

ENVIRONMENTAL AND ENERGY DIVISION

NEWSLETTER

10 AUG. 2015

This week's edition includes:

If you need older URLs contact George at ghh@att.net.

Please Note: This newsletter contains articles that offer differing points of view regarding climate change, energy and other environmental issues. Any opinions expressed in this publication are the responses of the unidentified EED Review Committee alone, which represents the positions of the Environmental and Energy Division (EED) and ASME.

This week's edition includes a discussion of a portion of the EED Executive meeting:

A. ENVIRONMENT 1. EARTH'S BEST-KNOWN CLIMATE SCIENTIST ISSUES BOMBSHELL SEA-LEVEL WARNING

READ MORE:

[HTTP://WWW.SLATE.COM/BLOGS/THE_SLATEST/2015/07/20/SEA_LEVEL_STUDY_JAMES_HANSEN_IS_SUES_DIRE_CLIMATE_WARNING.HTML#IXZZ3GCWLLQIO](http://www.slate.com/blogs/the_slatest/2015/07/20/sea_level_study_james_hansen_is_sues_dire_climate_warning.html#ixzz3GCWLLQIO) By [George Russell](#)

Published July 16, 2015

Tom Houlihan'

Editor's Note: Dr. Hansen is not known for his accurate predictions. See Comment E, below, for a more detailed discussion. GHH

2. ARNOLD SCHWARZENEGGER: CLIMATE CHANGE IS NOT SCIENCE FICTION

Guest essay by Eric Worrall

Arnold Schwarzenegger has joined an unprecedented group of politicians, celebrities and faith leaders gathered at the summit of conscience meeting Paris, who have demanded immediate action on climate change. According to the Guardian (quoting Schwarzenegger); "I've starred in a lot of science fiction movies and, let me tell you something,...

<http://wattsupwiththat.com/2015/07/22/arnold-schwarzenegger-climate-change-is-not-science-fiction/>

3. TAMINO (GRANT FOSTER) IS BACK AT HIS OLD TRICKS... THAT EVERYONE (BUT HIS FOLLOWERS) CAN SEE THROUGH

Or In a Discussion of the Hiatus Since 1998, Grant Foster Presents Trends from 1970 to 2010, Go Figure! Guest Post by Bob Tisdale Statistician Grant Foster (a.k.a. blogger Tamino, who also likes to call himself Hansen's Bulldog) is back to his one of his old debate tactics again: redirection. Or maybe a squirrel passed...

<http://wattsupwiththat.com/2015/07/21/tamino-grant-foster-is-back-at-his-old-tricksthat-everyone-but-his-followers-can-see-through/>

4. IMECE 2015

ASME's International Mechanical Engineering Congress and Exposition (IMECE) is the largest interdisciplinary mechanical engineering conference in the world. Among the 4,000 attendees from 75+ countries are mechanical engineers in advanced manufacturing, aerospace, advanced energy, fluids engineering, heat transfer, design engineering, materials and energy recovery, applied mechanics, power, rail transportation, nanotechnology, bioengineering, internal combustion engines, environmental engineering, and more.

INNOVATION @ IMECE:

Things to Look for in 2015

Stop. Registration Time.

[Registration is open](#) for IMECE 2015. Don't miss this chance to save as much as \$150 on registration rates if you register by August 10.

New Track Plenary Speakers Announced

The 2015 program continues to expand, as we confirm new plenary speakers for our technical tracks:

Biomedical & Biotechnology Engineering: [Jeffrey Sheldon](#), Citare, Tx

Mechanics of Solids, Structures and Fluids: [Gang Bao](#), Rice University, [Brice Lecampion](#), Ecole Polytechnique Federale de Lausanne

Transportation Systems: [Saeed Barbat](#), Ford Motor Company

Awards Preview

The recognition of the excellence of an engineer's work by his or her peers is one of the greatest rewards for accomplishment. By presenting these individuals with tokens of excellence, the Society brings the character and importance of the engineer's work to the attention of the public.

[Check out some of the individuals who will be recognized at IMECE 2015:](#)

- Members' and Students' Luncheon
- President's Luncheon
- Heat Transfer Luncheon
- Electronic & Photonic Packaging Division Wine & Cheese Reception
- Materials Division Reception
- Thurston Lecture
- Applied Mechanics Dinner

In the World of Interdisciplinary Mechanical Engineering: Working Together to Build Drought Resiliency

[Find out](#) how researchers recognize the importance of interdisciplinary dialogue needed to make engineering research effective and move forward.

