

The Week That Was: 2013-08-10 (August 10, 2013)
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The Science and Environmental Policy Project

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Quote of the Week: *If you put feedback into a computer model, you can prove anything.* John Brignell, Number Watch

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Number of the Week: 207

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THIS WEEK:

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

The Right Climate Stuff Team: In his *Forbes* column Larry Bell interviews Apollo astronaut Walter Cunningham, who discusses the change in culture at NASA from the days of the tremendous effort leading to the successful lunar missions as compared with today. Cunningham thinks that the culture of NASA today is less capable of significant accomplishments. Among other issues is that the Apollo scientists and engineers realized that hypotheses need to be challenged by empirical evidence.

Cunningham is part of The Right Climate Stuff team that tested the hypothesis that human emissions of carbon dioxide are causing unprecedented and dangerous global warming (Anthropogenic Global Warming (AGW)) against empirical data and found the hypothesis wanting. He is particularly concerned with the confusion in science created by NASA's Goddard Institute for Space Studies (GISS) and its former leader, James Hansen. Cunningham believes that GISS especially politicized science thereby compromising NASA's credibility and he was one of those who signed a letter to NASA Administrator Charlie Bolden to that effect.

A number of NASA retirees sent a second letter stating that NASA in general, and GISS in particular, failed to address all the salient data on climate change, and relied too heavily on climate models that fail to correctly predict climate change. Cunningham believes NASA should be at the forefront in collecting scientific evidence and debunking the hysteria over AGW. Please see link under Challenging the Orthodoxy.

Lowering Standards: Under its new leadership, the American Geophysical Union (AGU) announced a new statement on climate change drafted by a special committee for that purpose. The title says it all: "Human-induced climate change requires urgent action." The new leadership has completely politicized that once august scientific organization. Among other questionable statements is: "Human-caused increases in greenhouse gases are responsible for most of the observed global average surface warming of roughly 0.8°C (1.5°F) over the past 140 years."

If the statement is correct, we all should be thankful that greenhouse gas emissions, carbon dioxide (CO₂) in particular, brought the earth out of the Little Ice Age and its brutal weather. Of course, the AGU ignores the fact that a major component of 20th century warming occurred from about 1910 to 1940, long before significant CO₂ emissions. The new leadership did not bother to submit the statement to the membership for a vote.

On her web site, Judith Curry presents the significant objections by Roger Pielke Sr., the only dissenter on the AGU committee. Curry questions why any professional society should issue

statements on this topic. In her opinion the AGU statement is one of worst she has seen from a professional society.

In a different post, using criteria discussed at an AAAS workshop, Curry grades the climate statements by the Royal Society, the American Meteorological Society, and the American Geophysical Union. Under its new leadership, the AGU did not do well. Please see links under Lowering Standards and Questioning the Orthodoxy.

NOAA: The US National Oceanic and Atmospheric Administration (NOAA) released its 2012 State of the Climate report. The report evaded the facts that for a decade there has been little or no warming of the lower atmosphere, where the greenhouse effect takes place, and for over 15 years little or no surface warming. Instead the report states: “Warm temperature trends continue near Earth’s surface: Four major independent datasets show 2012 was among the 10 warmest years on record, ranking either 8th or 9th, depending upon the dataset used.” This is evasion of the facts.

The report further states: “The United States and Argentina had their warmest year on record.” As presented by John Christy and Joe D’Aleo, the statement for the US is questionable. An examination of surface records of the US that date back at least 80 years shows that more temperature records were set in the 1930s than during any other decade.

The logo of the web site carrying the report has the caption “science & information for a climate-smart nation.” Apparently, the leadership of NOAA believes that ignorance of significant, contradicting data is smart. Please see links under Lower Standards.

Climate and Violence: Statistician William Briggs discusses with widely differing statistics used in the paper “Quantifying the Influence of Climate on Human Conflict”, which was discussed in last week’s TWTW. He concludes: “The most charitable way to describe the result is complete and utter nonsense. I do not want to exaggerate, but this paper is not even a mess.” So much for the standards of “peer review” in *Science* magazine. Please see link under Lowering Standards.

Validating Models: As stated in prior TWTWs none of the some-73 global climate models have been validated and all run too hot when compared to lower atmospheric temperatures. On his web site, Bishop Hill, Andrew Montford presents a bibliography obtained by of his readers from the British Met Office in response to an inquiry on the validity of the output from General Circulation Models. Montford suggests his readers may wish to randomly select a paper and see what comfort it gives in answering the question.

This should prove interesting. The very first paper gives some discomfort. It equates model simulations (model runs) with experiments, which is not correct. An experiment would be how well a model predicted a particular component of climate – such as warming of the atmosphere over the tropics, where Douglass et al. [IJC 2007] have shown that the models fail. Please see link under Challenging the Orthodoxy.

Quote of the Week: The quote comes from John Brignell who devoted his career to measurement in science and engineering and was a pioneer in computer modeling. Very simply, the value of feedbacks cannot be established within a model. The feedbacks must be thoroughly tested outside of the model. This procedure is ignored in the reports by the UN Intergovernmental Panel on

Climate Change (IPCC) and its followers. On his web site, Brignell presents a list of hazards in computer modeling, which still apply.

In a 12 minute video, Australian David Evans explains why the models are failing – the calculated feedbacks are wrong. Please see links under Model v. Observations and Model Issues.

After Climategate: University of East Anglia Professor of Climate Change, Mike Hulme, presented a provocative essay entitled “After Climategate...Never the Same,” which is found in his new book of essays. On her web site, Judith Curry reproduces part of the essay, which she links to, and offers some of her thoughts. Curry boldfaced a particular sentence: *The populist notion that all climate sceptics are either in the pay of oil barons or are right-wing ideologues, as is suggested for example by studies such as Oreskes and Conway (2011), cannot be sustained.* Please see link under Climategate Continued.

Himalayan Melt: In its Fourth Assessment Report (AR4, 2007), the IPCC reported that the Himalayan glaciers will melt during the 21st century. This would cause great suffering to the many people who live on the watersheds of the Indus and Ganges rivers. The government of India was so concerned that it hired India’s foremost glacier expert to examine the claim. He found it false. Some glaciers were advancing, others retreating, with no clear net trend. The IPCC dismissed this study, leading the government of India to form its own team on climate change

Three years ago, a group headed by Walter Immerzeel published a paper in *Science* stating that during the early part of this century the glaciers will melt quickly and the water levels in the rivers will drop significantly by the end of the century. Many glacial experts criticized the study stating that glaciers melt slowly.

Now a team headed by Immerzeel has backed down on the predictions made earlier, stating the glaciers will recede, but more slowly and that the monsoons will increase precipitation. Of course, this is based on un-validated computer models, and may be very wrong. But at least Immerzeel is willing recognize a need to correct his prior study, which is how science progresses. The question remains: what will the IPCC do? Please see links under Changing Cryosphere – Land / Sea Ice

Amplifications and Corrections: Several readers have complained about the proofreading of TWTW. However, it appears that the major problem is in formatting. As seen in the pdf posted on www.sepp.org long quotes are properly formatted with indentations. But when the word document is converted for distribution, this formatting is lost, making it somewhat difficult to follow. We will endeavor to be sensitive to proper formatting in the document that is distributed. As always we appreciate amplifications and corrections.

Number of the Week: 207 According to reports an estimated 207 coal-fired power plants will close within the decade, of those 138 have been shut down since 2009. Most of the plants that have been shut down are the older, less efficient, and smaller plants. Modern plants are a great improvement to those built in the 1970s. A part of the shutdown is due to low prices of natural gas, but gas prices are rebounding due to a slowdown in drilling.

