

**The Week That Was: 2014-02-01 (February 1, 2014)**  
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**The Science and Environmental Policy Project**

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**Quote of the Week:** *“Whatever the UK is deciding to do vis-a-vis climate will have no impact on your climate. It will have a profound impact on your economy.”* Richard Lindzen in testimony to the UK House of Commons, Energy and Climate Change Committee

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**Number of the Week:** 4%

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**State of the Union:** On an unusually cold Washington night, President Obama gave this year’s State of the Union address. Environmental groups expressed disappointment because he did not outline strong measures to “fight” global warming, which is not occurring. To understand his administration, one should not only pay attention to his words, but also realize what he omits and what his administration is doing.

Mr. Obama correctly stated that climate change is a fact. It has been ongoing for hundreds of millions of years and will continue long after he is gone. There is little governments can do to stop it. The great fear of global warming was artificially contrived. In its claim that carbon dioxide emissions endanger public health and welfare, the EPA claimed its findings are supported by science and cited three lines of evidence.

- 1.) EPA claims a distinct human fingerprint -- a hot spot in the atmosphere centered over the tropics at about 33,000 feet. It does not exist. Satellites and weather balloons have failed to find it.
- 2.) EPA claims late 20th century surface global warming was unprecedented and dangerous. It was not. A similar warming occurred in the early 20th century, which was not associated with carbon dioxide. Any late 20th century surface warming stopped 16 years ago.
- 3.) EPA claims climate models are reliable. Climate models failed to predict that global warming would stop and greatly exaggerate the warming over the past 30 plus years.

The EPA finding that carbon dioxide endangers human health and welfare is based on failing science and sub-prime climate models that are wrong.

Mr. Obama bragged about the increase in production of oil and natural gas in the US. He is fortunate to be President during the US energy revolution. Extraction of oil and natural gas from dense shale is occurring with no help from the Administration. It is occurring on private or state controlled lands and driven by private initiatives. According to 2012 statistics compiled by the Energy Information Administration, the production of oil, natural gas, natural gas liquids and coal from Federal lands and waters all fell. The difference between what is occurring on non-Federal lands and Federal lands demonstrates the economically punitive policies of this administration. Yet, according to reports, Mr. Obama is moving forward to further restrict oil development and mining on Federal lands.

Mr. Obama’s administration is engaged on an economically destructive war on coal. Both the EPA and the Department of Energy falsely asserted that carbon capture and storage is commercially practical. Where it has been tried, it has been under highly specialized circumstances that are not generally available – such as using carbon dioxide (CO<sub>2</sub>) to enhance recovery of oil from nearby wells. If there are no nearby wells, this application does not work.

The EPA has declared that the shutting of coal-fired power plants is not due to EPA regulations but due to coal-fired plants being economically uncompetitive with natural gas-fired plants. This is partially true. In some regions of the country where coal is expensive, such as Kentucky, natural gas is more economical for generating electricity. In regions where coal is inexpensive, such as southern Illinois and the western states such as Wyoming, the opposite is true. The EPA's CO2 emissions standards on new coal-fired power plants prevent the construction of the latest, more efficient designs for coal-fired plants. The proposed standards for existing coal-fired power plants will force the closure of more plants, many in areas where natural gas is not generally available. All this will serve to drive up the costs of electricity to industry and other consumers.

Western Europe has led the fight on global warming/climate change with dire economic results. Those industries that can are fleeing high electricity costs brought on by a big commitments on renewable energy. According to Rupert Darwall, estimates by Eurostat and the US EIA on comparable electricity costs, in 2012 electricity was about 84% more costly for industrial firms and 65% more costly for households in Europe than in the US.

Countries such as Germany and the UK face unpleasant choices – subsidize electricity costs for industries or face enormous job losses. The promised Green Jobs are unsustainable without continued government subsidies and/or mandates. Now, President Obama desires to lead the US into adopting similar economically disastrous policies, without bothering to obtain Congressional approval.

Mr. Obama bragged about the increases in renewable energy, particularly solar power. According to a January 2014 report by the Energy Information Administration (EIA), the total electricity production from solar amounted to 0.2% of US electricity consumption, up ten times from what it was in 2008. By way of contrast, electric production by lumber and paper mills burning their wood waste is 4.5 times the current solar production, without the need for expensive subsidies and mandates.

Mr. Obama's administration created the Interagency Working Group on Social Cost of Carbon. From the Council of Economic Advisers to the Department of the Treasury, eleven government entities are involved in the creation of this contrived concept. These eleven entities blatantly ignore the tremendous benefits of enhanced atmospheric carbon dioxide to agriculture and the environment.

In August 2013, the White House reported that in FY 2013 US government climate change expenditures amounted to \$22.6 Billion. Based on previous reports by the GAO and the Congressional Research Service, this brings the total expenditures to over \$165 Billion since 1993. With all that money, we *did* invent some very good instruments to measure climate change, particularly from satellites; but those and other instruments are largely ignored. We now have reports that the Tropical Atmosphere Ocean array of buoys is failing for lack of funding. These buoys monitor the warming and cooling events in the equatorial Pacific, known respectively as El Niño and La Niña, which are important natural for climate change.

Where has most of the \$165 Billion gone? Much has been spent on failing science, failing climate models, failing alternative energy policies, and extreme exaggerations of the human influence on climate.

Clearly, SEPP will have many issues to address in the next few years. See links under The State of the Union, Social Benefits of Carbon, Measurement Issues, EPA and other Regulators on the March, Washington's Control of Energy and Article # 2.

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**Social Costs (Benefits) of Carbon:** On January 27 Fred Singer and Ken Haapala separately submitted their comments on the so-called Social Costs of Carbon (SCC) to the Office of Management and Budget (OMB), which is under the White House. Singer represented Virginia Scientists and Engineers for Energy and Environment and Haapala represented SEPP.

Singer pointed out the failings of the three Integrated Assessment Models being used to establish the SCC, with particular emphasis to the detailed critique by MIT Prof. Robert Pindyck, who states that the models are largely meaningless (TWTW Aug 24, Nov 23, and Nov 30, 2013). Singer also discussed the tremendous economic benefits that occurred by replacing human and animal power with fossil fuels, as reported in a study by Management Information Systems headed by Roger Bezdek, prepared for the American Coalition for Clean Coal Electricity.

Haapala discussed the absurdity of the concept of the social cost of carbon. All life on this planet is carbon based, does life have a social cost? He also discussed the fact that the scientific basis of the EPA endangerment finding is imploding [see above], and Craig Idso's study on the benefits of carbon dioxide. The Bezdek and Idso studies are different but complementary. The former discusses the benefits in the use of fossil fuels, which result in CO2 emissions. The latter discusses the direct benefits of enhanced concentrations of atmospheric CO2. However, it is doubtful that anyone in an important position in this ideologically blinded administration will publically recognize the significance of these studies. See links under Social Benefits of Carbon.

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**A Step Forward, A Step Back?** Marcia McNutt, Editor-in-Chief of *Science* wrote that for preclinical studies the magazine is adopting the standards recommended by the U.S. National Institute of Neurological Disorders and Stroke (NINDS) for transparency. Further, it will ask editors and reviews in other disciplines to identify papers that demonstrate transparency and instill confidence in the results. This may be used to take additional steps for implementing reproducibility guidelines. Importantly, with the advice from the American Statistical Association, and others, it will be adding members to its Board of Reviewing Editors from the statistical community to examine methods of data analysis. Hopefully, this may prevent publications of papers with internal statistical errors, such as what occurred with Mr. Mann's hockey-stick.

On a disappointing note, as linked in the January 18, 2014 TWTW, Robert Bradley had a post on Master Resource discussing an October 1, 2009 article by Richard Kerr, long time writer at *Science*. "What Happened to Global Warming? Scientists Say Just Wait a Bit." The article discussed a ten year pause in global warming as indicated in the Hadley Centre – Climatic Research Unit temperature data. The link has been taken down and the article is no longer listed under the author index. See links to the new Science policy under Seeking a Common Ground.

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**Not All Watts Are Created Equal:** Government agencies brag about their policy successes, however, some when doing so make statements that mislead the general public. For example, the latest "Energy Infrastructure Update" report from the Federal Energy Regulatory Commission's Office of Energy Projects promotes the increase in capacity of renewables, namely wind, biomass, solar, etc. And how the installed capacity is exceeding nuclear and oil. [Due to the expense of oil, less than 1% of electricity is generated by oil, and it is used predominantly as a back-up, or in isolated situations.] The problem with these reports is they used installed nameplate capacity, not

annual capacity or, more importantly, dependable capacity, which is usually termed as dispatchable capacity.

It is worth comparing nuclear power plants with wind. Nuclear can generate power 24/7 and the US fleet averages over 90% of nameplate capacity over the course of a year. It is only shut down for scheduled maintenance, thus the capacity can be considered 100% dispatchable. Based on reports from existing facilities, wind farms seldom exceed 30% of nameplate capacity, often less. Further, they experience occasions when no power is generated. The Columbia River Gorge discussed in last weeks TWTW is one example. A similar analysis can be done with coal-fired or natural gas combined cycle power plants. The results are similar. It may be useful to ask the bureaucrats who write these reports, when you are riding an elevator or the subway, which type of electrical generation would you prefer? See links under Alternative, Green (“Clean”) Solar and Wind

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**Keystone II:** Once again, the State Department found that the northern leg of the Keystone pipeline that is designed to bring oil from the oil sands of Canada, and some oil from the Bakken formation in North Dakota, to refineries on the Gulf Coast will have no major adverse impact on the environment. Once again, the environmentalists are screaming environmental disaster. Once again, the report will undergo an extensive public comment period and review. Once again, many in Washington are demonstrating their cavalier disregard for projects that have been demonstrated to provide jobs and add to general prosperity, without government subsidies and mandates. It has been over five years. See links under Washington’s Control of Energy.

