

The Week That Was: 2014-09-27 (September 27, 2014)
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The Science and Environmental Policy Project

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Quote of the Week: *If you thought that science was certain - well, that is just an error on your part.* Richard Feynman

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Number of the Week: 1.6 million bbl./d

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Special Day: September 27, 2014 was S. Fred Singer's 90th birthday. Fred is the founding President and now Chairman of the Science and Environmental Policy Project

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THIS WEEK:

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

Climate Pep Rally: According to the organizers, the UN Rally in New York to “save the planet” was a success. Others asked what was accomplished. It appears very little. There were no major political agreements; just a number of “feel good” statements. The political leaders of China, which, based on latest estimates, emits about twice the amount of carbon dioxide (CO₂) than the US, did not attend; nor, the leaders of India, Germany, Russia, Canada, and Australia. President Obama made a speech proclaiming the dangers of global warming/climate change. Of course, the globe has not been warming for over 15 years and the atmosphere has not warmed for over a decade.

Secretary of State John Kerry declared that climate change is as an urgent a problem as the terrorist group ISIS and the disease Ebola. The issue of urgency is questionable. Both the terrorist group and the disease are killing people now. Global warming/climate change from human emissions of CO₂ may kill people sometime in the future, based on highly questionable computer models that have no demonstrated predictive capability. Mr. Kerry ignores this detail.

The Administration took the dubious tact that fighting climate change, though we do not understand the cause, can be economically beneficial. The experiences in Germany, Italy, Spain, England, California, and elsewhere indicate that the benefit is largely illusionary. Green jobs are not materializing in industrialize countries as the politicians claimed they would. Solar and wind power are driving up the costs of electricity, forcing established electricity-intensive industries to consider locating elsewhere.

Even the number of marchers is in dispute. The organizers of the march estimated that there were at least 300,000 participants. A group that counts crowds at demonstrations placed the number closer to 125,000. The methodology the group used appears to be as solid as any presented. This group praised the march.

One characteristic seemed to dominate – the appeal for an authoritarian government to replace the messy democracies that cannot make a decision to “fight climate change.” Yet, it is precisely messy western democracies which are leading the effort. Russia and China, which are more authoritarian, did not attend.

TWTW reader Norm Kalmanovitch sent a photo of one poster, which illustrates the thinking of some of those participating in the march.

Stop King C.O.N.G; No Coal, Oil, Nuclear, Gas, -- Don't Nuke the Climate.

To such people, affordable, reliable electricity is not the path to a better future. See Article # 2 and links under Climate Pep Rally and Communicating Better to the Public – Make things up.

Lewis and Curry: Nicolas Lewis and Judith Curry have been critics of the procedures used by the UN Intergovernmental panel on Climate Change (IPCC). The critical measurement is the climate sensitivity, the increase in global temperatures from a doubling of CO₂. Using data from the IPCC Lewis and Curry found the climate sensitivity to be at the low end of what was reported by the IPCC.

This paper is one of several new papers with similar findings. Patrick Michaels and Chip Knappenberger produced a useful graph of twenty studies with climate sensitivity estimates lower than the high end of the IPCC findings.

These studies bring into question the body of work that use high end projections from climate models to claim significant species extinction and significant sea level rise (beyond 7 inches by the end of the century) Such work should be considered as speculation, at best.

As with the IPCC work, none of the recent work can be considered definitive. There is still far too much uncertainty, particularly the values of the aerosols – tiny droplets in the atmosphere. The models used by the IPCC calculate that the net effect of the aerosols and cloud adjustments to aerosols is a strong cooling. Yet, this remains to be independently, empirically demonstrated. See links under Challenging the Orthodoxy and

http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf, page 14

Unsettled Climate: On her web site, Curry has an additional discussion on uncertainty that deserves repeating:

*At the heart of the recent scientific debate on climate change is the 'pause' or 'hiatus' in global warming – the period since 1998 during which global average surface temperatures have not increased. This observed warming hiatus contrasts with the expectation from the 2007 IPCC Fourth Assessment Report that warming would proceed at a rate of **0.2°C/per decade** in the early decades of the 21st century. The warming hiatus raises serious questions as to whether the climate model projections of 21st century have much utility for decision making, given uncertainties in climate sensitivity to carbon dioxide, future volcanic eruptions and solar activity, and the multidecadal and century scale oscillations in ocean circulation patterns. [Boldface added]*

It is becoming clear to many involved in climate science that the prediction in the Fourth Assessment Report of a warming of 0.2°C/per decade in the early decades of the 21st century is wrong. Now, some in the climate establishment have produced over 50 explanations why the predicted warming is not occurring. None of these explanations are satisfactory. Nature is demonstrating that the claims of certainty by the climate establishment are wrong. See links under Seeking a Common Ground.

More Koonin: The article by Physicist Steve Koonin “Climate Science Is Not Settled”, which appeared in the *Wall Street Journal* on September 19 is getting some traction.

The crucial scientific question for policy isn't whether the climate is changing. That is a settled matter: The climate has always changed and always will. Geological and historical records show the occurrence of major climate shifts, sometimes over only a few decades. We know, for instance, that during the 20th century the Earth's global average surface temperature rose 1.4 degrees Fahrenheit.

Rather, the crucial, unsettled scientific question for policy is, "How will the climate change over the next century under both natural and human influences?" Answers to that question at the global and regional levels, as well as to equally complex questions of how ecosystems and human activities will be affected, should inform our choices about energy and infrastructure.

In the article, Mr. Koonin points out that in its summaries for policymakers, the IPCC fails to inform public officials of the extent and the implications of the serious deficiencies in its science. Additional discussions are appearing, including one in *Physics Today*. The failure of important scientific organizations and publications to address these deficiencies has resulted in a science that has not advanced the crucial metric of climate sensitivity for 35 years, in spite of the US government having expenditures exceeding \$165 billion climate science and policy since 1993. See links under Questioning the Orthodoxy and the September 20 TWTW.

Climate Policy: In a talk to the Global Business Forum, Ross McKittrick assessed the prospects of a binding, effective global climate treaty, the dream of the UN in which it could collect moneys from the western developed countries. McKittrick makes three major points:

First, the economics of climate policy remain as impossible as ever. Climatologically-relevant actions are politically infeasible, while feasible policies are climatologically irrelevant.

Second, the climate science community exaggerated its level of certainty about the effects of greenhouse gases, and it now faces a loss of credibility as the doomsday predictions conspicuously fail.

Third, the high-water mark of popular support for climate action was before the 2008 financial crisis, and those days are not coming back.

See link under Questioning the Orthodoxy.

Salmon: In discussing proposed policies that ignored cycles in West Coast salmon fishing, Tim Ball brings up the dogmatic, destructive attitudes that mark the green organizations. See link under Environmental Industry.

Florida: Many New Yorkers enjoy spending part of the winter in Florida. Perhaps that is why an article in the New York Times chose Florida as an example of the dangers of sea level rise. A poor choice.

Among the US states, Florida gives some of the best physical evidence of the lack of a strong relationship between atmospheric carbon dioxide and sea levels. Although there may be local variations, the state is relatively stable, tectonically. Off the coast, skeletons of shallow water

corals are found to hundreds of feet below sea level – to depths over 400 feet. They were formed during the last ice age when the land area of the state was about 3 times larger than it is today. (The Everglades were formed with increased precipitation and the rising seas, about 4,000 to 6,000 years ago.)

Yet, there are significant limestone quarries (from corals) above sea level. Some of these limestone beds were formed as recently as 125,000 years ago. The state has been subject to significant changes in sea levels without human CO2 emissions. Spring tides (full moon tides) have been a problem since development of the coast line started many years ago, and have nothing to do with CO2 emissions. It is doubtful if governments can do anything to stop these changes. See link under Communicating Better to the Public – Make things up and

<http://edis.ifas.ufl.edu/uw208>

Production Tax Credit: Some commentators believe that Congress will not pass an extension to the wind power production tax credit, which expired last year but is still around to the end of 2014. It is too early for such predictions, because there is a massive amount of government money at stake, with little accountability. In fiscal year 2013, the last year for which actual expenditures are available, not budgeted expenditures, green tax subsidies amounted to more than \$13 Billion - - Energy Tax Provisions That May Reduce Greenhouse Gases were \$4.999 billion, and Energy Payments in Lieu of Tax Provisions were \$8.080 billion.

Even if the Democrats lose control of the Senate, it is possible that a funding bill with very strange provisions can pass during a lame duck session between the election and the convening of the 114th Congress on January 3, 2015. See links under Subsidies and Mandates Forever and

http://www.whitehouse.gov/sites/default/files/omb/assets/legislative_reports/fcce-report-to-congress.pdf

Number of the Week: 1.6 million barrels per day (bbl./d) According to reports, 1.6 million bbl./d is the estimated amount of crude oil moving by rail in the US from oil fields to refineries. This is about 20 % of the daily crude oil production.

Part of the reason, but not the entire reason, for an enormous growth in rail shipments is the opposition of Washington to building pipelines, particularly the Keystone XL that required Washington's approval to cross national boundaries. Pipelines are a safer and less costly way to move crude oil than rail. See Articles # 3 and #5.

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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. Does Business Risk Facing a 'Climate Crash'?

By S. Fred Singer, American Thinker, Sep 26, 2014

http://americanthinker.com/2014/09/does_business_risk_facing_a_climate_crash.html

2. Making Headway Against Climate Change

Progress at the U.N. summit included big steps for carbon pricing.

By Ban Ki-Moon, WSJ, Sep 25, 2014

<http://online.wsj.com/articles/ban-ki-moon-making-headway-against-climate-change-1411688616>

3. Alaska's Lessons for the Keystone XL Pipeline

Environmentalists say the new pipeline will be a disaster. We lived through these scare tactics before.

By Mr. Moore and Mr Griffith, WSJ, Sep 24, 2014

<http://online.wsj.com/articles/stephen-moore-and-joel-griffith-alaskas-lessons-for-the-keystone-xl-pipeline-1411511151>

4. Germany's Coal Binge

Green energy mandates have achieved the opposite of their intent.

