# The Week That Was: 2012-09-29 (September 29, 2012) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

**Quote of the Week:** *Science is the belief in the ignorance of experts.* Richard Feynman. 1966

Number of the Week: Over 18,000 in a few days.

#### THIS WEEK:

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

**Climate Realism**: In an essay posted by American Thinker, Fred Singer explains his motivation for engaging in an exchange with noted economist William Nordhaus that was published in the *New York Review of Books*. Please see Article # 1.

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**Svalbard Again:** The small Norwegian archipelago of Svalbard (about the size of West Virginia) has become popular again this week. Svalbard is located at 76 and 80 degrees N, about 450 miles north of Norway, between Norway and the North Pole and between Norway and the northern part of the east coast of Greenland. Although the climate is classified as arctic, it is tempered by the (comparatively) warm North Atlantic Current which flows along the western and northern coasts of Spitsbergen, the main island, keeping water open and navigable most of the year. CIA Fact Book: <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/sv.html">https://www.cia.gov/library/publications/the-world-factbook/geos/sv.html</a>

It is the warm North Atlantic Current that may be misleading some in interpreting recent research of a lake in Svalbard. In an apparent update of a study published in May, researchers from Lamont-Doherty Earth Observatory concluded that the lake is warmer today than any time in the past 1800 years, including the Medieval Warm Period, and that the Little Ice Age was mild. Alarmist headlines quickly committed the logical fallacy of composition – that which applies to Svalbard applies to all of the Arctic. However, as even the press release of the research states: "Evidence from tree rings and ice cores shows that southern Greenland and parts of North America were warmer from 950 to 1250 than today, with the Vikings taking advantage of ice-free waters to settle Greenland." The temperatures in Svalbard may be an aberration from changing North Atlantic Current rather than any broad trend. Please see links under Seeking a Common Ground.

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**Circumpolar Vortex**: New research indicates that changes in the northern circumpolar vortex, strong winds that circulate clockwise (east to west) generally centered on the North Pole, may significantly influence the North Atlantic Oscillation, and thereby affect climate change. Writings by H.H. Lamb in the 1970s and 1980s brought out the importance of the circumpolar vortex in affecting weather and climate. These were systematically ignored in later reports by the UN

Intergovernmental Panel on Climate Change (IPCC), particularly in its *Summary for Policymakers*.

The new research links the changes in the stratosphere at altitudes up to 30 miles with changes in the ocean currents. Unfortunately, as all too common, the writing in the press release is overblown, which detracts from findings. It remains to be seen if the research is a significant new contribution. The authors try to link changes in vortex to changes in stratospheric ozone and CO2. However, as Lamb pointed out, changes in the vortex can be used to explain part of weather and climate change long before ozone and CO2 became an issue. Please see links under Challenging the Orthodoxy.

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**Wind Power:** There has been a blow-up in England where two researchers challenged a study by Gordon Hughes stating that using wind turbines in place of coal or natural gas power plants does not necessarily reduce carbon dioxide emissions. The response from Hughes was swift and deadly. No doubt such controversies will continue as more citizens are questioning the wisdom of wind power, which is driving up electricity costs.

**Taxes on Carbon Dioxide Emissions**: Although US Congress is out campaigning, the possibility of taxing carbon dioxide emissions continues to be discussed by the Washington establishment. The Congressional Research Service (CRS) produced a report re-stating a prior study that about one-half of the massive Federal Government deficits can be covered by 2020 with taxes on carbon dioxide emissions of \$20 per metric ton starting in 2012 and increasing 5.6% annually to about

\$31 per metric ton by 2020. Since 2009, the deficits have been running over \$1 Trillion per fiscal year.

The report seems to be competently done, but the impacts of economic dislocations are probably understated and the question of use of the new revenues is a major issue. It must be remembered that after using its computer models to evaluate the stimulus bill, the CRS predicted that the bill would keep unemployment from exceeding 8% and it would be down to about 5.5% by mid 2012. Unemployment has not been as low as 8% since the passage of the bill and, using the size of the labor force of 2009, it stands above 11%. Please see links under Cap and Trade and Carbon Taxes.

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**Silent Spring:** This week marked the 50<sup>th</sup> anniversary of the publication of the book *Silent Spring*, which marked the transformation of conservationism and prudent environmentalism (wise use) to radical environmentalism. The book falsely asserted that virtually all forms of cancer have environmental causes. Thus, cancer can be virtually eliminated by eliminating all forms of human "pollution", no matter what or how benign or beneficial the activities may be. This unscientific legacy continues in the EPA and other government agencies.

Probably, the worst form of neo-colonialism that ever took place was driven by radical environmentalism following the EPA banning the use of DDT on the unsubstantiated claim that it may cause cancer. (Wise use would have been more appropriate.)

Energy Independence? The concept that North America may become independent of the rest of the world for fossil fuels continues to stir controversy. The US and North America are largely independent in coal and, thanks to hydraulic fracturing, in natural gas. In 2011 the top three oil producers were ranked, in order, as Russia, Saudi Arabia, and the US. <a href="http://www.investopedia.com/financial-edge/0311/top-5-oil-producing-countries-in-2011.aspx#axzz27yXosbru">http://www.investopedia.com/financial-edge/0311/top-5-oil-producing-countries-in-2011.aspx#axzz27yXosbru</a> Preliminary 2012 data indicates that the rankings may change to Saudi Arabia, the US, and Russia for 2012.

Significant infrastructure investments must be made before the US or North America can become independent in oil. Such investments require that the production of "tight oil", that released by hydraulic fracturing of shale, be sustained and that international prices of crude oil remain above historic levels. Further, deepwater oil developments require high prices. Several analysts suggest that prices must remain above \$70 a barrel. As stated in prior TWTWs, the budgets of the primary exporting countries require that the world price remains above \$70 per barrel.

There is a lack of historic knowledge on the productive life of tight oil, as well as deepwater oil. The standards used to evaluate traditional sources may no longer apply to these sources. Also, the

**Number of the Week:** Over 18,000 in a few days. As mentioned last week, the Public Broadcasting System (PBS) had a one-hour segment on climate change that featured self-proclaimed former skeptic Richard Muller and included others such as Judith Curry and (horrors!) Anthony Watts. Immediately, certain web sites sprung into action and within a few days delivered a petition signed by over 18,000 people censoring PBS for including Anthony Watts. [In her comments on the program, Judith Curry stated that Watts appeared to be more a lukewarmer than she.]

The ombudsman of PBS publically stated that this program was not the finest hour for PBS, to which Curry agrees, but for other reasons. In his explanation of the program, it was not the finest hour of the ombudsman. No doubt those who make exaggerated claims of the difficulties global warming alarmists face with a hostile public will systematically ignore this episode of PBS. Please see links under Suppressing Scientific Inquiry.