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**Number of the Week: 4%** For some time, TWTW has pointed out that the map of temperature trends prepared by the National Space Science and Technology Center at University of Alabama in Huntsville, using the satellite data, shows pronounced warming only in the northern part of the Northern Hemisphere, with little or no warming elsewhere over the entire satellite record. Writing in Watts Up With That, Willis Eschenbach takes this a step further. He analyzes the data for five groups, according to latitude: Polar -- Arctic and Antarctic 67° to 90° North and South, Extratropics 23° N & S to 67° N & S, and Tropics 23° N to 23° S. He calculates that surface area for each is as follows: Polar 8%; Extratropics 52%; and Tropics 40%. [The satellite data does not completely cover the Polar Regions.]

Willis than calculates temperature trends for these five regions and compares the trends with actual temperatures reported by UAH. Over the entire temperature record Eschenbach finds a significant warming trend only for the Arctic – 4% of the globe. Global warming of 4% of the globe! This is not a stirring rallying cry for a war against global warming, or coal.

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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. Book Review: 'Windfall' by McKenzie Funk**

From politicians to profiteers, some people look at the effects of climate change and see dollar signs.

By Philip Delves Broughton, WSJ, Jan 28, 2014

<http://online.wsj.com/news/articles/SB10001424052702304632204579340560508887126?mod=I>  
[TP\\_opinion\\_0](#)

[SEPP Comment: *Covering the climate war profiteers.*]

## 2. Europe's Stark Renewables Lesson

Like Frankenstein, the EU has created a renewable-energy monster it does not know how to tame.

By Rupert Darwall, WSJ, Jan 28, 2014

<http://online.wsj.com/news/articles/SB10001424052702303553204579348470302047850>

## 3. Big Oil Companies Struggle to Justify Soaring Project Costs

Chevron, Exxon and Shell Spent More Than \$120 Billion in 2013 to Boost Oil and Gas Output, but Production Is Down

By Daniel Gilbert and Justin Schenck, WSJ, Jan 28, 2014

[http://online.wsj.com/news/articles/SB10001424052702303277704579348332283819314?mod=](http://online.wsj.com/news/articles/SB10001424052702303277704579348332283819314?mod=WSJ_Energy_2_4_Left)

[WSJ Energy 2 4 Left](http://online.wsj.com/news/articles/SB10001424052702303277704579348332283819314?mod=WSJ_Energy_2_4_Left)

## 4. Shell Plans Boat to Tap Gas Fields

Billion-Dollar Vessel Would Chill Gas and Pump It Into Tankers

By Justin Scheck, WSJ, Jan 28, 2014

<http://online.wsj.com/news/articles/SB10001424052702303277704579348333445778984?mod=I>

[TP pageone 2](http://online.wsj.com/news/articles/SB10001424052702303277704579348333445778984?mod=I)

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## NEWS YOU CAN USE:

### *Climategate Continued*

#### **Cherry picking and the tale of the Siberian larch trees**

Stephen McIntyre responds to Keith Briffa's allegations

By Matt Ridley, Rational Optimist, Jan 28, 2014

<http://www.rationaloptimist.com/blog/cherry-picking-and-the-tale-of-the-siberian-larch-data.aspx>

[SEPP Comment: A lengthy post of Briffa of Climategate Fame ignoring tree-ring data that does not support his hockey-stick.]

### *Challenging the Orthodoxy*

#### **Climate Change**

NZClimate Truth Newsletter NO 325

By Vincent Gray, NCTSP, Jan 30, 2014

<http://theclimatescepticsparty.blogspot.com.au/2014/01/climate-change.html>

The published projections [of the IPCC] fail completely to take account of the inherent uncertainties of natural variability which is supposedly incorporated in them.

#### **New study suggests global warming decreases storm activity and extreme weather**

By Anthony Watts, WUWT, Jan 25, 2014

<http://wattsupwiththat.com/2014/01/25/new-study-suggests-global-warming-decreases-storm-activity-and-extreme-weather/>

#### **Societal Benefits of Fossil Energy to be at Least 50 Times Greater than Perceived Costs of Carbon**

By Staff Writers, Washington DC (SPX), Jan 31, 2014

[http://www.energy-](http://www.energy-daily.com/reports/Societal_Benefits_of_Fossil_Energy_to_be_at_Least_50_Times_Greater_than_Perceived_Costs_of_Carbon_999.html)

[daily.com/reports/Societal Benefits of Fossil Energy to be at Least 50 Times Greater than Perceived Costs of Carbon 999.html](http://www.energy-daily.com/reports/Societal_Benefits_of_Fossil_Energy_to_be_at_Least_50_Times_Greater_than_Perceived_Costs_of_Carbon_999.html)

## **Should We Be Worried?**

By Willis Eschenbach, WUWT, Jan 29, 2014

<http://wattsupwiththat.com/2014/01/29/should-we-be-worried/>

## ***Defending the Orthodoxy***

### **Met Office New Decadal Forecast**

By Paul Homewood, Not A Lot Of People Know That, Jan 30, 2014 [H/t GWPF]

<http://notalotofpeopleknowthat.wordpress.com/2014/01/30/met-office-new-decadal-forecast/>

Link to the forecast: Decadal forecast

By Staff Writers, Met Office, January 2014

<http://www.metoffice.gov.uk/research/climate/seasonal-to-decadal/long-range/decadal-fc>

## ***Questioning the Orthodoxy***

### **Closing the Books on 2013: Another Year, Another Nail in the Coffin of Disastrous Global Warming**

By Patrick Michaels and Paul Knappenberger, CATO, Jan 27, 2014

<http://www.cato.org/blog/closing-books-2013-another-year-another-nail-coffin-disastrous-global-warming>

*[SEPP Comment: Far fewer Billion Dollar weather disasters than in the recent past.]*

### **Met Office Is Accused Of A ‘Warm Bias’ In Annual Forecasts**

By Ben Webster, The Times, Via GWPF, Jan 30, 2014

<http://www.thegwpf.org/met-office-accused-warm-bias-annual-forecasts/>

### **Met Office global forecasts too warm in 13 of last 14 years**

By Paul Hudson, BBC, Jan 27, 2014 [H/t GWPF]

<http://www.bbc.co.uk/blogs/paulhudson/posts/Met-Office-global-forecasts-too-warm-in-13-of-last-14-years>

### **Climate Change: A Serious Threat to Science**

By Marita Noon, Townhall, Jan 27, 2014

<http://finance.townhall.com/columnists/maritanoon/2014/01/27/climate-change-a-serious-threat-to-science-n1785073>

### **Procrastinating About The Global Warming ‘Pause’**

By Doug Hoffman, The Resilient Earth, Via GWPF, Jan 26, 2014

<http://www.thegwpf.org/procrastinating-global-warming-pause/>

### **‘Social Cost’ of Carbon vs. Climate Science**

By Chip Knappenberger, Master Resource, Jan 31, 2014

<http://www.masterresource.org/2014/01/social-cost-carbon-vs-climate-science/#more-29506>

### **The evidence for climate change is increasingly challenged**

By Lord Turnbull, Letters, Financial Times, Jan 30, 2014 [H/t GWPF]

<http://www.ft.com/intl/cms/s/0/dac9a438-8785-11e3-9c5c-00144feab7de.html?siteedition=intl#axzz2rzZ9GAoV>

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

**Efforts to cap CO<sub>2</sub> emissions are adverse to human health and welfare**

By Craig Idso, The Hill, Jan 30, 2014

<http://thehill.com/blogs/congress-blog/energy-environment/197001-efforts-to-cap-co2-emissions-are-adverse-to-human#ixzz2ruyOl4dm>

### **Response to the SOTU address: Efforts to cap CO2 emissions are adverse to human health and welfare**

By Craig Idso, WUWT, Jan 30, 2014

<http://wattsupwiththat.com/2014/01/30/response-to-the-sotu-address-efforts-to-cap-co2-emissions-are-adverse-to-human-health-and-welfare/>

### **The Positive Externalities of Carbon Dioxide**

By Craig Idso, Center for the Study of Carbon Dioxide and Climate Change, Oct 21, 2013

[http://scienceandpublicpolicy.org/reprint/the\\_positive\\_externalities\\_of\\_carbon\\_dioxide.html](http://scienceandpublicpolicy.org/reprint/the_positive_externalities_of_carbon_dioxide.html)

### **Societal Benefits of Fossil Energy to be at Least 50 Times Greater than Perceived Costs of Carbon**

By Staff Writers, Washington DC (SPX), Jan 31, 2014

[http://www.energy-daily.com/reports/Societal\\_Benefits\\_of\\_Fossil\\_Energy\\_to\\_be\\_at\\_Least\\_50\\_Times\\_Greater\\_than\\_Perceived\\_Costs\\_of\\_Carbon\\_999.html](http://www.energy-daily.com/reports/Societal_Benefits_of_Fossil_Energy_to_be_at_Least_50_Times_Greater_than_Perceived_Costs_of_Carbon_999.html)

### **The Social Costs of Carbon? No, the Social Benefits of Carbon**

Prepared for the American Coalition for Clean Coal Electricity

Lead Writer, Rober Bezdek, Management Information Systems, Inc. January 2014

[http://www.americaspower.org/sites/default/files/Social\\_Cost\\_of\\_Carbon.pdf](http://www.americaspower.org/sites/default/files/Social_Cost_of_Carbon.pdf)

### **At Last: A Report on the Social Benefits of Carbon**

By Marlo Lewis, Cooler Heads, Jan 22, 2014

<http://www.globalwarming.org/2014/01/22/at-last-a-report-on-the-social-benefits-of-carbon/>  
[SEPP Comment: The reports by Craig Idso have focused on the social benefits of carbon.]

