

ENVIRONMENTAL ENGINEERING

NEWSLETTER

25 MAY. 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 editor alone and do not represent the positions of the Environmental Engineering Division or the ASME.

George Holliday

This week's edition includes:

ENVIRONMENT: A. MAINSTREAM MEDIA FAILS TO FACT CHECK A CLIMATE-CHANGE STORY...ONCE AGAIN

Guest Post by Bob Tisdale Someday, probably not too soon, the mainstream media will come to realize something important. They need to perform a few simple fact checks on climate change-related claims in their articles. When readily available data falsify a claim made in the story, the entire article is undermined and it falls into...

<http://wattsupwiththat.com/2015/05/05/mainstream-media-fails-to-fact-check-a-climate-change-storyonce-again/>

B. CLIMATE CHANGE – NEW AND FAILED THE-END-IS-NIGH PREDICTIONS

Guest Post by Bob Tisdale

Michael Bastasch at TheDailyCaller recently penned an amusing article titled the 25 Years of Predicting The Global Warming ‘Tipping Point’. It’s an enjoyable read, beginning: For decades now, those concerned about global warming have been predicting the so-called “tipping point” — the point beyond which it’ll be too late to...

<http://wattsupwiththat.com/2015/05/05/climate-change-new-and-failed-the-end-is-nigh-predictions/>

C. TURNING OUR BACKS ON THE POOR? CARTOON BY JOSH

Josh writes: It is extraordinary to think that Bjorn Lomborg first published The Sceptical Environmentalist 17 years ago in 1998 – that’s as long as The Pause! However there has been no pause in some people ignoring his message as we have, rather depressingly, read on BishopHill over the weekend – see here and here. It...

<http://wattsupwiththat.com/2015/05/04/turning-our-backs-on-the-poor-cartoon-by-josh/>

D. GUEST ESSAY BY ERIC WORRALL UN CLIMATE CHIEF

Christiana Figueres appears to be doing the rounds, attempting to drum up support for meaningful Paris climate pledges – which currently fall far short of what climate apparatchiks wanted. The latest stop on her tour is a visit to Australia. According to the Guardian; The UN climate...

<http://wattsupwiththat.com/2015/05/04/un-frantic-climate-marketing-effort/>

E. A PREDICTION COMING TRUE?

Guest essay by David Archibald Pierre Gosselin of NoTricksZone has a post by Mike Brakey on NOAA adjustments of the temperature record of Lewiston-Auburn, Maine. In short, the NOAA are shameless liars. Their cooling of the past to keep the global warming meme alive reminds me of the old Soviet joke – the future is...

<http://wattsupwiththat.com/2015/05/04/a-prediction-coming-true/>

F. OIL LOBBY LAUNCHES ADS AGAINST EPA OZONE RULE

The oil industry is launching a multimedia advertising campaign tomorrow in opposition to the Obama administration's attempt to restrict allowable concentrations of ozone pollution.

The campaign from the American Petroleum Institute (API) reinforces the industry's belief that the current ozone standards, set in 2008, are sufficient to protect public health.

The [ads](#) will appear in print, radio, TV and the Web starting Friday, the API said.

The battle over ozone is a high-stakes fight for oil and other industries that produce or use fossil fuels. Ozone, the main component of smog, is a byproduct of pollutants from fossil fuels, and the industry fears states would curb fossil fuel use in order to comply.

“Even as we drive more, use more energy and grow our economy, air pollution is dropping. Ozone levels are down 18 percent,” a voiceover in the TV ad says. “But bureaucrats want to change the current rules safeguarding public health.”

The ad cites a controversial industry conclusion that the Environmental Protection Agency's ozone proposal would be the most expensive regulation ever, and calls it unnecessary.

“Don't mess with success,” the oil group's ad says. “Keep the current strict ozone standards.”

The EPA proposed in November to reduce the allowable ozone level to between 65 and 70 parts per billion, down from the current 75 parts per billion.

The agency and its supporters say reducing smog would improve public health because ozone contributes to respiratory illnesses.

A study commissioned by the National Association of Manufacturers, which the API cited, estimated that the rule could cost up to \$1.1 trillion for compliance. The EPA, in contrast, says it would cost up to \$16.6 billion, and the benefits could reach \$38 billion.

Howard Feldman, API's senior director of regulatory affairs, said the cost of the ad buy will be “significant.”

API spokesman Carlton Carroll said the ads will focus on the Washington, D.C., area, in order to influence the Obama administration. He declined to be more specific in the campaign's cost and said it has no end date in mind for it.

The EPA plans to make a final determination on potential ozone changes by Oct. 1, a date it agreed to in a court settlement.

Roger Zygmunt

<http://thehill.com/policy/finance/242099-oil-lobby-launches-ads-against-epa-ozone-rule>

HEALTH: A. YELLOW FEVER - AMERICAS (06): BRAZIL (PARANA, MATO GROSSO DO SUL) REQUEST FOR INFORMATION

A ProMED-mail post

<<http://www.promedmail.org>>

ProMED-mail is a program of the

International Society for Infectious Diseases <<http://www.isid.org>>

Date: Tue 5 May 2015

Source: Tribuna do Norte (TN) Online [in Portuguese, trans. Mod.JW, edited]

<<http://tnonline.com.br/noticias/arapongas/46,331442,05,05,araponguense-morreu-de-febre-amarela-e-nao-dengue-hemorragica.shtml>>

The State Department of Health (SESA) discarded on [Tue 5 May 2015] that a 31-year-old resident of Arapongas [Parana state], died a victim of hemorrhagic dengue. According to tests done by the State Central Laboratory (LACEN) the cause of death was yellow fever.

[The affected individual], brother of the Arapongas government secretary, traveled in late March [2015] to Mato Grosso do Sul on a fishing trip. The symptoms began on 23 Mar [2015] and he sought treatment while still in Mato Grosso do Sul. On return to Arapongas on 27 Mar [2015], he was hospitalized and died on 31 Mar [2015]. The initial diagnosis was leptospirosis and then it was changed to dengue hemorrhagic fever. LACEN dismissed these 2 suspected etiologies and confirmed yellow fever.

Communicated by:

ProMED-PORT

<promed-port@promedmail.org>

[Where in Mato Grosso do Sul had this individual traveled? If he went fishing initially, transmission may have been acquired in a sylvatic cycle. Was there an epidemiological investigation that has been able to identify the probable location of infection, if the cycle involved was, in fact, sylvan?

In theory, the patient arrived in Arapongas on the last day of the viremic period (which, as a rule, begins 1-2 days before the onset of symptoms and extends to 3-5 days). Were actions taken in order to block possible introduction and spread of yellow fever virus in Arapongas or in localities in Mato Grosso do Sul where his travel itinerary took him on the way to Arapongas?

Let's watch this - Mod.RNA.

