

The Week That Was: 2013-03-02 (March 2, 2013)
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The Science and Environmental Policy Project

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Quote of the Week: *“In conclusion, I hope that, on reflection, you will recognise that there should be a difference between the behaviour appropriate to a President of the Royal Society and acting as a shop steward for some kind of scientists’ closed shop. Not to do so can only bring the Royal Society into further disrepute, which cannot be in the public interest.”* Lord Nigel Lawson to Sir Paul Nurse, President of the Royal Society.

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Number of the Week: 0.04%

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THIS WEEK:

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

Special Note: In honor of the Federal budget Sequester which may decrease outlays by 2%, TWTW will be 2% shorter this week.

Climate Science Day: Led by the American Meteorological Society (AMS), a number of politically motivated science societies planned to individually lobby members of Congress on February 27. As a preemptive measure, SEPP, NIPCC, and VA-SEEE sponsored two briefings to selected Representatives and senior staffers on February 26. The briefing, Climate Facts and Extreme Weather, featured Fred Singer of SEPP addressing salient climate issues and Joseph D’Aleo of WeatherBell Analytics, LLC addressing extreme weather events. Given the timing was immediately before automatic spending cuts were taking effect, the attendance was not overwhelming. However, those who did attend asked penetrating questions. The questions indicated concern on the subject and understanding of broad issues.

Fred Singer suggested three questions for staffers to ask global warming / climate change / extreme weather event advocates. One, Please explain to me why there has been no warming for more than a decade, even though atmospheric carbon dioxide continues to rise. The question was supported by graphic evidence. The follow-up was a quote from Phil Jones of HadCRU admitting there has been no statistically significant surface warming for at least 15 years.

The second question was: Can you explain why the Antarctic has been getting colder and GAINING ice? (2.1 trillion tons/yr for past 150 yrs)? The scientific articles supporting the question were cited.

And the third question was: Could the Sun (or cosmic rays) be responsible for the major warming of 20th century? A graph by E Friis-Christensen and K Lassen, published in *Science*, shows a strong relationship between the temperature anomaly (departure from the normal) and the sunspot cycle length while the relationship between temperature anomaly and CO2 concentration is much weaker. The follow-up is an admission by the Intergovernmental Panel on Climate Change (IPCC) appearing in the Second Order Draft of the Fifth Assessment Report (AR5) that cosmic ray changes can affect earth’s clouds and climate.

Joe D’Aleo focused on questionable claims President Obama made in his State of the Union speech. Point one is the claim that 12 of the hottest years on record have come in the last 15 years.

Joe pointed out that the record has flat lined, which Rajendra Pachauri, the head of the IPCC, has acknowledged. Also, Joe brought up the serious data integrity issues in which the data has been manipulated in a way that has lowered historic high temperatures in the US in the 1930s.

Point two was the statement that “Heat waves, droughts, wildfires, and floods – all are now more frequent and intense.” The claim is so factually challenged that it is a wonder it got by the White House staff. Looking at the weather stations that have 80 years of data shows heat records were set in the 1930s, the Palmer drought index shows the 1930s and the 1950s were hotter and dryer with the 1930’s dust bowl lasting a decade. Amazingly, when he briefed the Senate, AMS President Shepherd ignored these droughts. Increased floods are not supported by the data, and, according to the National Interagency Fire Center, wildfires are declining.

Point three was: “We can choose to believe that Superstorm Sandy....a freak coincidence...” Sandy was neither unique nor extreme. Hurricane direct hits on NYC occurred in 1815, 1821 and 1893 in prior active periods

Other points included that since the 1970s snow is increasing, not decreasing and this decade appears to be approaching the weather of the 1960s with frequent, heavy snows.

In sum, it is one thing for the President to use the State of the Union speech for political purposes. It is something else for the head of a scientific society to ignore salient facts, in order to support the President’s politics.

Quote of the Week: Last week’s TWTW mentioned that, in an interview, Paul Nurse, the President of the Royal Society, made some unflattering statements about Nigel Lawson, the Chairman of the Global Warming Policy Foundation (GWPF), which is skeptical that human emissions of CO2 and other greenhouse gases are causing unprecedented and dangerous global warming. This week GWPF posted an open letter from Lawson to Nurse. The concluding paragraph applies to other science societies, which are becoming involved in the politics of global warming / climate change. Please see links under Communicating Better to the Public – Make things up.

Antarctic Ice Cores: Using a new technique, a recently published study indicates that the estimated temperatures from Antarctic ice cores are more in parallel with estimate CO2 concentrations that prior research had indicated with changes in temperatures leading changes in temperatures by about 800 years plus or minus several hundred years. The suggested lag is significantly less. It remains to be seen if this study withstands independent analysis.

However, global warming advocates are claiming that it vindicates Al Gore’s claim that ice cores prove that changing CO2 concentrations cause global temperature changes. It does not. Gore’s claim was contradicted by the best science available at the time. According to the abstract, the new study focuses on the end of the last ice age (deglacial warming). It does not go into cause – especially, what causes temperatures to start falling when atmospheric CO2 concentrations remain high? This is not to say that increased CO2 does not enhance warming from other causes. Please see links under Defending the Orthodoxy.

Myth of Scalability of Wind Power: Proponents of wind power have assumed that wind power is virtually inexhaustible. A new study indicates that wind turbines create a wind shadow, similar to mountains creating a rain shadow. This finding questions the scalability of wind farms. Can additional turbines be added to accommodate growth in the same proportion as when first installed? Apparently, they cannot. None of the goes with the fundamental deficiency of wind power, it is unreliable.

Barnett Shale: Key issues regarding the deep underground hydraulic fracturing and directional drilling of dense shale for oil and natural gas include the life of individual wells and the productive life of a shale formation. [Note that proper sized gravel forced into the fractures is an important component of this technology.] The results have been uneven and some wells drop off in production very quickly. This combination of techniques was first successfully applied to the Barnett Shale formation, which includes Fort Worth and Dallas, Texas, and extends significantly to the west and south.

The Jackson School of Geosciences of the University of Texas has announced what it calls a rigorous assessment of the resources in the Barnett Shale formation. [The assessment was not yet available for public review, but the *Wall Street Journal* received an advanced copy.] The conclusions may be disturbing for climate change alarmists. The researchers conclude that at the current rate of drilling, the current rate of production of 2 Trillion Cubic Feet will plateau, then slowly decline to about 900 Billion Cubic Feet per year by 2030, and the formation will continue to produce for several decades later.

The base price is \$4 per million BTUs (1,000 Cubic Feet), slightly higher than the price today. No doubt, this study will undergo intense scrutiny by those in the energy business and by others. The team that did the study plans to study other shale formations as well. Please see Article # 1 and links under Oil and Natural Gas – the Future or the Past?