### **Effects of Increased CO2 on Woody Plant Pests**

By Staff Writers, SPPI, Jan 29, 2014

[http://scienceandpublicpolicy.org/originals/effects\\_of\\_increased\\_co2\\_on\\_woody\\_plant\\_pests.html](http://scienceandpublicpolicy.org/originals/effects_of_increased_co2_on_woody_plant_pests.html)

Link to report: Effects of Increased CO2 on Woody Plant Pests

Center for the Study of Carbon Dioxide and Global Change, Jan 29, 2014

<http://www.co2science.org/subject/h/summaries/herbivoreswoodyplants.php>.

### **Better living through carbon conversion chemistry**

By Anthony Watts, WUWT, Jan 31, 2014

<http://wattsupwiththat.com/2014/01/31/better-living-through-carbon-conversion-chemistry/>

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

#### **Picture of how our climate is affected by greenhouse gases is a 'cloudy' one**

By Staff Writers, Jerusalem (SPX), Jan 30, 2014

[http://www.terraily.com/reports/Picture\\_of\\_how\\_our\\_climate\\_is\\_affected\\_by\\_greenhouse\\_gases\\_is\\_a\\_cloudy\\_one\\_999.html](http://www.terraily.com/reports/Picture_of_how_our_climate_is_affected_by_greenhouse_gases_is_a_cloudy_one_999.html)

[SEPP Comment: But the IPCC is 95% certain of something!]

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

#### **Science magazine: Demanding reproducibility up front**

By Anthony Watts, WUWT, Jan 26, 2014

<http://wattsupwiththat.com/2014/01/26/science-magazine-demanding-reproducibility-up-front/>

Link to editorial: Reproducibility

By Marcia McNutt, Editor in Chief, Science, Jan 17, 2014

[http://www.sciencemagazinedigital.org/sciencemagazine/17\\_january\\_2014?pg=9#pg9](http://www.sciencemagazinedigital.org/sciencemagazine/17_january_2014?pg=9#pg9)

#### **One small step for Science**

By Andrew Montford, Bishop Hill, Jan 26, 2014

<http://bishophill.squarespace.com/blog/2014/1/26/one-small-step-for-science.html>

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

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

#### **Long-Term Effects of Elevated CO<sub>2</sub> on Plant-Herbivore Interactions**

Reference: Stiling, P., Moon, D., Rossi, A., Forkner, R., Hungate, B.A., Day, F.P., Schroeder, R.E. and Drake, B. 2013. Direct and legacy effects of long-term elevated CO<sub>2</sub> on fine root growth and plant-insect interactions. *New Phytologist* 200: 788-795.

<http://nipccreport.org/articles/2014/jan/28jan2014a1.html>

In the eternal war between earth's plants and the herbivorous insects that feed upon them, the ongoing increase in the atmosphere's CO<sub>2</sub> concentration is proving to be a powerful *secret* weapon, which is helping the planet's vegetation to sustain the impressive worldwide *greening of the earth* that continues apace, growing ever stronger year by year.

#### **Simulating the Trigger of the Onset of the Indian Summer Monsoon**

Reference: Sabeerali, C.T., Dandi, A.R., Dhakate, A., Salunke, K., Mahapatra, S. and Rao, S.A. 2013. Simulation of boreal summer intraseasonal oscillations in the latest CMIP5 coupled GCMs. *Journal of Geophysical Research: Atmospheres* 118: 4401-4420.

<http://nipccreport.org/articles/2014/jan/28jan2014a2.html>

#### **The World's Longest-Running Tropical Sponge Study**

Reference: Kelmo, F., Bell, J.J. and Attrill, M.J. 2013. Tolerance of sponge assemblages to temperature anomalies: Resilience and proliferation of sponges following the 1997-8 El-Niño Southern Oscillation. *PLOS ONE* 8: e76441.

<http://nipccreport.org/articles/2014/jan/28jan2014a3.html>

#### **Two Decades of Overestimated Global Warming**

Reference: Fyfe, J.C., Gillett, N.P. and Zwiers, F.W. 2013. Overestimated global warming over the past 20 years. *Nature Climate Change* 3: 767-769.

<http://nipccreport.org/articles/2014/jan/29jan2014a4.html>

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

#### **Another Year, Another Nail in the CAGW Coffin (Now Includes December Data)**

By Werner Brozek, Edited By Just The Facts, WUWT, Jan 25, 2014

<http://wattsupwiththat.com/2014/01/25/another-year-another-nail-in-the-cagw-coffin-now-includes-december-data/>

#### **Where next for climate policy?**

By Andrew Montford, Bishop Hill, Jan 30, 2014

<http://bishophill.squarespace.com/blog/2014/1/30/where-next-for-climate-policy.html>

### ***Measurement Issues***

#### **El Niño sea monitoring system may fail – half dead already**

By Anthony Watts, WUWT, Jan 28, 2014

<http://wattsupwiththat.com/2014/01/28/el-nino-sea-monitoring-system-may-fail-half-dead-already/>

Link to article: El Niño monitoring system in failure mode

By Jeff Tollefson, Nature, Jan 23, 2014

<http://www.nature.com/news/el-ni%C3%B1o-monitoring-system-in-failure-mode-1.14582>

#### **Important study on temperature adjustments: ‘homogenization...can lead to a significant overestimate of rising trends of surface air temperature.’**

By Anthony Watts, WUWT, Jan 29, 2014

<http://wattsupwiththat.com/2014/01/29/important-study-on-temperature-adjustments-homogenization-can-lead-to-a-significant-overestimate-of-rising-trends-of-surface-air-temperature/>

#### **Inconsistencies in NCDC Historical Temperature Analysis?**

By Christopher Burt, Weather Extremes, Jun 6, 2012 [H/t Ken Towe]

<http://www.wunderground.com/blog/weatherhistorian/comment.html?entrynum=75>

### ***Changing Weather***

#### **Coldest SOTU ????**

By Staff Writers, ICECAP, Jan 27, 2014

[http://icecap.us/index.php/go/joes-blog/coldest\\_sotu/](http://icecap.us/index.php/go/joes-blog/coldest_sotu/)

A second forecast by Roy Spencer

#### **Atlanta’s 2” catastrophic snowfall**

By Judith Curry, Climate Etc. Jan 30, 2014

<http://judithcurry.com/2014/01/30/atlantas-2-catastrophic-snowfall/>

*[SEPP Comment: A bit of humor for TWTW readers in Russia.]*

#### **Baby, it's cold outside, but globe is warming: Our view**

2 things to keep in mind as you try to square your frozen driveway with a warming world.

Editorial, USA Today, Jan 30, 2014 [H/t Sam Karnick]

<http://www.usatoday.com/story/opinion/2014/01/30/climate-change-global-warming-polar-vortex-editorials-debates/5066231/>

### ***Changing Climate***

#### **Australia has lowest number of tropical cyclones in 1500 years?**

By Jo Nova, Her Blog, January 31, 2014

<http://joannenova.com.au/2014/01/australia-has-lowest-number-of-tropical-cyclones-in-1500-years/#more-33141>

Link to paper: Australian tropical cyclone activity lower than at any time over the past 550–1,500 years

By Haig, Nott & Reichart, Nature, Jan 29, 2014

[http://www.nature.com/nature/journal/v505/n7485/full/nature12882.html?WT.ec\\_id=NATURE-20140130](http://www.nature.com/nature/journal/v505/n7485/full/nature12882.html?WT.ec_id=NATURE-20140130)

*[SEPP Comment: Nova is appropriately skeptical.]*

### ***Changing Seas***

#### **What to do about The Flood Next Time**

By Kip Hansen, WUWT, Jan 27, 2014

<http://wattsupwiththat.com/2014/01/27/what-to-do-about-the-flood-next-time/>

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

#### **Inconvenient study: Arctic was warmer than the present during the Medieval Warm Period**

By Anthony Watts, WUWT, Jan 28, 2014

<http://wattsupwiththat.com/2014/01/28/inconvenient-study-arctic-was-warmer-than-the-present-during-the-medieval-warm-period/>

#### **Early 20th century Arctic warming**

By Judith Curry, Climate Etc. Jan 27, 2014

<http://judithcurry.com/2014/01/27/early-20th-century-arctic-warming/>

#### **Arctic Sea Ice in Century-Long Decline**

U of T scientist uses long-lived algae to track annual changes in northern climate back to 1300s

By Lanna Crucefix, Univ. of Toronto Magazine, Jan 20, 2014 [H/t Charles Dunkl]

[http://www.magazine.utoronto.ca/blogs/arctic-sea-ice-in-century-long-decline-coralline-algae-jochen-halfar/?utm\\_source=DUAL&utm\\_medium=email&utm\\_campaign=news\\_at\\_uoft](http://www.magazine.utoronto.ca/blogs/arctic-sea-ice-in-century-long-decline-coralline-algae-jochen-halfar/?utm_source=DUAL&utm_medium=email&utm_campaign=news_at_uoft)

*[SEPP Comment: It would be interesting to see if the data tracks a warming in the early part of the 20<sup>th</sup> century when many observers were reporting a decline in the Arctic sea ice. See link immediately above.]*

#### **NASA Radar Maps the Winter Pace of Iceland's Glaciers**

By Staff Writers, Pasadena CA (JPL), Jan 29, 2014

[http://www.terraily.com/reports/NASA\\_Radar\\_Maps\\_the\\_Winter\\_Pace\\_of\\_Iceland's\\_Glaciers\\_999.html](http://www.terraily.com/reports/NASA_Radar_Maps_the_Winter_Pace_of_Iceland's_Glaciers_999.html)

#### **Churchill polar bears eat more caribou and geese now than in 1968 because there are more caribou and geese, new research reveals**

By Susan Crockford, Polar Bear Science, Jan 26, 2014

<http://polarbearscience.com/2014/01/26/churchill-polar-bears-eat-more-caribou-and-geese-now-than-in-1968-because-there-are-more-caribou-and-geese-new-research-reveals/#more-4236>

*[SEPP Comment: Studies implying that a change in diet is stress related to melting Arctic ice are pure speculation.]*

### ***Changing Earth***

#### **Rainforests in Far East shaped by humans for the last 11,000 years**

By Staff Writers, Belfast, UK (SPX), Jan 28, 2014

[http://www.terraily.com/reports/Rainforests\\_in\\_Far\\_East\\_shaped\\_by\\_humans\\_for\\_the\\_last\\_11000\\_years\\_999.html](http://www.terraily.com/reports/Rainforests_in_Far_East_shaped_by_humans_for_the_last_11000_years_999.html)

### ***Acidic Waters***

#### **Ocean acidification research should increase focus on species' ability to adapt**

By Staff Writers, University of British Columbia, No date

[http://www.terraily.com/reports/Ocean\\_acidification\\_research\\_should\\_increase\\_focus\\_on\\_species\\_ability\\_to\\_adapt\\_999.html](http://www.terraily.com/reports/Ocean_acidification_research_should_increase_focus_on_species_ability_to_adapt_999.html)

Link to paper: Evolution in an acidifying ocean

By Sunday, et al. Trends in Ecology & Evolution, December 2013

<http://www.cell.com/trends/ecology-evolution/abstract/S0169-5347%2813%2900274-7>

[SEPP Comment: Species are able to adapt to changes in atmospheric CO2?]