#### **ARTICLES:**

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

#### 1. Climate Realism

By S. Fred Singer, American Thinker, Sep 26, 2012 <a href="http://www.americanthinker.com/2012/09/climate\_realism.html">http://www.americanthinker.com/2012/09/climate\_realism.html</a>

#### 2. What Arctic Foxes Know About Global Warming

By Matt Ridley, WSJ, Sep 21, 2012 [H/t William Readdy] <a href="http://online.wsj.com/article/SB10000872396390444450004578002500275382408.html?KEYWORDS=Arctic+fox+global+warming">http://online.wsj.com/article/SB10000872396390444450004578002500275382408.html?KEYWORDS=Arctic+fox+global+warming</a>

#### 3. Power Plants Aim to Curb Their Thirst

By Rebecca Smith, WSJ, Sep 21, 2012

http://online.wsj.com/article/SB10000872396390444433504577649914114390298.html?mod=IT P\_pageone\_1

#### **NEWS YOU CAN USE:**

#### Science: Is the Sun Rising?

#### Scientists Shed Light on Riddle of Sun's Explosive Events

By David Sims EOS Science Writer, Durham, NH (SPX), Sep 26, 2012

http://www.spacedaily.com/reports/Scientists Shed Light on Riddle of Suns Explosive Event s 999.html

#### Effects of solar variability on climate

By Judith Curry, Climate Etc. Sep 27, 2012

http://judithcurry.com/2012/09/27/effects-of-solar-variability-on-climate/#more-9905

[SEPP Comment: A report on two workshops that limited the scope of the discussion of the influence of the sun to Total Solar Irradiance (sunshine) thereby avoiding solar wind and magnetism. Curry quotes Kerry Emanuel: Absence of evidence is not evidence of absence.]

#### Suppressing Scientific Inquiry

#### The Anti-Free-Speech Brigade

Last week 18,000 people signed a petition demanding that a publicly-funded television station 'never again' report on a particular point-of-view.

By Donna Laframboise, NFC, Sep 28, 2012

http://nofrakkingconsensus.com/2012/09/28/the-anti-free-speech-brigade/

#### **PBS Ombudsman**

By Judith Curry, Climate Etc, Sep 22, 2012

http://judithcurry.com/2012/09/22/pbs-ombudsman/#more-9872

[SEPP Comment: More on the storm that erupted after Anthony Watts appeared on a PBS program that featured Richard Muller of faux conversion fame.]

#### PBS Newshour; Don't Promote Climate Denial

Forecast the Facts, Accessed Sep 28, 2012

http://act.engagementlab.org/sign/climate\_pbs\_watts/?source=climate\_website

[SEPP Comment: An example of a petition web site.]

#### Challenging the Orthodoxy

#### **Fewest Forest Fires On Record**

By Steven Goddard, Real Science, Sep 25, 2012 [H/t Climate Depot]

http://stevengoddard.wordpress.com/2012/09/25/fewest-forest-fires-on-record/

#### NASA GISS caught changing past data again – violates Data Quality Act

By Anthony Watts, WUWT, Sep 26, 2012

 $\frac{http://wattsupwiththat.com/2012/09/26/nasa-giss-caught-changing-past-data-again-violates-data-quality-act/\#more-71520$ 

#### **NASA's Rubber Ruler**

By Randall Hoven, American Thinker, Sep 25, 2012

http://www.americanthinker.com/blog/2012/09/nasas\_rubber\_ruler.html#ixzz27YZRxqIW [SEPP Comment: NASA-GISS historic numbers change yet again. Perhaps GISS would change the value of pi if they thought they could get away with it.]

#### **Stratosphere Targets Deep Sea to Shape Climate**

Press Release, Univ of Utah, Sep 23, 2012

http://unews.utah.edu/news\_releases/stratosphere-targets-deep-sea-to-shape-climate/

#### A stratospheric connection to Atlantic climate variability

Thomas Reichler,, Junsu Kim, Elisa Manzini & Jürgen Kröger

Nature Geoscience (2012) doi:10.1038/ngeo1586

http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo1586.html

[SEPP Comment: Journal link to the above.]

#### Defending the Orthodoxy

#### Loss of species makes nature more sensitive to climate change

By Staff Writers, Gothenburg, Sweden (SPX), Sep 27, 2012

http://www.terradaily.com/reports/Loss of species makes nature more sensitive to climate ch ange 999.html

#### Questioning the Orthodoxy

#### DON'T PANIC: Arctic methane emissions have been going on for ages

'Surprising' finding of scientific survey mission

By Lewis Page, The Register, Sep 25, 2012

http://www.theregister.co.uk/2012/09/25/dont panic arctic mission finds methane emissions o ld\_news/

#### Gas Outlets off Spitsbergen Are No New Phenomenon

Expedition to the Greenland Sea with Surprising Results

Press Release, GEOMAR, Sep 19, 2012

http://www.geomar.de/uploads/media/pm\_2012\_67\_MSM21-4\_Fazit\_en.pdf

[SEPP Comment: Link to the report discussed immediately above.]

#### More Evidence Against a Methane Time Bomb

By Patrick Michaels, World Climate Report, Sep 26, 2012

 $\underline{http://www.worldclimatereport.com/index.php/2012/09/26/more-evidence-against-a-methane-time-bomb/\#more-554}$ 

[SEPP Comment: Follow-up on the above study.]

#### Questioning European Green

#### Roger Helmer on UK Energy Policy, Green Energy, and Green Jobs

Five Minute Video, Sep 23, 2012

http://is.gd/GzMli8

#### Gordon Hughes: Response To Goodall & Lynas

By Gordon Hughes, GWPF, Sep 28, 2012

http://www.thegwpf.org/gordon-hughes-response-to-goodall-lynas/

#### It's a myth that wind turbines don't reduce carbon emissions

Conclusive figures show that the sceptics who lobby against wind power simply have their facts wrong

By Chris Goodall and Mark Lynas, The Guardian, Sep 26, 2012

http://www.guardian.co.uk/environment/blog/2012/sep/26/myth-wind-turbines-carbonemissions?newsfeed=true

#### Missing the point?

By Andrew Montford, Bishop Hill, Sep 26, 2012

http://bishophill.squarespace.com/blog/2012/9/26/missing-the-point.html#comments

[SEPP Comment: Questioning the article immediately above.]

#### Germany's wind power chaos should be a warning to the UK

Germany has gone further down the 'renewables' path than any country in the world, and now it's paying the price

By Christopher Booker, Telegraph, UK, Sep 22, 2012

http://www.telegraph.co.uk/comment/9559656/Germanys-wind-power-chaos-should-be-awarning-to-the-UK.html

[SEPP Comment: Germany should be a lesson for the rest of the industrialized world.]

## Chemicals Industry Bosses And Labor Union Send Angela Merkel Warning Letter Over Skyrocketing Energy Prices

By P Gosselin, No Tricks Zone, Sep 15, 2012 [H/t GWPF]

http://notrickszone.com/2012/09/25/chemicals-industry-bosses-and-labor-union-send-angela-merkel-warning-letter-over-skyrocketing-energy-prices/

#### Scottish islanders' wave power hopes sunk by 'massive costs'

By Staff Writer, The Register, Sep 24, 2012

http://www.theregister.co.uk/2012/09/24/marine energy connection costs/

#### Shunned US coal sends Europe's emissions higher

By Staff Writer, Reuters, Sep 25, 2012 [H/t GWPF]

http://www.smh.com.au/environment/shunned-us-coal-sends-europes-emissions-higher-20120925-26jfe.html

#### Questioning Green Elsewhere

#### Take Your Pick: Trendy Green Jobs, or Real Jobs?

By Diana Furchtgott-Roth, Manhattan Institute, Sep 14, 2012

http://www.manhattan-institute.org/html/miarticle.htm?id=8484#.UGSNxVH5Xro

#### **Bald-faced -climate policy**

By Peter Foster, Financial Post, Sep 27, 2012

http://opinion.financialpost.com/2012/09/27/peter-foster-bald-faced-% C2% ADclimate-policy/

#### Problems in the Orthodoxy

#### The End of International Environmentalism

Green ideology crashes and burns at the Rio +20 Earth Summit.