Editorial, WSJ, Sep 25, 2014

<http://online.wsj.com/articles/germanys-coal-binge-1411599265>

5. Dangers Aside, Railways Reshape Crude Market

Shipping Crude by Rail Expands as New Pipelines Hit Headwinds and Train Companies Reap Revenue

By Russell Gold and Chester Dawson, WSJ, Sep 21, 2014

<http://online.wsj.com/articles/dangers-aside-railways-reshape-crude-market-1411353150>

Today, 1.6 million barrels of oil a day are riding the rails,

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NEWS YOU CAN USE:

Climategate Continued

Black Tuesday of Climate Science

By Jean S, Climate Audit, Sep 22, 2014

<http://climateaudit.org/2014/09/22/black-tuesday-of-climate-science/>

“Mike’s trick” to hide the decline — still shocking

By Jo Nova, Her Blog, Sep 25, 2014

<http://joannenova.com.au/2014/09/manns-trick-to-hide-the-decline-still-shocking/>

Challenging the Orthodoxy

Lewis and Curry: Climate sensitivity uncertainty

By Judith Curry, Climate Etc. Sep 24, 2014

<http://judithcurry.com/2014/09/24/lewis-and-curry-climate-sensitivity-uncertainty/>

Link to paper: The implications for climate sensitivity of AR5 forcing and heat uptake estimates

By Nicholas Lewis & Judith A. Curry, Climate Dynamics, Sep 25, 2014

<http://link.springer.com/article/10.1007%2Fs00382-014-2342-y>

Getting lower

By Andrew Montford, Bishop Hill, Sep 24, 2014

<http://bishophill.squarespace.com/blog/2014/9/24/getting-lower.html>

New Research Finds Earth Even Less Sensitive To CO2 Than Previously Thought

By Staff Writers, GWPF, Sep 25, 2014

<http://www.thegwpf.com/new-research-finds-earth-even-less-sensitive-to-co2-than-previously-thought/>

The Collection of Evidence for a Low Climate Sensitivity Continues to Grow

By Patrick J. Michaels and Paul C. "Chip" Knappenberger, CATO, Sep 25, 2014

<http://www.cato.org/blog/collection-evidence-low-climate-sensitivity-continues-grow>

Mr. President, CO2 is not Pollution, it's the Elixir of Life

By Craig Idso, Townhall, Sep 23, 2014 [H/t Timothy Wise]

<http://townhall.com/columnists/craigidso/2014/09/23/mr-president-co2-is-not-pollution-its-the-elixir-of-life-n1895157>

The Global Warming Money Nexus Corrupts Real Climate Research

By Patrick Michaels, IBD, Sep 25, 2014

<http://news.investors.com/ibd-editorials-perspective/092514-719043-explosion-of-money-to-study-global-warming-ensures-one-sided-results.htm?p=full>

It's time to stop the climate scare stories

By Willie Soon and Christopher Monckton, WUWT, Sep 23, 2014

<http://wattsupwiththat.com/2014/09/23/its-time-to-stop-the-climate-scare-stories/>

Defending the Orthodoxy

China, US, India push world carbon emissions up

World carbon pollution up by nearly 800 million tons in 2013, mostly from China, US, India

By Seth Borenstein, AP, Sep 21, 2014

<http://news.yahoo.com/china-us-india-push-world-carbon-emissions-170301040--finance.html>

[SEPP Comment: Still no warming trend.]

Selfishness for All?

By Simon Zadek, Project Syndicate, Sep 24, 2014

<http://www.project-syndicate.org/commentary/simon-zadek-explores-the-potential-of-self-interest-to-spur-action-on-climate-change>

While few doubt that renewable energy eventually will be cheaper than fossil fuels, climate change is advancing too quickly simply to wait for the market to solve the problem

[SEPP Comment: The Co-Director of the UN-Environmental Program's "Inquiry into the Design of a Sustainable Financial System" would find SEPP a doubter. It strongly questions the rigor of the reports cited, especially Risky Business. Further, the cost of the electricity by source must include the costs of unpredictable failure.]

Climate Pep Rally

India, China ignore UN climate change summit

By Chetan Chauhan, Hindustan Times, Sep 23, 2014 [H/t GWPF]

<http://www.hindustantimes.com/india-news/india-china-ignore-un-climate-change-summit/article1-1267288.aspx>

Administration pitches economic benefits of fighting climate change

By Timothy Cama, The Hill, Sep 25, 2014

<http://thehill.com/policy/energy-environment/218852-administration-pitches-economic-benefits-of-climate-change>

Obama to UN: Climate Change Our Fault

By Ben Shapiro, Breitbart, Sep 23, 2014 [H/t Timothy Wise]

<http://www.breitbart.com/Big-Government/2014/09/23/Obama-climate-change>

Obama Lies, Punts at Climate Change Summit,

By John Hinderaker, Power Line, Sep 24, 2014

<http://www.powerlineblog.com/archives/2014/09/obama-punts-at-climate-change-summit.php>

All the significant announcements from the UN climate summit, and whether they're new

By Mat Hope, Simon Evans & Christian Hunt, The Carbon Brief, Sep 24, 2014

http://www.carbonbrief.org/blog/2014/09/all-the-significant-announcements-from-the-un-climate-summit-and-whether-they-were-new/?utm_source=Weekly+Carbon+Briefing&utm_campaign=d042edee02-Carbon_Brief_Weekly_111114&utm_medium=email&utm_term=0_3ff5ea836a-d042edee02-215218249

Once More on Counting Crowds at Demos

By Staff Writer, Fire on the Mountain, Sep 21, 2014

<http://www.firemtn.blogspot.ca/2014/09/once-more-on-counting-crowds-at-demos.html?m=1>

Instead of Protesting, Climate Marchers Should Read This

By Nicolas Loris, Daily Signal, Sep 22, 2014 [H/t Timothy Wise]

<http://dailysignal.com/2014/09/22/instead-protesting-climate-marchers-read/>

New York, it's time to sound the climate change alarm

Sunday will bring noise pollution the city should welcome

By Bill McKibben, New York Daily News, Sep 20, 2014 [H/t Timothy Wise]

<http://www.nydailynews.com/opinion/bill-mckibben-time-sound-alarm-article-1.1946071>

Our political leaders are terrified of the fossil fuel industry's money. We'll never match that money, but we need them to be just as wary of our numbers and our passion.

[SEPP Comment: The climate establishment and the environmental industry are fearful of losing money generated by the false fear of global warming.]

Countries pledge actions to fight climate change

By Timothy Cama, The Hill, Sep 23, 2014

<http://thehill.com/policy/defense/218636-countries-pledge-actions-to-fight-climate-change>

Climate apocalypse march Sunday draws true believers

By Anthony J. Sadar, American Thinker, Sep 22, 2014

http://www.americanthinker.com/blog/2014/09/climate_apocalypse_march_sunday_draws_true_believers.html

Burning Down the House

By Donald Kaberuka, Project Syndicate, Sep 22, 2014

<http://www.project-syndicate.org/commentary/donald-kaberuka-urges-global-leaders-gathering-at-the-un-to-make-four-commitments-on-climate-change>

[SEPP Comment: Special pleading for \$100 billion per year.]

The Crumbling Climate-Change Consensus

Extremists' rhetoric heats up as their case falls apart.

By John Fund, National Review Online, Sep 21, 2014

<http://www.nationalreview.com/article/388535/crumbling-climate-change-consensus-john-fund>

Blathering Eco-Intellectuals

By Alan Caruba, Warning Signs, Sep 22, 2014

<http://factsnotfantasy.blogspot.com/2014/09/blathering-eco-intellectuals.html>

Climate Change March Out Of Step With Facts

Editorial, IBD, Sep 22, 2014 [H/t Timothy Wise]

<http://news.investors.com/ibd-editorials/092214-718450-climate-change-march-ignores-inconvenient-truths.htm>

Climate Marchers, Unite!

By Paul Kengor, American Thinker, Sep 24, 2014 [H/t Timothy Wise]

http://www.americanthinker.com/2014/09/climate_marchers_unite_.html

Private sector steps up at climate summit

By Zack Colman, Washington Examiner, Sep 24, 2014

http://washingtonexaminer.com/private-sector-steps-up-at-climate-summit/article/2553862?utm_campaign=Washington%20Examiner:%20Politics%20Today&utm_source=Washington%20Examiner:%20Politics%20Today%20-%2009/24/14&utm_medium=email

The Air Comes Out of the Climate Change Talks

By Rupert Darwall, Real Clear Politics, Sep 24, 2014

http://www.realclearpolitics.com/articles/2014/09/24/the_air_comes_out_of_the_climate_change_talks_124087.html

The People's Climate

By Monica Araya and Hans Verolme, Project Syndicate, Sep 26, 2014

<http://www.project-syndicate.org/commentary/monica-araya-and-hans-verolme-say-that-the-people-s-climate-march-was-just-the-start-of-popular-pressure-on-world-leaders>

The People's March against common sense

Editorial, Washington Examiner, Sep 24, 2014 [H/t Timothy Wise]

http://washingtonexaminer.com/the-peoples-march-against-common-sense/article/2553859?utm_campaign=Washington%20Examiner:%20Opinion%20Digest&utm_source=Washington%20Examiner:%20Opinion%20Digest%20-%2009/24/14&utm_medium=email

Thousands March in New York to End Industrialized Civilization

By Rick Moran, PJ Media, Sep 21, 2014 [H/t Timothy Wise]

<http://pjmedia.com/tatler/2014/09/21/thousands-march-in-new-york-to-end-industrialized-civilization/>

Why Aren't They Marching On Beijing?