Yellow fever (YF) virus is endemic in forested areas in many parts of Brazil. There are 2 cycles of yellow fever virus transmission -- urban and sylvan (forest), which is why Mod.RNA asks specifically where the infection was acquired. The concern is that a person infected in the forest (sylvan cycle) could come to a locality where *Aedes aegypti* vectors are abundant enough to feed on the viremic individual and initiate ongoing urban transmission. This is a real concern, and explains why Mod RNA asks if an epidemiological barrier was set up in Arapongas or if the patient's route of travel from Mato Grosso do Sul was identified. This mosquito vector is abundant enough across Brazil to transmit dengue and chikungunya viruses, and potentially YF virus, to many people annually. Fortunately, a large proportion of the population in Brazil is vaccinated against YF. However, no mention is made of the YF vaccination status of the population in Arapongas.

C. SAFETY: OFFSHORE OIL RIG ACCIDENT KILLS 2; OUTPUT NORMAL – PEMEX

Adds comment from platform operator, Grupo Salinas plus details on injured workers)

May 5 (Reuters) - Mexican oil company Pemex said an accident on Tuesday has left an offshore maintenance rig in the southern Bay of Campeche listing, killing two workers, but has not affected crude production.

Pemex said the Troll Solution rig, which was contracted to operate in Pemex's Abkatun-Pol-Chuc shallow water oil field, was positioning itself to carry out maintenance on wells linked to the Caan Alf platform.

It earlier reported that two workers had suffered minor injuries.

"The accident on the Troll Solution platform does not affect production because it is a mobile platform dedicated to well maintenance," Pemex said in a Tweet.

Oilfield services firm Typhoon Offshore, owned by Mexican conglomerate Grupo Salinas and operator of the platform, said in a statement that the platform had been completely evacuated and that 10 workers were injured and receiving medical care.

Local media put the injured toll at 28 workers.

A Grupo Salinas spokesperson added that there was no oil or gas spilled as a nearby well was closed prior to the incident.

Photos circulated on social media showed dark streaks in the water stretching a few hundred meters (yards) from what appeared to be the platform, which was tilting steeply.

A Pemex spokesman also said there had been no crude spill but added that the platform probably contained diesel. "That could have fallen into the water," he added.

The Caan field where the accident occurred produced nearly 12,000 barrels per day (bpd) of crude in March, according to Pemex data. That in turn is part of the Abkatun-Pol-Chuc area, which produced almost 309,000 bpd in March.

Pemex said the platform was continuing to lean into the sea, but another spokesman for the company added that the accident had not "compromised" any wells.

The incident was the second platform mishap in barely a month to hit the Mexican oil giant, which made a loss of more than \$6 billion in the first quarter of 2015.

On April 1, at least four people died at a fire in a separate platform in the Abkatun Pol Chuc complex, which temporarily dented production in the area.

Around 70 percent of Pemex's [crude oil](#) output comes from the southern Gulf of Mexico.

Pemex said around 100 workers were evacuated. (Reporting by Mexico Newsroom; Editing by Marguerita Choy, [Bernard Orr](#))

Roger Zygmunt

D. BURST PIPELINE SPILLS 21,000 GALLONS OF OIL INTO OCEAN OFF CALIFORNIA

GOLETA, Calif. – An estimated 21,000 gallons (500 Bbl) of crude oil spilled into the ocean from a broken pipeline just off the central California coast before it was shut off on Tuesday, creating a spill stretching about 4 miles along the beach, the U.S. Coast Guard said.

Santa Barbara County health officials have shut down Refugio State Beach, the central site of the spill, though many had abandoned the site already because of the foul smell.

That smell brought county firefighters to the beach earlier in the day to discover the spill.

"They found about a half-mile slick of dark, black crude oil in the ocean," fire Capt. Dave Zaniboni said.

They traced the oil to the onshore pipeline that spilled into a culvert that ran under the U.S. 101 freeway and through a storm drain into the ocean.

The pipeline had been shut off about three hours later, but the spill had stretched along 4 miles of beach and 50 yards out into the water, said Coast Guard Petty Officer Andrea Anderson.

The scenic stretch of coastline about 20 miles northwest of the pricey real estate of Santa Barbara is dotted with state-run beaches that are popular with campers, and the spill comes just a few days before the Memorial Day weekend and subsequent summer camping season begin.

The 24-inch pipeline is owned by Plains All American Pipeline, which said it shut down the flow of oil and the culvert carrying the oil to the ocean was blocked.

"Plains deeply regrets this release has occurred and is making every effort to limit its environmental impact," the company said in a statement.

The stretch of coastline is also home to many oil rigs and drilling operations, and small amounts of tar and seepage show up on beaches, but in much smaller amounts.

The Coast Guard, county emergency officials and state parks officials were cleaning up the spill. Boats from the nonprofit collective Clean Seas also were providing help but were having trouble because so much of the oil was so close to the shore, Coast Guard spokeswoman Jennifer Williams said. About 850 gallons of oil have been recovered from the water, Williams said.

There was no immediate estimate of how long the cleanup might take. The Coast Guard said a Wednesday morning flyover would allow them to get a better sense of the damage.

Overnight winds are expected to push the spill down the coast and closer to Santa Barbara.

The Santa Barbara-based Environmental Defense Center said such a spill was inevitable with coastal oil development, but still unwelcome.

"To see this level of spill into such a sensitive and treasured environment is devastating to watch," the EDC said in a statement. The group expressed special worry for the many species of whale that migrate through the area.

Sierra Club California Director Kathryn Phillips said, "Every time we hear about an oil spill, we hold our breath and hope it won't get worse."

She said in her statement that the spill was especially troubling because no one caught it "until several barrels of oil had already tumbled into the ocean."

The spill came on the same stretch of coast as a 1969 oil spill that was the largest ever in U.S. waters at the time and is credited for giving rise to the modern American environmental movement. Several hundred thousand gallons from a blowout on an oil platform were spilled, and thousands of sea birds were killed along with many marine mammals.

It was later surpassed in size by 1989's Exxon Valdez spill off Alaska and the 2010 Gulf oil spill off Louisiana.

<http://www.foxnews.com/us/2015/05/20/pipeline-bursts-spills-oil-into-ocean-off-california-coast/>

COMMENTS

A. THE WEEK THAT WAS: 2015-05-16 (MAY 16, 2015)

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

Science and Scientism: One of the chosen ones for the political witch hunt, Steven Hayward wrote a short essay differentiating between the practice of science, which can be described as objectively examining empirical evidence to test a hypothesis, and scientism, which can have

many of the trappings of science, but put to other ends. Hayward begins by discussing a 1952 book by Austrian economist Friedrich August von Hayek. According to Hayward, Hayek “concludes that science of all kinds has a tendency to become what he calls ‘scientism,’ in which the claims of scientific superiority amount to yet another destructive and dogmatic authoritarian ideology.