### ***Lowering Standards***

#### **Unsettling the “Settled Science” of Climate Change**

By Simon Carr, Gallery Guido, Jan 30, 2014 [H/t Bishop Hill]

<http://order-order.com/2014/01/30/sketch-unsettling-the-settled-science-of-climate-change/>

#### **Climate science is for second-raters says world's greatest atmospheric physicist**

By James Delingpole, Telegraph, UK, Jan 29, 2014 [H/t Cooler Heads]

<http://blogs.telegraph.co.uk/news/jamesdelingpole/100257206/climate-science-is-for-second-raters-says-worlds-greatest-atmospheric-physicist/>

[SEPP Comment: The headline may be extreme.]

#### **A report on the AR5 hearings: ‘Unsettling the “Settled Science” of Climate Change’**

By Anthony Watts, WUWT, Jan 30, 2014

<http://wattsupwiththat.com/2014/01/30/a-report-on-the-ar5-hearings-unsettling-the-settled-science-of-climate-change/>

#### **Defence of the realm**

By Andrew Montford, Bishop Hill, Jan 31, 2014

<http://bishophill.squarespace.com/blog/2014/1/31/defence-of-the-realm.html>

[SEPP Comment: The Royal Society chimes in.]

#### **Walport's reverse thinking**

By Andrew Montford, Bishop Hill, Jan 27, 2014

<http://www.bishop-hill.net/blog/2014/1/27/walports-reverse-thinking.html>

[SEPP Comment: It is inconceivable that Britain's chief scientific adviser could possibly be wrong, especially inconceivable by him.]

#### **Scientific Advisor or Court Jester?**

By Ben Pile, Spiked, Jan 31, 2014 [H/t GWPF]

<http://www.spiked-online.com/newsite/article/scientific-adviser-or-court-jester/#.UuvMDBBdXCt>

The job of the chief scientist is not as much to inform the debate as to supply it with banal soundbytes.

### ***State of the Union***

#### **'Climate change is a fact,' Obama declares**

By Laura Barron-Lopez, The Hill, Jan 28, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/196757-obama-climate-change-is-a-fact>

#### **Obama defends 'all of the above' energy in speech**

By Laura Barron-Lopez, The Hill, Jan 28, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/196770-obama-defends-all-of-the-above-energy-in-speech>

## **Schism between Obama, environmentalists over energy policy**

By Dina Cappiello and Matthew Daly, AP, Jan 30, 2014

<http://www.slttrib.com/slttrib/world/57472601-68/obama-energy-letter-climate.html.csp>

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

### **Major German Daily ‘Die Welt’ Wildly Exaggerates Western Antarctic Ice Shelf Melt By 1100 Times!**

By P. Gosselin, No Tricks Zone, Jan 31, 2014

<http://notrickszone.com/2014/01/31/major-german-daily-die-welt-wildly-exaggerates-western-antarctic-ice-shelf-melt-by-1100-times/>

## **Biomarker for stress hormones in polar bears, wildlife affected by global climate change**

By Staff Writers, Amherst MA (SPX), Jan 28, 2014

[http://www.terraily.com/reports/Biomarker for stress hormones in polar bears wildlife affected by global climate change 999.html](http://www.terraily.com/reports/Biomarker%20for%20stress%20hormones%20in%20polar%20bears%20wildlife%20affected%20by%20global%20climate%20change%20999.html)

*[SEPP Comment: How do they separate natural levels of stress from climate change stress and what part can be attributed to humans?]*

## **Changing Climate Kills Magellanic Penguin Chicks**

By Thomas Sumner, Science, Jan 29, 2014

<http://news.sciencemag.org/climate/2014/01/changing-climate-kills-magellanic-penguin-chicks>

*[SEPP Comment: No hard data on weather events, etc. A three year average is not significant.]*

## **UN warns climate change is drowning Senegal**

By Staff Writers, Dakar (AFP), Jan 28, 2014

[http://www.terraily.com/reports/UN warns climate change is drowning Senegal 999.html](http://www.terraily.com/reports/UN%20warns%20climate%20change%20is%20drowning%20Senegal%20999.html)

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

### **Claim Global Warming Causes Cold “An Absurd PIK Construct On The Verge Of Extinction”, German Scientists Say**

Absurd PIK construct on the verge of extinction: North American cold spell in January 2014 was not the result of global warming

By Sebastian Lüning and Fritz Vahrenholt Translated, edited by P Gosselin, No Tricks Zone, Jan 29, 2014

<http://notrickszone.com/2014/01/29/claim-global-warming-causes-cold-an-absurd-pik-construct-on-the-verge-of-extinction-scientists-say/>

*[SEPP Comment: More on the claim that heat causes lack of heat.]*

## **Dire signs from a warming world**

By Eugene Robinson, Washington Post, Jan 27, 2014

[http://www.washingtonpost.com/opinions/eugene-robinson-global-warmings-impact-cant-be-ignored/2014/01/27/b5917594-8792-11e3-a5bd-844629433ba3\\_story.html](http://www.washingtonpost.com/opinions/eugene-robinson-global-warmings-impact-cant-be-ignored/2014/01/27/b5917594-8792-11e3-a5bd-844629433ba3_story.html)

Another insane cold wave — not the infamous “polar vortex ” but its evil twin — is bringing sub-zero and single-digit temperatures to much of the nation. And global warming may be even more extreme, and potentially more catastrophic, than climate scientists had feared.

*[SEPP Comment: What is the evil twin of a polar vortex – a tropical vortex? Does that cause freezing weather?]*

## **Solid rock**

By Andrew Montford, Bishop Hill, Jan 25, 2014

<http://bishophill.squarespace.com/blog/2014/1/25/solid-rock.html>

*[SEPP Comment: The claimed rock solid science is a bit like quicksilver.]*

## **Expanding the Orthodoxy**

### **Al Gore once again suggests ‘fertility management’ to fight global warming**

By Michael Bastasch, Daily Caller, Jan 27, 2014

<http://dailycaller.com/2014/01/27/al-gore-once-again-suggests-fertility-management-to-fight-global-warming/>

## **Questioning European Green**

### **Schäuble warns green policies are harming German economy**

By Peter Spiegel, Financial Times, Jan 28, 2014 [H/t GWPF]

<http://www.ft.com/intl/cms/s/0/5273b218-8802-11e3-8afa-00144feab7de.html?siteedition=intl#axzz2rjRArInE>

Critics charged Brussels with putting economic growth ahead of climate change concerns; the EU has long been the strongest advocate internationally for tough environmental standards and a retreat by Europe on the issue could have major implications for the global debate.

*[SEPP Comment: Tough environmental standards or willful ignorance?]*

## **The Costs of Green Dreams**

IEA: Energy Woes Will Hobble Europe for 20 Years

By Walter Russell Mead and Staff, American Interest, Jan 31, 2014 [H/t GWPF]

<http://www.the-american-interest.com/blog/2014/01/31/iea-energy-woes-will-hobble-europe-for-20-years/>

One of biggest stories of this decade is the steady erosion of the global green movement, which has almost entirely been driven by the incoherence of green policy proposals and the serial failure of signature policies. Yet the response of the mainstream green movement to critics who point these facts out is “Shut up, you evil science deniers.”

## **Coalition freezes carbon levy to curb energy bills in shock U-turn that signals green ambitions are being scrapped**

By Jon Rees, Financial Mail, Jan 28, 2014 [H/t GWPF]

<http://www.dailymail.co.uk/money/bills/article-2545904/Coalition-freezes-carbon-levy-curb-energy-bills-shock-U-turn.html>

## **Dominic Lawson: The Game’s Up For Renewable Energy**

By Dominic Lawson, The Sunday Times, Via GWPF, Jan 26, 2014

<http://www.thegwpf.org/dominic-lawson-games-renewable-energy/>

## **Europe Flees Economy-Destroying Green Initiatives While Obama Presses On**

By Megan Toombs, Cornwall Alliance, Jan 29, 2014

<http://www.cornwallalliance.org/blog/item/europe-flees-economy-destroying-green-initiatives-while-obama-presses-on/>

## **Patience of Barton Moss residents reaches limits**

By Andrew Montford, Bishop Hill, Jan 25, 2014

<http://bishophill.squarespace.com/blog/2014/1/25/patience-of-barton-moss-residents-reaches-limits.html>

[SEPP Comment: Save us from environmentalist "saviours".]

