

**The Week That Was: 2014-03-22 (March 22, 2014)**  
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**The Science and Environmental Policy Project**

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**Quote of the Week:** *We are at the very beginning of time for the human race. It is not unreasonable that we grapple with problems. But there are tens of thousands of years in the future. Our responsibility is to do what we can, learn what we can, improve the solutions, and pass them on.* Richard Feynman, The Quotes Page

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**Number of the Week:** 16.9% in two years

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**9th International Conference on Climate Change**

Press Release, The Heartland Institute, Mar 17, 2014

<http://climateconference.heartland.org/>

July 7 – 9 -- Las Vegas, Nevada

Includes the Findings of the New Report of the Nongovernmental International Panel on Climate Change (NIPCC) *Climate Change Reconsidered II*, Volumes 1, 2, and 3

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**THIS WEEK:**

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

**Lowering Standards:** Perhaps the most severe attacks on scientific rigor are coming from once-distinguished scientific organizations promoting a particular view that is not necessarily based on rigorous science. As Patrick Michaels and Chip Knappenberger discuss, the American Association for the Advancement of Science (AAAS) publically promoted corn ethanol for automobile fuel, a political issue of questionable public or scientific benefit.

AAAS has now released a report entitled *What We Know: The reality, Risks and Responses to Climate Change*. The report is written in an alarmist tone, purporting to be based evidence it does not present. The report is based on three assertions. One, *climate scientists agree: climate change is happening here and now*. Climate change has been happening for hundreds of millions of years, so what is new? The report further states that 97% of climate scientists have concluded that human-caused climate change is happening. If the 97% is based on one the three surveys that have been highly touted, then it is misleading. The results of the surveys were highly manipulated after the surveys were conducted. Probably the worst one was published in *Eos*, where about 10,300 geoscientists were surveyed and only 79 responses were included in the final results calculating 97%.

SEPP Chairman Fred Singer commented: the report states: “*It is not the purpose of this paper to explain why this disconnect between scientific knowledge and public perception has occurred. Nor are we seeking to provide yet another extensive review of the scientific evidence for climate change. Instead, we present key messages for every American about climate change:*” ... aka propaganda.

The second assertion is: *We are at risk of pushing our climate system toward abrupt, unpredictable, and potentially irreversible changes with highly damaging impacts*. There is no evidence that reported late-20<sup>th</sup> century climate change/global warming was unusual, and contrary to forecasts from climate models there is not current warming trend.

The third assertion is: *The sooner we act, the lower the risk and cost. And there is much we can do.* This statement is not true. We do not understand the natural causes of climate change and there is little we can do to stop natural climate change. Actions taken with such ignorance may harm humanity and the environment. In this assertion the report states: *The effects of CO2 emissions cannot be reversed from one generation to the next until there is a large- scale, cost-effective way to scrub carbon dioxide from the atmosphere.* SEPP Director Tom Sheahan commented that “Plant life does exactly that, at zero cost.”

Singer further commented: “*The overwhelming evidence of human-caused climate change ...*” is absent.

Judith Curry wrote that the rationale behind the report may have been revealed by co-chair James McCarthy “*The real experts on this subject agree in a way that the public do not understand.*” Yet, there are no experts on the committee on risk management, economics, mitigation strategies, which is about one-half of the report.

Apparently this AAAS committee has appointed themselves as the real experts on global warming/climate change. Yet, they failed to substantiate their knowledge of the natural causes of climate change. See links under Lowering Standards and for a review of the Cook et al. study claiming 97% see link under Questioning the Orthodoxy.

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**Spencer v. Time:** *Time* Magazine touted the new AAAS statement as scientific fact. The reporter falsely claimed the *science linking human activities to climate change is analogous to the science linking smoking to lung and cardiovascular diseases.* There is a dramatic difference between the two. The smoking link was based on rigorous statistical evidence, though the causal mechanism was not known. The possible link between humans and global warming is weak, at best.

The same reporter hyped a model study claiming that global warming will cause a decline in agricultural productivity and could lead to widespread famine. Roy Spencer, who speaks at a conference for grain producers and investors, took this article, and paper, to task.

Very simply, there is no empirical evidence that production of wheat, soybeans, and maize declined with late 20<sup>th</sup> century warming. The yields of the three crops continue to increase. Annual corn yield may decline if the summer is too hot, but the trend of increasing yields is dramatic. Spencer states that, with current knowledge, one cannot back out from the data any climate-related signal.

Further, such model studies assume that humans and human activities such as agriculture will not adjust by shifting crops and developing more heat resistant strains. This flap is one more example why studies based on un-validated models are not science, but something else. See links under Agriculture Issues & Fear of Famine, Un-Science or Non-Science?, and Defending the Orthodoxy.

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**Low Sensitivity:** The report by Lewis and Crok discussed in last week’s TWTW continues to prompt questioning and comments. As with the report by The Right Climate Stuff team, the report indicates that the sensitivity of the earth’s climate to increasing carbon dioxide (CO2) may be low—the lower values of range generally used by the UN Intergovernmental Panel on Climate Change. Further, transient climate response (TCR) to CO2 may be more appropriate metric to use

rather than equilibrium climate sensitivity (ECS). For a summary by Lewis of what is occurring, see link under Models v. Observations.

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**Species Extinction:** One of the loudly repeated claims of the climate establishment is that global warming/climate change will lead to massive species extinction. On Watts Up With That, Craig Loehle has a post describing the three common properties, or assumptions, that many of the studies on species extinction contain. One, use the most extreme model and scenario, 2) oversimplify the environment, and 3) assume the species cannot tolerate environmental change beyond its current location. Loehle shows why these assumptions lead to false conclusions. Among them, it is cold that kills vegetation not heat.

The species extinction group needs high values for climate sensitivity (TCR) to justify their research. Low values would render most of their work meaningless. Perhaps this is why the IPCC fails to lower the range of values even though, increasingly, empirical research does not support the high values. See link under Challenging the Orthodoxy.

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**APS Statement:** As reported last week, The American Physical Society (APS) formed a committee to evaluate its climate statement. The expert panel of six included three skeptics. These actions prompted some commentators to be optimistic about the result. There may be reason for hope, but optimism may be premature. See links under Seeking a Common Ground.

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**External Cost:** The Pacific Northwest has major wind power generation. It is backed up by the largest hydro-generating system in the US, using dams controlled by the Federal Bonneville Power Administration and non-Federal utilities. Writing in Master Resource, Wayne Lusvardi reports that the Wanapum Dam, owned by the Grant County Public Utility District in central Washington State, has developed a crack. The cause of the crack will probably not be known for some time. But, it is possible that rapid ramp-up required to provide back-up for wind power may be the cause. Lusvardi references a Swedish study that identified “stops and starts” of hydropower plants as a cause of foundation cracks. Lusvardi also states that the utility district is replacing the turbines in the dam that are at the end of their useful life, which was short compared with turbines used for constant generation. These reports continue to question the advisability of using hydro-generation to back-up unreliable wind and who should pay for the associated external costs. See link under Energy Issues – US.

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**IGCC:** Donn Dears reports on the failure of Integrated Gasification Combined Cycle (IGCC) power plants. These have been trumpeted by environmentalists, claiming that the administration and environmental groups are not in a war against coal. The coal industry thought that the plants may provide means for Carbon Capture and Sequestration (CCS). Three plants have been built without CCS. The capital cost is about the same as a nuclear plant, \$5,500 per KW, or about 5 times the cost of a combined cycle natural gas power plant. Dears discusses another unrealistic scheme as well. See link under Return of King Coal.

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**Natural Gas Export:** The Russian take-over of the Crimea has prompted calls for the US to develop the ability to export Liquefied Natural Gas (LNG). Opponents are claiming that it is too late to save the Crimea. Given the long lead time that development of the facilities require, the opponents are technically correct. However, it is not too late to prevent future take-overs, by giving Europeans an alternative to Russian gas. For decades, the opponents have made similar arguments to oppose the development of the oil and gas resources in Alaska, which would be producing large quantities of oil and gas by now.

The Wall Street Journal reported: *Martin Dempsey, as dovish a Chairman of the Joint Chiefs as America has had, told a House hearing last week: "An energy independent [U.S.] and net exporter of energy as a nation has the potential to change the security environment around the world—notably in Europe and in the Middle East. And so, as we look at our strategies for the future, I think we've got to pay more and particular attention to energy as an instrument of national power. And because it will very soon in the next few years potentially become one of our more prominent tools."* This testimony must have been a shock to the Pentagon types who produced the last strategic review stating climate change is a major strategic threat to the US, with no mention of a Russian take-over of parts of European Countries. See Articles #2 & #3, links under Energy Issues – Non-US and March 8, 2014 TWTW

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**Wind Power Subsidies:** Some members of Congress wish to restore the credits for investment in renewable energy technology and the production tax credit for wind, both of which expired in 2013. According to the reports, the letters contain choice sentences such as *"Like all businesses, the wind industry seeks certainty and predictability so that long-term project decisions and investments can be made."* And, *"Without that stability, we once again risk losing many of the jobs, infrastructure and investment that the wind industry has created."* The wind industry is claiming like all businesses it wants certainty, predictability, and stability. Perhaps the industry should assure its product, electricity, has characteristics of certainty, predictability, and stability. Then, the industry would not need subsidies. See link under Subsidies and Mandates Forever.

