# The Week That Was: 2013-06-15 (June 15, 2013) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

**Quote of the Week:** For a successful technology, reality must take precedence over public relations, for Nature cannot be fooled. Richard Feynman [The Quotes Page]

Number of the Week: 96%

#### THIS WEEK:

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

**NIPCC in China:** The editors of the two large reports by the Nongovernmental International Panel on Climate Change (NIPCC) are attending a press conference held by the Chinese Academy of Sciences (CAS) where CAS announcing the translation of the reports into Chinese. The Academy's invitation to the event stated:

"...NIPCC is what its name suggests: an international panel of nongovernment scientists and scholars who have come together to understand the causes and consequences of climate change. In 2009 and 2011, NIPCC publicized two reports named Climate Change Reconsidered, providing evidences the IPCC ignores and questioning the proposal of IPCC that climate change is caused by human greenhouse gas emissions.

China information center for global change studies of CAS edited and published the Chinese version of "Climate Change Reconsidered: Report of the NPICC" to facilitate Chinese scholars' understanding the opinions of NIPCC. The International Symposium of Global Changes is held on this occasion to enhance exchanges on the new advancements internationally and researches. A press conference will be held, with lead authors of NIPCC reports Craig D. Idso (USA), Robert M. Carter (Australia), S. Fred Singer (USA) and many other prominent scholars of the field presenting."

Researchers from home and abroad are warmly welcomed to attend the conference.

Time: June 15th 2013

Venue: Xijiao Hotel, Beijing

http://english.ucas.ac.cn/Lists/Events/ListDispForm.aspx?List=dc8f2138-7d88-4a0d-bad4-6939139997da&ID=164

Such an event clearly illustrates that 1) the science is not settled, 2) the absurdity of claims of 97% of climate scientists support the concept that carbon dioxide (CO2) emissions are causing unprecedented and dangerous global warming, and 3) leaders of the Chinese Academy have a better command of the principles of modern Western science than the leaders of many once venerable Western scientific institutions.

Also the event vindicates the work by S. Fred Singer who conceived and directed the NIPCC project and Fredrick Seitz who provided valuable guidance until his death in March 2008. Along with two other scientists, Seitz and Singer were vilified by largely unsubstantiated *ad hominem* attacks by Naomi Oreskes and Erik Conway in the **Merchants of Doubt**. Publications such as

Science carried fawning reviews of Merchants and refused to publish a rebuttal by Singer, the only one of the four still living.

**IPCC Hype:** According to an article by Bob Ward, who is Policy Director at the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science, the UN Intergovernmental Panel on Climate Change (IPCC) has secretly delivered the draft of the IPCC Fifth Assessment Report (AR5) to the governments involved. According to the IPCC schedule it would be Summary for Policymakers (SPM) because the authors are still writing the synthesis report and papers are still being accepted. As typical, for the IPCC the summary comes first, then the research. The review of the SPM by governments ends on August 2. The schedule does not clearly state when the government representatives will be negotiating the findings in the SPM.

Ward's article is all too characteristic. "Governments around the world have just received one of the most important scientific reports ever written." According to Ward, the reports state that at the end of the century temperatures will be "about 3 deg C higher than the little ice age." Apparently, he and the IPCC remain blissfully unaware that the models have not been validated, thus are useless for prediction, and that they are failing miserably.

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It's Real: The US production of oil increased by 14% last year, the greatest increase among countries producing a million or more barrels a year, according to the BP Statistical Review of World Energy, 2013. In 2012, the US was the third largest producer of oil, behind Saudi Arabia and Russia. This increase is in spite of Washington's policies, which have caused the production of oil, natural gas liquids, natural gas, and coal from federal lands to fall, both in quantity and as percentage of total production.

The remarkable developments come from the combination of technological advances in precise horizontal drilling, multi-port hydraulic fracturing using sand or ceramic proppants to keep fractures open under intense pressure, a chemical mix to promote flow, and expanding knowledge of oil and gas bearing formations. Isaac Orr of The Heartland Institute termed it "smart drilling." As more wells are drilled, knowledge on how to drill them and keep them productive expands. We do not know how much oil and natural gas products can be recovered, at a given price level, but with changing technology and knowledge the estimated recoverable amounts expand over time.

A major issue with this boom is getting the oil and gas from the fields to refineries and the market. According to the BP review "The average crude price at a major benchmark hub in Europe last year was \$111.67 a barrel, compared with \$94.13 in Oklahoma." The oil produced from shale is light as compared to that from the North Sea, therefore should command a higher price. The necessary pipelines need to be built, but will be opposed by many in Washington and by environmental organizations, many of which oppose all energy, except, perhaps, that from solar and wind.

At a time in which many in Washington and in the several states are complaining about tight budgets, in 2012 North Dakota experienced a 29% increase in taxable economic activity, according to the editors of Master Resource. This is largely attributable to the oil field activity in the Bakken formation.

Please Article #4 and links under Energy Issues – Non-US, Washington's Control of Energy, and Oil and Natural Gas – the Future or the Past?

**Carbon Tax:** The Heartland Institute and the R Street Institute hosted a debate on the question: Should conservatives accept a carbon tax? The concept was that the revenues from the carbon tax would be offset by reductions in other taxes, unspecified. Global warming was specifically excluded for the debate. Both sides of the issue were well represented with James Taylor, of Heartland, and David Kreutzer of Heritage Foundation opposed and Andrew Moylan of R Street and former US Representative Bob Inglis, of Energy and Enterprise Initiative in favor. From his questions, it quickly became evident that the moderator, Ronald Bailey of *Reason* magazine, had already formed an opinion supporting of carbon tax. T

The debate can be summed as those who do not trust the government to permanently reduce other forms of taxation to offset a carbon tax as opposed to those who do. The proponents of the tax asserted that the EPA would regulate carbon fuels anyway, presenting the false dilemma that the choice is between an expansion of government power thru taxation or the expansion of government power thru EPA blunt force.

Inglis asserted that his opponents are against the concept of self-government, as the country's founders envisioned. The false dilemma and the concept of self-government triggered an idea for different debate. The label "conservative" is poorly defined. During the contentious debate on the adoption of the Constitution to replace the Articles of Confederation, many founders grudgingly admitted that a stronger central government was necessary, but stipulated its powers must be few, defined, and limited. To address these concerns the Bill of Rights was quickly added by the new government. The founders demanding limited government could be identified as conservatives.

The question could be then phrased as: What limits to government power will prompt conservatives to discuss expansion of government powers thru a carbon tax? A possible answer could include clear limits on government regulatory power, especially the EPA, which evokes science that is not publicly available, and uses models that have not been validated, in proclaiming a need for regulatory expansion in the name of public health.

Proposed limits to power could include: 1) no secret science – all data and computer codes must be publically available; 2) independent replication of all studies used to justify regulation; 3) all models used must be validated; 4) all litigation agreements (sue and settle) must meet the above conditions; and 5) all existing regulations not meeting the above must be immediately rescinded.

Amplifications and Corrections: Last week's TWTW discussed sea level rise, the uncertainty, and the possible acceleration of the rate of rise. Physicist Donald Rapp send a set of papers a making a powerful argument that "It is possible that all (or most) of the claimed acceleration is due to ground water depletion, not global warming." He may be right. We appreciate all those who take the time to send amplifications and corrections.