By Ronald Bailey, Reason, Oct 2012

http://reason.com/archives/2012/09/24/the-end-of-international-

<u>environmentalis?utm\_source=feedburner&utm\_medium=feed&utm\_campaign=Feed%3A+reason</u> %2FArticles+%28Reason+Online+-

+All+Articles+%28except+Hit+%26+Run+blog%29%29&utm\_content=Bloglines

#### **Emerging powers press rich nations on emissions cuts**

By Staff Writers, Brasilia (AFP), Sept 21, 2012

http://www.terradaily.com/reports/Emerging powers press rich nations on emissions cuts 999 html

#### Seeking a Common Ground

#### High-Arctic Heat Tops 1,800-Year High, Says Study

Modern Spike Outmatches Naturally Driven 'Medieval Warm Period'

Press Release. Lamont-Doherty Earth Observatory, Sep 27, 2012 [H/t Hugh Sherman]

http://www.ldeo.columbia.edu/news-events/high-arctic-heat-tops-1800-year-high-says-study

[SEPP Comment: The title of the published study is: Mild Little Ice Age and unprecedented recent warmth in an 1800 year lake sediment record from Svalbard.]

http://geology.gsapubs.org/content/early/2012/09/18/G33365.1.abstract]

#### **New Weather-Shifting Climate Cycle Revealed**

You know El Niño—now meet the Pacific Centennial Oscillation By Elizabeth Halliday, WHOI Oceanus, Sep 27, 2012 http://www.whoi.edu/oceanus/feature/pco

#### Language matters in war

By Tom Harris, New Ideas@Frontier, Sep 26, 2012

http://www.fcpp.org/blog/language-matters-in-war/

[SEPP Comment: Demonizing opponents has long been a tactic in politics, war, etc. Now it is becoming common in what is called climate science. Oreskes and Conway are experts.]

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

Unloading Hansen's 'Climate Dice'

By Chip Knappenberger, Master Resource, Sep 24, 2012

http://www.masterresource.org/2012/09/unloading-hansens-climate-dice/#more-21874

#### More Deception in the Lewandowsky Data

By Steve McIntyre, Climate Audit, Sep 23, 2012

http://climateaudit.org/2012/09/23/more-deception-in-the-lewandowsky-data/#more-16864

#### Communicating Better to the Public - Make things up.

#### Global warming slows down world economy: report

By Staff Writers, New York (AFP), Sept 25, 2012

http://www.terradaily.com/reports/Global\_warming\_slows\_down\_world\_economy\_report\_999.ht ml

[SEPP Comment: Use of carbon based fuel causes 5 million deaths a year! These people must have learned their calculations skills from the EPA. Based on every available health statistic, use of carbon based fuels has led to longer, more productive lives.]

#### Scientists predict major shifts in Pacific ecosystems by 2100

By Staff Writers, Stanford CA (SPX), Sep 26, 2012

http://www.terradaily.com/reports/Scientists\_predict\_major\_shifts\_in\_Pacific\_ecosystems\_by\_21\_00\_999.html

[SEPP Comment: Speculation using models that are not verified or validated.]

#### 100 Million Examples of Global Warming Absurdity

By James Taylor, Forbes, Sep 27, 2012

 $\underline{http://www.forbes.com/sites/jamestaylor/2012/09/27/100-million-examples-of-global-warming-\underline{absurdity/}}$ 

#### Models v. Observations

## "The North American Regional Climate Change Assessment Program: Overview of Phase I Results" By Mearns Et Al 2012 – An Excellent Study But It Overstates Its Significance In The Multi-Decadal Prediction Of Climate

By Roger Pielke Sr, Climate Science, Sep 24, 2012

http://pielkeclimatesci.wordpress.com/2012/09/24/the-north-american-regional-climate-change-assessment-program-overview-of-phase-i-results-by-mearns-et-al-2012-an-exaggeration-of-its-significance-in-the-prediction-of-climate/

#### Comment On "A National Strategy for Advancing Climate Modeling" From The NRC

By Roger Pielke Sr, Climate Science, Sep 28, 2012

http://pielkeclimatesci.wordpress.com/2012/09/28/comment-on-a-national-strategy-for-advancing-climate-modeling-from-the-nrc/

[SEPP Comment: Not only does the report misrepresent the capabilities of climate models to predict, it ignores the definition of climate in a prior NRC report.]

#### **Changing Weather**

#### **Agriculture: Tropical Cyclones are Welcome Visitors**

By Patrick Michaels, World Climate Report, Sep 21, 2012

 $\underline{http://www.worldclimatereport.com/index.php/2012/09/21/agriculture-tropical-cyclones-are-welcome-visitors/\#more-553}$ 

#### **Drought and Climate Change**

By Roger Pielke Jr, His Blog, Sep 24, 2012

http://rogerpielkejr.blogspot.com/2012/09/drought-and-climate-change.html

[SEPP Comment: More contradictions of Hansen, et al, who claim that recent droughts are evidence of extreme weather events becoming more pronounced.]

## Surprise: glaciers in Montana retreated up to 6 times faster during the 1930's and 1940's than today

By Anthony Watts, WUWT, Sep 27, 2012

http://wattsupwiththat.com/2012/09/27/surprise-glaciers-in-montana-retreated-up-to-6-times-faster-during-the-1930s-and-1940s-than-today/

[SEPP Comment: Several years ago Al Gore took fawning reporters to view the glaciers in August as proof of human caused climate change. How will he explain this?]

#### **Changing Climate**

#### **Antarctic Peninsula Warming, Time After Time**

By Doug Hoffman, Reproduced by GWPF, Sep 24, 2012

http://www.thegwpf.org/doug-hoffman-antarctic-peninsula-warming-time-after-time/

[SEPP Comment: More on research reported previously.]

#### **Changing Seas**

#### Radar altimetry gains altitude in Venice

By Staff Writers, Venice, Italy (ESA), Sep 26, 2012

http://www.spacedaily.com/reports/Radar altimetry gains altitude in Venice 999.html

[SEPP Comment: Sea level rise of about 3 mm per year. The rate works out to be about 10 inches by 2100.]

### NOAA Data (Again) Shows No Acceleration In Sea Level Rise. "CO2 Climate Hypothesis Is In A Free-Fall"

By P. Gosselin, No Tricks Zone, Sep 21, 2012 [H/t ICECAP]

http://notrickszone.com/2012/09/21/noaa-data-again-shows-no-sea-level-rise-co2-climate-hypothesis-is-in-a-free-fall/

#### On the Record High Sea Surface Temperatures for the Northeast Continental Shelf

By Bob Tisdale, ICECAP, Sep 25, 2012

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

climate/on the record high sea surface temperatures for the northeast continental s/

[SEPP Comment: What the Northeast Fisheries Science Center was hiding in the press release.]

