutrality of Tax Revenues

Returning to the main theme of revenue-neutrality, I'm sure that tax experts can figure out which tax to reduce to compensate for an energy tax. Many would favor lowering the corporate income tax, as Herman Cain suggested in 2012. (In a properly operating competitive market, corporate profits are really an indicator of increased efficiency of operation.)

There are a number of advantages to such a proposal. It will make US corporations more competitive on the international market and avoid the problem of 'leakage' of corporate headquarters to countries with lower tax rates. In the final analysis, a corporate income tax is somewhat perverse; since a corporation is not a person, it does not consume goods. It may transform them, but it does not consume them as a person would. Instead, corporations should be encouraged to distribute their profits to their shareholders, who are now suffering from double taxation: first, when corporate profits are taxed, and later, when dividends are taxed as part of a shareholders' personal income.

Motor-fuel tax and Environmental concerns

A quick word about the advantages of (what amounts to) an increase in the Federal tax on motor fuels; the last such increase was imposed during the Reagan Administration. The various States would remain free to collect whatever their voters approve. But with fuel efficiency of vehicles rising, revenues derived from current State and Federal taxes are woefully inadequate to maintain highways and repair bridges. Also, a significant portion of federal and state gasoline taxes have been diverted to other uses such as local rail transit; according to a study by NCPA, only 60% of the federal revenue goes to highways, bridges, etc. http://www.ncpa.org/pub/ba761 Raising the cost of driving will also reduce traffic accidents, air and noise pollution, as well as traffic congestion –although road and bridge tolls may be the best way to fight congestion.

Last but not least, environmental activists have always campaigned for an increased tax on gasoline –considering cars and trucks as enemies of an equitable global climate. Although evidence for any significant influence of CO2 on climate is rapidly evaporating, a tax on fuels (and reduced use of motor vehicles) is bound to gain the support of the Greens and the media -- and of a sizable fraction of the public.

Gradually also, it has become clear that increased levels of CO2 are not only not harmful, but positively benefit the growth of plants worldwide – contributing to global agricultural prosperity. The publication of NIPCC's (Non-governmental International Panel on Climate Change) Climate Change Reconsidered, by the Heartland Institute in 2014, of a massive compendium of relevant biological research, underlines these beneficial effects.

To sum up, a carbon tax NO; a revenue-neutral energy tax, MAYBE. A lowering of taxes overall, YES.

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2. "Ditch the 2 °C warming goal." A Comment on Victor-Kennel [Nature, Oct 2]

By S. Fred Singer, Submitted to Nature, Oct 6, 2014
http://www.sepp.org/science_papers/Fred_Singer_10-7-14.doc

I applaud the bold suggestion [Nature Oct 2], by policy expert David Victor and space physicist Charles Kennel, to ditch the rather meaningless but well-entrenched 2 °C warming goal. I predict little if any positive response by governments.

I well remember how Swedish scientists Rodhe and Azar first came up with their arbitrary 2-degC target for a permitted increase of globally and annually averaged surface temperature (GAST). But there is no indication whatsoever, either in IPCC climate models or observationally, of any kind of climate instability at this particular temperature. Does anyone really know what exactly this magic number refers to – or even how to measure it? And what exactly will happen to the global climate if this limit is somehow exceeded?

It is easy to understand, however, why regulators were happy to endorse such a meaningless target for GAST. In various publications, I have referred to the 2-degC limit as the 'Goldilocks' number: not too large or too small, but just right for a regulatory goal. Note that a change in 'global annual average' can translate into huge local variations. For example, Siberian winter nights might warm (horrors!) by 5 deg C or more – from -40 deg C to -35.

Victor and Kennel, apparently true believers in anthropogenic climate disasters, speculate that the absence of surface warming trends for the past 18 years – and counting – may mean that 'missing energy' is heating the deep oceans. No such warming has been observed, however. But no need to despair; according to the popular blog WUWT by Anthony Watts, more than 50(!) mechanisms have already been suggested to explain the ongoing warming 'hiatus.'

But can anyone really tell us how much longer this warming pause will persist? How and when will the imagined stored ocean heat be released? How do possible answers to these crucial questions relate to atmospheric CO2 levels? Do current IPCC climate models provide any kind of guidance? And finally, shouldn't we know these results before deciding on costly mitigation programs for CO2?

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3. Comments on the Santer-Stocker Response to Steven Koonin's Essay "Climate Science is Not Settled."

By S. Fred Singer, SEPP, Submitted to Wall Street Journal, Oct 3, 2014
http://www.sepp.org/science_papers/Letter_to_the_Editor_WSJ.doc

Contrary to the Santer-Stocker letter (WSJ Oct 2), the climate models used by the UN-IPCC in its five Assessment Reports (AR) since 1990 have failed miserably in their persistent attempts to demonstrate evidence for AGW (anthropogenic global warming). As pointed out in reports of the NIPCC (Non-governmental International Panel on Climate Change www.NIPCCreport.org), the IPCC 'evidence' cited has changed from AR to AR -- without any explanation:

AR-1 relied on an imperfect correlation; for AR-2 Mr. Santer 'manufactured' a 'Hotspot,' an upper-atmospheric warming trend in the tropics, which doesn't even exist; AR-3 relied on Michael Mann's 'Hockeystick' graph, since discredited. Both AR-4 and AR-5 (which Mr. Stocker co-chaired) used 'evidence' based on a circular argument that defies elementary logic. They try to ignore the fact that current IPCC models cannot account for the absence of a warming trend during the past 15 or more years.

