The Week That Was: 2013-04-20 (April 20, 2013)
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The Science and Environmental Policy Project

Quote of the Week:
What we observe is not nature itself, but nature exposed to our method of questioning.—Werner Karl Heisenberg [H/t TRCS Research Team]

Number of the Week: 18 to 1

April Fools: April is upon us, and it is time to hold the SEPP April Fools contest. Using the following criteria, readers are requested to submit their nomination of a government official or political leader along with a sentence or two why that person should be considered:

- The nominee has advanced, or proposes to advance, significant expansion of governmental power, regulation, or control over the public or significant sections of the general economy.
- The nominee does so by declaring such measures are necessary to protect public health, welfare, or the environment.
- The nominee declares that physical science supports such measures.
- The physical science supporting the measures is flimsy at best, and possibly non-existent.

The final selection will be determined by a special SEPP panel. The name of the winner will be emblazoned with names of other winners of the great SEPP trophy – The Jackson – a lump of coal named after the first winner, (former) EPA administrator Lisa P. Jackson. Please submit your nomination to Ken@SEPP.org.

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

TRCS: Without question, one of the most spectacular scientific accomplishments of the 20th century was the Apollo landing of humans on the moon and their return. The mission required exhaustive testing of the concepts, models, and equipment against all appropriate data. If the data did not exist, it had to be compiled. Last year, some retired members of the Apollo team, and others, formed The Right Climate Stuff (TRCS) research team, volunteering to apply their skills to examine the scientific basis of the claim that human emissions of carbon dioxide (CO2) are causing dangerous global warming and/or climate change, which they term as Carbon-based Anthropogenic Global Warming (AGW).

Last week, TRCS team issued their findings: “Anthropogenic Global Warming Science Assessment Report.” This clearly-written 21 page assessment states that the empirical evidence of Carbon-based AGW is sorely lacking.

The major findings include:

- Carbon-based AGW is not settled.
- Natural processes dominate climate change (although many are poorly understood).
• Non-Carbon-based anthropogenic forcings are significant (land use change, urban heat island effect, black carbon, etc.)
• Carbon-based AGW impact appears to be muted.
• Empirical evidence for Carbon-based AGW does not support catastrophe.
• The threat of net harmful total global warming, if any, is not immediate and thus does not require swift corrective action.
• The US Government is over-reacting to concerns about AGW.

The report sharply differs from the 1100-plus page Draft National Climate Assessment issued by the U.S. Global Change Research Program (USGCRP), which is heavy on computer-driven speculation, but exceedingly light on physical evidence on Carbon-based AGW.

Also, TRCS report illustrates that some of the threats exaggerated in the USGCRP report are without a scientific basis. For example, in the treatment of sea level rise, the USGCRP report projects, that due to uncertainty in the models, 21st century sea level rise will be anywhere between 7 inches to up to 4 feet, and even up to 6 feet. The TRCS report states that rapid sea level rise can only come from extreme melting of ice on Greenland and on Antarctica and such a melting would require centuries, not decades.

The Northern Hemisphere is warming, and ice melt in Greenland needs monitoring. However, the TRCS report finds the 20th century warming to be in the range of natural variability. Further, suggesting that Antarctica will significantly contribute to sea level rise requires an ignorance of the extremely cold climate of Antarctica and its geology (the land mass is bowl-shaped). Thus there is no reason to assume a 21st century sea level rise to be significantly greater than 20th century rise – about 7 inches.

Among examples of US government over-reaction concerning AGW, the report finds the EPA’s determination that CO2 is a pollutant that must be controlled to be scientifically embarrassing.

The report recommends that models be validated before used in critical decision-making, which has not been done for climate models, and it is unlikely to be done. The report states that the natural climate-change mechanisms must be successfully modeled before we can hope to successfully model the earth surface temperature response to CO2 emissions. The Climate Establishment has ignored natural mechanisms other than changes in solar irradiance (daylight).

According to its web site, the FY 2012 budget request for the USGCRP was $2.6 Billion. The Apollo TRCS research team was self-financed – they paid for it without corporate or government support – which contradicts the saying you get what you pay for. The members of the TRCS research team should be congratulated for its contribution to empirical scientific work. See links under Challenging the Orthodoxy

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CATO Report: The Center for the Study of Science of the CATO Institute issued a lengthy, detailed critique of the USGCRP report by a team headed by Patrick Michaels. The CATO report finds many major errors and misleading statements in the USGCRP report. It will be interesting to see if the USGCRP corrects these errors and misleading statements. If it does not, perhaps its entire budget should be sequestered.

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**Projections v. Reality:** On his blog, Roy Spencer presents a comparison of the lower atmospheric temperature trends as projected from 44 climate models and as calculated from satellite observations. John Christy provided the model projections. Spencer used the both the University of Alabama, Huntsville (UAH) and the Remote Sensing Systems (RSS) calculations. The disparity is striking. Since the greenhouse effect takes place in the lower atmosphere, this is further evidence that the planet is not as sensitive carbon dioxide emissions as advocated by the UN Intergovernmental Panel on Climate Change (IPCC).

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**The Easterbrook Affair:** In March, Don Easterbrook, professor emeritus of geology at Western Washington University, presented his views on global warming/climate change to a committee of the Washington State Senate. In an editorial in a local newspaper, the active faculty of the Geology Department claimed Easterbrook’s views are not scientifically valid and not supported by the overwhelming evidence on the topic. They termed Easterbrook assertions to be poor-quality science.

Easterbrook has answered the challenge. You be the judge. In addition, astrophysicist Gordon Fulks proposed a seminar on climate science at WWU. The geology department backed away with one professor admitting insufficient knowledge in the subject to debate. Please see links under Easterbrook Affair.

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**Back to Court:** On Friday, The Southeastern Legal Foundation filed a Petition for Writ of Certiorari requesting the Supreme Court hear the case concerning the EPA’s finding that greenhouse gases (carbon dioxide included) endanger human health and welfare. The US Court of Appeals for the District of Columbia Circuit found against the petitioners. The petitioners include members of Congress, private corporations, associations, CEI, FreedomWorks, and SEPP. The Supreme Court accepts very few of these Writs and it is impossible to predict if it will accept this one. However, it is only on the Supreme Court level that we can have any hope of breaking the lock Federal Agencies have in the Appeals Courts on what constitutes science. Please see link under Litigation Issues.

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**Carbon Dioxide Emissions:** The International Energy Agency (IEA) reports that there has been virtually no drop in carbon dioxide emissions per unit of energy produced around the world during the period from 1990 to 2010. This is in spite of billions of dollars spent for subsides on alternative energy sources such as wind and solar. The report brings up the contrived goal of preventing a rise in temperatures of 2 deg C from the start of the industrial revolution (which coincided with the latter part of the Little Ice Age). By their actions, or non-actions, most countries appear to be indifferent to this contrived goal and have more important considerations.

The report urges governments to do more in subsidizing unreliable alternative energy sources and employing Carbon Capture and Storage (CCS), a technology which has never been demonstrated to be commercially reliable or viable. Similar to the World Bank, IEA is no longer a dispassionate reporter of facts, but a climate alarmist, advocacy organization.