#### Changing Sea Ice

#### **Changes in the Arctic**

By Martin Livermore, Scientific Alliance, Sep 27, 2012

http://www.scientific-alliance.org/scientific-alliance-newsletter/changes-arctic

#### NASA on Arctic sea ice record low - storm 'wreaked havoc on the Arctic sea ice cover'

By Anthony Watts, WUWT, Sep 24, 2012

http://wattsupwiththat.com/2012/09/24/nasa-on-arctic-sea-ice-record-low-storm-wreaked-havoc-on-the-arctic-sea-ice-cover/

#### Sounding the ice cap alarm while ignoring the elephant

By Steve Goreman, Phily Burbs, Sep 28, 2012

http://www.phillyburbs.com/news/local/courier\_times\_news/opinion/oped/sounding-the-ice-capalarm-while-ignoring-the-elephant/article\_684f4bf8-2319-5072-b360-f64beae40064.html

#### **Changing Earth**

#### Rare Great Earthquake in April Triggers Large Aftershocks All Over the Globe

By Staff Writers, Menlo Park, CA (SPX), Sep 27, 2012

http://www.terradaily.com/reports/Rare Great Earthquake in April Triggers Large Aftershock s All Over the Globe 999.html

#### Agriculture Issues & Fear of Famine

#### Global Grain Production at Record High Despite Extreme Climatic Events

By Staff Writers, Washington DC (SPX), Sep 27, 2012

http://www.seeddaily.com/reports/Global Grain Production at Record High Despite Extreme Climatic\_Events\_999.html

[SEPP Comment: More bad news for the alarmists.]

#### Review of Recent Scientific Articles by NIPCC

For a full list of articles see www.NIPCCreport.org

Three and a Half Centuries of Droughts in the American Southeast

Reference: Pederson, N., Bell, A.R., Knight, T.A., Leland, C., Malcomb, N., Anchukaitis, K.J., Tackett, K., Scheff, J., Brice, A., Catron, B., Blozan, W. and Riddle, J. 2012. A long-term perspective on a modern drought in the American Southeast. *Environmental Research Letters* 7: 10.1088/1748-9326/7/1/014034.

http://www.nipccreport.org/articles/2012/sep/25sep2012a1.html

[SEPP Comment: In some areas cooling brings drought.]

#### The Thermal Optimality of Entire Ecosystems

Reference: Niu, S., et al, 2012. Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. *New Phytologist* 194: 775-783.

http://www.nipccreport.org/articles/2012/sep/25sep2012a2.html

#### The Little Ice Age in West Antarctica

Reference: Orsi, A.J., Cornuelle, B.D. and Severinghaus J.P. 2012. Little Ice Age cold interval in West Antarctica: Evidence from borehole temperature at the West Antarctic Ice Sheet (WAIS) Divide. Geophysical *Research Letters* 39: 10.1029/2012GL051260.

http://www.nipccreport.org/articles/2012/sep/25sep2012a4.html

#### **Chipping Away at the Hockeystick**

Reference: Larocque-Tobler, I., Stewart, M.M., Quinlan, R., Traschel, M., Kamenik, C. and Grosjean, M. 2012. A last millennium temperature reconstruction using chironomids preserved in sediments of anoxic Seebergsee (Switzerland): consensus at local, regional and Central European scales. *Quaternary Science Reviews* 41: 49-56.

http://www.nipccreport.org/articles/2012/sep/26sep2012a2.html

#### The Political Games Continue

## House Passes Legislative "Stop the War on Coal Act" Package, Takes Aim at Carbon, Coal Ash Rules

By Sonal Patel, Power News, Sep 27, 2012

http://www.powermag.com/POWERnews/5003.html?hq\_e=el&hq\_m=2530880&hq\_l=4&hq\_v=5e660500d0

[SEPP Comment: It is doubtful the Act will pass the current Senate or the President.]

#### Litigation Issues

#### EPA sued in federal court over illegal human testing

By Steven Malloy, EPA Human Testing, Sep 24, 2012

http://epahumantesting.com/2012/09/24/epa-sued-in-federal-court-over-illegal-human-testing/

#### Cap-and-Trade and Carbon Taxes

#### Report: Carbon tax could halve deficit

By Ben Geman, The Hill, Sep 26, 2012

 $\underline{http://thehill.com/blogs/e2-wire/e2-wire/258773-report-carbon-tax-could-halve-the-deficit-property and the action of the property of the p$ 

[SEPP Comment: Not if it results in an economic depression.]

#### **Carbon Tax: Deficit Reduction and Other Considerations**

Congressional Research Service, Sep 17, 2012

http://www.fas.org/sgp/crs/misc/R42731.pdf

#### Coal Era Beckons for Europe as Carbon Giveaway Finishes

By Mathew Carr, Bloomberg Businessweek, Sep 21, 2012 [H/t GWPF]

http://www.businessweek.com/news/2012-09-21/coal-era-beckons-for-europe-as-carbon-giveaway-finishes

#### Subsidies and Mandates Forever

#### The Cost of Wind-Energy Jobs

The "our industry creates jobs" argument is the last refuge of a subsidy seeker.

By Robert Bryce, National Review Online, Sep 17, 2012

http://www.nationalreview.com/articles/316854/cost-wind-energy-jobs-robert-bryce

#### Tax Credit in Doubt, Wind Power Industry Is Withering

By Diane Cardwell, NYT, Sep 20, 2012 [H/t NCP]

http://www.nytimes.com/2012/09/21/business/energy-environment/as-a-tax-credit-wanes-jobs-vanish-in-wind-power-industry.html?\_r=1&pagewanted=all&\_moc.semityn.www

[SEPP Comment: Employment numbers from the American Wind Association of 85,000 in 2008-09 are significantly greater than the ones in a Brookings Institution 2011 study of 24,294. According to the Energy Information Agency, in 2010 the tax credits amounted to \$4,986,000,000, far more than the \$1 Billion used in the article. See Aug 25, TWTW]

## The Projected Economic Impact of Proposal 3 and Michigan's Renewable Energy Standard By David G. Tuerck, Paul Bachman and Michael Head, Mackinac Center, Sep 21, 2012

http://www.mackinac.org/archives/2012/25X25STUDY.pdf

[SEPP Comment: According to the study, the renewable energy standard will lower employment, reduce disposable income, reduce net investment, increase electricity bills for households, commercial businesses and industry.]

#### The Economic Impact of Maine's Renewable Portfolio Standard

By J. Scott Moody, Main Heritage Center, Sep 27, 2012

 $\frac{http://www.mainepolicy.org/2012/09/the-economic-impact-of-maine\%\,E2\%\,80\%\,99s-renewable-portfolio-standard/}{}$ 

[SEPP Comment: Increasing electricity rates to consumers does not increase prosperity.]

#### Unit Cycling Makes the Impossible the Ordinary, EUCG Members Say

By David Wagman, Power News, Sep 27, 2012

http://www.powermag.com/POWERnews/4997.html?hq\_e=el&hq\_m=2530880&hq\_l=7&hq\_v=5e660500d0

[SEPP Comment: What this does to total CO2 and pollutant emissions as well as operating costs and plant life remains to be seen.]