Keystone XL: The environmental industry has bitterly fought the upgrade and extension of the Keystone pipeline to bring oil from oil sands from Alberta, Canada, (and some oil from North Dakota) to refineries along the Gulf of Mexico. Alberta is land locked and any pipeline that does not go through the US must go over the high mountains to the West or a further distance to the east across Canadian (Laurentian) Shield in Ontario. Both routes will be very expensive and bitterly opposed. As brought up in prior TWTWs, the oil producers in Alberta are being forced to sell at a deep discount because it is difficult to bring the oil to the global market. Washington must approve the Canada – US crossing and it has delayed its decision, ostensibly for further environmental studies.

In Washington, Friday afternoons are a slow news day, and, traditionally, unwelcomed news is announced late on Fridays. This Friday, the State Department announced that it found that the pipeline will cause no significant environmental damage. [Nebraska, the other obstacle, had already announced it found no issues with the revised route.] The environmental industry will be furious. Will the administration quickly approve the pipeline, which will create thousands of jobs at no cost to the government? Or will the administration postpone any decision until after the Congressional elections in the fall of 2014? Please see links under Washington’s Control of Energy.

Book Review: *The Mad, Mad, Mad World of Climatism: Mankind and Climate Change Mania* by Steve Goreham

[SEPP Comment: *There are a number of books that address the failings of global warming science, but books written for the general public are rare. We asked a thirty-year-old artist to review this book. Except for one course in oceanography, she has no course work beyond basic mathematics and science. Below are her comments:*]

Difficulties in understanding the dryer sections of the book (especially the “Positive Feedback from Water Vapor”-pg 86), but the graphs were helpful aiding to better understanding of the topics.

Misspelling on pg 113, 1st paragraph; “...severe thunderstorm warming...” I believe it should say warning.

Fully appreciate the book’s tactfulness of not coming out saying how idiotic the people of Climatism are, but using their own words to illustrate it.

The cartoons were a good visual touch in a long text.

The money aspect was quite the eye-opener and important to point out. I have never heard any of the information in classroom, media, or common conversation about Global Warming. I now really question the conviction of the leaders of this movement. Would Al Gore be into saving the Earth if he saw no money from it? Would he be spending his green to “greenerize” the Earth?

I will recommend this book to any person that I have a conversation with about Global Warming. I am keeping the book in my household for reference in future debates. When my daughter starts going to school, and they are teaching her the false facts, this book will be a tool to the truth.

The Mad, Mad, Mad World of Climatism: Mankind and Climate Change Mania by Steve Goreham, New Lenox Books, New Lenox, IL, ISBN-13: 978-0982499627, 312 pages, 113 figures, 50 sidebars, 13 cartoons; Notes, index, and bibliography

By Ellen Haapala, March 1, 2013

Number of the Week: 0.04% or 400 ppm. On his web site, The Reference Frame, Luboš Motl presents a simple model he used to estimate when the atmospheric CO2 concentrations, as measured at Mauna Loa, Hawaii, will first record a concentration above 400 parts per million. This is not straightforward, because plant life in the Northern Hemisphere is far exceeds plant life in the Southern Hemisphere. Thus, carbon dioxide concentrations go down with the growing seasons in the Northern Hemisphere and go up when the growing seasons stop. Motl estimates that in Mid-May of 2013, the measured CO2 at Manual Loa will exceed 400 ppm, then fall back. No doubt this event will cause great consternation among global warming alarmists who prophesize calamities are about to befall the earth. However, it should be a time of rejoicing among environmentalists who recognize that plant life is benefiting from increased CO2, thus the environment is benefiting. Please see link under Seeking a Common Ground.

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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. Gas Boom Projected to Grow for Decades

By Russell Gold, WSJ, Feb 28, 2013

http://online.wsj.com/article/SB10001424127887323293704578330700203397128.html?mod=IT_P_pageone_0

2. Desertec Industrial Initiative Drops 2050 Electricity Target

By Summer Said, WSJ, Feb 27, 2013

http://online.wsj.com/article/SB10001424127887323478304578330221459821536.html?mod=W_SJ_Energy_2_4_Left

3. California Girds for Electricity Woes

Increased Reliance on Wind, Solar Power Means Power Production Fluctuates

By Rebecca Smith, WSJ, Feb 26, 2013

http://online.wsj.com/article/SB10001424127887323699704578328581251122150.html?mod=W_SJ_hps_MIDDLE_Video_second

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NEWS YOU CAN USE:

Climategate Continued

It's Time For The Person Who Leaked the CRU Emails To Step Forward

By Tim Ball, WUWT, Feb 27, 2013

<http://wattsupwiththat.com/2013/02/27/its-time-for-the-person-who-leaked-the-cru-emails-to-step-forward/>

Challenging the Orthodoxy

Yes! We Should Defund The U.N.'s Intergovernmental Panel On Climate Change

By Larry Bell, Forbes, Feb 24, 2013

<http://www.forbes.com/sites/larrybell/2013/02/24/yes-we-should-defund-the-u-n-s-intergovernmental-panel-on-climate-change/>

[SEPP Comment: Over two decades of misleading the public is too much.]

The NOAA USHCN RAW Data from Boulder, Colorado Restore the Beginning and End of the Modern Warming Regime

By Samuel Outcalt, Professor Emeritus of Physical Geography, The University of Michigan, Ann Arbor, WUWT, Feb 27, 2013

<http://wattsupwiththat.com/2013/02/27/the-noaa-ushcn-raw-data-from-boulder-colorado-restore-the-beginning-and-end-of-the-modern-warming-regime/>

[SEPP Comment: A technical presentation estimating the start of the recent warming period as 1976 and the end about 2000.]

Defending the Orthodoxy

Study of Ice Age Bolsters Carbon and Warming Link

By Justin Gillis, NYT, Mar 1, 2013

http://www.nytimes.com/2013/03/01/science/earth/at-ice-age-end-a-smaller-gap-in-warming-and-carbon-dioxide.html?nl=todaysheadlines&emc=edit_th_20130301&r=0

Link to study: Synchronous Change of Atmospheric CO₂ and Antarctic Temperature During the Last Deglacial Warming

By Parrenin, Masson-Delmontte, et al, Science, Mar 1, 2013

<http://www.sciencemag.org/content/339/6123/1060.abstract>

A Better Way to Fight Climate Change

By Jeffrey Sachs, Project Syndicate, Feb 28, 2013

<http://www.project-syndicate.org/commentary/lessons-of-europe-s-emissions-trading-system-by-jeffrey-d--sachs>

[SEPP Comment: The usual exaggerations about climate from a Special Adviser to the UN Secretary-General on the Millennium Development Goals.]

A visit to Santa Fe and James Hansen

By Robert Endlich, Climate Realists, Feb 26, 2013 [H/t Climate Depot]

<http://climaterrealists.com/index.php?id=11204>

[SEPP Comment: James Hansen doing a tap dance around a pointed question he will not answer.]

Questioning the Orthodoxy

Von Storch Blasts Climate Scientists: Not The “Keepers Of The Truth” – Says They “Oversold” The Science

By P. Gosselin, No Tricks Zone, Feb 26, 2013

<http://notrickszone.com/2013/02/26/von-storch-blasts-climate-scientists-not-the-keepers-of-the-truth-says-they-oversold-the-science/>

[SEPP Comment: A member of the orthodoxy calling for less extremism from the warmists.]