Admittedly, IPCC faces a difficult task: To establish the reality of AGW, they must show inadequacy of the 'null hypothesis' of natural climate variability – which is backed by geological data reaching back to pre-human ages.

The writer, an atmospheric physicist and 'expert reviewer' of IPCC reports, founded the NIPCC in 2007 to correct major deficiencies of the IPCC.

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4. The Global Warming Statistical Meltdown

Mounting evidence suggests that basic assumptions about climate change are mistaken: The numbers don't add up.
By Judith Curry, WSJ, Oct 9, 2014
http://online.wsj.com/articles/judith-curry-the-global-warming-statistical-meltdown-1412901060?mod=hp_opinion

At the recent United Nations Climate Summit, Secretary-General Ban Ki-moon warned that "Without significant cuts in emissions by all countries, and in key sectors, the window of opportunity to stay within less than 2 degrees [of warming] will soon close forever." Actually, this window of opportunity may remain open for quite some time. A growing body of evidence suggests that the climate is less sensitive to increases in carbon-dioxide emissions than policy makers generally assume—and that the need for reductions in such emissions is less urgent.

According to the U.N. Framework Convention on Climate Change, preventing "dangerous human interference" with the climate is defined, rather arbitrarily, as limiting warming to no more than 2 degrees Celsius (3.6 degrees Fahrenheit) above preindustrial temperatures. The Earth's surface temperatures have already warmed about 0.8 degrees Celsius since 1850-1900. This leaves 1.2 degrees Celsius (about 2.2 degrees Fahrenheit) to go.

In its most optimistic projections, which assume a substantial decline in emissions, the Intergovernmental Panel on Climate Change (IPCC) projects that the "dangerous" level might never be reached. In its most extreme, pessimistic projections, which assume heavy use of coal and rapid population growth, the threshold could be exceeded as early as 2040. But these projections reflect the effects of rising emissions on temperatures simulated by climate models, which are being challenged by recent observations.

Human-caused warming depends not only on increases in greenhouse gases but also on how "sensitive" the climate is to these increases. Climate sensitivity is defined as the global surface warming that occurs when the concentration of carbon dioxide in the atmosphere doubles. If climate sensitivity is high, then we can expect substantial warming in the coming century as emissions continue to increase. If climate sensitivity is low, then future warming will be substantially lower, and it may be several generations before we reach what the U.N. considers a dangerous level, even with high emissions.

The IPCC's latest report (published in 2013) concluded that the actual change in 70 years if carbon-dioxide concentrations double, called the transient climate response, is likely in the range of 1 to 2.5 degrees Celsius. Most climate models have transient climate response values exceeding 1.8 degrees Celsius. But the IPCC report notes the substantial discrepancy between recent observation-based estimates of climate sensitivity and estimates from climate models.

Nicholas Lewis and I have just published a study in Climate Dynamics that shows the best estimate for transient climate response is 1.33 degrees Celsius with a likely range of 1.05-1.80 degrees Celsius. Using an observation-based energy-balance approach, our calculations used the same data for the effects on the Earth's energy balance of changes in greenhouse gases, aerosols and other drivers of climate change given by the IPCC's latest report.

We also estimated what the long-term warming from a doubling of carbon-dioxide concentrations would be, once the deep ocean had warmed up. Our estimates of sensitivity, both over a 70-year time-frame and long term, are far lower than the average values of sensitivity determined from global climate models that are used for warming projections. Also our ranges are narrower, with far lower upper limits than reported by the IPCC's latest report. Even our upper limits lie below the average values of climate models.

Our paper is not an outlier. More than a dozen other observation-based studies have found climate sensitivity values lower than those determined using global climate models, including recent

papers published in Environmentrics (2012),Nature Geoscience (2013) andEarth Systems Dynamics (2014). These new climate sensitivity estimates add to the growing evidence that climate models are running "too hot." Moreover, the estimates in these empirical studies are being borne out by the much-discussed "pause" or "hiatus" in global warming—the period since 1998 during which global average surface temperatures have not significantly increased.

This pause in warming is at odds with the 2007 IPCC report, which expected warming to increase at a rate of 0.2 degrees Celsius per decade in the early 21st century. The warming hiatus, combined with assessments that the climate-model sensitivities are too high, raises serious questions as to whether the climate-model projections of 21st-century temperatures are fit for making public-policy decisions.

The sensitivity of the climate to increasing concentrations of carbon dioxide is a central question in the debate on the appropriate policy response to increasing carbon dioxide in the atmosphere. Climate sensitivity and estimates of its uncertainty are key inputs into the economic models that drive cost-benefit analyses and estimates of the social cost of carbon.