How to Make 3D Printing Affordable

[Read more](#) about the latest technologies in 3D printing and how we continue to impact Energy Innovation for the Developing World

[See how](#) finding locally appropriate devices and machinery that will work for specific communities can present challenge

5. CLIMATE-CHANGE PUTSCH

States should refuse to comply with Obama's lawless power rule.

Aug. 3, 2015 6:50 p.m. ET

Rarely do American Presidents display the raw willfulness that President Obama did Monday in rolling out his plan to reorganize the economy in the name of climate change. Without a vote in Congress or

even much public debate, Mr. Obama is using his last 18 months to dictate U.S. energy choices for the next 20 or 30 years. This abuse of power is regulation without representation.

The so-called Clean Power Plan commands states to cut carbon emissions by 32% (from 2005 levels) by 2030. This final mandate is 9% steeper than the draft the Environmental Protection Agency issued in June 2014. The damage to growth, consumer incomes and U.S. competitiveness will be immense—assuming the rule isn't tossed by the courts or rescinded by the next Administration.

States have regulated their power systems since the early days of electrification, but the EPA is now usurping this role to nationalize power generation and consumption. To meet the EPA's targets, states must pass new laws or regulations to shift their energy mix from fossil fuels, subsidize alternative energy, improve efficiency, impose a cap-and-trade program, or all of the above.

Coal-fired power will be the first to be shot, but the EPA is targeting all sources of carbon energy. As coal plants have retired amid seven years of EPA assault, natural gas recently eclipsed coal as the dominant source of electric power. This cleaner-burning gas surge has led to the cheapest and fastest emissions plunge in history, but the EPA isn't satisfied.

Thus the new rule's central planning favors green energy sources like wind and solar. The plan expands their quotas and funding, while punishing states that are insufficiently enthusiastic. The EPA estimates renewables will make up 28% of U.S. electric capacity by 2030, up from less than 5% today.

The rule is the first step in a crescendo of climate-change politics that Mr. Obama is planning for his final days. In September he will commune with [Pope Francis](#) on the subject, and then jet to Paris in hopes that his new rule shows enough U.S. progress that the climate treaty conference in December will reach some grand accord.

As for the home front, the point is to bull-rush states into making permanent changes to their energy systems. The investments and lead times in new power plants and transmission lines on this scale are generational. Yet state compliance plans are due in September 2016, and most of the carbon reductions must be complete by 2022.

The White House and EPA know they are distorting the law beyond recognition and that this rule will be litigated for years. But they figure that if they can intimidate the states into enacting as much change as fast as possible, a legal defeat won't matter because the outcome will be a *fait accompli*.

The Supreme Court did give EPA the authority to regulate carbon emissions in *Mass. v. EPA* in 2007. But that was not a roving license to do anything the EPA wants. The High Court has rebuked the agency twice in the last two years for exceeding its statutory powers.

"When an agency claims to discover in a long-extant statute an unheralded power to regulate a significant portion of the American economy, we typically greet its announcement with a measure of skepticism," the Court warned last year. "We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast economic and political significance."

Congress did no such thing with the Clean Power Plan, which is a new world balanced on a fragment of the Clear Air Act called Section 111(d). This passage runs a couple hundred words and was added to the law in 1977, well before the global warming stampede. Historically Section 111(d) has applied "inside the fence line," meaning the EPA can set performance standards for individual plants, not for everything connected to those sources that either produces or uses electricity.

When the EPA rule does arrive before the Justices, maybe they'll rethink their doctrine of "Chevron deference," in which the judiciary hands the bureaucracy broad leeway to interpret ambiguous laws. An agency using a 38-year-old provision as pretext for the cap-and-tax plan that a Democratic Congress rejected in 2010 and couldn't get 50 Senate votes now is the all-time nadir of administrative "interpretation."

Meantime, states can help the resistance by refusing to participate. The Clean Air Act is a creature of cooperative federalism, and Governors have no obligation to craft a compliance plan. The feds will try to

enforce a fallback, but they can't commandeer the states, and they lack the money, personnel and bandwidth to overcome a broad boycott. Let's see how much "clean power" the EPA really has. The states have good reason to avoid collaborating in a scheme that will result in higher prices for consumers and business as the EPA mandates are passed down the energy chain. The plan also endangers electric reliability, and the strains to the grid could lead to brownouts or worse. The EPA added a reliability "safety valve" in the final rule as a concession that these risks are real, but this offers little protection in practice.

