

ENVIRONMENTAL AND ENERGY DIVISION
NEWSLETTER
14 DEC. 2015

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 editor alone and do not represent the positions of the Environmental and Energy Engineering Division or the ASME."

George Holliday

A. ENVIRONMENT 1. COP21 MARKS A PARADIGM SHIFT IN #CLIMATE POLICY, WITH MIXED RESULTS

<https://www.project-syndicate.org/commentary/paris-climate-change-pragmatic-approach-by-oliver-geden-2015-11>

Judith Curry

2. DON'T EXPECT MIRACLES – WHAT WE CAN REALISTICALLY HOPE FOR, FROM COP21 IN PARIS. IN TODAY'S INDEPENDENT

<http://www.independent.co.uk/voices/why-the-paris-climate-change-talks-may-set-us-on-the-path-to-a-cooler-planet-a6752206.html>

Judith Curry

3. NOAA: U.S. DEATHS CAUSED BY SEVERE WEATHER HIT 22-YEAR LOW IN 2014

<http://www.cnsnews.com/news/article/barbara-hollingsworth/noaa-2014-had-lowest-weather-related-deaths-23-years>

Judith Curry

4. PROMISE \$\$\$ AND CORRUPT NATIONS WILL SUPPORT THE CLIMATE CHANGE AGENDA, GUESS WHO IS ON THE HOOK?

<http://news.yahoo.com/latam-hands-climate-bill-rich-world-summit-050003973.html>

"Montevideo (AFP) - Latin America will demand that the richest and most polluting countries foot the bill for reducing harmful emissions at the world climate summit starting Monday.

Countries in one of the world's poorest and most environmentally diverse regions have failed to agree on many things and do not have a common negotiating position overall going into the talks.

But they do agree that countries in their region suffer more than most from the effects of global warming, and that the big polluters should pay.

Leaders of 195 countries are aiming for an accord to limit global warming at the United Nations climate summit in Paris, which runs until December 11.

They will discuss limits to emissions and funding for the poorer countries who are fighting climate change.

They hope to agree to limit global warming by 2030 to two degrees Celsius compared to the pre-industrial era.

Among the countries attending, seven form the Independent Alliance of Latin America and the Caribbean: Chile, Colombia, Costa Rica, Guatemala, Panama, Paraguay and Peru.

They are promising to reduce their greenhouse gas emissions by 20 to 45 percent by 2030.

Mexico, the region's second-biggest economy, does not belong to the group but shares its objectives. It has promised to cut harmful emissions by 22 percent by 2030.

"We are all pushing to develop early warning systems that will allow us to anticipate (weather) phenomena that are going to occur," said Mexico's environment minister Rafael Pacchiano.

"In the past half-century, Latin America and the Caribbean are estimated to have caused less than five percent of carbon dioxide emissions, but they have suffered more than most from extreme weather disasters.

"What has to be negotiated is who will contribute" to the cost of fighting climate change, said Caillaux.

"It is not our countries that should contribute, but the richest and most industrialized ones."

Don Shaw

5. CLIMATE AND HUMAN CIVILIZATION OVER THE LAST 18,000 YEARS

Guest essay by Andy May

This is an updated timeline of climatic events and human history for the last 18,000 years. The original timeline was posted in 2013. The updated full size (Ansi E size or 34x44 inches) Adobe Reader version 8 PDF can be downloaded here or by clicking on Figure 1. It prints pretty...

[Climate and Human Civilization over the last 18,000 years](#)

6. THE DIFFERENCES BETWEEN SEA SURFACE TEMPERATURE DATASETS PREVENT US FROM KNOWING WHICH EL NIÑO WAS STRONGEST ACCORDING NINO3.4 REGION TEMPERATURE DATA

Guest Post by Bob Tisdale

In the November 17, 2015 post here (WattsUpWithThat cross post here), we discussed the recent alarmist claims by the mainstream media and members of the climate science community about the strength of the current El Niño, showing how and why the 1997/98 El Niño was actually stronger than the one...

<http://wattsupwiththat.com/2015/11/21/the-differences-between-sea-surface-temperature-datasets-prevent-us-from-knowing-which-el-nino-was-strongest-according-nino3-4-region-temperature-data/>

7. IPCC ≠ SCIENCE ↔ IPCC = GOVERNMENT

Guest essay by Wim Rost

Sometimes you know that something “stinks” somewhere. But you don’t know what and you don’t know where. You can search everywhere and don’t find it. Till you finally find out. Until recently I thought about the IPCC as an organization “filled up with science”. That thought was both right and... <http://wattsupwiththat.com/2015/11/29/ipcc-science-ipcc-government/>

8. FRANCE IMPOSES SOVIET STYLE MOVEMENT RESTRICTIONS ON CLIMATE ACTIVISTS

Guest essay by Eric

Worrall France has arbitrarily imposed Soviet style movement restrictions on a number of climate activists. French Authorities claim this measure is necessary, to reduce the risk of public disorder during the COP21 conference. According to the Australian ABC; French climate change activists have been placed under house arrest ahead of the...

<http://wattsupwiththat.com/2015/11/29/france-imposes-soviet-style-movement-restrictions-on-climate-activists/>

COMMENTS

A. THE WEEK THAT WAS: 2015-11-28(NOV. 28, 2015)

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

Science Supporting COP-21: The Conference of Parties (COP-21) of the United Nations’ Framework Convention on Climate Change (UNFCCC), will take place in Paris between November 30 and December 11, 2015. Tens of thousands will gather, centered on a meeting of official government delegates who will try to reach an agreement to limit carbon dioxide (CO₂) emissions. The propaganda, the hyperboles produced by the supporters of COP-21 have called the meeting as the last, best change for humanity to save itself from global warming/climate change. Others may call it as the latest, best chance for authoritarian governments to control humanity, and economic growth, through the UN.

Untold Billions of dollars have been spent preparing for this meeting. The US, alone, has spent over \$40 Billion, since 1993, on what government reports identify as climate science. Over \$120 Billion has been spent on efforts to prevent future climate change – a vague concept that does not withstand scientific scrutiny. The earth’s climate has changed for hundreds of millions of years – thousands of times longer than humanity has existed. The earth goes through periods of warming and cooling. For over 2.5 million years it has been in a period of cooling – ice ages. Humans change the landscape by farming, urbanization, irrigation, draining swamps, etc.; thereby changing local and regional climate.