#### EPA and other Regulators on the March

#### The EPA's Arrogance and Incompetence Keeps America Dependent on Foreign Oil

By Marita Noon, Energy Tribune, Sep 24, 2012

 $\frac{http://www.energytribune.com/articles.cfm/11729/The-EPAs-Arrogance-and-Incompetence-Keeps-America-Dependent-on-Foreign-Oil}{}$ 

#### The Courts and the EPA

By Alan Caruba, Warning Signs, Sep 23, 2012

http://factsnotfantasy.blogspot.com/2012/09/the-courts-and-epa.html

[SEPP Comment: Avoiding the law.]

#### Scientist who saw drowned polar bears reprimanded

An Alaska scientist whose observations of drowned polar bears helped galvanize the global warming movement has been reprimanded for improper release of government documents. By Becky Bohrer, AP, Sep 28, 2012 [H/t WUWT]

http://seattletimes.com/html/nationworld/2019291549 apuspolarbearscientist.html

[SEPP Comment: Further evidence that the Federal Appeals Courts must change to permit questioning of scientific declarations by Federal government agencies.]

#### Critical evidence on polar bears in W. Hudson Bay is unpublished

By Susan Crockford, Polar Bear Science, Sep 27, 2012

http://polarbearscience.com/2012/09/27/critical-evidence-on-polar-bears-in-w-hudson-bay-is-unpublished/

#### Energy Issues – Non-US

#### The Reasons to Wonder About Natural Gas Prices

By Staff Writers, New Energy and Fuel, Sep 27, 2012 [H/t GWPF]

http://newenergyandfuel.com/http:/newenergyandfuel/com/2012/09/27/the-reasons-to-wonderabout-natural-gas-prices/

#### The Efficiency Wall and the Future of the Internet's Energy Cost

By Mark Mills, Energy Facts Weekly, Sep 26, 2012

http://us1.campaign-archive2.com/?u=29bc7d5d85828d574f86c157a&id=2b2af88e11&e=

[SEPP Comment: As many governments institute policies driving up the cost of electricity, the demand from the high tech industries continues to expand.]

#### Energy Issues -- US

#### **Energy Independence in the US: Is the Impossible Possible?**

By Keith Schaefer, Oil Price, Sep 27, 2012

 $\frac{http://oilprice.com/Energy/Energy-General/Energy-Independence-in-the-U.S.-Is-the-Impossible-Possible.html}{Possible.html}$ 

#### The China Model and U.S. Energy Policy

By Lee Lane, Hudson Institute, Sep 2012

http://www.hudson.org/files/publications/TheChinaModelandUSEnergyPolicy--LeeLane0912.pdf Summary By Staff Writers, NCPA, Sep 24, 2012

http://www.ncpa.org/sub/dpd/index.php?Article\_ID=22390&utm\_source=newsletter&utm\_mediu\_m=email&utm\_campaign=EnvPD

#### Rethinking 'green' tax preferences

Editorial, Washington Examiner, Sep 25, 2012 [H/t Randy Randol]

http://washingtonexaminer.com/rethinking-green-tax-

preferences/article/2509009#.UGR2jVH5Xrp

#### Oil and Natural Gas - the Future or the Past?

#### U.S. manufacturing sector prospers with natural gas boom

Rising natural gas production has lured more manufacturers back to the United States with the promise of cheaper electricity and feedstock.

By Jay Marks, News Oklahoma, Sep 21, 2012 [H/t GWPF]

http://newsok.com/u.s.-manufacturing-sector-prospers-with-natural-gas-boom/article/3711511 [SEPP Comment: The job growth from an increase in lower cost ethane alone may dwarf the total green jobs in the wind industry, as reported in the vaunted Brookings study.]

#### **Gazprom Falls Victim To Shale Revolution**

By Anders Aslund, Financial Post, via GWPF, Sep 28, 2012 http://www.thegwpf.org/anders-aslund-gazprom-falls-victim-to-shale-revolution/

#### Washington's Control of Oil and Gas

#### Pollutants linked to 'fracking' found in Wyoming groundwater

By Zack Colman, The Hill, Sep 27, 2012

 $\underline{http://thehill.com/blogs/e2-wire/e2-wire/259047-study-finds-groundwater-pollution-previously-linked-to-fracking}$ 

[SEPP Comment: Traces of the same organic compounds can be found in groundwater where there was no hydraulic fracturing.]

#### Oil trade group blasts wave of regulations

By Jennifer Dlouhy, Fuel Fix, Sep 25, 2012

http://fuelfix.com/blog/2012/09/25/oil-trade-group-blasts-wave-of-regulations/

#### Return of King Coal?

#### **Beijing Plans to Kick Its Coal Addiction**

By Tim Daiss, Energy Tribune, Sep 27, 2012

http://www.energytribune.com/articles.cfm/11746/Beijing-Plans-To-Kick-Its-Coal-Addiction [SEPP Comment: Though it may take many decades.]

#### Coal Set for a Strong Comeback in Europe

By Gary Hunt, Oil Price, Sep 25, 2012

http://oilprice.com/Energy/Coal/Coal-Set-for-a-Strong-Comeback-in-Europe.html

#### Obama's War on Coal

By Katrina Trinko, National Review, Sep 26, 2012

http://www.nationalreview.com/blogs/print/328532

[SEPP Comment: The statement can be expanded to include much of Washington.]

#### Nuclear Energy and Fears

#### IAEA Updates Its Projections for Nuclear Power in 2030

By Alan McDonald and Holger Rogner, IAEA, Sep 25, 2012

http://www.iaea.org/newscenter/news/2012/np2030.html

[SEPP Comment: Links to current projections, projections made in 2011, and projections made before the event in Japan in 2010.]

#### 23 nuclear power plants are in tsunami risk areas

By Staff Writers, Madrid, Spain (SPX), Sep 24, 2012

http://www.nuclearpowerdaily.com/reports/23\_nuclear\_power\_plants\_are\_in\_tsunami\_risk\_areas 999.html

#### Emirates, Saudis drive for nuclear power

By Staff Writers, Abu Dhabi, United Arab Emirates (UPI) Sep 21, 2012

http://www.nuclearpowerdaily.com/reports/Emirates Saudis drive for nuclear power 999.html

#### Alternative, Green ("Clean") Solar and Wind

#### **GE's New Natural-Gas Turbines Could Help Renewables**

The technology could make it cheaper to use wind

By Kevin Bullis, Technology Review, Sep 27, 2012

http://www.technologyreview.com/news/429388/ges-new-natural-gas-turbines-could-help/?nlid=nldly&nld=2012-09-28

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

#### Ten Reasons To Care That E15 Ethanol Is On The Way To Your Gas Station

By Larry Bell, Forbes, Sep 23, 2012

 $\underline{\text{http://www.forbes.com/sites/larrybell/2012/09/23/ten-reasons-to-care-that-e15-ethanol-is-on-the-way-to-your-gas-station/}$ 

#### Wood insanity be the reason?

By Andrew Montford, Bishop Hill, Sep 26, 2012

http://www.bishop-hill.net/blog/2012/9/26/wood-insanity-be-the-reason.html

[SEPP Comment: As the UK was running out of trees, it turned to coal for energy. Now it's returning to wood?]

