The Week That Was: 2012-06-23 (June 23, 2012)  
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The Science and Environmental Policy Project

Quote of the Week:
This is the way the world ends
This is the way the world ends
This is the way the world ends
Not with a bang but a whimper.
T.S. Eliot – The Hollow Men, 1925

Number of the Week: 2.0°F warmer in 1832

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

RIO+20: Apparently, the Rio + 20 Conference ended on Friday. The word apparently is used jokingly. Saturday’s headlines of both the New York Times and the Washington Post failed to include any mention of the closing of the conference. These “newspapers of record” focused on sensational sex trials instead. It seems the conference did not end as the editors wished. According to reports, the conference was tightly controlled by the BRIC countries – Brazil, Russia, India, and China – particularly Brazil which headed the conference. The leaders of Brazil, India and China have made it clear that they will not punish their citizens by stopping economic growth. Russia needs revenues from exports of oil and gas to maintain its budget and government spending.

The conference was different than past conferences for several reasons. There was no grand announcement of Western governments committing huge sums to the governments of the third world. There were no political rock-stars flying in at the last moment to put a deal together. There were no all night sessions extending far beyond the scheduled close of the meeting.

The European ministers were disappointed in the failure for the world to adopt their agenda. The non-government organizations (NGOs) were largely locked out of the process of reaching an agreement, their demands were ignored. The disappointment, even despair, expressed by a number of environmental groups is indicative of the success of the BRIC countries.

Those in the UN Framework Convention on Climate Change (UNFCCC), under whose auspices this conference was given, are no doubt disappointed that they will not have a $100 Billion a year Green Fund to manage. The leaders of some third world countries are no doubt disappointed they will not be receiving huge sums from the UNFCCC, dashing their hopes of expanding their Swiss bank accounts or obtaining that special villa in the south of France. But the conference gave some political leaders the opportunity to stay at a luxurious resort while preaching austerity for others. And the conclusion gives the opportunity for many ordinary citizens in the world to sigh with relief.

As usual, there were many pledges, but few hard commitments. There were pledges of loans for green energy. Certainly, electricity from green sources such as solar and wind is superior to no electricity, but distinctly inferior to reliable electricity from fossil fuels or hydro. Secretary of State Hillary Clinton promised “forging partnerships that would harness ‘the power of the market’ rather than relying solely on governmental action.” As the statement indicates, it is questionable if anyone at the State Department understands why some cultures create prosperity and others do not, as Thomas Sowell has articulated. Also, Roger Pielke, Jr, has some excellent posts on his web site on wealth creation and innovation as

For a variety of reports on Rio+20 please see Article #1 and links under Rio+20.

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**The Royal Society:** The Royal Society has issued a report titled “Science as an open enterprise: open data for open science.” The report states: “Realising the benefits of open data requires effective communication through a more intelligent openness: data must be accessible and readily located; they must be intelligible to those who wish to scrutinise them; data must be assessable [sic] so that judgments can be made about their reliability and the competence of those who created them; and they must be usable by others.” This is an important step in promoting robust discussions on scientific issues, especially in climate science where independent analysts have had to resort to Freedom of Information requests to obtain data to analyze questionable assertions. Often these requests have been met with hostility and have been rebuffed. The hockey-stick affair is but one classic example.

Both Steven McIntyre and Andrew Montford discuss their appreciation and their concerns on the report. Montford adds a few penetrating points: 1) before they are acceptable for public policy considerations, models must demonstrate forecasting power, just not hindcasting; and 2) should those who create elaborate models that prove to be wrong be liable for professional advice as engineers and other professionals are? Please see links under The Royal Society.

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**Temperature Issues:** Ross McKitrick and a colleague produced a new study that continues on his work challenging the claim by the IPCC that the surface land data is free of direct human influence such as urbanization and industrialization. This is critical, because if it is not, the data is biased and the models used by the IPCC attribute to carbon dioxide temperature changes that belong to direct human influence. An expert reviewer of the IPCC Fourth Assessment Report (AR4), McKitrick suggested including a study showing that temperature changes could be explained by socioeconomic variables, thus indicating a possible bias in the surface data. His comments were not included in the final draft.

McKitrick and his colleague have refined the earlier work and compared their model of socioeconomic data with the IPCC models in explaining warming patterns over land for the past few decades. Both types of models are needed to explain surface temperature data indicating that the data does include socioeconomic contamination. McKitrick explains his findings in an article published by Financial Post. Please see links under Challenging the Orthodoxy.

Two other studies appeared on surface temperature data including one by Tom Quirk estimating if the current trend in temperatures, with no warming, is the result of a shift in the Pacific Decadal Oscillation (PDO). Please see links under Measurement Issues.

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**Ad Hominem Attacks:** Personal attacks on skeptics of the theory that carbon dioxide emissions are causing unprecedented and dangerous global warming have appeared in Nature Climate Change and in Science Magazine including the use of the term denier. These have been fiercely rebutted by skeptics.

The piece in Nature Climate Change was an analysis of those who were classified deniers. No doubt, this is all part of the announced effort by global warming alarmists to communicate better with the public. But the analysis offended many that the effort is intended to reach. Judith Curry suggested that the analysts should be analyzed.

Perhaps another study is in order. Should government finance shoddy science to justify government expansion of control over energy use? Even asking the general public a similar question may produce interesting results.
Arctic Warming: A new study of sediment cores dating back some 2.8 million years from a lake in Siberia that has not been covered by glaciers produced some surprising results. The study compared the two interglacial periods from 12,000 and 125,000 years ago, called normal, with two from 400,000 and 1.1 million years ago, called super. They found the temperatures in the super interglacial were significantly warmer, about 4 to 5°C warmer than the normal interglacial. There is no clear indication if the super interglacial periods were the product of intense feedback to warming or the result of natural forcings not understood.