Complicating matters, the EU Parliament voted to prevent the suspension of a scheduled carbon emissions permit auction. Prices of carbon emissions permits plunged, causing considerable consternation among supporters of carbon trading schemes. Please see links under Questioning Green Elsewhere, Expanding the Orthodoxy, and Article # 2.
Natural Gas: The US spot price for natural gas at the important Henry Hub has increased from low last spring below $2 per million BTU (MMBtu) to above $4 MMBtu this week. The increase is not entirely unexpected because the 2012 price was below production costs, as can be witnessed by the rapid shift of rigs from drilling for natural gas to drilling for oil. According to the EIA, there are 1771 active rigs as of April 12, with only 21% of the total drilling for natural gas. Of the total rigs, 62% are engaged in horizontal drilling, which was largely unknown a decade ago. EIA projections of future prices vary greatly, in part because they depend on projections of economic growth rates and expected rates of resource recovery from natural gas wells. The technology is not sufficiently mature to permit estimating resource recovery with any degree of confidence.

The increase in natural gas prices has resulted in a decline in the generation of electricity from natural gas. As expected, the proponents of coal and renewable point to the price volatility as a reason why natural gas is an inferior fuel for generating electricity. What they ignore is that spot prices are often not the basis for costs, but long-term contracts are. Additionally, since both coal and natural gas generate reliable electricity, a competition between the fuels tends to lower the costs to the consumer.

Those who use the natural gas spot variability to promote wind and solar are saying, in essence, the cost volatility justifies electricity unreliability. Bureaucrats who make the claim are saying that consumers prefer high cost-price stability to electricity reliability. The assertion is doubtful. Please see links under Energy Issues – US and Return of King Coal?, and http://www.eia.gov/naturalgas/weekly/#tabs-rigs-2.

EPA and Health: EPA repeatedly asserts increased regulation of coal-fired power plants will deliver enormous health benefits, including reduction in asthma attacks, the causes of which are not clear. In Investor’s Business Daily, senior writer John Merline states that a group of six major categories of air pollutants have fallen 62% since 1990. Yet, according to a September 2012 report of the American Lung Association, a great supporter and beneficiary of the EPA, the number of people suffering from asthma in the US continues to grow. Clearly, there is something wrong with the EPA health-benefit models.

Also, the EPA does not consider the possible harm it causes by increasing the cost of electricity, and effectively prohibiting replacement of old coal-fired plants with modern plants that greatly increase energy efficiency and significantly reduce pollutants. Please see links under EPA and other Regulators on the March, Return of King Coal?, and http://www.lung.org/finding-cures/our-research/trend-reports/asthma-trend-report.pdf.

Old Pipelines: Sixty-year-old pipelines have ruptured over the past several years spilling crude oil, or emitting natural gas. The Wall Street Journal reports on the changes in welding technology that makes modern pipelines safer than those built decades ago. Please see Article # 4

Antarctic Ice: Two new reports on findings from Antarctic ice cores came out this week, causing some confusion and significant blaring among alarmists about sea level rise.
One paper examined 18 ice cores of the West Antarctic Ice Sheet. It found that: “Changes in atmospheric circulation over the past five decades have enhanced the wind-driven inflow of warm ocean water onto the Antarctic continental shelf, where it melts ice shelves from below. Atmospheric circulation changes have also caused rapid warming over the West Antarctic Ice Sheet, and contributed to declining sea-ice cover in the adjacent Amundsen–Bellinghausen seas. It is unknown whether these changes are part of a longer-term trend.” The current thinning is within what has occurred at different times in the past 2,000 years.

The second study was a thousand-year temperature reconstruction from a single ice core from James Ross Island, which is near the northern tip of the Antarctic Peninsula. It concludes the current summer ice melt is the greatest in the past 1,000 years. What is disturbing is what was omitted in the abstract and an accompanying article. One, the island is on the east side of the peninsula, thus is subject to different ocean currents than the West Antarctic Ice Sheet. Two, at latitude of approximately 64 deg S, the island is outside of the Antarctic Circle. And, three, James Ross Island “is a large basaltic volcano with a shield profile. It has a basal diameter of 35-60 km and a summit (Mt Haddington) at 1500 m and it is the largest volcano by far in the Antarctic Peninsula region, and one of the largest in Antarctica.” [Emphasis added]

Generalizations from the James Ross Island ice core are problematic. Please see links under Changing Cryosphere – Land / Sea Ice, Communicating Better to the Public – Make things up, and http://www.volcano.group.cam.ac.uk/volcanoes/james-ross-island/

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Number of the Week: 18 to 1. As expressed immediately above, 18 ice cores of the West Antarctic Ice Sheet showed nothing beyond what has occurred in the past 2,000 years. One problematic ice core from James Ross Island ice shows melt beyond what occurred in the past 1,000 years.

#precedented

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

1. Climate Change Conversation Aborted
By S. Fred Singer, American Thinker, Apr 19, 2013
http://www.americanthinker.com/2013/04/climate_change_conversation_aborted.html
[SEPP Comment: See the initial article under Defending the Orthodoxy.]

2. Vote Leaves EU Emissions Trading in Tatters
By Sean Carney, WSJ, Apr 16, 2013 [H/t Stefan Björklund]
http://online.wsj.com/article/SB10001424127887324030704578426280702003120.html?mod=rss_markets_main

3. Rise in U.S. Gas Production Fuels Unexpected Plunge in Emissions
By Russell Gold, WSJ, Apr 18, 2013
http://online.wsj.com/article/SB10001424127887324763404578430751849503848.html

4. Big Spills From Aging Oil Pipelines
Seam Failures From Old, Outmoded Welds Are Under Study After Exxon and Chevron Lines Rupture
By Daniel Gilbert, WSJ, Apr 16, 2013

NEWS YOU CAN USE:

Climategate Continued
Tingley and Huybers Exclude Mt Logan
By Steve McIntyre, Climate Audit, Apr 14, 2013
http://climateaudit.org/2013/04/14/tingley-and-huybers-exclude-mt-logan/
Perhaps the greatest single difference between being a “real climate scientist” and policies recommended here is that “real climate scientists” do not hesitate in excluding data ex post because it goes the “wrong” way, a practice that is unequivocally condemned at Climate Audit and other critical blogs which take the position that criteria have to be established ex ante:

The Hockey Team and Reinhart-Rogoff
By Steve McIntyre, Climate Audit, Apr 18, 2013
http://climateaudit.org/2013/04/18/the-hockey-team-and-reinhart-rogoff/#more-17835
[SEPP Comment: To hockey-team members, major errors do not matter.]

PAGES2K, Gergis and Made-for-IPCC Journal Articles
By Steve McIntyre, Climate Audit, Apr 19, 2013
http://climateaudit.org/2013/04/19/pages2k-gergis-and-made-for-ipcc-journal-articles/
[SEPP Comment: Recycling is in vogue in Nature – publishing an article for inclusion in the IPCC AR5 that did not meet the standards of Journal of Climate.]

Donald ducks
By Andrew Montford, Bishop Hill, Apr 19, 2013
http://bishophill.squarespace.com/blog/2013/4/19/donald-ducks.html
[SEPP Comment: Caught misstating the major criticism of the hockey-stick.]