### **Proof wind turbines take thousands off your home: Value of houses within 1.2 miles of large wind farms slashed by 11%, study finds**

Study by LSE found value of homes close to wind farms slashed by 11%

Home that costs £250,000 would lose £27,000 in value

Homes as far as two-and-a-half miles away could be reduced by 3%

By Sanchez Manning, Mail, UK, Jan 27, 2014

[http://www.dailymail.co.uk/news/article-2546042/Proof-wind-turbines-thousands-home-value-homes-1-2-miles-wind-farms-slashed-11-cent-study-finds.html?ITO=1490&ns\\_mchannel=rss&ns\\_campaign=1490](http://www.dailymail.co.uk/news/article-2546042/Proof-wind-turbines-thousands-home-value-homes-1-2-miles-wind-farms-slashed-11-cent-study-finds.html?ITO=1490&ns_mchannel=rss&ns_campaign=1490)

### ***Questioning Green Elsewhere***

**Fearing they'll 'be next,' industries unite against Obama's climate change rules**

By Ben Goad, The Hill, Jan 30, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/196968-business-plans-major-pushback-on-energy-regulation>

### **Study: Green roofs suck at solving global warming**

By Anthony Watts, WUWT, Jan 31, 2014

<http://wattsupwiththat.com/2014/01/31/study-green-roofs-suck/>

### **Warmism Comes Down With A Chill**

By Alan Moran, Quadrant, Jan 28, 2014

<http://quadrant.org.au/opinion/doomed-planet/2014/01/warmism-feels-chill-wind/>

### ***Green Jobs***

**New Study Finds US Solar Jobs Grew 20% Last Year**

By Staff Writers, Washington DC (SPX), Jan 29, 2014

[http://www.solardaily.com/reports/New\\_Study\\_Finds\\_US\\_Solar\\_Jobs\\_Grew\\_20%25\\_Last\\_Year\\_999.html](http://www.solardaily.com/reports/New_Study_Finds_US_Solar_Jobs_Grew_20%25_Last_Year_999.html)

[SEPP Comment: Insignificant compared with job from the oil and gas revolution. What would the growth be without subsidies and mandates?]

### ***Funding Issues***

**Reduce GHGs or Increase Energy Access?**

By Roger Pielke Jr, His Blog, Jan 31, 2014

<http://rogerpielkejr.blogspot.com/2014/01/reduce-ghgs-or-increase-energy-access.html>

[SEPP Comment: US government policy of anti-fossil fuel may thwart goals of promoting electricity generation in Africa.]

### ***Litigation Issues***

**European justice?**

By Andrew Montford, Bishop Hill, Jan 29, 2014

<http://bishophill.squarespace.com/blog/2014/1/29/european-justice.html>

Link to Press Release: European Court of Justice condemns EPAW

By Mark Duchamp and Pat Swords, EPAW, Jan 29, 2014

[http://www.epaw.org/press/European Court of Justice condemns EPAW.pdf](http://www.epaw.org/press/European_Court_of_Justice_condemns_EPAW.pdf)

[SEPP Comment: Does the court have the power to select which organizations are legal entities and which are not?]

### **Shell gives up on Arctic drilling for 2014**

By Laura Barron-Lopez, The Hill, Jan 30, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/196955-shell-wont-pursue-arctic-drilling-in-2014>

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

#### **Climate precrimes**

By Andrew Montford, Bishop Hill, Jan 27, 2014

<http://bishophill.squarespace.com/blog/2014/1/27/climate-precrimes.html>

[SEPP Comment: A short, witty comment for those who proclaim a need for a carbon tax based on speculative results from climate models.]

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

#### **The Solar-Induced Death Spiral**

By Donn Dears, Power For USA, Jan 28, 2014

<http://dddusmma.wordpress.com/2014/01/28/the-solar-induced-death-spiral/>

### **Wind industry revives push to extend key tax credit**

By Zack Colman, Washington Examiner, Jan 30, 2014

[http://washingtonexaminer.com/wind-industry-revives-push-to-extend-key-tax-credit/article/2543190?utm\\_source=Washington%20Examiner:%20Politics%20Today%20Reoccurring%20-%2001/31/2014&utm\\_medium=email&utm\\_campaign=Washington%20Examiner:%20Politics%20Today](http://washingtonexaminer.com/wind-industry-revives-push-to-extend-key-tax-credit/article/2543190?utm_source=Washington%20Examiner:%20Politics%20Today%20Reoccurring%20-%2001/31/2014&utm_medium=email&utm_campaign=Washington%20Examiner:%20Politics%20Today)

### **Gone With the Wind: Weak Returns Cripple German Renewables**

By Gunther Latsch, Anne Seith and Gerald Traufetter, Spiegel International, Translated by Charles Hawley, Jan 30, 2014 [H/t GWPF]

<http://www.spiegel.de/international/business/wind-power-investments-in-germany-proving-riskier-than-thought-a-946367.html>

Daldorf's findings are surprising given the substantial subsidies the state has provided to renewable energies over the years. The guaranteed feed-in tariff for a kilowatt hour of electricity generated by a renewable energy technology currently averages 17 cents. That is several times the market price.

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

#### **The War on Coal: Collateral Damage Will Hit Non-Coal States, Too**

By Filip Jolevski and David Kreutzer, The Foundry, Jan 31, 2014

<http://blog.heritage.org/2014/01/31/war-coal-collateral-damage-will-hit-non-coal-states/>

Link to research paper: EPA Power Plant Regulations: A Backdoor Energy Tax

By Nicolas Loris, Kevin Dayaratna and David W. Kreutzer, Heritage, Dec 5, 2013

[http://www.heritage.org/research/reports/2013/12/epa-power-plant-regulations-a-backdoor-energy-tax#\\_ftn2](http://www.heritage.org/research/reports/2013/12/epa-power-plant-regulations-a-backdoor-energy-tax#_ftn2)

[SEPP Comment: NEMS – National Energy Modeling System]

### **War On Coal to Increase your Cost of Electricity**

By Donn Dears, Power For USA, Jan 31, 2014

<http://dddusmma.wordpress.com/2014/01/31/war-on-coal-to-increase-your-cost-of-electricity/>

### **EPA's Wood-Burning Stove Ban Has Chilling Consequences For Many Rural People**

By Larry Bell, Forbes, Jan 29, 2014

<http://www.forbes.com/sites/larrybell/2014/01/29/epas-wood-burning-stove-ban-has-chilling-consequences-for-many-rural-people/>

### **Asian ozone pollutes Hawaii and USA west coast – varies with climatic shifts**

By Anthony Watts, WUWT, Jan 27, 2014

<http://wattsupwiththat.com/2014/01/27/asian-ozone-pollutes-hawaii-and-usa-west-coast-varies-with-climatic-shifts/>

*[SEPP Comment: What will the EPA do to protect Americans from this pollution? Ban coal-fired power plants in China? The article inappropriately links changing atmospheric wind patterns with human-caused global warming/climate change.]*

### ***Energy Issues – Non-US***

#### **10 Reasons Intermittent Renewables Are A Problem**

By Gail Tverberg, Investing.com, Jan 22, 2014 [H/t NCPA]

<http://www.investing.com/analysis/ten-reasons-intermittent-renewables-%28wind-and-solar-pv%29-are-a-problem-199532>

*[SEPP Comment: Addresses universal problems.]*

### **Energy price gap with the US to hurt Europe for ‘at least 20 years’**

By Pilita Clark, Financial Times, Jan 29, 2014 [H/t GWPF]

<http://www.ft.com/intl/cms/s/0/80950dfe-8901-11e3-9f48-00144feab7de.html?siteedition=intl#axzz2rs2WwCiX>

### **US vs. Europe: Energy battle heats up**

By: Daniel Yergin, CNBC, Jan 27, 2014 [H/t GWPF]

[http://www.cnbc.com/id/101365772#\\_gus](http://www.cnbc.com/id/101365772#_gus)

DAVOS is billed as the annual World Economic Forum and focuses on global politics, economics and social issues. It attracts international business and political leaders.

### **Germany Losing European Friends in Energy Switch, Gabriel Says**

By Brian Parkin and Rainer Buergin, Bloomberg, Jan 30, 2014

<http://www.businessweek.com/news/2014-01-30/germany-losing-european-friends-in-energy-switch-gabriel-says>

### **Germany First in Europe to Tax Consumer Use of Clean-Energy (1)**

By Stefan Nicola and Marc Roca, Bloomberg, Jan 24, 2014 [H/t GWPF]

<http://www.businessweek.com/news/2014-01-24/germany-first-in-europe-to-tax-consumer-use-of-renewable-energy>

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

#### **American wind to be stored in Canada**

By Susan Kraemer, Wind Energy Update, Jan 27, 2014

[http://social.windenergyupdate.com/operations-maintenance/american-wind-be-stored-canada?utm\\_source=e-brief2801&utm\\_medium=email&utm\\_content=2801&utm\\_campaign=WEU](http://social.windenergyupdate.com/operations-maintenance/american-wind-be-stored-canada?utm_source=e-brief2801&utm_medium=email&utm_content=2801&utm_campaign=WEU)

[SEPP Comment: Will the administration try to slow-roll this as it has slow-rolled the Keystone pipeline from crossing the US-Canada border.]

### **America reaches an era of powering down**

By Terence Jeffrey, Washington Examiner, Jan 29, 2014

[http://washingtonexaminer.com/america-reaches-an-era-of-powering-down/article/2543089?utm\\_source=Washington%20Examiner:%20Opinion%20Digest%20Reoccurring%20-%2001/30/2014&utm\\_medium=email&utm\\_campaign=Washington%20Examiner:%20Opinion%20Digest](http://washingtonexaminer.com/america-reaches-an-era-of-powering-down/article/2543089?utm_source=Washington%20Examiner:%20Opinion%20Digest%20Reoccurring%20-%2001/30/2014&utm_medium=email&utm_campaign=Washington%20Examiner:%20Opinion%20Digest)

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

#### **Keystone XL oil pipeline clears big hurdle**

Pressure grows on Obama to OK project

By Ben Wolfgang, The Washington Times, Jan 31, 2014

<http://www.washingtontimes.com/news/2014/jan/31/keystone-oil-pipeline-clears-significant-hurdle/>

### **Positive Environmental Report Means Admin Would Need Other Rationale to Kill Keystone**

Environmental groups demand review of all tar sands pipelines for carbon pollution before a final Keystone judgment.