The scientific issue for COP-21 is to what extent are human emissions of greenhouse gases (GHG) modifying natural global warming/climate change? Carbon dioxide is the dominant greenhouse gas emitted by humans into the atmosphere, therefore the focus of COP-21. Currently, in the atmosphere, CO₂ is about 0.04% (4 parts per 10,000). By far, the dominate greenhouse gas in the atmosphere is water vapor, which may be up to 4% (400 parts per 10,000). The concentration of water vapor is particularly high in the tropics, where heat from the sun is most pronounced driving the atmospheric and ocean systems that cause changing weather patterns and climate change.

To examine the need, or the lack of need, for control of human CO₂ emissions, it is necessary to examine the current status of climate science. To do so, TWTW will review four recent papers and articles that address the issues. The first is a position paper by SEPP Chairman S. Fred Singer which will be presented at an independent event at COP-21 in Paris on December 7 at the Hotel California at 10 to 11:30 AM. The second item is a new book by the Non-governmental Panel on Climate Change, also to be presented at the event. The third item is a summary by historian Bernie Lewin, who discusses how events at a meeting of the Scientific Working Group of the IPCC, 20 years ago in Madrid, led to the

fabrication of the claim of a “discernible human influence” on climate, propelling the entire COP and IPCC process. And, the fourth item is a summary of the issues by Matt Ridley and Benny Peiser, published in the Wall Street Journal.

All the issues discussed in these papers undermine the justifications for any agreement at COP-21 to limit carbon dioxide emissions, a harmless gas necessary for life on this planet. Further, the issues discussed undermine the foundations for the US EPA’s Endangerment Finding, that carbon dioxide emissions endanger human health and welfare. Also, they undermine the need for subsidies for alternative forms of generating unreliable electricity from solar and wind. These sources endanger human health – a modern hospital would fail to function properly if the electricity was interrupted frequently, without warning, as happens with solar and wind.

The Burden of Proof on Climate Change

S. Fred Singer 11-24-2015

[for presentation on Heartland Panel, Hotel California, Paris, Dec 7, 2015]

The burden of proof for Anthropogenic CC falls on alarmists. Climate Change (CC) has been ongoing for millions of years – long before humans existed on this planet. Obviously, the causes were all of natural origin, and not anthropogenic.

There is no reason to believe that these natural causes have suddenly stopped; for example, volcanic eruptions, various types of solar influences, and (internal) atmosphere-ocean oscillations all continue today. (Note that these natural factors cannot be modeled precisely.)

Let’s call this the “Null Hypothesis.” Logically therefore, the burden of proof is on alarmists to demonstrate that the Null Hypothesis is not adequate to account for empirical climate data; alarmists must provide convincing observational evidence for Anthropogenic CC (ACC) – by detailed comparison of empirical data with GH [greenhouse] models.

I am not aware of such proofs, only of anecdotal info – although I admit that ACC is plausible; after all, CO₂ is a GH gas, and its level has been rising, mainly because of burning of fossil fuels. However, ACC appears to be much smaller than predicted by GH models; there is even believed to be a period of no warming [“hiatus”] during the past 19 years – in spite of rapidly rising atmospheric CO₂ levels [1].

There seems to be no generally accepted explanation for this discrepancy. Yet as the gap grows, the five IPCC reports insist there is no gap – with ever greater claimed certainty; rising from 50% to 99%. Even necessary conditions for empirical data (like temperature rise vs altitude and latitude; cloud cover; precipitation) are difficult to establish; any major disagreement with models disproves ACC.

IPCC’s GH models are not validated – and not policy-relevant. In other words, GH models have not been, and may never be validated; hence are not policy relevant.

They are scenario-generation machines that rest on assumptions and incomplete science -- not on actual observations [2].

Anyway, warming appears to be trivially small and most likely economically beneficial overall-- as established through careful studies by leading economists. I therefore regard the absence of any significant GH warming as settled, and policies to limit CO₂ emissions as wasting resources needed for genuine societal problems -- and even as counterproductive, since CO₂ promotes plant growth and raises crop yields [3]

Surviving a coming climate cooling I am much more concerned about a cooling climate, as predicted by many solar scientists [4], with its adverse ecological effects and severe economic consequences for humanity. Singer and Avery [5] have described the cyclical CC, seen during the past major glaciation; Loehle and Singer [6] see evidence for extension of the cycles into the current Holocene.

In particular, historical records [7] identify the recent cycle of a (beneficial) Medieval Warm Period and the (destructive) Little Ice Age (LIA) with its failed harvests, starvation, disease, and mass deaths.

I have therefore explored ways [8] to counter the (imminently expected) next cooling phase through low-cost and low-ecological-risk methods of a specific GH effect – not based on CO2. At the same time, assuming that our scheme does not work, we need to prepare for adaptation [9] to a colder climate – with special attention to supply of food, and of sustainable water and energy. The outlook appears promising – provided there is adequate preparation. However, the coming cold period will test the survivability of our technological civilization.

Paris-COP

As surmised earlier [10], COP21 will likely turn out to be a “big nothing-burger,” but media will spin it as great Obama victory. US consumers will pay the bill; suffer higher energy prices, and increasing poverty.