Hayward discusses how certain politicians and some scientists use scientism to further their own ends. This use of scientism is becoming particularly obvious in the run-up for the great conference of parties (COP) sponsored by the UN Framework Convention on Climate Change (UNFCCC) in Paris from November 30 to December 11, 2015. We can expect more “scientism” from Western governments and once distinguished scientific organizations that are now part of the Climate Establishment. See link under Questioning the Orthodoxy.

Climate and Health and Ignorance? As discussed in the April 18 TWTW, The US Global Change Research Program (USGCRP) released a draft for public review of its upcoming Climate & Health Assessment. As previously stated, the entire document has significant issues.

Even though the US government spent over \$35 billion on climate science, research from fiscal year 1993 to FY 2013, federal agencies have failed to create a global climate model, verified and validated, for predicting future temperatures. Without a valid climate model, temperature forecasts are highly speculative. Thus, the core of the entire USGCRP Climate and Health Assessment is speculative. Labeling such statements with terms such as Very Likely or High Confidence is pure fiction. There is no objective method to assess likelihood or confidence. Further, there is no indication that government agencies are attempting to create a valid climate model that has predictive power (skill).

The most distinctive feature of the chapter on vector borne diseases (chapter 4) is what is missing: how has the US addressed infectious diseases in the past? The chapter details the spread of diseases such as Lyme disease (borne by ticks) and West Nile virus & Malaria (borne by mosquitoes). Lyme disease, the major tick borne disease was subject to surveillance in 1991, and West Nile virus, the major mosquito borne disease, was first reported in 1999. Both are recent diseases in the US. Malaria was endemic in low lying land in colonial days. In fact, an 1882 map, not mentioned in USGCRP report, shows that, except for the Appalachian Mountains and northern New England, malaria was common east of the Rocky Mountains.

Further, the USGCRP report states that there were 36,307 reported cases of Lyme disease, 2,469 reported cases of West Nile virus, and 1,594 reported cases of Malaria in 2013. For individuals taken ill, the diseases are significant, but compared to the past, the numbers of those infected by vector borne diseases are insignificant in a population exceeding 317 million.

For example, the 1999 Statistical Abstract of the United States, shows that the Malaria rate in 1920 was 173 per 100,000 for a population of 106 million, or about 183,400 cases. This works out to be about 0.17% of the population in 1920 and 0.0005% of the population in 2013.

Similarly, the great killer diseases of the past in the United States have been reduced to almost insignificance. These diseases include yellow fever, typhoid, and dysentery. Attempts by the USGCSP to relate infectious diseases, vector borne or not, to climate change fell flat. One of the great triumphs of Western Civilization has been the ability to address these diseases through research, public health measures, and wealth.

What is particularly disturbing about the USGCSP report is that the lead authors of the chapter on vector borne diseases are from the Centers for Disease Control and Prevention (CDC). One would expect that members of the CDC would know of the great improvements to American

health and the control and prevention of disease during the 20th century, when the climate warmed. See links under Defending the Orthodoxy.

Science Journalism: In discussing what he considers to be the sea level acceleration trap, David Whitehouse of the Global Warming Policy Foundation observes that Pacific atolls are not sinking beneath the waves as many had claimed they would. He further observes that many claims of sea level rise are within the range of error of the instruments used for measurement', thus, cannot be considered a trend. Yet, few science journalists report such an observation. Whitehead concludes: "No financial journalist would not look at the figures behind a headline. Very few covering science ever do, and many would not even think to ask!" See links under Challenging the Orthodoxy.

97% Myth: In an article in the Financial Post, Ross McKittrick, who with Steve McIntyre demolished Mr. Mann's hockey-stick, exposes the 97% myth, discussed in last week's TWTW. See link under Challenging the Orthodoxy.

Antarctic Ice: An article on the Science 2.0 web site states that gravity data from the GRACE satellites experiment show that the west Antarctic ice sheet is melting faster than the east Antarctic ice sheet is accumulating ice. This finding brings up several issues about Antarctic Ice that some readers may find confusing.

As the article states, Antarctica has two major ice sheets. The big one is in the east and is increasing; the small one is in the west and is decreasing. The article does not discuss the surrounding sea ice (increasing). The measurements are from the GRACE satellites, which may have calibration issues. It is difficult to draw a conclusion from the apparently conflicting data, which includes mass, volume, and area, except to say that the decline in west is probably due to influences other than increases in CO₂. See links under Changing Cryosphere.

UK Election: For those who follow political polls, the UK election was a surprise –the current major party won an outright majority and it does not have to form a coalition government. The Global Warming Policy Forum speculates what this means for UK energy policy. Columnist Janet Daley made an interesting observation about why the polls were so wrong –many voters do not wish to express their views when the views are contrary to those who consider themselves to be superior. See links under Energy Issues –Non-US, The Political Games Continue –Election, and Article # 5

Greenhouse Effect: Some of those who think the reports of UN Intergovernmental Panel on Climate Change (IPCC) inadequately describe the natural influences on climate, assert the Greenhouse Effect does not exist. We disagree. This TWTW will describe areas of agreement with those who believe the greenhouse effect does not exist. A subsequent TWTW will describe areas of disagreement. The following reflects the views of the author, and should not be construed to reflect the views of others.

This analysis is based on a review of Climate Change Reconsidered II –Physical Science by Martin Hertzberg, published in Energy & Environment, Volume 26, No.3, 2015. TWTW was unable to find a web link to that review. Another review by the distinguished explosives expert with a Ph.D. in Physical Chemistry from Stanford, who is also a meteorologist, can be found on

the web site of Principia Scientific at <http://www.principia-scientific.org/evaluation-of-climate-change-reconsidered-ii-physical-science.html>

No effort was made to compare the two reviews.

Some of the areas of agreement are:

The models used by the IPCC and various governments have greatly overestimated warming, and should not be used for policy.

Ice cores from Vostok (Antarctica) show changes in temperatures precede, not follow, changes in CO₂. There is a parallelism, but Al Gore got it wrong.

The IPCC fails to adequately treat “solar forcing” caused by variations in solar activity. The current “quiet Sun” may result in a cooling, which is being predicted by some solar physicists.

The observed changes in the Cryosphere are within the range of natural variability. So is the average rate of sea level rise. The data does not support claims of increasing precipitation, storminess, extreme weather events, droughts, etc.

The IPCC models do not adequately account for clouds, water vapor, precipitation, ocean currents, sea ice, and permafrost.

Hertzberg goes a bit beyond the NIPCC report by stating that it would be absurd to use the climate models for public policy, to which this author agrees.

The next TWTW, will discuss other areas of agreement as well as areas of disagreement.