The plants to be shut down in the next 10 years have about 10% of the nation’s generating capacity. Thanks to game playing by the EPA and the administration, by announcing future

regulations for new power plants without being specific, no prudent utility will undertake the planning and construction of a new coal-fired plant that may not be approved under future, to-be-determined, regulations. This is but another example how indifferent Washington is to the stagnant economy. Please see link under Washington's Control of Energy and <http://in.reuters.com/article/2013/08/07/utilities-firstenergy-coal-idINL1N0G822U20130807>

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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. U.S. and Canada Vie for Big Gas Projects

By Chester Dawson and Ben Lefebvre, WSJ, Aug 5, 2013

http://online.wsj.com/article/SB10001424127887324260204578585883862305950.html?mod=W_SJ_Energy_2_4_Right

2. Oil Boom Helps to Shrink U.S. Trade Deficit by 22%

By Brenda Cronin, WSJ, Aug 6, 2013

http://online.wsj.com/article/SB10001424127887323968704578651734228576550.html?mod=IT_P_pageone_1

3. Runaway Train in Quebec Sparks New U.S. Rail-Safety Rules

Agency Takes Aim at Unattended Trains With Hazardous Materials Such as Crude Oil

By Betsy Morris, WSJ, Aug 2, 2013

http://online.wsj.com/article/SB10001424127887324635904578644561741905382.html?mod=IT_P_pageone_1

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NEWS YOU CAN USE:

Science: Is the Sun Rising?

The Sun's Magnetic Field is about to Flip

By Tony Phillips, NASA Science, Aug 5, 2013

http://science.nasa.gov/science-news/science-at-nasa/2013/05aug_fieldflip/

Commentary: Is the Sun Rising?

Looming weak solar max may herald frosty times

By Staff Writers, Moscow (SPX), Aug 09, 2013

http://www.spacedaily.com/reports/Looming_weak_solar_max_may_herald_frosty_times_999.html

Climategate Continued

After Climategate . . . never the same (?)

By Judith Curry, Climate Etc., Aug 8, 2013

<http://judithcurry.com/2013/08/08/after-climategate-never-the-same/#more-12529>

Link to essay: <http://www.mikehulme.org/wp-content/uploads/2013/06/Extract-from-Chapter-50-Climategate.pdf>

Suppressing Scientific Inquiry

Note to Broadcast Meteorologists pressured by News Directors or Forecast the Facts

By Joseph D'Aleo, ICECAP, Aug 4, 2013

<http://icecap.us/index.php/go/joes-blog/note-to-broadcast-meteorologists-pressured-by-news-directors-or-forecast-th/>

Challenging the Orthodoxy

A Conversation With Apollo Astronaut Walter Cunningham About A Vital Need To Restore Climate Science Integrity

By Larry Bell, Forbes, Aug 6, 2013

<http://www.forbes.com/sites/larrybell/2013/08/06/a-conversation-with-apollo-astronaut-walter-cunningham-about-a-vital-need-to-restore-climate-science-integrity/>

The validity of climate models: a bibliography

By Andrew Montford, Bishop Hill, Aug 3, 2013

<http://bishophill.squarespace.com/blog/2013/8/3/the-validity-of-climate-models-a-bibliography.html>

Who are the real deniers?

By Gordon Fulks, The Hockey Schtick, Aug 5, 2013

<http://hockeyschtick.blogspot.com/2013/08/who-are-real-deniers.html>

Environment Canada's Ignorance Guarantees Political Climate Science And Wrong Policy.

By Tim Ball, A Different Perspective, Aug 3, 2013

<http://drtimball.com/2013/environment-canadas-ignorance-guarantees-political-climate-science-and-wrong-policy/>

An illustration that CO2 won't roast the Earth in a runaway tipping point...

By Anthony Watts, WUWT, Aug 8, 2013

<http://wattsupwiththat.com/2013/08/08/an-illustration-that-co2-wont-roast-the-earth-in-a-runaway-tipping-point/>

Global methane emissions driven by Soviet leaks, volcanoes and El Ninos, not cows

The true story of the drivers of methane

By Tom Quirk, Jo Nova's Blog, Aug 4, 2013

<http://joannenova.com.au/2013/08/global-methane-emissions-driven-by-soviet-leaks-volcanoes-and-el-ninos-not-cows/#more-29853>

Biologists spreading misinformation: hybridization with grizzlies not due to polar bears moving inland

By Susan Crockford, Polar Bear Science, Aug 3, 2013

<http://polarbearscience.com/2013/08/03/biologists-spreading-misinformation-hybridization-with-grizzlies-not-due-to-polar-bears-moving-inland/>

Link to paper, Ecological Consequences of Sea-Ice Decline

By Post, et al., Science, Aug 2, 2013

<http://www.sciencemag.org/content/341/6145/519>

Defending the Orthodoxy

German Politicians Moving To Ban Meat Consumption – Request The Enactment Of A Weekly “Veggie-Day”

By P Gosselin, No Tricks Zone, Aug 8, 2013

<http://notrickszone.com/2013/08/08/german-politicians-moving-to-ban-meat-consumptions-request-the-enactment-of-a-weekly-veggie-day/>

[SEPP Comment: See link about Global Methane, above.]

Frigid and Sweltering: The New Climate Normal

By Madeline Ostrander, The Nation, Aug 8, 2013

<http://www.thenation.com/blog/175667/frigid-and-sweltering-new-climate-normal#axzz2bUzs7LrQ>

Marine Life Reacts Faster to Warming Than Land Species

By Alex Morales, Businessweek, Aug 4, 2013

<http://www.businessweek.com/news/2013-08-04/marine-life-reacting-faster-to-climate-change-than-land-species>

Areas occupied by marine species including fish, corals and plankton are moving by an average of 72 kilometers (45 miles) a decade, typically toward the poles, the study by researchers at 17 institutions in 8 countries said today. That’s more than 10 times the 6.1 kilometer rate that land creatures are shifting.

[SEPP Comment: What!]

Questioning the Orthodoxy

Climate Realism and Socialist Realism

By Norman Rogers. American Thinker, Aug 8, 2013

http://www.americanthinker.com/2013/08/climate_realism_and_socialist_realism.html

[SEPP Comment: The IPCC is breaking new ground in mathematical statistics. With its ensemble of models, it creates an opinion poll of computers!]

(Ir)responsible advocacy by scientists

By Judith Curry, Climate Etc., Aug 6, 2013

<http://judithcurry.com/2013/08/06/irresponsible-advocacy-by-scientists/#more-12477>

Scientists assert there is less weather variability, globally, than most people believe

Henry Gass, E&E reporter, Aug 5, 2013 [H/t WUWT]

<http://www.eenews.net/stories/1059985592>

Link to paper: No increase in global temperature variability despite changing regional patterns

By Huntingford, et al., Nature, Jul 24, 2013

<http://www.nature.com/nature/journal/vaop/ncurrent/full/nature12310.html>

Climate Change Myths

Just because humans sometimes damage the environment doesn't mean government is competent to fix the problem

By John Stossel, Reason.com, Aug 7, 2013

<http://reason.com/archives/2013/08/07/climate-change-myths>

Fabricating Climate Doom – Part 2: Hijacking Conservation Success in the UK to Build Consensus!

By Jim Steele, WUWT, Aug 6, 2103

<http://wattsupwiththat.com/2013/08/06/fabricating-climate-doom-part-2-hijacking-conservation-success-in-the-uk-to-build-consensus/>

Global Warming as Faith

By Norman Rogers, American Thinker, Aug 6, 2013

http://www.americanthinker.com/2013/08/global_warming_as_faith.html

Hot Lies Disputed by Cold Facts

By Alan Caruba, Warning Signs, Aug 5, 2013

<http://factsnotfantasy.blogspot.com/2013/08/hot-lies-disputed-by-cold-facts.html>

Global Warming = Climate Change

By Ed Hoskins, SPPI, Aug 7, 2013

http://scienceandpublicpolicy.org/originals/global_warming_climate_change.html

[SEPP Comment: An overview of temperature history and the significance of CO2.]

Problems in the Orthodoxy

Major Danish Daily Warns: “Globe May Be On Path To Little Ice Age...Much Colder Winters...Dramatic Consequences”!

By P Gosselin, No Tricks Zone, Aug 9, 2013

<http://notrickszone.com/2013/08/09/major-danish-daily-warns-globe-may-be-on-path-to-little-ice-age-much-colder-winters-dramatic-consequences/>

Rebels Turn on IPCC over Climate Sensitivity

By Graham Lloyd, The Australian, via GWPF, Aug 3, 2013

<http://www.thegwpf.org/rebels-turn-ipcc-climate-sensitivity/>

A New Climate-Policy Paradigm

By Oliver Geden, Project Syndicate, Aug 7, 2013

<http://www.project-syndicate.org/commentary/replacing-the-top-down-approach-to-international-climate-policy-by-oliver-geden>

[SEPP Comment: The big top-down effort is not working.]