Continuing to rely on climate-model warming projections based on high, model-derived values of climate sensitivity skews the cost-benefit analyses and estimates of the social cost of carbon. This can bias policy decisions. The implications of the lower values of climate sensitivity in our paper, as well as similar other recent studies, is that human-caused warming near the end of the 21st century should be less than the 2-degrees-Celsius "danger" level for all but the IPCC's most extreme emission scenario.

This slower rate of warming—relative to climate model projections—means there is less urgency to phase out greenhouse gas emissions now, and more time to find ways to decarbonize the economy affordably. It also allows us the flexibility to revise our policies as further information becomes available.

Ms. Curry, a professor and former chairwoman of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology, is the president of Climate Forecast Applications Network.
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5. Unrealistic Green Expectations

I'm an alternative-energy investor, but let's not kid ourselves: Change will be gradual and needs fossil fuels.

By Jeffrey Leonard, WSJ, Oct 6, 2014

http://online.wsj.com/articles/jeffrey-leonard-unrealistic-green-expectations-1412636904?tesla=y&mod=djemMER_h&mg=reno64-wsj

The Rockefeller Brothers Fund, and heirs to the Rockefeller fortune, recently pledged to divest fossil-fuel holdings, joining endowed institutions, local governments and wealthy individuals representing over $50 billion in assets. Sun Microsystems founder Vinod Khosla recently told CNN's Fareed Zakaria that the federal government should revitalize the Energy Department's $6 billion loan-guarantees program to spark commercialization of new technologies.

The intention is to catapult America toward the end of the fossil-fuel era, evoking historical images of the Manhattan Project or Apollo Program. Yet America lacks a strategic vision to move the economy on an accelerating path toward cost-effective, low-carbon energy sources. The increased production of domestic oil and natural gas in the U.S. heartland provides a needed boost to the economy, so this must form part of the equation for a long-term transitional strategy. This is

not just about climate change. More-efficient energy technologies are keys to future global competitiveness.

A transitional bridge to lower-carbon energy is already forming in America's vast electricity supply system, as coal is in natural decline. But lower-carbon-emitting natural gas is essential for this transition, displacing coal, almost megawatt for megawatt. The fallacy of the no-fossil-fuel movement is that elimination of natural gas would stunt the transition, and cause untold harm to our economy due to energy shortages and high-cost electricity. Wind and solar power alone will not be enough to meet America's bulk electricity needs. Yet, due to more renewables and natural gas, greenhouse-gas emissions associated with electricity production have fallen.

Also, the Nuclear Regulatory Commission is extending the licenses of most U.S. nuclear power plants for another 20 years. These plants currently account for 20% of baseload U.S. electricity generation capacity. If they were shut down now they could only be replaced by repowering mothballed coal plants.

These trends buy time to develop new energy technologies. America can use the cushion of booming natural-gas production and the renewal of existing nuclear plants to put in place a national energy strategy to boost the economy and cut greenhouse-gas emissions. The pillars of such an energy strategy are: 1) a multi-decade commitment to invest in the basic research and development behind a multiplicity of new energy technologies; and 2) a gradual and incremental tax on carbon emissions.

We need diverse technological R&D paths because we don't know where the winners will come from. For example, a new generation of more-efficient nuclear technologies—with lower capital costs and waste challenges resolved—could pay big dividends for the future—just in time for the end of life of current nuclear plants.

A long-term commitment to revitalizing federal energy R&D programs should harness America's world-leading university research facilities and national laboratories—which have seen funding for basic research chopped. Such programs should focus on basic science, not commercialization subsidies. The strengths of American corporations and venture capitalists are precisely in mobilizing capital and the creativity of commercialization when linked into the basic science—as demonstrated by successful commercial spinoffs from prior federal R&D programs such as Advanced Research Projects Agency Network (Arpanet).

As an economist, I believe that a carbon tax on energy producers and users will inevitably change energy markets to favor lower and noncarbon fuel sources. A carbon tax could be gradually introduced for bulk electricity generators. If state and federal regulators don't allow these added costs to be passed on to consumers through the rate base, this will bite into the profits of heavy carbon users. A user tax on industries and households, based on the carbon content of their energy sources, would induce consumers to push for efficiency gains across the entire electricity system—spawning new investments in power-generation technologies such as cogeneration, waste-heat recovery and improved transmission and distribution systems.

A carbon tax would also initiate a race among manufacturers to develop more efficient motors, pumps, data centers and other electricity-using technologies. No other more complex solutions—e.g., cap and trade, which fascinates academics and tax accountants—would have such a profound, permanent and positive impact on the energy landscape of the future.

To engage the public in a two-pronged program of R&D plus carbon taxes, and make it budget neutral, 30-year energy R&D bonds could finance the technology-development programs. The annualized amortization of these bonds would be supported by the carbon taxes collected from energy users.

It is not very complicated, but the agenda has to be incremental and ironclad to be successful. Not a leapfrog moon shot to find some carbon-fuel alternative overnight. And not subject to pork-barrel earmarks or periodic review by a politicized Congress.

Mr. Leonard is CEO of Global Environment Fund, an alternative-asset investment-management firm, and a member of the board of New America, an independent think tank

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