**SEPP Web Site:** Several readers stated that their antivirus software flagged an item when they downloaded from the SEPP website. We found three unauthorized items, deleted them, and worked with the host provider to tighten the security of the website. One of the items had the name Blackhat, which, years ago was a code name for a NSA operation, purpose unknown. We will endeavor to be vigilant.

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**Number of the Week:** 96%. Last week, TWTW linked to a post by Roy Spencer showing the great divergence between observations and the projections from 73 CMIP5 climate models for the period 1979 to 2012 between latitudes 20 deg N and 20 deg S (approximately the tropics). As stated, the linearization of the observations hide the climate shift shown by the actual data. However, the end points for 2012 are illuminating. A rough measurement shows that 70 out of 73 of the models (96%) projected a warming greater than twice that shown by the observations. All 19 US models were in the 96%. Will this divergence appear in the IPCC AR5? <a href="http://www.drroyspencer.com/2013/06/epic-fail-73-climate-models-vs-observations-for-tropical-tropospheric-temperature/">http://www.drroyspencer.com/2013/06/epic-fail-73-climate-models-vs-observations-for-tropical-tropospheric-temperature/</a>

#### **ARTICLES:**

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

#### 1. Fracturing in California

Democrats revolt against a ban on oil and gas 'fracking.'

Editorial, WSJ, Jun 7, 2013

http://online.wsj.com/article/SB10001424127887324767004578488821344316236.html

### 2. U.S. Corn Belt Expands to North

Warmer Climate, Hardier Seeds Help Crop Gain on Wheat, North Dakota's Staple By Owen Fletcher, WSJ, Jun 14, 2013

http://online.wsj.com/article/SB10001424127887324904004578539352566317388.html?mod=W SJ hpp LEFTTopStories

[SEPP Comment: Informed the reporter that there is another driving factor for this shift – carbon dioxide enrichment.]

### 3. Why U.S. Wood Can—and Should—Power Europe

A forest owner (and Rolling Stones keyboardist) on the benefits of 'biomass' sales.

By Chuck Leavell, WSJ, Jun 9, 2013

http://online.wsj.com/article/SB10001424127887324798904578529690411491374.html?mod=IT P\_opinion\_0

#### 4. U.S. Oil Notches Record Growth

Rise in Production Is World's Largest; Fueled by Fracking

By Keith Johnson and Russell Gold, WSJ, Jun 12, 2013

http://online.wsj.com/article/SB10001424127887324049504578541601909939628.html?mod=WSJ\_hps\_LEFTTopStories

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

#### NIPCC in China

# Chinese Academy of Sciences Publishes Heartland Institute Research Skeptical of Global Warming

'Another sign that the latest science does not support claims of catastrophic man-made climate change'

By Joseph Bast, Craig Idso, S. Fred Singer, and Robert Carter

 $\underline{http://heartland.org/press-releases/2013/06/11/chinese-academy-sciences-publishes-heartland-institute-research-skeptical-}$ 

#### Climate Change Reconsidered - Translation by the Chinese Academy of Sciences

By Joe Bast, Craig Idso, S. Fred Singer, Robert Carter, Heartland, Jun 11, 2013

http://heartland.org/policy-documents/climate-change-reconsidered-translation-chinese-academy-sciences

# Exclusive: China Translate 1,200-Page Rebuttal to Climate Change Agenda

By Staff Writers, Breitbart, Jun 11 2013

http://www.breitbart.com/Big-Government/2013/06/11/exclusive-China-rebuttal-climate-change

### Challenging the Orthodoxy

On the meaning of ensemble means

By Andrew Montford, Bishop Hill, Jun 14, 2013

http://bishophill.squarespace.com/blog/2013/6/14/on-the-meaning-of-ensemble-means.html

# No significant warming for 17 years 4 months

By Christopher Monckton, WUWT, Jun 13, 2013

http://wattsupwiththat.com/2013/06/13/no-significant-warming-for-17-years-4-months/

[SEPP Comment: See the link immediately above for a comment on the article.]

#### **Before and After the Temperature Standstill**

By David Whitehouse, GWPF, Jun 11, 2013

http://www.thegwpf.org/temperature-standstill/

#### An Engineer's Take on Climate Change #2

By Ronald Voisin, WUWT, Jun 14, 2013

http://wattsupwiththat.com/2013/06/14/an-engineers-take-on-climate-change-2/

# Man-Made Global Warming WRONG - The Ten Reasons.

By Cohenite, NCTCS, Jun 5, 2013

 $\underline{\text{http://theclimatescepticsparty.blogspot.com.au/2013/06/man-made-global-warming-wrong-ten.html}\\$ 

#### Murry Salby: CO2 is the integral of temperature

By Luboš Motl, The Reference Frame, Jun 12, 2013

http://motls.blogspot.com/2013/06/murry-salby-co2-is-integral-of.html

#### Defending the Orthodoxy

# **Climate Change by the Numbers**

By Bob Ward, Project Syndicate, Jun 11, 2013

 $\frac{http://www.project-syndicate.org/commentary/the-ipcc-s-fifth-assessment-of-global-warming-by-bob-ward}{}\\$ 

#### What to Make of a Warming Plateau

By Justin Gillis, NYT, Jun 10, 2013

 $\underline{\text{http://www.nytimes.com/2013/06/11/science/earth/what-to-make-of-a-climate-change-plateau.html?\_r=1\&}$ 

#### World in danger of missing climate goals

By Staff Writer, WNN, Jun 10, 2013

http://www.world-nuclear-news.org/EE-World\_in\_danger\_of\_missing\_climate\_goals-1006137.html

#### Natural disasters not odd coincidences:

By Robert Redford, USA Today, Jun 11, 2013

http://www.usatoday.com/story/opinion/2013/06/10/president-obama-climate-change-column/2407783/

[SEPP Comment: When all else fails bring in Hollywood.]

# Questioning the Orthodoxy

# **Are Climate Scientists Wrong About Man's CO2 Emissions?**

Editorial, IBD, Jun 12, 2013

http://news.investors.com/ibd-editorials/061213-659745-co2-increases-follow-temperature-increases.htm

#### 12 Reasons the MET Office Is Alarmed

By Staff Writer, GWPF, Jun 14, 2013

http://www.thegwpf.org/12-reasons-met-office-alarmed/

# **Climate Models Predict Heat That Hasn't Occurred**

Editorial, IBD, Jun 11, 2013

http://news.investors.com/ibd-editorials/061113-659660-observed-temperatures-cooler-than-scientists-projections.htm?p=full

# Keep Your Long Flannel Underwear: Climate Scientists Predict Hell To Freeze Over!

By Larry Bell, Forbes, Jun 9, 2013

http://www.forbes.com/sites/larrybell/2013/06/09/keep-your-long-flannel-underwear-climate-scientists-predict-hell-to-freeze-over/#comment-4715

# The Pause In Global Warming

By Art Horn, Energy Tribune, Jun 12, 2013

http://www.energytribune.com/77618/the-pause-in-global-warming#sthash.05PEHM2Y.dpbs

#### **Effects of CO2 on Nitrous Oxide Emissions**

By Staff Writers, SPPI & CO2 Science, Jun 12, 2013

http://scienceandpublicpolicy.org/originals/effects of c02 on nitrous oxide emissions.html In summation, it would appear that concerns about additional global warming arising from enhanced N2O emissions from agricultural soils in a CO2-enriched atmosphere of the future are not well founded.