Fracking shatters all the old green battlelines

By Hugo Rifkind, The Times, via GWPF, Aug 6, 2013

<http://www.thegwpf.org/hugo-rifkind-fracking-shatters-green-battlelines/>

Seeking a Common Ground

Changing minds

By Martin Livermore, Scientific Alliance, Aug 8, 2013

<http://scientific-alliance.org/scientific-alliance-newsletter/changing-minds>

Cold weather coming?

TV Debate – Joe Bastardi of WeatherBell and Corey Powell of Discovery Magazine, Fox Video, Aug 8, 2013 [H/t WUWT]
<http://video.foxbusiness.com/v/2593834248001/colder-weather-coming/>

Expanding the Orthodoxy

Coal at Risk as Global Lenders Drop Financing on Climate

By Mark Drajem, Bloomberg, Aug 6, 2013

http://www.bloomberg.com/news/2013-08-05/coal-at-risk-as-global-lenders-drop-financing-on-climate.html?utm_content=buffer313b4&utm_source=buffer&utm_medium=twitter&utm_campaign=Buffer

[SEPP Comment: Keeping the poor, poor.]

IAEA Coordinates an International Project to Protect Glaciers

By Michael Madsen, IAEA, Jul 29, 2013

<http://www.iaea.org/newscenter/news/2013/protectglaciers.html>

[SEPP Comment: Obviously, the International Atomic Energy Agency expects to benefit, even though its expertise is someone thin.]

Lowering Standards

Scientists declare: 'Human activities are changing Earth's climate'

By John Roach, NBC, Aug 5, 2013 [H/t Clyde Spencer]

<http://www.nbcnews.com/science/scientists-declare-human-activities-are-changing-earths-climate-6C10853219#scientists-declare-hum>

Link to Statement: Human-induced climate change requires urgent action.

By AGU Committee, August 2013

http://www.agu.org/sci_pol/pdf/position_statements/AGU_Climate_Statement_new.pdf

AGU Statement on Climate Change

By Judith Curry, Climate Etc., Aug 5, 2013

<http://judithcurry.com/2013/08/05/agu-statement-on-climate-change/#more-12466>

[SEPP Comment: Along with comments by Roger Pielke Sr. on why he opposed it.]

The AGU climate policy statement as redrafted by Monckton

By Christopher Monckton, WUWT, Aug 7, 2013

<http://wattsupwiththat.com/2013/08/07/the-agu-policy-statement-as-redrafted-by-monckton/>

Crazy over climate

By Peter Foster, Financial Post, CA, Aug 8, 2013

<http://opinion.financialpost.com/2013/08/08/peter-foster-crazy-over-climate/>

[SEPP Comment: More on the Royal Society's award to "cognitive scientist" Stephan Lewandowsky and his attempt to link climate skeptics to those who believe NASA faked the lunar landing. Does Lewandowsky include Apollo astronauts?]

Climate Hash Rehashed

By Patrick J. Michaels and Paul C. "Chip" Knappenberger, WUWT, Aug 7, 2013

<http://wattsupwiththat.com/2013/08/07/climate-hash-rehashed/>

Link to the report: State of the Climate in 2012: Highlights

By Staff Writers, NOAA, Aug 2, 2013

<http://www.climate.gov/news-features/understanding-climate/state-climate-2012-highlights>

NOAA report card: We still live in a warming world

While the report purposely doesn't address why the world is warming, "the causes are primarily greenhouse gases, the burning of fossil fuels.

By Seth Borenstein, AP, Aug 7, 2013 [H/t Clyde Spencer]

<http://news.msn.com/science-technology/noaa-report-card-we-still-live-in-a-warming-world>

Rise In Violence Linked To Poor Statistics. Or Climate Change

By William Briggs, His Blog, Aug 4, 2013

<http://wmbriggs.com/blog/?p=8704>

Questioning European Green

We could soon be paying billions for this wind back-up

The National Grid's latest plan is taking off into the weirdest scheme yet, thanks to our politicians' obsession with wind turbines

By Christopher Booker, Telegraph, UK, Aug 3, 2013

<http://www.telegraph.co.uk/earth/energy/10220083/We-could-soon-be-paying-billions-for-this-wind-back-up.html>

There's no room for wind farms but plenty for fracking, says PM

There will not be "a lot more" onshore wind turbines in the UK, David Cameron has said, as he signalled that hundreds of gas fracking wells could be drilled across the country.

By Peter Dominiczak, Telegraph, UK, Aug 8, 2013 [H/t GWPF]

<http://www.telegraph.co.uk/earth/environment/10231717/Theres-no-room-for-wind-farms-but-plenty-for-fracking-says-PM.html>

Two thirds of huge UK wind farms built by foreign companies

Two thirds of one of the UK's biggest wind farms has been built abroad, it has been disclosed.

By Peter Dominiczak, Telegraph, UK, Aug 7, 2013

<http://www.telegraph.co.uk/earth/energy/windpower/10227981/Two-thirds-of-huge-UK-wind-farms-built-by-foreign-companies.html>

Questioning Green Elsewhere

Abbott demands green bank stops work

By Staff Writer, AAP, (AU), Aug 5, 2013 [H/t GWPF]

<http://www.heraldsun.com.au/news/breaking-news/abbott-demands-green-bank-stops-work/story-fni0xqi4-1226691455875>

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

Art Horn Letter to Connecticut State Department of Agriculture

By Art Horn, ICECAP, Aug 6, 2013

http://icecap.us/index.php/go/political-climate/art_horn_letter_to_connecticut_state_department_of_agriculture/

[SEPP Comment: Horn exposing the ignorance of the bureaucrat.]

Breaking News! Seventh First Climate Refugees Discovered!

By Willis Eschenbach, WUWT, Aug 9, 2013

<http://wattsupwiththat.com/2013/08/09/breaking-news-seventh-first-climate-refugees-discovered/>

[SEPP Comment: More sensationalist reporting by BBC.]

ScienceShot: Arctic Warming Twice as Fast as Rest of World

By Sid Perkins, Science, Aug 8, 2013 [H/t Toshio Fujita]

<http://news.sciencemag.org/2013/08/scienceshot-arctic-warming-twice-fast-rest-world>

[SEPP Comment: Hot Tip – Global Warming of one-fourth of the planet is not Global!]

Climate change said driving force behind larger, more extreme wild fires

By Staff Writers, East Lansing, Mich. (UPI,) Aug 1, 2013

http://www.terraily.com/reports/Climate_change_said_driving_force_behind_larger_more_extreme_wildfires_999.html

[SEPP Comment: The lack of warming is creating these hazards? They researched current and future climate patterns – that says it all.]

Communicating Better to the Public – Make things up.

Climate Changing at Fastest Pace Since the Age of Dinosaurs

By Terrell Johnson, Weather Channel, Aug 6, 2013

http://www.weather.com/news/science/environment/climate-changing-faster-any-time-dinosaurs-20130805?cm_ven=Twitter

[SEPP Comment: Weeds, rats, and cockroaches will do well. Stanford University should be proud! For a contradicting paper link to Scientists assert there is less weather variability, globally, than most people believe.]

Ian Stirling’s latest howler: “the polar bear who died of climate change”

By Susan Crockford, Polar Bear Science, Aug 7, 2013 [H/t WUWT]

<http://polarbearscience.com/2013/08/07/ian-stirlings-latest-howler-the-polar-bear-who-died-of-climate-change/>

[SEPP Comment: Exposing a once distinguished scientist.]

Ozone-protection treaty had climate benefits

Kim Martineau, Science Writer, Lamont-Doherty

New York NY (SPX) Aug 07, 2013

http://www.terraily.com/reports/Ozone_protection_treaty_had_climate_benefits_999.html

Models v. Observations

12-Minute Video Clip Clearly Shows Why “Climate Models Are Fundamentally Flawed”!