Editorial, IBD, Sep 22, 2014

<http://news.investors.com/ibd-editorials/092214-718452-why-are-global-warmists-protesting-in-new-york-and-not-beijing-webhed-why-arent-global-warmists-protesting-china-.htm>

Questioning the Orthodoxy

American Physical Society journal Physics Today: "Physicist Steve Koonin impeaches scientists' climate consensus"

By Staff Writer, The Hockey Schtick, Sep 24, 2014

<http://hockeyschtick.blogspot.com/2014/09/american-physical-society-journal.html>

Link to article: Physicist Steve Koonin impeaches scientists' climate consensus

Bu Steven, Corneliussen, Physics Today Web 2014

<http://scitation.aip.org/content/aip/magazine/physicstoday/news/10.1063/PT.5.8071>

Assessing the Prospects for a Binding, Effective, Global Climate Treaty,

By Ross McKittrick, to 2014 Global Business Forum, Sep 18, 2014

http://www.rossmckitrick.com/uploads/4/8/0/8/4808045/gbf_talk.pdf

Forget ISIS — White House Declares War on CO2

By Larry Bell, Newsmax, Sep 22, 2014

<http://www.newsmax.com/LarryBell/ISIS-White-House-CO2/2014/09/22/id/596075/>

Journalists still pushing the “polar bears eat snow geese story,” as if it matters

By Susan Crockford, Polar Bear Science, Sep 23, 2014

<http://polarbearscience.com/2014/09/23/journalists-still-pushing-the-polar-bears-eat-snow-geese-story-as-if-it-matters/>

Who Signed the Climate Declaration?

By Donna Laframboise, NFC, Sep 22, 2014

<http://nofrackingconsensus.com/2014/09/22/who-signed-the-climate-declaration/>

Will Climate Week Ever End?

By Steen Hayward, Power Line, Sep 25, 2014

<http://www.powerlineblog.com/archives/2014/09/will-climate-week-ever-end.php>

Russian National Television Film Warns Of Cooling...Senior Woods Hole Scientist Calls Arctic Model Runs “Far From Ideal”!

By P Gosselin, No Tricks Zone, Sep 26, 2014

<http://notrickszone.com/2014/09/26/russian-national-television-film-warns-of-cooling-senior-woods-hole-scientist-calls-arctic-model-runs-far-from-ideal/>

Spiegel Writes Cook’s 97% Consensus Claims “Are Deceiving The Public”...”A Failed Call To Action”

By P Gosselin, No Tricks Zone, Sep 23, 2014

<http://notrickszone.com/2014/09/23/spiegel-writes-cooks-97-consensus-claims-are-deceiving-the-public-a-failed-call-to-action/>

‘People who want to argue that climate researchers are secretive and incompetent,’ says Tol polemically, ‘only have to point to the 97% consensus paper.’”

Should We Credit Global Warming When Disasters Don’t Happen?

By Paul Knappenberger, CATO, Sep 19, 2014

<http://www.cato.org/blog/should-we-credit-global-warming-when-disasters-dont-happen>

Social Benefits of Carbon

Global change: Trees continue to grow at a faster rate

By Staff Writers, Munich, Germany, (SPX) Sep 22, 2014

http://www.terraily.com/reports/Global_change_Trees_continue_to_grow_at_a_faster_rate_999.html

[SEPP Comment: Assumes warming is the primary factor, CO2 enhancement is secondary.]

Water Use Efficiency of Agricultural Species

By Staff Writers, CO2 Science & SPPI, Sep 17, 2014

http://scienceandpublicpolicy.org/images/stories/papers/originals/water_use_efficiency.pdf

Problems in the Orthodoxy

Bjorn Lomborg: Global warming is hardly the world's biggest problem

By Bjorn Lomborg, National Post, Sep 23, 2014

<http://fullcomment.nationalpost.com/2014/09/23/bjorn-lomborg-global-warming-is-hardly-the-worlds-biggest-problem/>

With the outreach program The World We Want, the UN already has asked what the rest of us think. More than 4-million people from every nation say the top priorities are better education and health care, less corruption, more jobs and affordable food. At the very last place, as priority number 17, comes global warming.

Yet, the UN Climate Panel finds the total cost of climate change by the 2070s is less than 2% of GDP. This means global warming is a problem, but it is not by any means the end of the world. Its cost is equivalent to a single year of recession over the next 60 years.

Emissions From India Will Increase, Official Says

By Coral Davenport, NYT, Sep 24, 2014

<http://www.nytimes.com/2014/09/25/world/asia/25climate.html>

[SEPP Comment: Blaming the developed countries for 20th century warming. If correct, it took the world out of the Little Ice Age. The accusation should be a fitting trap for the alarmists.]

Mr. Obama's hot flash on global warming

He's having trouble persuading the Third World to love their poverty

Editorial, Washington Times, Sep 22, 2014 [H/t Timothy Wise]

<http://www.washingtontimes.com/news/2014/sep/22/editorial-mr-obamas-hot-flash/>

Europe's carbon cuts should be subject to Paris climate deal – EU energy chief

Proposed 40% cut by 2030 should be reconsidered if governments fail to agree on a binding deal, says Gunther Oettinger

By Arthur Nelsen, Guardian, UK, Sep 25, 2014 [H/t GWPF]

<http://www.theguardian.com/environment/2014/sep/25/europe-should-only-cut-carbon-if-world-agrees-paris-climate-deal-eu-energy-chief>

What Did China Have to Offer at UN Climate Summit 2014?

The UN Climate Summit shows little has changed in China's thinking on climate change.

By Shannon Tiezzi, The Diplomat, Sep 24, 2014 [H/t GWPF]

<http://thediplomat.com/2014/09/what-did-china-have-to-offer-at-un-climate-summit-2014/>

Why climate change policy won't hinge on international talks

By Michael Levi, Fortune Magazine, Sep 25, 2014 [H/t Climate Etc.]

http://fortune.com/2014/09/25/why-climate-change-policy-wont-hinge-on-international-talks/?utm_content=buffer9e639&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

Seeking a Common Ground

An unsettled climate

By Judith Curry, Climate Etc. Sep 21, 2014

<http://judithcurry.com/2014/09/21/an-unsettled-climate/#more-16947>

Are we sovereign?

By Clark A. Miller, The Hill, Sep 23, 2014

<http://thehill.com/blogs/pundits-blog/energy-environment/218555-are-we-sovereign>

Review of Recent Scientific Articles by CO2 Science

Dying from Heat and Cold in Australia

Bennett, C.M., Dear, K.B.G. and McMichael, A.J. 2014. Shifts in the seasonal distribution of deaths in Australia, 1968-2007. *International Journal of Biometeorology* 58: 835-8428.

<http://www.co2science.org/articles/V17/N39/EDIT.php>

[SEPP Comment: Increase in daily minimum temperatures indicates that global warming/climate change will reduce mortality rates.]

Modeling Daily Intense Rainfall Events over Africa

Cretat, J., Vizy, E.K. and Cook, K.H. 2014. How well are daily intense rainfall events captured by current climate models over Africa? *Climate Dynamics* 42: 2691-2711.

<http://www.co2science.org/articles/V17/N39/C1.php>

"State-of-the-art climate models still cannot realistically simulate daily intense rainfall events with high accuracy."

The Woody Vegetation Cover of Northern Ethiopian Highlands

Nyssen, J., Frankl, A., Haile, M., Hurni, H., Descheemaeker, K., Crummey, D., Ritler, A., Portner, B., Nievergelt, B., Moeyersons, J., Munro, N., Deckers, J., Billi, P. and Poesen, J. 2014.

Environmental conditions and human drivers for changes to north Ethiopian mountain landscapes over 145 years. *Science of the Total Environment* 485-486: 164-179.

<http://www.co2science.org/articles/V17/N39/B1.php>

Assessing Future Rice Yields in China

Yu, Y., Zhang, W. and Huang, Y. 2014. Impact assessment of climate change, carbon dioxide fertilization and constant growing season on rice yields in China. *Climatic Change* 124: 763-775.

<http://www.co2science.org/articles/V17/N39/B3.php>

In light of these several findings, it is clear that the future of rice cultivation in China looks bright indeed.

Model Issues

Debunking the New York Times' faith in climate models

By Staff Writer, The Hockey Schtick, Sep 23, 2014

<http://hockeyschtick.blogspot.com/2014/09/debunking-new-york-times-faith-in.html>

Measurement Issues

New paper finds global temperature data trend prior to 1950's "meaningless" & "artificially flattened"

By Staff Writer, Hockey Schtick, Sep 25, 2014

<http://hockeyschtick.blogspot.com/2014/09/new-paper-finds-global-temperature-data.html>

Link to correspondence: Spatiotemporal patterns of warming
By Macias-Fauria, et al. Nature Climate Change, Sep 25, 2014
<http://www.nature.com/nclimate/journal/v4/n10/full/nclimate2372.html>

Was August Really The Warmest Month Ever?