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1. http://www.americanthinker.com/articles/2015/06/the_climate_warming_pause_goes_awol.html
 2. Bast, JL. Private communication, Nov 2015
 3. CCR-IIb www.climatechangereconsidered.org
 4. Soon, de Jager, Zharkova, et al
 5. Singer&Avery. Unstoppable Global Warming: Every 1500 years. Rowman & Littlefield 2007
 6. Loehle&Singer. CanJEarthSci 2010;
 7. Lamb, HH. Climate, History and the Modern World. Routledge 1995
 8. http://www.americanthinker.com/articles/2015/05/saving_humanity_from_catastrophic_global_cooling_a_task_for_geoengineering.html
 9. http://www.americanthinker.com/articles/2015/11/surviving_an_imminent_ice_age_.html
 10. http://www.americanthinker.com/articles/2015/04/obama_expected_to_bind_us_to_co2_reduction_at_paris_climate_meeting_this_year.html

NIPCC Report: The Non-governmental International Panel on Climate Change (IPCC) has published a new report -- Why Scientists Disagree About Global Warming. The report can be downloaded through the internet without charge. The report addresses major disagreements among scientists who have investigated the subject of climate change. Although climate change has been ongoing for hundreds of millions of years, the subject as a discipline is new. The importance of climate change was promoted by climate science pioneer Hubert Horace Lamb (1913-1997), who warned against dangers, particularly of the return of cold periods, which were marked by disease, famine, and death. Later, some promoters advocated climate change to mean global warming in an effort to control human use of fossil fuels. The NIPCC Report distinguishes how its purpose is different from the IPCC. NIPCC tries to examine all the causes of changes to global climate. The IPCC was limited to finding and disseminating the human impact on climate. It does not test critical assumptions – hypotheses. As such, it is a limited source, an agenda-driven, political body, which has become extremely biased. As stated in the summary of the new NIPCC report: “Probably the only “consensus” among climate scientists is that human activities can have an effect on local climate and that the sum of such local effects could hypothetically rise to the level of an observable global signal. The key questions to be answered, however, are whether the human global signal is large enough to be measured and if it is, does it represent, or is it likely to become, a dangerous change outside the range of natural variability? On these questions, an energetic scientific debate is taking place on the pages of peer-reviewed science journals.

“In contradiction of the scientific method, IPCC assumes its implicit hypothesis – that dangerous global warming is resulting, or will result, from human-related greenhouse gas emissions -- is correct and that its only duty is to collect evidence and make plausible arguments in the hypothesis’s favor. It simply ignores the alternative and null hypothesis, amply supported by empirical research, which currently

observed changes in global climate indices and the physical environment are the result of natural variability.

“The results of the global climate models (GCMs) relied on by IPCC are only as reliable as the data and theories “fed” into them. Most climate scientists agree those data are seriously deficient and IPCC’s estimate for climate sensitivity to CO2 is too high.”

Rather than rely exclusively on IPCC for scientific advice, policymakers should seek out advice from independent, nongovernment organizations and scientists who are free of financial and political conflicts of interest. NIPCC’s conclusion, drawn from its extensive review of the scientific evidence, is that any human global climate impact is within the background variability of the natural climate system and is not dangerous.

In the face of such facts, the most prudent climate policy is to prepare for and adapt to extreme climate events and changes regardless of their origin. Adaptive planning for future hazardous climate events and change should be tailored to provide responses to the known rates, magnitudes, and risks of natural change. Once in place, these same plans will provide an adequate response to any human-caused change that may or may not emerge. See links under Challenging the Orthodoxy – NIPCC.

Fabricated in Madrid: One of the great harms to objective climate science occurred at the November 1995 meeting of Working Group I (Scientific Working Group) in Madrid, Spain, where lead author Benjamin Santer of the Lawrence Livermore National Laboratory and IPCC leader Sir John Houghton changed the peer-reviewed report of the IPCC Second Assessment to find a discernible human influence, even there was no such evidence in the peer-reviewed literature. The human-fingerprint, the so called “hot-spot” over the tropics centered at about 10 km (about 33,000 feet) was not published until later. On June 12, 1996, Frederick Seitz wrote in the Wall Street Journal, that the change in the peer reviewed report was the worst abuse of the peer review process he had witnessed in 60 years in American Science and was made to deceive policy makers and the public into believing that the scientific evidence shows human activities are causing global warming. Seitz had been President of the US National Academy of Sciences from 1962 to 1969 and was President Emeritus of the Rockefeller University, the major US medical research university.

On December 12, 1996, Nature magazine published an article showing that the Santer, et al. paper used to justify the “hot-spot” included a selected portion (1963 to 1987) of the 1958 to 1995 record. In 2010, Seitz, who had died, was denounced by Oreskes and Conway in Merchants of Doubt. Based on hearsay, no evidence they documented, Oreskes and Conway claimed Seitz helped mislead the American public on the dangers of smoking cigarettes.

In 2011, Santer was elected as a fellow of the American Geophysical Union and a member of the National Academy of Sciences. Such is the status of the “peer review” with the IPCC, underlying COP-21. See Challenging the Orthodoxy (be sure to check the links in the article, especially <https://enthusiasmcepticismscience.wordpress.com/2012/07/01/madrid-1995-and-the-quest-for-the-mirror-in-the-sky-part-ii/>)

Your Complete Guide to the Climate Debate: Matt Ridley, The Rational Optimist, and Benny Peiser of the Global Warming Policy Foundation authored a lengthy opinion article that can be described as moderate skepticism and prudent from a political perspective. Among other items, they note: “Even with this year’s El Niño-boosted warmth threatening to break records, the world is barely half a degree Celsius (0.9 degrees Fahrenheit) warmer than it was about 35 years ago. Also, it is increasingly clear that the planet was significantly warmer than today several times during the past 10,000 years.”

“As for the impact of that future warming, a new study by a leading climate economist, Richard Tol of the University of Sussex, concludes that warming may well bring gains, because carbon dioxide causes crops and wild ecosystems to grow greener and more drought-resistant. In the long run, the negatives

may outweigh these benefits, says Mr. Tol, but ‘the impact of climate change does not significantly deviate from zero until 3.5°C warming.’”

“Mr. Tol’s study summarizes the effect we are to expect during this century: ‘The welfare change caused by climate change is equivalent to the welfare change caused by an income change of a few percent. That is, a century of climate change is about as good/bad for welfare as a year of economic growth. Statements that climate change is the biggest problem of humankind are unfounded: We can readily think of bigger problems.’ No justification for prioritizing climate change over terrorism there.”

In addition, they cite recent studies indicate that the sensitivity of the climate to a doubling of CO2 may be far less than projected by the IPCC. Also, new a new study indicates the cooling influence of sulfate emissions may have been over-estimated, leading to an over-estimate of the warming influence of CO2.