By P Gosselin, No Tricks Zone, Aug 6, 2013

<http://notrickszone.com/2013/08/06/12-minute-video-clip-clearly-shows-why-climate-models-are-fundamentally-flawed/>

Model Issues

Computer modelling

By John Brignell, Number Watch, Aug 2002

http://www.numberwatch.co.uk/computer_modelling.htm

Changing Weather

Tornado season close to quietest ever despite the two F-5s in Oklahoma

By Joseph D'Aleo, ICECAP, Aug 7, 2013

http://icecap.us/index.php/go/icing-the-hype/tornado_season_close_to_quietest_ever_despite_the_two_f_5s_in_oklahomal/

[SEPP Comment: Contains a video taken by a storm chaser of the F-5 that hit Moore Oklahoma.]

Another Busy Hurricane Hoopla Season

By Jeffrey Folks, American Thinker, Aug 9, 2013

http://www.americanthinker.com/2013/08/another_busy_hurricane_hoopla_season.html

[SEPP Comment: Searching for the meaning of normal in NOAA's above normal predictions.]

Excessive rain in U.S. Southeast causing millions in crop damage

By Staff Writers, Cordele, Ga. (UPI), Aug 2, 2013

http://www.seeddaily.com/reports/Excessive_rain_in_US_Southeast_causing_millions_in_crop_damage_999.html

[SEPP Comment: Last year it was the drought.]

Changing Climate

Medieval Warm Period in China

By Staff Writers, SPPI & CO2 Science, Jul 31, 2013

http://scienceandpublicpolicy.org/originals/medieval_warm_period_in_china.html

[SEPP Comment: A review of studies that indicate that prolonged Medieval Warm Period existed in China and that for most parts it was warmer than today. Increases in atmospheric CO2 cannot be the cause.]

Changing Cryosphere – Land / Sea Ice

Climate change won't affect Indus and Ganga levels

Utpal Parashar, Hindustan Times, Aug 6, 2013 [H/t GWPF]

<http://www.hindustantimes.com/world-news/Nepal/Climate-change-won-t-affect-Indus-and-Ganga-levels/Article1-1103858.aspx>

Rising river flows throughout the twenty-first century in two Himalayan glacierized watersheds

By W. W. Immerzeel, F. Pellicciotti & M. F. P. Bierkens, Nature Geoscience, Aug 4, 2013

<http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo1896.html>

Antarctic Sea Ice Extent Breaking All Records

By Paul Homewood, Not a Lot of People Know That, Aug 2, 2013 [H/t GWPF]

<http://notalotofpeopleknowthat.wordpress.com/2013/08/02/antarctic-sea-ice-extent-breaking-all-records/>

[SEPP Comment: It may be a tough spring for the Emperor penguins, which are well inland. See link immediately below.]

British Antarctic Survey: Harsh Antarctic Sea Ice Threatens Emperor Penguins With Starvation

By P Gosselin, No Tricks Zone, Aug 4, 2013

<http://notrickszone.com/2013/08/04/british-antarctic-survey-harsh-antarctic-sea-ice-threatens-emperor-penguins-with-starvation/>

Agriculture Issues & Fear of Famine

Bt talong ruling setback to science

By Henrylito D. Tacio, Sun Star (PH), Jun 15, 2013 [H/t World Growth]

<http://www.sunstar.com.ph/weekend-davao/2013/06/15/bt-talong-ruling-setback-science-287622>

[SEPP Comment: Greenpeace playing on fears to stop field trials of Bt eggplants.]

Top French court lifts ban on growing Monsanto GM corn

By Staff Writers, Paris, France (AFP), Aug 01, 2013

http://www.seeddaily.com/reports/Top_French_court_lifts_ban_on_growing_Monsanto_GM_corn_999.html

Existing cropland could feed four billion more

By Staff Writers, Minneapolis MN (SPX), Aug 08, 2013

http://www.seeddaily.com/reports/Existing_cropland_could_feed_four_billion_more_999.html

Review of Recent Scientific Articles by NIPCC

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

Modeling Multi-Scale Precipitation Variability in the Southwest US

Reference: Jiang, P., Gautam, M.R., Zhu, J. and Yu, Z. 2013. How well do the GCMs/RCMs capture the multi-scale temporal variability of precipitation in the southwestern United States. *Journal of Hydrology* 479: 75-85.

<http://nipccreport.org/articles/2013/aug/6aug2013a3.html>

Jiang et al. conclude that their "comparative analyses suggest that current GCMs/RCMs do not adequately capture multi-scale temporal variability of precipitation," and, therefore, they say that "using GCM/RCM output to conduct future flood projections is not credible."

Meet the New Models: Are They Any Better Than the Old Models?

Reference: Knutti, R. and Sedlacek, J. 2013. Robustness and uncertainties in the new CMIP5 climate model projections. *Nature Climate Change* 3: 369-373.

<http://nipccreport.org/articles/2013/aug/7aug2013a1.html>

So ... meet the new models, which are nearly the same as the old models -- struggling in their ability to accurately simulate the Earth's climate

Aneurysmal Subarachnoid Hemorrhage and Global Warming

Reference: Gill, R.S., Hambridge, H.L., Schneider, E.B., Hanff, T., Tamargo, R.J. and Nyquist, P. 2012. Falling temperature and colder weather are associated with an increased risk of Aneurysmal Subarachnoid Hemorrhage. *World Neurosurgery* 79: 136-142.

<http://nipccreport.org/articles/2013/aug/7aug2013a2.html>

The Medieval Warm Period in Northern Chile

Reference: Elbert, J., Wartenburger, R., von Gunten, L., Urrutia, R., Fischer, D, Fujak, M., Hamann, Y., Greber, N.D. and Grosjean, M. 2013. Late Holocene air temperature variability reconstructed from the sediments of Laguna Escondida, Patagonia, Chile (45°30'S).

Palaeogeography, Palaeoclimatology, Palaeoecology 369: 482-492

<http://nipccreport.org/articles/2013/aug/7aug2013a3.html>

[SEPP Comment: Medieval Warm Period was much warmer with no increase in atmospheric CO2 content.]

The Political Games Continue

Rep. Dingell to Obama: Clean Air Act isn't right for greenhouse gas rules

By Zack Colman, The Hill, Aug 6, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/315835-rep-dingell-to-obama-clean-air-act-isnt-right-for-ghg-rules>

Litigation Issues

Global warming litigation goes cold

By Jonathan March, Lexology, Aug 5, 2013 [H/t WUWT]

<http://www.lexology.com/library/detail.aspx?g=253dae70-7328-459f-bf8b-6ef8a7aa12c4>

[SEPP Comment: These are specific damage cases, important but limited in scope. The key case is the EPA endangerment finding.]

California judge rules on the side of sound science – no warning labels required

By Staff Writer, ACSH, Aug 6, 2013

<http://acsh.org/2013/08/california-judge-rules-on-the-side-of-sound-science-no-warning-labels-required/>

[SEPP Comment: Not all is lost – even in California. Various fruit and vegetable products will not require health hazard warnings]

Cap-and-Trade and Carbon Taxes

Dear Australia: Replace the Carbon Tax with . . . NOTHING (don't cream consumers at the credit casino)

By Viv Forbes, Master Resource, Aug 7, 2013

<http://www.masterresource.org/2013/08/australia-replace-carbon-tax-nothing/#more-27056>

Real Politic: Carbon Tax Pessimism (Part II)

By Kenneth P. Green, Master Resource, Aug 9, 2013

<http://www.masterresource.org/2013/08/real-politic-carbon-tax-ii/>

But at the end of the day we're better off with no policy rather than bad policy

Subsidies and Mandates Forever

Fossil Fuel Subsidies

By Donn Dears, Power for USA, Aug 6, 2013

<http://dddusmma.wordpress.com/2013/08/06/fossil-fuel-subsidies/>

[SEPP Comment: Different than what is commonly expressed.]

Beyond Wind Spin: Miami Herald Should Get It Right

By Glenn Schleede, Master Resource, Aug 6, 2013

<http://www.masterresource.org/2013/08/beyond-wind-spin-miami-herald-rebuttal/#more-27045>

[SEPP Comment: An overview of why wind farms are not an inherently profitable investment. The investors in sub-prime energy deserve all the sympathy given to the investors in sub-prime mortgages.]