There is a perplexing issue of why the researchers selected 12,000 years ago as a base for the normal. As shown by Don Easterbrook, that was during the Younger Dryas period, which was significantly colder than, say, 8000 years ago.

Easterbrook suggests that the cooling of the Younger Dryas was not caused by meteors as suggested in a study linked in last week’s TWTW. To Easterbrook, the Younger Dryas was globally synchronous and featured multiple glacial advances and retreats. This indicates that the cause was not linked to orbital forcing, a sudden flood of fresh water, meteor impacts, or volcanic eruptions. Please see links under Climate Change.

Antarctic Warming: A study from NASA states that the Antarctic supported substantial vegetation along the edges 20 million years ago. Temperatures were about 20°F or 11°C warmer than today. The article attempted to link the warmth of this period to the concentrations of atmospheric carbon dioxide – up to 50 percent greater than today.

But the article did not explain what caused the earth to enter an ice age about 2.5 million years ago, with long periods of glaciations interrupted by brief warm periods. Anthony Watts kindly supplied a map showing the orientation of the continents 20 million years ago. It clearly shows the North American plate is not linked with the South American plate and the Caribbean seaway is open. Some geologists theorize it was plate tectonics which caused the closing of the Caribbean seaway, which resulted in a change in ocean currents, which, eventually, caused the beginning of the Ice Age period.

EPA-Senate: The Senate resolution to prevent the EPA from implementing rules that will cause the numerous coal-fired power plants to shut down was rejected by a vote of 53 to 46. On the following day, in a letter to his Senators thanking them for voting in favor of the resolution, one member of Virginia Scientists and Engineers for Energy and Environment noted that the temperatures for the day in the Virginia suburbs of Washington were forecast to be 98°F with wind speeds of 4 to 5 mph. According to the specifications for GE wind turbines, on-shore wind power would generate zero electricity. One hundred percent back-up would be required. The forecast for off-shore winds was 10 to 15 knots, which roughly calculated, results in a range in production of 20 to 50% of capacity. An 80% back-up would be needed. Virginia does not yet rely on wind so the calculations were hypothetical.

Amplifications and Corrections: Reader John Dunn asked why are so many people proposing methanol, ethanol; anything but efficient and clean burning gasoline? Fred Singer responded: I see no need for alcohol fuels. They have to be manufactured, have lower heat content than gasoline, hence lower mpg, damage car components, and require a new infrastructure. Why not produce gasoline directly from abundant methane. One made add that a comparison with race cars using methanol may not be appropriate because race car engines are carefully inspected after each race – something the general public would find very inconvenient.

Number of the Week: 2.0 °F warmer in 1832. Reader Ken Towe wrote to TWTW that: “In 1832 Charles Darwin spent the month of June in Brazil. The HMS Beagle was moored in the harbor at Rio de Janeiro.
The air temperature was measured each day at 12 noon. The average noon air temperature for June of 1832 was 75.9°F (± 3.9). In June of 2010 the average noon air temperature in Rio de Janeiro was 73.9°F (± 2.75). The average noon temperature in 1832 was 2.0°F WARMER than 2010. A Student's t-test (0.95) indicates that it is statistically significant.

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. Why Rio is a success - BRICS shut out Green excesses
By Alex Oxley, World Growth, NO URL, Jun 22, 2012

2. Letter from R.C.E. Wyndham To the Bishop of Exeter
Cornwall, England, Jun 14, 2012, No URL

3. Feel-Good Environmentalism at the U.N.
Why do the global glitterati ignore water and air pollution?
By Bjorn Lomborg, WSJ, Jun 20, 2012
http://online.wsj.com/article/SB10001424052702304765304577478470785293702.html?mod=ITP_opinion

4. America, Start Your Natural-Gas Engines
Replacing gasoline in our cars could be an energy game changer. Here's what we need to do to get from here to there.
By Tom Fower, WSJ, Jun 18, 2012
http://online.wsj.com/article/SB10001424052702304192704577406431047638416.html

NEWS YOU CAN USE:

Suppressing Scientific Inquiry
In Academia: “Our Way or the Highway”
By Staff Writers, Facts and Fears, Jun 15, 2012

Society for Conservation Biology in Turmoil Over Editor's Ouster
By Erik Stokstad Science Insider, Jun 15, 2012 [H/t Joe D’Aleo]
[SEPP Comment: Keeping political statements out of scientific journals is no longer tolerated?]

Challenging the Orthodoxy
New Paper “Climate Physics, Feedbacks, And Reductionism (And When Does Reductionism go Too Far?)” By Dick Lindzen
By Roger Pielke Sr, Pielke Climate Science, Jun 21, 2012

Not So Hot in East China
By Patrick Michaels, World Climate Report, Jun 22, 2012
[SEPP Comment: Using proxies of sea surface temperature covering 2,700 years, researchers from Chinese Universities found that the current warming period is not unprecedented.]
Dr. Pat Michaels on the ‘voluminous science that the USGCRP either ignored or slanted’ for the EPA endangerment finding
By Pat Michaels, WUWT, Jun 22, 2012
http://wattsupwiththat.com/2012/06/22/dr-pat-michaels-on-the-voluminous-science-that-the-usgcrp-either-ignored-or-slanted-for-the-epa-endangerment-finding/#more-66082

New Paper Testing Climate Model Validity
By Ross McKitrick, His Blog, Jun 20, 2012
http://www.rossmckitrick.com/index.html

Climate reality check
Conclusion of series shows IPCC’s -computer models fall way short
By Ross McKitrick, Financial Post, Jun 20, 2012
http://opinion.financialpost.com/2012/06/20/climate-reality-check/