By Joseph D'Aleo, ICECAP, Sep 24, 2014
http://icecap.us/index.php/go/icing-the-hype/was_august_really_the_warmest_month_ever1/

NOAA Devolving To An Orwellian Political Farce...Veteran Meteorologist: “Fox Is Guarding The Henhouse”

By P Gosselin, No Tricks Zone, Sep 21, 2014
<http://notrickszone.com/2014/09/21/noaa-devolving-to-an-orwellian-political-farce-veteran-meteorologist-fox-is-guarding-the-henhouse/>

The hotter nights in Melbourne and some mysterious adjustments

By Jo Nova, Her Blog, Sep 26, 2014
<http://joannenova.com.au/2014/09/the-hotter-nights-in-melbourne-and-some-mysterious-adjustments/>

Changing Weather

New paper finds low-CO2 US drought in 1934 was the most extreme of past Millennium

By Staff Writer, The Hockey Schtick, Sep 23, 2014
<http://hockeyschtick.blogspot.com/2014/09/new-paper-finds-low-co2-us-drought-in.html>

Colorado wildfires NOT MORE SEVERE since 1800s, says ‘massive’ UColorado study

By Staff Writers, Junk Science, Sep 24, 2014
<http://junkscience.com/2014/09/24/colorado-wildfires-not-more-severe-since-1800s-says-massive-ucolorado-study/>

Changing Seas

Surprising PNAS paper: CO2 emissions not the cause of U.S. West Coast warming

By Anthony Watts, WUWT, Sep 22, 2014
<http://wattsupwiththat.com/2014/09/22/surprising-pnas-paper-co2-emissions-not-the-cause-of-u-s-west-coast-warming/>

Link to paper: Atmospheric controls on northeast Pacific temperature variability and change, 1900–2012

By James A. Johnstone and Nathan J. Mantuaa, PNAS, Sep 22, 2014
<http://www.pnas.org/content/early/2014/09/16/1318371111.abstract>

Changing Cryosphere – Land / Sea Ice

Arctic Ice Continues Recovery – So Death Spiral Claims Are Rehashed

By Paul Homewood, Not a Lot of People Know That, Sep 23, 2014 [H/t GWPF]
<http://notalotofpeopleknowthat.wordpress.com/2014/09/23/arctic-ice-continues-recovery-so-death-spiral-claims-are-rehashed/>

Claim: Arctic sea ice helps remove CO2 from the atmosphere

By Anthony Watts, WUWT, Sep 22, 2014
<http://wattsupwiththat.com/2014/09/22/claim-arctic-sea-ice-helps-remove-co2-from-the-atmosphere/>

Changing Earth

First eyewitness accounts of mystery volcanic eruption

By Staff Writers, Bristol, UK (SPX), Sep 22, 2014

http://www.terraily.com/reports/First_eyewitness_accounts_of_mystery_volcanic_eruption_999.html

Agriculture Issues & Fear of Famine

The vital roles of farming and science

By Martin Livermore, Scientific Alliance, Sep 26, 2014

<http://scientific-alliance.org/scientific-alliance-newsletter/vital-roles-farming-and-science>

[SEPP Comment: Not impressed by the cited paper on rapid 21st century population growth due to the paper's questionable calculations of probabilities. However, the issue of land for food vs. fuel is crucial.]

Un-Science or Non-Science?

Two contrasting views of multidecadal climate variability in the 20th century†

By Kravtsov, Wyatt, Curry and Tsonis, Geophysical Research Letters,

<http://onlinelibrary.wiley.com/doi/10.1002/2014GL061416/abstract>

[SEPP Comment: Disagree with the statement: The bulk of our knowledge about causes of 20th century climate change comes from simulations using numerical models. The term knowledge is inappropriately used. It is more fitting to say: The bulk of our ideas (or speculation) about causes ...]

Lowering Standards

The Royal and the Arctic

By Andrew Montford, Bishop Hill, Sep 22, 2014

<http://bishophill.squarespace.com/blog/2014/9/22/the-royal-and-the-arctic.html>

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

Climate Change You Can Believe In

By Bill Moyers and Michael Winship, Moyers Blog, Sep 18, 2014 [H/t Timothy Wise]

<http://billmoyers.com/2014/09/18/climate-change-you-can-believe-in/>

Terrible flooding in India and Pakistan, the worst in more than a century, with heavy monsoon rains, 500 lives lost and hundreds of thousands left stranded

[SEPP Comment: India, Bangladesh, and Pakistan have been subject to numerous floods over the 19th and 20th centuries.]

TV dwells on disaster in covering climate science: study

By Alister Doyle, Reuters, Sep 23, 2014 [H/t Clyde Spence]

<http://www.reuters.com/article/2014/09/23/us-climatechange-media-idUSKCN0HI16I20140923?feedType=RSS&feedName=scienceNews&rpc=76>

[SEPP Comment: Who would watch if newscasts on global warming focused on the main influence of increased atmospheric CO₂ – plants growing bigger and producing more food?]

Climate Change at Ground Zero

By Issa Martin Bikienga, Project Syndicate, Sep 26, 2014

<http://www.project-syndicate.org/commentary/issa-m--bikienga-describes-how-sustainable-practices-are-transforming-agriculture-in-burkina-faso>

Drought and flooding here and elsewhere occur largely because of climate imbalances caused by industrial activities that produce greenhouse gases.

[SEPP Comment: When has there ever been a climate in balance?]

CO2 emissions set to reach new 40 billion ton record high in 2014

By Staff Writer, Phys.org, Sep 21, 2014

<http://phys.org/news/2014-09-co2-emissions-billion-ton-high.html>

Link to paper, Global Carbon Budget

By Staff Writers, Global Carbon Project, Sep 21, 2014

<http://www.globalcarbonproject.org/carbonbudget/>

[SEPP Comment: Fails to provide evidence that CO2 is significant in causing global warming.]

Lew: Climate change hits all sectors of economy

By Laura Barron-Lopez, The Hill, Sep 22, 2014

<http://thehill.com/policy/energy-environment/218538-treasury-secretary-climate-change-hits-all-sectors-of-economy>

[SEPP Comment: The Secretary of Treasury adds his two cents of reason: Climate change is one of the most important challenges of the time and what the US and other countries do to address climate will determine the nation's future.]

Communicating Better to the Public – Make things up.

The ozone hole was exaggerated as a problem

Serial hyperbole does the environmental movement no favours

By Matt Ridley, Rational Optimist, Sep 25, 2014

<http://www.rationaloptimist.com/blog/the-ozone-hole-was-exaggerated-as-a-problem.aspx>

Florida Goes Down the Drain

By Gail Collins, NYT, Sep 24, 2014

http://www.nytimes.com/2014/09/25/opinion/gail-collins-the-politics-of-climate-change.html?emc=edit_th_20140925&nl=todaysheadlines&nid=16167125

Kerry: Climate change as urgent as ISIS, Ebola

By Laura Barron-Lopez, The Hill, Sep 22, 2014

<http://thehill.com/policy/energy-environment/218480-kerry-climate-change-as-urgent-at-isil-ebola>

Expanding the Orthodoxy

FACT SHEET: President Obama Announces New Actions To Strengthen Global Resilience To Climate Change And Launches Partnerships To Cut Carbon Pollution

By Staff Writers, The White House, Sep 23, 2014

<http://www.whitehouse.gov/the-press-office/2014/09/23/fact-sheet-president-obama-announces-new-actions-strengthen-global-resil>

The Climate Action Plan is working. In 2012, U.S. greenhouse gas emissions fell to the lowest level in nearly two decades.

[SEPP Comment: US emissions fell thanks to increased natural gas production and lower prices, which received no support from the Administration.]

US Homeland Security moves to tackle climate change risks

By Lisa Anderson, Reuters, Sep 25, 2014 [H/t SPPI]

<http://www.reuters.com/article/2014/09/25/us-foundation-climate-security-idUSKCN0HK2PW20140925>

[SEPP Comment: Exaggerating the threat of sea level rise– a 2.5 foot increases in 35 years!]

Questioning European Green

Belgian brownout, German emergency, British plan

By Andrew Montford, Bishop Hill, Sep 15, 2014

<http://bishophill.squarespace.com/blog/2014/9/25/belgian-brownout-german-emergency-british-plan.html>

Questioning Green Elsewhere

Clean Energy's Dirty Secrets

By Rupert Darwall, National Review, Sep 23, 2014 [H/t Deke Forbes]

<http://m.nationalreview.com/energy-week/388619/clean-energys-dirty-secrets-rupert-darwall>

China “Bans” Low-Quality Coal

Too Green to be True

By Walter Russell Mad & Staff, American Interest, Sep 19, 2014 [H/t GWPF]

<http://www.the-american-interest.com/blog/2014/09/19/china-bans-low-quality-coal/>

Green Jobs

Where Did All The Green Jobs Go?

By Paul Homewood, Not a Lot of People Know That, Sep 21, 2014 [H/t GWPF]

<http://notalotofpeopleknowthat.wordpress.com/2014/09/21/where-did-all-the-green-jobs-go/>

Non-Green Jobs

Will America take advantage of its natural gas opportunity?

By Karen Alderman Harbert, Washington Examiner, Sep 22, 2014

http://washingtonexaminer.com/will-america-take-advantage-of-its-natural-gas-opportunity/article/2553632?utm_campaign=Washington%20Examiner:%20Opinion%20Digest&utm_source=Washington%20Examiner:%20Opinion%20Digest%20-%2009/22/14&utm_medium=email

Funding Issues

DOT unveils \$3.6B to make transit systems climate resilient

By Laura Barron-Lopez, The Hill, Sep 22, 2014

<http://thehill.com/policy/energy-environment/218491-dot-unveils-36b-to-make-transit-systems-climate-resilient>

Cap-and-Trade and Carbon Taxes

Ditching coal a massive step to climate goal: experts

By Staff Writers, Paris (AFP), Sept 22, 2014

http://www.energy-daily.com/reports/Ditching_coal_a_massive_step_to_climate_goal_experts_999.html

Subsidies and Mandates Forever

Saying goodbye to the Wind PTC/ITC

By Lisa Linowes, Wind Action, Sep 23, 2014

<http://www.windaction.org/posts/41283-saying-goodbye-to-the-wind-ptc-itc#.VCQWsfldV8E>

EPA and other Regulators on the March

Climate change and aviation

By Billy Pizer, The Hill, Sep 26, 2014

<http://thehill.com/blogs/pundits-blog/energy-environment/218976-climate-change-and-aviation>

EPA targets dental fillings

By Timothy Cama, The Hill, Sep 25, 2014

<http://thehill.com/policy/energy-environment/218917-epa-targets-dental-fillings>

Phony 'environmental justice' at EPA

The agency's programs will wreak injustice on poor and minority families

By Paul Driessen, Washington Times, Sep 23, 2014

<http://www.washingtontimes.com/news/2014/sep/23/driessen-phony-environmental-justice-at-epa/>

Energy Issues – Non-US

Study: Fracked shale gas impacts have positive and negative benefits, but there's no reason not to make it part of the energy mix

By Anthony Watts, WUWT, Sep 22, 2014

<http://wattsupwiththat.com/2014/09/22/study-shale-gas-impacts-have-positive-and-negative-benefits-but-theres-no-reason-not-to-make-it-part-of-the-energy-mix/>

“If shale gas is extracted under tight regulations and is reasonably cheap, there is no obvious reason, as yet, why it should not make some contribution to our energy mix. However, regulation should also ensure that investment in sustainable technologies is not reduced at the expense of shale gas.”