Almost eight months late, EPA sets 2013 biofuel blend requirement

By Julian Hattem, The Hill, Aug 6, 2013

<http://thehill.com/blogs/regwatch/energyenvironment/315761-epa-calls-for-mixing-165-billion-gallons-of-biofuel-with-gas-in-2013>

[SEPP Comment: Continuing a ridiculous policy.]

EPA and other Regulators on the March

The Epidemiologist Fallacy Strikes Again. EPA, CARB, And Air Pollution

By William Briggs, His Blog, Aug 6, 2013

<http://wmbriggs.com/blog/?p=8720>

[SEPP Comment: Selling fear based on statistical games.]

Dakota lawmakers: EPA decision in Wyoming will raise energy prices

By Ramsey Cox, The Hill, Aug 9, 2013

<http://thehill.com/blogs/floor-action/senate/316321-dakota-lawmakers-epa-decision-in-wyo-will-raise-energy-prices>

[SEPP Comment: According to the link immediately below, the major sources of volatile organic compounds, which produce haze, are natural. Should the required plans include clearing all vegetation?]

Active Atmosphere-Ecosystem Exchange of the Vast Majority of Detected Volatile Organic Compounds

By Park, et al., Science, Aug 9, 2013

<http://www.sciencemag.org/content/341/6146/643.abstract?maxtoshow=&hits=1&RESULTFOR MAT=&andorexactitle=and&titleabstract=climate%252Cgreenhouse%252C+warming&andorexacttitleabs=or&andorexactfulltext=and&searchid=1&usestrictdates=yes&resourcetype=HWCIT&ct>

Clean Air Issues in the 113th Congress: An Overview

By James McCarthy, CRS, July 15, 2013

<http://fpc.state.gov/documents/organization/213007.pdf>

[SEPP Comment: The report is a summary of the current status of EPA intentions and Congressional response.]

Ozone, Mo'Zone and NoZone

Paul Driessen, Townhall, Aug 3, 2013

http://townhall.com/columnists/pauldriessen/2013/08/03/ozone-mozone-and-nozone-n1649367?utm_source=thdaily&utm_medium=email&utm_campaign=nl

Energy Issues – Non-US

Yesterday's fuel

The world's thirst for oil could be nearing a peak. That is bad news for producers, excellent for everyone else

Editorial, The Economist, Aug 3, 2013 [H/t GWPF]

<http://www.economist.com/news/leaders/21582516-worlds-thirst-oil-could-be-nearing-peak-bad-news-producers-excellent>

[SEPP Comment: A new type of peak oil prediction –peaking consumption, not production.]

China to surpass US as top oil importer

By Ben Geman, The Hill, Aug 9, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/316323-china-to-surpass-us-as-top-oil-importer>

Link to Report: China poised to become the world's largest net oil importer later this year

By Staff Writers, EIA, Aug 9, 2013

<http://www.eia.gov/todayinenergy/detail.cfm?id=12471>

UK aims to kick-start British shale revolution

By Michael Thompson and Nick Connell, Oil&Gas Financial Journal, Aug 5, 2013 [H/t GWPF]

<http://www.ogfj.com/articles/print/volume-10/issue-8/departments/capital-perspectives/uk-aims-to-kick-start-british-shale-revolution.html>

Energy Issues -- US

An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions

By Michael Ratner and Mary Tiemann, CRS, Jul 15, 2013

<http://fpc.state.gov/documents/organization/213024.pdf>

[SEPP Comment: The report shows that many states in which modern hydraulic fracturing is occurring already require disclosure of chemicals used. States which are potential for smart drilling are considering such regulations. Most states are using the national listing web site of fracfocus: <http://www.fracfocus.org/>

Energy Exports: America Cannot Afford to Delay

By: Michael Economides, Energy Tribune, Aug 8, 2013

<http://www.energytribune.com/78687/energy-exports-america-cannot-afford-to-delay#sthash.yr413x7G.dpbs>

Washington's Control of Energy

Energy Dept. gives OK to third natural-gas export proposal

By Zack Colman, The Hill, Aug 7, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/315945-doe-gives-ok-to-third-natural-gas-export-proposal>

[SEPP Comment: Needless bureaucratic delays will continue.]

Report: Keystone XL won't impact greenhouse gas emissions

By Zack Colman, The Hill, Aug 8, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/316197-report-keystone-xl-wont-impact-greenhouse-gas-emissions>

'Social cost of carbon' draws coal, oil industry lobbying

By Ben Geman, The Hill, Aug 5, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/315631-social-cost-of-carbon-draws-coal-oil-industry-lobbying>

'War on coal': 207 coal plants will close in the next decade

By Ashe Schow, Washington Examiner, Aug 6, 2013

<http://washingtonexaminer.com/war-on-coal-207-coal-plants-will-close-in-the-next-decade/article/2533944>

Oil and Natural Gas – the Future or the Past?

Federal data: Oil-and-gas jobs up 40 percent since '07

By Ben Geman, The Hill, Aug 8, 2013

<http://thehill.com/blogs/e2-wire/e2-wire/316143-federal-data-oil-and-gas-jobs-up-40-percent-since-07>

Link to report: Oil and gas industry employment growing much faster than total private sector employment

By Staff Writers, EIA, Aug 8, 2013

<http://www.eia.gov/todayinenergy/detail.cfm?id=12451>

The US is the Gassiest Country

By Robert Rapier, Energy Tribune, Aug 9, 2013

<http://www.energytribune.com/78728/the-us-is-the-gassiest-country#sthash.QYWwKFWC.dpbs>

It was in 2003 that the late Matt Simmons predicted, with “certainty,” that by 2005 the US would begin a long-term natural gas crisis for which the only solution was “to pray.”

Potential well water contaminants highest near natural gas drilling

By Staff Writers, Arlington TX (SPX), Aug 06, 2013

http://www.energy-daily.com/reports/Potential_well_water_contaminants_highest_near_natural_gas_drilling_999.html

Many of these heavy metals occur naturally at low levels in groundwater, but disturbances from natural gas extraction activities **could** cause them to occur at elevated levels. [Boldface added.]
[SEPP Comment: Dredging for dollars?]

Study: Shale Is A “Game-Changing” Opportunity for U.S. Economy

By Dana Bohan, Energy in Depth, Aug 1, 2013 [H/t GWPF]

<http://energyindepth.org/national/study-shale-is-a-game-changing-opportunity-for-u-s-economy/>

Link to Report,

Game changers: Five opportunities for US growth and renewal

By Susan Lund, James Manyika, Scott Nyquist, Lenny Mendonca, and Sreenivas Ramaswamy, McKinsey & Co, July 2013

http://www.mckinsey.com/insights/americas/us_game_changers

Return of King Coal?

Dethroning King Coal

By Peter Singer, Project Syndicate, Aug 6, 2013

<http://www.project-syndicate.org/commentary/a-war-on-coal-to-save-the-planet-by-peter-singer>

[SEPP Comment: Global temperature records began to be kept in 1880 – for what percent of the globe? One of the “World’s most prominent ethicists” has issues with facts.]

Old King Coal lives on

By Jonathan Rowland, Energy Global, Aug 8, 2013 [H/t GWPF]

http://www.energyglobal.com/news/coal/articles/Coal%C2%AC_remains_dominant_in_electricity_mix_as_natural_gas_prices_rise_coal_new_301.aspx#UgOT_pK1Fc5

Oil Spills, Gas Leaks & Consequences

BP's Robert Dudley on the Gulf Oil Spill's Legal Aftermath

By Paul Barrett, Businessweek, Aug 8, 2013

<http://www.businessweek.com/printer/articles/141586-bps-robert-dudley-on-the-gulf-oil-spills-legal-aftermath>

[SEPP Comment: Does not understand that years of demonization in the US has created hatred for oil companies.]

Nuclear Energy and Fears

Climate targets blown in Japan

By Staff Writers, WNN, Aug 1, 2013

http://www.world-nuclear-news.org/EE_Climate_targets_missed_in_Japan_0108131.html

Terrapower: A Nuclear Reactor that Burns Its Own Waste?