Challenging the Orthodoxy
Anthropogenic Global Warming Science Assessment Report
The Right Climate Stuff Research Team, Apr 2013

The Right Climate Stuff Team Releases New Report,
Finds 'No Convincing Evidence Indicating Our Planet Is in a Climate Crisis'
By Staff Writers, Heartland Institute, Apr 13, 2013
http://heartland.org/right-climate-stuff

The Missing Science from the Draft National Assessment on Climate Change
By Patrick Michaels, et al, CATO, April, 2012
[SEPP Comment: Links to the 133 page review.]

Global Warming Slowdown: The View from Space
By Roy Spencer, His Blog, Apr 16, 2013

The Strange Case of Global Warming
By Ivar Giaever, The 62nd Lindau Nobel Laureate Meeting, 2012 [H/t Larry Gould]
http://www.mediatheque.lindau-nobel.org/#/Video?id=1410
[SEPP Comment: Answering the question: is global warming a pseudo-science?]

The Climate Horror Picture Show, Brought to You by Dodgy Science
By Patrick Michaels, Forbes, Apr 18, 2013

Belgian Scientists: Double Standards in Climate Change
By István E. Markó, Alain Préat, Henri Masson and Samuel Furfar, GWPF, Apr 13, 2013
[SEPP Comment: French language press does not cover challenges to the orthodoxy.]

Defending the Orthodoxy
Gore calls for action on climate change
Nobel Peace Prize winner challenges climate change denier
By Mary Fitzgerald, Irish Times, Apr 17, 2013

Climate Change Conversations
By Bassam Z. Shakhashiri & Jerry A. Bell, Science Mag, Apr 5, 2013
http://www.sciencemag.org/content/340/6128/9.full

Climate Change: The Moral Choices
The effects of global warming will persist for hundreds of years. What are our responsibilities and duties today to help safeguard the distant future? That is the question ethicists are now asking.
By David Rotman, MIT Technology Review, Apr 11, 2013 [H/t Bishop Hill]
[SEPP Comment: What is the morality in promoting what Ivar Giaever calls a pseudo-science?]

Questioning the Orthodoxy
The failure of climate change mitigation policy
By Martin Livermore, Scientific Alliance, Apr 18, 2013

Yes, Let's Please Have More Conversations About Global Warming
By James Taylor, Forbes, Apr 17, 2013

The Dam Is About to Break
By Dennis Avery, Center for Global Food Issues, Apr 11, 2013
Mother of German Green Weeklies, Die Zeit, Shocks Readers...Now Casts Doubt On Global Warming!
By P. Gosselin, No Tricks Zone, Apr 19, 2013

[SEPP Comment: A bit of humor.]

Is the UK heading for ANOTHER Arctic winter? Met Office calls emergency meeting to discuss if melting ice is causing Britain to freeze
Dr Julia Slingo at the Met Office calling a meeting of world climate experts
She is concerned melting Arctic ice is causing Britain's climate to change
Comes after lowest April temperature for nearly 100 years was recorded
By Emma Innes, Mail Online, Apr 11, 2013

Is the Great Climate Alarm Winding Down?
By Douglas Gregory, Master Resource, Apr 18, 2013
http://www.masterresource.org/2013/04/climate-alarm-winding-down/#more-25193

History trumps climate scientist
Climate alarmist claims are at odds with reality
Lawrence Solomon, Financial Post, Apr 18, 2013
http://opinion.financialpost.com/2013/04/18/lawrence-solomon/

[SEPP Comment: Climate history contradicts the Climate Establishment.]

Climate scientists struggle to explain warming slowdown
Bu Alister Doyle, Reuters, Apr 16, 2013 [H/t Dennis Avery]
http://www.reuters.com//assets/print?aid=USBRE93F0AJ20130416

Back To The Penalty Box...Chinese Paleo-Climatologists Slap Down High-Sticking Michael Mann!
By P. Gosselin, No Tricks Zone, Apr 15, 2013

Questioning European Green
Margaret Thatcher: Global Warming Provides a Marvelous Excuse for Global Socialism
By Marita Noon and Michael Economides, Energy Tribune, Apr 18, 2013

Biofuels: 'Irrational' and 'worse than fossil fuels'
By Matt McGrath, BBC, Apr 14, 2013 [H/t GWPF]
It creates a financial incentive to buy refined palm oil, cook a chip in it to turn it into used cooking oil and then sell it at profit...”

[SEPP Comment: Political values creating artificial economic value.]

It's insane that we're fleeced by the energy giants AND help them avoid tax!
By Stephen Glover, Daily Mail, Apr 17, 2013 [H/t GWPF]

Questioning Green Elsewhere
IEA: Carbon Mitigation Efforts Have Stalled Despite Rapid Renewables Expansion
By Sonal Patel, Power Mag, Apr 18, 2013
http://www.powermag.com/POWERnews/5545.html?hq_e=el&hq_m=2656272&hq_l=8&hq_v=5e660500d0
Link to report: Tracking Clean Energy Progress 2013
By Staff Writers, OECD/IEA, 2013

Clean Energy Investment Falls 22% as Subsidy Cuts Stall Projects
By Sally Bakewell, Bloomberg, Apr 14, 2013 [H/t No Tricks Zone]

Renewable power just too costly
By Donald Dewees, Financial Post, Apr 13, 2013
http://opinion.financialpost.com/2013/04/17/renewables-just-too-costly/

The missing costs of carbon policies
By Terence Corcoran, Financial Post, Apr 17, 2013
http://opinion.financialpost.com/2013/04/17/carbon-policies/

Expanding the Orthodoxy
World Bank President: Climate Change Is Urgent 'Today' Problem
By Cindy Huang, PBS News, Apr 18, 2013

US, China agree climate change working group
By Staff Writers, AFP, Apr 13, 20113

China climate chief says EU CO2 crisis will not hurt domestic plans
By David Stanway, Reuters, Apr 18, 2013 [H/t Bob Carter]
http://www.reuters.com/article/2013/04/18/us-china-climate-eu-idUSBRE93H0ER20130418

As Arctic Ice Melts, It's A Free-For-All For Oil ... And Tusks
Funding Fights
International Climate Change Financing: The Green Climate Fund (GCF)
By Richard Lattanzio, CRS, Apr 16, 2013 [H/t Timothy Wise]
http://fpc.state.gov/documents/organization/207882.pdf

[SEPP Comment: A yet to be fleshed-out program to pay off the rich in poor countries to keep their countries poor. Many parties expect the capitalization and operation of the GCF after the November 2013 UNFCCC COP meeting in Warsaw, Poland. Thankfully, Congress has yet to allocate funds.]

Seeking a Common Ground
Numeracy in Climate Discussions – how long will it take to get a 6 deg. C rise in temperature?
Calculations by William Happer, WUWT, Apr 18, 2013

[SEPP Comment: A mathematical exercise showing the absurdity of claims that CO2 emissions will result in a 6 deg C rise in temperatures.]