“To put it bluntly, climate change and its likely impact are proving slower and less harmful than we feared, while decarbonization of the economy is proving more painful and costly than we hoped. The mood in Paris will be one of furious pessimism among the well-funded NGOs that will attend the summit in large numbers: Decarbonization, on which they have set their hearts, is not happening, and they dare not mention the reassuring news from science lest it threaten their budgets.”

“So what will emerge from Paris, when thousands of government officials gather from Nov. 30 to Dec. 11 to agree on a new U.N. climate deal to replace the Kyoto Protocol, which expires in 2020? Expect an agreement that is sufficiently vague and noncommittal for all countries to sign and claim victory. Such an agreement will also have to camouflage deep and unbridgeable divisions while ensuring that all countries are liberated from legally binding targets a la Kyoto

“However, developing nations are only too aware that the \$100 billion per annum funding pledge [President Obama made in 2009] is never going to materialize, not least because the U.S. Congress would never agree to such an astronomical wealth transfer. This failure to deliver is inevitable, but it will give developing nations the perfect excuse not to comply with their own national pledges.

“According to the EU’s key demand, the Paris Protocol must deliver ‘legally binding mitigation commitments that put the world on track toward achieving the below 2°C objective. . . . Mitigation commitments under the Protocol should be equally legally binding on all Parties.’ The chances of such an agreement are close to zero. If there are no legally binding carbon targets agreed to in Paris, the EU will be unlikely to make its own conditional pledges legally binding.

“Any climate agreement should be flexible enough so that voluntary pledges can be adjusted over the next couple of decades depending on what global temperatures do. The best we can hope for is a toothless agreement that will satisfy most governments yet allow them to pay lip-service to action. In all likelihood, that’s exactly what we can expect to get in Paris.”

Of course, since this is a political position, not a rigorous scientific one, the authors do not mention that the IPCC gives no “empirical” justification that carbon dioxide causes global warming since the “hot spot” fabricated in Madrid twenty years ago. See links under Challenging the Orthodoxy.

State Attorney General Letter: As seen in past meetings by UN delegates in climate conferences, it is not clear what will emerge. Retiring Senator Boxer has said that the Republicans in Congress will back-down from a strong agreement. Contrasting this, The Attorney Generals of West Virginia and Texas have sent a strong letter to Secretary of State John Kerry, with copies to appropriate leaders of India, China, etc.

The letter states the president’s commitment to reduce CO2 emissions is unlawful and is unlikely to survive judicial review. Among reasons given is that the EPA relies on an EPA assertions of regulations that the courts recently rejected. Further, there is a constitutional issue of the 10th Amendment. The letter also states that any agreement must be ratified by the US Senate. Unless it is ratified, it is not binding, regardless what the President states.

Given that the President frequently dismisses contrary political views, it is possible he and Secretary Kerry will try to dismiss this letter, though it was agreed upon by 27 states (over 50%). It may very well prove out that the delegates from India, China, etc. are more aware of the limits on Executive Powers of the President placed by US Constitution than the delegates chosen by the Administration acknowledge. See links under Problems in the Orthodoxy.

Number of the Week: 4. Four separate, independent data sets are used in calculating the extent to which Global Climate Models (GCMs) over-estimate warming in the lower atmosphere, particularly over the tropics, the location of the yet-to-be-found “hot-spot,” Two separate entities, UAH and RSS, produce the satellite data, and two entities produce the balloon data. Yet these data are largely ignored by the IPCC and its supporters.

By contrast, the IPCC uses surface data. Much data for the historic surface temperature now comes from one source – the NOAA’s National Climatic Data Center (now National Centers for Environmental Information (NCEI)). These data have been heavily manipulated in recent decades.

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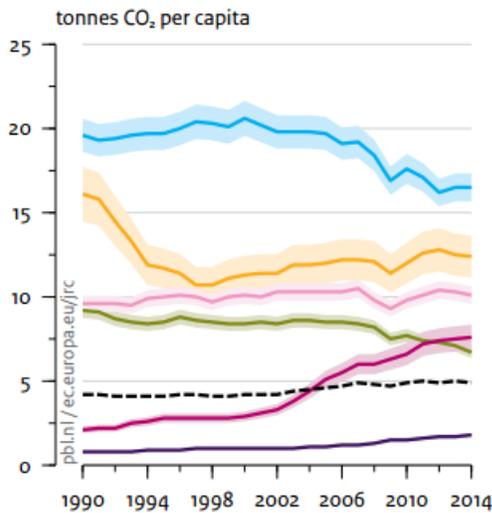
<http://www.sepp.org/twtwfiles/2015/TWTW%2011-28-15.pdf>

B. CO2-EMISSIONS -STAGNATES

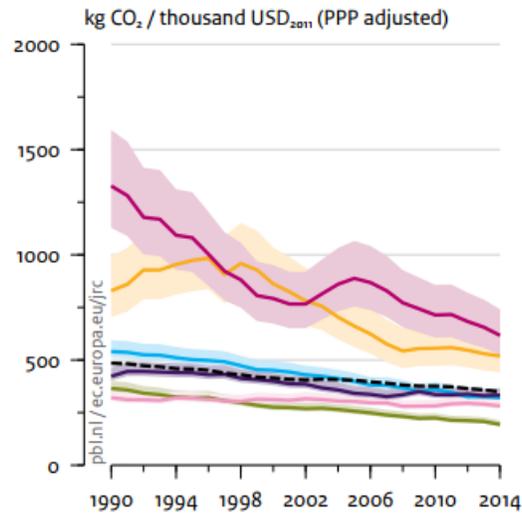
Published November 26, 2015 at [779 x 546](#) in [Report: Global growth in CO2 emissions stagnates](#)

CO₂ emissions from fossil-fuel use and cement production in the top 5 emitting countries and the EU

Per capita



Per unit of GDP



- United States
- Russian Federation
- European Union (EU28)
- Japan
- China
- India
- Global average
- Uncertainty

Source: EDGAR 4.3 FT2014 (notably IEA 2014, NBS 2015 and BP 2015); UNPD 2013 (WPP, Rev. 2013) World Bank 2015; IMF 2015
<http://wattsupwiththat.com/2015/11/26/report-global-growth-in-co2-emissions-stagnates/co2-emissions-stagnates/>

Don Shaw

C. PAUSE BUSTER SST DATA: HAS NOAA ADJUSTED AWAY A RELATIONSHIP BETWEEN NMAT AND SST THAT THE CONSENSUS OF CMIP5 CLIMATE MODELS INDICATE SHOULD EXIST?