Number of the Week: Six years; \$6 Billion. In 2008, the federal government awarded Shell Oil leases to drill for oil and natural gas in the Chukchi Sea off northwest Alaska. According to the *Wall Street Journal*, Shell has spent six years and \$6 billion waiting to be able to enforce the contracts. Why should any private company trust a government that refuses to honor its contracts? See Article #4

<http://www.sepp.org/twtwfiles/2015/TWTW%205-16-15.pdf>

B. BLACKOUT TALE OF PO

Debating Mike Bloomberg on a coal plant shutdown.

April 17, 2015 6:54 p.m. ET

[Michael Bloomberg](#) takes us to task in a nearby letter for an editorial on his anticarbon enthusiasms. We stand by our critique, and we appreciate the former New York mayor giving us an opportunity to elaborate on the closure of a coal-fired power plant in Washington and its consequences.

From Harry Truman into 2012, the Potomac River Generating Station in Alexandria, Virginia delivered electricity directly to metro D.C., Georgetown and Foggy Bottom. Until recently, the only other sources were two transmission lines that imported outside power from the regional grid operator PJM Interconnection. When the “Po River” plant was a target of the green left over its last two decades of operation, it was run as a redundant “N minus 1” failsafe that supported PJM during periods of peak demand or in case the lines went out of service.

Former New York City Mayor Michael Bloomberg:

In 2005 the Virginia Department of Environmental Quality and later the Environmental Protection Agency cited the plant for violating air-quality standards. In August 2005 Po River’s then owner, Mirant, decided it would be cheaper to shut down than comply with these demands, and idled all but one unit.

The same day the District of Columbia public service commission filed an emergency appeal under a rarely used 1935 law meant for wartime that gives the Department of Energy the authority to order a power plant to restart. DoE then agreed that dropping to only two sources from three would be precarious.

The DoE thus ruled Po Station must be preserved “to compensate for the sudden failure” of both lines at once and the “reasonable possibility an outage will occur that would cause a blackout.” If Washington went dark for merely 24 hours back then, said the Energy Department, the Blue Plains wastewater treatment plant “will have no option but to release untreated sewage directly into the Potomac River, which would result in a significant adverse impact to human health, aquatic wildlife and other environmental resources.”

Once Po Station came back on line, the problem for Mirant was that it was required to run at the direction of DoE and PJM—while simultaneously being fined by Virginia and the EPA for breaking clean-air laws. Only after two new transmission lines were finished that connected Washington proper to southwestern Pennsylvania and Maryland, in 2012, could Mirant finally retire Po Station to end the regulatory agony. Mr. Bloomberg nonetheless claimed a scalp for his “beyond coal” campaign, and his money provided political cover for this schizophrenic government coercion.

No one can prove a counterfactual, but our point was that if the Po River plant had remained in limited operation, it may have helped mitigate the recent blackout. We never argued shutting it down caused the problem.

Mr. Bloomberg says there was plenty of electricity available, but this is a non sequitur. The blackout was the result of a grid failure far from Washington. That power could not travel to D.C. on the Po River-replacement transmission lines. If it could, then no blackout. However, if the coal-fired power plant that used to be plugged into downtown—a failsafe so important to **preventing blackouts that the feds took it over—had been available to temporarily ramp up**, maybe the grid disruption wouldn’t have interrupted reliability for so long.

The larger point is that the political rush to close down coal plants around the country is going to have harmful consequences for electric-grid reliability. There is no carbon-free free lunch.

<http://www.wsj.com/articles/blackout-tale-of-po-1429311253>

C. QUANTIFYING THE ANTHROPOGENIC CONTRIBUTION TO ATMOSPHERIC CO₂

Posted on [May 6, 2015](#) | [47 comments](#)

by Fred Haynie

I conclude that, the IPCC’s model assumptions that long-term natural net rate of accumulation is constant and anthropogenic emission rates are the only contributor to total long-term accumulation of atmospheric CO₂, is false

<http://judithcurry.com/2015/05/06/quantifying-the-anthropogenic-contribution-to-atmospheric-co2/#more-18635>

D. IS FEDERAL FUNDING BIASING CLIMATE RESEARCH?

Posted on [May 6, 2015](#) | [171 comments](#)

by Judith Curry

Does biased funding skew research in a preferred direction, one that supports an agency mission, policy or paradigm?

<http://judithcurry.com/2015/05/06/is-federal-funding-biasing-climate-research/#more-18616>

E. FOLLOW-UP QUESTIONS RE MY RECENT HOUSE TESTIMONY

Posted on [May 5, 2015](#) | [258 comments](#)

by Judith Curry

Some interesting follow-up questions from the House Committee on Science, Space and Technology, regarding my recent Congressional testimony.

<http://judithcurry.com/2015/05/05/follow-up-questions-re-my-recent-house-testimony/#more-18620>

F. WHAT ARE THE MOST CONTROVERSIAL POINTS IN CLIMATE SCIENCE?

Posted on [May 4, 2015](#) | [399 comments](#)

by Judith Curry

And how might these controversies be resolved?

<http://judithcurry.com/2015/05/04/what-are-the-most-controversial-points-in-climate-science/#more-18607>

G. UN DEMANDS AUSTRALIA STOP MINING COAL

Guest essay by Eric Worrall

UN climate chief Christiana Figueres has stated that Australia must stop mining coal. According to the Sydney Morning Herald; Speaking at a conference in Melbourne on Wednesday, Christiana Figueres drew a parallel between Australia and the oil kingdom [Saudi Arabia] as countries that would need to diversify their economies as...

<http://wattsupwiththat.com/2015/05/07/un-demands-australia-stop-mining-coal/>

H. NOAA ANNOUNCEMENT: CO2 CONCENTRATION SURPASSES 400PPM “FOR THE FIRST MONTH SINCE MEASUREMENTS BEGAN”

Guest Post by Bob Tisdale

Yesterday, in the press release Greenhouse gas benchmark reached, NOAA announced: Global carbon dioxide concentrations surpass 400 parts per million for the first month since measurements began. The press release begins: For the first time since we began tracking carbon dioxide in the global atmosphere, the monthly global average concentration...

<http://wattsupwiththat.com/2015/05/07/noaa-announcement-co2-concentration-surpasses-400ppm-for-the-first-month-since-measurements-began/>

Editor’s Note: I continue to believe a rise in the atmospheric CO2 to about 1200 ppm would increase our ability to grow food for future generations, without any appeasable global temperature rise. GHH

I. GLOBAL TEMPERATURE DOWN IN APRIL, JUST 7/100THS OF A DEGREE ABOVE NORMAL

From Dr. Roy Spencer and from UAH, I’m a bit remiss in posting this due to travel, but better late than never – Anthony UAH V6.0 Global Temperature Update for April, 2015: +0.07 deg. C

NOTE: This is the first monthly update with our new Version 6.0 dataset. Differences versus the old Version 5.6 dataset...