#### Alternative, Green ("Clean") Vehicles

#### Who Killed The Electric Car? Toyota Now Tries For That Role

By Dale Buss, Forbes, Sep 24, 2012

 $\underline{http://www.forbes.com/sites/dalebuss/2012/09/24/toyota-calls-emperor-on-no-clothes-essentially-kills-evs/}$ 

#### **Obamacar: Bad Karma For Taxpayers**

By Larry Bell, Forbes, Sep 25, 2012

http://www.forbes.com/sites/larrybell/2012/09/25/obamacar-bad-karma-for-taxpayers/

#### **Electric Car Verdict: Another Government-Subsidized Bust**

By Robert Bradley Jr., Master Resource, Sep 26, 2012

http://www.masterresource.org/2012/09/electric-car-bust/

#### California Dreaming

#### Alberta's largest wind project ready before winter

By Dave Cooper, Edmonton Journal, Sep 18, 2012 [H/t Peter Salonius]

http://www.edmontonjournal.com/technology/Alberta+largest+wind+project+ready+before+winter/7262234/story.html#ixzz26vpl9pR9

[SEPP Comment: Partially funded by green-energy credits needed by a California utility, paid by California electricity consumers. Do California bureaucrats count these jobs in Canada as green jobs?]

#### The slow death of Obama's high speed rail continues

By Conn Carroll, Washington Examiner, Sep 26, 2012

http://washingtonexaminer.com/the-slow-death-of-obamas-high-speed-rail-

 $\underline{continues/article/2509100?utm\_source=Washington\%20Examiner:\%20Opinion\%20Digest\%20-pinion\%20-pin$ 

<u>%2009/27/2012&utm\_medium=email&utm\_campaign=Washington%20Examiner:%20Opinion%20Digest#.UGQ3kVH5Xro</u>

#### 'Carmaheaven': Closure of I-405 in 2011 improved air quality up to 83 percent

By Alison Hewitt, UCLA Press Release Sep 28, 2012 [H/t WUWT]

http://newsroom.ucla.edu/portal/ucla/405-closure-improved-air-quality-239043.aspx

"There is no safe level of PM2.5 concentrations, where you would no longer observe health impacts, so any reduction is an improvement," Zhu said.

[SEPP Comment: EPA linear, no-threshold thinking at its worst.]

#### Environmental Industry

#### Fifty years after Silent Spring

By Lubos Motl, Reference Frame, Sep 27, 2012

http://motls.blogspot.com/2012/09/fifty-years-after-silent-spring.html#more

#### Silent Spring's 50-Year History of Selective Data

Rachel Carson, more than any other person, created the politicized science that afflicts today's public policy debates.

By Ronald Bailey, Reason, Sep 26, 2012

http://reason.com/archives/2012/09/26/silent-spring-turns-50-this-week

#### Other Scientific News

#### How the NSF allocates billions of federal dollars to top universities by Lee Drutman

By Roger Pielke, Sr, Climate Science, Sep 22, 2012

 $\frac{http://pielkeclimatesci.wordpress.com/2012/09/22/how-the-nsf-allocates-billions-of-federal-dollars-to-top-universities-by-lee-drutman/$ 

The more university-affiliated individuals serve on NSF advisory committees, the more NSF funding the university gets.

[SEPP Comment: Link to the NSF funding of various universities.]

#### NASA Rover Finds Old Streambed on Martian Surface

By Staff Writers, Pasadena CA (JPL), Sep 28, 2012

http://www.marsdaily.com/reports/NASA\_Rover\_Finds\_Old\_Streambed\_on\_Martian\_Surface\_9 99.html

#### Life in the extreme

By Staff Writers, Raleigh NC (SPX), Sep 25, 2012

#### http://www.spacedaily.com/reports/Life\_in\_the\_extreme\_999.html

#### Pesticides not yet proven guilty of causing honeybee declines

By Staff Writers, Exeter UK (SPX), Sep 24, 2012

http://www.seeddaily.com/reports/Pesticides not yet proven guilty of causing honeybee declines\_999.html

[SEPP Comment: Contradicting a prior report blaming pesticides for colony collapse. Based on new calculations, although individual bees may be killed, there is no evidence the colony will collapse.]

#### Other News that May Be of Interest

#### Will a new 'Weather Commission' be a benefit or a travesty?

By Anthony Watts, WUWT, Sep 28, 2012

http://wattsupwiththat.com/2012/09/28/will-a-new-weather-commission-be-a-benefit-or-a-travesty/

## Warning of 'water bankruptcy' for many regions after reviewing 200 major global projects By Staff Writers, Bangkok, Thailand (SPX), Sep 26, 2012

http://www.terradaily.com/reports/Warning of water bankruptcy for many regions after reviewing 200 major global projects 999.html

#### **BELOW THE BOTTOM LINE:**

#### Consumer Reports: Fisker Karma the Worst Luxury Sedan

By Paul Chesser, National Legal and Policy Forum, Sep 26, 2012

http://nlpc.org/stories/2012/09/26/consumer-reports-fisker-karma-worst-luxury-sedan

#### Fueling the Fleet, Navy Looks to the Seas

By Staff Writers, Washington DC (SPX), Sep 26, 2012

http://www.spacewar.com/reports/Fueling\_the\_Fleet\_Navy\_Looks\_to\_the\_Seas\_999.html

[SEPP Comment: Creating hydrocarbon fuel from sea water while the ships are steaming makes more sense than replacing jet fuel which costs less than \$4 per gallon with biofuel that costs about \$27 per gallon. At least fuel from sea water does not need to be transported long distances. The research may lead to a breakthrough, though doubtful.]

#### **ARTICLES:**

#### 1. Climate Realism

By S. Fred Singer, American Thinker, Sep 26, 2012

http://www.americanthinker.com/2012/09/climate\_realism.html

Even with the Kyoto Protocol due to expire at the end of this year, Obama persists in giving highest priority to climate change policy if re-elected. Does the U.S. really want to lead the world in committing economic suicide? It pays to look at the rapidly disappearing scientific rationale for trying to mitigate a putative future global warming.

In an essay "Why the Global Warming Skeptics are Wrong" in the *New York Review of Books* of Feb. 22, 2012, Yale professor William D. Nordhaus attempts to counter the arguments of a group

of 16 prominent scientists who published an essay, "No Need to Panic about Global Warming," in the *Wall Street Journal* on Jan. 27, 2012.

Two crucial points may have been overlooked in the debate:

- \*\*Evidence for anthropogenic global warming (AGW) is problematic.
- \*\*A modest warming is likely to be beneficial -- not damaging.

First, some background: I have known Bill Nordhaus for about 40 years; he certainly is no wild-eyed alarmist, but rather a highly respected specialist in environmental economics. Through his association with the U.N. climate-science panel, he is familiar with the main arguments supporting the IPCC's contention that human activities, mainly rising carbon dioxide levels from energy generation, have been responsible for much of past warming. He does not question this IPCC claim; however, I have no reason to believe that he supports any of the drastic CO<sub>2</sub>-mitigation schemes -- be they carbon sequestration or alternative "green" energy projects -- or that he has illusions about the efficacy of the Kyoto Protocol or similar measures of international control.