By Shawn McCarthy, Globe and Mail, (CA) via GWPF, Aug 9, 2013

<http://www.thegwpf.org/terrapower-nuclear-reactor-burns-waste/>

Alternative, Green ("Clean") Solar and Wind

Cycling Damages Power Plants

By Donn Dears, Power for USA, Aug 9, 2013

<http://dddusmma.wordpress.com/2013/08/09/cycling-damages-power-plants/>

[SEPP Comment: A major problem created by erratic solar and wind.]

DOE: Wind Leads New U.S. Generation Additions in 2012

By Sonal Patel, Power News, Aug 7, 2013

http://www.powermag.com/POWERnews/5831.html?hq_e=el&hq_m=2724401&hq_l=7&hq_v=5e660500d0

Obama in center of fight over bald eagle deaths

By Julian Hattem, The Hill, Aug 8, 2013

<http://thehill.com/blogs/regwatch/pending-regs/316051-obama-in-center-of-green-fight-over-eagle-deaths>

[SEPP Comment: The Hill finally acknowledges that wind is not so green after all.]

U.K. Grants Offshore Wind Triple Market Electricity Price

By Alex Morales & Sally Bakewell, Bloomberg, Jun 27, 2013

<http://www.bloomberg.com/news/2013-06-27/u-k-to-pay-offshore-wind-companies-triple-market-rate-for-power.html>

Why U.S. Wind Installations Are Slowing

By Lisa Linowes, Master Resource, Aug 3, 2013

<http://www.masterresource.org/2013/08/slow-us-wind-installations-2q13/#more-27012>

Alternative, Green ("Clean") Vehicles

Chevrolet's Electric Volt: Is Failure Within Its Range?

Editorial, IBD, Aug 7, 2013

<http://news.investors.com/ibd-editorials/080713-666735-gm-dropping-price-on-chevrolet-volt.htm>

Health, Energy, and Climate

Climate change said affecting global spread of infectious diseases

By Staff Writers, Athens, Ga. (UPI), Aug 2, 2013

http://www.terradaily.com/reports/Climate_change_said_affecting_global_spread_of_infectious_diseases_999.html

[SEPP Comment: Warmer weather in the Arctic expands the mosquito season as well.]

Oh Mann!

Climate change letter was personal attack

By Michael Mann, Letter, Times Dispatch, Aug 6, 2013 [H/t WUWT]

http://www.timesdispatch.com/opinion/letters-to-the-editor-for-august/article_833393bb-0d7e-5389-b90d-9edb451c2ddd.html

Link to letter: http://www.dailyprogress.com/opinion/letters_to_the_editor/pols-scientists-misuse-climate-issue/article_01ff07fc-f5ee-11e2-b678-001a4bcf6878.html

[SEPP Comment: For a guy who acts tough, Mr. Mann is very sensitive. He obviously disagrees with the heads of the IPCC and the CRU about the pause in temperature increases.]

Michael Mann, climate charlatan

By Paul Jossey, Daily Caller, Aug 5, 2013

<http://dailycaller.com/2013/08/05/michael-mann-climate-charlatan/#ixzz2bKJnNQsU>

Michael Mann Redefines Science

By Rich Trzuppek, Somewhat Reasonable, Jul 31, 2013

<http://blog.heartland.org/2013/07/michael-mann-redefines-science/>

Environmental Industry

Blueprint for Balance: Protecting Public Lands From the Energy Boom

By Matt Lee Asley, et al. Center for American Progress, Aug 7, 2012

http://www.realclearpolitics.com/articles/2013/08/07/protecting_public_land_from_the_energy_boom_119539.html

[SEPP Comment: American Progress solution – deny use of public lands. The administration is already doing a good job.]

Other Scientific News

Why are publicly-funded scientists allowed to keep their work secret?

By Ron Arnold, Washington Examiner, Aug 2, 2013

http://washingtonexaminer.com/why-are-publicly-funded-scientists-allowed-to-keep-their-work-secret/article/2533802?utm_source=Washington%20Examiner:%20Opinion%20Digest%20Reoccurring%20-%2008/05/2013&utm_medium=email&utm_campaign=Washington%20Examiner:%20Opinion%20Digest

New evidence that cosmic impact caused Younger Dryas extinction

By Marcia Malory, Phys Org, Aug 6, 2013 [H/t GWPF]

<http://phys.org/news/2013-08-evidence-cosmic-impact-younger-dryas.html>

Link to paper: Large Pt anomaly in the Greenland ice core points to a cataclysm at the onset of Younger Dryas

By Petaev, et al., PNAS, Aug 6, 2013

<http://www.pnas.org/content/110/32/12917>

CU-Boulder team develops new water splitting technique that could produce hydrogen fuel

By Staff Writers, Boulder CO (SPX) Aug 07, 2013

[http://www.energy-](http://www.energy-daily.com/reports/CU_Boulder_team_develops_new_water_splitting_technique_that_could_produce_hydrogen_fuel_999.html)

[daily.com/reports/CU Boulder team develops new water splitting technique that could produce hydrogen fuel_999.html](http://www.energy-daily.com/reports/CU_Boulder_team_develops_new_water_splitting_technique_that_could_produce_hydrogen_fuel_999.html)

[SEPP Comment: The dream of a hydrogen economy – free fuel!]

Other News that May Be of Interest

Vienna's routin' Teuton travesty of science

By Tony Thomas, Quadrant, Aug 9, 2013

<http://www.quadrant.org.au/blogs/thomas/2013/08/vienna-s-routin-teuton-travesty-of-science>

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BELOW THE BOTTOM LINE:

Persistent Cold Weather Keeps Thwarting German Efforts To Fight Warming!

By P Gosselin, No Tricks Zone, Aug 5, 2013

<http://notrickszone.com/2013/08/05/persistent-cold-weather-keeps-thwarting-german-efforts-to-fight-warming/>

[SEPP Comment: A bit of amusement.]

Drought making trees more susceptible to dying in forest fires

By Staff Writers, Arcata, Calif. (UPI), Aug 2, 2013

http://www.terradaaily.com/reports/Drought_making_trees_more_susceptible_to_dying_in_forest_fires_999.html

[SEPP Comment: Before or after they die from the drought?]

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ARTICLES:

1. U.S. and Canada Vie for Big Gas Projects

By Chester Dawson and Ben Lefebvre, WSJ, Aug 5, 2013

http://online.wsj.com/article/SB10001424127887324260204578585883862305950.html?mod=W_SJ_Energy_2_4_Right

PORT EDWARD, British Columbia—Some of the world's largest energy companies are racing to transform backwaters like this hamlet of 544 people into boomtowns.

The energy giants are proposing half a trillion dollars in projects to export vast new finds of North American natural gas. Western Canada and the U.S. Gulf Coast are competing to see which region receives the lion's share of the investment.

Port Edward has been shrinking since the canneries and pulp mills began shutting decades ago. But it has a deep-water port that could someday handle the huge ships that carry liquefied natural gas. And Malaysia's state-owned energy giant, Petroliam Nasional Bhd., or Petronas, says it is prepared to spend \$20 billion on a terminal, pipeline and other infrastructure here.

A drilling revolution in the U.S. and Canada has unlocked a glut of natural-gas reserves across the continent. That has sent prices tumbling—a boon for consumers and industrial users. But it has also sent energy companies scrambling for a way to profit by sending the cheap gas to Asia, where demand and prices are high.

Producers largely have divided up into two camps: One is betting on Canada's industry-friendly federal government and its closer proximity to Asia. The other group is hoping already-developed infrastructure in the U.S. will outweigh political uncertainty in Washington over large-scale exports of the cheap fuel.

Industry executives say most of the projects announced so far in the two regions won't be built, so companies are jostling to be first out of the gate. Eurasia Group, a research and consulting firm, estimates energy companies eventually could spend \$50 billion converting existing liquid-gas import plants in the U.S. into export plants, while they may shell out an additional \$60 billion to build such plants from scratch in Canada.

The biggest economic impact will be in North America itself. The British Columbia government estimates that a single LNG plant will cost as much as \$20 billion, creating 3,500 construction jobs and 200 to 300 permanent jobs.