#### Problems in the Orthodoxy

### Climate talks collapse!

Russia derails treaty track at UN climate summit in Bonn

By Craig Rucker, Jun 12, 2013

http://www.cfact.org/2013/06/12/climate-talks-collapse/

# UN climate talks collapse amid acrimony in Bonn

By John Parnell, RTCC, Jun 12, 2013

http://www.rtcc.org/un-climate-talks-collapse-amid-acrimony-in-bonn/

#### Is UN negotiating an unattainable climate goal?

By Staff Writers, Bonn (AFP), June 13, 2013

http://www.terradaily.com/reports/Is UN negotiating an unattainable climate goal 999.html

### Divorce? Lovers finally stumble across boundary object which once kept them together!

By Werner Krauss, Die Klimazwiebel, Jun 12, 2013 [H/t GWPF]

#### http://klimazwiebel.blogspot.co.uk/2013/06/divorce-lovers-finally-stumble-across.html

# Climate activist group close to IPCC removes video: The science on which it was based, from Stefan Rahmstorf, is no longer the scientific consensus

By Fritz Vahrenholt and Sebastian Lüning (translated/edited by P Gosselin), No Tricks Zone, Jun 13, 2013

http://notrickszone.com/2013/06/13/skeptical-science-folly-video-based-on-flawed-rahmstorf-foster-paper-disappears/

### Met Office withdraws article about Marcott's hockey stick

By Andrew Montford, Bishop Hill, Jun 14, 2013

 $\underline{http://bishophill.squarespace.com/blog/2013/6/14/met-office-withdraws-article-about-marcotts-hockey-stick.html}$ 

[SEPP Comment: What took so long?]

#### Seeking a Common Ground

A Climate Debate: Both Sides Showed Up!

By Dennis Avery, Center for Global Food Issues, Jun 3, 2013

http://www.cgfi.org/2013/06/a-climate-debate-both-sides-showed-up-by-dennis-t-avery/

[SEPP Comment: Mass starvation occurs more often in cold periods than in warm periods. In cold periods often crops do not ripen, in warm periods they ripen earlier.]

#### Leading the way with an unbiased climate panel

By Tom Harris, WUWT, Jun 14, 2013

http://wattsupwiththat.com/2013/06/14/leading-the-way-with-an-unbiased-climate-panel/

#### Expanding the Orthodoxy

### **Climate Change Officers**

By Judith Curry, Climate Etc., Jun 10, 2013

http://judithcurry.com/2013/06/10/climate-change-officers/#more-11566

[SEPP Comment: A new professional society. Wonder how many of them ever studied climate change history such as by H.H. Lamb?]

#### Polar Bear Specialist Group adds WWF and PBI activists as full voting members

By Susan Crockford, Polar Bear Science, Jun 6, 2013

 $\underline{http://polarbearscience.com/2013/06/06/polar-bear-specialist-group-adds-wwf-and-pbi-activists-as-full-voting-members/}$ 

[SEPP Comment: No doubt to give the organization great objectivity!]

#### Questioning European Green

### **German Government Pushes Electricity Costs to Record High**

By Daniel Wetzel, Trans. Phillipp Mueller, Jun 6, 2013

http://www.thegwpf.org/german-government-pushes-electricity-costs-record-high/

[SEPP Comment: Government regulations and taxes, not cost of fuel, are causing sharply increasing costs to consumers.]

# Merkel Sees the Folly of Green Energy Policy

By Walter Russell Mead, Via Meadia, Jun 13, 2013 [H/t GWPF]

http://blogs.the-american-interest.com/wrm/2013/06/13/merkel-sees-the-folly-of-green-energy-policy/

[SEPP Comment: Waiting to see what she proposes to do, rather than what she says.]

# Plymouth diesel power stations 'to help green energy

Two diesel power stations planned in Plymouth will compensate for fluctuations in supplies from green energy, say developers.

By Staff Writers, BBC, Jun 11, 2013 [H/t Bishop Hill]

http://www.bbc.co.uk/news/uk-england-devon-22845487

Its 52 generators will consume more than 1.1m litres of diesel a year, or about one tanker a week.

#### Questioning Green Elsewhere

# DOE Green Energy Loans: \$11.45 million per job and a rounding error's worth of averted carbon emissions.

By David Middleton, WUWT, Jun 11, 2013

http://wattsupwiththat.com/2013/06/11/doe-green-energy-loans-11-45-million-per-job-and-arounding-errors-worth-of-averted-carbon-emissions/

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

# Climate science tells us the alarm bells are ringing

By Michael Oppenheimer and Kevin Trenbert, Washington Post, Jun 7, 2013 [H/t Conrad Potemra]

http://www.washingtonpost.com/opinions/climate-science-tells-us-the-alarm-bells-are-ringing/2013/06/07/ca81cb84-cef6-11e2-8845-d970ccb04497 story.html

# A Couple of Comments about the Oppenheimer and Trenberth Op-Ed in the Washington Post

By Bob Tisdale, WUWT, Jun 9, 2013

http://wattsupwiththat.com/2013/06/09/a-couple-of-comments-about-the-oppenheimer-and-trenberth-op-ed-in-the-washington-post/

[SEPP Comment: See link immediately above.]

# Communicating Better to the Public – Make things up.

### **Bloomberg's Folly**

By Joseph D'Aleo, ICECAP Jun 11, 2013

http://icecap.us/index.php/go/political-climate/bloombergs\_folly/

[SEPP Comment: Devastating critique of New York Mayor Bloomberg's plan and the lack of knowledge behind it. See links below.]

# Bloomberg's race to protect NYC from climate change

By Dana Milbank, WP, Jun 11, 2014

 $\underline{http://www.washingtonpost.com/opinions/dana-milbank-bloombergs-race-to-protect-ny-from-climate-change/2013/06/11/5f06265c-d2d9-11e2-a73e-826d299ff459\_story.html$ 

[SEPP Comment: See link immediately above.]

### Gotham will be a Southern-fried hot mess by 2020, climate pros warn

City Hall urges preparations for Alabama-slammer summers with heat waves that'll be hell, and high water from 10% more rain. A quarter of the Big Apple is predicted to be submerged under water by 2050.

By Jennifer Fermino, New York Daily News, Jun 10, 2013 [H/t WUWT] <a href="http://www.nydailynews.com/new-york/2020-forecast-hell-high-water-city-article-1.1368794">http://www.nydailynews.com/new-york/2020-forecast-hell-high-water-city-article-1.1368794</a> [SEPP Comment: See first link in the section.]

### Carbon dioxide emissions rose 1.4 percent in 2012, IEA report says

By Steven Mufson, Washington Post, Jun 10, 2013

 $\frac{http://www.washingtonpost.com/business/economy/carbon-dioxide-emissions-rose-14-percent-in-2012-iea-report-says/2013/06/09/35d32bac-d123-11e2-8cbe-1bcbee06f8f8\_story.html$ 

The agency said continuing that pace could mean a temperature increase over pre-industrial times of as much as 5.3 degrees Celsius (9 degrees Fahrenheit), which IEA chief economist Fatih Birol warned "would be a disaster for all countries."

[SEPP Comment: Nothing is rising faster than hyperbole!]