So I will simply try to address questions Prof. Nordhaus posed in his NYRB essay, to which I responded in a (Aug. 16) letter in the NYRB. I wanted my response to reach NYRB readers, typically liberal academics, lawyers, and teachers.

1. Is the planet in fact warming? This crucial question cannot be answered honestly unless one specifies the time interval referred to. Clearly, the climate has warmed since the last Ice Age. It has also warmed since about 1850, in recovering from the Little Ice Age (roughly 1400-1800 AD). But is has *not* warmed since the Medieval Warm Period of 1,000 years ago, or since the Holocene Optimum, which reached even higher temperatures 5,000-8,000 years ago. Nor has it warmed during the past decade.

Coming closer to the present, we see a warming between 1910 and 1940, which is real but not caused by human activities. Most would agree that the Earth's surface cooled slightly between 1940 and 1975 -- even though carbon dioxide, a greenhouse (GH) gas, had been steadily increasing during this period. Temperature data show a sudden, unexplained jump around 1976-1977. Surface weather stations then report a modest increase in temperature up to the year 2000 - although different analyses disagree on details and have been frequently revised. Many people, including Nordhaus, tend to identify this reported increase as caused by the almost parallel increase in CO<sub>2</sub>. In its Summary, the latest IPCC report (2007) states explicitly that this reported (surface) warming trend is sure (>90%) evidence for anthropogenic global warming (AGW).

\*\*We note, however, that the atmosphere, both over land and ocean, did *not* warm during this same post-1978 period -- even though atmospheric theory and *every* climate model predicts that the tropical atmosphere should warm nearly twice as rapidly as the surface. This atmospheric evidence comes from instruments in weather satellites, producing the only truly global data -- and, independently, from thermometers in balloon-borne radiosondes.

\*\*In 2000, the U.S. National Academy of Sciences assembled a team of distinguished scientists to discuss the puzzle of surface warming in the absence of an atmospheric warming trend. However,

their report, "Reconciling observations of global temperature change," could not reconcile the disparity.

\*\*I note that an analysis of ocean data has shown no significant warming during the period of 1978 -2000. Independent non-thermometer data (so-called proxies, like tree rings, ice cores, ocean sediments, stalagmites, etc.) also show no warming trend between 1978 and 2000. Significantly, there has been no warming for the past decade. All this, in spite of constantly rising CO<sub>2</sub> levels.

The inescapable conclusion -- or perhaps I should say suspicion -- is that land-based weather stations may be reporting just *local* temperature increases but that there is negligible *global* warming. If correct, this surmise would remove the main evidence for the IPCC's claim about the existence of appreciable AGW.

- 2. Are human influences an important contributor to warming? Obviously, the answer must be no -- if one accepts the evidence about the nonexistence of recent warming. Nevertheless, it should be stated that since CO<sub>2</sub> is a GH, and since most if not all of its increase is human-caused, there must be *some* minor human contribution to climate change. The real scientific puzzle, not mentioned by Nordhaus, is why the observed temperature trends are so much smaller than what models calculate.
- 3. Is carbon dioxide a pollutant? Lawyers might say, Yes, this is what the Supreme Court ruled in 2007, but scientists are not so sure. A pollutant, by definition, must produce harmful effects. CO<sub>2</sub> is a natural constituent of the atmosphere, non-toxic, invisible, having no physiological effects we know of -- even at high concentrations. Its definition as a pollutant relies entirely on its alleged causation of significant global warming and on the additional assumption that a warmer climate is damaging.

(We should take note that  $CO_2$  is Nature's plant fertilizer. The world's important crop plants developed when  $CO_2$  levels were much greater than today's. Innumerable experiments have demonstrated that higher  $CO_2$  concentrations are beneficial for plant growth and therefore benefit global agriculture. Plants not only grow faster, but require less water. All of this is well-known to agricultural experts and to the owners of commercial greenhouses, who often raise  $CO_2$  levels artificially to increase productivity. Perhaps we should be grateful to China, the world's largest emitter of  $CO_2$ .)

However, before considering CO<sub>2</sub> as a "criteria pollutant" subject to regulation under the Clean Air Act, the Supreme Court ruling requires the EPA to demonstrate by independent research that higher levels of CO<sub>2</sub> are damaging to "human health and welfare." But the EPA's Endangerment Finding and supporting Technical Support Document (TSD) have been attacked by a large number of plaintiffs. The case was lost before the Court of Appeals of the District of Columbia; it is likely that it will return to the Supreme Court, which may get a chance to modify its 2007 decision.

4. Are we seeing a regime of fear for skeptical climate scientists? Being fairly senior, I am not much affected by the animosity towards skeptics, revealed by the leaked e-mails from Climategate. However, I seem to have lost friends in the academic community and have had considerable difficulty in getting technical papers published in journals whose editors have openly

expressed their bias. My real concern is for younger scientists who are just trying to establish their professional careers.

5. Are the views of mainstream climate scientists driven primarily by the desire for financial gain? This is a leading question; I would assume that scientific curiosity is the main driving force. Financial gain may be only one of several additional factors, along with prestige and academic advancement, invitations to important conferences, prizes, etc. However, I would point to the large sums, about \$20 billion during the past decade, that the government has spent on climate research, of which only a tiny fraction has gone to skeptics. I also note the multi-million-dollar grants to "mainstream" climate scientists by private foundations, and even by oil companies such as Exxon and BP. Not surprisingly, the number of scientific publications is roughly proportional to this level of financial support.

6. Is it true that more carbon dioxide and additional warming will be beneficial? Briefly, my answer is yes.

First, Nordhaus correctly states that net benefits (benefits minus costs) should be maximized. This is mathematically equivalent to the well-known result that one should increase pollution control as long as marginal benefits exceed marginal costs. As an expert economist, however, Nordhaus should expand his discussion of more important points:

\*\*The discount rate plays a crucial role in the present case, where costs are incurred today, while benefits may be realized 100 years hence. Nordhaus himself uses realistic discount rates of 4%, but he should be more critical of others, like Lord Nicholas Stern, who use discount rates close to zero, which severely skews any cost-benefit analysis by greatly over-estimating the present dollar-value of benefits.

\*\*Further, one must ask if there is really any net damage at all from a warmer climate. I wonder why Professor Nordhaus never mentions the work of Yale resource economist Robert Mendelsohn and his 23 economist-colleagues, whose acclaimed book concludes that a modest warming and higher CO<sub>2</sub> levels would actually enhance GDP-raising average income, prosperity, and general welfare. True, there are also respected economists who hold a different view; the 1996 report of the IPCC lists results of several of their analyses. While these agree surprisingly well on the *total* amount of damage, I found that they strongly disagree on individual sectors (like agriculture and others) that make up these totals. And they all assign large economic damage to sea-level rise -- even though there is no observational evidence for an influence of short-term (decadal) temperature changes on the rate of rise of sea level.