Guest Post by Bob Tisdale

In this post, we're going to discuss one of the three adjustments with the greatest impacts on the new NOAA "pause buster" sea surface temperature dataset. That is, I'm going to discuss and illustrate that NOAA based one of their recent adjustments (the adjustment with the greatest impact during the...

<http://wattsupwiththat.com/2015/11/30/pause-buster-sst-data-has-noaa-adjusted-away-a-relationship-between-nmat-and-sst-that-the-consensus-of-cmip5-climate-models-indicate-should-exist/>

E. THE PARIS PLACEBO EFFECT

November 29th, 2015

Spoiler alert...the following contains spoilers about what the Paris COP21 climate conference this week will actually accomplish.

Human-caused global warming and climate change is an interesting human malady. No matter whether you consider it a physical or emotional ailment, many of us simply know it to be true.

Many of us have personally experienced it in a heat wave, snow storm, hurricane, etc., which now feel different than they used to when they were mere weather events.

For example, Senator Debbie Stabenow (D-MI) in 2009 declared, "Global warming creates volatility and I feel it when I'm flying. The storms are more volatile."

This affliction will actually be greatly alleviated this week as those who have been stricken with it take a collective placebo pill in the form of yet another Earth-saving international agreement to reduce global greenhouse gas emissions.

SPOILER: *We already know that the pill has no actual medicine in it.* The commitments (or non-commitments) by various countries of the world have already been submitted and analyzed. And the prognosis is this: the agreements will have an [unmeasurable effect on global temperatures](#), no matter what you believe about the human influence on climate.

But there is good news! The world will swallow that pill, and then experience a collective sigh of relief, for we will have done something to Save the Earth!

Those who most believe in human-caused climate change will hopefully receive the most relief of their symptoms. I saw some of these people at previous COP meetings in Montreal and Cancun. I described my first experience in Montreal at the 2005 COP11 as [culture shock](#). People dressed up in all kinds of costumes meant to draw attention to whatever portion of the Earth is supposedly suffering from your SUV. Polar bear costumes are especially popular. Meanwhile, a frigid winter wind was blowing outside, which I was ill-equipped to handle despite being from northern Michigan.

The people participating in COPXX meetings are easily convinced that polar bears are disappearing...even though they haven't been. They are convinced CO2 is a poison, even though it is necessary for life to exist on Earth—and, given that, is in amazingly short supply.

Later, at the 2009 COP16 in Cancun, I debated Daryl Hannah on TV, who seemed very informed on alternative energy strategies until we were off-camera and she told me we just need to switch to all renewables right away. The fact is that doing such a thing is a physical impossibility, unless you want to relegate humanity to a new Stone Age.

Even though I'm asked, I've stopped attending the COPXX meetings because what little remains of my mental health is too precious to me. In addition to my climate research dealing with physics and actual numbers, I must also already deal with a steady stream of interactions with the public and the media

involving feelings and beliefs. I am ill-equipped to handle the latter, but it now goes with the territory in a climate scientist's life.

So, as the United Nations declares yet another a landmark agreement to Save the Earth, just remember...sometimes placebos really do work. The danger, though, is that the politicians of the world will be emboldened to manufacture ever greater quantities of placebos, at ever-increasing costs to humanity.

Roy Spencer

<http://www.drroyspencer.com/category/blogarticle/>

F. HOW SENSITIVE IS GLOBAL TEMPERATURE TO CUMULATIVE CO₂ EMISSIONS ?

Posted on [November 30, 2015](#) | [57 Comments](#)

by Nic Lewis

The mean carbon cycle behaviour of CMIP5 ESMs and EMICs may be quite unrealistic.

IPCC AR5 states (WG1 SPM E.8) that "Cumulative total emissions of CO₂ and global mean surface temperature [GMST] response are approximately linearly related". The mean increase in GMST with cumulative CO₂ emissions simulated by current CMIP5 Earth System Models (ESMs) and EMICs [1] was presented in AR5 (Figure SPM.10; coloured lines) for differing Representative Concentration Pathway scenarios (RCPs).