The Carbon Cycle – Nature or Nurture?

By Ed Caryl, No Tricks Zone, Mar 2, 2013

<http://notrickszone.com/2013/03/02/most-of-the-rise-in-co2-likely-comes-from-natural-sources/>

[SEPP Comment: A debatable issue. But the author proposes a possible test. Should the earth begin to cool as some scientists suggest, will the CO₂ concentrations start to fall?]

The price of life: the IPCC's first and forgotten controversy

By Bernie Lewin, Bishop Hill, Feb 26, 2013

<http://bishophill.squarespace.com/blog/2013/2/26/the-price-of-life-the-ipccs-first-and-forgotten-controversy.html>

Movement! German Media Reopen Climate Discussion – Concede Warming Has Stopped, Other Factors At Play

By P. Gosselin, No Tricks Zone, Feb 28, 2013

<http://notrickszone.com/2013/02/28/movement-german-media-reopen-climate-discussion-concede-warming-has-stopped-and-other-factors-at-play/>

Collapsing Consensus – Another German Meteorology Site Wonders About The Global Temperature Stagnation

By P. Gosselin, No Tricks Zone, Feb 25, 2013

<http://notrickszone.com/2013/02/25/collapsing-consensus-another-german-meteorology-site-wondering-about-the-global-temperature-stagnation/>

Climate Consensus? What Climate Consensus?

By Peter Glover, Energy Tribune, Feb 25, 2013

<http://www.energytribune.com/73949/climate-consensus-what-climate-consensus>

Questioning European Green

The green, the crooked and the incompetent

By Andrew Montford, Bishop Hill, Feb 25, 2013

<http://bishophill.squarespace.com/blog/2013/2/25/the-green-the-crooked-and-the-incompetent.html>

Link to minutes:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66751/6993-sag-meeting-minutes-11-sep-2012.pdf

[SEPP Comment: According to the minutes from the UK Department of Energy and Climate Change Science Advisory Group, the desired energy efficiency cannot be achieved if energy prices are too low! Incentives such as substantial price on carbon are needed! These bureaucrats claim they serve the public.]

One day, turning off the lights won't be up to you

Governments have taken suicidal gambles with our energy supplies

By Christopher Booker, Telegraph, UK, Feb 23, 2013

<http://www.telegraph.co.uk/earth/energy/9889184/One-day-turning-off-the-lights-wont-be-up-to-you.html>

Is renewable energy affordable?

By Martin Livermore, Scientific Alliance, Mar 1, 2013

<http://www.scientific-alliance.org/scientific-alliance-newsletter/renewable-energy-affordable>

[SEPP Comment: Not if it continues to be unreliable.]

Wind farms will create more carbon dioxide, say scientists

Thousands of Britain's wind turbines will create more greenhouse gases than they save, according to potentially devastating scientific research to be published later this year.

By Andrew Gillian, Telegraph, UK, Feb 23, 2013 [H/t Stefan Björklund]

<http://www.telegraph.co.uk/earth/energy/windpower/9889882/Wind-farms-will-create-more-carbon-dioxide-say-scientists.html>

[SEPP Comment: Based on the study, it applies only to pristine peat soils.]

The unbearable detachment of EU beings

By Pat Swords, Bishop Hill, Mar 1, 2013

<http://bishophill.squarespace.com/blog/2013/3/1/the-unbearable-detachment-of-eu-beings.html>

[SEPP Comment: If it sounds good for the environment, many politicians and bureaucrats will buy virtually any scheme from the wind industry and foist it onto the public.]

Blackout Britain: EU environmental directive puts millions at risk of power cuts

ONE million homes narrowly escaped a power cut last month as bitterly cold weather placed a massive strain on Britain's creaking electricity network.

By Tracey Boles, Express, UK, Feb 24, 2013

<http://www.express.co.uk/news/uk/379845/Blackout-Britain-EU-environmental-directive-puts-millions-at-risk-of-power-cuts>

A New Climate Alarmist Scare About Loss of Arctic Sea Ice Volume

By James Rust, Somewhat Reasonable, Feb 24, 2013

<http://blog.heartland.org/2013/02/a-new-climate-alarmist-scare-about-loss-of-arctic-sea-ice-volume/>

Questioning Green Elsewhere

World cools on global warming as green fatigue sets in

Worldwide concerns about climate change have dropped dramatically since 2009

By Sam Masters, Independent, UK, Feb 27, 2013

<http://www.independent.co.uk/environment/climate-change/world-cools-on-global-warming-as-green-fatigue-sets-in-8513826.html>

[SEPP Comment: Is Steven Schneider saturation setting in?

Not easy being green

Series of disasters for the climate doomsayers

By Lawrence Solomon, Financial Post, Feb 28, 2013

<http://opinion.financialpost.com/2013/02/28/lawrence-solomon-not-easy-being-green/>

Green Energy Has A Brownout Problem

Editorial, IBD, Feb 27, 2013

<http://news.investors.com/ibd-editorials/022713-646095-wind-and-solar-promise-high-cost-low-reliability.htm>

Green Fantasies, Hard Realities

The only place wind energy is free and easy is in the minds of green activists.

By Donna Laframboise, NFC, Feb 28, 2013

<http://nofrackingconsensus.com/2013/02/28/green-fantasies-hard-realities/>

Using energy and happy about it

By Steve Goreham, Washington Times, Feb 27, 2013

<http://communities.washingtontimes.com/neighborhood/climatism-watching-climate-science/2013/feb/27/using-energy-and-happy-about-it/>

Green-Jobs Survey Dies as U.S. Readies Sequestration Cuts

By Lorraine Woellert & Todd Shields, Bloomberg, Mar 1, 2013

<http://www.bloomberg.com/news/2013-02-28/green-jobs-survey-republicans-faulted-shelved-in-cutbacks.html>

[SEPP Comment: Most green jobs are traditional jobs with a special classification.]

Expanding the Orthodoxy

Bipartisan Center Outlines 50 Policy Recommendations for More Secure U.S. Energy Future

By Sonal Patel, Power News, Feb 28, 2013

http://www.powermag.com/POWERnews/5425.html?hq_e=e1&hq_m=2626381&hq_l=7&hq_v=5e660500d0

[SEPP Comment: Does the nation need another bureaucracy touting unreliable wind and solar, and needless Biofuels in the name of energy security?]

White House official: Power grid upgrades needed to mitigate extreme weather

By Zack Colman, The Hill, Feb 26, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/284899-white-house-official-power-grid-upgrades-needed-to-mitigate-extreme-weather->

[SEPP Comment: As if extreme weather events never occurred before. A cover story for the real issue: expansion of the grid is needed for unreliable wind and solar.]

Did you know that the Centers for Disease Control and Prevention has an "associate director for climate change"? That guy suggests that CO2 causes "a huge mental toll on people"

By Tom Nelson, His Blog, Feb 27, 2013

<http://tomnelson.blogspot.com/2013/02/did-you-know-that-centers-for-disease.html>

[SEPP Comment: As if the climate never changed in the past. What would he have recommended during the Dust Bowl?]