This plan is essentially a tax on the livelihood of every American, which makes it all the more extraordinary that it is essentially one man's order. Mr. Obama's argument is that climate change is too important to abide by relics like the rule of law or self-government. It is an important test of the American political system to prove that he is wrong.

<http://www.wsj.com/articles/climate-change-putsch-1438642218>

6. ANNOUNCING OBAMA'S NEW 'CARBON POLLUTION' PLAN

I ([Anthony Watts](#)) got this email this morning direct to my private email, and not part of an email list. I suppose the White House thinks the reach and impact we have at WUWT have is important enough to merit a direct email to me of this press release. So, I'll play the game, publish this PR,...

<http://wattsupwiththat.com/2015/08/03/announcing-obamas-new-carbon-pollution-plan/>

7. OBAMA MAY FINALLY SUCCEED!

Guest Post by Willis Eschenbach For this post I've taken as my departure point a couple of very interesting graphs from over at Not A Lot Of People Know That. I'll repeat them here: Interesting, no? But I'm a numbers guy, I wanted to actually analyze the results. Using the data from those posts and...

<http://wattsupwiththat.com/2015/08/03/obama-may-finally-succeed/>

COMMENTS

A. THE WEEK THAT WAS: 2015-08-01 (AUG. 1, 2015)

BY KEN HAAPALA, PRESIDENT, SCIENCE AND ENVIRONMENTAL POLICY PROJECT (SEPP)

This TWTW is very brief. It focuses on two recent articles by S. Fred Singer of scientific importance: 1) Editor of Science Magazine Should Resign!; and 2) A Paradigm Change: Re-directing public concern from Global Warming to Global Cooling. The normal TWTW will resume next week.

We are at the 33rd Annual Meeting of the Doctors for Disaster Preparedness titled: "Myths, Superstitions, and Real Threats Confronting America." Fred Singer discussed the threat of a new cold period. Ken Haapala discussed the *National Climate Assessment*.

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ARTICLES:

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

1. Editor of Science Magazine Should Resign!

By S. Fred Singer, American Thinker, Jul 28, 2015

http://www.americanthinker.com/articles/2015/07/editor_of_emscienceem_magazine_should_resign.html

The 3 July 2015 issue of Science features a remarkable editorial by Editor Marcia McNutt. Titled “The beyond-two-degree inferno,” it suggests that an anthropogenic greenhouse (GH) warming of more than 2 degrees C (global average) will literally cause hell on earth, unless we can all agree to reduce emissions of the “infernal” GH-gas carbon dioxide –preferably before or at a UN-sponsored mega-confab in Paris in December. This much-hyped event, to be attended by nearly 200 national delegations and thousands of hangers-on, has even been endorsed in a papal encyclical, referred to, somewhat irreverently, as a “Pope-sicle” by my Virginia colleague Dr Charles Battig.

McNutt’s editorial claims a “global threat to food supplies, health, ecosystem services, and the general viability of the planet.” Yet none of these threats are supported by any scientific evidence --even from the usually alarmist UN-IPCC. She fails to remind us that atmospheric CO₂ is the essential ingredient for sustaining carbon-based life on Earth. The low CO₂ levels during the recent ice age severely limited the rate of photosynthesis; at slightly lower levels, we and almost all living things on the Earth’s surface would just starve and die. And she takes for granted that rising CO₂ will cause significant Global Warming (GW), with all the usual calamities that are recited by climate alarmists --in spite of overwhelming evidence for absence of 21st-century warming.

As geologist Dudley Hughes wrote in May 2007 in Environment & Climate News, “[L]ittle publicity is given to the large number of qualified scientists who...contend that if CO₂ plays any part in global warming, it is so insignificant that it can barely be measured, let alone be the major cause.” And: “[T]he claims that increased carbon dioxide is causing ‘global warming’ ...has no more scientific foundation than the bloodletting of past generations.”

His words are backed by the five reports (in English) of the independent NIPCC (Nongovernmental International Panel on Climate Change), issued since 2008 and based on many thousands of references collected from peer-reviewed journals by nearly 100 well-qualified climate scientists; they included many papers ignored by the IPCC. The brief Overview-NIPCC volume of 2008 was translated into several European languages; the Chinese Academy of Sciences translated and published a substantial NIPCC summary volume in 2013.

But McNutt is not interested in listening to contrary evidence. “The time for debate has ended. Action is urgently needed.” What a strange position to take for the editor of a leading and (formerly) respected international science journal! She should resign her job and allow someone else to take her place -- someone who recognizes that debate is essential for scientific progress.