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**Number of the Week:** 16.9% in two years. Russia's take-over of the Crimea is creating an East-West divide in the EU on dramatic action on global warming/climate change. The eastern countries, heavily dependent on Russian gas, oppose strong controls on CO2 emissions; the western countries, less dependent on Russian gas, advocate strong controls. In a press conference, Connie Hedegaard, the EU Commissioner on Climate Action, called for a switch to clean, renewable sources of energy. She claimed it is a myth that renewable power is causing soaring energy costs in Europe. And, *"In those member states that have had a huge component of wind and solar energy, the cost of producing energy has actually gone down."* She cited her native Denmark as the example to be followed.

According to the latest EU Eurostat electricity prices for households, in 2011 Denmark was the most expensive country in the EU with 0.298 EUR per kWh, Germany was second with 0.253 EUR per kWh. In 2009, in Denmark household electricity price was 0.255 EUR per kWh. In two years, the household electricity costs went up by 16.9% in the country Ms. Hedegaard cites as the example to be followed. See Article # 1

[In 2011 industrial prices went down to the level they were in 2009 – no net change.]  
[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Energy\\_price\\_statistics](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Energy_price_statistics)

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### ARTICLES:

For the numbered articles below, please see this week's TWTW at: [www.sepp.org](http://www.sepp.org). The articles are at the end of the pdf.

#### 1. Ukraine Crisis Is a Call to Rethink Energy Policies

EU Climate Chief Says Countries Should Switch from Russian Gas to Renewables

By Vanessa Mock, WSJ, Mar 19, 2014

<http://online.wsj.com/news/articles/SB10001424052702303802104579449382570371924>

## 2. A Gas Export Strategy

Opponents don't understand energy markets or price expectations.

Editorial, WSJ, Mar 19, 2014

[http://online.wsj.com/news/articles/SB10001424052702303802104579449584212189554?mod=WSJ\\_Opinion\\_AboveLEFTTop&mg=reno64-wsj](http://online.wsj.com/news/articles/SB10001424052702303802104579449584212189554?mod=WSJ_Opinion_AboveLEFTTop&mg=reno64-wsj)

## 3. Green Politics Made Europe Vulnerable to Putin

Germany's dependence on renewable energy is a bonanza for Gazprom.

By Rupert Darwall, WSJ, Mar 20, 2014

[http://online.wsj.com/news/articles/SB10001424052702304747404579444901610420082?mod=WSJ\\_Opinion\\_LEFTTopOpinion&mg=reno64-wsj](http://online.wsj.com/news/articles/SB10001424052702304747404579444901610420082?mod=WSJ_Opinion_LEFTTopOpinion&mg=reno64-wsj)

## 4. Exxon Agrees to Disclose Its 'Carbon Risk'

Shareholder Resolution Is Withdrawn on Promise of Environmental Report

By Daniel Gilbert, WSJ, Mar 20, 2014

[http://online.wsj.com/news/articles/SB10001424052702304026304579451642191953028?mod=WSJ\\_business\\_whatsNews&mg=reno64-wsj](http://online.wsj.com/news/articles/SB10001424052702304026304579451642191953028?mod=WSJ_business_whatsNews&mg=reno64-wsj)

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## NEWS YOU CAN USE:

### *Climategate Continued*

#### **Lewandowsky's Fury**

By Steve McIntyre, Climate Audit, Mar 21, 2014

<http://climateaudit.org/2014/03/21/lewandowskys-fury/>

### **Week in review**

By Judith Curry, Climate Etc. Mar 22, 2014

<http://judithcurry.com/2014/03/22/week-in-review-17/#more-14945>

### *Challenging the Orthodoxy*

#### **The Release of Part Two of Climate Change Reconsidered II**

Press Release, NIPCC, March 21, 2014

The second and third volumes of Climate Change Reconsidered II, addressing biological impacts, human welfare, energy, and policies, will be released during a series of events in Washington DC starting on April 7. These new reports from the Nongovernmental International Panel on Climate Change (NIPCC) are the most comprehensive and authoritative reports on global warming to be published in 2014. They will change the terms of the debate for years to come, bringing the era of global warming alarmism to an end.

<http://climatechangereconsidered.org/>

### **Un-cherry-picking and the [Fred] Singer Event**

By Christopher Monckton, WUWT, Mar 19, 2014

<http://wattsupwiththat.com/2014/03/19/un-cherry-picking-and-the-singer-event/>

### **Climate Science**

NZ Climate Truth Newsletter No 328

By Vincent Gray, CSP, Mar 17, 2014

<http://theclimatescepticsparty.blogspot.com.au/2014/03/climate-science.html>

## **IPCC Scientists Knew Data and Science Inadequacies Contradicted Certainties Presented to Media, Public and Politicians, But Remained Silent**

By Tim Ball, WUWT, Mar 21, 2014

<http://wattsupwiththat.com/2014/03/21/ipcc-scientists-knew-data-and-science-inadequacies-contradicted-certainties-presented-to-media-public-and-politicians-but-remained-silent/>

## **Climate science isn't necessarily 'settled'**

By John Christy, Centre Daily [Penn], Mar 20, 2014 [H/t Climate Etc.]

<http://www.centredaily.com/2014/03/20/4093680/john-r-christy-climate-science.html>

The reason there is so much contention regarding “global warming” is relatively simple to understand: In climate change science we basically cannot prove anything about how the climate will change as a result of adding extra greenhouse gases to the atmosphere.

## **Climate Change and the Biodiversity Crisis**

By Craig Loehle, WUWT, Mar 16, 2014

<http://wattsupwiththat.com/2014/03/16/climate-change-and-the-biodiversity-crisis/>

## ***Defending the Orthodoxy***

### **How much does the 'war on coal' really cost?**

By Tim Devaney, The Hill, Mar 21, 2014

<http://thehill.com/blogs/regwatch/energy-environment/201429-how-much-does-war-on-coal-really-cost>

Link to article: Groundhog Days

Utilities Wrong Again About Pollution Safeguard Costs

By Daniel Weiss and Miranda Peterson, American Progress, Mar 19, 2014

<http://www.americanprogress.org/issues/green/report/2014/03/19/85923/groundhog-days/>

*[SEPP Comment: Overestimates can be used against those who made such estimates. The analysis does not include any adjustments for significant technological improvements.]*

## **Scientists Sound the Alarm on Global Warming, But Americans Sleep In**

By Bryan Walsh, Time, Mar 18, 2014

<http://time.com/28721/global-warming-climate-change-gallup/>

## ***Questioning the Orthodoxy***

### **Climate policy based on faulty science does harm**

It's time for reality to supercede theory

By Anthony Sadar and Susan Cammarata, Washington Times, Mar 20, 2014

<http://www.washingtontimes.com/news/2014/mar/20/sadar-and-cammarata-when-climate-theory-collides-w/>

## **David Friedman on the 97% Consensus on Global Warming**

By David Henderson, Library of Economics and Liberty, Feb 27, 2014

[http://econlog.econlib.org/archives/2014/02/david\\_friedman\\_14.html](http://econlog.econlib.org/archives/2014/02/david_friedman_14.html)

## **The ebbing tide of climate change mitigation**

By Martin Livermore, Scientific Alliance, Mar 21, 2014

<http://scientific-alliance.org/scientific-alliance-newsletter/ebbing-tide-climate-change-mitigation>

Climate change has become part of the background noise rather than the main signal for the majority of people.

### **What Will Disappear from the IPCC Summary?**

By Donna Laframboise, NFC, Mar 17, 2014

<http://nofrackingconsensus.com/2014/03/17/what-will-disappear-from-the-ipcc-summary/>

*[SEPP Comment: The final-final summary is not yet final.]*

### **Mainstreaming fringe science with John Holdren**

The White House science adviser confuses global-warming fact and fanc

By Chip Knappenberger, Washington Times, Mar 18, 2014

<http://www.washingtontimes.com/news/2014/mar/18/knappenberger-out-on-the-fringe-with-john-holdren/#ixzz2wQ3p2E00>

### **More Scientists Debunking Climate Change Myths**

By Larry Bell, Newsmax, Mar 17, 2014

<http://www.newsmax.com/LarryBell/climate-warming-moore/2014/03/17/id/559929/>

### **Conflict-of-Interest in the IPCC's New Chapter 7**

By Donna Laframboise, NFC, Mar 21, 2014

<http://nofrackingconsensus.com/2014/03/21/conflict-of-interest-in-the-ipccs-new-chapter-7/>

### **We need more scientific mavericks**

Letter by many, Guardian, UK, Mar 18, 2014 [H/t GWPF]

<http://www.theguardian.com/science/2014/mar/18/we-need-more-scientific-mavericks>

### **Modern Magic – Clean Energy by Wire**

By Viv Forbes, WUWT, Mar 17, 2014

<http://wattsupwiththat.com/2014/03/17/modern-magic-clean-energy-by-wire/>

### ***Social Benefits of Carbon***

#### **Benefits Of Carbon Use Far Outweigh Its Costs**

By Roger Bezdek and Paul Driessen, IBD, Mar 19, 2014

<http://news.investors.com/ibd-editorials-viewpoint/031914-693890-social-cost-of-carbon-doesnt-include-social-benefits.htm?p=full>

*[SEPP Comment: May have misstated the word hydrocarbon instead of fossil fuels. Hydrocarbons do not include coal, which contains atoms other than hydrogen and carbon, such as oxygen.]*

### **Asia greened by Increased CO2 Fertilisation**

By Geoff Brown, CSP, Mar 19, 2014

<http://theclimatescepticsparty.blogspot.com.au/2014/03/asia-greened-by-increased-co2.html>

Link to paper: Recent Changes in Terrestrial Gross Primary Productivity in Asia from 1982 to 2011