[SEPP Comment: For modern civilization, what is sustainable about unreliable wind and solar?]

New research suggests China's CO2 output is almost twice U.S.'s

By Thor Benson, Washington DC (UPI), Sep 21, 2014

http://www.energy-daily.com/reports/New_research_suggests_Chinas_CO2_output_is_almost_twice_USs_999.html

Austria to challenge 'scandalous' British nuclear deal

By Staff Writers, Vienna (AFP), Sept 24, 2014

http://www.nuclearpowerdaily.com/reports/Austria_to_challenge_scandalous_British_nuclear_deal_999.html

EIKE: German Power Grid More Vulnerable Than Ever...”On The Brink Of Widespread Blackouts”!

By P Gosselin, No Tricks Zone, Sep 24, 2014

<http://notrickszone.com/2014/09/24/eike-german-power-grid-more-vulnerable-than-ever-on-the-brink-of-widespread-blackouts/>

Energy Issues -- US

Obama's energy policy is not science -- it's an ideological crusade

By Mitch McConnell, Washington Examiner, Sep 22, 2014

http://washingtonexaminer.com/obamas-energy-policy-is-not-science-its-an-ideological-crusade/article/2553631?utm_campaign=Washington%20Examiner:%20Opinion%20Digest&utm

[_source=Washington%20Examiner:%20Opinion%20Digest%20-%202009/22/14&utm_medium=email](http://www.washingtonexaminer.com/opinion/digest/2009/22/14?utm_medium=email)

Another Look At Hydrogen

By Donn Dears, Power For USA, Sep 23, 2014

<http://dddusmma.wordpress.com/2014/09/23/another-look-at-hydrogen/>

New Cost Analysis Shows Unsubsidized Renewables Increasingly Rival Fossil Fuels

Levelized costs don't tell the whole story about competitiveness. But they provide a helpful guide for where clean energy is headed.

By Stephen Lacy, Green Tech Media, Sep 22, 2014 [H/t Timothy Wise]

http://www.greentechmedia.com/articles/read/5-more-charts-that-prove-wind-and-solar-just-keep-getting-cheaper?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+GreentechMedia+%28Greentech+Media%29

[SEPP Comment: The cost of power disruption from unreliable electricity generation by solar and wind is not calculated.]

Oil prices would hit \$150/barrel without U.S. shale, EIA says

By Ernest Scheyder, Reuters, Sep 24, 2014

<https://en-maktoob.news.yahoo.com/oil-prices-hit-150-barrel-without-u-shale-175838536--business.html>

What Drives Anti-Fracking Zealots?

By Paul Driessen, Townhall, Sep 21, 2014 [H/t Timothy Wise]

<http://townhall.com/columnists/pauldriessen/2014/09/21/what-drives-antifracking-zealots-n1894512>

Washington's Control of Energy

Energy Drilling Off Atlantic Would Be Economic Boon

By Ellen Weaver and Michael Thompson, IBD, Sep 23, 2014

<http://news.investors.com/ibd-editorials-perspective/092314-718630-benefits-far-outweigh-risks-of-drilling-for-energy-off-atlantic-oast.htm?p=full>

Oil and Natural Gas – the Future or the Past?

The Science Is Settled: Fracking Is Safe

By Jeffrey Folks, American Thinker, Sep 21, 2014

http://americanthinker.com/2014/09/the_science_is_settled_fracking_is_safe.html

[SEPP Comment: The term Safe may be too strong. No known contamination from properly conducted drilling operations is more accurate.]

Impact of Technology on Oil E & P

By Donn Dears, Power For USA, Sep 26, 2014

<http://dddusmma.wordpress.com/2014/09/26/impact-of-technology-on-oil-e-p/>

[SEPP Comment: The technological advances are stunning.]

Is the Shale Revolution a 'Ponzi Scheme' or the End of Peak Oil?

"Ponzi scheme" or the end of Peak Oil?

By Ronald Bailey, Reason, Sep 19, 2014 [H/t GWPF]

<http://reason.com/archives/2014/09/19/a-shale-gas-and-oil-bubble>

Shale Revolution Deniers Face An Inconvenient Truth

By Mark Perry, IBD, Sep 23, 2014

<http://news.investors.com/ibd-editorials-brain-trust/092314-718598-shale-production-per-well-rises-despite-pessimists.htm>

[SEPP Comment: What the Centre for Research on Globalization called a “Ponzi scheme” is paying major dividends.]

API: Crude oil imports lowest in nearly 20 years

By Daniel J. Graeber, Washington (UPI), Sep 19, 2014

[http://www.oilgasdaily.com/reports/API Crude oil imports lowest in nearly 20 years 999.htm](http://www.oilgasdaily.com/reports/API%20Crude%20oil%20imports%20lowest%20in%20nearly%2020%20years%20999.htm)

[SEPP Comment: Yet the Navy continues to subsidize biofuels in the name of national security.]

Environmentalists Should Back Green Fracking

Editorial, IBD, Sep 25, 2014 [H/t Timothy Wise]

<http://news.investors.com/ibd-editorials/092514-719052-fracking-and-natural-gas-use-are-reason-for-steep-decline-in-co2.htm#>

Mining for sand for fracking holds risks for communities, study says

By Neela Banerje, LA Times, Sep 25, 2014

<http://www.latimes.com/nation/nationnow/la-na-nn-fracking-sand-mining-20140925-story.html>

Link to report: Rapidly Expanding Frac Sand Mining Is Hidden Danger of Fracking Boom in U.S.

By Staff Writers, Civil Society Institute, Boston Action Research & Environmental Working Group, Sep 25, 2014

<http://216.30.191.148/fracsandmining/>

[SEPP Comment: Another questionable issue. However, if the report is accurate, there is no shortage of suitable sand]

Return of King Coal?

Coal must be part of America's energy future

By Peter Roff, Washington Examiner, Sep 22, 2014

http://washingtonexaminer.com/coal-must-be-part-of-americas-energy-future/article/2553637?utm_campaign=Washington%20Examiner:%20Opinion%20Digest&utm_source=Washington%20Examiner:%20Opinion%20Digest%20-%202009/22/14&utm_medium=email

Oil Spills, Gas Leaks & Consequences, Other

Nation's First Coal Ash Law Takes Effect in North Carolina

By Sonal Patel, Power News, Sep 24, 2014

http://www.powermag.com/nations-first-coal-ash-law-takes-effect-in-north-carolina/?hq_e=el&hq_m=2950629&hq_l=12&hq_v=5e660500d0

Nuclear Energy and Fears

The Potential of Thorium for Safer, Cleaner and Cheaper Energy

By Staff Writers, NCPA, Sep 26, 2014

http://www.ncpa.org/sub/dpd/index.php?Article_ID=24895&utm_source=newsletter&utm_medium=email&utm_campaign=DPD

Link to report: The Potential of Thorium for Safer, Cleaner and Cheaper Energy,
By Xinyuan Zou and Joe Barnett, NCPA, Sep 26, 2014
<http://www.ncpa.org/pub/ib149>

US energy secretary lists priorities at IAEA meeting

By Staff Writer, WNN, Sep 22, 2014

<http://www.world-nuclear-news.org/NP-US-energy-secretary-lists-priorities-at-IAEA-meeting-2209201401.html>

Alternative, Green (“Clean”) Solar and Wind

FACT SHEET: White House Announces Executive Actions and Commitments from Across the Country to Advance Solar Deployment and Energy Efficiency

Press Release by Staff Writers, The White House, Sep 18, 2014 [H/t Timothy Wise]

<http://www.whitehouse.gov/the-press-office/2014/09/18/fact-sheet-white-house-announces-executive-actions-and-commitments-acros>

[SEPP Comment: Deploying an unreliable and expensive form of electricity generation.]

Power from wind turbines slumps - due to lack of wind

Electricity output from UK wind farms falls by a fifth due to unusually low wind speeds

By Emily Gosden, Telegraph, UK, Sep 25, 2014 [H/t GWPF]

<http://www.telegraph.co.uk/earth/energy/11122336/Power-from-wind-turbines-slumps-due-to-lack-of-wind.html>

California Dreaming

Massive Wind-CAES Project Proposed to Power Southern California

By Thomas Overton, Power, Sep 24, 2014

http://www.powermag.com/massive-wind-caes-project-proposed-to-power-southern-california/?hq_e=el&hq_m=2950629&hq_l=17&hq_v=5e660500d0

Environmental Industry

Green Socialism’s Insidious Misanthropy

By Julia Patrick, Quadrant, Sep 25, 2014

<http://quadrant.org.au/magazine/2014/09/insidious-misanthropy-green-socialism/>

Salmon, Climate, And Accountability

By Tim Ball, A Different Perspective, Sep 22, 2014

<http://drtimball.com/2014/salmon-climate-and-accountability/>

Other Scientific News

Japanese Firm Plans Space Elevator to Run by 2050

By Staff Writers, Moscow (RIA Novosti), Sep 23, 2014

http://www.space-travel.com/reports/Japanese_Firm_Plans_Space_Elevator_to_Run_by_2050_999.html

Modern Europeans descended from three groups of ancestors

By Staff Writers, Chevy Chase MD (SPX), Sep 22, 2014

http://www.terraily.com/reports/Modern_Europeans_descended_from_three_groups_of_ancestors_999.html

Termites evolved complex bioreactors 30 million years ago

By Staff Writers, Copenhagen, Denmark (SPX), Sep 25, 2014

http://www.terradaily.com/reports/Termites_evolved_complex_bioreactors_30_million_years_ago_999.html

Other News that May Be of Interest

Critical Minerals: Rare Earths and the U.S. Economy

By Staff Writers, NCPA, Sep 26, 2014

http://www.ncpa.org/sub/dpd/index.php?Article_ID=24894&utm_source=newsletter&utm_medium=email&utm_campaign=DPD

Link to report: Critical Minerals: Rare Earths and the U.S. Economy

By Ann Norman, Xinyuan Zou and Joe Barnett, NCPA, Sep 2014

<http://www.ncpa.org/pdfs/bg175.pdf>

Earth's water is older than the sun

By Staff Writers, Washington DC (SPX), Sep 26, 2014

http://www.terradaily.com/reports/Earths_water_is_older_than_the_sun_999.html

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BELOW THE BOTTOM LINE:

@CNN asks ‘Why worry about ISIS when the danger of Climate Change is so much more clear and imminent?’