*Defending the Orthodoxy*
Climate panel adopts controversial ‘grey’ evidence
By Fred Pearce, New Scientist, Jun 19, 2012

IPCC Gives Up On Science, Makes Grey Literature Official
By Hank Campbell, Science 2.0, Jun 20, 2012 [H/t GWPF]
http://www.science20.com/science_20/ipcc_gives_science_makes_grey_literature_official-91262

‘Prove Us Wrong or Stand Down’: Kerry’s Hour long Floor Speech on Climate Change
By Staff Writers, PJ Media, Jun 19, 2012 [H/t Timothy Wise]
http://pjmedia.com/tatler/2012/06/19/prove-us-wrong-or-stand-down-kerrys-hourlong-floor-speech-on-climate-change/
[SEPP Comment: 8,037 Words to assert an illogical proposition.]

Ocean Acidification - Cause for Alarm and Action
By Sasha Henriques, IAEA, Jun 18, 2012
[SEPP Comment: The International Atomic Energy Agency steps out of its field of expertise and demonstrates its ignorance. Perhaps ignorance is endemic to international agencies.]

Arctic methane gas could spell trouble for Florida coastline
By Elizabeth Bettendorf for FSU News
Tallahassee, FL (SPX) Jun 20, 2012
http://www.terradaily.com/reports/Arctic_methane_gas_could_spell_trouble_for_Florida_coastline_999.html

Expansion of forests in the European Arctic could result in the release of carbon dioxide
By Staff Writers, Exeter UK (SPX), Jun 20, 2012
http://www.terradaily.com/reports/Expansion_of_forests_in_the_European_Arctic_could_result_in_the_release_of_carbon_dioxide_999.html

*Questioning the Orthodoxy*
Study Slashes Deforestation Carbon Emission Estimate
By Staff Writers, Pasadena CA (JPL), Jun 22, 2012
Green grabs: The dark side of the green economy
By Staff Writers, London, UK (SPX) Jun 21, 2012
http://www.seeddaily.com/reports/Green_grabs_The_dark_side_of_the_green_economy_999.html

Global Warming’s Killer: Critical Thinking
By Russell Cook, American Thinker, Jun 18, 2012
http://www.americanthinker.com/2012/06/global_warmings_killer_critical_thinking.html

Questioning European Green Watermelons
How environmentalists are killing the planet, destroying the economy and stealing your children’s future.
By John Brignell, Number Watch, June, 2012
http://www.numberwatch.co.uk/watermelons.htm
[SEPP Comment: An articulate book review by a distinguished British scholar, scientist, and statistician.]

Sunday Reflection: The truth about Germany and the 'clean energy economy'
By Wolfgang Müller and Christopher Horner, Washington Examiner, Jun 9, 2012
http://washingtonexaminer.com/article/686896

GWPF Memorandum On The Draft Energy Bill
Memorandum submitted by the Global Warming Foundation Policy to the Energy and Climate Change Select Committee, House of Commons, June 2012
By Benny Peiser, GWPF, Jun 21, 2012
http://thegwpf.org/uk-news/6022-gwpf-memorandum-on-to-the-draft-energy-bill.html

Wind energy subsidies may be cut
George Osborne wants to cut subsidies for wind energy in a move which could halt the expansion of the turbines throughout Britain.
By Christopher Hope, Telegraph, UK, Jun 19, 2012, [H/t GWPF]
http://www.telegraph.co.uk/earth/energy/9343063/Wind-energy-subsidies-may-be-cut.html

Rio + 20 – World Control?
The Rio future we avoided
Maurice Strong sees the cratering of his Stewie Griffin-style plan to rule the world
By Peter Foster, Financial Post, Jun 21, 2012
http://opinion.financialpost.com/2012/06/21/peter-foster-the-rio-future-we-avoided/

Godfather of Global Green Thinking Steps Out of Shadows at Rio+20
By George Russell, Fox News, Jun 20, 2012 [H/t Catherine French]

Rio +20 Earth Summit: Greens Fail to Get The Future They Want
By Ronald Bailey, Reason, Jun 21, 2012
http://reason.com/archives/2012/06/21/rio-20-earth-summit-greens-fail-to-get-t

Lord Monckton Reports From Rio
To the Gaia-worshipers in Rio, all is symbolic of the new religion
Top Green on Rio: “We Know It’s Rubbish”
By Walter Russell Mead, American Interest, Jun 19, 2012
http://blogs.the-american-interest.com/wrm/2012/06/19/top-green-on-rio-we-know-its-rubbish/

Rio+20 NGO fantasy
Rupert Darwall, Financial Post, Jun 19, 2012
http://opinion.financialpost.com/2012/06/19/rio20-ngo-fantasy/

The Rio Earth Summit: is it destined to fail the world?
The environmental problems facing the world are growing critical, so why is so little expected from the Rio summit?
By Geoffrey Lean, Telegraph, UK, Jun 19, 2012 [H/t Malcolm Ross]
[SEPP Comment: Spotlighting the famous statue of Christ the Redeemer with green light did not help. What a sham!]