By Kazuhito Ichii, et al., Remote Sensing, Nov 15, 2013

<http://www.mdpi.com/2072-4292/5/11/6043>

### **The Growing Benefits of a Warmer World**

By H. Sterling Burnett, NCPA, Mar 18, 2014

<http://www.ncpa.org/pub/ba796>



## **Amazon Inhales More Carbon than It Emits**

By Staff Writers, Pasadena CA (JPL), Mar 19, 2014

[http://www.terraily.com/reports/Amazon\\_Inhales\\_More\\_Carbon\\_than\\_It\\_Emits\\_999.html](http://www.terraily.com/reports/Amazon_Inhales_More_Carbon_than_It_Emits_999.html)

## ***Problems in the Orthodoxy***

### **UN Climate Talks In Bonn Fail**

By Tory Aardvark, His Blog, Mar 17, 2014 [H/t GWPF]

<http://toryaardvark.com/2014/03/17/un-climate-talks-in-bonn-fail/>

### **EU climate ambitions clouded by calendar issues**

By Staff Writers, EurActiv, Mar 19, 2014 [H/t GWPF]

<http://www.euractiv.com/priorities/calendar-issues-cloud-eu-climate-news-534223>

### **Why Are Americans Not More Worried About Climate Change?**

By Frank Newport, Gallup Polls, Mar 14, 2014 [H/t GWPF]

<http://pollingmatters.gallup.com/2014/03/why-are-americans-not-more-worried.html>

*[SEPP Comment: Could it be that they are not as gullible as the alarmists and politicians hope?]*

### **Hans von Storch “Fears Science Taking Role In Political Decision Processes” ... German Expert Panel Rejects 2°C Target**

By P Gosselin, No Tricks Zone, Mar 20, 2014

<http://notrickszone.com/2014/03/20/hans-von-storch-fears-science-taking-role-in-political-decision-processes-german-expert-panel-rejects-2c-target/>

### **More likely to say global warming exaggerated, Gallup polling suggests**

By Timothy Cama, The Hill, Mr 17, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/201013-gallup-more-likely-to-say-global-warming-exaggerated>

## ***Seeking a Common Ground***

### **Finally, Some Real Climate Science**

By Tony Thomas, Quadrant, Mar 18, 2014

<http://quadrant.org.au/opinion/tony-thomas/2014/03/finally-real-climate-science/>

### **Mythical Climate Change Consensus Hits An Iceberg**

Editorial, IBD, Mar 21, 2014

<http://news.investors.com/ibd-editorials/032114-694249-american-physical-society-reviews-climate-change.htm?p=full>

### **American Physical Society Sees [May See] the Light: Will It Be the First Major Scientific Institution to Reject the Global Warming “Consensus”?**

By James Delingpole, Breitbart, Mar 20, 2014

[http://www.breitbart.com/Breitbart-London/2014/03/20/American-Physical-Society-Sees-The-Light-Will-It-Be-The-First-Major-Scientific-Institution-To-Reject-The-Global-Warming-Consensus?utm\\_source=e\\_breitbart\\_com&utm\\_medium=email&utm\\_content=Breitbart+News+Roundup%2C+March+21%2C+2014&utm\\_campaign=20140321\\_m119659646\\_Breitbart+News+Roundup%2C+March+21%2C+2014&utm\\_term=More](http://www.breitbart.com/Breitbart-London/2014/03/20/American-Physical-Society-Sees-The-Light-Will-It-Be-The-First-Major-Scientific-Institution-To-Reject-The-Global-Warming-Consensus?utm_source=e_breitbart_com&utm_medium=email&utm_content=Breitbart+News+Roundup%2C+March+21%2C+2014&utm_campaign=20140321_m119659646_Breitbart+News+Roundup%2C+March+21%2C+2014&utm_term=More)



### **Simplicity amidst complexity (?)**

By Judith Curry, Climate Etc. Mar 17, 2014

<http://judithcurry.com/2014/03/17/simplicity-amidst-complexity/>

Link to the paper: Simplicity amid Complexity

By Isaac Held, Science, Mar 14, 2014

<http://www.sciencemag.org/content/343/6176/1206.short>

[SEPP Comment: Somewhat technical. Bottom line is that linear thinking may be inappropriate for understanding climate change.]

### **Moses Versus Joseph: A Biblical Lesson in Communication about Climate Change**

By Cliff Mass, Weather Blog, Mar 16, 2014

<http://cliffmass.blogspot.com/2014/03/moses-versus-joseph-biblical-lesson-in.html>

### **NASA Clarifies Its Role in Civilization-Collapse Study**

By Mike Wall, Space.com, Mar 20, 2014 [H/t GWPF]

<http://www.space.com/25160-nasa-statement-civilization-collapse-study.html>

### **UK-US Workshop Part V: Broadening the portfolio of climate information**

By Judith Curry, Climate Etc. Mar 19, 2014

<http://judithcurry.com/2014/03/19/uk-us-workshop-part-v-broadening-the-portfolio-of-climate-information/#more-14985>

### ***Review of Recent Scientific Articles by NIPCC***

***For a full list of articles see [www.NIPCCreport.org](http://www.NIPCCreport.org)***

### **Embryonic Norway Lobsters in a Warmed and Acidified Ocean**

Reference: Styf, H.J.K., Skold, H.N. and Eriksson, S.P. 2013. Embryonic response to long-term exposure of the marine crustacean *Nephrops norvegicus* to ocean acidification and elevated temperature. *Ecology and Evolution* 3: 5055-5065.

<http://nipccreport.org/articles/2014/mar/18mar2014a1.html>

...the three researchers conclude that "this species would benefit from global warming and be able to withstand the predicted decrease in ocean pH in the next century during their earliest life stages."

### **The Indo-Australian Monsoon in CMIP3 and CMIP5 Simulations**

Reference: Jourdain, N.C., Gupta, A.S., Taschetto, A.S., Ummenhofer, C.C., Moise, A.F. and Ashok, K. 2013. The Indo-Australian monsoon and its relationship to ENSO and IOD in reanalysis data and the CMIP3/CMIP5 simulations. *Climate Dynamics* 41: 3073-3102.

<http://nipccreport.org/articles/2014/mar/18mar2014a2.html>

And this means we are still not at a point where we can adequately characterize the nature of the studied region's climate of the future with any significant degree of confidence.

### **Sea Level Consequences of Exceptional Glacial Meltwater Forcing (**

Reference: Tedstone, A.J., Nienow, P.W., Sole, A.J., Mair, D.W.F., Cowton, T.R., Bartholomew, I.D. and King, M.A. 2013. Greenland ice sheet motion insensitive to exceptional meltwater forcing. *Proceedings of the National Academy of Sciences USA* 110: 19,719-19,724.

<http://nipccreport.org/articles/2014/mar/18mar2014a4.html>

...Tedstone et al. write their findings suggest "surface melt-induced acceleration of land-terminating regions of the ice sheet will remain insignificant even under extreme melting scenarios."

## **Modelling the Atlantic Multi-decadal Oscillation of the 20th-Century**

Reference: Ruiz-Barradas, A., Nigam, S. and Kavvada, A. 2013. The Atlantic Multidecadal Oscillation in twentieth century climate simulations: uneven progress from CMIP3 to CMIP5. *Climate Dynamics* 41: 3301-3315.

<http://nipccreport.org/articles/2014/mar/19mar2014a3.html>

*[SEPP Comment: Both sets of models perform poorly.]*

## ***Models v. Observations***

### **Ed's evidence of low TCR**

By Nic Lewis, Bishop Hill, Mar 19, 2014

<http://bishophill.squarespace.com/blog/2014/3/19/eds-evidence-of-low-tcr.html>

## ***Models Issues***

### **Cloudy forecast**

The biggest source of climate uncertainty is white and fluffy

By Gabriel Popkin, Science News, Mar 7, 2014 [H/t GWPF]

<https://www.sciencenews.org/article/cloudy-forecast>

*[SEPP Comment: Lengthy post explaining that the models fail in modeling clouds.]*

## **UCLA study yields more accurate data on thousands of years of climate change**

By Staff Writers, Los Angeles CA (SPX), Mar 16, 2014

[http://www.terraily.com/reports/UCLA\\_study\\_yields\\_more\\_accurate\\_data\\_on\\_thousands\\_of\\_years\\_of\\_climate\\_change\\_999.html](http://www.terraily.com/reports/UCLA_study_yields_more_accurate_data_on_thousands_of_years_of_climate_change_999.html)

"Most global climate models underestimate the average temperature variations that the region has experienced," Tripathi said, adding that the other models' simulations may be incomplete or the models are not sensitive enough.