<http://wattsupwiththat.com/2015/05/06/global-temperature-down-in-april-just-7100ths-of-a-degree-above-normal/>

J. NEWSBYTES: UK CLIMATE MINISTER VOTED OUT, GREEN LIBDEMS WIPED OUT IN ELECTION

David Cameron wins majority for Conservatives in Election 2015 victory Britain's Climate Change Secretary Ed Davey has lost his seat to the Conservative party, in an election night that has seen the Liberal Democrats presence in the House of Commons decimated. —The Mirror, 8 May 2015 David Cameron has won the general election with an...

<http://wattsupwiththat.com/2015/05/08/newsbytes-uk-climate-minister-voted-out-green-libdems-wiped-out-in-election/>

K. SOLAR CYCLE UPDATE

Guest essay by David Archibald Two useful things we would like to know are the length of Solar Cycle 24 and the amplitude of Solar Cycle 25. Figure 1 below shows the NOAA version of Solar Cycle 24 progression with the 23/24 transition copied onto the end of their projection. This crude method (we don't...

<http://wattsupwiththat.com/2015/05/08/solar-cycle-update/>

L. HEARTLAND REPLIES TO JEFFREY SACHS

NOTE: Since WUWT has the broadest reach of any climate blog and is essentially a "publication of record", I have been asked to carry this opinion piece by the Heartland Institute. I have not received any compensation directly or indirectly for publishing this rebuttal. – Anthony Watts By Joseph L. Bast, Director, Heartland Institute On...

<http://wattsupwiththat.com/2015/05/07/heartland-replies-to-jeffrey-sachs/>

M. A REVIEW OF JOHN COOK'S UQX DENIAL 101X

By James Cook (no relation) DENIAL 101x is a University of Queensland MOOC being promoted as helping people understand the new phenomenon of "Science Denialism", led by John Cook, a career drummer for Global Warming. According to the narration, Denialism is distinguishable from normal Scientific Skepticism by fact that the evidence is considered after one...

<http://wattsupwiththat.com/2015/05/07/a-review-of-john-cooks-uqx-denial-101x/>

N. NEW CHEMICAL RECIPE TO STORE SOLAR ENERGY, RELEASE IT AS HEAT, SUCH AS FOR CREATING STEAM

From the Faculty of Science – University of Copenhagen Chemistry student in sun harvest breakthrough (via Eurekalert). The Sun is a huge source of energy. In just one hour planet Earth is hit by so much sunshine that humankind could cover its energy needs for an entire year if only we knew how to harvest...

<http://wattsupwiththat.com/2015/05/08/new-chemical-recipe-to-store-solar-energy-release-it-as-heat-such-as-for-creating-steam/>

O. "... THE REAL AGENDA IS CONCENTRATED POLITICAL AUTHORITY. GLOBAL WARMING IS THE HOOK."

Maurice Newman, the chairman of Prime Minister Tony Abbott's Business Advisory Council, has accused the UN of attempting to subvert democracy, of attempting to establish a worldwide authoritarian regime, with political power concentrated in the hands of UN officials. According to Newman; Why then, with such little evidence [for dangerous global warming], does the UN...
<http://wattsupwiththat.com/2015/05/08/the-real-agenda-is-concentrated-political-authority-global-warming-is-the-hook/>

P. KPMG: ADDRESSING BRITAIN'S ENERGY CRISIS IS A PRIORITY

Guest essay by Eric Worrall

On the first day of the new British Government, Simon Virley, UK chair of energy and natural resources at KPMG, has warned that a priority for the new government is addressing Britain's looming energy crisis. According to The Telegraph; Ahead of the results of one of the closest elections in...

<http://wattsupwiththat.com/2015/05/08/kpmg-addressing-britains-energy-crisis-a-priority/>

Q. TRANSMISSION PLANNING: WIND AND SOLAR

Posted on [May 7, 2015](#) | [182 comments](#)

by Planning Engineer

Some of the denizens have requested an introduction to transmission planning and a discussion of how the transmission system is impacted by renewable resources.

<http://judithcurry.com/2015/05/07/transmission-planning-wind-and-solar/#more-18666>

R. ON THE PAUSE IN GLOBAL SEA ICE ANOMALIES

Guest Post by Bob Tisdale

I just finished the illustrations and text for another chapter of my upcoming book. The latest was about sea ice data. I believe you'll be interested in one of the topics from that chapter. As noted in the title of the post, the topic is the "pause" in global sea...

<http://wattsupwiththat.com/2015/05/11/on-the-pause-in-global-sea-ice-anomalies/>

S. MEDIA IGNORES CONFLICTS OF INTEREST AND FALSE CLAIMS

By [Kitty Stapp Reprint](#)

NEW YORK, Apr 21 2015 (IPS) - Climate change may be one of the most divisive issues in the U.S. Congress today, but despite the staunch denialism of Republicans, experts say the global transition from fossil fuels to renewables is already well underway.

A [new book](#) published by the Washington-based Earth Policy Institute finds that a steep decline in the price of solar photovoltaic (PV) panels (by three-fourths between 2009 and 2014, to less than 70 cents a watt) has helped the industry grow 50 percent per year.

"If they truly want to keep their own jobs, our elected leaders will soon see ties with coal, oil and gas as a serious political liability." -- Kyle Ash of Greenpeace USA

Wind power capacity grew more than 20 percent a year for the last decade, now totalling 369,000 megawatts, enough to power more than 90 million U.S. homes.

In China, electricity generation from wind farms now exceeds that from nuclear plants, while coal use appears to be peaking.

“Wind farms and solar PV systems will likely continue to anchor the growth of renewables,” Matthew Roney, a co-author of “The Great Transition”, told IPS. “They’re already well established, with costs continuing to drop, and their ‘fuels’ are widespread and abundant.”

With international initiatives like the U.N. Secretary-General’s [Sustainable Energy for All](#) and new development goals in the offing, donors and policy-makers are looking to massively scale up these tried-and-true clean technologies.

“One of solar’s advantages is that not only is it increasingly competitive with the average cost of grid electricity around the world, it can make economic sense for many of the 1.3 billion people who do not yet have access to electricity,” Roney said.

The book also notes that 70 countries now have feed-in tariffs, a policy mechanism designed to accelerate investment in renewable energy technologies by offering long-term contracts to renewable energy producers. Another two dozen have renewable portfolio standards (RPS), 37 countries offer production or investment tax credits for renewables, and 40 countries are implementing or planning carbon pricing.

In the U.S., reliance on coal is dwindling – it fell 21 percent between 2007 and 2014 – and more than one-third of the nation’s coal plants have already closed or announced plans for future closure.

But according to Greenpeace and other civil society watchdog groups, the industry is trying to get a new lease on life by pushing so-called carbon capture and sequestration (CCS) – where waste carbon dioxide (CO₂) is captured from large point sources, such as power plants, and transported to a storage site — what Greenpeace has dubbed a “Carbon Capture Scam.”