# Gore laments scientists 'won't let us' tie climate change to tornadoes

By Zack Colman, The Hill, Jun 11, 2013

http://thehill.com/blogs/e2-wire/e2-wire/304755-gore-says-record-breaking-tornadoes-a-result-of-climate-change

#### **Measurement Issues**

# **Australian Warming Exaggerated**

By Geoff Brown, NCTCS, Jun 15, 2013

http://theclimatescepticsparty.blogspot.com.au/2013/06/australian-warming-exaggerated.html

#### Changing Weather

### English Winters Back To Normal-Julia Blames Global Warming!

By Paul Homewood, Not a Lot of People Know That, Apr 12, 2013 [H/t GWPF] <a href="http://notalotofpeopleknowthat.wordpress.com/2013/04/12/english-winters-back-to-normaljulia-blames-global-warming/">http://notalotofpeopleknowthat.wordpress.com/2013/04/12/english-winters-back-to-normaljulia-blames-global-warming/</a>

#### Germany begins to count cost as floods surge north

By Staff Writers, Berlin (AFP) June 11, 2013

 $\underline{http://www.terradaily.com/reports/Germany\_begins\_to\_count\_cost\_as\_floods\_surge\_north\_999.h}tml$ 

# Maxeiner, Miersch And Magdeburg: Superstitious Spiegel Devolves To The Dark Ages, Blames Floods On "Deniers"

By P Gosselin, No Tricks Zone, Jun 11, 2013

 $\frac{http://notrickszone.com/2013/06/11/maxeiner-miersch-and-magdeburg-superstitious-spiegel-devolves-to-the-dark-ages/}{}$ 

# Hungary says catastrophe averted after Danube hits new record

By Staff Writers, Budapest (AFP), June 10, 2013

http://www.terradaily.com/reports/Hungary says catastrophe averted after Danube hits new r ecord 999.html

# To NCDC: it's been two year of La Niña, what do you expect?

By Anthony Watts, WUWT, Jun 14, 2013

http://wattsupwiththat.com/2013/06/14/to-ncdc-its-been-two-year-of-la-nina-what-do-you-expect/[SEPP Comment: Clear explanation using NOAA maps showing why La Niñas create droughts in the southwestern US.]

### **Changing Climate**

# Borneo stalagmites provide new view of abrupt climate events over 100,000 years

By Staff Writers, Atlanta GA (SPX), Jun 11, 2013

http://www.terradaily.com/reports/Borneo\_stalagmites\_provide\_new\_view\_of\_abrupt\_climate\_ev\_ents\_over\_100000\_years\_999.html

Link to paper: "Varied response of western Pacific hydrology to climate forcings over the last glacial period,"

By Stacy Carolin, et al., Science, Jun 6, 2013

http://www.sciencemag.org/content/early/2013/06/05/science.1233797

# Changing Cryosphere – Land / Sea Ice

# Ocean Water Melting Antarctic Ice From Bottom Up

By James Foley, Nature World News, Jun 13, 2013 [Catherine French]

 $\underline{http://www.natureworldnews.com/articles/2446/20130613/ocean-water-melting-antarctic-ice-bottom-up.htm}$ 

Link to paper: Ice Shelf Melting Around Antarctica

By E. Rignot1, S. Jacobs, J. Mouginot, B. Scheuchl, Science, Jun 13, 2013

http://www.sciencemag.org/content/early/2013/06/12/science.1235798.abstract

# New Study Shows Antarctica Ice Is Melting 70% More Slowly Than Thought – Another Scare Bites The Dust

By Translated P. Gosselin, No Tricks Zone, Jun 15, 2013

 $\underline{\text{http://notrickszone.com/2013/06/15/new-study-shows-antarctica-ice-is-melting-70-more-slowly-than-thought-another-scare-bites-the-dust/}$ 

[SEPP Comment: 70% less than what was predicted in the 2007 IPCC-AR4]

# Friday Funny (well maybe not so funny) – XKCD takes on the real climate threat phics to scale: ice sheets 21,000 years ago versus today's skylines.

By Anthony Watts, WUWT, Jun 14, 2013

 $\underline{http://wattsupwiththat.com/2013/06/14/friday-funny-well-maybe-not-so-funny-xkcd-takes-on-the-real-climate-threat/}$ 

[SEPP Comment: Cannot attest to the accuracy, but it give a perspective that is often ignored.]

#### Acidic Waters

# Rutgers findings may predict the future of coral reefs in a changing world

By Staff Writers, New Brunswick NJ (SPX), Jun 10, 2013

http://www.terradaily.com/reports/Rutgers\_findings\_may\_predict\_the\_future\_of\_coral\_reefs\_in\_a\_changing\_world\_999.html

On the commonly used pH scale, where lower numbers are more acidic, today's seas are a moderately alkaline 8.2. But they are expected to creep toward 7.6 as carbon dioxide

concentration increases in the air. Using a scanning electron microscope and other measurement devices, the scientists examined the proteins and found that all had begun to precipitate calcium carbonate crystals in the test tube at both pH levels.

[SEPP Comment: Unless it goes below 7, lowering the pH of an alkaline solution does not make it more acidic; it makes it more neutral.]

# Agriculture Issues & Fear of Famine

### Is there a crisis in farming?

By Martin Livermore, Scientific Alliance, Jun 14, 2013 http://scientific-alliance.org/newsletter

### Biotech crops vs. pests: Successes and failures from the first billion acres

By Staff Writers, Tucson AZ (SPX), Jun 11, 2013

http://www.seeddaily.com/reports/Biotech\_crops\_vs\_pests\_Successes\_and\_failures\_from\_the\_first\_billion\_acres\_999.html

# Review of Recent Scientific Articles by NIPCC

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

# Storm-Track Activity: Modeled vs. Measured

Reference: Chang, E.K.M., Guo, Y., Xia, X. and Zheng, M. 2013. Storm-track activity in IPCC AR4/CMIP3 model simulations. *Journal of Climate* 26: 246-260. http://nipccreport.org/articles/2013/jun/11jun2013a1.html

#### Effects of Elevated CO2 on Plant Attacks by Herbivorous Insects

Reference: Klaiber, J., Najar-Rodriguez, A.J., Piskorski, R. and Dorn, S. 2013. Plant acclimation to elevated CO2 affects important plant functional traits, and concomitantly reduces plant colonization rates by an herbivorous insect. *Planta* 237: 29-42. http://nipccreport.org/articles/2013/jun/11jun2013a2.html

### Reassessing the Past Century of Warming in Australia

Reference: Stockwell, D.R.B. and Stewart, K. 2012. Biases in the Australian high quality temperature network. *Energy and Environment* 23: 1273-1294. <a href="http://nipccreport.org/articles/2013/jun/11jun2013a3.html">http://nipccreport.org/articles/2013/jun/11jun2013a3.html</a>

#### **How Do Non-Specialist Sub-Arctic Mammals React to Warming?**

Reference: Hof, A.R., Jansson, R. and Nilsson, C. 2012. Future climate change will favor non-specialist mammals in the (Sub) Arctics. *PLOS ONE*: 10.1371/journal.pone.0052574. http://nipccreport.org/articles/2013/jun/12jun2013a1.html

#### Subsidies and Mandates Forever

### **Eternal Vigilance: Federal Energy Spending Tracker (www.energysubsidies.org)**

By Robert Bradley Jr. Master Resource, Jun 12, 2013

http://www.masterresource.org/2013/06/eternal-vigilance-federal-energy-spending-tracker-www-energysubsidies-org/

Link to the Federal Energy Spending Tracker:

By Staff, IER,

http://data.instituteforenergyresearch.org/

# EPA and other Regulators on the March

# EPA nominee in limbo as Republicans press for documents

By Zack Colman, The Hill, Jun 12, 2013

 $\underline{http://thehill.com/blogs/e2-wire/e2-wire/305059-gop-call-for-epa-data-signals-more-waiting-for-nominee-mccarthy}$ 