Maybe McNutt really believes that GW has never really paused and that reducing CO₂ levels can make a noticeable difference. That could happen only if she reads the evidence selectively and rejects all evidence to the contrary. Or maybe she is cynically playing along with current White House policy, even though it is completely uninformed and misguided, in the hope it will benefit Science mag and herself. Yet another possibility is that she is naïve enough to believe that the world’s nations are actually worried about a small amount of climate warming; in reality, the game is about money and political power. She seems oblivious to the fact that China snookered Obama in their November 2014 climate agreement; but she seems really disturbed about India’s plans, and insensitive to that nation’s desperate need for reliable, secure, and low-cost electric power: “Unfortunately, [energy minister] Piyush Goyal ... intends to double his nation’s coal production by the year 2019 to meet domestic energy requirements.” India’s CO₂ emissions will soon match China’s and, together, will make irrelevant any emission reductions by the rest of the world; after all, it’s the global CO₂ level that counts. Could someone please explain this to McNutt?

As for myself, I have decided to drop my subscription to Science and my AAAS membership; Science is the flagship journal of the American Association for the Advancement of Science. I guess I will continue as an elected AAAS Fellow; but I am no longer proud of that distinction. I suppose, also, that any future

contribution to Science—even a Letter or a Technical Comment --will not be welcome as long as McNutt or someone of her persuasion continues as editor.

Has the global warming pause really ended?

The pernicious influence of Editor McNutt's ideology-driven science can be easily recognized in the promotion given to a fairly routine scientific paper by NOAA climatologist Thomas Karl and coauthors; however, it has very important policy implications. After making certain controversial adjustments to the surface temperature record, the authors concluded that there had been no GW pause (a.k.a. hiatus or plateau), which many researchers had rather reluctantly accepted, but that there had actually been a continuing warming trend during all of the 21st century. Their paper was published in Science-Express on June 4, with a lot of the publicity usually reserved for major discoveries.

It was finally printed in the 26 June issue of Science; the comments published in Science blog were almost uniformly negative, and questioned the authors' motives rather than the technical details of their data adjustment. This is wrong, of course; with the 3 July editorial at hand, such comments might have been better addressed to the Editor.

The several NIPCC reports can be accessed free of charge at www.NIPCCreport.org. IPCC reports are available at www.ipcc.de. A critique of the latest IPCC science report was issued as a Policy Brief in Oct 2013 and can be accessed at http://heartland.org/sites/default/files/critique_of_ipcc_spm.pdf

My initial reaction (of 4 June) to the Karl paper in Science-Express is seen at Independent comments from the Science blog were reprinted at

http://www.americanthinker.com/blog/2015/07/commenters_excoriate_a_emscienceem_paper_that_denies_global_warming_pause.html. Technical papers questioning the Karl conclusions are forthcoming --but may not be published in Science; one would want to look at other scientific journals.

To sum up: The GW plateau appears to be ongoing --and is as yet unexplained. We don't know if or when it will end. Climate sensitivity of CO₂ seems to be much lower than any of the IPCC models predict --perhaps even close to zero. Thus, any policies based on GH models can be junked; fossil fuels are not the cause of climate change. So much for McNutt's policy prescription that "...every person need [sic] to ... reduce carbon pollution [sic] by ...adopting alternative energy technologies, ...and capturing CO₂ at the source."

The two-degree limit is a political invention

The 2 deg limit has nothing to do with science --and, in any case, is unlikely to be exceeded, or even reached, as things look now. As recounted in American Thinker, the 2 deg limit was invented in Sweden as a pure guess --without any "evidence" from climate models that there might be some kind of discontinuity when global temperature (however it may be calculated) reaches the 2 deg level. However, the 2 deg limit was widely adopted by politicians and became enshrined in folklore, when it was realized that it satisfied the "Goldilocks" principle --not too little or too large, but just right for political action against CO₂, fossil fuels, low-cost and secure energy --and the economic growth all this made possible.

Consider: A limit set at 0.5deg will be dismissed with "We've already seen this --and nothing happened." A limit at, say, 5deg may elicit a different kind of response: "It won't happen soon --at least, not in my lifetime." In fact, the whole concept of a global average is very vague; GH models tell us that warming will concentrate at high latitudes at night. So, Siberian winter nights might warm from minus 40 deg all the way to minus 35 deg. Is that bad?

Many economists have concluded that even a 3 deg warming might on the whole be beneficial, even at the lower US latitudes, largely because of gains by the agricultural sector: longer growing seasons and fewer frosts, more rain, but mostly increased fertilization from higher atmospheric CO₂ levels.