Communicating Better to the Public – Exaggerate, or be Vague?
Study reveals seasonal patterns of tropical rainfall changes from global warming
By Staff Writers, Honolulu HI (SPX), Apr 18, 2013

Link to paper: Patterns of the seasonal response of tropical rainfall to global warming
By Ping Huang, et al, Nature Geoscience, Apr 14, 2013
http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo1792.html

[SEPP Comment: A study based showing what 18 climate models project is not particularly meaningful. Do observations support the models?]

Sea level rise: Jeopardy for terrestrial biodiversity on islands
By Staff Writers, Vienna, Austria (SPX), Apr 15, 2013
http://www.terradaily.com/reports/Sea_level_rise_Jeopardy_for_terrestrial_biodiversity_on_islands_999.html

Link to paper: Vulnerability of terrestrial island vertebrates to projected sea-level rise.
By Wetzel, Beissmann, Penn, & Jetz, Global Change Biology, Mar, 2013
http://jetzlab.yale.edu/sites/default/files/gcb12185.pdf

[SEPP Comment: Start off with a false premise, then go on from there.]

Cutting specific pollutants would slow sea level rise
By Staff Writers, Boulder CO, (SPX) Apr 16, 2013
http://www.terradaily.com/reports/Cutting_specific_pollutants_would_slow_sea_level_rise_999.html
Communicating Better to the Public – Make things up.
New insight into accelerating summer ice melt on the Antarctic Peninsula
By Staff Writers, London, UK (SPX), Apr 16, 2013 [H/t Viv Forbes]
http://www.terradaily.com/reports/New_insight_into_accelerating_summer_ice_melt_on_the_Antarctic_Peninsula_999.html
Link to paper: Acceleration of snow melt in an Antarctic Peninsula ice core during the twentieth century
http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo1787.html

Easterbrook Affair
WWU faculty find overwhelming scientific evidence to support global warming
By WWU Geology Faculty, Bellingham Herald, Mar 31, 2013
http://www.bellinghamherald.com/2013/03/31/2943649/wwu-faculty-find-overwhelming.html#disqus_thread

Easterbrook disputes WWU faculty global warming opinions
By Don Easterbrook, Bellingham Herald, Apr 14, 2013 [H/t Gordon Fulks]
http://www.bellinghamherald.com/2013/04/14/2958336/easterbrook-disputes-wwu-faculty.html#storylink=misearch

The Second-string ‘Hockey Team’
By Gordon Fulks, ICECAP, Apr 16, 2013
http://icecap.us/index.php/go/new-and-cool/the_second_string_hockey_team/

Models v. Observations
Climate models fail to ‘predict’ US droughts
Simulations identify past megadroughts, but at wrong times.
By Quirin Schiermeier, Nature, April 16, 2013 [H/t Pat Michaels]

Changing Weather
Stubbed Toe? Blame Global Warming
By Walter Russell Mead, Via Meadia, Apr 14, 2013
http://blogs.the-american-interest.com/wrm/2013/04/14/stubbed-toe-blame-global-warming/

Spring rains bring life to Midwest granaries but foster Gulf of Mexico 'Dead Zone'
By Staff Writers, New Orleans LA (SPX), Apr 15, 2013
[SEPP Comment: Turning good news into bad news.]

Changing Cryosphere – Land / Sea Ice
West Antarctic Change Indistinguishable from Natural Variability
By Doug Hoffman, The Resilient Earth from GWPF, Apr 18, 2013
http://www.thegwpf.org/west-antarctic-change-indistinguishable-natural-variability/
Recent Antarctic climate, glacier changes at the ‘upper bound’ of normal
By Vince Stricherz, Press Release, Univ. of Washington, Apr 14, 2013 [H/t Carl de Boor]

[SEPP Comment: Same facts written differently than link immediately above.]

Antarctic ice sheet melt 'not that unusual', latest ice core shows
Warm slushy spells like the 1990s have happened before
By Lewis Page, The Register, Apr 15, 2013 [H/t ICECAP]
http://www.theregister.co.uk/2013/04/15/western_antarctic_melting_nothing_unusual/

Link to article: Recent climate and ice-sheet changes in West Antarctica compared with the past 2,000 years
http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo1778.html

[SEPP Comment: 18 ice cores shown We conclude that the uncertain trajectory of tropical climate variability represents a significant source of uncertainty in projections of West Antarctic climate and ice-sheet change.]

Antarctica gaining Ice Mass — and is not extraordinary compared to 800 years of data
By Jo Nova, Her Blog, Apr 16, 2013

Review of Recent Scientific Articles by NIPCC
For a full list of articles see www.NIPCCreport.org

Meteorology and Mortality in Rural Bangladesh
http://www.nipccreport.org/articles/2013/apr/16apr2013a1.html

Ecosystem Trophic Relationships in a Warmer World
http://www.nipccreport.org/articles/2013/apr/16apr2013a4.html

The Global Warming-ENSO Connection
http://www.nipccreport.org/articles/2013/apr/17apr2013a1.html

The Global Warming-GLOBAL RUNOFF CONNECTION
http://www.nipccreport.org/articles/2013/apr/17apr2013a2.html
In the concluding words of the research team, “we show that an intensification of the global water cycle due to global warming is not obvious over the last two decades,” which is not exactly what one would expect to be the case during a period of supposedly "unprecedented" over-heating of the planet.

The Political Games Continue
Carbon Tax...Are Republicans Really That Stupid?
By Larry Bell, Forbes, Apr 16, 2013
http://www.forbes.com/sites/larrybell/2013/04/16/carbon-tax-are-republicans-really-that-stupid/

Litigation Issues
Bachmann, conservative groups ask Supreme Court to stop EPA climate rules
By Ben Geman, The Hill, Apr 19, 2013

Cap-and-Trade and Carbon Taxes
Failed Emissions Trading Reform: 'The End of a European Climate Policy'
By Christian Teets, Spiegel, Apr 17, 2013 [H/t Roger Cohen]
[SEPP Comment: Lamenting the possible demise of the EU Carbon trading scheme as the EP Parliament refused to pass a delay on the sale of more carbon certificates. Great propaganda photo of steam condensing.]

EU Refuses to Resuscitate Its Dying Carbon Market
By Walter Russell Mead, Via Meadia, Apr 16, 2013
http://blogs.the-american-interest.com/wrm/2013/04/16/eu-refuses-to-resuscitate-its-dying-carbon-market/

UK Industry Faces ‘Catastrophic’ Problems over Carbon Floor Price
By Pilita Clark & Chris Tighe, Financial Times, GWPF, Apr 4, 2013
http://www.thegwpf.org/uk-industry-faces-catastrophic-problem-carbon-floor-price/

Labor in a $7 billion black hole as world carbon price collapses
By Gemma Jones, Daily Telegraph, AU, Apr 18, 2013

Europe's climate chief vows to fight on to save emissions trading scheme
Connie Hedegaard's attempts to introduce longer-term reforms will face fierce opposition from a powerful business lobby
By Fiona Harvey, Guardian, UK, Apr 17, 2013
http://www.guardian.co.uk/environment/2013/apr/17/europe-climate-chief-vow-save-emissions-trading

Green energy on the back foot after carbon trading blow
By Matt McGrath, BBC, Apr 18, 2013 [H/t Chris Horner]

Subsidies and Mandates Forever
Federal Support for Renewable and Advanced Energy Technologies
By Staff Writers, GAO, Apr 16, 2013 [H/t Timothy Wise]
Link to full report: Federal Support for Renewable and Advanced Energy Technologies
Testimony by Frank Rusco, GAO, Apr 16, 2013
[SEPP Comment: Protecting the citizens from imported oil and volatile energy costs by subsidizing costly and unreliable wind and solar, costly electric and hybrid vehicles, etc. and using multiple and overlapping programs. These credit subsidy and loan guarantee programs support products that few consumers want.]