Rio+20: Nick Clegg blames China for ‘disappointing text’
Nick Clegg, the Deputy Prime Minister, has blamed a ‘neocolonial world’, where China is more powerful than Europe, for a “disappointing” new global deal on saving the environment.
By Louise Gray, Telegraph, UK, Jun 21, 2012 [H/t GWPF]

Rio +20: World faces mass extinction of wildlife, UN warns
The world faces a mass extinction of wildlife, according to the latest assessment of endangered animals by the United Nations.
By Louise Gray, Telegraph, UK, Jun 19, 2012

Blair leads call for worldwide 'green industrial revolution'
By Staff Writers, Rio De Janeiro (AFP), June 18, 2012
http://www.energy-daily.com/reports/Blair_leads_call_for_worldwide_green_industrial_revolution_999.html

Clinton calls for pragmatic action at Rio+20
By Bradley Brooks, AP, Jun 22, 2012

Earth Summit Babble
By Alan Caruba, Facts No Fantasy, Jun 19, 2012
http://factsnotfantasy.blogspot.com/2012/06/earth-summit-babble.html

Rio – 50,000 people flock to a flop – but that is success in its own right
By Jo Nova, Her Blog, Jun 21, 2012
Science Group: UN Rio+20 Summit Must Reduce Global Population
By Alex Newman, New American, Jun 14, 2012
http://www.thenewamerican.com/tech/environment/item/11724-science-group-un-rio%2020-summit-must-reduce
[SEPP Comment: Eugenics anyone?]

West must cut appetite for cars and TVs, says UN official
By Staff Writers, United Nations (AFP), June 18, 2012
http://www.space-travel.com/reports/West_must_cut_appetite_for_cars_and_TVs_says_UN_official_999.html
[SEPP Comment: Imagine Secretary of State Clinton selling this to the American public.]

Rio+20 Earth Summit results in nonbinding declaration with moderate goals
Clinton spoke of forging partnerships that would harness “the power of the market” rather than relying solely on governmental action.

Funding Fights
Revealed: how taxpayers fund climate change lobbyists
British households are unknowingly giving millions of pounds to fund climate change campaigners through the European Union, according to the Taxpayers’ Alliance.
By Rowena Mason, Telegraph, UK, Jun 19, 2012 [H/t GWPF]
http://www.telegraph.co.uk/earth/environment/climatechange/9339045/Revealed-how-taxpayers-fund-climate-change-lobbyists.html
[SEPP Comment: More on government agencies giving money to green groups to lobby for more government regulations, and expand government.]

The Royal Academy
Science as an open enterprise
The Royal Society, 2012

Royal Society Report on Data Sharing
By Steve McIntyre, Climate Audit, Jun 21, 2012
http://climateaudit.org/2012/06/21/royal-society-report-on-data-sharing/

Boulton says free the data
By Andrew Montford, Bishop Hill, Jun 21, 2012
http://bishophill.squarespace.com/blog/2012/6/21/boulton-says-free-the-data.html

Ad Hominem Attacks
A response to Dr. Paul Bain’s use of ‘denier’ in the scientific literature

Analyzing people who talk about AGW denialism
By Judith Curry, Climate Etc, Jun 19, 2012
http://judithcurry.com/2012/06/19/analyzing-people-who-talk-about-agw-denialism/#more-8865
A Response to Popular Ad Hominem, err Science, Magazine on Global Warming Skeptics
By Warren Meyer, Forbes, Jun 18, 2012

Seeking a Common Ground
Science held hostage in climate debate
By Garth Paltridge, Australian Financial Review, Jun 21, 2012 [H/t GWPF]
http://afr.com/p/lifestyle/review/science_held_hostage_in_climate_Uamwgc7zXEsU6RbQJ5MWIJ#

Communicating Better to the Public – Exaggerate, or be Vague?
OPEC Could Collapse As Shale Gas Pops Peak Oil Myth
By Staff Writers, Dubai, United Arab Emirates (UPI), Jun 21, 2012
http://www.energy-daily.com/reports/OPEC_Could_Collapse_As_Shale_Gas_Pops_Peak_Oil_Myth_999.html

Communicating Better to the Public – Make things up.
Unscientific American on line chat on heat wave to cultists - blames 90s this week on AGW
By Joseph D’Aleo, ICECAP, Jun 21, 2012
http://icecap.us/index.php/go/joes-blog/unscientific_american_on_line_chat_on_heat_wave_to_cultists_blames_90s_this/

The UN defines “climate change” as being man-made: Orwell could not have done it better
By Joanne Nova, Her Blog, Jun 16, 2012

Models v. Observations
A new perspective on drought in the American southeast
By Judith Curry, Climate Etc, Jun 20, 2012
http://judithcurry.com/2012/06/20/a-new-perspective-on-drought-in-the-american-southeast/#more-8875

Measurement Issues
Three new papers on interpreting temperature trends
By Judith Curry, Climate Etc, Jun 21, 2012
http://judithcurry.com/2012/06/21/three-new-papers-on-interpreting-temperature-trends/#more-8883

Remarkable Admission By Gavin Schmidt In Response To The McKittrick and Tole 2012 Paper
By Roger Pielke Jr, Pielke Climate Science, Jun 22, 2012

Changing Weather
2 warmest winter months in Midwest history may have connection
By Staff Writers, Columbia, MO (SPX) Jun 20, 2012
http://www.terradaily.com/reports/2_warmest_winter_months_in_Midwest_history_may_have_connection_999.html
Lupo shared his results with fellow scientists at the Seventh International Climate Change Conference in Chicago this May.
[SEPP Comment: A link between weather patterns 123 years apart.]
March into history
By Anthony Lupo, ICECAP, Jun 22, 2012
http://icecap.us/index.php/go/in-the-news/march_into_history/

[SEPP Comment: Further explanation of unusual warm periods over a century apart.]