Ice ages are the real threat to mankind

The most recent glaciation covered much of the northern hemisphere with miles-thick ice and wiped out the Neanderthals; its sudden end about 12,000 years ago led into the present warm

Inter glacial period, which we call the Holocene. According to the Milankovitch astronomical calculations, the next glaciation is “just around the corner” --or at least a millennium or so away. But even a “little” ice age, like one that ended only 200 years ago, would be extremely damaging to our civilization. Crop failures worldwide would lead to famines, disease, and many deaths. The December gabfest in Paris should be concerned about near-future cooling --not warming. And so should Editor McNutt.

She should be soliciting research papers that explore adaptation to an extended cool period, and ways its harmful effects can be overcome or lessened. Time to prepare may be short.

2. A Paradigm Change: Re-directing public concern from Global Warming to Global Cooling

By S. Fred Singer, American Thinker, Jul 31, 2015

http://www.americanthinker.com/articles/2015/07/a_paradigm_change_redirecting_public_concern_from_global_warming_to_global_cooling.html

I want to change public concern from Global (GW) to Global Cooling (GC). Presented here are three arguments in favor of such a drastic shift --which involves also a drastic shift in current policies, such as mitigation of the greenhouse (GH) gas carbon dioxide.

My main argument relies on the fact, backed by historical evidence, that cooling, even on a regional or local scale, is much more damaging than warming. The key threat is to agriculture, leading to failure of harvests, followed by famine, starvation, disease, and mass deaths.

Also, GC is reasonably sure, while GW is iffy. The evidence, again, is historical --from deep-sea sediment cores and ice cores. Our planet has experienced some 17 (Milankovitch-style) glaciations in the past 2 million years, each typically lasting 100,000 years, interrupted by warm inter-glacial, typically of around 10,000-yr duration. The most recent glaciation ended rather suddenly about 12,000 years ago. We are now in the warm Holocene, which is expected to end soon.

In fact, we may have already entered into the next glaciation --as we can discover only in retrospect. (Past cycles suggest a very gradual cooling initially --with ice accumulation and a drop in global sea levels, a decrease in atmospheric CO₂ into the cooling oceans and lowest temperatures occurring only much later in the cycle.)

Archeological data show that the recent glaciation wiped out the Neanderthals and much of the fauna that constituted their source of food. Most of humanity may not survive the next, inevitable glaciation. We need to consider also the warming-cooling (Dansgaard-Oeschger-Bond --DOB) cycles, which seem to be solar-controlled and have a period of approx 1000-1500 years; its most recent cooling phase, the “Little Ice Age” (LIA), ended about 200 years ago. For details, see *Unstoppable Global Warming: Every 1500 Years* by Singer and Avery [2007].

The LIAs are not nearly as severe as the major glaciations; yet they present an important threat to the food supply and to current civilization. Available technology seems adequate to assure human survival --at least in industrialized nations. The main threat is warfare, driven by competition for food and other essential resources. With nuclear weapons and delivery systems widely dispersed, the outcome of future wars is difficult to predict.

Geo-Engineering: Overcoming a Future Ice Age

In a word: the possibility of using technology to overcome a future cooling looks promising for both types of ice ages --with relatively low cost and low risk to the physical and biological environment.

Geo-Engineering has generally been discussed in relation to GW --most recently in two reports issued by the US National Academy of Sciences-National Research Council. The schemes most favored include either reduction of solar intensity (by increasing Earth’s albedo (the fraction of solar energy reflected back into space) or reduction of the atmospheric level of carbon dioxide (under the unproven

assumption that the increasing level of the GH gas CO₂ is responsible for such a GW). Unfortunately, both approaches are costly and have undesirable side effects.

With regard to the Milankovitch cycles, there is of course little chance of changing the astronomical parameters that influence the cycles. One can dream up engineering schemes to increase solar flux to the Earth's surface --either by increasing solar intensity or by reducing general albedo. Both approaches are costly and risky.

The most promising method is to find a "trigger" --a phenomenon that initiates the glaciation. The most common suggestion is a high-latitude snowfield that somehow survives summer melting. It can then grow from year to year in extent and thickness and develop into a nice sheet by a kind of positive feedback --thanks to the high albedo of snow and ice.

The easiest way to locate such triggers is by digital comparison of successive images from existing weather satellites. This non-intrusive scheme costs very little and presents no risks of any kind; it is simply a software program that processes available data in a special way. It is fairly easy to establish an automatic routine to accomplish this task.