EPA and other Regulators on the March
EPA proposes water pollution rules for power plants
By Zack Colman, The Hill, Apr 19, 2013
http://thehill.com/blogs/e2-wire/e2-wire/295095-epa-proposes-water-pollution-rules-affecting-power-plants

EPA Delays GHG Emissions Decision and Adds to FutureGen Challenges
By Gail Reitenbach and Sonal Patel, Power Mag, Apr 18, 2013
http://www.powermag.com/POWERnews/5525.html?hq_e=el&hq_m=2656272&hq_l=5&hq_v=5e660500d0

EPA faces lawsuit threats over blown climate rule deadline
By Ben Geman, The Hill, Apr 17, 2013
http://thehill.com/blogs/e2-wire/e2-wire/294615-epa-faces-lawsuit-threats-over-blown-climate-rule-deadline

EPA’s Tier 3 tyranny
By Paul Driessen, SPPI, Apr 17, 2013
http://sppiblog.org/news/epas-tier-3-tyranny

EPA’s Dirty Secret About The Environment
By John Merline, IBD, Apr 19, 2013

Energy Issues – Non-US
Why shipping oil by rail may not be a substitute for Keystone
By Patrick Rucker, Reuters, Apr 13, 2013

Wind Power Incidents in China: Investigation and Solutions
By Zeng Ming, et al. North China Electric Power University, Power Mag, Apr 1, 2013
… the authors examine and sort wind technology failures by type and explore their causes in an effort to offer solutions.

Energy Issues -- US
Electricity from Natural Gas 16% Down
By Staff Writer, Energy Manager Today, Apr 12, 2013 [H/t George Nicholas]

Washington’s Control of Energy
Will Obama Put Coal out of Business?
By Rich Duprey, Motley Fool, Apr 10, 2013

Alaska lawmakers slash oil taxes, hope to spur output
By Yereth Rosen, Reuters, Apr 15, 2013
http://www.reuters.com/article/2013/04/15/us-alaska-oiltaxes-idUSBRE93E06J20130415
[SEPP Comment: Washington’s denial of additional development of oil fields in Alaska is having an impact on the state’s budget.]

Oil and Natural Gas – the Future or the Past?
Study: Fracked gas far more climate-friendly than coal
By Ben Geman, The Hill, Apr 19, 2013
Link to the article: Life Cycle Greenhouse Gas Emissions and Freshwater Consumption of Marcellus Shale Gas
By Ian Laurenzi and Gilbert Jersey, ExxonMobil Research and Engineering, Environmental Science and Technoloby, Apr 2, 2013
http://pubs.acs.org/doi/abs/10.1021/es305162w
We conclude by comparing the life cycle impacts of Marcellus gas and U.S. coal: The carbon footprint of Marcellus gas is 53% (80% CI: 44–61%) lower than coal, and its freshwater consumption is about 50% of coal.

Alaska, DOE agree to study unconventional energy
Alaska, federal Department of Energy, sign agreement to study unconventional energy in Arctic
By Dan Joling, AP, Apr 17, 2013
[SEPP Comment: Possible development of methane hydrates.]
Return of King Coal?
EIA Projects Coal Generation Gains Due to Increasing Gas Prices
By Gail Reitenbach, Power Mag, Apr 11, 2013
http://www.powermag.com/POWERnews/5519.html?hq_e=el&hq_m=2651821&hq_l=8&hq_v=5e660500d0

Natural gas reality shows its teeth
By Frank Clemente, Energy Facts, Apr 17, 2013

A War on Coal?
By Staff Writers, NCPA, Apr 15, 2013
Link to report: An EPA War on Coal?
By Richard Gordon, Regulation, Spring 2013
[SEPP Comment: It began with poorly conceive laws long before the current administration. The current administration only chooses to exploit these laws to acquire additional power.]

Oil Spills, Gas Leaks & Consequences
University of Tennessee professor's research shows Gulf of Mexico resilient after spill
By Staff Writers, Knoxville TN (SPX), Apr 15, 2013

Nuclear Energy and Fears
Small Nuclear Reactors
By Donn Dears, Power for USA, Apr 16, 2013
http://dddusmmana.wordpress.com/2013/04/16/small-nuclear-reactors/

Alternative, Green (“Clean”) Solar and Wind
Response to Critics of the Fraser Institute Report: Ontario’s Green Energy Act Causing Energy Prices to Soar
By Ross McKitrick, His Blog, Apr 18, 2013
[SEPP Comment: An economist who can write with a sharp quill. Wind power advocates beware.]

The free market strikes back. Renewables Investment plummets 22% in first quarter of 2013
By Jo Nova, Her Blog, Apr 20, 2013
[SEPP Comment: Provides a good infill for a dry Bloomberg report.]
U.S. leads in wind installations
By Staff Writers, Washington (UPI), Apr 12, 2013
http://www.winddaily.com/reports/US_leads_in_wind_installations_999.html
[SEPP Comment: Chinese numbers, (under Energy Issues – Non US) which end in 2011, show 11,409 turbines installed in 2011, this article reports 6,700 installed in US in 2012.]

Solar becomes single largest source of new grid capacity in the USA
By Staff Writers, Washington DC (SPX), Apr 16, 2013
http://www.solardaily.com/reports/Solar_becomes_single_source_of_new_grid_capacity_in_the_USA_999.html
[SEPP Comment: Wind claims 13 GW of new capacity (link immediately above) solar claims 3.3 GW of new capacity. Both claims cannot be right, yet both can be very wrong. Unreliable capacity is not the same as reliable (dispatchable) power.]

Alternative, Green (“Clean”) Energy -- Other
Thinktank: Biofuels are too expensive - and they don’t always reduce emissions
By Robin Webster, Carbon Brief, Apr 15, 2013
http://www.carbonbrief.org/blog/2013/04/chatham-house-on-biofuels
Link to study: The Trouble with Biofuels: Costs and Consequences of Expanding Biofuel Use in the United Kingdom
By Rob Bailey, Chatham House, April 2013

Is it time to end ethanol vehicle fuel mandates?
By Steve Goreham, Washington Times, Apr 16, 2013

Sapphire Energy's Warner discusses efforts to commercialize green crude
Transcript by Staff Writer, EETV, Apr 16, 2013
http://www.eenews.net/tv/transcript/1664

Cost-saving measure to upgrade ethanol to butanol -- a better alternative to gasoline
By Staff Writers, New Orleans LA (SPX), Apr 15, 2013
http://www.biofueldaily.com/reports/Cost_saving_measure_to_upgrade_ethanol_to_butanol_a_better_alternative_to_gasoline_999.html

Carbon Schemes
Kevin Rudd wins Golden Fleece Award
By Viv Forbes, WUWT, Apr 19, 2013
http://wattsupwiththat.com/2013/04/19/kevin-rudd-wins-golden-fleece-award/

CO2 removal can lower costs of climate protection
By Staff Writers, Potsdam Germany (SPX), Apr 16, 2013
http://www.terradaily.com/reports/CO2_remove_999.html
Link to paper: Is atmospheric carbon dioxide removal a game changer for climate change mitigation?
By Kriegler, Edenhofer, Reuster, Luderer, and Klien, Feb, 2013
http://link.springer.com/article/10.1007%2Fs10584-012-0681-4

California Dreaming
Chevron Defies California On Carbon Emissions
By Ben Elgin & Peter Waldman, Bloomberg, Apr 18, 2013
[SEPP Comment: Chevron’s management is becoming aware that trying to use politics to gain advantage over its completion can be costly unless the technology it is counting on is fully developed for commercial use.]