*[SEPP Comment: Not sensitive enough to natural climate change?]*

## **Why the Alarmists' Climate Models Are Worthless**

By John Hinderaker, Power Line, Mar 21, 2014

<http://www.powerlineblog.com/archives/2014/03/why-the-alarmists-climate-models-are-worthless.php>

## ***Measurement Issues***

### **Geographers create 'easy button' to calculate river flows from space**

By Staff Writers, Los Angeles CA (SPX), Mar 19, 2014

[http://www.terraily.com/reports/Geographers\\_create\\_easy\\_button\\_to\\_calculate\\_river\\_flows\\_from\\_space\\_999.html](http://www.terraily.com/reports/Geographers_create_easy_button_to_calculate_river_flows_from_space_999.html)

## ***Changing Weather***

### **End this obsession over climate change: It stops us tackling floods and storms now say experts**

By Ben Spencer, Mail Online, Mar 21, 2014 [H/t GWPF]

<http://www.dailymail.co.uk/sciencetech/article-2585519/Social-policy-disaster-Our-climate-change-obsession-distraction-flooding-say-scientists.html>

## **Harsh Winter's Toll Could Cost the Economy Billions**

By John Schoen, NBC News, Mar 20, 2014 [H/t Clyde Spencer]

<http://www.nbcnews.com/business/economy/harsh-winters-toll-could-cost-economy-billions-n58011>

### ***Changing Climate***

#### **Climatologists offer explanation for widening of Earth's tropical belt**

By Staff Writers, Riverside CA (SPX), Mar 19, 2014

[http://www.terraily.com/reports/Climatologists\\_offer\\_explanation\\_for\\_widening\\_of\\_Earths\\_tropical\\_belt\\_999.html](http://www.terraily.com/reports/Climatologists_offer_explanation_for_widening_of_Earths_tropical_belt_999.html)

Link to paper: Influence of anthropogenic aerosols and the Pacific Decadal Oscillation on tropical belt width

By Robert J. Allen, Joel R. Norris & Mahesh Kovilakam, Nature Geoscience, Mar 16, 2014

<http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo2091.html>

*[SEPP Comment: Eight to five thousand years ago it was wider as the monsoon rains came to the Sahara. Five to three thousand years ago the monsoon rains gave rise to the Harappan civilization in the Indus plateau, which failed when the rains no longer came.]*

#### **Antarctic moss returns to life after 1,500 years frozen**

By Staff Writers, Washington (AFP), March 17, 2014

[http://www.terraily.com/reports/Antarctic\\_moss\\_returns\\_to\\_life\\_after\\_1500\\_years\\_frozen\\_999.html](http://www.terraily.com/reports/Antarctic_moss_returns_to_life_after_1500_years_frozen_999.html)

### ***Changing Seas***

#### **Jet Stream Gets Fish in Hot Water**

Ocean 'heat wave' linked to shift in atmospheric current

By Charlie Winner, OceanUs, Mar 18, 2014

<http://www.whoi.edu/oceanus/feature/ocean-heat-wave-linked-to-jet-stream>

#### **Southern Ocean iron cycle gives new insight into climate change**

By Staff Writers, Liverpool, UK (SPX), Mar 17, 2014

[http://www.terraily.com/reports/Southern\\_Ocean\\_iron\\_cycle\\_gives\\_new\\_insight\\_into\\_climate\\_change\\_999.html](http://www.terraily.com/reports/Southern_Ocean_iron_cycle_gives_new_insight_into_climate_change_999.html)

### ***Changing Cryosphere – Land / Sea Ice***

#### **Claim: ‘Sustained mass loss of the northeast Greenland ice sheet triggered by regional warming’, but, not so fast**

By Anthony Watts, WUWT, Mar 17, 2014

<http://wattsupwiththat.com/2014/03/17/claim-sustained-mass-loss-of-the-northeast-greenland-ice-sheet-triggered-by-regional-warming-but-not-so-fast/>

#### **New genetic study confirms polar bears survived several warm Interglacials**

By Susan Crockford, Polar Bear Science, Mar 17, 2014

<http://polarbearscience.com/2014/03/17/new-genetic-study-confirms-polar-bears-survived-several-warm-interglacials/#more-4652>

### ***Agriculture Issues & Fear of Famine***

#### **The Next Great Famine...or Age of Abundance?**

By Roy Spencer, His Blog, Mar 18, 2014

<http://www.drroyspencer.com/2014/03/the-next-great-famineor-age-of-abundance/>

## **Climate Change Could Cause the Next Great Famine**

By Bryan Walsh, Time, Mar 17, 2014

<http://time.com/27201/climate-change-could-cause-the-next-great-famine/>

## **Global food trade can alleviate water scarcity**

By Staff Writers, Potsdam, Germany (SPX), Mar 19, 2014

[http://www.terraily.com/reports/Global\\_food\\_trade\\_can\\_alleviate\\_water\\_scarcity\\_999.html](http://www.terraily.com/reports/Global_food_trade_can_alleviate_water_scarcity_999.html)

Link to paper: Valuing the impact of trade on local blue water

By Anne Biewald, et al, Ecology Economics, Mar 14, 2014

<http://www.sciencedirect.com/science/article/pii/S0921800914000391>

## ***Un-Science or Non-Science?***

### **Claim: Future heat waves pose threat to global food supply**

By Anthony Watts, WUWT, Mar 19, 2014

<http://wattsupwiththat.com/2014/03/19/claim-future-heat-waves-pose-threat-to-global-food-supply/>

Link to paper: Global crop yield response to extreme heat stress under multiple climate change futures

By Delphine Deryng, et al, Environmental Research Letters, Mar 19, 2014

<http://iopscience.iop.org/1748-9326/9/3/034011/article>

## **Climate change will reduce crop yields sooner than we thought**

By Staff Writers, Leeds, UK (SPX), Mar 19, 2014

[http://www.seeddaily.com/reports/Climate\\_change\\_will\\_reduce\\_crop\\_yields\\_sooner\\_than\\_we\\_thought\\_999.html](http://www.seeddaily.com/reports/Climate_change_will_reduce_crop_yields_sooner_than_we_thought_999.html)

Link to paper: A meta-analysis of crop yield under climate change and adaptation

By A.J. Challinor, et al. Nature Climate Change, Mar 16, 2014

<http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2153.html>

*[SEPP Comment: See immediately above.]*

## **Number of Days Without Rain to Dramatically Increase in Some World Regions**

By Staff Writers, La Jolla CA (SPX), Mar 18, 2014

[http://www.terraily.com/reports/Number\\_of\\_Days\\_Without\\_Rain\\_to\\_Dramatically\\_Increase\\_in\\_Some\\_World\\_Regions\\_999.html](http://www.terraily.com/reports/Number_of_Days_Without_Rain_to_Dramatically_Increase_in_Some_World_Regions_999.html)

## ***Lowering Standards***

### **What We Know: The reality, Risks and Responses to Climate Change**

By AAAS Climate Science Panel, AAAS, March 2014

[http://climatenexus.org/wp-content/uploads/2014/03/AAAS-What-We-Know\\_3.17.14.pdf](http://climatenexus.org/wp-content/uploads/2014/03/AAAS-What-We-Know_3.17.14.pdf)

## **To AAAS: What we know? Earth hasn't warmed significantly in over a decade, climate models failed to predict this**

By Anthony Watts, WUWT, Mar 18, 2014

<http://wattsupwiththat.com/2014/03/18/to-aaas-what-we-know-earth-hasnt-warmed-significantly-in-over-a-decade-climate-models-failed-to-predict-this/>

## **AAAS: What we know**

By Judith Curry, Climate Etc. Mar 18, 2014

<http://judithcurry.com/2014/03/18/aaas-what-we-know/>

### **AAAS's Guide to Climate Alarmism**

By Patrick J. Michaels and Paul C. "Chip" Knappenberger, CATO, Mar 18, 2014

<http://www.cato.org/blog/aaass-guide-climate-alarmism>

### **Climate change: we've put off the difficult decisions for too long**

The debate isn't whether global warming exists - it's what we do about it.

By Paul Nurse, President of the Royal Society, Telegraph, UK, Mar 17, 2014 [H/t Bishop Hill]

<http://www.telegraph.co.uk/earth/environment/climatechange/10701265/Climate-change-weve-put-off-the-difficult-decisions-for-too-long.html>

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

#### **Academic takedown**

By Andrew Montford, Bishop Hill, Mar 19, 2014

<http://bishophill.squarespace.com/blog/2014/3/19/academic-takedown.html>

*[SEPP Comment: Members of the climate establishment criticizing distorted headlines of pending doom.]*

### **NOAA map of February temperatures less than accurate**

By Howard Ambler, Talking About the Weather, Mar 18, 2014 [H/t WUWT]

<http://talkingabouttheweather.wordpress.com/2014/03/18/noaa-map-of-february-temperatures-less-than-accurate/>

### **What is the Gaelic for "integrity"?**

By Andrew Montford, Bishop Hill, Mar 17, 2014

<http://bishophill.squarespace.com/blog/2014/3/17/what-is-the-gaelic-for-integrity.html>

### **For NYT Enviro Reporter Justin Gillis, It's Always 'Apocalypse Now'**

By Clay Waters, News Busters, Mar 19, 2014 [H/t Climate Depot]

<http://newsbusters.org/blogs/clay-waters/2014/03/19/nyt-enviro-reporter-justin-gillis-its-always-apocalypse-now>

### **Global warming a concern at Chile's penguin paradise**

By Staff Writers, Magdalena Island, Chile (AFP), March 17, 2014

[http://www.terraily.com/reports/Global\\_warming\\_a\\_concern\\_at\\_Chiles\\_penguin\\_paradise\\_999.html](http://www.terraily.com/reports/Global_warming_a_concern_at_Chiles_penguin_paradise_999.html)

*[SEPP Comment: More special pleading.]*

### ***Communicating Better to the Public – Make things up.***

#### **Getting away with 'Müller' in the climate debate**

By Alex Hadcock, Bishop Hill, Mar 16, 2014

<http://bishophill.squarespace.com/blog/2014/3/16/getting-away-with-muller-in-the-climate-debate.html>

*[SEPP Comment: An amusing take.]*

### **Washington Post Falls for Left-Wing Fraud, Embarrasses Itself**

By John Hinderaker, Power Line, Mar 20, 2014 [H/t Timothy Wise]

<http://www.powerlineblog.com/archives/2014/03/washington-post-falls-for-left-wing-fraud-embarrasses-itself.php>

Link to the article: The biggest lease holder in Canada's oil sands isn't Exxon Mobil or Chevron. It's the Koch brothers.