"We can be the second-largest exporter of liquefied natural gas in the world," said British Columbia Premier Christy Clark, who is contemplating a \$100 billion "prosperity fund" from expected tax revenue. "When we reach our potential for liquefied natural gas, it will have the same impact on Canada's national economy that the oil sands in Alberta have had."

Those backing U.S. plants have a different take.

"The reality of it is that the additional cost to build the pipeline and liquefaction equipment in such a remote and pristine area will raise the cost so much that their advantage of lower shipping will be completely eliminated," said Michael Smith, chief executive of Freeport LNG Development LP in Freeport, Texas.

Martin Houston, chief operating officer for BG Group the U.K. gas giant, acknowledges that challenge, but cites shorter sailing times to Asia as a key selling point for Canada. Shipments from Western Canada take eight to 10 days to reach East Asia, less than half the time it takes from the U.S. Gulf coast. Still, BG is hedging its bet with a proposed plant on both sides of the border.

"We see a world in which global supply will be challenged to keep up with global demand," said Mr. Houston.

As recently as 2007, North America was preparing for a gas shortage and building terminals to import LNG, not ship it offshore. But with the advent of the North American gas boom, many of the import terminals have seen little business.

Now they are being converted to export terminals at around \$10 billion apiece.

So far, the U.S. government has approved two projects for LNG exports—Freeport is one of them. A debate rages in Washington over whether to allow more. Some industry groups say the gas should stay on the continent, to ensure cheap energy for U.S. manufacturing and consumers.

There is no such debate in Canada. Ottawa has approved three export applications, including projects led by Chevron Corp and Royal Dutch Shell PLC. Four others filed this summer are pending—including one large-scale plant by Exxon Mobil Corp and two more major terminals by BG Group and Petronas.

None of them have yet fully committed to a Canadian project. Before spending the billions of dollars necessary for an LNG-export plant, they want long-term contracts for the gas. So they are courting Asian buyers or recruiting them as partners for their projects. Asian buyers, meanwhile, are pushing to get the gas as cheaply as possible before they commit.

Few in the energy industry doubt that Asian buyers will sign deals for Canadian gas. The best evidence is the number of Asian companies that have taken equity stakes in Canadian LNG projects or snapped up tracts of gas-rich ground in western Canada.

Just the same, Apache Corp and two former partners struggled to line up buyers for its Canadian LNG project on the site of an abandoned pulp mill in the coastal town of Kitimat. Many were spooked by the companies' lack of experience in LNG and the high prices the consortium sought to cover upfront costs, according to company and industry officials. The project got a boost after Chevron, a giant with deep pockets, bought in late last year.

"Chevron brings financial strength, operating experience and marketing expertise to the project," said Apache spokesman Paul Wyke.

Freeport's Mr. Smith says projects in the U.S. had a different challenge. Amid deep reservations in Washington about letting large-scale LNG exports go forward, planners realized their success lining up buyers would be determined by their place in the permit line. Freeport won the second recent U.S. export license in May.

As projects on both sides of the border compete for LNG buyers, a boomtown mentality has taken hold along isolated stretches of Canada's north Pacific coastline, where practically no LNG infrastructure exists currently. The epicenter of the excitement is a handful of small coastal communities some 350 miles northwest of Vancouver and less than 50 miles from Alaska, like Port Edward, with ice-free harbors year round.

Companies would need to build berths, gas-liquefaction plants and the pipelines running to gas fields hundreds of miles inland. Petronas paid over \$5 billion for Canadian gas producer Progress Energy to get access to the gas reserves that would feed its proposed plant in Port Edward.

Chinese state-owned energy giant Cnooc Ltd. has expressed interest in nearby Digby Island, home to Prince Rupert's single-runway airport, and another site 16 miles farther north, local officials say. Last year, Cnooc spent \$15.1 billion buying Nexen, another Canadian energy firm with significant gas holdings in British Columbia.

"The LNG industry appears to be caught up in a gold rush along this coast," said Jack Mussallem, mayor of Prince Rupert, population 11,838, which shares a deep-water port with Port Edward. "We're getting new inquiries monthly."

The community of Kitimat, 125 miles southeast of Prince Rupert, is also bracing for change. Situated at the end of a picturesque fiord popular with salmon fishermen, groups led by Chevron, Shell and a smaller consortium have snapped up abandoned industrial and native-owned lands for proposed LNG terminals.

"We've probably seen every world class energy company come and visit us over the past year," said Rose Klukas, economic development officer in Kitimat, whose city hall operates out of a partially vacant shopping mall.

Tim Hortons Inc. opened its first coffee-and-doughnut store in Kitimat in December. The town expects its first hotel to break ground by year's end, and town officials changed its bylaws in June to allow escort services, expecting an onslaught of temporary workers.

The town welcomes all the new attention after a period of economic malaise. In 2010, West Fraser Timber Co. shut a paper mill after 40 years in Kitimat.

"We feared our home equity had gone to zero overnight," Ms. Klukas said. Today, real-estate prices have rebounded, with home sales doubling last year, according to local real-estate agents.

Driving all the activity are huge shale-gas formations in the Western Canada Sedimentary Basin, which make up the bulk of the nearly 1,300 trillion cubic feet of known "tight gas" resources in Canada that could contain more than 100 years' of gas at current production levels, according to the Canadian Society for Unconventional Gas. Long thought too costly to tap, horizontal drilling and hydraulic fracturing, or fracking, now promise to unlock much of that gas, trapped in shale and other rock.

Getting it to Asia won't be simple. At the Chevron-Apache project in Kitimat, bulldozers are leveling dirt at the site at a cost of hundreds of millions of dollars, but no formal construction date has been set for the project, already two years behind its original timetable.

Work crews at the site in the lower Kitimat valley are busy installing some 1,600 ground panels to stabilize the soft soil after removing 100,000 square feet of clay prone to liquefying. And a pipeline has yet to be built to carry gas hundreds of miles, over a coastal mountain range, from fields near the interior border with Alberta.

"All projects have their challenges," said Joe Geagea, Chevron's global natural gas marketing chief. "We have not seen anything that cannot be overcome with good engineering and good planning."

Back in Port Edward, Petronas has awarded preliminary contracts for pipelines and other engineering work, and expects to make a final investment decision next year. While publicly pursuing separate facilities, Petronas and BG are discussing ways of possible collaboration, said people familiar with the companies' plans.

"There are so many proposals out there," said Greg Kist, president of Pacific Northwest LNG, the name of the Petronas-backed project. "It's about who's got all the pieces in place at one point in time."

Geological surveys began the last week of June on the small, brush-covered islet called Lelu Island it has leased for the LNG facility. Mr. Kist says it could soon be swarming with 3,500 workers building the first two of three planned trains, or facilities, for super-chilling 18 million tons of gas annually from 2018.

But first it needs a bridge. A 500-foot span of water separates the uninhabited island from Port Edward proper. Local residents say Lelu Island, with no roads or electricity, is a popular recreational spot. Shawn Pettitt, the town's volunteer fire chief, lives within sight of the island and recalls family outings there.

"This community needs the jobs," he said. "But I'm sure going to miss the fishing and swimming."

In the early 2000s, soaring gas prices triggered plans to build dozens of LNG import terminals in the U.S. In 2008, Cheniere Energy Partners LP opened the doors on one such facility in Cameron Parish, La. But by then, a revolution in drilling and extraction was unlocking vast new reserves of gas at home.

Demand for imports fell, and Cheniere laid off much of the staff. In his Houston office, Cheniere Chief Executive Charif Souki keeps a model of an LNG cargo ship his company bought at the time to bring in the gas imports. The company was forced to sell the ship at a distressed price.

"A bad memory," Mr. Souki calls it.

Today, the facility is suddenly at the front of the pack in the new race to export gas. Cheniere is spending \$12 billion to expand the plant to super-chill gas into a liquid state for sea shipment. Its first shipment is expected in late 2015, and should be the first to hit the market.

Corrections & Amplifications

Natural-gas prices are \$4 per million British thermal units in North America and \$16 per million BTU in Asia. An earlier version of this article dropped the word million in both cases.