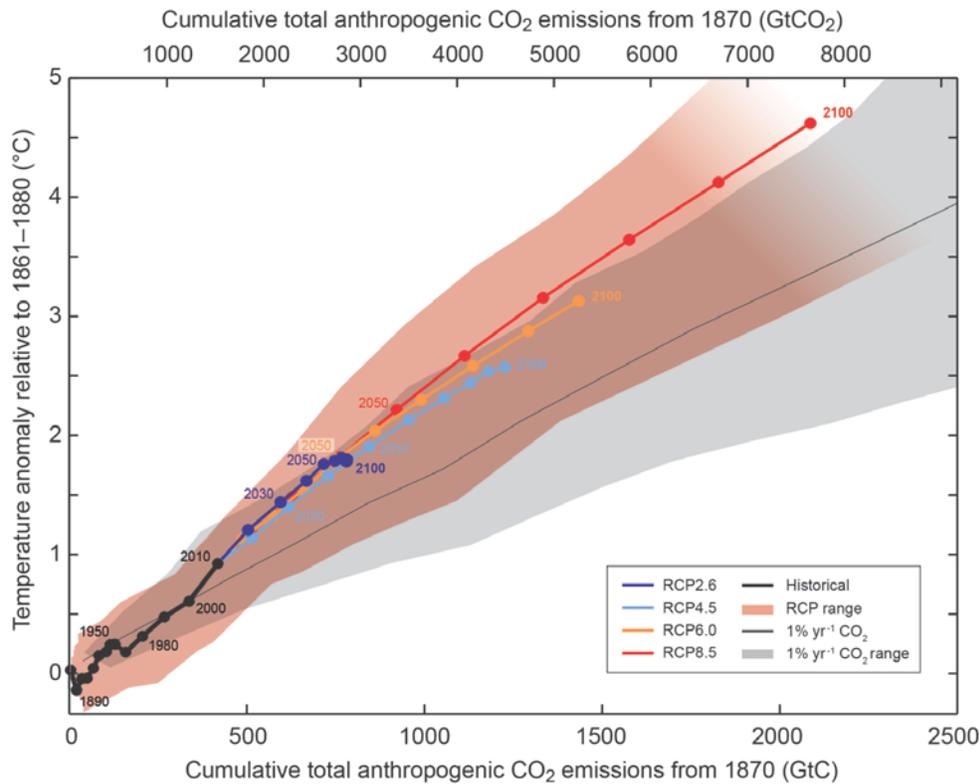


Figure SPM.10: Global mean surface temperature increase as a function of cumulative total global CO₂ emissions from various lines of evidence. Multi-model results from a hierarchy of climate-carbon cycle models for each RCP until 2100 are shown with coloured lines and decadal means (dots). Some decadal means are indicated for clarity (e.g., 2050 indicating the decade 2041–2050). Model results over the historical period (1860–2010) are indicated in black. The coloured plume illustrates the multi-model spread over the four RCP scenarios and fades with the decreasing number of available models in RCP8.5.

The multi-model mean and range simulated by CMIP5 models, forced by a CO2 increase of 1% per year (1% per year CO2 simulations), is given by the thin black line and grey area. For a specific amount of cumulative CO2 emissions, the 1% per year CO2 simulations exhibit lower warming than those driven by RCPs, which include additional non-CO2 drivers. All values are given relative to the 1861–1880 base period. Decadal averages are connected by straight lines

<http://judithcurry.com/2015/11/30/how-sensitive-is-global-temperature-to-cumulative-co2-emissions/#more-20572>

Judith Curry

G. DEEP DE-CARBONISATION OF ELECTRICITY GRIDS

Posted on [November 29, 2015](#) | [99 comments](#)

by Peter Lang

J. P. Morgan recently published an excellent report '[Deep de-carbonisation of electricity grids](#)'. Below are excerpts from the report and some comment added by me.

<http://judithcurry.com/2015/11/29/deep-de-carbonisation-of-electricity-grids/#more-20559>

Judith Curry

H. OPINION

OBAMA IS CORRECT, CLIMATE CHANGE IS BIGGEST THREAT, BUT ONLY BECAUSE OFFICIAL IPCC CLIMATE SCIENCE IS COMPLETELY WRONG

Guest opinion: Dr. Tim Ball

Kafkaesque is one word that encapsulates the entire Paris Conference. It is defined as: A nightmarish situation which most people can somehow relate to, although strongly surreal. With an ethereal, "evil", omnipotent power floating just beyond the senses. There are insufficient superlatives to describe the disaster that is the...

<http://wattsupwiththat.com/2015/11/30/obama-is-correct-climate-change-is-biggest-threat-but-only-because-official-ipcc-climate-science-is-completely-wrong/>

I. WHY SCIENTISTS DISAGREE ABOUT GLOBAL WARMING

November 30, 2015 – Today, on the first day of the United Nations' twenty-first conference of the parties (COP-21) taking place in Paris, a new book emphatically rejects claims of a "scientific consensus" on the causes and consequences of climate change. The authors are three prominent climate scientists affiliated with the Nongovernmental International Panel on...

<http://wattsupwiththat.com/2015/11/30/why-scientists-disagree-about-global-warming/>

J. THE REALITY GAP IN THE PUSH TO CLOSE THE GLOBAL WARMING 'EMISSIONS GAP' IN PARIS **

Year by year, the great transition away from the world's risky carbon-based path to progress is said to be just around the corner. This year's Emissions Gap report from the United Nations Environment Program, aiming to energize Paris climate talks next month, was released today with this headline:

<http://dotearth.blogs.nytimes.com/2015/11/06/the-reality-gap-in-the-push-to-close-the-global-warming-emissions-gap-in-paris/>

Judith Curry

K. RUSSIAN POWER ASSETS ATTACKED – HOW LONG WILL THE TRANS-SIBERIAN PIPELINE LAST? **

Guest essay by Eric Worrall

Power pylons supplying regions of the Crimean have been blown up, causing significant economic disruption to disputed territory currently occupied by Russian backed Ukrainian rebels. According to Reuters; Crimea was left without electricity supplies from Ukraine on Sunday after pylons carrying power lines to the Russia-annexed peninsula were blown up...

<http://wattsupwiththat.com/2015/11/23/russian-power-assets-attacked-how-long-will-the-trans-siberian-pipeline-last/>

L. HOW NOT TO MEASURE TEMPERATURE, BRITISH FACEPALM EDITION **

I had to share this “laugh out loud” moment from Bishop Hill and the photo of this weather station. Andrew Montford writes:

“**Settled science**”. Much amusement is to be had from a posting at a blog called Sudden Oak Life. The author has recorded images of the Radcliffe surface temperature station in Oxford, part...

<http://wattsupwiththat.com/2015/11/23/how-not-to-measure-temperature-british-facepalm-edition/>

M. CHAOS & CLIMATE – PART 2: CHAOS = STABILITY**

Guest Essay by Kip Hansen ...

We should recognize that we are dealing with a coupled non-linear chaotic system, and therefore that the long-term prediction of future climate states is not possible.” – IPCC TAR Chap 14, Exec Summary Introduction: The IPCC has long recognized that the Earth’s climate system is a...

<http://wattsupwiththat.com/2015/11/23/chaos-climate-part-2-chaos-stability/>

N. WHAT TO MAKE OF UK’S #COAL PHASE-OUT ANNOUNCEMENT? **

by Judith Curry

<http://www.carbonbrief.org/in-depth-uk-pledges-coal-phase-out-by-2025-but-uncertainty-remains>

O. ENVIRONMENTALISM VERSUS SCIENCE**

Posted on [November 24, 2015](#) | [43 comments](#)

Words of wisdom from Hobart, Tasmania.

Judith Curry

<http://judithcurry.com/2015/11/24/environmentalism-versus-science/#more-20497>

P. A BUOY-ONLY SEA SURFACE TEMPERATURE RECORD**

Posted on [November 22, 2015](#) | [338 comments](#)

by Zeke Hausfather and Kevin Cowtan

A buoy-only sea surface temperature record supports NOAA’s adjustments.