Once such growing snowfields have been located, they can be covered with black soot to decrease albedo. The summer sun can then do its work. How much soot? A certain amount of experimentation is required to answer the question. The best way to produce and spread soot particles can again be found by experiment; it looks like a rather simple technical issue, akin to crop-dusting in agriculture. The problem appears to be rather different for DOB cycles; there may not be any triggers to initiate the cold phase of a cycle --although clues on timing may be derived from solar observations. These clues may simply be the time-history of sunspot numbers; but more sophisticated techniques to monitor the Sun are just now becoming available.

The aim would be to eliminate the cold phase --or at least diminish it. The problem is rather complicated; judging from available but imperfect and incomplete data. Observations between 1400 and 1800 AD of the Little Ice Age show that cooling appears to be regional rather than global; in addition, the cold phase is not continuous but consists of decades-long frigid intervals, with warmer periods in between.

Obviously, there is much scope here for research on how to ameliorate DOB cooling. One suggestion is to make use of GH effects. But CO₂ is not the answer; its atmospheric life time is too long and its distribution is global --a poor match to what is required. In addition, CO₂ effectiveness is questionable --or at least controversial --judging by the current temperature plateau (a.k.a. 'pause' or 'hiatus') that has lasted nearly 20 years --and perhaps even much longer.

My personal suggestion has been to create regions of cirrus near the tropopa use by injecting water in the form of mist or droplets, leading to ice particles --akin to contrails from aircraft. The scheme would create regions of strong GH forcing and seem to fit the twin requirements of regionality and moderate lifetime. How much water is needed? How often to inject --and other important but more detailed parameters? Again, we need to learn by experimentation.

Conclusion

In my opinion, there is little doubt that a near-term cooling is among the major calamities facing the population on our planet; concern about global warming is entirely misplaced. A Little Ice Age (DOB cooling) may arrive within decades --perhaps much sooner. The end of our warm Holocene inter-glacial is rapidly approaching. There is no time to lose in preparing for survival. A paradigm change is essential. Instead of fiddling with apportionment of CO₂ quotas among different nations, we should face realities: CO₂ forcing of climate seems largely offset by internal atmospheric negative feedback. In any case, CO₂ forcing is largely saturated spectroscopically; there is little chance of exceeding or even reaching the artificial temperature goal of 2 degrees that politicians have adopted.

No effective quota system will emerge at the forthcoming climate conference in Paris in December 2015, as long as developing nations, like India, aim to overcome poverty by assuring their citizens of reliable, secure, and cheap energy from fossil fuels. The United States needs to learn this lesson also.

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B ARCTIC EXPEDITION TO STUDY GLOBAL WARMING PUT ON HOLD BECAUSE OF TOO MUCH ICE

This is funny: “According to a Coast Guard officer, the icy conditions “are the “worst he’s seen in 20 years“ “A carefully planned, 115-day scientific expedition on board the floating research vessel, the CCGS Amundsen, has been derailed as the icebreaker was called to help resupply ships navigate heavy ice in Hudson Bay. “Obviously it...

<http://wattsupwiththat.com/2015/07/22/arctic-expedition-to-study-global-warming-put-on-hold-because-of-too-much-ice/>

Don Shaw

C. CAN YOU SPOT THE GLOBAL WARMING, ER CLIMATE CHANGE, ER POISONED WEATHER IN THIS PICTURE?

Al Gore finally got something done. Remember those pictures we used to get as children, such as “Can you spot the cow in this picture? Well, Al Gore finally succeeded in creating one of those. Can you see the devastating effects of climate change? Can you spot the #poisonedweather that the “Forecast The Facts” eco-zealots...

<http://wattsupwiththat.com/2015/07/22/can-you-spot-the-global-warming-er-climate-change-er-poisonedweather-in-this-picture/>

D. POPE FRANCIS: CLIMATE CHANGE CAUSES HUMAN TRAFFICKING

Guest essay by Eric Worrall

Pope Francis has waded into the climate debate again, by attempting to link human trafficking and climate change. According to the Daily Mail; Pope Francis has urged world leaders to take a ‘very strong stand’ on climate change ahead of the United Nations summit in Paris this year. He was...

<http://wattsupwiththat.com/2015/07/22/pope-francis-climate-change-causes-human-trafficking/>

Don Shaw

E. WHY WE LIVE ON EARTH AND NOT VENUS

From the University of British Columbia: Compared to its celestial neighbors Venus and Mars, Earth is a pretty habitable place. So how did we get so lucky? A new study sheds light on the improbable evolutionary path that enabled Earth to sustain life. The research, published this week in Nature Geoscience, suggests that Earth’s first...