2. Oil Boom Helps to Shrink U.S. Trade Deficit by 22%

By Brenda Cronin, WSJ, Aug 6, 2013

<http://online.wsj.com/article/SB10001424127887323968704578651734228576550.html?mod=IT>
[P_pageone_1](#)

America's trade deficit narrowed sharply in June, driven by record exports and a shrinking bill for oil imports, brightening the picture for domestic growth in the second quarter.

The trade gap fell more than 22% during the month, to \$34.2 billion from \$44.1 billion, the Commerce Department said Tuesday. Exports notched their sharpest rise since September 2012, hitting their highest level, adjusted for inflation, on record. Imports fell in part because Americans bought far fewer foreign-made cellphones and other consumer goods.

The improving trade situation spurred a number of economists to raise their estimates for second-quarter growth from the government's initial 1.7% estimate last week.

Tuesday's figures indicate that trade could exert less of a drag on gross domestic product growth than estimated—and possibly even contribute to expansion. Paul Ashworth, chief U.S. economist at Capital Economics, said GDP could be revised up to an annualized pace of more than 2.5%.

"It's a good trade report from the perspective of the improving export position of the U.S.," said Barry Bosworth, a senior fellow in economic studies at the Brookings Institution in Washington. However, that improvement comes amid global demand that has yet to recover from the 2007-09 recession.

"All around the world I think you see the slowing of trade mainly because the markets in which people are trying to sell aren't doing very well," he said.

Mr. Bosworth added that some strength in June likely was due to a rebound from May's weak reading, which initially estimated that the trade deficit widened to \$45 billion.

The most recent report in part reflects a strengthening domestic energy industry. Imports of fuel oil and other petroleum products fell, while exports of both rose. When calculated in 2009 dollars, the trade deficit in petroleum products fell by almost \$2.2 billion from May to \$10.23 billion; the trade deficit in non-petroleum products fell by \$5.93 billion to \$37.38 billion.

June's reading showed narrowing trade deficits between the U.S. and partners such as the European Union and China, which have seen their economies slow, and a growing surplus with parts of Central and South America. Trade numbers for individual countries aren't seasonally adjusted, which means that they are a less-reliable barometer, and one that can swing widely from month to month.

The U.S. imports far more from China than it exports. In June, however, imports from China edged down while exports moved up. Nevertheless, a number of U.S. companies say they already are seeing some softening in demand, as Beijing attempts to rebalance its economy away from exports and toward more domestic consumption.

Alter Trading Corp. of St. Louis continues to ship 20-foot containers of scrap metal to Asia, but says China has lost its formerly "voracious" demand for the company's materials. Robert Stein,

Alter's senior vice president of the nonferrous market, said 45% of the company's nonferrous metals—such as aluminum and copper —are exported, with "the preponderance" going to China.

The family-owned company gathers and processes scrap metal at more than a dozen facilities, mostly in Midwest and Southern states.

"China's overall importance as a destination for secondary metals is on the decline and my opinion is that it has reached its zenith and is headed down," Mr. Stein said. "It'll still be a significant and steady buyer but they won't be as crazy as they were."

But China's surging population remains a tantalizing market for exporters, including U.S. companies. The country's middle class is expected to triple from 200 million now to 600 million in 10 years, according to John Frisbie, president of the U.S.-China Business Council. The Washington, D.C.-based nonprofit consists of hundreds of American companies that do business with China.

"Growth is being increasingly sought in the so-called Tier 3 and Tier 4 cities in China" and no longer is "concentrated in Beijing and Shanghai and along the coasts," Mr. Frisbie said. "That means you need a bigger network and you need to be managing more in the way of logistics to capture that growth."

Tuesday's report shows U.S. exports to Europe—though down sharply for the first half of the year as a whole—edged up 1.5% in June.

Although many economists saw the narrowing trade deficit as a potential shot in the arm for the U.S. economy, others cautioned against reading too much into one report.

Steven Ricchiuto, chief economist, at Mizuho Securities USA Inc., said it was too soon to translate the brisk exports into stronger second-quarter GDP growth. If the exports largely came out of inventories, that wouldn't reflect new production and lead to a big bump in growth, he said.

3. Runaway Train in Quebec Sparks New U.S. Rail-Safety Rules

Agency Takes Aim at Unattended Trains With Hazardous Materials Such as Crude Oil

By Betsy Morris, WSJ, Aug 2, 2013

<http://online.wsj.com/article/SB10001424127887324635904578644561741905382.html?mod=IT>
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The Federal Railroad Administration issued an emergency order on Friday outlining a detailed set of safety directives to railroads, including prohibiting them from leaving crude-oil trains unattended without first getting a green light from the government.

The order came in the wake an accident last month, when a runaway train derailed and exploded, devastating a small Quebec town and killing 47 people. The train had been unattended before the accident.

The agency said it re-examined its regulations governing the securing of trains after the Quebec accident. It said its inspection data since January 2010 showed "significant non-compliance with

FRA's securement regulations," with "nearly 4,950 recorded defects" in that time. It also said it had seen a number of serious accidents during rail transport of flammable liquids since 2009, and noted the significant growth in these types of rail shipments since 2011.

The agency said that if a railroad wants to leave a train with hazardous materials unattended, it must submit a plan telling the agency where and when it will do so, among other things. It also will need to develop processes to secure the trains, and make sure the locomotive cab is locked, the order said.

The employees responsible for securing trains transporting crude oil and other hazardous materials must notify a dispatcher of the number of hand brakes they intend to apply, along with the tonnage and length of the train, the grade of the terrain on which the vehicle is parked and any relevant weather conditions.

In a train, hand brakes function like an emergency brake does in a car—as a backup to the air brakes. The number of hand brakes that need to be set depend on each situation and require a complex calculation.

In the emergency order, the dispatchers or other qualified railroad employees will be required to confirm that the braking is adequate. Safety regulators have focused on the hand brakes as one of the factors that might have caused the Quebec accident.

The agency said that those factors caused it to decide that it needed to take action to "eliminate an immediate hazard of death, personal injury or significant harm to the environment."

The rail industry said that it would implement the order.

"We appreciate the steps the FRA has taken to help advance the safety of moving hazardous materials via rail," said Edward R. Hamberger, chief executive of the Association of American Railroads.

Mr. Hamberger noted that the association will review its own operating practices in order to enhance safety. It has already convened a committee to review every aspect of the Quebec crash to develop safety provisions.

According to the railroad group, crude-oil traffic increased 443% in the U.S. between 2005 and 2012. The growth is expected to continue, the order noted.

In its order, the agency also raised concerns about the safety of transporting both crude oil and ethanol by rail. In the case of crude oil, the Quebec accident shows that, "in a catastrophic incident, crude oil is problematic when released because it is flammable," the agency said. That risk is compounded, it said, because crude oil is commonly shipped in large units. Similar risks exist with other hazardous materials such as ethanol, the agency said, noting that more carloads of ethanol were transported by rail than any other hazardous material in 2012. Ethanol traffic increased by 442% between 2005 and 2010, though shipments declined last year, according to the order. Furthermore, it said there have been at least four serious mainline derailments resulting in

the breach of tank cars carrying ethanol since 2009—one deadly and the other three causing evacuations.

In addition to the emergency order, the agency and the Pipeline and Hazardous Materials Safety Administration issued notice of a safety advisory and emergency meeting of the railroad safety advisory committee to discuss the Quebec accident and potential regulatory actions to prevent similar future accidents from occurring. Crew staffing practices—including the number of crew members aboard a train hauling hazardous materials—will be on the agenda.

The train that derailed in Lac-Mégantic, Quebec, just north of the U.S. border in Maine, was operated by Montreal Maine & Atlantic Railway Inc., a subsidiary of U.S. train operator Rail World Inc.

The MM&A train, comprising five locomotives and 72 tanker cars carrying crude oil, derailed in the center of Lac-Mégantic on July 6, triggering a series of explosions and killing 47 people.

MM&A has blamed the accident on the train's engineer, saying he didn't set the right number of hand brakes. The union representing the engineer defended his safety record. He hasn't spoken publicly since the accident.

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