By Steven Mufson and Juliet Eilperin, Washington Post, Mar 20, 2014

<http://www.washingtonpost.com/blogs/wonkblog/wp/2014/03/20/the-biggest-land-owner-in-canadas-oil-sands-isnt-exxon-mobil-or-conoco-phillips-its-the-koch-brothers/>

### **L.A. Council Members Blame Fracking for Recent Earthquake**

By Joel Pollak, Breitbart, Mar 19, 2014

[http://www.breitbart.com/Big-Government/2014/03/19/L-A-Council-Members-Blame-Fracking-for-Recent-Earthquake?utm\\_source=e\\_breitbart\\_com&utm\\_medium=email&utm\\_content=Breitbart+News+Roundup%2C+March+19%2C+2014&utm\\_campaign=20140319\\_m119626832\\_Breitbart+News+Roundup%2C+March+19%2C+2014&utm\\_term=More](http://www.breitbart.com/Big-Government/2014/03/19/L-A-Council-Members-Blame-Fracking-for-Recent-Earthquake?utm_source=e_breitbart_com&utm_medium=email&utm_content=Breitbart+News+Roundup%2C+March+19%2C+2014&utm_campaign=20140319_m119626832_Breitbart+News+Roundup%2C+March+19%2C+2014&utm_term=More)

### **The Goldilocks principle: New hypothesis explains earth's continued habitability**

By Anthony Watts, WUWT, Mar 20, 2014

<http://wattsupwiththat.com/2014/03/20/the-goldilocks-principle-new-hypothesis-explains-earths-continued-habitability/>

### ***Communicating Better to the Public – Go Personal.***

#### **The one-sided Conversation**

By Christopher Monckton, WUWT, Mar 18, 2014

<http://wattsupwiththat.com/2014/03/18/the-one-sided-conversation/>

### ***Expanding the Orthodoxy***

#### **New 'impossible to ignore' climate data spin initiative announced by the White House**

By Anthony Watts, WUWT, Mar 19, 2014

<http://wattsupwiththat.com/2014/03/19/new-impossible-to-ignore-climate-data-spin-initiative-announced-by-the-white-house/>

### **White House launches climate data initiative**

By Juliet Eilperin, Washington Post, Mar 19, 2014 [H/t Conrad Potemra]

[http://www.washingtonpost.com/politics/white-house-launches-climate-data-initiative/2014/03/19/45b0fa20-af78-11e3-a49e-76adc9210f19\\_story.html](http://www.washingtonpost.com/politics/white-house-launches-climate-data-initiative/2014/03/19/45b0fa20-af78-11e3-a49e-76adc9210f19_story.html)

*[SEPP Comment: The last gasp of a failing idea embraced by a failing administration.]*

### **Kerry's first Policy Guidance out of touch with climate realities**

By Tom Harris, On Line Opinion, AU, Mar 17, 2014

<http://www.onlineopinion.com.au/view.asp?article=16121>

### **US Senator Kerry's climate nostrums will make the patient worse**

By James Rust, On Line Opinion, AU, Mar 21, 2014

<http://www.onlineopinion.com.au/view.asp?article=16138>

### **Declining ocean health threatens food security**

By Staff Writers, Hong Kong (SPX), Mar 18, 2014

[http://www.seeddaily.com/reports/Declining\\_ocean\\_health\\_threatens\\_food\\_security\\_999.html](http://www.seeddaily.com/reports/Declining_ocean_health_threatens_food_security_999.html)

*[SEPP Comment: The usual cure – put us in control.]*

### ***Questioning European Green***

#### **Germany's Green Energy Shift Could Lead To Fall In Living Standards**

By Frank Umbach, World Review, Mar 18, 2014 [H/t GWPF]

<http://www.worldreview.info/content/germany-s-energy-policy-could-lead-fall-living-standards>

#### **Germany's energy policy is expensive, harmful and short-sighted**

By Bjorn Lomborg, Financial Times, Mar 16, 2014 [H/t David Lessman]

<http://www.ft.com/intl/cms/s/0/9d6ba56a-a633-11e3-8a2a-00144feab7de.html?siteedition=intl#axzz2wCDug4DV>

#### **No turning back: Four reasons Osborne's Budget matters**

By Andrew Lilico, City A.M. Mar 19, 2014 [H/t GWPF]

<http://www.cityam.com/article/1395265457/no-turning-back-four-reasons-osbornes-budget-will-matter>

The third key feature is the death of whatever was left of the UK government's feeble attempts to persuade anyone we can and will prevent climate change by limiting CO2 emissions.

#### **Thousands Of Wind Turbines A 'Disaster For Tourism'**

By Mike Wade, The Times, UK, Via GWPF, Mar 18, 2014

<http://www.thegwgf.org/thousands-of-wind-turbines-a-disaster-for-tourism/>

### ***Green Jobs***

#### **Empty Theatrics on Climate Change**

Senate Democrats spurt sound bites all night long but fail to offer specific proposals.

By Robert Bryce, National Review, Mar 19, 2014 [H/t Timothy Wise]

<http://www.nationalreview.com/article/373641/empty-theatrics-climate-change-robert-bryce>

For years, left-leaning politicians and their allies have been claiming that renewable energy can create jobs and boost the economy. For instance, back in 2008, then-candidate Barack Obama claimed during a speech in Golden, Colo., that his planned investments in wind, solar, and biofuels would create "5 million new jobs that pay well and can't ever be outsourced."

#### **German Professor Fritz Vahrenholt Calls Claimed Green Jobs Wonder A "Labeling Fraud"!**

By P. Gosselin, No Tricks Zone, Mar 15, 2014

<http://notrickszone.com/2014/03/15/german-professor-fritz-vahrenholt-calls-claimed-green-jobs-wonder-a-labeling-fraud/>

### ***Litigation Issues***

#### **Federal Court Denies DOE's Waste Fee Appeal**

By Sonal Patel, Power, Mar 19, 2014

[http://www.powermag.com/federal-court-denies-does-waste-fee-appeal/?hq\\_e=el&hq\\_m=2850656&hq\\_l=11&hq\\_v=5e660500d0](http://www.powermag.com/federal-court-denies-does-waste-fee-appeal/?hq_e=el&hq_m=2850656&hq_l=11&hq_v=5e660500d0)

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

#### **Dear Prime Minister [AU]**

By Des Moore and Case Smit, Mar 19, 2014

<http://quadrant.org.au/opinion/doomed-planet/2014/03/dear-prime-minister-2/>

[SEPP Comment: *The need for an objective cost-benefit analysis of carbon taxes.*]

#### **Budget 2014: Key climate and energy announcements**



By Mat Hope, Carbon Brief, Mar 19, 2014

[http://www.carbonbrief.org/blog/2014/03/budget-2014-key-climate-and-energy-announcements/?utm\\_source=Weekly+Carbon+Briefing&utm\\_campaign=9d13249461-Carbon+Brief+Weekly+18+7+137+18+2013&utm\\_medium=email&utm\\_term=0\\_3ff5ea836a-9d13249461-215218249](http://www.carbonbrief.org/blog/2014/03/budget-2014-key-climate-and-energy-announcements/?utm_source=Weekly+Carbon+Briefing&utm_campaign=9d13249461-Carbon+Brief+Weekly+18+7+137+18+2013&utm_medium=email&utm_term=0_3ff5ea836a-9d13249461-215218249)

### **China reconsiders carbon tax, citing Australia's planned repeal**

By Staff Writers, Reuters, Mar 13, 2014 [H/t GWPF]

<http://www.smh.com.au/business/carbon-economy/china-reconsiders-carbon-tax-citing-australias-planned-repeal-20140313-34nfp.html>

### ***Subsidies and Mandates Forever***

#### **Lawmakers urge renewal of wind energy tax credits**

By Timothy Cama, The Hill, Mar 21, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/201423-lawmakers-urge-renewal-of-wind-energy-tax-credits>

### ***EPA and other Regulators on the March***

#### **Former White House CEQ official Guzy discusses future of air regulations**

Transcript by Staff Writers, EETV, Mar 20, 2014

<http://www.eenews.net/tv/videos/1800/transcript>

### **Fake CIA agent helped craft sweeping environmental rules while at EPA**

Republicans seek review of John Beale's work while at agency

By Jim McElhatton, Washington Times, Mar 19, 2014

<http://www.washingtontimes.com/news/2014/mar/19/republicans-seek-review-of-john-beales-work-while-/>

### ***Energy Issues – Non-US***

#### **Russia Eyes Crimea's Oil and Gas Reserves**

By Nicholas Cunningham of Oilprice.com

Washington DC (SPX) Mar 19, 2014

<http://www.energy-daily.com/reports/Russia+Eyes+Crimeas+Oil+and+Gas+Reserves+999.html>

### **European leaders seek ways to curb dependence on Russian gas**

By Barbara Lewis, Reuters, Mar 19, 2014 [H/t GWPF]

<http://www.reuters.com/article/2014/03/19/ukraine-crisis-energy-idUSL6N0LN26720140319?irpc=932>

### **Coal taints Germany's energy mix**

By Staff Writers, WNN, Mar 12, 2014

<http://www.world-nuclear-news.org/EE-Coal-taints-Germanys-energy-mix-1203141.html>

### ***Energy Issues -- US***

#### **Can fracking save the world?**

By Robert Shum, The Hill, Mar 18, 2014

<http://thehill.com/blogs/congress-blog/energy-environment/201003-can-fracking-save-the-world>

**Curtailed Hydro from Wanapum Dam Crack: An 'Unpredicted Change in the Wind'?**

By Wayne Lusvardi, Master Resource, Mar 17, 2014

<http://www.masterresource.org/2014/03/hydro-wind-wanapum-dam-crack/#more-29775>

### **James Hansen: Still More Good Energy Realism (just ignore his climate alarmism, world fee-and-dividend fix)**

By Robert Bradley Jr., Master Resource, Mar 18, 2014

<http://www.masterresource.org/2014/03/hansen-more-energy-realism/>

### **Environmental groups gearing up for battle over natural gas exports**

By Zack Colman, Washington Examiner, Mar 20, 2014

<http://washingtonexaminer.com/environmental-groups-gearing-up-for-battle-over-natural-gas-exports/article/2546004>

"The environmental community is pretty united in the U.S. that natural gas is a bridge to nowhere," Kessler said.