<http://wattsupwiththat.com/2015/07/22/why-we-live-on-earth-and-not-venus/>

F. RISK ASSESSMENT: WHAT IS THE PLAUSIBLE ‘WORST SCENARIO’ FOR CLIMATE CHANGE?

Posted on [July 20, 2015](#) | [422 comments](#)

by Judith Curry

We know that climate change is a problem – but how big a problem is it? We have to answer this question before we can make a good decision about how much effort to put into dealing with it.
<http://judithcurry.com/2015/07/20/risk-assessment-what-is-the-plausible-worst-scenario-for-climate-change/#more-19385>

G. CORN GROWERS RALLY OVER EPA'S RULE TO CUT ETHANOL PRODUCTION

<http://www.examiner.com/article/corn-growers-rally-over-epa-s-rule-to-cut-ethanol-production>

H. NEW ELECTRICITY SOURCES STILL MORE EXPENSIVE THAN EXISTING ONES

IER recently [released](#) a groundbreaking report on the cost of electricity from existing power plants. The report, titled *The Levelized Cost of Electricity from Existing Generation Resources*, found that electricity from existing power plants is much, much less expensive than from new plants. For example, electricity from existing coal plants is roughly half the price of electricity from new combined cycle natural gas power plants, on average, and only one third the price of electricity from new wind facilities when you consider all of the costs.

<http://instituteeforenergyresearch.org/analysis/icymi-new-electricity-sources-still-more-expensive-than-existing-ones/>

Judith Curry

I. THE LATEST SIGN THAT COAL IS GETTING KILLED

Coal is having a [hard time](#) lately. U.S. power plants are switching to natural gas, environmental restrictions are kicking in, and the industry is being derided as the world's No. 1 climate criminal. Prices have crashed, sure, but for a real sense of coal's diminishing prospects, check out what's happening in the bond market.

Bonds are where coal companies turn to raise money for such things as new mines and environmental cleanups. But investors are increasingly reluctant to lend to them. Coal bond prices tumbled 17 percent in the second quarter, according to an analysis by Bloomberg Intelligence. It's the fourth consecutive quarter of price declines and the worst performance of any industry group by a long shot.

<http://www.bloomberg.com/news/articles/2015-07-13/the-latest-sign-that-coal-is-getting-killed>

Judith Curry

J. THE RIGHT PRICE ON EMISSIONS

By [Cass R. Sunstein](#)

An executive order from President Barack Obama requires that the Environmental Protection Agency analyze the costs and benefits of its regulations. But how exactly can it measure the economic benefits of the coming restrictions on greenhouse gases? For both policy and law (including the inevitable court challenges), it's a crucial question.

This month, the administration provided a big part of the answer with a new report from its Interagency Working Group on the Social Cost of Carbon, which is intended to capture in dollar terms the damage from 1 ton of carbon emissions. (Disclosure: In 2009-2010, I helped convene the initial interagency working group on this subject.)

The central value is \$36. (This is set within a range from \$11 to \$105, meant to acknowledge scientific and economic uncertainty.) So suppose that, next year, the EPA finalizes a rule meant to eliminate 20

million tons of carbon dioxide emissions annually. If so, the monetary value of the reduction would be calculated at \$720 million. And that number would loom large in the EPA's decision about whether the benefits justify the costs -- and in figuring out how stringent its regulation should be.

<http://www.bloombergview.com/articles/2015-07-14/the-right-price-on-emissions>

K. MORE ALARMISTS FAILED CLIMATE PREDICTIONS INCLUDING HEAD OF BRITISH MET

Here are some past predictions by climate alarmists including so called scientists, posted on wattsupwiththat.com by a blogger.

Think you would keep your job if you made such outrageous mistakes?

Note that one of these predictions was made by NASA scientists, no wonder we need the Russians to reach the space station. An outstanding organization has been ruined in the last 6 years as they focus on climate change rather than their initial mission.

Don Shaw

"How about a prediction of ice-free by 2000

Arctic Ocean to be ice free by Year 2000, by Bernt Balchen (who is recognized as a leading specialist on the Arctic) – He also says that the Northern USA would be 20 to 25 degrees warmer than it is now.