The Barack Obama administration advocates CCS as part of its “all of the above” energy strategy, the group says in a [recent analysis](#), even though the government’s own projections show that it would cost almost 40 percent more per kilogramme of avoided carbon dioxide than solar photovoltaic, 125 percent more than wind and 260 percent more than geothermal.

“The most fair-weather politician, if honest, should agree that advocating for renewables is a winning campaign strategy,” Greenpeace USA legislative representative Kyle Ash told IPS. “Do they really care about jobs? Do they really care about U.S. competitiveness and energy independence?” he asked. “The president and Congress have no shortage of reasons to acknowledge renewables are the only path forward when it comes to energy production. If they truly want to keep their own jobs, our elected leaders will soon see ties with coal, oil and gas as a serious political liability.”

The Environmental Protection Agency’s proposed carbon rule requires that new coal plants capture CO₂, and emphasises the CO₂ be used to augment oil extraction. Oil rigs then pump the carbon dioxide underground so the oil expands and more is forced up the well.

Greenpeace says that rather than actually storing carbon, it comes right back up the well with the oil. Every major power plant CCS project in the United States intends to sell the scrubbed carbon to the oil extraction industry.

“We don’t just have statistics, technology, and climate science on our side – we have a growing body politic that is opposing fracking, tar sands, coal exports, and other ways an archaic industry is trying to hold on,” Ash said.

“CCS is really the last gasp of the political pandering to coal, an industry widely known to have been horrible to workers and horrible for the environment. What we should soon see is more pandering to workers and the environment.”

The Obama administration has won kudos from environmental groups, including Greenpeace, for at least acknowledging the problem. In a videotaped statement for Earth Day this year, the U.S. president declared that “Today, there’s no greater threat to our planet than climate change.” The million-dollar question, most scientists say, is whether the transition to renewables will be fast enough to restrict warming to the benchmark two-degree increase by 2020, beyond which the consequences could be catastrophic.

“Although the adoption of renewable energy worldwide is moving in the right direction, more quickly than virtually anyone predicted even five years ago, the race is definitely not over yet,” Roney said. “Cutting into oil use by electrifying the transport sector is key, but electric vehicle adoption is not yet moving quickly enough to have a big impact.”

He noted that batteries, a major part of the price tag for an EV, are set to come down by half by 2020, according to UBS, making EVs fully competitive with conventional cars.

“At that point, buying an EV over a car that runs on gasoline will be a no-brainer, with up to 2,400 dollars in anticipated annual savings on gas. More broadly, pricing carbon would likely be the most effective way to accelerate the shift fast enough to keep climate change from spiraling out of control,” Roney said.

“The good news is that some 40 countries now have implemented or plan to implement carbon pricing, through a cap and trade system or carbon tax, including China. When its anticipated national cap and trade system begins in 2016, roughly a quarter of global carbon emissions will be priced—not nearly enough, but a decent start.”

Edited by Kanya D’Almeida

Richard Yoder

<http://junkscience.com/2015/05/05/media-beats-up-willie-soon-but-turns-a-blind-eye-to-epa-funded-researchers-shilling-for-epas-biggest-rule/>

T. CARBON DIOXIDE IS NOT A POLLUTANT, DON’T TAX IT

Benjamin Zycher of the American Enterprise Institute offers an insightful analysis of proposals conservatives have put forward in favor of a supposedly revenue-neutral carbon tax. Zycher calls social-cost-of-carbon calculations promoted by President Barack Obama and other climate alarmists “an exercise in bureaucratic arithmetic shameless even by Beltway standards.” Zycher notes proposed carbon taxes fail any reasonable cost/benefit analysis because they would have no noticeable effect on global temperatures, writing,

The effect of the US policy would be [to prevent] twenty-five one-thousandths of a degree [warming], and expansion of similar policies to China and the rest of the industrialized world would increase that to barely more than four tenths of a degree. That trivial temperature effect explains why the EPA has never taken a position, whether in published form or in congressional testimony, on just what would be achieved with its GHG proposals, as doing so would be embarrassing.

<http://www.aei.org/publication/the-carbon-tax-and-economists-as-experts-and-politicians/>

U. SATELLITE DATA DIMINISH WARMING

University of Alabama climatologists have released the newest version of their satellite temperature datasets, adjusted to account for factors including satellite drift and improvements to

software and methodology. The updated data showed a lower warming trend than previously recorded. From December 1978 through March 2015, the adjusted data show modestly faster warming in the early part of the satellite record and significantly reduced or an absence of warming in the latter part of the record. According to climatologists Roy Spencer, John Christy, and William Braswell, Version 6 satellite data now show a decreased warming trend of 0.114 degrees Celsius per decade, compared to Version 5.6's 0.140 degree trend.

Also worth noting, Version 6 shows land areas have warmed faster than oceans. Land areas have warmed by 0.19 degrees Celsius per decade while oceans have warmed only 0.08 degrees per decade. These rates of warming are below the rates of temperature rise recorded by surface thermometers or those projected by climate models. Perhaps land masses having warmed more than oceans indicates a greater impact of urban development, or the urban heat island effect, than previously believed by scientists.

<http://dailycaller.com/2015/04/29/updated-satellite-data-shows-even-less-global-warming-than-before/>

V. CLIMATE CHANGE AND WATER NEWS

April 22, 2015

EPA Climate Change and Water News is a bi-weekly newsletter from the U.S. Environmental Protection Agency (EPA) Office of Water that covers climate change and water-related news from EPA, other U.S. federal agencies, and partners. To learn more about climate change impacts on water resources, visit our website at: <http://www.epa.gov/water/climatechange>.

EPA News

EPA and Federal Partners Announce Resilient Lands and Waters Initiative to Prepare Natural Resources for Climate Change

EPA, in collaboration with the U.S. Department of the Interior and NOAA, have recognized four collaborative landscape partnerships across the country where federal agencies will focus efforts with partners to conserve and restore important lands and waters and make them more resilient to a changing climate. Building on existing collaborations, the Resilient Lands and Waters partnerships located in southwest Florida, Hawaii, Washington, and the Great Lakes region will help build resilience in regions vulnerable to climate change and related challenges. They will also showcase the benefits of landscape-scale management approaches and help enhance the carbon storage capacity of these natural areas.

Click [here to read the press release](#).

EPA Climate Ready Estuaries Program Releases Video about San Juan Bay Vulnerability Assessment

Using the EPA publication, "Being Prepared for Climate Change: A Workbook for Developing Risk-Based Adaptation Plans," the San Juan Bay (Puerto Rico) National Estuary Program developed a risk-based climate change vulnerability assessment. A new video describes some of the climate change impacts already affecting San Juan, documents why the San Juan Bay National Estuary Program undertook this vulnerability assessment project, and explains the benefits of conducting the study.