# How the EPA connives with Greens on policy

Radical partisans use threat of lawsuits to intimidate the agency

By Bob Beauprez, Washington Times, Jun 10, 2013

http://www.washingtontimes.com/news/2013/jun/10/how-the-epa-connives-with-greens-on-policy/

### What happens in the backroom of a sue-and-settle lawsuit?

By Ron Arnold, Washington Examiner, Jun 6, 2013

http://washingtonexaminer.com/what-happens-in-the-backroom-of-a-sue-and-settle-lawsuit/article/2531305?utm\_source=Washington%20Examiner:%20Opinion%20Digest%20-%2006/11/2013&utm\_medium=email&utm\_campaign=Washington%20Examiner:%20Opinion%20Digest

### 'Environmental Justice,' EPA Style

If the EPA wants to help low-income and minority populations, it should stick to promoting technologies that reduce pollution for everyone, rather than making environmental issues about racial justice

By Steven Hayward, The American, Jun 9, 2013

http://www.american.com/archive/2013/june/environmental-justice-epa-style

### **GOP** warns of \$1T EPA regs

By Julian Hattem, The Hill, Jun 12, 2013

 $\underline{\text{http://thehill.com/blogs/e2-wire/e2-wire/305081-lawmakers-debate-most-expensive-regulation-ever}}$ 

#### Rogue EPA Staff Spies On U.S. Farmers, Releases Data

Editorial, IBD, Jun 11, 2013

http://news.investors.com/ibd-editorials/061113-659663-epa-spies-on-farmers-releases-data.htm

# Methane Emissions from Natural Gas Operations: EPA's Continuing, Conscious Overestimate

By Katie Brown, Master Resource, Jun 10, 2013

http://www.masterresource.org/2013/06/epa-methane-overestimate/#more-25695

# Pebble mine's Shively discusses future of project, EPA's watershed assessment

Transcript by Staff Writers, EETV, Jun 13, 2013

http://www.eenews.net/tv/videos/1698/transcript

#### White House knew about Lisa Jackson's secret email account

By Michael Bastasch, Daily Caller, Jun 9, 2013 [H/t Timothy Wise]

http://dailycaller.com/2013/06/09/white-house-knew-about-lisa-jacksons-secret-email-account/

# Energy Issues – Non-US

# **Statistical Review of World Energy 2013**

By Staff Writers, BP, June 2013

 $\underline{http://www.bp.com/en/global/corporate/about-bp/statistical-review-of-world-energy-2013/group-chief-executive-s-introduction-.html$ 

Coal remained the fastest-growing fossil fuel, with China consuming half of the world's coal for the first time – but it was also the fossil fuel that saw the weakest growth relative to its historical average.

### Developing world oil demand surpasses wealthy nations: EIA

By David Sheppard, Reuters, Jun 11, 2013

http://www.reuters.com/article/2013/06/11/us-eia-stea-nonoecd-idUSBRE95A16120130611

### **Could US Oil Trends Alter How Oil Prices Are Set?**

By Geoffrey Styles, Energy Tribune, Jun 14, 2013

http://www.energytribune.com/77723/could-us-oil-trends-alter-how-oil-prices-are-set#sthash.5FDljwGI.dpbs

# Fear and bad policy is holding back the UK's huge shale potential

By Dan Lewis, City A.M., UK, Jun 12, 2013 [H/t GWPF]

http://www.cityam.com/article/fear-and-bad-policy-holding-back-uk-s-huge-shale-potential

#### Energy Issues -- US

### **Exporting Natural Gas**

By Donn Dears, Power for USA, Jun 14, 2013

http://dddusmma.wordpress.com/2013/06/14/exporting-natural-gas/

#### Washington's Control of Energy

# Sales of Fossil Fuels Produced from Federal and Indian Lands, FY 2003 through FY 2012

By Staff Writers, US Energy Information Administration, May 2013

http://www.eia.gov/analysis/requests/federallands/pdf/eia-federallandsales.pdf

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

#### Energy agency: US oil-and-gas reserves up 35 percent, thanks to shale boom

By Zack Colman, The Hill, Jun 10, 2013

http://thehill.com/blogs/e2-wire/e2-wire/304495-eia-shale-boom-drives-us-oil-and-gas-reserves-up-35-percent

#### The Mighty Bakken (Resourceship in action: II)

By Fred Lawrence, Master Resource, Jun 14, 2013

http://www.masterresource.org/2013/06/mighty-bakken-resourceship2/

[SEPP Comment: Part 2 of a well-written and informative series – we simply do not know how much is down there and how much can be recovered. With changing technology and knowledge, the recoverable amount expands over time.]

# Fracking Energy Mess: Deconstructing the Green Agenda

By Michael Economides and Peter Glover, Energy Tribune, Jun 11, 2013 <a href="http://www.energytribune.com/77587/fracking-energy-mess-deconstructing-the-green-agenda#sthash.w2I7k3WN.sKXJr7zh.dpbs">http://www.energytribune.com/77587/fracking-energy-mess-deconstructing-the-green-agenda#sthash.w2I7k3WN.sKXJr7zh.dpbs</a>

# Return of King Coal?

#### **Clean Coal Needs Another Look**

By Donn Dears, Power for USA, Jun 11, 2013

http://dddusmma.wordpress.com/2013/06/11/clean-coal-needs-another-look/

[SEPP Comment: Focus on a solution that is practical and works.]

# **Environmental Organizations Don't Want Clean Coal. It's Making Fossil Energy Too Expensive. Really!**

By Larry Bell, Forbes, Jun 11, 2013

http://www.forbes.com/sites/larrybell/2013/06/11/environmental-organizations-dont-want-clean-coal-its-making-fossil-energy-too-expensive-really/

### Oil Spills, Gas Leaks & Consequences

# Cleanup work after BP oil spill end in 3 states

By Staff Writers, AP, Jun 10, 2013

 $\frac{http://www.boston.com/business/news/2013/06/10/cleanup-work-after-oil-spill-end-states/jfNglfgHQorCBIoLT2RYpM/story.html$ 

[SEPP Comment: According to the report, BP spent over \$14 Billion.]

# Nuclear Energy and Fears

### **Nuclear plant closures show industry's struggles**

By Michael Blood and Ray Henry, AP, Jun 8, 2013

http://fuelfix.com/blog/2013/06/08/nuclear-plant-closures-show-industrys-struggles/

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

#### Can You Get More than 100% Solar Energy? The Answer is Yes!

By Cliff Mass, His Blog, Jun 14, 2013

http://cliffmass.blogspot.com/2013/06/can-you-get-more-than-100-solar-energy.html

[SEPP Comment: More problems for the grid. Shows actual production and solar radiation on a roof top rather than modeled production.]

#### Goldman Sachs Eyes Japan Offshore Wind in Clean Energy Expansion

By Chisaki Watanabe, Bloomberg, Jun 13, 2013

 $\frac{http://www.bloomberg.com/news/2013-06-13/goldman-sachs-eyes-japan-offshore-wind-in-clean-energy-expansion.html}{}$ 

#### Spain: Sorry about this, but some of these renewable-energies subsidies have got to go

By Erika Johnsen, Hot Air, Jun 9, 2013 [H/t Timothy Wise]

http://hotair.com/archives/2013/06/09/spain-sorry-about-this-but-the-renewable-energies-subsidies-have-got-to-go/

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

# **Ethanol Use Creates a Spike in Global Food Prices**

By Staff Writers, NCPA, Jun 10, 2013

http://www.ncpa.org/sub/dpd/index.php?Article\_ID=23262&utm\_source=newsletter&utm\_medium=email&utm\_campaign=DPD

# Wood Not So Green a Biofuel? Logging May Have Greater Impact On Carbon Emissions Than Previously Thought

By Staff Writer, Science News, Jun 13, 2013 [H/t GWPF]

http://www.sciencedaily.com/releases/2013/06/130611122103.htm

Link to paper: Mineral soil carbon fluxes in forests and implications for carbon balance assessments.