By Bill Straub, PJ Media, Jan 31, 2014 [H/t Timothy Wise]

<http://pjmedia.com/blog/positive-environmental-report-means-admin-would-need-other-rationale-to-kill-keystone/>

### **Obama to further restrict federal land from oil production**

By Dave Boyer, Washington Times, Jan 29, 2014

<http://www.washingtontimes.com/news/2014/jan/29/obama-to-further-restrict-federal-land-from-oil-pr/>

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

#### **TRIPLETT: Not ‘hope and change,’ but real jobs in oil patch**

Employment booming in the energy sector

By William C. Triplett II Washington Times, Jan 29, 2014

<http://www.washingtontimes.com/news/2014/jan/29/triplett-not-hope-and-change-but-real-jobs/>

### **Harper: A fracking good story missed by the media**

By Christopher Harper, Washington Times, Jan 29, 2014 [H/t Cooler Heads]

<http://www.washingtontimes.com/news/2014/jan/29/the-united-states-has-become-the-largest-producer-/>

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

#### **ACCCE's Duncan discusses coal's ability to compete as grid technologies evolve**

Transcript by Staff Writers, EETV, Jan 30, 2014

<http://www.eenews.net/tv/videos/1779/transcript>

## **The Coal, Hard Truth**

China's New Coal 6 Times Higher than Wind, 27 Times Higher than Solar in 2013

By Armond Cohen, Breakthrough Institute, Jan 23, 2014 [H/t GWPF]

<http://thebreakthrough.org/index.php/programs/energy-and-climate/the-coal-hard-truth/>

## **Coal Will 'Dominate Global Power Sector For Decades'**

By Annabel Hepworth, The Australian, Via GWPF, Jan 30, 2014

<http://www.thegwgf.org/coal-dominate-global-power-sector-decades/>

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

### **Market Disruptor: Nuclear Restarts Spells Trouble for LNG**

By Staff Writers, Washington DC (SPX), Jan 31, 2014

<http://www.energy->

[daily.com/reports/Market\\_Disruptor\\_Nuclear\\_Restarts\\_Spells\\_Trouble\\_for\\_LNG\\_999.html](http://www.energy-daily.com/reports/Market_Disruptor_Nuclear_Restarts_Spells_Trouble_for_LNG_999.html)

*[SEPP Comment: The cost of importing LNG by Japan may force a re-start of the nuclear power plants in Japan. According to the report, the estimated cost of liquefaction, transportation, and re-gasification is \$4 to \$5 per MMBTu]*

### **Boxer: 'Unacceptable delay' in U.S. Fukushima response**

By Ben Goad, The Hill, Jan 30, 2014

<http://thehill.com/blogs/e2-wire/e2-wire/196987-boxer-unacceptable-delay-in-us-fukushima-response>

*[SEPP Comment: Does the Senator know the difference between an earthquake and a tidal wave?]*

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

### **Solar Provides 0.2% of Electric Supply--Up From 0.02% Before Obama**

By Terence Jeffrey, CNS News, Jan 29, 2014 [H/t Timothy Wise]

<http://www.cnsnews.com/news/article/terence-p-jeffrey/solar-provides-02-electric-supply-002-obama>

Link to report: Monthly Energy Review

By Staff Writers, EIA, January 2914

<http://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf>

### **Renewables Provide 37 Percent Of New US Generating Capacity in 2013**

By Staff Writers, Washington DC (SPX), Jan 30, 2014

<http://www.energy->

[daily.com/reports/Renewables\\_Provide\\_37\\_Percent\\_of\\_All\\_New\\_US\\_Electrical\\_Generating\\_Capacity\\_in\\_2013\\_999.html](http://www.energy-daily.com/reports/Renewables_Provide_37_Percent_of_All_New_US_Electrical_Generating_Capacity_in_2013_999.html)

### **Scotland's offshore wind farms investment halved**

By Andrew Whitaker, Scotsman, Jan 28, 2014 [H/t GWPF]

<http://www.scotsman.com/news/environment/scotland-s-offshore-wind-farms-investment-halved-1-3283585>

### **The UK was an offshore wind leader in 2013, but how long will it last?**

By Mat Hope, Carbon Brief, Jan 30, 2014

[http://www.carbonbrief.org/blog/2014/01/the-uk-was-an-offshore-wind-leader-in-2013,-but-how-long-will-it-last/?utm\\_source=Weekly+Carbon+Briefing&utm\\_campaign=732a85c4db-](http://www.carbonbrief.org/blog/2014/01/the-uk-was-an-offshore-wind-leader-in-2013,-but-how-long-will-it-last/?utm_source=Weekly+Carbon+Briefing&utm_campaign=732a85c4db-)

[Carbon Brief Weekly 18 7 137 18 2013&utm\\_medium=email&utm\\_term=0\\_3ff5ea836a-732a85c4db-215218249](http://www.carbonbrief.org/Carbon-Brief-Weekly-18-7-137-18-2013&utm_medium=email&utm_term=0_3ff5ea836a-732a85c4db-215218249)

*[SEPP Comment: If they realized the actual costs, including required back-up, how many rate payers would want to see their nation be the international leader in expensive, unreliable offshore wind farms?]*

### **Active Power Control of Wind Turbines Can Improve Power Grid Reliability**

By Staff Writers, Golden CO (SPX), Jan 29, 2014

[http://www.winddaily.com/reports/Active\\_Power\\_Control\\_of\\_Wind\\_Turbines\\_Can\\_Improve\\_Power\\_Grid\\_Reliability\\_999.html](http://www.winddaily.com/reports/Active_Power_Control_of_Wind_Turbines_Can_Improve_Power_Grid_Reliability_999.html)

The study, "Active Power Controls from Wind Power: Bridging the Gaps", finds that wind power can support the power system by adjusting its power output to enhance system reliability.

*[SEPP Comment: Does not adjust the major issues of periods of no production and the need to make quick demands on needed back-ups.]*

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

#### **Boeing and UAE To Look at Biofuels From Desert Plants**

By Staff Writers, Abu Dhabi UAE (SPX), Jan 23, 2014

[http://www.biofueldaily.com/reports/Boeing\\_United\\_Arab\\_Emirates\\_Partners\\_Look\\_to\\_Harvest\\_Biofuel\\_from\\_Desert\\_Plants\\_999.html](http://www.biofueldaily.com/reports/Boeing_United_Arab_Emirates_Partners_Look_to_Harvest_Biofuel_from_Desert_Plants_999.html)

#### **Iceland drilling creates world's first magma-based geothermal system**

By Staff Writers, Riverside, Calif. (UPI), Jan 24, 2013

[http://www.energy-daily.com/reports/Iceland\\_drilling\\_creates\\_worlds\\_first\\_magma-based\\_geothermal\\_system\\_999.html](http://www.energy-daily.com/reports/Iceland_drilling_creates_worlds_first_magma-based_geothermal_system_999.html)

### ***California Dreaming***

#### **California Energy Update: Part IV**

By Wayne Lusvardi, Master Resource, Jan 30, 2014

<http://www.masterresource.org/2014/01/california-energy-update-iv/#more-29457>

### ***Health, Energy, and Climate***

#### **Hey NYTimes: Are we really "giving ourselves cancer?" Amazing scare piece.**

By Staff Writers, ACSH, Jan 31, 2014

<http://acsh.org/2014/01/hey-nytimes-really-giving-cancer-amazing-scare-piece/>

#### **New study tries to link Alzheimer's disease and DDT; media thinks it succeeded**

By Staff Writers, ACSH, Jan 28, 2014

<http://acsh.org/2014/01/new-study-tries-link-alzheimers-disease-ddt-media-thinks-succeeded/>

### ***Oh Mann!***

#### **Mann versus Steyn**

By Judith Curry, Climate Etc. Jan 26, 2014

<http://judithcurry.com/2014/01/26/mann-versus-steyn/>

### ***Environmental Industry***

#### **India's Essar sues Greenpeace for \$80 mn for defamation**

By Staff Writers, Mumbai (AFP), Jan 28, 2014

[http://www.terraily.com/reports/Indias Essar sues Greenpeace for 80 mn for defamation 99.html](http://www.terraily.com/reports/Indias_Essar_sues_Greenpeace_for_80_mn_for_defamation_99.html)

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

**New York declares war on swans**

By Staff Writers, New York (AFP), Jan 30, 2014

[http://www.terraily.com/reports/New York declares war on swans 999.html](http://www.terraily.com/reports/New_York_declares_war_on_swans_999.html)

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**BELOW THE BOTTOM LINE:**

**Proposed State Climate Change Legislation**

By Staff Writers, Live Green Swim Warm.org, No date

<http://livegreenswimwarm.org/proposed-state-legislation/#.UurDGxBdXCs>

Saving the planet, one swimming pool at a time

**Opec's UAE 'Could Import US Shale Gas'**

By Staff Writers, Upstream News, Jan 27, 2014

<http://www.upstreamonline.com/live/article1350402.ece>

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**ARTICLES:**

**1. Book Review: 'Windfall' by McKenzie Funk**

From politicians to profiteers, some people look at the effects of climate change and see dollar signs.

By Philip Delves Broughton, WSJ, Jan 28, 2014

<http://online.wsj.com/news/articles/SB10001424052702304632204579340560508887126?mod=I>

[TP opinion 0](#)

*[SEPP Comment: Covering the climate war profiteers.]*

The changes occurring in Earth's climate appear to present an unfair fight, between the majestic forces of Nature and we minuscule humans, scurrying to protect ourselves. But whatever we may or may not have done to heat up our planet, the polar ice is melting, the mercury seems to be rising and for those with an eye on the main chance, there is money to be made. Once you have contemplated the mind-boggling variety of bets that nations, businesses and politicians are placing based on predicted global temperatures, the choice of which gas-hybrid SUV to buy will seem trivial.