By Anthony Watts, WUWT, Sep 21, 2014

<http://wattsupwiththat.com/2014/09/21/cnn-asks-why-worry-about-isis-when-the-danger-of-climate-change-is-so-much-more-clear-and-imminent/>

Climate Crazyness of the Week: White House fence jumper was “concerned that the atmosphere was collapsing” and wanted to alert the president

By Anthony Watts, WUWT, Sep 20, 2014

<http://wattsupwiththat.com/2014/09/20/climate-crazyness-of-the-week-white-house-fence-jumper-was-concerned-that-the-atmosphere-was-collapsing-and-wanted-to-alert-the-president/>

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ARTICLES:

1. Does Business Risk Facing a 'Climate Crash'?

By S. Fred Singer, American Thinker, Sep 26, 2014

http://americanthinker.com/2014/09/does_business_risk_facing_a_climate_crash.html

With the publication of their report on climate risk, three multi-billionaires have started a campaign to frighten the public about global-warming “calamities” and to persuade business leaders to become worried about “climate risk” -- all in support of the White House’s misguided efforts to treat carbon dioxide, a natural constituent of the atmosphere and a blessing to successful agriculture, as a dangerous pollutant.

The Risky Business Project, led by Michael Bloomberg, Henry Paulson, and Tom Steyer, released its report on "The Economic Risks of Climate Change in the United States" last June. The project's co-chairs have been hitting the media ever since, promoting the project's report. Yet the public does not seem scared -- and their campaign is going nowhere. The global activists’ mass marches “to save the climate” are not getting any traction. And the UN’s “Climate Summit” of Sept 23 is considered a flop, with top-emitting nations China and India sending only lower-echelon delegates. Chinese President Xi Jinping and Indian Prime Minister Narendra Modi had

more important business to attend to -- demonstrating the irrelevance of the UN and of Pres Obama's climate warnings to the Summit.

An Open Letter in the Wall Street Journal [June 19, 2014] called attention to the Project; it was signed by about a dozen, including some nominal Republicans who are certainly not of the Tea Party persuasion. The driving force is former hedge-fund manager Tom Steyer, a high-rolling Democrat supporter who has gained notoriety by his very public pledge of \$100 million to the cause of "climate protection."

Never mind that such plans are based on climate models that don't work -- incapable of explaining the absence of warming during the past 15 years. Another strange fact: With a ranch on the North California coast, Steyer has become an implacable foe of the (mid-West) Keystone-XL oil pipeline -- and seems unfazed that Canadian oil must be transported by rail -- more expensive and less safe.

The Open Letter addresses business leaders, urging them to consider "climate risk" along with other risks. Fair enough. But business already factors climate into their plans -- through commodity futures, and through insurance. What worries business leaders most is government regulation that is as unpredictable as the climate. Unlike the climate, regulation is most certainly influenced by humans, which serves to make it arbitrary or even capricious -- but profitable to the politically connected.

Meanwhile, former Treasury Secretary Henry M. Paulson has warned about a "coming climate crash." I am not sure what he means by "crash;" it certainly sounds scary. Maybe it's analogous to a stock-market crash, with temperatures suddenly dropping into deep-freeze. If so, I imagine more greenhouse gases like CO₂ might be called for -- not less.

The third member of the triumvirate is Michael Bloomberg, former New York City mayor and publisher of the influential Business Week. He keeps flogging the dangerous and flawed White House concept of a "Social Cost of Carbon." Such an SCC could become a tax on CO₂ emissions, circumventing the Congress and the US Constitution. Sadly, the WH "calculation" of SCC totally ignores the positive benefits of CO₂, which far outweigh the so-called climate costs.

Climate Cycles

Climate is dominated by natural cycles of various lengths, whose causes are only poorly known. Scientific studies of ice cores, ocean sediments, etc. suggest the existence of a 1000-1500-yr climate cycle of warming and cooling. For example, we had a Medieval Warm Period (MWP) when Norsemen farmed in Greenland and Yorkshire produced wine, followed by a Little Ice Age (LIA), which ended only around 1750, close to the beginning of the Industrial Age.

The climate has warmed since then; but it is difficult to discern any human influence -- either from land clearing to expand agriculture or from burning of fossil fuels to produce the energy needed to sustain industry, food production, and the micro-climate to keep people comfortable. More important perhaps, there hasn't been any significant warming trend over the past 15 years or so, while atmospheric CO₂ levels have climbed 10%. Existing climate models have failed utterly to account for this "pause" in global warming; yet the EPA's control policies for CO₂ rely on these unverified models.

The science is likely to remain contentious as long as GW believers confuse correlation between a warming trend and CO2 trend with proof. They don't explain the cooling trend of 1940–75, or why the climate warmed strongly before 1940 when CO2 levels were quite low.

No Consensus on Future Climate

Climate scientists are sharply divided on the issue of future climate. The UN-sponsored IPCC clings to the computerized model predictions that, as atmospheric CO2 levels rise, see an accelerated warming -- in contrast to actual observations.

On the other hand, the independent NIPCC (Non-governmental International Panel on Climate Change) allows for the possibility that natural forcings swamp any human influence, while not denying the existence of a greenhouse [GH] effect. It is quite clear, however, that neither IPCC or NIPCC foresee the extreme future temperatures alluded to in the Open Letter

Henry Paulson posits an interesting analogy between the economic crash of 2008 and a coming climate crash -- unless the US institutes a carbon tax without delay. To my simple mind, imposition of such a tax would delay recovery of economic growth, kill jobs, and hurt low-income households. But my expertise is atmospheric science and does not include public finance and macro-economics; I cannot tell whether Mr. Paulson's policies of injecting huge amounts of public funds into a few selected companies helped recovery or delayed it. It depends on which expert I listen to.

Similarly, I suspect that Mr. Paulson has little expertise in atmospheric science and has been talking only to climate alarmists. He even mixes up his facts. Observed temperatures are not "catching up with ... models." Quite the opposite: Climate models calculate a warming trend that grows as the level of atmospheric level of carbon dioxide increases; but there hasn't been any warming now for at least 15 years -- with the temperature disparity growing larger year by year. Perhaps Mr. Paulson should get a second opinion.

Most economists agree that a modest warming (of 2-3 degC, or 3-6 degF) would be beneficial, especially for agriculture: a longer growing season, fewer frosts -- plus the boost from higher levels of CO2. In fact, agriculture got its start during the early Holocene, about 10,000 years ago, when it was much warmer than today.

Keep in mind that the use of global average temperatures can mislead. Since GH-warming increases with latitude; a Siberian winter night might see -35 deg C instead of -40. Also, the models based on GH theory do not suggest a "critical threshold temperature," 2 degC or whatever, where warming becomes uncontrolled. The climate history of our planet has shown remarkable stability.

Sea Level Rise

Aside from temperature, sea level rise [SLR] is a contested scientific issue. Estimates for SLR in 2100 range from 6 additional inches [NIPCC] to 20 feet [Al Gore]. The point at issue is whether SLR depends on ocean temperature -- and how. But there is no evidence of any acceleration during the warming of the 20th century.

Data from tropical corals show that global SL rose 400 feet in the past 18,000 years, since the Earth emerged from the depths of the most recent ice age. But once the continental ice sheets

covering much of North America and Europe had melted off, SLR slowed to a steady 7 inches per century. We expect this rate to continue -- no matter what we do -- until the next ice age arrives.

Let's see if Mr. Steyer and the other signers of the Open Letter are willing to sell their beach-front properties at distress prices to demonstrate their faith in climate risk.

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2. Making Headway Against Climate Change

Progress at the U.N. summit included big steps for carbon pricing.

By Ban Ki-Moon, WSJ, Sep 25, 2014

<http://online.wsj.com/articles/ban-ki-moon-making-headway-against-climate-change-1411688616>

More than 100 world leaders gathered Tuesday at the United Nations in New York, along with over 800 leaders from business, finance and civil society, to confront the threat of climate change and to embrace the opportunities inherent in addressing it. The Climate Summit had two clear objectives: to reinvigorate the process that will lead to a meaningful universal climate agreement in Paris next year, and to catalyze significant action to cut emissions and reduce risk. The summit delivered.

First, climate change is now higher on the global political agenda than it has ever been. The summit succeeded in focusing the minds of decision makers whose influence will be essential in the run-up to climate negotiations in Lima this year and in Paris in 2015.

Second, we are seeing action. China declared that it would soon announce a date for peak emissions, and the European Union committed to reduce emissions to 40% below 1990 levels by 2030. Leaders from more than 40 countries, 30 cities and dozens of corporations will work to double the rate of global energy efficiency by 2030 through vehicle fuel efficiency, lighting, appliances, buildings and district energy. The mayor of New York announced plans for the city to cut greenhouse-gas emissions by 80% by 2050.

Third—and in the long run perhaps most far-reaching—was the response by the finance and business communities. Individually, and as part of multi-stakeholder alliances, private-sector actors are entering the game from the sidelines. This is good news for climate action, sustainable green growth and global economic prospects.

Some of the biggest—and potentially transformational—announcements at the Climate Summit came from the private sector. A coalition of institutional investors has committed to decarbonize \$100 billion in institutional equity investments before the end of 2015, and to measure and disclose the carbon footprint of investments worth at least \$500 billion more.