Tom Ridge: 'Climate change is a national security threat'

By Robert Vickers, Patriot News (PA), Feb 25, 2013 [H/t Timothy Wise]

http://www.pennlive.com/midstate/index.ssf/2013/02/tom_ridge_joins_group_calling.html#incart_m-rpt-2Former

SciTech committee looks at public attitudes

By Andrew Montford, Bishop Hill, Feb 28, 2013

<http://bishophill.squarespace.com/blog/2013/2/28/scitech-committee-looks-at-public-attitudes.html>

[SEPP Comment: One question to ask: Is climate alarmism undermining public trust in science?]

Seeking a Common Ground

Mauna Loa carbon dioxide: a fit

By Lubos Motl, Reference Frame, Feb 23, 2013

<http://motls.blogspot.com/2013/02/mauna-loa-carbon-dioxide-fit.html>

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

Interesting Update on the Sandy "Hurricane Deductible"

By Roger Pielke, Jr, His Blog, Feb 23, 2013

<http://rogerpielkejr.blogspot.com/2013/02/interesting-update-on-sandy-hurricane.html>

As a case study in the application of "evidence-based policy" you won't find a better one than the hurricane deductible. Sometimes "evidence" matters, sometimes it does not. Sometime we care about whether it matters, sometimes we do not.

Giant waves of atmospheric energy driving extreme weather

By Staff Writers, Potsdam, Germany (SPX), Feb 26, 2013

http://www.terraily.com/reports/Weather_extremes_provoked_by_trapping_of_giant_waves_in_the_atmosphere_999.html

[SEPP Comment: These climate experts should read a little about climate history, such as Lamb's Climate, History and the Modern World.]

Given link does not work.

Blockheaded thinking on well known weather patterns and 'extreme weather'

By Anthony Watts, WUWT, Feb 27, 2013

<http://wattsupwiththat.com/2013/02/27/blockheaded-thinking-on-well-known-weather-patterns-and-extreme-weather/>

[SEPP Comment: See article immediately above.]

1970s global cooling alarmism

By Andrew Montford, Bishop Hill, Mar 1, 2013

<http://bishophill.squarespace.com/blog/2013/3/1/1970s-global-cooling-alarmism.html>

[SEPP Comment: A reminder of the last climate change fear.]

Goodbye to a Very Green Business Week

By Alan Caruba, Warning Signs, Feb 25, 2013

<http://factsnotfantasy.blogspot.com/2013/02/goodbye-to-very-green-business-week.html>

Communicating Better to the Public – Make things up.

Lord Lawson's Letter to Sir Paul Nurse

By Lord Lawson, GWPF, Feb 27, 2013

<http://www.thegwgf.org/lord-lawsons-letter-sir-paul-nurse/>

Link to transcript by Nurse: <http://www.abc.net.au/radionational/programs/scienceshow/paul-nurse---making-science-work/4508096#transcript>

Less Snow, But More Blizzards: Climate Alarmists Have it All Ways

By James Rust, Somewhat Reasonable, Feb 26, 2013

<http://blog.heartland.org/2013/02/less-snow-but-more-blizzards-climate-alarmists-have-it-all-ways/>

Changing Weather

Over 650 snow records set in USA this week – another wonky surface station located

By Anthony Watts, WUWT, Feb 23, 2013

<http://wattsupwiththat.com/2013/02/23/over-650-snow-records-set-in-usa-this-week-another-wonky-surface-station-located/>

[SEPP Comment: Since most of the new records are in the mid-West, the alarmists cannot blame a fictional warming of the Atlantic.]

Overly Overcast: Germany Weathers Darkest Winter in 43 Years

By Staff Writers, Spiegel, Feb 26, 2013 [H/t Bishop Hill]

<http://www.spiegel.de/international/germany/germany-weighs-darkest-winter-in-43-years-a-885608.html>

[SEPP Comment: 100 hours of sunshine over the meteorological winter of December to February. The average is 160 hours. Bishop Hill points out that according to Wiki, Germany is “the world’s top photovoltaics (PV) installer with a solar PV capacity as of December 2012 of more than 32.3 gigawatts.” What is the production as a percentage of installed capacity?]

The Winter of 1947 [in England]

Before “Climate Disruption” bought on heavy snows

By Paul Homewood, WUWT, Feb 25, 2013

<http://wattsupwiththat.com/2013/02/25/the-winter-of-1947/>

New satellite to warn of severe weather by watching lightning

By Anthony Watts, WUWT, Mar 1, 2013

<http://wattsupwiththat.com/2013/03/01/new-satellite-to-warn-of-severe-weather-by-watching-lightning/>

Changing Climate

New paper finds no increase in tropical cyclones over past 200 years

The Hockey Schtick, Feb 28, 2013 [H/t GWPF]

<http://hockeyschtick.blogspot.co.uk/2013/02/new-paper-finds-no-increase-in-tropical.html>

Link to paper: Reconstructing tropical cyclone frequency using hydrogen isotope ratios of sedimentary n-alkanes in northern Queensland, Australia

By Soelen, et al, Palaeogeography, Palaeoclimatology, Palaeoecology, Feb 28, 2013

<http://www.sciencedirect.com/science/article/pii/S0031018213000953>

[SEPP Comment: For the area studied.]

Changing Seas

New projections of 'uneven' global sea-level rise

By Staff Writers, London, UK (SPX), Feb 26, 2013

http://www.terraily.com/reports/New_projections_of_uneven_global_sea_level_rise_999.html

[SEPP Comment: Areas of subsidence will have greater local sea level rise. But using projections of ice melt from unverified models is pure speculation.]

Fact check for Andrew Glikson – Ocean heat has paused too

By Anthony Watts, WUWT, Feb 25, 2013

<http://wattsupwiththat.com/2013/02/25/fact-check-for-andrew-glickson-ocean-heat-has-paused-too/>

[SEPP Comment: The consistency of the earlier measurements is open to question.]

Changing Cryosphere – Land / Sea Ice

Antarctic Ice: Is It Going To Take Over The Planet?

Editorial, IBD, Feb 22, 2013

<http://news.investors.com/ibd-editorials/022213-645488-arctic-ice-antarctic-ice-contradict-global-warming.htm>

[SEPP Comment: If everyone wrote as the alarmists do!]

Agriculture Issues & Fear of Famine

Global Warming to Endanger Breakfast by 2080!!!

By David Middleton, WUWT, Feb 27, 2013

<http://wattsupwiththat.com/2013/02/27/global-warming-to-endanger-breakfast-by-2080/>
[SEPP Comment: Demolishing another alarmist farce.]

Increased greenhouse-gas intensity of rice production under future atmospheric conditions
By Kees Jan van Groenigen,, Chris van Kessel & Bruce A. Hungate, Nature Climate Change, Oct 21, 2012

http://www.nature.com/nclimate/journal/v3/n3/full/nclimate1712.html?WT.ec_id=NCLIMATE-201303

[SEPP Comment: Projecting a warming ranging from +0.8 °C to +6 °C!]