By Buchholz, et al., Bioenergy, Jan 29, 2013

http://onlinelibrary.wiley.com/doi/10.1111/gcbb.12044/abstract

#### Carbon Schemes

# **Moving Iron in Antarctica**

By Staff Writers, Atlanta GA (SPX), Jun 13, 2013

http://www.spacedaily.com/reports/Moving\_Iron\_in\_Antarctica\_999.html

Link to paper: Role of biogenic silica in the removal of iron from the Antarctic seas

By Ingall, et al., Nature Communications, Jun 10, 2013

http://www.nature.com/ncomms/2013/130610/ncomms2981/full/ncomms2981.html

# **Environmental Industry**

# NRDC chief: Fracking 'most complicated thing I've encountered'

By Zack Colman, The Hill, Jun 11, 2013

 $\underline{http://thehill.com/blogs/e2-wire/e2-wire/304785-nrdc-chief-fracking-most-complicated-thing-ive-encountered}$ 

[SEPP Comment: Totally clueless!]

#### The Sierra Club Exposed

By Marita Noon, Energy Tribune, Jun 13, 2013

http://www.energytribune.com/77674/the-sierra-club-exposed#sthash.NimdKqsO.dpbs

# Potentially 'catastrophic' changes underway in Canada's northern Mackenzie River Basin By Staff Writers, Los Angeles CA (SPX), Jun 13, 2013

http://www.terradaily.com/reports/Potentially\_catastrophic\_changes\_underway\_in\_Canadas\_nort hern\_Mackenzie\_River\_Basin\_999.html

#### Other Scientific News

# Science, Heal Thyself

By Ferric Fang, Project Syndicate, Jun 5, 2013

 $\underline{http://www.project-syndicate.org/commentary/using-science-to-address-threats-to-the-scientific-enterprise-by-arturo-casadevall-and-ferric-c--fang$ 

Last year, for example, when C. Glenn Begley and Lee Ellis sought to reproduce 53 "landmark" preclinical cancer studies, they discovered that nearly 90% of the findings could not be reproduced. While the researchers who originally published those studies may have profited from increased funding and recognition, the patients who need new cancer treatments gained nothing.

[SEPP Comment: Highlights the need for independent reproduction of studies before major policy decisions including funding. Disagree with the authors comments on climate change. The alarm is not based on scientifically-established principles.]

#### NASA To Study How Pollution, Storms And Climate Mix

By Staff Writers, Edwards CA (SPX), Jun 10, 2013

http://www.terradaily.com/reports/NASA To Study How Pollution Storms And Climate Mix 999.html

# New study proposes solution to long-running debate as to how stable the Earth system is

By Staff Writers, Southampton, UK (SPX), Jun 13, 2013

http://www.terradaily.com/reports/New\_study\_proposes\_solution\_to\_long\_running\_debate\_as\_to\_how\_stable\_the\_Earth\_system\_is\_999.html

Link to paper: The Emergence of Environmental Homeostasis in Complex Ecosystems

By James Dyke and Ian Weaver, PLOS, May 16, 2013

http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1003050;jsessionid=342B29A1D6AE6804179E9B06A99E702C

#### Abiogenic methane made in the mantle from carbonate?

By Matt Ridley, His Blog, Jun 8, 2013

http://www.rationaloptimist.com/blog/is-gas-made-in-the-earth's-mantle.aspx

[SEPP Comment: A long debated issue.]

# Other News that May Be of Interest

# Signs that Davis Strait polar bears are at carrying capacity

By Susan Crockford, Polar Bear Science, Jun 10, 2013 [H/t GWPF]

http://polarbearscience.com/2013/06/10/signs-that-davis-strait-polar-bears-are-at-carrying-capacity/

# **BELOW THE BOTTOM LINE:**

# Climate change could slash snowfall in Southern California mountains

By Bettina Boxall, LA Times, Jun 14, 2013 [H/t WUWT]

http://www.latimes.com/news/science/sciencenow/la-sci-sn-southern-california-snow-20130614,0,1562365.story

[SEPP Comment: Based on studies of unvalidated models. Snowfall observed from Los Angles is rare, but occurs on the next set of mountains further east.]

#### **ARTICLES:**

#### 1. Fracturing in California

Democrats revolt against a ban on oil and gas 'fracking.'

Editorial, WSJ, Jun 7, 2013

http://online.wsj.com/article/SB10001424127887324767004578488821344316236.html

Few issues divide Democrats more than energy policy, as we've learned as unions and environmentalists fight over the Keystone XL pipeline. More evidence now comes from California, where greens have lost an attempt to ban oil and gas hydraulic fracturing.

Democratic leaders brought their fracking moratorium bill to the Assembly floor last week, and their rank and file revolted. The bill lost 37-24, with 12 Democrats joining 25 Republicans to defeat it. Another 18 Democrats abstained, and it's a good bet they were "no" votes who didn't want to publicly cross their leadership. This was a rare rout of the Sierra Club and other greens that denounce "fracking" for polluting water and inducing earthquakes, among other horrors. They blamed the oil and gas lobby, but that hides the real story.

The votes for the fracking ban came mainly from the wealthy, mostly white Democratic coastal districts—San Francisco, Santa Monica and Malibu. Opponents were mostly from central California, areas that are poor and minority, with rates of unemployment of 12% or more. Six of the seven black assembly Democrats voted against the ban or abstained. Though the Assembly speaker is Hispanic, most of the rank-and-file Latino Democrats refused to vote for the ban.

These Democrats understand that fracking is already happening in California, especially in energy-rich Bakersfield. According to the California Independent Petroleum Association, about one-third of the active wells now use this innovative drilling process that uses chemicals, sand and water to crack shale rock. A moratorium would throw thousands of Californians out of work, and not those in Beverly Hills. Oil and gas jobs typically pay salaries that range from \$50,000 to \$100,000 a year and many of them are unionized.

California sits atop the vast Monterey Shale that contains an estimated 15 billion barrels of oil. That's twice as much as North Dakota has in the Bakken Shale where fracking is common. The oil and gas industry still hasn't found a way to extract the oil from Monterey economically. But it is getting closer, and a fracking ban would send the industry elsewhere.

A study by University of Southern California scientists funded by the oil industry estimates fracking would deliver 500,000 jobs over the next several years and \$24.6 billion in state and local tax revenue in 2020 alone. If those numbers are even close to accurate, drilling could be a financial salvation for a state that has \$167.9 billion in long-term liabilities, not counting pensions and retiree health, according to the state's auditor. A strong case can be made that California can't afford not to frack.

The drilling debate isn't over in Sacramento. Some Democrats will try to kill drilling through regulation, and environmentalists through lawsuits, even as they pretend to be pro-jobs. Never mind that the drilling industry has signed on to most of the major regulations: full disclosure of chemicals used, strict clean up measures, and constant monitoring of water quality.

But other Democrats, including Governor Jerry Brown, are beginning to see the economic benefits of fracking. That's good news for the state's many unemployed workers and economically depressed areas.