Another new coalition of more than 160 institutions, local governments and major individual investors will divest \$50 billion from fossil fuels in the next three to five years and reinvest in clean energy. More than 20 global food companies will change their palm-oil sourcing to end deforestation. Leading oil, gas and petroleum producers at the summit committed to cut methane-gas emissions and gas flaring.

Polluting our way to prosperity has been the global development model for too long. It is plain that the environmental, social and economic costs are becoming too much to bear. Governments increasingly see it but are hampered by conflicting political demands. But the private sector, which can be more nimble and proactive, is responding faster.

Change is in the air, and the investment and business communities are helping to create those powerful winds. Awareness is growing that climate change is not just a burden but an opportunity. New energy technologies are becoming ever cheaper, making low-carbon growth ever more feasible and economically attractive, especially when one factors in the co-benefits such as cleaner air, better health, fewer weather disasters and vast opportunities for business expansion, job creation and economic growth.

The economic-growth model of the future has to be low-carbon. Governments have agreed that we must limit global temperature rise to less than two degrees Celsius. With carbon-dioxide emissions rising to record levels each year, the current trajectory has us reaching four degrees Celsius. To get on track, we need greenhouse-gas emissions to peak before 2020 and to reduce dramatically thereafter so that we attain climate neutrality in the second half of this century.

One powerful tool to achieve this is putting a price on carbon. Increasingly, economists and policy experts are providing evidence that carbon pricing mechanisms, such as emissions-trading systems and carbon taxes, can invigorate economic growth and not impede it, as was commonly feared. Putting a price on carbon will provide markets with the policy signals needed to invest in climate solutions. That is why 73 national governments, 11 regional governments and more than 1,000 businesses and investors signaled support for carbon pricing at the summit. Together, these leaders represent 52% of global gross domestic product, 54% of global greenhouse-gas emissions and almost half of the world's population.

Governments and the private sector increasingly understand that fighting climate change need not impede economic growth and business success. Indeed, the competition to seize the opportunities can be a boon to citizens, businesses and economies around the world. I urge all finance, business and government leaders to take inspiration from the many bold new announcements at the Climate Summit. Climate change demands an urgent solution. We must scale up action and reach an agreement in Paris that matches the seriousness of the challenge.

Mr. Ban is secretary-general of the United Nations.

3. Alaska's Lessons for the Keystone XL Pipeline

Environmentalists say the new pipeline will be a disaster. We lived through these scare tactics before.

By Mr. Moore and Mr Griffith, WSJ, Sep 24, 2014

<http://online.wsj.com/articles/stephen-moore-and-joel-griffith-alaskas-lessons-for-the-keystone-xl-pipeline-1411511151>

Earlier this year the Obama administration again delayed a decision about the Keystone XL pipeline. The 1,200 mile, \$5.2 billion pipeline could increase North American energy security and create more than 15,000 jobs. But behind the White House's unwillingness to move forward are environmental groups that vehemently oppose the project. Groups like the Sierra Club warn that Keystone "poses a health risk to our communities" and is a "climate disaster in the making."

We've lived through these scare tactics before. Exhibit A is the 800-mile Trans-Alaska Pipeline. Since its completion in 1977, this technological marvel has conveyed more than 17 billion barrels of oil, worth more than \$1.5 trillion in today's dollars, from Alaska's North Slope to the Port of Valdez for shipment to the lower 48 states. Yet the pipeline was almost not built, thanks to a propaganda campaign by environmental groups beginning in 1969. Most of their dire warnings have proved inaccurate.

The Wilderness Society, for example, issued a resolution warning that the pipeline threatened "imminent, grave and irreparable damage to the ecology, wilderness values, natural resources, recreational potential, and total environment of Alaska." James Moorman, counsel to the Environmental Defense Fund, predicted that "disastrous massive oil spills along literally thousands of miles of the Pacific Coast" were "inevitable." David Bower, then president of Friends of the Earth, said that, "If, as many scientists fear, we are approaching the point of no return in a race to oblivion, then we urge that all the checks and balances of Government be used, not superficially, to ensure a tenable future for us all."

In March 1970 the Wilderness Society, Friends of the Earth and the Environmental Defense Fund sued to block the pipeline. The lawsuit claimed the pipeline would "have a substantial adverse environmental impact on a significant portion of the Alaska wilderness." The complaint also warned it would "interfere with the natural and migratory movements of wildlife, primarily caribou and moose."

The resulting court injunction and other legal hurdles delayed the project until Congress passed the Trans-Alaska Pipeline Authorization Act in November 1973. Debate in Congress was fierce. Opponents of the pipeline such as Rep. John Dingell (D., Mich.) warned of earthquake risks, an "extreme" hazard to wildlife, and "an enormous threat to the way of life" of native American tribes.

However, aside from the 1989 Exxon Valdez oil spill—which was a tanker accident, not a pipeline leak—the Trans-Alaska Pipeline System, or TAPS, has had an exemplary environmental record.

The fear of earthquake-related ecological disaster proved overblown when a magnitude 7.9 earthquake struck along the Denali Fault on Nov. 3, 2002. Structures holding the pipeline above ground were damaged, but the pipeline itself did not buckle.

And what of the pipeline's impact on the ecosystem? A study delivered in 2002 to the American Society of Civil Engineers found that "the ecosystems affected by the operation of TAPS and associated activity for almost 25 years are healthy." The pipeline system, it said, "is simply another feature on the landscape, to which the flora and fauna have habituated."

Meanwhile, the ecosystem of Prince William Sound has in large part recovered from the damage inflicted by the 1989 tanker spill (in which an estimated 11 million gallons of crude leaked when

the ship ran aground). According to the National Oceanic and Atmospheric Association's 25th anniversary report, the "measurable impacts have diminished over the last two decades. In 2013, even two vertebrate species that had shown consistent and lengthy signs of exposure and effects—harlequin ducks and sea otters—appeared to have recovered."

The oil-field structures, according to an environmental report prepared for TAPS in 2001, were used by birds "for nesting, perching, and foraging." In 2011, a census (the most recent) conducted by the Alaska Department of Fish and Game, Division of Wildlife Conservation, showed that the Western Arctic caribou herd (Alaska's largest) numbered about 325,000—four times the pre-pipeline count of 75,000 in 1976.

The lesson of the Trans-Alaska pipeline is that we can build pipelines in ways that protect the environment while yielding large economic benefits. The naysayers were wrong 40 years ago, and policy makers should give scant credence to their arguments against Keystone today.

Mr. Moore is chief economist at the Heritage Foundation, where Mr. Griffith is a senior research associate.

4. Germany's Coal Binge

Green energy mandates have achieved the opposite of their intent.

Editorial, WSJ, Sep 25, 2014

<http://online.wsj.com/articles/germanys-coal-binge-1411599265>

Berlin's "energy revolution" is going great—if you own a coal mine. The German shift to renewable power sources that started in 2000 has brought the green share of German electricity up to around 25%. But the rest of the energy mix has become more heavily concentrated on coal, which now accounts for some 45% of power generation and growing. Embarrassingly for such an eco-conscious country, Germany is on track to miss its carbon emissions reduction goal by 2020.

Greens profess horror at this result, but no one who knows anything about economics will be surprised. It's the result of Chancellor Angela Merkel's Energiewende, or energy revolution, a drive to thwart market forces and especially price signals, that might otherwise allocate energy resources. Now the market is striking back.

Take the so-called feed-in tariff, which requires distributors to buy electricity from green generators at fixed prices before buying power from other sources. Greens tout the measure because it has encouraged renewable generation to the point that Germany now sometimes experiences electricity gluts if the weather is particularly sunny or windy.

Yet by diverting demand to renewables, the tariff deprives traditional generators of revenue and makes it harder for them to forecast demand for thermal power plants that require millions of euros of investment and years to build. No wonder utilities favor cheaper coal plants to pick up the slack whenever renewables don't deliver as promised.

Mrs. Merkel's accelerated phase-out of nuclear power after the 2011 Fukushima disaster in Japan has had a similar effect. Shutting profitable nuclear plants deprives utilities of revenue and saddles them with steep decommissioning costs, which makes cheaper coal more appealing.

To top it off, Berlin has imposed a moratorium on fracking. By preventing exploitation of ample shale-gas reserves, the ban leaves Germany more exposed to strategic pressure from gas exporters (read: Russia) and raises the cost of gas relative to coal. This is another reason cheap, local coal is back in favor.

Ordinary Germans foot the bill for these market distortions, having ponied up an estimated €100 billion (\$129 billion) extra on their electricity bills since 2000 to fund the renewable drive. The government estimates this revolution could cost a total of €1 trillion by 2040.

Berlin is scaling back some taxpayer subsidies for green power. But Germans still also pay for the energy revolution when job-creating investment goes to countries with lower power costs, as happened earlier this year when chemical company BASF said it would cut its investments in Germany to one-quarter of its global total from one-third, and when bad incentives skew generation toward dirtier coal instead of cleaner natural gas.

None of this is what environmentalists promise voters when they plug the virtues of a low-carbon future. Germany's coal renaissance is a cautionary tale in what happens when you try to substitute green dreams for economic realities.

5. Dangers Aside, Railways Reshape Crude Market

Shipping Crude by Rail Expands as New Pipelines Hit Headwinds and Train Companies Reap Revenue

By Russell Gold and Chester Dawson, WSJ, Sep 21, 2014

<http://online.wsj.com/articles/dangers-aside-railways-reshape-crude-market-1411353150>

Today, 1.6 million barrels of oil a day are riding the rails,

In May 2008, a locomotive with a grizzly bear painted on its side pulled into a railroad siding next to an abandoned grain elevator in the ghost town of Dore, N.D. The engine, property of the Yellowstone Valley Railroad, hitched up a couple of tank cars of crude from nearby oil wells and set off on a thousand-mile journey to Oklahoma.

Dore would never be the same—and neither would the U.S. energy industry. Until then, most oil pumped in North America moved around the continent in pipelines. Suddenly, and just as the oil industry began a period of unprecedented growth, there was an alternative: "crude by rail."