Review of Recent Scientific Articles by NIPCC

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

In Search of a CO₂-Induced Increase in the Mean Rate-of-Rise of Global Sea Level

Reference: Zhang, X. and Church, J.A. 2012. Sea level trends, interannual and decadal variability in the Pacific Ocean. *Geophysical Research Letters* 39: 10.1029/2012GL053240.

<http://www.nipccreport.org/articles/2013/feb/26feb2013a1.html>

The Net Effect of Simultaneous Increases in Air Temperature and CO₂ Concentration on Plant Biomass Production

Reference: Dieleman, W.I.J., Vicca, S., Dijkstra, F.A., Hagedorn, F., Hovenden, M.I., Larsen, K., Morgan, J.A., Volder, A., Beier, C., Dukes, J.S., King, J., Leuzinger, S., Linder, S., Luo, Y., Oren, R., de Angelis, P., Tingey, D., Hoosbeek, M.R. and Janssens, I.A. 2012. Simple additive effects are rare: a quantitative review of plant biomass and soil process responses to combined manipulations of CO₂ and temperature. *Global Change Biology* 18: 2681-2693

<http://www.nipccreport.org/articles/2013/feb/26feb2013a2.html>

Low-Level Liquid-Containing Arctic Clouds

Reference: Cesana, G., Kay, J.E., Chepfer, H., English, J.M. and de Boer, G. 2012. Ubiquitous low-level liquid-containing Arctic clouds: New observations and climate model constraints from CALIPSO-GOCCP. *Geophysical Research Letters* 39: 10.1029/2012GL053385.

<http://www.nipccreport.org/articles/2013/feb/26feb2013a3.html>

CMIP5 Model Representations of Cloud Vertical Structure

Reference: Cesana, G. and Chepfer, H. 2012. How well do climate models simulate cloud vertical structure? A comparison between CALIPSO-GOCCP satellite observations and CMIP5 models. *Geophysical Research Letters* 39: 10.1029/2012GL053153.

<http://www.nipccreport.org/articles/2013/feb/26feb2013a4.html>

Litigation Issues

Monckton explains why taking climate extremists to court works (and Uni Tas agrees to investigate).

By Jo Nova, Her Blog, Mar 1, 2013

<http://joannenova.com.au/2013/03/monckton-explains-why-taking-climate-extremists-to-court-works-and-uni-tas-agrees-to-investigate/>

[SEPP Comment: Includes Monckton's essay.]

Court ruling keeps polar bear as threatened species

By Zack Colman, The Hill, Mar 1, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/285737-court-ruling-keeps-polar-bear-as-threatened-species>

[SEPP Comment: Once a Federal agency makes a scientific finding, no matter how inane, it is difficult for the public to have it overturned.]

Cap-and-Trade and Carbon Taxes

Global Warming Alarmists Chant 'Forget The Carbon, We Demand The Tax'

By James Taylor, Forbes, Feb 28, 2013

<http://www.forbes.com/sites/jamestaylor/2013/02/28/global-warming-alarmists-chant-forget-the-carbon-we-demand-the-tax/>

EU carbon market boosts emissions, NGOs say

By Nikolaj Nielsen, Euobserver, Feb 18, 2013 [H/t Catherine French]

<http://euobserver.com/environment/119096>

EPA and other Regulators on the March

Environmental Protection Agency Funding Up 51% Since 2008

By Fred Lucas, CNS News, Feb 27, 2013 [H/t Timothy Wise]

<http://cnsnews.com/news/article/environmental-protection-agency-funding-51-2008>

EPA Increases Mandates For Fuels That Don't Exist

Editorial, IBD, Feb 26, 2013

<http://news.investors.com/ibd-editorials/022613-645843-epa-mandates-fuels-that-dont-exist.htm>

EPA Directs 36 States to Revise SIPs for Emissions during Plant Startup, Shutdown, Malfunction

By Staff Writer, Power News, Feb 28, 2013

http://www.powermag.com/POWERnews/5426.html?hq_e=el&hq_m=2626381&hq_l=8&hq_v=5e660500d0

[SEPP Comment: If unreliable wind and solar force startups, should the reliable sources pay for the costs.]

EPA Discovers Its 'Renewable Fuels' Program Is Vulnerable to Fraud

By Susan Jones, CNS News, Feb 26, 2013

<http://cnsnews.com/news/article/epa-discovers-its-renewable-fuels-program-vulnerable-fraud>

Chamber study claims to debunk EPA figures on job-creating regulations

By Ben Goad, The Hill, Feb 27, 2013

<http://thehill.com/blogs/regwatch/energyenvironment/285359-chamber-study-claims-to-debunk-epas-job-creation-figures>

[SEPP Comment: EPA job creation applies to the EPA.]

Energy Issues – Non-US

Deliverance from discounts and deficits

By Claudia Cattaneo, Financial Post, Feb 28, 2013

http://business.financialpost.com/2013/02/28/deliverance-from-discounts-and-deficits/?_lsa=fb40-a569

Germany lays down rules for 'fracking'

By Staff Writers, Berlin (AFP), Feb 26, 2013

http://www.energy-daily.com/reports/Germany_lays_down_rules_for_fracking_999.html

Germany to Add Most Coal-Fired Plants in Two Decades, IWR Says

By Stefan Nicola, Bloomberg, Feb 27, 2013 [H/t GWPF]

<http://www.bloomberg.com/news/2013-02-27/germany-to-add-most-coal-fired-plants-in-two-decades-iwr-says.html>

Energy Issues -- US

Shell freezes Alaska drilling until 2014

By Staff Writers, Washington (AFP), Feb 27, 2013

http://www.energy-daily.com/reports/Shell_freezes_Alaska_drilling_until_2014_999.html

[SEPP Comment: No doubt, some will claim that this pause justifies a ban on further drilling.]

Dividing Fracking Regulation Efficiently

By Staff Writers, NCPA, Feb 25, 2013

http://www.ncpa.org/sub/dpd/index.php?Article_ID=22879&utm_source=newsletter&utm_medium=email&utm_campaign=DPD

Link to report: "Institutional Choices for Regulating Oil and Gas Wells

By Lee Lane, Hudson Institute, Feb 2013

<http://www.hudson.org/files/publications/Lane--OilGasWells--0213web.pdf>

[SEPP Comment: The oil and gas industries are exempt from federal control under the Safe Drinking Water Act. Hydraulic fracturing of deep underground shale takes place far below water aquifers.]

Washington's Control of Energy

Keystone XL pipeline would have little impact on climate change, State Department analysis says

By Juliet Eilperin & Steven Mufson, Washington Post, Mar 1, 2013, [H/t Cooler Heads]

http://www.washingtonpost.com/national/health-science/keystone-xl-pipeline-will-not-have-huge-impact-on-climate-draft-analysis-says/2013/03/01/715491b0-82a5-11e2-b99e-6baf4ebe42df_story.html

Aide distances White House from Keystone pipeline decision

By Ben Geman, The Hill, Feb 27, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/285343-aide-distances-white-house-from-keystone-pipeline-decision>

EU climate chief: Obama would send 'strong signal' by nixing Keystone

By Ben Geman, The Hill, Feb 28, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/285505-eu-climate-chief-obama-would-send-strong-signal-by-nixing-keystone-pipeline>

Oil and Natural Gas – the Future or the Past?