California Environmental Law Needs Reform, Not Excuses
Editorial, IBD, Apr 18, 2013

A Rock and a Hard Place: California and the Monterey Shale
By Thomas Overton, Power Mag, Apr 1, 2013
[SEPP Comment: An assessment of political, and physical, difficulties in developing the Monterey shale formation for oil and gas.]

California High Speed Rail Falls Short of Expectations
By Staff Writer, NCPA, Apr 17, 2013
Link to full report: California High-Speed Rail: An Updated Due Diligence Report
By Joseph Vranich, Wendell Cox and Adrian Moore, Reason Foundation, Apr 11, 2013
http://reason.org/studies/show/california-high-speed-rail-report

Health, Energy, and Climate
New chemophobe-in-chief at the NYTimes
By Staff Writer, ACSH, Apr 15, 2013

Energy efficiency could increase infection risks in hospital wards
By Staff Writers, Leeds UK (SPX), Apr 17, 2013
http://www.interndaily.com/reports/Energy_efficiency_could_increase_infection_risks_in_hospitalwards_999.html
Link to paper: Measurement of Ventilation and Airborne Infection Risk in Large Naturally Ventilated Hospital Wards
By C.A. Gileson, et al, Building and Environment, Apr 6, 2013
Environmental Industry
An open letter to David Attenborough
By John Happs, Quadrant, Apr 15, 2013

Don't expect Big Green to save Falmouth
By Ron Arnold, Washington Examiner, Apr 18, 2013
[SEPP Comment: Discusses bird and bat kills by wind farms.]

Other Scientific News
Florida Tech professors present 'dark side of dark lightning' at conference
By Staff Writers, Melbourne FL (SPX), Apr 12, 2013

Other News that May Be of Interest
Pottery reveals Ice Age hunter-gatherers' taste for fish
By Staff Writers, York UK (SPX), Apr 15, 2013
http://www.terradaily.com/reports/Pottery_reveals_Ice_Age_hunter_gatherers_taste_for_fish_999.html
[SEPP Comment: Analysis of 15,000 year old pottery from Japan.]

BELOW THE BOTTOM LINE:
Ridiculous comment of the year – Andrew Cuomo connects climate change and bombing
By Anthony Watts, WUWT, Apr 19, 2013

ARTICLES:

1. Climate Change Conversation Aborted
By S. Fred Singer, American Thinker, Apr 19, 2013
http://www.americanthinker.com/2013/04/climate_change_conversation_aborted.html
[SEPP Comment: See the initial article under Defending the Orthodoxy.]

An editorial essay by American Chemical Society (ACS) officers Bassam Shakhashiri and Jerry Bell (Science 5 April 2013) extends a gracious invitation for a "respectful conversation" about Climate Change. Yet when I tried to respond, the editors of Science refused to print it. So much for "conversation."

Aside from its admirable tone, the editorial itself is a mixture of things that are trivially true (i.e., that the climate is changing - indeed it does so, on all time scales, and is likely to continue) to
statements contradicted by readily available evidence (that there has been an increase in weather extremes over the past century -- contrary to published official statistics). In between, one finds assertions that are still under intense scientific debate.

It is true, unfortunately, that many professional societies, including also the ACS, have issued hastily drawn climate statements, espousing an alarmist view that even exceeds that of the IPCC. In this, they have been joined by many national academies, including the US National Academy of Sciences and the venerable Royal Society. But they all simply regurgitate the shaky conclusions of the UN-IPCC (Intergovernmental Panel on Climate Change) -- without adding any original analysis.

As an example of ongoing debate: Is the climate really warming, as claimed in the editorial? Hard to tell unless one specifies the time interval. Nearly everyone agrees that the climate is warmer now than during the Little Ice Age (as recently as 200 years ago). Some believe that most of the warming occurred before 1940. Increasingly, many accept that there has been no observed warming for at least the past decade. The situation between 1940 and 2000 is somewhat murky; it all depends on which data set one accepts as truly representing global climate. The ongoing debate on this issue will determine the answer to the key question: How important is the human contribution to climate change?

Many of us find evidence for anthropogenic global warming (AGW) unconvincing. The report of the UN science panel [IPCC 2007] bases it mainly on comparing a single (uncertain) observed temperature set with one calculated from (incomplete and non-validated) climate models driven by (anthropogenic) increases in greenhouse gases, like carbon dioxide.

Even less convincing are earlier IPCC [2001] claims that the 20th century has experienced unusual warming compared to preceding centuries (the so-called 'Hockeystick' curve). A recent paper in Science (8 March 2013) has tried to resurrect this particular bit of fiction. [See Another Hockeystick?] But with intense scrutiny after its publication (following the obligatory peer review), the authors now admit that this result is no longer "robust." There have been many such papers published in prestigious journals in the past 25 years that have all claimed sure proof of AGW -- or implied it; it would be good to see them corrected or formally withdrawn.

So what is causing the climate to change -- on a human time scale, of decades to centuries? The jury is still out on that particular debate; but increasingly the evidence points to the Sun -- and to changes in solar activity. The Science editorial concludes that "reducing emissions [of CO2] is required to avoid a warmer planet." It would be well to settle the crucial question of the cause before undertaking costly projects to mitigate climate change. Some of these projects - like cellulosic ethanol or 'carbon capture and sequestration' -- have not even been demonstrated on a commercial scale. Good advice would be to "Look before you Leap."

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2. Vote Leaves EU Emissions Trading in Tatters
By Sean Carney, WSJ, Apr 16, 2013 [H/t Stefan Björklund]
http://online.wsj.com/article/SB10001424127887324030704578426280702003120.html?mod=rss_markets_main

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The European Union's flagship program to fight global warming—a regional carbon-emissions trading system—suffered a major blow Tuesday when legislators rejected a proposal aimed at saving the market from collapse.

After the European Parliament's rejection, spooked investors drove the already depressed price of carbon emission permits down by nearly half. Benchmark electricity prices also fell.

The legislature derailed—at least temporarily—a plan to revive prices by postponing the issuance of any new permits for between five and seven years. Electricity generators and some other industries must buy the permits to cover their carbon dioxide emissions.