<http://judithcurry.com/2015/11/22/a-buoy-only-sea-surface-temperature-record/#more-20470>

Q. INCREASED CARBON DIOXIDE ENHANCES PLANKTON GROWTH, OPPOSITE OF WHAT WAS EXPECTED**

Science study reports that coccolithophores' abundance has increased by an order of magnitude since 1960s, significantly changing ocean garden From the BIGELOW LABORATORY FOR OCEAN SCIENCES Coccolithophores—tiny calcifying plants that are part of the foundation of the marine food web—have been increasing in relative abundance in the North Atlantic over the last 45 years, as...

<http://wattsupwiththat.com/2015/11/27/increased-carbon-dioxide-enhances-plankton-growth-opposite-of-what-was-expected/>

R. SIMILARITIES TO JIM JONES AND THE CULT OF CLIMATE CHANGE**

Guest opinion by Arkady Bukh, Esq

The apocalypse of an alleged climate change shares many of Jones' cult-like qualities. Jim Jones, the People's Temple leader, led over 900 persons to commit suicide 32 years ago. Jones was charismatic and knowledgeable of both Scriptures and human behavior. After the mass murder/suicide and the murder of U.S. Congressman,...

<http://wattsupwiththat.com/2015/11/27/similarities-to-jim-jones-and-the-cult-of-climate-change/>

S. PETITION CONGRESS TO INVESTIGATE USGS POLAR BEAR RESEARCH METHODS**

More Research Finds Polar Bears' Condition Unaffected by Reduced Summer Sea Ice. Guest essay by Jim Steele Director emeritus Sierra Nevada Field Campus, San Francisco State University and author of Landscapes & Cycles: An Environmentalist's Journey to Climate Skepticism Reasons to Petition Congress to Investigate USGS' Dubious Polar Bear Claims Sign Petition Here: Although the...

<http://wattsupwiththat.com/2015/11/26/petition-congress-to-investigate-usgs-polar-bear-research-methods/>

T. 'FACT' CHECKING THE U.S. PRESIDENTIAL CANDIDATES**

Posted on [November 27, 2015](#) | [15 comments](#)

by Judith Curry

So, which of the U.S. Presidential candidates are 'flunking' climate science?

<http://judithcurry.com/2015/11/27/fact-checking-the-u-s-presidential-candidates/#more-20495>

U. CLIMATE HERETIC. PART II**

Posted on [November 26, 2015](#) | [277 comments](#)

by Judith Curry

David Rose has published an interview with me in the Spectator.

<http://judithcurry.com/2015/11/26/climate-heretic-part-ii/#more-20515>

V. THE RISE AND FALL OF CENTRAL ENGLAND TEMPERATURE**

Posted on [November 25, 2015](#) | [115 comments](#)

by Tony Brown

Over the last 15 years interesting things have been happening at CET-the world's longest instrumental record, dating to 1660.

<http://judithcurry.com/2015/11/25/the-rise-and-fall-of-central-england-temperature/#more-20500>

W. YOUR COMPLETE GUIDE TO THE CLIMATE DEBATE**

At the Paris conference, expect an agreement that is sufficiently vague and noncommittal for all countries to claim victory.

By

Matt Ridley And Benny Peiser, Nov. 27, 2015 3:41 p.m. ET

In February President Obama said, a little carelessly, that climate change is a greater threat than terrorism. Next week he will be in Paris, a city terrorized yet again by mass murderers, for a summit with other world leaders on climate change, not terrorism. What precisely makes these world leaders so convinced that climate change is a more urgent and massive threat than the incessant rampages of Islamist violence?

It cannot be what is happening to world temperatures, because they have gone up only very slowly, less than half as fast as the scientific consensus predicted in 1990 when the global-warming scare began in earnest. Even with this year's El Niño-boosted warmth threatening to break records, the world is barely half a degree Celsius (0.9 degrees Fahrenheit) warmer than it was about 35 years ago. Also, it is increasingly clear that the planet was significantly warmer than today several times during the past 10,000 years.

Nor can it be the consequences of this recent slight temperature increase that worries world leaders. On a global scale, as scientists keep confirming, there has been no increase in frequency or intensity of storms, floods or droughts, while deaths attributed to such natural disasters have never been fewer, thanks to modern technology and infrastructure. Arctic sea ice has recently melted more in summer than it used to in the 1980s, but Antarctic sea ice has increased, and Antarctica is gaining land-based ice, according to a new [study](#) by NASA scientists published in the Journal of Glaciology. Sea level continues its centuries-long slow rise—about a foot a century—with no sign of recent acceleration.

Perhaps it is the predictions that worry the world leaders. Here, we are often told by journalists that the science is “settled” and there is no debate. But scientists disagree: They say there is great uncertainty, and they reflected this uncertainty in their fifth and latest assessment for the United Nations Intergovernmental Panel on Climate Change (IPCC). It projects that temperatures are likely to be anything from 1.5 to 4.5 degrees Celsius (2.7 to 8.1 degrees Fahrenheit) warmer by the latter part of the century—that is, anything from mildly beneficial to significantly harmful.

As for the impact of that future warming, a new [study](#) by a leading climate economist, Richard Tol of the University of Sussex, concludes that warming may well bring gains, because carbon dioxide causes crops and wild ecosystems to grow greener and more drought-resistant. In the long run, the negatives may outweigh these benefits, says Mr. Tol, but “the impact of climate change does not significantly deviate from zero until 3.5°C warming.”

Mr. Tol's study summarizes the effect we are to expect during this century: “The welfare change caused by climate change is equivalent to the welfare change caused by an income change of a few percent. That is, a century of climate change is about as good/bad for welfare as a year of economic growth. Statements that climate change is the biggest problem of humankind are unfounded: We can readily think of bigger problems.” No justification for prioritizing climate change over terrorism there.

The latest science on the “sensitivity” of the world's temperature to a doubling of carbon-dioxide levels (from 0.03% of the air to 0.06%) is also reassuring. Several recent peer-reviewed studies of climate sensitivity based on actual observations, including one published in 2013 in [Nature Geoscience](#) with 14 mainstream IPCC authors, conclude that this key measure is much lower—about 30%-50% lower—than the climate models are generally assuming.