Changing Climate
The Intriguing Problem Of The Younger Dryas—What Does It Mean And What Caused It?
By Don Easterbrook, WUWT, Jun 19, 2012

2.8 Million Years of Arctic Climate Change from Lake El’gygytgyn, NE Russia
http://www.sciencemag.org/content/early/2012/06/20/science.1222135.abstract

Remote Siberian Lake Holds Clues to Arctic - and Antarctic - Climate Change
By Staff Writers, Washington DC (SPX), Jun 22, 2012
http://www.terradaily.com/reports/Remote_Siberian_Lake_Holds_Clues_to_Arctic_and_Antarctic_Cli mate_Change_999.html

NASA: Study Finds Ancient Warming Greened Antarctica
By Anthony Watts, WUWT, Jun 18, 2012
http://wattsupwiththat.com/2012/06/18/nasa-study-finds-ancient-warming-greened-antarctica/

New deglaciation data opens door for earlier First Americans migration
By Staff Writers, Corvallis, OR (SPX), Jun 22, 2012
http://www.terradaily.com/reports/New_deglaciation_data_opens_door_for_earlier_First_Americans_mig ration_999.html

Changing Sea Ice
Elephant seals help uncover slower-than-expected Antarctic melting
By Staff Writers, Washington DC (SPX), Jun 22, 2012
http://www.terradaily.com/reports/Elephant_seals_help_uncover_slower_than_expected_Antarctic_melti ng_999.html

The Political Games Continue
Bid to kill EPA coal plant regulations thwarted in Senate

Litigation Issues
Transocean asks judge to release federal documents on Deepwater Horizon
By Emily Pickrell, Fuel Fix, Jun 18, 2012
http://fuelfix.com/blog/2012/06/18/transocean-asks-judge-to-release-21-key-federal-documents-on-deepwater-accident/

[SEPP Comment: Why is the administration not releasing certain emails pertaining to the BP Oil Spill?]

Subsidies and Mandates Forever – maybe not
Wind Farms Canceled, Layoffs Starting” (government dependence is risky business)
EPA and other Regulators on the March
The EPA’s Flawed Zero Tolerance Policy
By Staff Writers, NCPA, Jun 14, 2012

Predicting natural gas prices is like predicting the weather
Eric Lam, Financial Post, Jan 20, 2012
[SEPP Comment: The EPA states by it effectively shutting down of the coal-fired utility industry is only an extension of what is happening as utilities dash for gas. But does the EPA guarantee that the current low prices of natural gas will continue in the future? Of course not!]

All Pain and No Gain
By Staff Writers, NCPA, Jun 18, 2012

EPA Proposes Clean Air Standards for PM2.5
By Staff Writers, Power News, Jun 21, 2012
http://www.powermag.com/POWERnews/4720.html?hq_e=el&hq_m=2468840&hq_l=5&hq_v=5e660500d0

Deadly Particles
Editorial, NYT, Jun 20, 2012
http://www.nytimes.com/2012/06/20/opinion/deadly-particles-in-the-air.html?_r=1&nl=todaysheadlines&emc=edit_th_20120620&pagewanted=print

EPA in a Bind Over Hazardous Experiments on Humans
By Paul Chesser, NLPC, Jun 18, 2012
http://nlpc.org/stories/2012/06/15/epa-bind-over-hazardous-experiments-humans
[SEPP Comment: If EPA declares certain concentrations of soot hazardous, then why did it subject humans to very high concentrations?]
http://opinion.financialpost.com/2012/06/14/peter-foster-pipelines-behind-c-38-battle/
[SEPP Comment: Efforts to streamline environmental regulations are opposed to those whose interest is in the existing order. No newly rich from western Canada for me, thank you.]

Clash Of Titans: Canada Battles Powerful Green Lobby
By William Kay, From GWPF, Jun 21, 2012

Energy Issues -- US
US military's role with petroleum is to assure security, not pioneer alternative fuels
By Staff Writers, Santa Monica CA (SPX), Jun 22, 2012
http://www.energy-daily.com/reports/US_militarys_role_with_petroleum_is_to_assure_security_not_pioneer_alternativaive_fuels_999.html

SDG&E Energizes Sunrise Powerlink
117-Mile, 500,000-Volt Transmission Line Will Support Electric System Reliability This Summer
Press Release, SDGE, Jun 18, 2012
http://www.alpinecommunitynetwork.com/2012/06/the-switch-has-been-flipped-sdge-energizes-sunrise-powerlink/
[SEPP Comment: The permitting process, with environmental reviews, took 5 years. The construction took 18 months.]

Clean Energy in China and the U.S.: It's Not What You Spend
Hearing before US Senate Committee on Energy and Natural Resource
By Derek Scissors, The Heritage Foundation, Jun 15, 2012

Oil and Natural Gas – the Future or the Past?
The US unconventional oil revolution: are we at the beginning of a new era for US oil?
By Salman Ghouri and Areeba Ghouri, European Energy Review, Jun 18, 2012
http://www.europeanenergyreview.eu/site/pagina.php?id_mailing=285&toegang=0e01938fc48a2cfb5f2217f8fb00722d&id=3759

Why Natural Gas Could Displace Gasoline
By Staff Writers, Washington DC (SPX), Jun 18, 2012

Adding fuel to Capitol Hill fire
Natural gas makes sense with federal dollars

Tight oil loosens up
By Jameson Berkow, Financial Post, Jun 21, 2012
http://business.financialpost.com/2012/06/21/tight-oil-loosens-up/?__lsa=44b54869
[SEPP Comment: Another oil boom in Canada?]