New, Rigorous Assessment of Shale Gas Reserves Forecasts Reliable Supply from Barnett Shale Through 2030

By J.B. Bird, Press Release, Jackson School of Geosciences, University of Texas, Feb 28, 2013

<http://www.utexas.edu/news/2013/02/28/new-rigorous-assessment-of-shale-gas-reserves-forecasts-reliable-supply-from-barnett-shale-through-2030/>

For FAQ: <http://www.jsg.utexas.edu/news/2013/02/frequently-asked-questions-faq-beg-barnett-shale-assessment-study/>

No link to the actual study as of yet.

Shale Gas Revolution: Greatest Boom Ever For The U.S. Economy?

By Stephan Dube, Seeking Alpha, Feb 26, 2013 [H/t Gordon Fulks]

<http://seekingalpha.com/article/1224031-shale-gas-revolution-greatest-boom-ever-for-the-u-s-economy?source=yahoo>

[SEPP Comment: Good graphics showing the different classifications of natural gas by source.]

The End of the Shale Era: Big Shift in Junior Oil Exploration

By. James Stafford of Oilprice.com, Washington DC (SPX) Feb 25, 2013

http://www.energy-daily.com/reports/The_End_of_the_Shale_Era_Big_Shift_in_Junior_Oil_Exploration_999.html

[SEPP Comment: An executive of a mid-sized oil company is pessimistic about the future of oil from hydraulic fracturing of dense shale due to the high cost of the wells.]

Peak Oil, The Shale Boom and our Energy Future: Interview with Dave Summers

By James Stafford, Oil Price.com, Feb 28, 2013

<http://oilprice.com/Interviews/Peak-Oil-The-Shale-Boom-and-our-Energy-Future-Interview-with-Dave-Summers.html>

[SEPP Comment: Another pessimist.]

Domestic Oil Production At Record Level Despite Obama

Editorial, IBD, Feb 28, 2013

<http://news.investors.com/ibd-editorials/022813-646276-obama-shuts-federal-land-oil-not-private.htm>

Return of King Coal?

Coal To Win 2013 Battle With Gas, As Coal Regains Significant Generation Market Share

By John Hanger, His Blog, Feb 28, 2013 [H/t GWPF]

<http://johnhanger.blogspot.co.uk/2013/02/coal-to-win-2013-battle-with-gas-as.html>

Link to report: By Staff Writers, EIA, Feb 2013

http://www.eia.gov/forecasts/steo/pdf/steo_full.pdf

[SEPP Comment: Some may strongly disagree.]

AEP to Shutter or Refuel 2 GW of Coal Power in Return for Cheaper SO2 Control Option

By Sonel Patel, Power News, Feb 28, 2013

http://www.powermag.com/POWERnews/5419.html?hq_e=el&hq_m=2626381&hq_l=9&hq_v=5e660500d0

[SEPP Comment: The litany of illnesses and deaths is pure illusion.]

NYC Mayor Bloomberg: 'Coal is a dead man walking'

By Zack Colman, The Hill, Feb 27, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/285217-nyc-mayor-bloomberg-coal-is-a-dead-man-walking>

[SEPP Comment: Political irresponsibility.]

Oil Spills, Gas Leaks & Consequences

Deepwater Horizon: the Government on Trial?

By Bruce Thompson, American Thinker, Feb 26, 2013

http://www.americanthinker.com/2013/02/deepwater_horizon_the_government_on_trial.html

[SEPP Comment: Should the incompetence of Washington be exposed?]

Alternative, Green ("Clean") Solar and Wind

Solar power may eclipse oil in fifty years: Shell

By Yadullah Hussain, Financial Post, Feb 28, 2013

http://business.financialpost.com/2013/02/28/solar-may-eclipse-oil-in-fifty-years-shell/?_isa=e631-34fb

[SEPP Comment: That may become true. But it is no reason for government forcing expensive and unreliable solar on consumers today.]

Rethinking wind power

By Staff Writers, Boston MA (SPX), Feb 26, 2013

http://www.winddaily.com/reports/Rethinking_wind_power_999.html

Link to study: Are global wind power resource estimates overstated?

By Amanda Adams and David Keith, Environmental Research Letters, Feb 25, 2013

http://iopscience.iop.org/1748-9326/8/1/015021/pdf/1748-9326_8_1_015021.pdf

Big wind just got smaller

By Andrew Montford, Bishop Hill, Feb 26, 2013

<http://bishophill.squarespace.com/blog/2013/2/26/big-wind-just-got-smaller.html>

[SEPP Comment: See link immediately above.]

Global wind energy capacity grows 19 percent in 2012

By Staff Writers, Ottawa, Canada (SPX), Feb 25, 2013

http://www.winddaily.com/reports/Global_wind_energy_capacity_grows_19_percent_in_2012_999.html

[SEPP Comment: Why does such a growth industry need subsidies?]

Dominion Virginia's "Green" Solar Program: Bad Economics for a Misplaced Cause

By Charles Battig, Master Resource, Feb 27, 2013

<http://www.masterresource.org/2013/02/dominion-virginia-solar-program/#more-24477>

[SEPP Comment: Regulated utilities love schemes that increase their costs that can be passed onto the consumer along with a profit margin on those increased costs.]

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

France seeks to boost marine energy

By Staff Writers, Cherbourg, France (UPI), Feb 27, 2013
http://www.energy-daily.com/reports/France_seeks_to_boost_marine_energy_999.html

Alternative, Green (“Clean”) Vehicles

Delaware Taxpayers on the ‘Green’ Hook as Fisker Can’t Pay Bills

By Alyssa Carducci, Heartland, Feb 7, 2013

<http://news.heartland.org/newspaper-article/2013/02/07/delaware-taxpayers-green-hook-fisker-cant-pay-bills>

California Dreaming

Golden State's green jobs bust

By Conn Carol, Washington Examiner, Feb 27, 2013

<http://washingtonexaminer.com/day-4-californias-green-jobs-bust/article/2522728>

[SEPP Comment: One article of a five part series.]

Environmental Industry

Greens and the rule of law

By Andrew Montford, Bishop Hill, Feb 28, 2013

<http://bishophill.squarespace.com/blog/2013/2/28/greens-and-the-rule-of-law.html>

[SEPP Comment: Greenpeace guilty of piracy?]

Kenji sniffs out stupid claims by the Union of Concerned Scientists

By Anthony Watts, WUWT, Feb 26, 2013

<http://wattsupwiththat.com/2013/02/26/kenji-sniffs-out-stupid-claims-by-the-union-of-concerned-scientists/>

[SEPP Comment: Anthony’s dog, Kenji, is an official member of the Union of Concerned Scientists which “puts rigorous, independent science to work to solve our planet’s most pressing problems.”]

Other Scientific News

Deep Impact

What Exploded over Russia?