Europe's Emissions Trading System, launched in 2008, was intended to protect the environment by raising the cost of polluting and encouraging businesses to invest in cleaner technologies.

But lately, as the region struggles to recover from recession, politicians have focused more on economics—generating jobs and sparking growth—relegating green concerns to second.

Poland, one of the EU's less-affluent members, has been outspoken in its opposition to the measure, which it said could hamper development. The country's environment minister, Marcin Korolec, called the result Tuesday "a vote of reason."

In Germany, Economy Minister Philipp Rösler also welcomed the rejection as an "excellent signal" for a continuing economic recovery.

"Reducing supply CO2 allowances would equate to an intervention into a functioning market system," and further burden industry, he said.

Several environment ministers around Europe—including Germany—came out last week in favor of the plan, calling it necessary to safeguard the EU's long-term climate targets.

After the vote, the European Parliament's Environment Committee said that some members felt that "a rise in the carbon price would erode the competitiveness of European industry and be passed on in household energy bills."

Slack demand for electricity because of the recession and an abundance of permits helped push the price of emitting a ton of carbon below €5 ($6.60) earlier this year, from nearly €30 in 2008.

On Tuesday, the price dropped to €2.55 before recovering partially to €3.20.

Without some intervention to reduce supply, "the ETS will almost certainly collapse," said Kash Burchett, a London-based analyst at consulting company IHS Energy.

"Prices will likely sink below €1 per ton as participants recognize that there is no political will at present to restore the market mechanism to functioning order," he said.

That, in turn, would severely undercut the credibility of Europe's carbon market as a major contributor to the bloc's goal of reducing carbon emissions 20% from 1990 levels by 2020.
The EU’s executive arm, the European Commission, which drafted the so-called back-loading plan, said it regretted parliament’s move. Environment ministers from the member states said they would try to draw up an alternate.

Environmental groups criticized the vote as sending the wrong message.

"Today’s vote is a historic failure," said Joris den Blanken, EU climate policy director at environmental advocacy group Greenpeace.

Rob Elsworth from the U.K. group Sandbag, a non-profit that lobbies for effective carbon markets, said members of Parliament needed to act "to prevent the EU’s climate policy from drifting dangerously off course."

Late in the day Tuesday, contracts for 2014 German baseload power fell, to €39.55 per megawatt hour from €41 per megawatt before the vote.

Investors, watching falling electricity prices and worried that utilities will have to write down the value of permits they now hold, drove down power company shares.

Shares in German utilities E.ON and RWE lost 4.6% and 2.4%, respectively, while shares in Central and Eastern Europe's largest company by market capitalization, Czech utility CEZ, were down 3.4%.

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3. Rise in U.S. Gas Production Fuels Unexpected Plunge in Emissions
By Russell Gold, WSJ, Apr 18, 2013
http://online.wsj.com/article/SB10001424127887324763404578430751849503848.html

U.S. carbon-dioxide emissions have fallen dramatically in recent years, in large part because the country is making more electricity with natural gas instead of coal.

Energy-related emissions of carbon dioxide, the greenhouse gas that is widely believed to contribute to global warming, have fallen 12% between 2005 and 2012 and are at their lowest level since 1994, according to a recent estimate by the Energy Information Administration, the statistical arm of the U.S. Energy Department.

While other factors, including a sluggish U.S. economy and increasing energy efficiency, have contributed to the decline in carbon emissions from factories, automobiles and power plants, many experts believe the switch from coal to natural gas for electricity generation has been the biggest factor. Carbon-dioxide emissions account for nearly 84% of greenhouse-gas emissions, while methane—the main ingredient in natural gas—makes up 8.8%, according to a recent Environmental Protection Agency report.

Natural gas emits half as much carbon dioxide as coal when used to make electricity, though the calculation fails to take into account the release of methane from natural-gas wells and pipelines, which also contributes to climate change.
Few people predicted this drop in carbon emissions. "Everybody just figured that emissions were just going to continue to increase rapidly," says Ted Nordhaus, chairman of the Breakthrough Institute, an energy and climate think tank based in Oakland, Calif. "Nobody was expecting the worst recession since the Great Depression, but also no one was really expecting this remarkable shift from coal to gas either."

Last year, 30% of power in the U.S. came from burning natural gas, up from 19% in 2005, driven by drilling technologies that have unlocked large and inexpensive new supplies of the fuel.

The U.S. trend hasn't led to a global decline in carbon emissions, which increased 15% from 2005 through 2011, according to federal statistics. An International Energy Agency report this week concluded that China's rising reliance on coal to fuel economic growth jeopardizes progress toward what the IEA calls "a low-carbon future." But the U.S., which has decreased its carbon-dioxide output tonnage more than any other nation, demonstrates that market forces can have an impact on greenhouse gases even as politicians continue to disagree over what, if any, federal regulations are needed to force industries to reduce their emissions.

White House spokesman Clark Stevens said important progress had been made reducing emissions and the federal government was committed to implementing standards that "help ensure that we remain on a path to reduce these emissions."

U.S. carbon-dioxide output rose steadily in the 1990s and 2000s, peaking in 2007. In 2008, the economy weakened and power generation from natural gas and renewables began to increase, a combination that led to a sharp reduction in emissions. The Energy Department, which had been expecting increasing emissions, began lowering its forecasts in 2009. It now says carbon-dioxide emissions will begin rising year-on-year in 2015 but won't return to 2005 levels through 2040.

These rapid U.S. declines may be short-lived, as natural-gas prices rise and utilities increase coal consumption. "Our coal-fired generation has certainly picked up" in recent months, says Nick Akins, chief executive of Ohio-based American Electric Power Co. AEP +0.93% Natural-gas prices have risen for eight straight weeks, recently closing at $4.40 per million British thermal units, more than twice its price a year ago.

Mr. Akins also says that stronger economic growth in the U.S. would reverse some of the recent changes. "If the economy were to pick back up considerably before you are able to put new natural-gas capacity in place," he said, "you would expect carbon emissions to increase because coal is going to pick up as well."

As the U.S. has reduced its coal consumption, it has increased its coal exports to Europe, which rose 23% in 2012 from a year earlier, according to federal statistics. Gérard Mestrallet, chief executive of French power group GDF Suez SA says that European utilities imported and burned that coal, raising carbon-dioxide emissions from power plants in Europe. He said as-yet unpublished figures for GDF will show an increase in emissions last year.

Other European utilities used more coal also, likely reversing a recent trend of carbon reductions. European carbon emissions fell 8% between 2005 and 2011, the latest year for which data are
available. In February, the German environment ministry said it expected there was a 1.6% rise in greenhouse-gas emissions in Germany last year.

European officials have criticized both the U.S. and China at recent United Nations climate summits for a lack of political will to reduce greenhouse-gas emissions. The European Union instituted regulations requiring its member states to lower emissions. The EU has also reduced its overall greenhouse-gas emissions to meet requirements of the Kyoto Protocol, a U.N. compact adopted in 2005 which the U.S. hasn't signed. Late last year, the EU said its emissions have fallen 17.5% since 1990 and were "on track" to meet its 20% reduction target under the Kyoto agreement by 2020. Since 1990, U.S. greenhouse-gas emissions are up 8%. But since 2005, U.S. emissions have fallen faster than Europe's.