Fracking The Movie(s)
By Peter C Glover, Energy Tribune, Jun 22, 2012
Nuclear Energy and Fears
Ohi reactors cleared for restart
Permission to restart the first two of Japan's idled fleet of nuclear power reactors has been given by the prime minister following approvals from local municipal and prefectural authorities. Units 3 and 4 of the Ohi plant are both expected to be back at full power by the end of next month.
By Staff Writers, WNN, Jun 18, 2012

Radioactive Power Politics: New Court Decision Lays Waste To U.S. Nuclear Power Development
By Larry Bell, Forbes, Jun 17, 2012

NRC Petitioned to Stop 35 Reactors Until Court Ruling Satisfied
By Staff Writers, Washington DC (SPX), Jun 21, 2012
http://www.nuclearpowerdaily.com/reports/NRC_Petitioned_to_Stop_35_Reactors_Until_Court_Ruling_Satisfied_999.html

RWE pulls plug on international nuclear power business
By Staff Writers, Berlin (AFP), June 18, 2012
http://www.nuclearpowerdaily.com/reports/RWE_pulls_plug_on_international_nuclear_power_business_999.html

Virginia: Energy Capitol or Energy Prison
By Marita Noon, Energy Tribune, Jun 20, 2012

Alternative, Green (“Clean”) Solar and Wind
$9 Billion in ‘Stimulus’ for Solar, Wind Projects Made 910 Final Jobs -- $9.8 Million Per Job

Permitting and "Intergalactic" Transmission Issues Among Biggest Obstacles for Offshore Energy
By Staff Writers, Power News, Jun 21, 2012
http://www.powermag.com/POWERnews/4749.html?hq_e=el&hq_m=2468840&hq_l=10&hq_v=5e66050d0
[SEPP Comment: The conference appeared to avoid another key issue – cost.]

Wimp Power: Some Quotations from Wind’s Critics
By John Droz, Jr, Master Resource, Jun 21, 2012
http://www.masterresource.org/2012/06/wimp-power-windpower/#more-20456

Soft Costs a Focus in Drive to Cut Solar Energy's Price
By David Wagman, Power News, Jun 21, 2012
http://www.powermag.com/POWERnews/4723.html?hq_e=el&hq_m=2468840&hq_l=9&hq_v=5e66050d0
[SEPP Comment: Sec. of Energy Chu is in a fierce race to lose the most.]
Obama's Green-Jobs Fraud Exposed
Editorial, IBD, Jun 21, 2012

Carbon Schemes
Another nail in the CCS coffin
By Andrew Montford, Bishop Hill, Jun 21, 2012

California Dreaming
Environmental objections in path of bullet train
Rail construction could create more emissions in an area that already has dirty air and high asthma rates. Resolving the issues could delay the project and boost costs.
By Ralph Vartabedian, Los Angeles Times, Jun 11, 2012
http://www.latimes.com/news/local/la-me-bullet-green-20120611,0,7566489.story

GM mislabeling on the California ballot
By Staff Writers, ACSH, Jun 18, 2012
[SEPP Comment: What would the organic farmers say if it was proposed their products had the label: “May contain manure.”]

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

Warmth and Peace in the Roman Classical Period
http://www.nipccreport.org/articles/2012/jun/19jun2012a1.html
Once again evidence continues to accumulate for (1) the rule-of-thumb proposition that warmer times have generally been more peaceful times throughout human history, (2) the likelihood that the high stable temperatures between 60 BC and 90 AD may well have been warmer than those of the 20th century, and (3) the likelihood that solar variability may have been "an important climate forcing factor during this time."

The Theory of Warmth-Induced Amplification of Extreme Weather Events
http://www.nipccreport.org/articles/2012/jun/19jun2012a3.html
[SEPP Comment: Not supported by the evidence.]

Dying from Particulate Air Pollution on Hot and Cold Days in Shanghai, China
http://www.nipccreport.org/articles/2012/jun/20jun2012a2.html
[SEPP Comment: Based on the statistical analysis, extremely cold days amplified the deaths from air pollution, extremely hot days did not.]

Plant Responses to Significant and Rapid Global Warming
http://www.nipccreport.org/articles/2012/jun/20jun2012a1.html
[SEPP Comment: Examining the empirical evidence what did happen rather than building a model of what may have happened. How Novel!]

Environmental Industry
Left-Wing Foundations Dictate Obama's Misplaced Priority
By David Horowitz and Jacob Lanksin, IBD, Jun 19, 2012
http://news.investors.com/article/615354/201206191753/money-forces-obama-to-focus-on-climate-change.htm?p=full

U.N.’s threat to biodiversity
‘Green’ agenda is not healthy for children and other living things

More indium
By Andrew Montford, Bishop Hill, Jun 22, 2012
http://bishophill.squarespace.com/blog/2012/6/22/more-indium.html
[SEPP Comment: Creation of imaginary scarcity for the benefit of environmentalists and bureaucrats.]

Other Scientific News
Soil Moisture Climate Data Record Observed from Space
By Staff Writers, Vienna, Austria (SPX) Jun 21, 2012
http://www.spacedaily.com/reports/Soil_Moisture_Climate_Data_Record_observed_from_Space_999.html

Extensive water in Mars' interior
By Staff Writers, Washington DC (SPX), Jun 22, 2012
http://www.marsdaily.com/reports/Extensive_water_in_Mars_interior_999.html

Other News that May Be of Interest
U.S. reclaims top spot in super-computer wars with machine that 'can do more in an hour than the world's population working non-stop for 320 years'
By Eddie Wrenn, Daily Mail, Jun 18, 2012

Malaysia rare earths plant gets go-ahead
By Staff Writers, Kuala Lumpur, Malaysia (UPI), Jun 20, 2012
http://www.spacemart.com/reports/Malaysia_rare_earths_plant_gets_go-ahead_999.html

Energy poverty takes toll on Balkan forests
Governments’ inability to address energy poverty in Southeastern Europe is increasing the threat of deforestation, as illegal timbering is seen by needy people as their only chance for survival through harsh winters.
By Staff Writer, EurActiv, Jun 21, 2012 [H/t GWPF]
BELOW THE BOTTOM LINE:
‘Peak Rock’: The ONION Goes Neo-Malthusian (Fixity/depletion curse expands)
http://www.masterresource.org/2012/06/peak-rock-parody/#more-20283
[SEPP Comment: A little humor in an all too serious world.]