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#### 2. U.S. Corn Belt Expands to North

Warmer Climate, Hardier Seeds Help Crop Gain on Wheat, North Dakota's Staple By Owen Fletcher, WSJ, Jun 14, 2013 <a href="http://online.wsj.com/article/SB10001424127887324904004578539352566317388.html?mod=WSJ\_hpp\_LEFTTopStories">http://online.wsj.com/article/SB10001424127887324904004578539352566317388.html?mod=WSJ\_hpp\_LEFTTopStories</a>

[SEPP Comment: Informed the reporter that there is another driving factor for this shift – carbon dioxide enrichment making corn more resistant to stress.]

RUGBY, N.D.—Wheat has long dominated the windswept farm fields of the northern Great Plains. But increasingly, farmers here are switching to corn, reflecting how climate change, advancements in biotechnology and high corn prices are pushing the nation's Corn Belt northward.

Last year, corn narrowly eclipsed wheat as North Dakota's most valuable crop as farmers produced a record corn harvest. This year, as farmers across the Corn Belt are finishing up the planting season after an unusually wet spring, the U.S. Department of Agriculture has forecast that 4.1 million acres of North Dakota will be sown with corn, an all-time high and a nearly threefold increase over a decade ago.

The shift, which is occurring in northern Minnesota and Canada's Manitoba province as well, shows how warming temperatures and hardier seeds are enabling farmers to grow corn in areas once deemed inhospitable to the crop. As a result, North Dakota's farmers, who produced 4% of last year's U.S. corn crop and are benefitting from high prices for other crops, are invigorating the state's agricultural economy at the same time its energy sector is thriving.

Corn prices are about double historical norms, driven by food demand in China and other fast-growing countries, as well as the rise of U.S. ethanol production.

Farmer Steve Fritel planted more corn than wheat for the first time this spring. "Wheat is profitable; corn is just more profitable," said the 58-year-old, who farms about 4,000 acres near Rugby with his son Brad.

Climatologists and agricultural experts point to North Dakota as an example of how climate change could reshuffle the fortunes of U.S. farmers in coming decades. While crops in certain regions will benefit, and new technology may help farmers resist some of the negative effects from climate change, other areas are expected to face severe challenges.

In a report earlier this year, the USDA said climate change could bring more frequent extreme weather, soil erosion and new rainfall patterns. The threat "is new and different from anything we've ever tackled," Agriculture Secretary Tom Vilsack said in a speech this month.

So far, the impact of climate change has been muted on crops like corn, as average weather conditions are changing only gradually. But the impact could be much greater later this century if the climate turns unfavorable for corn in a major producing state such as Iowa, which raised 17% of last year's U.S. crop.

Last year's severe drought led to the nation's smallest corn crop in six years. That has prompted growers in some hard-hit states to cut back. In Kansas, farmers are expected to plant 2% fewer acres with corn and instead grow more sorghum, a less water-intensive grain. The northernmost parts of the Corn Belt, including North Dakota and Minnesota, largely avoided the dry spell.

Overall, U.S. corn acres will be about flat this year, the USDA estimates.

Warmer temperatures—which give corn plants more days to mature—have helped make it more practical to plant the crop in North Dakota. In the past 100 years, the state's average temperature has risen 2.7 degrees, lengthening the growing season by an average 1.2 days per decade, said Adnan Akyuz, the state's climatologist.

North Dakota farmers say advancements in the genetic engineering of seeds by companies such as DuPont Co. DD -0.65% and Monsanto Co. MON +1.88% have encouraged them to grow more corn. The hardier corn has made each acre of the grain higher-yielding, and therefore more profitable, than wheat. Wheat acreage in North Dakota this year is expected to be down 11% from a decade ago, according to the USDA.

Although a national move toward corn has reduced the acreage of wheat planted in the U.S. in the last 20 years, the shift hasn't yet significantly affected supply levels or prices, as world wheat supplies remain mostly adequate.

Excluding labor and management costs, farmers here in north-central North Dakota will earn about \$126 per acre in profit from corn this year, about double the expected return of \$65 an acre for wheat, said Dwight Aakre, an extension economist at North Dakota State University.

Jim Teigen, who farms with his son Dave near Rugby, planted 235 acres of corn this spring, up 50% from last year, when he planted corn for the first time. Mr. Teigen, 65, said warmer temperatures have made corn less risky to grow. "The corn prices and returns have been good the last three, four years particularly," Mr. Teigen said.

Net farm income in North Dakota in 2011, the most recent year for which data are available, totaled \$2.17 billion, or 11% higher than the average level over the previous five years, according to USDA data.

Newly flush farmers in Rugby, a town of 2,900 about 40 miles south of the Canadian border, have ramped up purchases of tractors and other equipment.

At Farmers Union Oil Co., a small retail chain that sells fuel, general merchandise and farm supplies, business has been so brisk lately that General Manager Steve Dockter said he struggles to hire enough employees.

#### 3. Why U.S. Wood Can—and Should—Power Europe

A forest owner (and Rolling Stones keyboardist) on the benefits of 'biomass' sales. By Chuck Leavell, WSJ, Jun 9, 2013

http://online.wsj.com/article/SB10001424127887324798904578529690411491374.html?mod=ITP\_opinion\_0

In the past two weeks, news reports have covered European Union rules mandating that 20% of energy in EU countries by 2020 must come from "renewable" sources. To meet the requirement,

European utilities are increasingly turning toward burning wood instead of coal—with much of the wood coming from the United States in the form of pellets.

Some environmentalists complain that cutting down trees is hardly a "green" solution, while utility-company officials have defended the practice of using woody biomass as a renewable energy source. Yet one point of view hasn't been much in evidence in the debate. That is the view of independent forest owners like me—my family manages 2,500 acres of forest in Georgia—who can speak directly to practices of the forestry industry and the benefits the industry provides local communities.

First, some perspective on the U.S. wealth of natural resources: The American South has more than 214 million acres of forest land, according to the Southern Group of State Foresters. About 89% is privately owned, making it the nation's stronghold for private forest ownership and stewardship.

Although the U.S. has a large amount of forested land, that does not mean the country can afford to cut down trees in a careless, slash-and-burn fashion as in decades past—and that is certainly not what is happening today.

Europe's increasing use of woody biomass, such as wood pellets, has not resulted in the inappropriate over-harvesting of U.S. forests that some fear. The demand has created a viable use for woody material from forestry operations that typically goes to waste. Twigs and limbs—plus woody material from thinning operations in which unsalable trees are removed to allow other trees to grow stronger and healthier—that would otherwise rot are used for biomass. Using this resource for energy puts it to good use and is a wise thing to do.

There is a common-sense approach to sustainably managing the nation's forests. Americans have learned that they need to be good stewards of the land, and forest owners throughout the Southeast can be very proud of their forest management. Sustainable methods and best practices have been established, which include replanting trees and ensuring that tree harvesting is done in a way that protects wildlife as well as air and water quality.

The forestry industry and thus the forest owners are governed by federal and state laws, including the National Environmental Policy Act, Endangered Species Act, Clean Air Act, Clean Water Act and Healthy Forests Initiative. There also are independent certifications that govern all forestry industries. The type of certification a landowner chooses is up to the owner, but the standards are in place. Individual forest owners also work hand-in-hand with state forestry officials and with experienced licensed foresters for proper forestry management.