The rapid decline in U.S. emissions has taken some pressure off the White House after the 2010 failure of a cap-and-trade bill meant to put a price on carbon emissions. Instead, the Obama administration has embraced environmentally responsible production of natural gas as a relatively painless way to meet both energy and environmental goals.

The decline in U.S. emissions from 2005 to 2012—706 million metric tons of carbon dioxide—puts the U.S. a long way toward achieving the 17% reduction in greenhouse-gas emissions from 2005 the Obama administration set as its 2020 goal a few years ago.

Groups in favor of cutting greenhouse-gas emissions to reduce the threat posed by climate change say far deeper reductions than that 17% are needed. "The wildfires, storms and droughts we've seen over the past few years have shown us we need to make even steeper reductions in emissions that were proposed a few years ago," says Michael Brune, executive director of the Sierra Club.

There is considerable worry by many observers of the gas industry that federal figures of overall greenhouse-gas-emissions reductions may be misleading because they fail to account for the impact of natural gas that leaks into the atmosphere from drilling and pipelines. A recent EPA report noted that U.S. greenhouse-gas emissions, including carbon dioxide, methane and other contributors, were 6.9% below 2005 levels, but this data didn't include 2012.

"The fundamental question is, are we making progress in reducing global warming—and that is a question of whether or not we are controlling methane leaks," says Mark Brownstein, head of the U.S. Climate and Energy Program at the Environmental Defense Fund, which is leading new studies to determine how much natural gas leaks from wells and pipelines.

"If you measure the extent of the problem, you can manage the problem," he says. "We just haven't been measuring and therefore we haven't been managing."

Some states require natural-gas companies use technology to capture gas during the construction and drilling of wells. While much of the energy industry has resisted such requirements as too expensive, some companies that use this technology report that it pays for itself. Houston-based Southwestern Energy Co., a large shale-well driller, said capturing gas is no more costly than burning it off, or flaring it.

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4. Big Spills From Aging Oil Pipelines
Seam Failures From Old, Outmoded Welds Are Under Study After Exxon and Chevron Lines Rupture
By Daniel Gilbert, WSJ, Apr 16, 2013
http://online.wsj.com/article/SB10001424127887323741004578418693982405224.html?mod=WSJ_Energy

Recent pipeline ruptures, including one at an Exxon Mobil Corp. pipeline that caused a major oil spill in Arkansas last month, are raising fresh questions about the safety of pipes made decades ago using obsolete welding techniques.

Though the industry stopped making what is known as low-frequency, electric-resistance welded pipe by about 1970, it still accounts for more than a quarter of the 182,500 miles of liquid fuel pipelines across the U.S., according to federal data for 2011, the latest available.

The accidents come as federal regulators are examining whether state-of-the-art inspection methods are capable of detecting flaws in these old pipe seams. A U.S. regulator has commissioned a study of old, substandard pipe that could help shape new rules.

In the Exxon rupture and another on a Chevron Corp. pipeline in Utah last month that spilled 600 barrels of diesel near the Great Salt Lake, segments of the pipes were made about 60 years ago by bending metal sheets to form a tube, then heating the edges with a low-frequency electric current to weld them lengthwise. Such welds can leave defects in seams that make them vulnerable to corrosion and cracks, risks that have been known for decades.

The Chevron pipeline appeared to split along the welded seam, according to federal regulators. A Chevron spokesman said while the investigation continues, "Initial indications are that the release may have been the result of a longitudinal seam failure in the pipeline."

The Exxon pipeline gushed about 5,000 barrels of crude into a residential neighborhood through a 22-foot, incision-like break.

"It clearly looks like a seam-type failure," Rick Kuprewicz, a Seattle-based pipeline-safety consultant, said after seeing photographs of the Exxon rupture.

Exxon spokesman Alan Jeffers said the company hasn't reached any conclusions on the cause of the pipeline failure and is awaiting a third-party review of the ruptured section, which was removed on Monday.

"If we felt there was a problem we would have done something else, but in hindsight clearly there was an issue," Mr. Jeffers said of the company's safety tests.

It isn't clear from federal records how often obsolete welds play a role in accidents. Of the 1,151 accidents on liquids pipelines since 2010 reported to federal regulators, 78% don't show what kind of weld was involved, and 85% don't show when the pipe was manufactured, according to a Wall Street Journal review of government data. The Pipeline and Hazardous Materials Safety Administration says most of the accidents involved very small spills, or weren't related to pipe welds, so operators weren't required to furnish detailed information about them.
But the number of pipeline accidents has been rising; the 364 accidents on liquids pipelines last year were the most since 2008, but fewer than in 2002, according to federal data.

The threat of substandard welding "seems to be rearing its ugly head again," said Carl Weimer, a pipeline-safety advocate and executive director of nonprofit Pipeline Safety Trust. "The issue is how well are companies mitigating for that risk?"

A spokesman for the Association of Oil Pipe Lines says old pipe is safe as long as it is well-maintained, and that spills are relatively rare.

Federal regulators have questioned the adequacy of inspection methods that failed to reveal problems with these pipes before major explosions, including a 2007 blast in Mississippi that killed two people and injured seven.

The welds are such a concern that PHMSA, the pipeline regulator, in 2011 commissioned a $4.2 million, multiyear study of electric-welded pipes and how to prevent them from failing while in use.

Battelle Memorial Institute, which is conducting the study, has analyzed 280 cases in which electric-welded pipes failed between 1950 and 2005, including 55 failures while the pipe was in use. The nonprofit research group says the surest way to identify a weld defect is to pump water through the pipe at high pressure. Such tests are costly, requiring a company to shut down the line, and in some cases apparently led to failures when placed back in service, Battelle says.

The other chief testing method involves running a robotic device through the interior of the pipe to detect any anomalies. This device, commonly called a "smart pig," has at times failed to catch flaws that later resulted in a rupture.

"Neither of them is foolproof," said Brian Leis, a researcher leading Battelle's study. "Both are better than one."

Chevron last pressure-tested the pipeline that ruptured in Utah in 1987, and inspected it internally in 2009. Exxon conducted a pressure test on its Arkansas pipe in 2006, according to regulators. It conducted an internal inspection in 2010 that didn't find any significant anomalies, and another one in February, but hasn't received the results, regulators say.

By 1970, most pipe manufacturers began using a high-frequency current to weld, which produced seams less prone to fractures, according to a Battelle report submitted to federal regulators in September.

Last July, a pipeline carrying gasoline in southeastern Wisconsin split along an old electric-welded seam, spilling about 1,000 barrels and prompting the evacuation of two homes.

The operator, West Shore Pipeline Co., reported a second rupture in August on a similarly antiquated seam. It pressure-tested both pipelines more than a decade ago, and performed several different internal inspections on them between 2009 and 2012.
Both pipelines were running at or above the maximum pressure determined to be safe, and one
was significantly corroded, according to federal records."We are continuing to consistently re-
evaluate our programs, and consistently look to further test our lines to maintain them safely and
operate them safely," said Patrick D. Hodgins, a spokesman for Buckeye Partners LP, which
controls West Shore Pipeline.

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