### ***Washington's Control of Energy***

#### **Alaska sues feds over Arctic drilling**

By Timothy Cama, The Hill, Mar 17, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/200983-alaska-sues-feds-over-arctic-drilling>

### **Keystone XL pipeline delays: Don't blame Canada**

Opinion: Pipeline would generate tax revenue, economic activity and jobs

By Diana Furchtgott-Roth, Market Watch, Mar 14, 2014

<http://www.marketwatch.com/story/keystone-xl-pipeline-delays-dont-blame-canada-2014-03-14>

### **Domestic Shipping Industry Needs Load Of Competition**

By Mark Perry, IBD, Mar 20, 2014

<http://news.investors.com/ibd-editorials-brain-trust/032014-694047-congress-should-repeal-wilson-era-protectionist-shipping-law.htm?p=full>

### **Greens seek to derail expansion of natural gas exports**

By Rick Moran, American Thinker, Mar 19, 2014

[http://www.americanthinker.com/blog/2014/03/greens\\_seek\\_to\\_derail\\_expansion\\_of\\_natural\\_gas\\_exports.html](http://www.americanthinker.com/blog/2014/03/greens_seek_to_derail_expansion_of_natural_gas_exports.html)

### ***Oil and Natural Gas – the Future or the Past?***

#### **Shale gas will continue changing world energy outlook**

BP executive calls increase in U.S. oil production 'staggering'

By Ted Griggs, The Advocate, Mar 19, 2014 [H/t GWPF]

<http://theadvocate.com/home/8667689-125/shale-gas-will-continue-changing>

### **Three Cheers for Fracking**

By Gary D. Libecap, Hoover Institution Journal, Mar 5, 2014 [H/t Timothy Wise]

<http://www.hoover.org/publications/defining-ideas/article/170026>

Thanks to secure property rights, this technology has the power to resuscitate our lagging economy.

### **Fracking celebrates its 65th birthday**

Companies like Oklahoma City-based Devon Energy Corp. have grabbed headlines with the technique recently, but fracking is far from a new process.

By Adam Wilmoth, The Oklahoman, Mar 21, 2014

<http://newsok.com/fracking-celebrates-its-65th-birthday/article/3945352>

### ***Return of King Coal?***

#### **Lipstick on a Pig**

By Donn Dears, Power For USA, Mar 21, 2014

<http://dddusmma.wordpress.com/2014/03/21/lipstick-on-a-pig/>

#### **Dan River Ash Spill Could Lead Duke to Retire 932 MW of Coal Generation**

By Aaron Larson, Power, Mar 19, 2014

[http://www.powermag.com/dan-river-ash-spill-could-lead-duke-to-retire-932-mw-of-coal-generation/?hq\\_e=el&hq\\_m=2850656&hq\\_l=3&hq\\_v=5e660500d0](http://www.powermag.com/dan-river-ash-spill-could-lead-duke-to-retire-932-mw-of-coal-generation/?hq_e=el&hq_m=2850656&hq_l=3&hq_v=5e660500d0)

*[SEPP Comment: No question that improvements should be made to the older units and disposal of ash. But, often the slogan “make the polluter pay” becomes make the ratepayers suffer.]*

### ***Nuclear Energy and Fears***

#### **S.C.: DOE’s Hold of MOX Facility Construction Is Illegal**

By Sonal Patel, Power, Mar 20, 2014

[http://www.powermag.com/s-c-does-hold-of-mox-facility-construction-is-illegal/?hq\\_e=el&hq\\_m=2850656&hq\\_l=7&hq\\_v=5e660500d0](http://www.powermag.com/s-c-does-hold-of-mox-facility-construction-is-illegal/?hq_e=el&hq_m=2850656&hq_l=7&hq_v=5e660500d0)

### ***Alternative, Green (“Clean”) Solar and Wind***

#### **The Poverty of Renewables**

By Bjørn Lomborg, Project Syndicate, Mar 17, 2014 [H/t David Lessmann]

<http://www.project-syndicate.org/commentary/bj-rn-lomborg-says-that-the-prevailing-solution-to-global-warming-is-hurting-the-poor-more-than-the-problem-is>

#### **“Killing Wildlife In the Name of Climate Change” (Part II: Gas, Nuclear, Little Else)**

By Robert Bryce, Master Resource, Mar 20, 2014

<http://www.masterresource.org/2014/03/killing-wildlife-in-the-name-of-climate-change-ii/#more-29987>

*[SEPP Comment: Second of two parts. Discusses the important concept of energy density. The first part discusses the political favoritism shown by Federal agencies to the wind industry in enforcing Federal laws on wildlife.]*

#### **Spain island eyes world first with wind, water power**

By Staff Writers, Madrid (AFP), March 20, 2014

[http://www.winddaily.com/reports/Spain\\_island\\_eyes\\_world\\_first\\_with\\_wind\\_water\\_power\\_999.html](http://www.winddaily.com/reports/Spain_island_eyes_world_first_with_wind_water_power_999.html)

#### **Veterans Affairs wind turbine, built for \$2.3 million, stands dormant**

By Tom Steward, Watchdog.org, Mar 19, 2014 [H/t Timothy Wise]

<http://townhall.com/watchdog/minnesota/2014/03/19/veterans-affairs-wind-turbine-build-2-3-million-stands-dormant-n4347>

### ***Alternative, Green (“Clean”) Energy -- Other***

**The bonfire of insanity: Woodland is shipped 3,800 miles and burned in Drax power station. It belches out more CO2 than coal at a huge cost YOU pay for... and all for a cleaner, greener Britain!**

By David Rose, Mail, UK, Mar 15, 2014 [H/t Climate Etc.]

<http://www.dailymail.co.uk/news/article-2581887/The-bonfire-insanity-Woodland-shipped-3-800-miles-burned-Drax-power-station-It-belches-CO2-coal-huge-cost-YOU-pay-cleaner-greener-Britain.html>

**Bonfire of insanity**

By Judith Curry, Climate Etc. Mar 16, 2014

<http://judithcurry.com/2014/03/16/bonfire-of-insanity/>

[SEPP Comment: Additional information on the above from Curry.]

**Friends of the Earth want Scotland covered in "high risk" boreholes**

By Andrew Montford, Bishop Hill, Mar 16, 2014

<http://bishophill.squarespace.com/blog/2014/3/16/friends-of-the-earth-want-scotland-covered-in-high-risk-bore.html>

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

**Electric Vehicle Update**

By Donn Dears, Power For USA, Mar 18, 2014

<http://dddusmma.wordpress.com/2014/03/18/electric-vehicle-update-2/>

***California Dreaming***

**The enviro zealots**

By Roger Hedgecock, UT San Diego, Mar 18, 2014 [H/t Timothy Wise]

<http://www.utsandiego.com/news/2014/mar/18/hedgecock-environment-zealots-water-nuclear-solar/>

***Oh Mann!***

**Media, Surprisingly, Ask To See Climate Scientist's Emails**

Editorial, IBD, Mar 18, 2014

<http://news.investors.com/ibd-editorials/031814-693773-media-demand-to-read-hockey-stick-creator-michael-mann-emails.htm?p=full>

**Mann on climate sensitivity and counting**

By Andrew Montford, Bishop Hill, Mar 19, 2014

<http://bishophill.squarespace.com/blog/2014/3/19/mann-on-climate-sensitivity-and-counting.html>

***Environmental Industry***

**Climate confessions as SPAM (please send money)**

By Anthony Watts, WUWT, Mar 20, 2014

<http://wattsupwiththat.com/2014/03/20/climate-confessions-as-spam-please-send-money/>

**The Merchants of Doom**

By Keith Kloor, Discover, Mar 17, 2014 [H/t GWPF]

<https://blogs.discovermagazine.com/collideascape/2014/03/17/merchants-doom/>

***Other Scientific News***

## **Earth Dodged Grid-Destroying Solar Storm in 2012, Says Study**

By Thomas Overton, Power, Mar 19, 2014

[http://www.powermag.com/earth-dodged-grid-destroying-solar-storm-in-2012-says-study/?hq\\_e=el&hq\\_m=2850656&hq\\_l=9&hq\\_v=5e660500d0](http://www.powermag.com/earth-dodged-grid-destroying-solar-storm-in-2012-says-study/?hq_e=el&hq_m=2850656&hq_l=9&hq_v=5e660500d0)

Link to paper: Observations of an extreme storm in interplanetary space caused by successive coronal mass ejections

By Ying D. Liu, et al., Nature Communications, Mar 18, 2014

<http://www.nature.com/ncomms/2014/140318/ncomms4481/full/ncomms4481.html>

## **Are Academics Above The Law?**

By Walter Starck, Quadrant, Mar 21, 2014

<http://quadrant.org.au/opinion/doomed-planet/2014/03/academics-law/>

*[SEPP Comment: A lengthy discussion of possible misleading research and conflicts of interest in studies on the Great Barrier Reef from a marine biologist.]*