#### 2. What Arctic Foxes Know About Global Warming

By Matt Ridley, WSJ, Sep 21, 2012 [H/t William Readdy] <a href="http://online.wsj.com/article/SB10000872396390444450004578002500275382408.html?KEYW">http://online.wsj.com/article/SB10000872396390444450004578002500275382408.html?KEYW</a> ORDS=Arctic+fox+global+warming

This week probably saw the Arctic Ocean's sea ice reach its minimum extent for the year and begin to expand again, as it usually does in mid-September. Given that the retreat of Arctic ice has become a key piece of evidence for those who take a more alarmed view of global warming, it's newsworthy that 2012's melt was the greatest since records began in 1979, with sea ice in the Northern Hemisphere shrinking to about 1.3 million square miles, or about half the 1979-2008 average.

As this column has sometimes pointed out ways in which the effects of global warming are happening more slowly than predicted, it is fair to record that this rate of decline in Arctic sea ice is faster than many predicted. Although an entirely ice-free Arctic Ocean during at least one week a year is still several decades away at this rate, we are halfway there after just three decades.

Arctic melts on this scale have happened before, however. Svend Funder of the Danish Museum of Natural History and his colleagues recently studied the northern coast of Greenland, where the land-fast sea ice never breaks up, even in a year like this. Yet evidence of wave action in the past (indicating open waters) and waterlogged driftwood show that for 2,500 years in the "Holocene Optimum" period, when Arctic summer temperatures were two to four degrees Celsius warmer than today, the summer melt of the Arctic Ocean routinely left half as much ice as this year.

Another study, by Jørgen Berge and colleagues from the University Centre in Svalbard, Norway, and other institutions, discovered a downward migration of egg-carrying amphipod crustaceans that enables them to recolonize Arctic ice from ice-free areas using deep currents. They say this implies that some animals are well adapted to the seasonal loss of ice.

In the Holocene Optimum there was no collapse of the polar-bear population or "point of no return." The extent of Arctic summer sea ice then increased steadily, reaching a maximum during the very recent so-called Little Ice Age of 1500-1850. Potential confirmation that this was an unusually icy epoch comes from a newly published study by Durham University (in Britain) of the genetics of Arctic foxes on Iceland.

Greger Larson and his colleagues found that the remains of 17 Arctic foxes in Iceland from the ninth to the 12th centuries shared a single genetic signature, while the modern Icelandic fox population has five different genetic types. During the cold centuries, they infer, genetically diverse Arctic foxes from the Eurasian continent apparently reached Iceland via sea ice.

Anecdotal evidence suggests that the extent of summer Arctic sea ice then shrank after 1850, before expanding in the 1960s. Clearly, the Arctic Ocean's sea ice is both more variable and more vulnerable to warming than expected. But is the current rapid retreat caused only by warming? At least some of it might be caused by soot from dirty, coal-fired power stations. Some scientists have noticed that the decline in Arctic sea ice correlates better with the rapid growth of coal consumption in China than it does with global temperature. As the argument goes: Soot falling on white ice darkens it, which results in faster melting in summer sun.

Correlation does not always mean causation, but if soot is contributing to sea-ice melt, then it is moderately good news, because cleaning up soot emissions from power stations could be both cheaper and quicker than cutting carbon-dioxide emissions.

There's also the puzzling fact that Antarctic sea ice shows no sign of summer retreat, and the current winter's peak extent is well above average. The sea-dominated Southern Hemisphere is certainly warming more slowly than the land-dominated Northern Hemisphere, but it has still been warming. If warming is supposed to be "global," shouldn't sea ice retreat at both ends of the world?

\*\*\*\*\*\*

#### 3. Power Plants Aim to Curb Their Thirst

By Rebecca Smith, WSJ, Sep 21, 2012

http://online.wsj.com/article/SB10000872396390444433504577649914114390298.html?mod=IT P pageone 1

The drought that parched more than 30 states this summer is forcing the power industry to rethink its heavy use of water and adopt technology to use less of it.

Electricity generation is the biggest single user of water in the U.S., according to an analysis by the U.S. Geological Survey, which found that power plants account for nearly half of all water withdrawn from American rivers, lakes and seashores each day—more than 200 million gallons worth.

The water, which surpasses by far the amount used for irrigation, is converted to steam to turn turbines, and is used to cool equipment at many kinds of plants, including nuclear, coal and gas units. Much of it later is put back, though in heated form.

This summer, however, some power plants had to cut electricity production because of low water levels or because water was too warm to cool nuclear reactors. The National Oceanic and Atmospheric Administration said the period from August 2011 through July 2012 was the hottest 12-month period on record in the U.S. since 1895.

Low water levels remain a concern for both power companies and the agencies that operate electric grids across the country, the federal Energy Information Administration said earlier this month.

"The power industry is all over this issue," said John Moura, associate director of reliability assessments for National Electric Reliability Corp., the federal organization responsible for electric-grid dependability. "The net result is going to be a reduction in water use by the power industry."

The federal Bureau of Reclamation, the second-biggest producer of hydroelectric power in the country with dams across the western U.S., said electricity output in the drought-stricken Colorado River system is down 16% from a decade ago. To cope with persistently low water, the agency is installing new turbines that can generate electricity with lower flows in places like the Hoover Dam, on the Arizona-Nevada border.

"We're just getting started," said Kerry McCalman, senior hydropower adviser, "but results are good so far."

Rising water temperatures also are causing trouble. In July, Exelon Corp.'s EXC -0.33% Braidwood nuclear plant in Illinois had to get special permission from the Nuclear Regulatory Commission to continue running when the plant's cooling-pond temperature reached 102 degrees Fahrenheit.

Operators of the Millstone nuclear-power plant in Connecticut shut down one of two reactors when the temperature of Long Island Sound reached 75 degrees in early August. Plant spokesman Kenneth Holt said the two-week shutdown resulted in 255,000 megawatt hours of lost power production worth several million dollars.

Dominion Resources Inc., D -0.24% Millstone's operator, is conducting a study it hopes will convince regulators that the plant is safe to run even if water temperatures are high.

Some companies are replacing coal-fired plants, which use a lot of water, with less-thirsty natural-gas plants. In Salem, Mass., Footprint Power LLC got community support to do just that, in part because of the water savings.

The existing Salem Harbor coal plant was allowed to withdraw as much as 670 million gallons of seawater each day and discharge water that was as much as 28 degrees hotter, changing the ecology of the harbor. The new gas-fired plant, which the company hopes to have in operation in 2016, will use no seawater, said Peter Furniss, the chief executive of Footprint Power, which recently bought the site from Dominion.

Mr. Furniss said the reduction in water use is key to garnering regulatory approvals in Massachusetts.

AES Corp. AES -0.98% wants to build new gas-fired units at its existing plant site in Huntington Beach, Calif., which will use a \$30 million air condenser instead of relying on seawater for cooling. Currently, the Huntington Beach plant uses an average of 270 million gallons of seawater and 260,000 gallons of fresh water each day. If AES gets permission to build the new gas-fired units and finds a buyer for the power, it plans to stop using seawater and cut fresh-water use to 41,000 gallons a day.

"Huntington Beach is surf city," said Stephen O'Kane, program engineer for AES, which is based in Arlington, Va. "When they heard we were proposing to eliminate using ocean water for cooling, that was a huge plus" in generating public support for the plan.