Just as musicians are passionate about their craft, independent forest owners are passionate about the art of land management. Our mantra is to leave the land in better shape than when we found it. Not only do we care about this from aesthetic and recreational perspectives, but for many it is good business to care.

Forest owners who sell timber have an incentive to ensure that their forests remain healthy, productive and sustainable. Anything else would hurt the bottom line and threaten their investment. Sound practices also create and protect jobs. In Georgia alone, there are 24 million

acres of forested land. According to state-government estimates, this translates to roughly 188,000 jobs and \$25 billion of economic impact related to forestry. In the states that produce woody biomass, what was once a declining job market has new hope as forestry puts people back to work in jobs connected to a resource that is natural, organic and renewable.

I am also concerned about what I call "The Invisible Forest Health Crisis"—the loss of natural lands to growth and development. Landowners sometimes have tough choices to make: sell the land so it can become some community's strip mall, or keep the land as a sustainably managed working forest. More demand for forest products increases the likelihood of those forests remaining intact.

As a land and forest owner I recognize that I can't stop growth. But as a lifelong nature lover and environmentalist, I can guide it. Preserving our forests and fostering the use of wood products, including woody biomass—while also helping Europe meet its admirable goals for renewable-energy sources—is not a bad proposition.

#### 4. U.S. Oil Notches Record Growth

Rise in Production Is World's Largest; Fueled by Fracking
By Keith Johnson and Russell Gold, WSJ, Jun 12, 2013
<a href="http://online.wsj.com/article/SB10001424127887324049504578541601909939628.html?mod=WSJ\_hps\_LEFTTopStories">http://online.wsj.com/article/SB10001424127887324049504578541601909939628.html?mod=WSJ\_hps\_LEFTTopStories</a>

U.S. crude-oil production grew by more than one million barrels a day last year, the largest increase in the world and the largest in U.S. history.

In the latest sign of the shale revolution remaking world energy markets, crude production in the U.S. jumped 14% last year to 8.9 million barrels a day, according to the newly released Statistical Review of World Energy, an annual compilation of industry trends published by BP for more than six decades.

The wave of new crude, flowing in oil fields from North Dakota to south Texas, helped keep the global market adequately supplied and helped markets weather declining oil production elsewhere in the world.

"The growth in U.S. output was a major factor in keeping oil prices from rising sharply, despite a second consecutive year of large oil supply disruptions," said BP Chief Executive Bob Dudley.

In volume terms, last year's U.S. production gain of 1.04 million barrels a day surpassed the earlier biggest annual increase of 640,000 barrels per day, recorded in 1967.

Most of this new production is coming from dense shale-rock formations, such as the Bakken Shale in North Dakota and the Eagle Ford Shale in Texas. In recent years, the oil industry has

developed techniques to hydraulically fracture, or frack, these shales, freeing up previously trapped oils.

Beyond the U.S., oil production increased almost 7% in Canada, raising North America's profile as a global oil producer.

The boom in the North American oil patch contrasts sharply with developments in many big oil-producing countries such as Nigeria and Venezuela, where aging oil fields and political strife led to steep declines.

Despite rising U.S. production, the nation remains a large crude importer. However, it is bringing in fewer barrels than at any time since the mid-1990s. That is freeing up some traditional suppliers to ship their barrels elsewhere and satisfy rising demand in Asia and Latin America.

This surge of U.S. oil output is expected to have only a modest impact on global prices. The U.S., the third-largest global crude producer behind Saudi Arabia and Russia, still pumps only about one of every 10 barrels world-wide. What's more, restrictions on exporting crude oil from the U.S. have muffled its potential impact.

U.S. crude-oil production has raced ahead of new pipeline infrastructure to move it from oil fields to refineries. This has created regional gluts, such as in a major trading hub in Oklahoma, and driven down prices there. But it hasn't spilled over to depress global prices or deliver substantial amounts of cheap oil and fuel to consumers. The average crude price at a major benchmark hub in Europe last year was \$111.67 a barrel, compared with \$94.13 in Oklahoma.

This could change as production rises and more pipelines are built—and as railroads move more crude around the country. "Growth in U.S. shale-oil production could have the most significant long-term impact on oil prices of any supply event in recent decades," noted a report from Pacific Investment Management Co., which runs one of the world's largest commodity funds. But current output "has not yet been sufficient to meaningfully weaken oil prices."

While the U.S. shale boom increased production, many other oil-producing regions struggled with declining volumes. U.K. production fell 13.4% in 2012, as some of its North Sea oil fields near their fourth decade of life. Former OPEC member Indonesia experienced a 3.9% decline.

Libya grew its production from 479,000 daily to 1.5 million, mostly because it was able to restart output following disruptions related to its civil war. Powerhouse Saudi Arabia raised its world-leading output almost 4% to 11.5 million barrels per day.

The fracking techniques that have unleashed so much crude in the U.S. haven't yet had an impact overseas. However, recent government reports suggest that Argentina and Russia could have enormous deposits of crude oil accessible through fracking. Development of these resources has been slowed by government policies, competition from less expensive fields and a scarcity of specialized equipment.

The extra North American supply made it easier for the U.S. and Europe to impose tough sanctions on Iranian oil exports in a bid to hamstring its nuclear-weapons development. Iranian oil

production fell 16% to 3.7 million barrels per day, the largest drop among major producers, BP said. Other oil-market analysts have said Iranian exports have fallen by more than one million barrels per day since sanctions took full effect last summer.

Additional supplies also make it easier to deal with rising demand from energy-hungry countries such as China, whose quest to lock up oil and gas resources has been a source of friction. Much of the recent tension in the South China Sea, for example, is due to China and its neighbors eyeing potentially rich underwater hydrocarbon reserves.

"A better-supplied world is a safer world," Daniel Yergin, vice chairman of energy consultancy IHS, said at a conference Wednesday.

Improved energy efficiency and Europe's weak economy kept a lid on demand in 2012. BP said world consumption grew 0.9%. Europe and North America used less oil, while the rest of the world, led by China, used more.

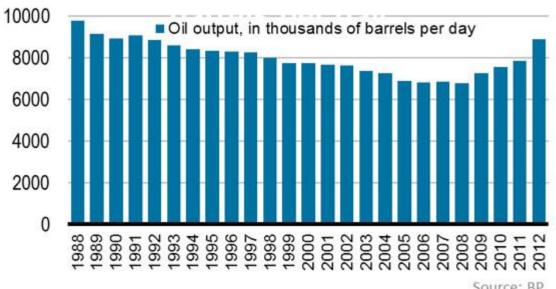
While the U.S. gusher tamped down the effect of supply problems elsewhere, BP noted average oil prices remained at record-high levels last year. The prices reflect relentless demand for oil from developing countries, including China, India and most of the Middle East.

Measured in 2012 dollars, the average oil price last year of \$111.67 per barrel of Brent crude was just \$2 lower than in 2011, which was the highest price at any time since the post-Civil War boom in Pennsylvania in the 1860s, BP said. Both prices were higher than such watershed years as 2008, when oil nearly hit \$150 a barrel in the summer and the average was \$103.71 a barrel in current dollars; 1979, when the Iranian revolution roiled markets; and 1973, the year of the Arab oil embargo.

On Wednesday, the World Bank forecast global oil prices would drop to \$102 a barrel this year from \$105 last year, based on an average of global benchmarks. It added that "over the longer term, oil prices are projected to fall" as supply growth from shale-rock deposits accelerate.

# Rising Supply

The U.S. is the world's fastest growing oil producer



Source: BP