In "Windfall" McKenzie Funk, an intrepid American journalist, reports on the lesser-known victims and profiteers of climate change brings a dizzyingly abstruse phenomenon down to a more human scale. Mr. Funk leads us away from the rarefied air of Al Gore and his lethal PowerPoint slides, to mingle with the militiamen, inventors, politicians and activists trying to find their way through an era of turmoil. Bad news for flood-stricken Bangladeshis, it turns out, is good news for Greenland's separatists, hoping to break free of Denmark and profit from an Arctic mineral boom. Russians are taking their lead from President Vladimir Putin, who has observed that the warming of his country means "we shall save on fur coats." Melting sea ice and permafrost would expand Russia's agricultural land, improve its fishing stocks and make it easier to extract minerals from Siberia. A Chinese company has signed a lease to farm 5% of Ukraine, some 7.5 million acres, to grow food for its home market.

In Africa, though, the Sahara is expanding and a torrent of immigrants heading north to escape the drought. The late Col. Gadhafi used to hold this gun to Europe's head. "What will be the reaction

of the white and Christian Europeans faced with this influx of starving and ignorant Africans?" he asked the Italians. "We don't know if Europe will remain an advanced and united continent or if it will be destroyed as happened with the Barbarian invasions." His threats worked. In 2009, Italy agreed to pay Libya 250 million euros a year for 20 years in return for joint infrastructure projects, oil contracts and aid in stopping Africans from crossing the Mediterranean. Giant camps were built in the Libyan desert to hold the thwarted emigrants. The deal unraveled after Gadhafi's fall, and last year more than 30,000 immigrants were smuggled from Libya to Italy aboard rickety boats.

The African Union's answer to desertification is a 4,000-mile tree-planting project, laughably called the Great Green Wall—a scrubby line of saplings stretching from Senegal to Somalia. Some enterprising foreigners are betting that doesn't work out. Mr. Funk travels to southern Sudan with a New York money manager hoping to win over the local warlords who control thousands of acres of rich farmland—"a kind of double bet on chaos, on national fragmentation plus international food crisis," as Mr. Funk describes it. It is hard to tell who is more desperate, the fund manager struggling to justify his dealings with warlords or the indigent locals fighting for rather than profiting from the natural wealth around them.

There are many bizarre and wonderful stories in Mr. Funk's book. Who knew that Israelis were the masters of artificial snow-making? It turns out to be a lucrative byproduct of their experience desalinating seawater to irrigate Israeli farms. Now their machines pump snow all over the Alps and will be in action at Sochi for the Winter Olympics. In Holland, engineers are rubbing their hands at the prospect of bringing a version of the dam system that protects Rotterdam to post-Sandy New York. And in Seattle, an ex-Microsoft scientist is scheming to pump sulfur into the stratosphere to shield polar ice from the sun. These geo-engineers believe technology can work more quickly than global protocols in addressing climate change.

"Windfall" is not concerned with the causes of climate change, only its effects, both real and imagined. The Arctic melt, for example, is well under way. Elsewhere, countries and investors are betting on climate outcomes based on varying degrees of probability. What unites the characters in this book is that they share a "simple, cynical premise" about global warming: "we won't stop it anytime soon."

In climatically benighted Bangladesh, Mr. Funk talks to the country's leading environmentalist, Atiq Rahman, who tells him of the four horsemen of salinity, cyclones, flooding and sea-level rise menacing his country. As more of the country is flooded, he predicts, more people will move to the cities risking more overcrowding and more civil unrest. All because, he says, the first world wants its cars and refrigerators. On a recent visit to Los Angeles, Mr. Rahman says, "I told the Americans: I want a piece of California. I want a piece of Texas. I want a piece of Maryland for my people that you are inundating."

At the same time, global efforts to impose change might only penalize smaller nations and their emerging economies. Mr. Rahman has particular contempt for systems that propose to pay polluters, whether companies or countries, to reduce their emissions. The polluters get paid, while those who suffer from pollution while polluting little, like Bangladesh, receive next to nothing. He describes what he calls "the nightmare scenario on climate change" to Mr. Funk: "a lot of zero-carbon technology being transferred to places that already produce virtually zero carbon. And nothing happens. For the poor, absolutely nothing happens."

It turns out that climate change is rather like the financial crisis. Those who may have caused it with their emissions are likely to profit most from it, and the gulf between the world's rich, who can protect themselves from its worst effects, and the poor, who cannot, will only widen. It is an ugly truth, but one well worth recognizing as we ponder what do if Maine turns into Tuscany and the Marshall Islands vanish beneath the sea.

*Mr. Delves Broughton's latest book is "The Art of the Sale: Learning From the Masters About the Business of Life."*

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## **2. Europe's Stark Renewables Lesson**

Like Frankenstein, the EU has created a renewable-energy monster it does not know how to tame.

By Rupert Darwall, WSJ, Jan 28, 2014

<http://online.wsj.com/news/articles/SB10001424052702303553204579348470302047850>

"We can avoid what could well be a human calamity," German Chancellor Angela Merkel said in 2007 after EU leaders decided to cut greenhouse gas emissions by 20% and to generate 20% of the EU's energy from renewable sources by 2020. While these policies might have no discernible effect on the climate, they are a calamity for the EU. Like Frankenstein, the EU has created a renewable-energy monster it does not know how to tame.

In a clear-eyed analysis last week, the European Commission published its proposals for the follow-up period from 2020. The Commission notes that since 2005, the U.S. cut its CO2 emissions by more than 12% (a little less than the EU, which cut emissions by just under 14%), thanks largely to shale gas. EU firms and households, the commission says, are increasingly concerned by rising energy prices and widening cost differentials with the U.S. Between 2008 and 2012, the average electricity price paid by European industrial firms rose by 16.7% while American firms are paying 2.3% less, so prices paid by American firms are 45% lower than EU firms.

As the U.S. powers into an era of cheap, abundant energy, across the Atlantic the European Commission reckons electricity prices will rise 31% before inflation by 2030 from 2011, and will consume an increasing share of European GDP. Widening energy-price disparities may reduce production and investment and shift global trade patterns, the commission concedes. However, it adds, if other countries outside Europe agreed to cap their greenhouse-gas emissions, they would help Europe's energy-intensive industries—hardly an inducement for them to do so.

Having driven much of the way to its 2020 vision, the EU has a big problem. Institutionally, it has no reverse gear. So for the post-2020 period, the commission proposes pushing on in the same direction, but with considerably less determination. It wants to nix some of the most egregious policies. First-generation biofuels have a limited role in decarbonizing the transport sector, so should not receive public support after 2020. The commission also puts a black mark over biomass policies (chopping down trees to burn in power stations), questioning their ability to reduce greenhouse emissions and highlighting their effects on other timber-consuming sectors.

But the EU's biggest energy problem lies at the dead center of its 2020 vision. By the end of 2012, the EU had installed around 44% of the world's renewable capacity. The commission acknowledges that, because member states over-incentivized investment in renewables, they compounded the challenges posed by weather-dependent electricity generation. Renewable

energy needs conventional back-up, but the subsidies needed to make wind power profitable upend generators' cost structures, imperiling investment in conventional capacity.

The variable costs of wind and solar electricity are virtually zero. Subsidizing their fixed costs increases the risks and displaces the returns from investing in conventional power stations. When the wind blows, wind power delivers the lowest-cost electricity to the grid, bumping off conventional generators. Ironically, when wind becomes a sizeable component of a nation's electricity mix, profits from a gas-fired power station are more at risk from wind conditions than investments in wind-farms.

According to John Constable of the Renewable Energy Foundation, wind investors receive subsidies that give them satisfactory returns even in a low-wind year. A high-wind year is a bonus. The unsubsidized conventional generator is in a more awkward position. Its fixed costs are only recovered from the electricity it sells. With a large wind fleet in a high-wind year, the load factor for conventional generators could drop very low indeed, making it almost impossible to recover their fixed costs. The squeeze is being felt by gas-fired power stations. Last month, gas-fired power stations contributed 29% to the U.K.'s net supply of electricity compared to 50% four years earlier. As a result, there is a dearth of investment in such capacity.

The commission does not have an answer to Europe's looming energy crunch other than to propose that any post-2020 target for renewables should not be binding on member states. It also argues for "more market oriented approaches," including phasing out subsidies for mature energy technologies.

At Davos last week, U.K. Prime Minister David Cameron talked up the huge opportunity represented by shale gas. Having lots of shale gas won't be much use without gas-fired power stations. At the same time, the prime minister boasted that Britain is one of the best places for green investment, with the world's largest offshore wind market, seemingly oblivious to its effect on killing investment in new gas-fired power stations.

For the rest of the world, Europe offers a stark lesson. When it comes to unilateral cuts in greenhouse emissions and aggressive incentives for renewables, this is a global race you don't want to win. As Europe shows, the winner loses—big.

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

## Europe's Energy Calamity

Average cost of energy by price per kilowatt hour in 2012 (U.S. cents)

	United States	European Union	European Union cost disadvantage
Industrial Firms	6.67	12.25	+5.58
Households	11.88	19.75	+7.78

Source: Eurostat, US Energy Information Administration

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### **3. Big Oil Companies Struggle to Justify Soaring Project Costs**

Chevron, Exxon and Shell Spent More Than \$120 Billion in 2013 to Boost Oil and Gas Output, but Production Is Down

By Daniel Gilbert and Justin Schenck, WSJ, Jan 28, 2014

[http://online.wsj.com/news/articles/SB10001424052702303277704579348332283819314?mod=WSJ\\_Energy\\_2\\_4\\_Left](http://online.wsj.com/news/articles/SB10001424052702303277704579348332283819314?mod=WSJ_Energy_2_4_Left)

Chevron Corp, Exxon Mobil Corp, and Royal Dutch Shell spent more than \$120 billion in 2013 to boost their oil and gas output—about the same cost in today's dollars as putting a man on the moon.