## **Sea anemone is genetically half animal, half plant**

By Staff Writers, Vienna, Austria (SPX), Mar 19, 2014

[http://www.terraily.com/reports/Sea\\_anemone\\_is\\_genetically\\_half\\_animal\\_half\\_plant\\_999.html](http://www.terraily.com/reports/Sea_anemone_is_genetically_half_animal_half_plant_999.html)

## **Rocky Mountain wildflower season lengthens by more than a month**

By Staff Writers, College Park MD (SPX), Mar 21, 2014

[http://www.terraily.com/reports/Rocky\\_Mountain\\_wildflower\\_season\\_lengthens\\_by\\_more\\_than\\_a\\_month\\_999.html](http://www.terraily.com/reports/Rocky_Mountain_wildflower_season_lengthens_by_more_than_a_month_999.html)

Link to paper: Shifts in flowering phenology reshape a subalpine plant community

By Paul J. CaraDonna, et al. PNAS, Mar 12, 2014

<http://www.pnas.org/content/early/2014/03/12/1323073111.abstract>

*[SEPP Comment: No temperature measurements of the area studied are presented. The lengthening of the blooming season may be due to atmospheric carbon dioxide enhancement.]*

## ***Other News that May Be of Interest***

### **Addercadabra: Python's homing trick stuns scientists**

By Staff Writers, Paris (AFP), March 19, 2014

[http://www.terraily.com/reports/Addercadabra\\_Pythons\\_homing\\_trick\\_stuns\\_scientists\\_999.html](http://www.terraily.com/reports/Addercadabra_Pythons_homing_trick_stuns_scientists_999.html)

### **EU readying invasive alien species hit-list**

By Staff Writers, Brussels (AFP), March 18, 2014

[http://www.seeddaily.com/reports/EU\\_readying\\_invasive\\_alien\\_species\\_hit-list\\_999.html](http://www.seeddaily.com/reports/EU_readying_invasive_alien_species_hit-list_999.html)

### **New Airborne GPS Technology for Weather Conditions Takes Flight**

By Staff Writers, San Diego CA (SPX), Mar 19, 2014

[http://www.gpsdaily.com/reports/New\\_Airborne\\_GPS\\_Technology\\_for\\_Weather\\_Conditions\\_Takes\\_Flight\\_999.html](http://www.gpsdaily.com/reports/New_Airborne_GPS_Technology_for_Weather_Conditions_Takes_Flight_999.html)

### **Polluted Paris prepares for partial car ban**

By Staff Writers, Paris (AFP), March 16, 2014

[http://www.terraily.com/reports/Polluted\\_Paris\\_prepares\\_for\\_partial\\_car\\_ban\\_999.html](http://www.terraily.com/reports/Polluted_Paris_prepares_for_partial_car_ban_999.html)

## **The tyranny of experts**

William Easterly's new book explores the aid industry's autocratic instincts  
My book review for The Times of William Easterly's new book "The Tyranny of Experts"  
By Matt Ridley, Rational Optimist, Mar 21, 2014

<http://www.rationaloptimist.com/blog/the-tyranny-of-experts.aspx>

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

**CNN's dumbest news question, evar**

By Anthony Watts, WUWT, Mar 19, 2014

<http://wattsupwiththat.com/2014/03/19/cnns-dumbest-news-question-evar/>

*[SEPP Comment: If it is not caused by global warming, it must be caused by a black hole.]*

**Earth going to pot – Marijuana grows in California produce more carbon than 3 million cars**

By Anthony Watts, WUWT, Mar 17, 2014

<http://wattsupwiththat.com/2014/03/17/earth-going-to-pot-marijuana-grows-in-california-produce-more-carbon-than-3-million-cars/>

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### **ARTICLES:**

#### **1. Ukraine Crisis Is a Call to Rethink Energy Policies**

EU Climate Chief Says Countries Should Switch from Russian Gas to Renewables

By Vanessa Mock, WSJ, Mar 19, 2014

<http://online.wsj.com/news/articles/SB10001424052702303802104579449382570371924>

The Ukraine crisis is a wake-up call for European countries to rethink their energy policies and make the switch from Russian gas to clean, renewable sources of energy, says Connie Hedegaard, the European Union's climate chief.

Ms. Hedegaard also said it was also a "myth" that the increased use of renewable power, such as wind and solar, was to blame for soaring energy costs in Europe.

At a meeting in Brussels on Thursday, European Union leaders are to debate further sanctions against Moscow in response to the annexation of Crimea, at which Europe's dependency on Russian natural gas is expected to be discussed.

During the summit, leaders will also give initial consideration to proposals to reduce carbon dioxide emissions by 40% by 2030, part of a climate-change package announced by the European Commission, the EU's executive, in January.

"What's happening with Russia and Ukraine [should], if anything, bring the message home that Europe really needs to do something serious about its energy situation," Ms. Hedegaard said. Europe gets about 30% of its natural gas from Russia.

Ms. Hedegaard, who is the bloc's Commissioner on Climate Action, pointed out that some of the bloc's least energy efficient countries were also "the most dependent when it comes to Russian gas." Bulgaria, Latvia and Lithuania are among six countries that depend exclusively on Russia's state-owned gas monopoly, OAO for their supplies.

"If you are a Bulgarian minister, you know that almost all your energy depends on whether Mr. Putin want to keep the lines open or not. They know they need to do efficiency," she said.

Similarly, Ukraine, which is both a consumer and transit route for Russian gas, should "first and foremost" look at non-Russia suppliers of energy, she said.

Some countries that are heavily dependent on Russian gas, such as Poland and Hungary, have fiercely rejected the EU's new climate-change package, which also includes a goal to further boost by 2030 the use of renewable sources of power, saying these would increase energy costs.

Ms. Hedegaard, who spearheaded the proposals, is also under fire from energy intensive industries, such as chemicals and steel, which argue they would lead to soaring production costs and harm the bloc's competitiveness, particularly in light of sharply lower U.S. energy costs brought about by the boom in shale gas.

She acknowledged that U.S. shale had "changed the picture dramatically." In the EU, she said Brussels wouldn't stand in the way of shale exploration if nations decide to do it—but that any results would take time to come to fruition.

She denied EU policies were to blame for Europe's higher energy bills. "There are really a lot of myths circulating, for instance that it's because of our climate policies that we have more expensive energy in Europe than in the U.S.

"In those member states that have had a huge component of wind and solar energy, the cost of producing energy has actually gone down."

Ms. Hedegaard cited her native Denmark as an example: the small Nordic country is on course to get 40% of its energy from renewables by 2030.

But for renewable energy to reach its potential, she said, it needs to be supported by a pan-European energy grid, to ensure effective backup when flows drop from renewable sources and to guarantee that excess output can be redirected to countries where it is needed.

All EU governments also need to rethink renewables subsidies, she said. "When you have mature, renewables technology that competes on market terms, such as land-based solar power, you should phase out subsidies. Support only infant technologies."

The commissioner, a former journalist who served as Minister for Climate and Energy in Denmark, said it is crucial for Europe to set ambitious targets ahead of United Nations climate talks in Paris, starting in November 2015, when world leaders are due to map out long-term targets to reduce greenhouse gas emissions.

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## **2. A Gas Export Strategy**

Opponents don't understand energy markets or price expectations.

Editorial, WSJ, Mar 19, 2014

[http://online.wsj.com/news/articles/SB10001424052702303802104579449584212189554?mod=WSJ\\_Opinion\\_AboveLEFTTop&mg=reno64-wsj](http://online.wsj.com/news/articles/SB10001424052702303802104579449584212189554?mod=WSJ_Opinion_AboveLEFTTop&mg=reno64-wsj)

The latest excuse for not exporting America's domestic energy resources to reduce Vladimir Putin's political influence is that it's too late to save Crimea. The anti-fossil-fuel left always has a reason not to drill, but their argument this time defies economic logic.



The U.S. oil and gas revolution has handed President Obama a powerful policy tool, and one way to wield it would be for the Energy Department to approve immediately the 25 applications for liquefied natural gas (LNG) export terminals. Opponents, including the White House, claim the timing is wrong because the first U.S. LNG export facility isn't due online until next year; others are even further off; Ukraine doesn't have a facility to receive and convert LNG back to gas; and U.S. LNG exports are most likely destined for Asia in any event.

Asked how the U.S. could liberate Europe from Russian gas, White House press secretary and geostrategist Jay Carney opined that exports are a "complicated process and more of a long-term proposition." For people who don't understand markets, supply and demand expectations may be complicated. For anyone else, this is easy.

The growth of LNG—which can ship internationally—has created a more global natural gas market. That market is forward-looking, and any clear signal that the U.S. intends to boost its exports will contribute to expectations about lower future prices. Even if some U.S. gas flows to Asia, the global supply will increase.

This is especially important to the many European nations that are currently dependent on Russia for 70% to 100% of their gas. Jaroslav Zajicek, deputy chief of mission for the Czech Republic, told a House hearing last year that his country has found that even the decline in U.S. gas imports in recent years has freed up more gas for Europe, lowered prices, and thus "weakened" the "Russian negotiating position during contract-renewal talks."

Europe has an extensive pipeline network, which means that U.S. gas making it to any port of entry would reduce overall European dependence on Russia. Spain has an LNG receiving terminal that can add fuel to the European pipeline, while countries like Lithuania (100% dependent on Russian gas) are racing to get a floating LNG import terminal online by the end of the year.