A key [study](#) published in the Journal of Climate this year by Bjorn Stevens of the Max Planck Institute for Meteorology in Hamburg, Germany, found that the cooling impact of sulfate emissions has held back global warming less than thought till now, again implying less sensitivity. So the high end of the IPCC range is looking even more implausible in theory and practice. When politicians intone that, despite the slow warming so far, “two degrees” of warming is inevitable and imminent, remember they are using high estimates of climate sensitivity.

Yes, but if there is even a tiny chance of catastrophe, should the world not strain every sinew to head it off? Better to decarbonize the world economy and find it was unnecessary than to continue using fossil fuels and regret it. If decarbonization were easy, then sure, this would make sense. But the experience of the last three decades is that there is no energy technology remotely ready to take over from fossil fuels on the scale needed and at a price the public is willing to pay.

Solar power is cheaper than it was, but even if solar panels were free, the land, infrastructure, maintenance and backup power (for nighttime and cloudy days) would still make it more expensive than gas-fired electricity. Solar provides about 0.5% of the energy generated world-wide. Wind has expanded hugely, but at massive cost, yet still supplies a little more than 1% of all energy generated globally. Nuclear is in slow retreat, and its cost stubbornly refuses to fall. Technological breakthroughs in the production of gas and oil from shale have outpaced the development of low-carbon energy and made it even less competitive.

Meanwhile, there are a billion people with no grid electricity whose lives could be radically improved—and whose ability to cope with the effects of weather and climate change could be greatly enhanced—with the access to the concentrated power of coal, gas or oil that the rich world enjoys. Aid for such projects has already been constrained by Western institutions in the interest of not putting the climate at risk. So climate policy is hurting the poor.

To put it bluntly, climate change and its likely impact are proving slower and less harmful than we feared, while decarbonization of the economy is proving more painful and costly than we hoped. The mood in Paris will be one of furious pessimism among the well-funded NGOs that will attend the summit in large numbers: Decarbonization, on which they have set their hearts, is not happening, and they dare not mention the reassuring news from science lest it threaten their budgets.

Casting around for somebody to blame, they have fastened on foot-dragging fossil-fuel companies and those who make skeptical observations, however well-founded, about the likelihood of dangerous climate change. Scientific skeptics are now routinely censored, or threatened with prosecution. One recent [survey](#) by Rasmussen Reports shows that 27% of Democrats in the U.S. are in favor of prosecuting climate skeptics. This is the mentality of religious fanaticism, not scientific debate.

So what will emerge from Paris, when thousands of government officials gather from Nov. 30 to Dec. 11 to agree on a new U.N. climate deal to replace the Kyoto Protocol, which expires in 2020? Expect an agreement that is sufficiently vague and noncommittal for all countries to sign and claim victory. Such an agreement will also have to camouflage deep and unbridgeable divisions while ensuring that all countries are liberated from legally binding targets a la Kyoto.

The political climate is conducive to such an ineffectual agreement. Concerns about the economy, terrorism and international security have been overshadowing the climate agenda for years. The fact that global warming has slowed significantly over the past two decades has reduced public concern and political pressure in most countries. It has also given governments valuable time to kick painful decisions down the road.

The next 10-15 years will show whether the global-warming slowdown continues or whether a strong warming trend terminates the current pause for good. The Paris summit is likely to agree to a review process that reassesses global temperatures and carbon-dioxide emissions every five years. If the climate is less sensitive to carbon-dioxide emissions than climate models assume, the new accord should

allow for the possibility of carbon-dioxide pledges to be relaxed in line with empirical observations and better scientific understanding.

Concerned about the loss of industrial competitiveness, the Obama administration is demanding an international transparency-and-review mechanism that can verify whether voluntary pledges are met by all countries. Developing countries, however, oppose any outside body reviewing their energy and industrial activities and carbon-dioxide emissions on the grounds that such efforts would violate their sovereignty.

They are also resisting attempts by the U.S. and the European Union to end the legal distinction (the so-called firewall) between developing and developed nations. China, India and the “Like-Minded Developing Countries” group are countering Western pressure by demanding a legally binding compensation package of \$100 billion a year of dedicated climate funds, as promised by President Obama at the U.N. climate conference in Copenhagen in 2009.

However, developing nations are only too aware that the \$100 billion per annum funding pledge is never going to materialize, not least because the U.S. Congress would never agree to such an astronomical wealth transfer. This failure to deliver is inevitable, but it will give developing nations the perfect excuse not to comply with their own national pledges.

Both India and China continue to build new coal-fired power stations. China’s coal consumption is growing at 2.6% a year, India’s at 5%, which is why coal was the fastest-growing fossil fuel last year. China has pledged to reduce energy and carbon intensity, but that is another way of saying it will increase energy efficiency—it doesn’t mean reducing use.

For the EU, on the other hand, a voluntary climate agreement would finally allow member states to abandon unilateral decarbonization policies that have seriously undermined Europe’s competitiveness. The EU has offered to cut carbon-dioxide emissions by 40% below the 1990 level by 2030. However, this pledge is conditional on all nations represented at the Paris summit adopting legally binding carbon-emissions targets similar to and as a carry-over of the Kyoto Protocol.

According to the EU’s key [demand](#), the Paris Protocol must deliver “legally binding mitigation commitments that put the world on track toward achieving the below 2°C objective. . . . Mitigation commitments under the Protocol should be equally legally binding on all Parties.” The chances of such an agreement are close to zero. If there are no legally binding carbon targets agreed to in Paris, the EU will be unlikely to make its own conditional pledges legally binding.

Any climate agreement should be flexible enough so that voluntary pledges can be adjusted over the next couple of decades depending on what global temperatures do. The best we can hope for is a toothless agreement that will satisfy most governments yet allow them to pay lip-service to action. In all likelihood, that’s exactly what we can expect to get in Paris.

Mr. Ridley is a columnist for the Times (U.K.) and a member of the House of Lords; he has an interest in coal mining on his family’s land. Mr. Peiser is the director of the Global Warming Policy Forum
<http://www.wsj.com/articles/your-complete-guide-to-the-climate-debate-1448656890>

Regards,
George