By Tony Phillips for NASA Science News, Huntsville AL (SPX), Feb 28, 2013

http://www.spacedaily.com/reports/What_Exploded_over_Russia_999.html

Researchers Find New Information About 'Snowball Earth' Period

By Staff Writers, Science Daily, Feb 28, 2013 [H/t WUWT]

<http://www.sciencedaily.com/releases/2013/02/130228155626.htm>

Link to Article: Sedimentary constraints on the duration of the Marinoan Oxygen-17 Depletion (MOSD) event. By Killingsworth, Hayles, Zhu, and Gao, PNAS, No date

<http://www.pnas.org/content/early/2013/02/05/1213154110.1>

[SEPP Comment: Did extremely high concentrations of atmospheric CO2 save the earth from the snowball’s grasp? What caused the increase in CO2?]

Dust’s excellent global adventure ends in California’s Sierra Nevada

By Anthony Watts, WUWT, Mar 1, 2013

<http://wattsupwiththat.com/2013/03/01/dusts-excellent-global-adventure-ends-in-californias-sierra-nevada/#more-81090>

[SEPP Comment: Anthony adds an interesting portrait of global aerosols to the dusty article.]

NASA Deciphering the Mysterious Math of the Solar Wind

By Karen C. Fox for Goddard Space Flight Center, Greenbelt MD (SPX) Feb 27, 2013

http://www.spacedaily.com/reports/NASA_Deciphering_the_Mysterious_Math_of_the_Solar_Wind_999.html

NASA's Aquarius Sees Salty Shifts

By Maria-Jose Vinas for Goddard Space Flight Center, Greenbelt MD (SPX) Feb 28, 2013

http://www.spacedaily.com/reports/NASAs_Aquarius_Sees_Salty_Shifts_999.html

Other News that May Be of Interest

Russia calls for united meteor defense

By Staff Writers, Krasnogorsk, Russia (UPI), Feb 26, 2013

http://www.spacedaily.com/reports/Russia_calls_for_united_meteor_defense_999.html

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BELOW THE BOTTOM LINE:

The Russian Meteor and Global Warming

By Roger Pielke Jr, His Blog, Feb 24, 2013

<http://rogerpielkejr.blogspot.com/2013/02/the-russian-meteor-and-global-warming.html>

[SEPP Comment: Sometimes humor is much needed.]

Sir Ranulph Fiennes' frostbite highlights global warming

By Lubos Motl, Reference Frame, Feb 27, 2013

<http://motls.blogspot.com/2013/02/sir-ranulph-fiennes-frostbite.html#more>

[SEPP Comment: Using simple numbers, Motl explains the foolishness of such ideas to publicize global warming, which is no longer occurring. Assume global warming contributed 0.3 °C to the temperatures of the Antarctic. "But there's still about 50 °C by which Antarctica is colder than what your fingers would find comfortable!"]

Geoengineering by coalition

By Staff Writers, Washington DC (SPX), Feb 26, 2013

http://www.terraily.com/reports/Geoengineering_by_coalition_999.html

[SEPP Comment: Protect us from the sun!]

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ARTICLES:

1. Gas Boom Projected to Grow for Decades

By Russell Gold, WSJ, Feb 28, 2013

http://online.wsj.com/article/SB10001424127887323293704578330700203397128.html?mod=IT_P_pageone_0

U.S. natural-gas production will accelerate over the next three decades, new research indicates, providing the strongest evidence yet that the energy boom remaking America will last for a generation.

The most exhaustive study to date of a key natural-gas field in Texas, combined with related research under way elsewhere, shows that U.S. shale-rock formations will provide a growing source of moderately priced natural gas through 2040, and decline only slowly after that. A report on the Texas field, to be released Thursday, was reviewed by The Wall Street Journal.

The research provides substantial evidence that there are large quantities of gas available that can be drilled profitably at a market price of \$4 per million British thermal units, a relatively small increase from the current price of about \$3.43.

The study, funded by the nonpartisan Alfred P. Sloan Foundation and performed by the University of Texas, examined 15,000 wells drilled in the Barnett Shale formation in northern Texas, mostly over the past decade. It is among the first to study the geology and economics of shale drilling, a relatively recent development made possible by hydraulic fracturing, or fracking, in which a mixture of water, sand and chemicals is pumped at high pressure into rocks to release gas.

Looking at data from actual wells rather than relying on estimates and extrapolations, the study broadly confirms conclusions by the energy industry and the U.S. government, which in December forecast rising gas production.

"We are looking at multi, multi decades of growth," said Scott Tinker, director of the Bureau of Economic Geology at the university and a leader of the study.

Millions of barrels of oil are rolling out of North Dakota each year and thousands of job-hungry Americans are rolling in, drawn to lucrative oil jobs. But the state faces a challenge: How much do you build when an oil boom may one day bust?

The shale-gas boom has led to a reorientation of the U.S. energy economy. This has led to a steep decline in coal consumption for electric generation and prompted companies to announce or consider multibillion-dollar investments to export gas and build chemical, steel and fertilizer plants that will consume enormous quantities of gas.

If these investments go forward, but gas production were to slip, higher prices for the fuel—which now accounts for 30% of electricity production and heats half of U.S. homes—are likely.

Art Berman, a petroleum geologist and consultant who has been a leading critic of what he says are overly optimistic projections of shale-gas production, said the research "is probably the most comprehensive study of the Barnett shale that will ever be done." But he said it bolsters his view that only a quarter of Barnett wells generate an economic return. The question for the industry, he said, is, "why didn't they identify the sweet spots initially, before spending \$40 billion on land and wells?"

The study does show that many of the wells drilled in the Barnett have been poor performers. And while the gas-bearing rock covers 8,000 square miles in and around Fort Worth, Texas, the study suggests it can be economically developed in an area only half that size. Some of the energy companies that spent enormous sums to lease thousands of acres in far-flung parts of the Barnett may be sitting on acreage of little value.

Mr. Tinker agrees that the study shows the Barnett is highly variable, with some areas producing enough gas to make the wells profitable and other areas generating duds.

Even so, the study concludes that 44 trillion cubic feet of natural gas will be recovered from the Barnett—more than three times what has been produced so far and about two years' worth of U.S. consumption at current rates.

The university also is examining shale formations in Pennsylvania, Louisiana and Arkansas, work that has led investigators to conclude that U.S. natural gas production won't plateau until 2040. Reports on these formations are expected to be released next year.

One reason there has been a dispute over projections of shale-gas production is that much of the research, even inside universities, has been funded by groups with either pro- or anti- energy-development agendas. Many of the latter have strong views about the environmental impact of fracking on the air and groundwater.

The Sloan Foundation said it looked into whether the researchers who performed the new study were unduly influenced by outside ties and was satisfied that "potential conflicts of interest or sources of bias have not influenced the research."

The co-lead investigator of the study, Mr. Tinker, is paid to serve on the technical advisory boards of BP and two smaller energy companies. He also receives speaking fees a few times a year for appearances before industry groups and private companies.

The Bureau of Economic Geology receives research funding from government, industry and the University of Texas. The other lead investigator, Svetlana Ikonnikova, didn't disclose any potential conflicts to the university.