<http://news.google.com/newspapers?id=zml0AAAAIBAJ&sjid=L5wEAAAIAAJ&pg=5376,3200988&dq=ice+free+arctic&hl=en>

Or 2008

"It seems unthinkable, but for the first time in human history, ice is on course to disappear entirely from the North Pole this year" (Steve Connor 'Science Editor', The Independent 2008)

<http://www.independent.co.uk/environment/climate-change/exclusive-scientists-warn-that-there-may-be-no-ice-at-north-pole-this-summer-855406.html>

or 2012

Arctic Sea Ice Gone in Summer Within Five Years? (National Geographic, 2007)

"After reviewing his own new data, NASA climate scientist Jay Zwally said: "At this rate, the Arctic Ocean could be nearly ice-free at the end of summer by 2012, much faster than previous predictions."

<http://news.nationalgeographic.com/news/2007/12/071212-AP-arctic-melt.html>

or 2013

Arctic summers ice-free 'by 2013' (BBC 2007)

"Our projection of 2013 for the removal of ice in summer is not accounting for the last two minima, in 2005 and 2007.....So given that fact, you can argue that may be our projection of 2013 is already too conservative"

<http://news.bbc.co.uk/1/hi/7139797.stm>

And, whilst we are laughing, the best of all...

LONDON ON THE BORDER OF DESTRUCTION. To Be Wiped Out by a Huge Wave. According to a recent theory of some geologists.....due to break up of Antarctic ice cap (1901)

<http://trove.nla.gov.au/ndp/del/article/64027823#pstart6133478>

So, the moral of this story is: Don't lose too much sleep on end-of-the-world scare stories."

Finally if you want a real laugh you should watch the head of the British Weather (MET) make numerous predictions in 2007 with such certainty and cocky attitude, all of which have failed.

<https://youtu.be/jZKD7k7BeBw>

Don Shaw

L. RISING GLOBAL COAL USE DOOMS CARBON DIOXIDE GOALS

Stories at Vox.com highlight the main problem facing those hoping to stem the rise in greenhouse gas emissions. While the fortunes for coal-fired power plants in the U.S. have declined under President Barack Obama, internationally, coal power is resurgent.

According to BP's *Statistical Review of Energy*, coal consumption has been accelerating worldwide since the end of the 1990s. A study in the *Proceedings of the National Academy of Sciences* (PNAS) reports coal is the energy source of choice for a vast array of poorer, fast-growing countries around the world. "This renaissance of coal," the authors write, "has even accelerated in the last decade."

The world added about 626 gigawatts of net coal capacity between 2005 and 2013 with another 276 gigawatts under construction and more than 1,000 gigawatts in various stages of planning.

The authors point out coal is popular because it is often the cheapest energy option in many parts of the world. Vox admits, "**On the upside, this boom has helped these countries lift themselves out of poverty.**"

CLIMATE CHANGE WEEKLY #180:

M. COMICALLY CORRECT

For climate alarmists, unless something changes, increasing coal use will make it impossible to reduce global carbon dioxide emissions. Currently, coal accounts for approximately 30 percent of the world's primary energy use; alarmists believe in order to fend off significant climate change, coal's share of the worldwide energy mix would need to drop to below 10 percent in the next two decades.

That seems unlikely, with more than 2,177 coal units currently in various stages of planning or construction around the world, especially in such fast-growing countries as India, Indonesia, and Vietnam. As Vox notes, "once a country builds a new coal-fired power plant, which plant generally lasts for 30 to 50 years or more. So the more coal plants the world builds, the harder it gets to reduce coal's share – because of 'lock-in' effects."

The PNAS study reports, "Developing economies now account for such a large share of global energy use that the trend toward higher carbon intensity in these countries cancels out the effect of decreasing carbon intensities in industrialized countries. If the future economic convergence of poor countries is fueled to a major extent by coal – i.e., if current trends continue, ambitious mitigation targets likely will become infeasible."

Not all of these coal plants will ultimately come online. Since 2010, CoalSwarm/Sierra Club report for every coal plant actually built, two get canceled. Still, if only 1/3 of the remaining plants under construction or planned come online, an additional 719 new coal plants will be added to existing plants, some of which will likely be expanded and relicensed in the coming years.

The task of reducing greenhouse emissions during the next 50 years must seem daunting, if not well-nigh impossible, to climate alarmists.

For climate realists like me, coal's renaissance is good news: It means we can expect poverty to decline, life spans to increase, and well-being to improve for billions of people around the world who might finally gain access to welfare-enhancing, safe, reliable electric power supplies.

-- H. Sterling Burnett

SOURCES: [Vox.com on coal renaissance](#) and [Vox.com on climate change](#)

Regards,

George