Click [here to view the video](#).

Click [here to view the Climate Ready Estuaries website](#).

EPA and Partners Announce Development of Early Warning System to Detect Harmful

Algal Blooms

EPA has announced that it is developing an early warning indicator system using historical and current satellite data to detect algal blooms. EPA researchers will develop a mobile app to inform water quality managers of changes in water quality using satellite data on cyanobacteria algal blooms from three partnering agencies: NASA, NOAA, and the U.S. Geological Survey. The multi-agency project will create a reliable, standard method for identifying cyanobacteria blooms in U.S. freshwater lakes and reservoirs using ocean color satellite data.

Click [here to view the press release](#).

Other Federal News

New Topic Section for U.S. Climate Resilience Toolkit: Human Health

The U.S. Climate Resilience Toolkit announced an updated Human Health topic section. The new topic section includes climate-related risks and opportunities related to extreme heat, extreme events, air pollutants, food and water-based threats, changing ecosystems, and infectious disease. Tools and case studies that help manage human health-related climate risk and help build resilience, can also be found within this section.

Click [here to access the topic section](#).

Click [here for the Toolkit homepage](#).

U.S. Forest Service Releases New Interactive Education Module on Climate Change Effects

The Climate Change Resource Center has released a new interactive online education module on climate change effects: "Climate Change Effects on Forests and Grasslands: What You Need to Know." It is the second in a series of three education modules. It gives a brief overview of current and projected climate change effects on water resources, vegetation, wildlife, and disturbances, specifically geared towards forest and grassland ecosystems. The first module, "Climate Change Science and Modeling," provides an introduction to the climate system, greenhouse gases, climate models, current climate change impacts, and future projections.

Click [here to access the training modules](#).

Other News

U.S. Water Alliance Honors 2015 Water Prize Winners

The U.S. Water Prize was initiated five years ago by the U.S. Water Alliance to elevate organizations with strategies that promote the value of water and the power of innovating and integrating for sustainability. The 2015 U.S. Water Prize winners are the City of San Diego Public Utilities Department, Electric Power Research Institute, and The Coca-Cola Company.

Click [here to learn more about the winners](#).

Pacific Institute Report Shows U.S. Has Reduced Water Use Among All Sectors

A new report by the Pacific Institute demonstrates that water use in the United States declined in the five-year period ending in 2010. The nation saw reductions in all sectors, including agriculture; municipal and industrial; and thermoelectric power. The report reveals that nearly two-thirds of the reductions were in the thermoelectric power sector, the largest use of fresh and saline water in the United States. These water-use trends reveal overall improvements in the management of our nation's water. Although substantial progress has been made, current water use trends are not sustainable in the face of population growth and climate change.

Click [here to download the report](#).

Upcoming Webinars, Conferences and Trainings

For a calendar of climate change and water-related trainings, conferences, and webinars, visit:

<http://water.epa.gov/scitech/climatechange/Calendar-of-Events.cfm>.

This newsletter is produced by the U.S. Environmental Protection Agency, Office of Water (EPA). If you have questions related to the newsletter or want to submit an item, email the editor at water_climate_change@epa.gov. For past issues of EPA Climate Change and Water News, as well as further information on climate change impacts on water resources, visit www.epa.gov/water/climatechange. For more information on EPA's climate change activities, visit www.epa.gov/climatechange. To unsubscribe to this newsletter, send a blank email to [Unsubscribe](#).

I agree – maybe we can put it in the newsletter?

Arnie Feldman

Editors Note: I find this discussion interesting. Nowhere does EPA say Climate Change will occur. This is another example of “What will happen if Climate Change occurs. GHH”

W. U.S. CLIMATE NEGOTIATOR DOWNPLAYS OPPOSITION TO EPA RULES

"The Obama administration's senior climate change negotiator is downplaying concerns that opposition to the Environmental Protection Agency's proposed power plant rules will harm the United States' ability to hash out a global climate change deal at the end of the year.

U.S. Special Envoy for Climate Change Todd Stern told reporters Monday that although questions by foreign dignitaries on the EPA rules have come up in talks, those concerns were not represented at a meeting of major economies that ended Monday.

Stern made the comments at the conclusion of a closed two-day meeting in Washington to discuss emission reductions in the run-up to United Nations climate talks at the end of the year in Paris. Most scientists blame greenhouse gas emissions from burning fossil fuels for global warming.

"I definitely have been asked that" by a variety of countries that "want to make sure the [U.S.] can deliver" on its commitments to reduce greenhouse gas emissions, but the "issue didn't come up over the last two days," Stern said, suggesting that any concerns that foreign partners may have had over the rule's implementation may be waning.

His comments come just days after the U.S. Court of Appeals for the District of Columbia Circuit heard oral arguments in a lawsuit opposing the rules as regulatory overreach. More than a dozen states argue that the EPA's rules overstep the agency's Clean Air Act authority by putting states on the hook for emission reductions, rather than individual power plants. However, the federal judges appeared skeptical they could act before the rules are finalized. The rules aren't expected to be final until this summer.

Stern said the EPA climate rule is "based on existing legal authority derived from Clean Air Act."

The primary message to other countries has been that the EPA is on "solid legal ground" and the administration has a "fair and justified degree of confidence that we can deliver" on emission reductions, Stern said.

In recent months, environmentalists have raised concerns that the opposition to the regulations could indicate a lack of support to other countries and undermine the president's ability to secure a global deal among major emitters.

Overall, the April 19-20 meeting in Washington showed that there is a "clear focus...on getting a deal in Paris," Stern said."

Don Shaw

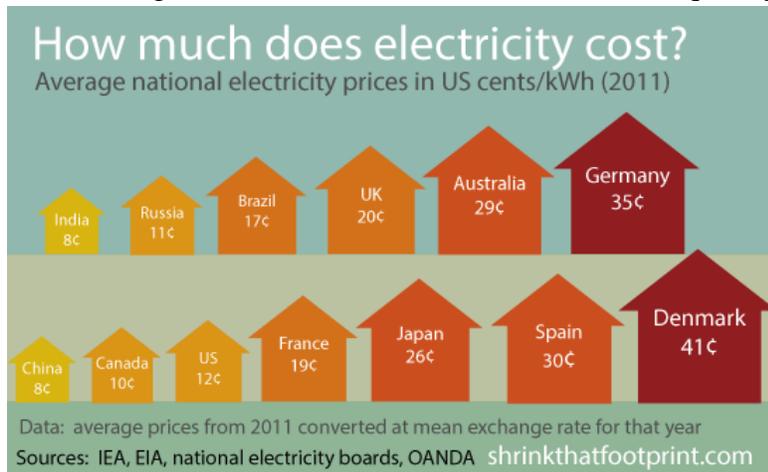
<http://www.washingtonexaminer.com/article/2563338>

X. DENMARK COST OF ELECTRICITY HIGHEST DUE TO WIND ENERGY AT 41 CENTS/KWH

Note increased grid problems in Germany with expensive renewable energy.