But the three oil giants have little to show for all their big spending. Oil and gas production are down despite combined capital expenses of a half-trillion dollars in the past five years. Each company is expected to report later this week a profit decline for 2013 compared with 2012, even though oil prices are high.

One of the biggest problems: Costs are soaring for many of the new "megaprojects" to tap petroleum deposits needed to replenish depleting fields.

Plans under way to pump oil using man-made islands in the Caspian Sea could cost a consortium that includes Exxon and Shell \$40 billion, up from the original budget of \$10 billion. The price tag for a natural-gas project in Australia, called Gorgon and jointly owned by the three companies, has ballooned 45% to \$54 billion. Shell is spending at least \$10 billion on untested technology to build a natural-gas plant on a large boat so the company can tap a remote field, according to people who have worked on the project.

Finding the next gusher has always been a risky business, sending oil companies beneath the ocean floor and into unstable parts of Africa, Asia and the Middle East. Now the pursuit is trickier and more expensive than ever. The easiest-to-reach oil ran dry long ago, and the most prolific fields often are controlled by state-owned companies in places like Saudi Arabia and Venezuela.

As a result, Chevron, Exxon and Shell are digging even deeper into their pockets, putting their usually reliable profit margins in jeopardy. Exxon is borrowing more, dipping into its cash pile and buying back fewer shares to help the Irving, Texas, company cover capital costs.

Exxon has said such costs would hit about \$41 billion last year, up 51% from \$27.1 billion in 2009.

As they pursued the big-bet strategy, the three oil giants arrived late to the shale boom in North America, where they missed out on profits raked in by smaller, nimbler companies that pioneered how to extract oil and gas from the dense rock.

The news isn't all bad. Combined profits at Chevron, Exxon and Shell totaled about \$70 billion in 2013, according to analysts' estimates. Exxon and Shell report fourth-quarter and full-year results Thursday, while Chevron announces its results Friday. In 2012, the three companies earned nearly \$100 billion.

Exxon and Chevron are pressing ahead with their megaprojects, confident they will boost production within three years. "Before we make the first cut with a saw, we re-measure five times instead of one," says Ken Cohen, Exxon's vice president of public and government affairs.

By 2017, Exxon will pump a million new barrels of oil per day and the equivalent in natural gas, showing the company's ability to deliver big projects on time, executives say. Exxon's output started to rebound in late 2013 after a two-year decline, helped by new crude from a \$13 billion oil-sands project in Canada. The project's cost rose \$2 billion since 2011 because of regulatory hurdles and permit delays.

Full-year earnings at Shell are expected to total about \$16.8 billion, down from \$27.2 billion in 2012. Net capital spending hit \$44.3 billion in 2013, up nearly 50% from 2012.

Oil-industry experts say it will be difficult for the oil giants to spend less because they need to replenish the oil and gas they are pumping—and must keep up with rivals in the world-wide exploration race.

"If you don't spend, you're going to shrink," says Dan Pickering, co-president of Tudor, Pickering Holt & Co., an investment bank in Houston that specializes in the energy industry. Unfortunately for the oil giants, though, "I don't think there's any way these projects are more profitable than their legacy production," he adds.

Chevron has been especially aggressive, promising a 25% increase in oil and gas output by 2017. Last year, the San Ramon, Calif., company poured \$42 billion into oil and gas projects, more than double its 2010 total, even though Chevron is half as big as Exxon or Shell by annual revenue. Chevron plans to spend an additional \$40 billion in 2014.

The spending surge has drawn attention from U.S. securities regulators, who have demanded more disclosure from Chevron about whether the jump will get even bigger and affect the company's liquidity. Chevron told regulators it will provide more details.

Chevron's most gargantuan projects, from Australia to the Gulf of Mexico, haven't generated any cash flow yet—and might not until next year. The lag between the upfront investment in the projects and their output is pressuring Chevron's bottom line. Analysts expect the company to report that profits fell about 20% to \$21 billion in 2013 from \$26.2 billion in 2012.

The Gorgon natural-gas project is one of the most extreme examples of the runaway costs that haunt Chevron, Exxon and Shell. The three companies teamed up in 2009 to build the plant on an island reserve 40 miles off Australia's coast, aiming to tap a natural-gas trove estimated at 40 trillion cubic feet. Gorgon could be productive for decades and feed energy-hungry Japan, South Korea and China.

Chevron staked more than \$18 billion of its own money on Gorgon, one of the company's biggest projects ever, owns nearly half of the project and runs it. Exxon and Shell own a 25% stake each.

Gorgon, also the name of sisters in Greek mythology who had snakes in their hair and could turn beholders to stone, presents unusually tough challenges. The gas produced there must be piped 80 miles across a mountainous sea floor to Barrow Island, home to so many unusual species of plants and animals that locals call it "Australia's Ark."

Then the natural gas has to be purified and run through giant chillers that condense it into liquid form so it can be shipped on tankers.

Barrow Island's sensitive ecology meant that much of Gorgon's construction had to be done elsewhere, with hundreds of thousands of tons of buildings and equipment disinfected and shrink-wrapped to keep out invasive species.

Chevron executives brushed aside analysts' worries about the project's cost. "We see a window of opportunity to move forward with Gorgon, timing it to capture growing market demand while benefiting from a lowering cost environment," George Kirkland, now Chevron's vice chairman, said in March 2009.

Costs soon spiked higher. Labor costs rose because of fierce competition for skilled workers as other companies committed to spending more than \$100 billion in similar gas projects across Australia. The strong Australian dollar inflated the cost of materials. Cyclones slowed work on Gorgon and forced Chevron, Exxon and Shell to build stormproof camps for workers.

Gorgon was about half-finished in December 2012 when Chevron estimated the project would cost a total of \$52 billion—or 40% over budget. Last month, Chevron tacked an additional \$2 billion to the price tag. The project now is 75% complete, according to the company.

"The economics of the Gorgon project are strong," says Kurt Glaubitz, a Chevron spokesman. The company has struck deals to sell most of Gorgon's output under contracts tied to oil prices that are up about 60% since Chevron committed itself to the project, he adds.

Chevron says it is working hard to keep costs in line. A civil-engineering unit dedicated to managing expenses and overseeing contractors has tripled to 120 employees since 2008. The company has about 62,000 employees.

Gary Fischer, who leads the unit and started at Chevron as an intern in 1979, said at an industry conference in November that the company has intensified its focus on completing megaprojects on time and on budget. Those projects "are very fragile," he said, "and they're totally unforgiving."

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#### **4. Shell Plans Boat to Tap Gas Fields**

Billion-Dollar Vessel Would Chill Gas and Pump It Into Tankers

By Justin Scheck, WSJ, Jan 28, 2014

[http://online.wsj.com/news/articles/SB1000142405270230327770457934833445778984?mod=I TP\\_pageone\\_2](http://online.wsj.com/news/articles/SB1000142405270230327770457934833445778984?mod=I TP_pageone_2)

Royal Dutch Shell says it has a way to spend less on tapping remote natural-gas fields. There's just one catch: It will cost at least \$10 billion, according to people who have worked on the project.

Shipyard workers in South Korea are building a hull for the Anglo-Dutch company that stretches more than 1,600 feet from bow to stern. The boat will drop anchor in a natural-gas field, chill the gas into liquid and pump it into tankers.

The vessel, christened Prelude, will produce enough natural gas to supply Hong Kong for a year, according to Shell. The company says the giant project will help Shell develop gas fields that are too small or far-flung to justify the pricey pipelines and onshore processing plants needed for offshore gas fields.

Shell hasn't announced a completion date for Prelude, now a bright red hull afloat in the shipyard, but it likely is months away. Workers must attach the 105-foot-tall turret that will process the natural gas.

To compete in a world where the easy oil is gone, "you have to have the idea, you have to have the engineering solution, and you have to have the guts to put it into reality," says Matthias Bichsel, Shell's head of major projects.

The idea of a floating gas barge has been around at least since 1975. An employee of a company owned by reclusive billionaire Howard Hughes published a paper proposing such a vessel, which could tap fields too far offshore or with "too small an estimated reserve to justify the tremendous capital investment" of onshore plants and pipelines.

Some engineers suggested concrete-hulled boats, vessels made out of steel and even a big barge with a hole in the middle that engineers called "the doughnut," says Neil Gilmour, Shell's vice president in charge of natural gas. Every idea was written off as too expensive or risky.

In 2007, Shell discovered a gas field more than 100 miles off the Australian coast. The gas field wasn't large enough to justify tens of billions of dollars for pipelines and onshore processing, and Shell geologists questioned how productive it would be, according to people involved in the process.

Shell executives also debated the project, but top officials decided in 2011 to go ahead with it, partly on the rationale that the boat also could be used at a natural-gas field discovered nearby in 2009.

The project's design challenges include trying to cram a processing plant onto the vessel and minimizing the amount of sloshing by liquid gas in the hull.

Australia has drawn other energy companies because of its vast gas reserves and proximity to Asian markets hungry for liquefied natural gas. The frenzy has driven up the cost of materials and labor, swelling budgets and timelines for gas plants built on land. Prelude hasn't been squeezed by those pressures, according to Shell.

Even though Shell's untested technology hasn't set sail, Exxon Mobil Corp. XOM -1.48% has told Australian regulators it is considering a gas-harvesting boat. Mr. Bichsel says Shell officials are discussing building a second vessel.

"Since we have the size and we can afford it, going for the larger projects makes perfect sense for our company," he says. "It is not because we are mad and have to be the first."

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