To fix the climate, take meat off the menu
http://www.washingtonpost.com/opinions/why-are-they-serving-meat-at-a-climate-change-conference/2012/06/15/gJQAUn0afV_story.html
[SEPP Comment: Ask the Secretary of State Clinton to sell that one to Congress!]

Top predators key to extinctions as planet warms
By Staff Writers, New Haven, CT (SPX), Jun 22, 2012
http://www.terradaily.com/reports/Top_predators_key_to_extinctions_as_planet_warms_999.html

ARTICLES:
1. Why Rio is a success - BRICS shut out Green excesses
By Alex Oxley, World Growth, NO URL, Jun 22, 2012

Rio de Janeiro, As the Rio+20 meeting in Brazil draws to a close, World Growth Chairman Alan Oxley notes this meeting is a welcome step change for the UN - away from an unhappy pattern of global environmental meetings marked by division and failure. The reason is leadership by the BRICS, particularly Brazil.

"The communique delivered at Rio is a practicable program that attempts to map out steps towards environmental protection and sustain economic growth. It fairly represents the consensus of opinion among members of the United Nations."

"It very clearly reflects what most of the world thinks and makes clear what UN climate change officials in Copenhagen obscured almost three years ago: Onerous global environmental regulations that cut economic growth are not acceptable."

"Nor is there hyperbole about disastrous rates of removal of tropical rainforests, but businesslike reendorsement of UN programs to promote steady and effective management of forests."

"The fanciful Green-age economic management tools - ecological economics, natural capital, sustainability indexes - are put back where they belong: at the fringe. They are recognized as measures that will flatten growth, not enhance it. The classical aims of sustainable development - increasing economic growth and protection of biodiversity - are reaffirmed."

"In masterful display of conference management, the Brazilian Government set up the Rio+20 Conference to lock the impractical, pet projects of environmental groups and European environment minister out of the UN agenda."

"Three days before the conference ended and before global leaders addressed it, the Brazilian co-ordinator closed down the negotiating groups that had been running for months and issued the text of a declaration, effectively telling the more than 150 delegations, 'That's it. This is what we will approve.'"

"This will be the first major UN conference in memory which has not turned on the results of high-wire antics after time has run out."
"Green campaigners have protested that Brazil’s chairing of the meeting has been heavy-handed. Experienced multilateral negotiators applaud Brazil for artful conference management."

"Nothing better illustrates by contrast the mishandling and incompetence of one climate change conference after another for nearly two decades, culminating at Copenhagen in 2009. These fiascos severely damaged the UN brand."

"This is a return to sanity and a reconnection of the UN system to what most people in most member states want, not what Green minorities in rich countries demand."

"What brought this change? It was not enlightened leadership by the world's developed economies; it was energized by the realistic self-interest of the emerging economies. They are the ones to benefit most from proper implementation of sustainable development and lose most from green economy rhetoric. Brazil is to be congratulated for this achievement."

*Alan Oxley is a highly-experienced, former multilateral negotiator. He is a former Ambassador (of Australia) and former Chairman of the GATT, the predecessor of the WTO. During his diplomatic career he also served terms as a diplomat covering UN meetings in both New York and Geneva. He founded the pro-growth and free market NGO, World Growth, with the aim of adding balance to global debate about sustainable development.*

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**2. Letter from R.C.E. Wyndham To the Bishop of Exeter**
Cornwall, England, Jun 14, 2012, No URL

Rt. Rev. Michael Langrish
Bishop of Exeter
The Bishop's Office
The Palace
Exeter, EX1 1HY

Dear Bishop Langrish

Earlier in the week I listened to what you had to say following the welcome decision to withdraw the diocese's application to erect wind turbines in Devon. I see that your remarks have now been republished in The Daily Telegraph. In particular, it is striking that you consider that you and your staff were subjected to abuse by objectors. Well, I was not part of any such exchanges and do not condone, in your own words, 'bullying tactics'. On the other hand, I cannot help pointing out - to a churchman and so an ethical standard bearer, most especially - that such tactics are an absolutely routine component of the dialectical arsenal favoured by climate change proselytisers, amongst whose ranks the prelariat of all denominations have constituted a prominent and discreditable cadre of alarmist partisans. Accordingly, whilst I will certainly not stoop to the use of opprobrious language, neither do I have any intention of pulling punches simply in deference to 'the cloth', if I may so put it.

Fortuitously, the story of your wind turbines has broken almost exactly with the publication of recent pronouncements of the Intergovernmental Panel on Climate Change (IPCC), supplemented by parallel pronouncements by the National Oceanographic and Atmospheric Administration, another global warming alarmist body sustained, in this case, by the American government. These prompted me to write to my local MP, George Eustice - as you will know, an erstwhile press guru to David Cameron. Rather than going to the bother of re-inventing the wheel, as it were, what follows is a slightly altered text of what I wrote to him two days ago; the nature of the IPCC/NOAA pronouncements will become evident towards the end:
It is always intriguing to note how people such as yourself, who proselytise this issue, invariably settle for sweeping generalisation in preference to the more taxing task of addressing specifics; Yeo, for example, could give master classes in dissimulation. This has consequences. In an immediate sense, it makes it hard to decide whether you have understood my email of 8 June, which initiated this exchange or, indeed, have even read it.