"To illustrate the problem that renewable energy instability can cause, here is an example. When the voltage from German's electric grid weakened for just a millisecond at 3 am, the machines at Hydro Aluminum in Hamburg ground to a halt, production stopped, and the aluminum belts snagged, hitting machines and destroying a piece of the mill with damages amounting to [\\$12,300](#) to the equipment. The voltage weakened two more times in the next three weeks, causing the company to purchase its own emergency system using batteries, costing \$185,000.

These short interruptions to the German electric grid increased by 29 percent and the number of service failures increased 31 percent over a 3-year period, with about half of those failures leading to production stoppages causing damages ranging from ten thousand to *hundreds of thousand* of Euros. These power grid fluctuations in Germany are causing major damage to a number of industrial companies, who have responded by getting their own power generators and regulators to help minimize the risks. However, companies warn that they might be forced to leave if the government does not deal with the issues quickly. "



Don Shaw

Y. THE HOLE IN THE ROOFTOP SOLAR-PANEL CRAZE

Large-scale plants make sense, but panels for houses simply transfer wealth from average electric customers.

By

Brian H. Potts

May 17, 2015 5:52 p.m. ET

Most people buy rooftop solar panels because they think it will save them money or make them green, or both. But the truth is that rooftop solar shouldn't be saving them money (though it often does), and it almost certainly isn't green. In fact, the rooftop-solar craze is wasting billions of dollars a year that could be spent on greener initiatives. It also is hindering the growth of much more cost-effective renewable sources of power.

According to a recent Energy Department-backed [study](#) at North Carolina State University, installing a fully financed, average-size rooftop solar system will reduce energy costs for 93% of the single-family households in the 50 largest American cities today. That's why people have been rushing out to buy rooftop solar panels, particularly in sunny states like Arizona, California and New Mexico.

The primary reason these small solar systems are cost-effective, however, is that they're heavily subsidized. Utilities are forced by law to purchase solar power generated from the rooftops of homeowners and businesses at two to three times more than it would cost to buy solar power from large, independently run solar plants. Without subsidies, rooftop solar isn't close to cost-effective.

Recent studies by Lazard and [others](#), however, have found that large, utility-scale solar power plants can cost as little as five cents (or six cents without a subsidy) per kilowatt-hour to build and operate in the sunny Southwest. These plants are competitive with similarly sized fossil-fueled power plants. But this efficiency is possible only if solar plants are large and located in sunny parts of the country. On average, utility-scale solar plants nationwide still cost about 13 cents per kilowatt-hour, versus around six cents per kilowatt-hour for coal and natural gas, according to the Lazard study.

Large-scale solar-power prices are falling because the cost to manufacture solar panels has been decreasing and because large solar installations permit economies of scale. Rooftop solar, on the other hand, often involves micro installations in inefficient places, which makes the overall cost as much as 3½ times higher.

So why are we paying more for the same sun?

There are lots of reasons. Well-meaning—but ill-conceived—federal, state and local tax incentives for rooftop solar give back between 30% and 40% of the installation costs to the owner as a tax credit. But more problematic are hidden rate subsidies, the most significant of which is called net metering, which is available in 44 states. Net metering allows solar-system owners to offset on a one-for-one basis the energy they receive from the electric grid with the solar power they generate on their roof.

While this might sound logical, it isn't. An average California resident with solar panels, for example, generally pays about 17 cents per kilowatt-hour for electric service when the home's

solar panels aren't operating. When they are operating, however, net metering requires the utility to pay that solar customer the same 17 cents per kilowatt-hour. But the solar customer still needs the grid to back up his intermittent solar panels, and the utility could have purchased that same solar power from a utility-scale solar power plant for about five cents per kilowatt-hour. This 12-cents-per-kwh cost difference amounts to a wealth transfer from average electric customers to customers with rooftop solar systems (who also often have higher incomes). This is because utilities collect much of their fixed costs—the unavoidable costs of power plants, transmission lines, etc.—from residential customers through variable-use charges, in other words, charges based on how much energy they use. When a customer with rooftop solar purchases less electricity from the utility, he pays fewer variable-use charges and avoids contributing revenue to cover the utility's fixed costs. The result is that all of the other customers have to pick up the difference.

The California Public Utilities Commission projects that net metering will cost the state \$1.1 billion a year by 2020. Arizona Public Service Company calculates that if the current rate of rooftop-solar installations continues through mid-2017, its nonsolar customers will pay close to \$800 million in higher rates to subsidize rooftop-solar customers over the next 20 years. The total costs nationwide are unknown. On May 5, however, an interdisciplinary group of Researchers and professors at MIT released a [study](#) about the future of solar energy and concluded that net metering is inefficient and should be redesigned.

Large-scale solar power generally doesn't get these same hidden-rate subsidies. When utilities build or buy output from large solar facilities, they spread the costs out evenly to customers. Every dollar spent on rooftop solar is a dollar not spent on other, more productive renewable sources.

Increasingly, utilities across the country have been calling attention to the problems with rooftop solar. They've been urging the pursuit of large-scale solar and other renewables, the moderation of rooftop-solar subsidies, and a restructuring of electric rates to encourage new technologies. They've been vilified by armies of PR consultants armed with sound bites about how utilities want to kill solar.

Yet the federal subsidies for solar amount to about \$5 billion a year, with more than half of that amount going to rooftop and other, more expensive, non-utility solar plants. If the federal government spent the \$5 billion instead subsidizing only utility-scale solar plants, I estimate that it could increase the amount of solar power installed in this country every year by about 65%. And without net metering and all of the other nonsensical state and local subsidies for rooftop solar, we could save this country billions of dollars every year.

It is time to stop encouraging people to pick a losing technology merely because it makes them feel good. There are greener, more cost-effective solutions.

Mr. Potts, a utility lawyer, is a partner and member of the Energy Industry Team at the international law firm Foley & Lardner LLP

http://www.wsj.com/articles/the-hole-in-the-rooftop-solar-panel-craze-1431899563?mod=trending_now_5

Z. FORECAST SUPER EL NIÑO FOR FALL NEARLY DOUBLE THE STRENGTH OF 1998 SUPER EL NIÑO

Wow! ECMWF Long-Term Weather Model Is Predicting a Super El Niño and I Mean Super Guest Post by Bob Tisdale I was notified today of the rather remarkable plume of ENSO forecasts for 2015 from ECMWF (European Centre for Medium-Range Weather Forecasts). See their System 4 ENSO region sea surface temperature anomaly forecast webpage here....

<http://wattsupwiththat.com/2015/05/16/wow-ecmwf-long-term-weather-model-is-predicting-a-super-el-nino-and-i-mean-super/>

Regards

George