Today, 1.6 million barrels of oil a day are riding the rails, close to 20% of the total pumped in the U.S., according to the Energy Information Administration, chugging across plains and over bridges, rumbling through cities and towns on their way to refineries on the coasts and along the Gulf of Mexico. If all the railcars loaded with crude on one day were hitched to a single locomotive, the resulting train would be about 29 miles long.

Initially conceived of as a stopgap measure until pipelines could be constructed, and plagued by high-profile safety problems, crude by rail has nevertheless become a permanent part of the nation's energy infrastructure, experts say. Even pipeline companies have jumped into the rail business, building terminals to load and unload crude.

Behind the new industry are powerful economics. While it costs a bit more to ship petroleum on trains than through pipelines, railroads have the flexibility to deliver it to wherever it will fetch the highest prices. And capital expenses are far lower. Major railroads' revenue for hauling crude has jumped from \$25.8 million in 2008 to \$2.15 billion in 2013, according to federal data.

The oil and rail industries have developed "a mutual dependence likely to continue for a long time," said Ed Morse, global head of commodities research for Citigroup.

It is a similar story in Canada: the amount of crude moving by rail has quadrupled since 2012, and is forecast to more than triple between now and 2016.

The swift growth of crude by rail has been embraced by drillers in new oil fields in North Dakota, Texas and Colorado eager to move their product to the highest bidders. It was also welcomed, at least initially, by railroads looking for new customers after the recession sent traditional shipments tumbling.

But it has frightened communities across the country where first responders fear the fireballs that have erupted in the past year after some oil-train derailments. Federal regulators recently proposed new rules to require sturdier cars to carry oil, lower speed limits on some shipments and testing of the volatility of the crude transported by train.

Pipelines still carry most of the 8.5 million barrels of oil pumped every day in the U.S. And safety experts say pipelines have the best record of transporting crude without accident, despite a few big leaks like the one that left Mayflower, Ark., awash in heavy crude last year.

But pipelines, especially new pipelines, face a lot of problems these days. They draw protests from communities worried about spills and unhappy with the use of eminent domain to take rights of way from local landowners.

Activists opposed to the use of fossil fuels have focused on blocking pipelines in hopes of keeping oil in the ground. The Keystone XL pipeline, which requires federal approval because it crosses the U.S. border from Canada, has been seeking a permit since 2008 amid fierce political fighting, pro and con.

Railroads, by contrast, already own 140,000 miles of track in the U.S., according federal statistics, in a system that can send cargo from coast to coast, north to Canada and south to Mexico. By law, railroads don't have the ability to turn down cargo, even if they want to, so all oil shippers had to do is to figure out how to get oil on and off the trains.

A big loading terminal might cost about \$50 million—equal to the estimated cost of building just one mile of the Keystone pipeline.

With a terminal, "You can build it and have it under contract in 12 months and pay it off in five years," said Steve Kean, president and chief operating officer of Kinder Morgan Inc., the operator of 80,000 miles of pipeline in North America and a growing network of rail terminals. The company has spent \$290 million to date building up a crude-by-rail business.

To justify the massive investments needed for pipelines, their builders usually require drillers and refiners to sign long-term shipping contracts before they start laying pipe. That has been a problem for new oil fields without a track record, and for the mostly independent energy companies that developed those fields using hydraulic fracturing, said Adam Sieminski, who runs the federal government's Energy Information Administration. Railroads don't require such lengthy contracts.

The new way of moving crude was born out of frustration and need. In 2006, North Dakota faced what it called, in a report, a "crude oil transportation crisis." Oil production was rising, but the few pipelines that served the state were full.

Enter Musket Corp., a privately held Houston company owned by the family that also owns Love's Travel Stops & Country Stores. Musket bought inexpensive diesel from refineries along the Gulf Coast and moved it by rail to locations close to the Love's service stations, developing and patenting a portable pump for loading and unloading the fuel.

In 2007, Musket tried using its pump to load a couple of tank cars with crude oil rather than diesel. When that worked, the company sent employees driving around North Dakota with binoculars to find an unused railroad siding to lease. They spotted Dore.

"Pretty soon, we knew it was going to be big," said J.P. Fjeld-Hansen, a managing director of Musket. Trains could deliver Bakken crude to wherever it could fetch the highest prices, including Philadelphia, California, Louisiana or the giant Houston petrochemical complex.

The first loads from Dore were carried to Oklahoma, home to a giant oil-trading hub, by BNSF Railway Co., now owned by Berkshire Hathaway Inc. It picked up the cars from Yellowstone Valley Railroad, a so-called short line railroad that now operates on just one mile of track—specializing in hauling freight from shippers' yards to connections with the bigger railroads. The company that owns the railroad, Watco Companies Inc., didn't respond to requests for comment.

"Crude is a growing part of our business," said Michael Treviño, a spokesman for BNSF, which now moves more oil than any other major North American railroad and spent \$200 million last year on crude-by-rail projects.

The Dore project caught the attention of EOG Resources Inc., a big oil and gas company based in Houston. By the end of 2009, EOG had built an industrial-scale rail-loading terminal in Stanley, N.D., including a 1.3-mile loop of track where trains could be loaded with 60,000 barrels a day.

"We brought the project to fruition in an eight-month period," Mark Papa, the former chairman of the company, said in a conference call with analysts in 2010. The company declined to comment.

The terminal cost \$50 million, according to Wilson & Company Inc., an engineering firm involved in the project. Its chairman, Kenny Hancock, said his firm needed to work out kinks with this first-of-its-kind facility.

One problem was that when tank cars were loaded, hydrocarbon fumes would leak out and, since they were heavier than air, settle in the long open-ended loading shed. "The first seal we tried didn't work and our explosive limit alarms went off," he said. New seals and ventilation fans eventually solved the problem, the company said.

The relative ease and low cost of building loading and unloading terminals soon attracted a range of companies. Great Western Railroad, a Saskatchewan short line mostly owned by the province's farmers in a cooperative agreement, hauled more carloads of crude last year than carloads of grain.

In 2011, Dakota Plains Holding Co. built a loading terminal, acquired a Utah tanning salon business that traded on the OTC Bulletin Board, renamed the business and issued shares to raise funds to expand.

By the end of 2013, there were 13 large rail loading facilities in the state, according to the North Dakota Pipeline Authority. The largest, the Bakken Oil Express outside Dickinson, N.D., can handle 200,000 barrels a day.

There was also a surge in facilities for unloading oil and transferring it to refineries; such terminals are operating or planned in nearly two dozen states and Canadian provinces. Mile-long trains of oil tankers became familiar sights in cities across the country.

The crude-by-rail phenomenon has spread beyond the Bakken Shale in North Dakota and Montana to the Permian Basin in Texas, the Niobrara in Colorado and to western Canada. In July, Global Partners LP and Kansas City Southern said they planned to build a rail terminal in the heart of the Gulf Coast petrochemical complex that can handle more than 100,000 barrels a day of crude, including Canadian oil sands.

"It is not a layup to build a pipeline to the Gulf Coast," said Mark Romaine, chief operating officer of Global Partners, a Waltham, Mass., fuel logistics firm. "Look at the Keystone XL."

But a year ago, those strings of black train cars took on an ominous look after an unattended oil train in Lac-Mégantic, Quebec, derailed and exploded, killing 47 people. Several other derailments were followed by fireballs as Bakken crude burst into towering flames.

Those accidents have given railroads second thoughts about hauling crude, said consultant Anthony Hatch. While companies don't break out the data, hauling crude is believed to be very profitable for railroads, so "they were excited" at first, he said. But now that business, which makes up only about 3.5% of rail shipments, according to federal data, has attracted unwelcome attention in communities that previously ignored the freight trains rumbling through town. And even some of the largest North American railroads are concerned they might not survive the costs of cleanup and lawsuits if a train exploded in a crowded city.

Regulators are imposing new rules that industry executives fear could slow the entire rail system, cut capacity and cause congestion. Federal regulators recently concluded that Bakken oil contains a high level of combustible compounds, known as light ends, as The Wall Street Journal reported earlier this year. The U.S. Department of Transportation's proposed new rules on crude by rail will require companies to test crude before putting it into appropriately sturdy tank cars, among other measures being imposed on the little-regulated industry.

Harold Hamm, chairman and chief executive of Continental Resources Inc., a leading exploration and production company in the Bakken, said that the problem isn't with the oil, but with railroad safety. "There would not be any problems with oil movements in America as long as Mr. Buffett keeps the trains on the track," said Mr. Hamm, referring to Warren Buffett, the chairman and chief executive of Berkshire Hathaway, the owner of BNSF.

Mr. Treviño, the BNSF spokesman, said that "the facts are that 99.997% of rail industry shipments of hazardous materials reach their destination without a release caused by a train accident," and that BNSF had a lower percentage of derailments last year than anytime in company history.

Two BNSF trains were involved in a derailment near Casselton, N.D., in 2013 that released more than 400,000 gallons of crude and set off a several-story tall explosion, leading to the evacuation of 1,400 people from Casselton.

The Association of American Railroads said it has increased inspections, decreased speeds and is using more technology to prevent derailments.

But Mr. Hamm said he thinks the situation will be short lived. "Rail is still a temporary thing," he said. "If rail hadn't been available, there would have been pipelines built."

And some are in the works. Enbridge Inc. recently received approval from North Dakota regulators to start construction on a \$2.6 billion, 225,000-barrel a day and 600-mile project called the Sandpiper pipeline, which would move oil from Tioga, N.D., to Wisconsin.

In Dore, Musket says it isn't worried about business drying up with the addition of pipelines. The company's terminal in the town can now handle 60,000 barrels a day and employs 50 people; the company has built another rail-loading facility in Dickinson, a two-hour drive to the south, and one in the Niobrara Shale in Colorado.

"I don't think it's either/or," Mr. Fjeld-Hansen said. "I think rail and pipe will coexist for a long time."