The ambassadors of Hungary, Poland, the Czech Republic and Slovakia recently wrote to House Speaker John Boehner with a plea for more gas, noting that technology allows them to reverse gas flows back to Ukraine. In 2013 alone, Ukraine imported from Poland and Hungary almost two billion cubic meters of gas. With Russia unilaterally raising gas prices on the Ukraine, the more ability Europe has to undermine those price hikes, the more limited the Russian influence.

Another excuse for doing nothing is that even if Energy approves all 25 applications, the projects must still endure federal and local environmental and safety reviews. True enough. Yet this misses that blanket approval would let the market sort which facilities are best positioned for an efficient regulatory review, project financing and contracts. The Energy bureaucracy's current approach—plodding through each application on a first-come-first-serve basis—means that the best projects may be at the end of the queue.

Blanket approval would have an equally important psychological impact. The Russian economy—and Mr. Putin's political cronies—are highly dependent on petro dollars. His gas stranglehold has also given Mr. Putin enormous political leverage over former Soviet satellites. Every dollar of U.S. gas that flows to the world market is one less dollar flowing to Mr. Putin's economy and his energy blackmail racket. Mr. Putin would get the message that even if he can swallow Ukraine, his future leverage will decline.

Martin Dempsey, as dovish a Chairman of the Joint Chiefs as America has had, told a House hearing last week: "An energy independent [U.S.] and net exporter of energy as a nation has the potential to change the security environment around the world—notably in Europe and in the Middle East. And so, as we look at our strategies for the future, I think we've got to pay more and particular attention to energy as an instrument of national power. And because it will very soon in the next few years potentially become one of our more prominent tools."

Mr. Obama has been told all this by his military advisers, American CEOs, foreign leaders and Members of Congress. He knows more gas exports are in the U.S. national interest. The case is so overwhelming that the White House "timing" excuse can only be explained as cover for the President's unwillingness to offend his green money-men who hate fossil fuels. He is letting partisan politics interfere with U.S. economic and strategic interests.

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### **3. Green Politics Made Europe Vulnerable to Putin**

Germany's dependence on renewable energy is a bonanza for Gazprom.

By Rupert Darwall, WSJ, Mar 20, 2014

[http://online.wsj.com/news/articles/SB10001424052702304747404579444901610420082?mod=WSJ\\_Opinion\\_LEFTTopOpinion&mg=reno64-wsj](http://online.wsj.com/news/articles/SB10001424052702304747404579444901610420082?mod=WSJ_Opinion_LEFTTopOpinion&mg=reno64-wsj)

Alaska's Sen. Lisa Murkowski called on President Obama this month to lift the ban on exports of U.S. natural gas to Europe. For the sake of European independence, we can only hope the administration listens.

Until the crisis over Ukraine, there was an inbuilt tendency in Germany to embrace closer ties with Russia. Former Chancellor Gerhard Schroeder is close to Vladimir Putin (he has compared Russia's intervention in Ukraine to NATO's action against Serbia in the 1990s) and is chairman of the board of Gazprom joint-venture pipeline company Nord Stream. In 2012, Russia piped 30 billion cubic meters of natural gas to Germany, accounting for 28% of the 105.5 billion cubic meters of gas delivered to the European Union.

Friendships aside, the most significant driver of German energy-related foreign policy has been its powerful Green Party. Other countries considering letting domestic or foreign policy be determined by environmentalists would do well to consider where Germany's embrace of environmentalism has led.

Germany's Greens first emerged as a political force at the end of the 1970s at a time of acute East-West tension. In response to deployment of Soviet midrange SS-20 missiles, NATO decided to station Pershing missiles in Germany. Massive, sometimes violent, demonstrations against nuclear power and nuclear missiles swept Germany. Whether consciously or not, the protesters were doing the Kremlin's work in trying to split the Atlantic alliance.

The protests turned the German left into the voice of radical environmentalism—a historical shift. Old Nazis and neo-Nazis had been the bearers of Germany's culture of ecological politics, which had been marginalized with Hitler's defeat. German environmentalism was antidemocratic and anticapitalist. The Nazis were Europe's greenest party, passing laws to extend protected forests and banning animal vivisection while performing hideous experiments on human beings.

In October 1980, Germany's Green Party was formed to stand in parliamentary and state elections. Eighteen years later it entered government in a Red-Green coalition with the left-of-center SPD and in 2000 successfully pushed for the gradual phaseout of nuclear power.

The Greens' biggest triumph came with Germany's adoption of its *Energiewende*, the transition to renewable energy. The policy is a long-term bonanza for Gazprom. It means that Germany will buy more and more Russian gas because it cannot depend on electricity from unreliable wind and solar to power its industries and keep the lights on.

The emergence of the Greens has had a huge impact on German and European politics. But not all of Europe is so enthusiastic or willfully naive about dependence on Russian gas. Some countries are looking to America for alternatives.

Russia supplies around one third of the EU's gas, but the proportion rises the farther east you go. The Baltic states and Bulgaria buy all their gas from Russia. In the middle are Poland, the Czech Republic, Slovakia and Hungary, dependent for 50% of their gas on Russia. Those countries, acting as the Visegrad Four, have opposed German attempts (which are supported by Britain and France) to institutionalize aggressive decarbonization policies across the EU.

Earlier this month, the prime ministers of the Visegrad Four condemned Russia's action in Ukraine, saying it created "a dangerous new reality in Europe." Polish Prime Minister Donald Tusk warned that Europe risks paralysis as "exorbitant" climate policies could well make the EU more dependent on Russian energy. The four nations' ambassadors in Washington have asked congressional leaders for help lifting barriers on U.S. natural gas exports.

There are now more than a dozen pipelines supplying Europe with Russian gas, and as gas prices are mostly indexed to the world price of crude oil, the price of that gas has risen sharply. Yet President Obama dithers over approving the Keystone XL pipeline and is passive in response to European appeals for American gas.

Opening up European markets to American gas would help shake Gazprom's hold on those countries most dependent on Russian supplies. Mr. Obama needs to face down the greens in his own party and open up North America's abundant oil and gas reserves to the world.

*Mr. Darwall is the author of "The Age of Global Warming: A History" (Quartet, 2013).*

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#### **4. Exxon Agrees to Disclose Its 'Carbon Risk'**

Shareholder Resolution Is Withdrawn on Promise of Environmental Report

By Daniel Gilbert, WSJ, Mar 20, 2014

[http://online.wsj.com/news/articles/SB10001424052702304026304579451642191953028?mod=WSJ\\_business\\_whatsNews&mg=reno64-wsj](http://online.wsj.com/news/articles/SB10001424052702304026304579451642191953028?mod=WSJ_business_whatsNews&mg=reno64-wsj)

Exxon Mobil Corp. has agreed to disclose how the regulation of carbon emissions could affect the value of its oil and gas holdings, a sign that America's biggest energy company is stepping up efforts to address shareholders' environmental concerns.

The oil giant will publish a report later this month explaining how it weighs the risks that regulations could make it prohibitively expensive to tap oil and gas, according to Arjuna Capital,

an investment management firm focused on social responsibility that submitted a shareholder resolution asking for such a report.

Exxon is set to disclose a range of measures in the report, including a calculation of the carbon emissions that its operations give off and a discussion of how it incorporates the risk of regulation into its spending plans.

Arjuna said it withdrew the shareholder resolution after Exxon became the first major energy company to agree to provide the information.

David Rosenthal, Exxon's head of investor relations, told Arjuna earlier this month that the company is making "an extensive outreach this year" to shareholders concerned about carbon, greenhouse-gas emissions and hydraulic fracturing, among other environmental issues, according to correspondence reviewed by The Wall Street Journal.

An Exxon spokesman declined to comment.

For years, Exxon has assumed that there will be a cost from government regulations designed to limit carbon emissions from fossil-fuel use, as concerns mount over their impact on the climate. In developed countries such as the U.S. and in Europe at the vanguard of such policies, Exxon assumes that carbon emissions will cost about \$80 per ton in 2040.

But the Irving, Texas, giant is taking that a step further with agreeing to detail how it weighs the risks of carbon regulations.

"I think it reflects a shift in priorities and understanding at the company," said Natasha Lamb, director of equity research and shareholder engagement at Arjuna. Regulations that tax carbon could make it more expensive to develop much of Exxon's reserves, especially those that require costly technologies to tap, such as mining heavy, tar-like crude in Canada, she said.

"If companies are spending a fortune to develop unconventional assets, there's not a lot of wiggle room when it comes to the margins," she said.

The proposal submitted by Arjuna, in concert with environmental advocacy group As You Sow, is the first to seek such disclosure from Exxon.

In announcing the agreement, Arjuna and As You Sow said, "The report will provide investors with greater transparency into how ExxonMobil plans for a future where market forces and climate regulation makes at least some portion of its carbon reserves unburnable."

Last year, a similar carbon-risk shareholder resolution at Consol Energy Inc., a coal and natural-gas company, received support from 20% of votes cast by shareholders. The groups have filed such proposals at nine companies this year in addition to Exxon, they said.

Some of the items to be covered in the new report are already disclosed in some detail by Exxon, such as the makeup of its oil and gas reserves by region and type of fuel. Of the 25.2 billion barrels of oil and the equivalent in natural gas that Exxon books as reserves, nearly a third are in the U.S. or Europe, according to a February filing with the U.S. Securities and Exchange

Commission. That doesn't include the 3.6 billion barrels of bitumen, a thick kind of crude, in Canada and South America.

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