Scott Anderson, who researches shale development for the Environmental Defense Fund, which is working on lowering the environmental impact of gas drilling, reviewed some of the study's preliminary results. He praised the report as "robust" and "sophisticated."

The U.S. energy industry welcomed the conclusion that a large number of successful gas wells remain to be drilled. The American Petroleum Institute, the lobbying arm of large U.S. oil and gas companies, said in a statement that the study "underscores the fact that the U.S. has substantial and growing natural gas resources that will be able to supply future domestic markets and provide exports as well."

To get at all this gas will require tens of thousands of new wells, spread throughout rural and some urban parts of the country. Even in the Barnett formation, which has been drilled intensively for a decade, there still may be room for 13,000 more wells, said Mr. Tinker.

He said that existing wells "aren't draining giant areas, but they are draining pretty efficiently from areas around them." This means that even in densely drilled areas, he said, "there is a reasonable amount of good quality drilling still to be done."

The giant Marcellus Shale in Pennsylvania and neighboring states likely contains enough gas to support the drilling of tens of thousands more wells. This could heighten growing concerns about fracking, and calls for increased government oversight of the practice.

"There are health risks that we don't have our arms around and that's a problem, " said Paul Gallay, president of Riverkeeper, a New York state environmental group critical of fracking. "We're out ahead of our science and we need to be concerned about that."

2. Desertec Industrial Initiative Drops 2050 Electricity Target

By Summer Said, WSJ, Feb 27, 2013

<http://online.wsj.com/article/SB10001424127887323478304578330221459821536.html?mod=W>
[SJ Energy 2 4 Left](#)

Desertec Industrial Initiative is backing away from its goal of meeting 20% of Europe's electricity demand by 2050 due to challenges related to grid links, the group's chief executive said.

The Germany-led initiative, founded in 2009, envisions a network of solar-thermal plants feeding electric grids both in North Africa, the Middle East and Europe. Fields of mirrors in the desert would gather solar rays from concentrated solar power to boil water, turning turbines to electrify new carbon-free networks.

But Paul van Son, the chief executive of DII, told Dow Jones Newswires that while the Arab Spring led to more interest in renewable energy to boost economies and create jobs, it is difficult to predict how fast countries in the region can push their investments in solar and wind energy.

"If the right conditions can be created, like technical, legal and financial conditions, to couple Europe with the Middle East and North Africa in an optimal way, then up to 20% of Europe's demand could be covered from an economic basis from the MENA region," Mr. van Son said.

"But we are quite sure that the 20% will not be achieved because building grids, for instance, will most likely take longer time...and there is a lot of homework to be done in these countries to create industrial cultures, cultural acceptance and regulations."

The whole project, which may total as much as €400 billion (\$522.44 billion) in investments by 2050, would help satisfy North Africa's energy demands and help Europe save €33 billion annually, according to DII.

Despite scepticism over DII's plan, Mr. van Son believes that in 30 years there is a potential that "the European electricity market will be very strongly connected to the MENA markets," as more countries in the region see the viability of renewable energy.

DII is supported by the Desertec Foundation, a global network of governments, major industrial companies and think tanks. Some of its shareholders include E.ON SE, RWE AG, Deutsche Bank AG and UniCredit.

Last year, two of the biggest industrial supporters at the founding of the initiative, German engineering conglomerate Siemens and automotive supplier Bosch, backed out.

Mr. van Son played down the setback, saying it had little effect on DII's overall effort.

"We have talks with other companies and it is a matter of time before they join," Mr. van Son said. "We are very relaxed about companies joining or leaving us, and it is not our objective to have a large number of companies but to create market conditions for our project."

3. California Girds for Electricity Woes

Increased Reliance on Wind, Solar Power Means Power Production Fluctuates

By Rebecca Smith, WSJ, Feb 26, 2013

http://online.wsj.com/article/SB10001424127887323699704578328581251122150.html?mod=W_SJ_hps_MIDDLE_Video_second

California is weighing how to avoid a looming electricity crisis that could be brought on by its growing reliance on wind and solar power.

Regulators and energy companies met Tuesday, hoping to hash out a solution to the peculiar stresses placed on the state's network by sharp increases in wind and solar energy. Power production from renewable sources fluctuates wildly, depending on wind speeds and weather.

California has encouraged growth in solar and wind power to help reduce greenhouse-gas emissions. At the same time, the state is running low on conventional plants, such as those fueled by natural gas, that can adjust their output to keep the electric system stable. The amount of electricity being put on the grid must precisely match the amount being consumed or voltages sag, which could result in rolling blackouts.

At Tuesday's meeting, experts cautioned that the state could begin seeing problems with reliability as soon as 2015.

California isn't the only state having trouble coping with a growing share of renewables. Texas also needs more resources, such as gas-fired power plants, that can adjust output in response to unpredictable production from wind farms.

Renewable power has seen a boom in both states. On Feb. 9, wind farms in Texas set a record for output, providing nearly 28% of the state's supply for the day. Production hasn't hit that level yet in California, but the state's goal is to get one-third of its electricity from renewable resources by 2020.

"I think we're going to end up closer to 40%," said Robert Weisenmiller, chairman of the California Energy Commission, the state's policy and planning agency for electricity.

A decade ago, California was hit by an electricity crisis marked by price surges and rolling blackouts, stemming from market manipulation and tightening electricity supplies in a newly deregulated market. To prevent a recurrence, state regulators passed rules requiring utilities to line up enough energy to meet even high power demand, with a special emphasis on in-state renewable resources.

"California has been well served by the procurement process since the crisis," said Steve Berberich, chief executive of the California Independent System Operator, which runs the state's grid. "The problem is we have a system now that needs flexibility, not capacity."

Changes in California's market have attracted lots of new generation; the state expects to have 44% more generating capacity than it needs next year. Grid officials say they expect the surplus to fall to 20% by 2022, though it will remain high for about a decade.

However, the surplus generating capacity doesn't guarantee steady power flow. Even though California has a lot of plants, it doesn't have the right mix: Many of the solar and wind sources added in recent years have actually made the system more fragile, because they provide power intermittently.

Electricity systems need some surplus, so they can cover unexpected generator outages or transmission-line failures, but having too much can depress the prices generators can charge for electricity. In part because of low power prices, many gas-fired generation units aren't profitable enough to justify refurbishments required by pending federal regulations under the Clean Water Act. That means they are likely to be shut by 2020, adding to the state's power woes.

By July, state officials hope to have a plan in place addressing the problem. Turf issues among state and federal regulators could complicate the process.

Michael Peevey, president of the California Public Utilities Commission, which regulates utilities, said action is clearly needed, but he isn't sure whether the market needs "small adjustments or a major overhaul."

Utility executives are calling for immediate action, pointing to the risk of rolling blackouts. "We see the issue hitting as soon as 2013, 2014, 2015," said Todd Strauss, the head of planning and analysis for PG&E Corp., a big utility serving Northern California, who attended Tuesday's meeting. "If we thought it was far out, we wouldn't be here."

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