**Climate change major risks:** Such as? There is not one shred of empirical evidence for your assertion. There is, of course, an ocean of mendacious and fraudulent computer modelling by people with vast vested interests in promoting the scam. These embrace individual scientists, to the lasting shame of each academia, scientific societies and publications, the prelatariat of all religious denominations ('faith communities', rather primly and sententiously I suppose we must now call them), NGOs, civil servants, politicians, the media and a number of industrial enterprises.

You state that you do not underestimate my 'strength of feeling on this important issue'. With respect, you are well wide of the mark. I have no strong feelings about climate change. Climate change is fact of life and, in that sense, is a banality. I do, however, have a prejudice against blatant chicanery and outright knavery. You add that you, personally, do believe in dangerous human contribution to so-called climate change. In order to entertain such a proposition, you must accept that, within the context of a vast, chaotic system such as the atmosphere, minor changes to the concentration of a benign trace gas (let me remind you, in overall concentration amounting to less than 1/25th of a single percentage point) can of itself generate catastrophic climatic consequences; in any contemplated response, do please avoid the impulse to quote water vapour - for alarmist promoters like you, a very insecure, double sided argument! No, allow me to suggest, again with respect, that this is an intellectual construct which cannot be advanced with honesty of purpose. And yet, it is upon this vast inverted pyramid constructed on the summit of a sand dune that this disreputable government, as well as its lamentable predecessor, has founded the UK's energy and economic policies.

Neither is this, anyway, a scientific issue. The science is clear. There have been and are no untoward changes in global climate outside those which flow from natural variability. There have been no recent climatic phenomena, which do not have numerous precedents. CO2 has nothing to do with the matter.

On the other hand it is an ethical issue. The ethical considerations arise from the activities of propagandists when

- they seek to howl down any form of questioning or dissent,
- they use threatening vilification as a propagandist tool,
- they damage the careers of those who have the temerity to question their dogma,
- they wilfully and knowingly misrepresent data,
- they wilfully and knowingly suppress contra-indicative data,
- they claim data to be authentic and rigorous when, in reality, it is cherry picked from partisan environmentalist propaganda material,
- they undermine scientific method by refusing to disclose and share data/methodology,
- they wilfully subvert and prostitute their calling for personal gain and self-aggrandisement,
- they subvert hitherto trusted forums of scientific discussion and dissemination,
- they subvert the independence of peer review as a legitimate check and balance,
- they abuse the young by indoctrinating deviant 'science'.

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they lay waste to the environment with worthless and hideously expensive machines (wind/tidal turbines) as well as other devices such as photo-voltaic cells,
they oppress the poor by diverting land usage from food crop cultivation to uneconomic and inefficient mono-crop cultivation of so-called biofuels,
they wilfully associate their personal conceits and financial interests with massive environmental pollution in the developing world,
they are complicit, for the same reasons, in rainforest and other forms of environmental destruction,
they manipulate the fiscal arrangements of entire countries on the basis of demonstrable falsehood,
they spread lies designed to intimidate poorly educated and/or gullible populations,
they claim economic insights based upon false assumptions, corrupted data and outright lies,
they sustain vast departments of state to promote falsehood and scaremongering,
they subsidise supposed independent pressure groups for the purpose of surreptitiously encouraging partisan lobbying,
they lend succour and support from the safety of privileged positions, inherited and otherwise, to villains and scientific charlatans,
they seek to close off and monopolise what should be legitimate debate on a controversial matter of importance, again from behind barricades created by privilege,
they ostentatiously ignore whatever is inconvenient to their tendentious paradigm, however distinguished and credible the sources may be,
they whitewash arrant knavery,
they distort, in furtherance of their mendacity, the normal accepted meaning of language,
they subvert the hitherto trusted organs of mass communication.

Well, enough to be getting on with, I suggest. The questions are how to mitigate the damage/how to hold to account those responsible for it!

So back briefly to my communication of 8 June. The point of that email was to draw to your attention a recent pronouncement - let it be stressed, not from a sceptical voice but from the Intergovernmental Panel on Climate Change, after all your very own supposed primary source of information/wisdom in this matter, and backed up by none other than the National Oceanographic and Atmospheric Administration, another major climate alarm propagandist. And what were these two saying? Why, to be sure, that solar panels, one of the major supposed low carbon palliatives so much beloved by you and in such evidence in your own constituency, as by-products of their manufacture, are in reality delivering to the atmosphere what are now measurable quantities of greenhouse gases of a virulence representing entire orders of magnitude greater than any comparable effect produced by carbon dioxide which, in your declared philosophy, is the primary bugaboo. Moreover, these gases, in marked contrast to CO2, are entirely man made and are also vastly more long lasting.

As I stated at the outset of this message, it is not clear to me whether or not you grasped what was being said. In any event, if you can explain the logic of this wondrous contribution to the welfare of the planet, not to mention the rivers of treasure diverted to its promotion, I'd be interested to hear the case.
During the last few days, the papers have been awash with the C of E's objections over the issue of whether or not a brace of homosexuals should be able to 'marry'. As it happens, in relation to this specific issue, I am rather on your side. But, since I am also addressing a churchman, there also springs to mind the new testament reference to motes and beams. These, of course, are contained in a parable directed mainly at hypocrisy but which is also about relativities. What is being weighed in the scales is the comparatively minor issue of some aspect of personal conduct on the one hand and, on the other, the wilful corruption of the species' greatest achievement, namely the forging of an instrument for the exploration of objective truth; I refer, of course, to scientific method. In terms of their relative importance, so disproportionate are these two contrasting alternatives that it seems almost ridiculous to consider them in the same sentence. And yet, you and your confreres agonise over the trivial and consider yourselves virtuous when you ignore the infinitely greater - indeed far worse, for, willy nilly, you take on board and promote a fallacious, corrupt and massively damaging pseudo-scientific proposition.

Of course, as the wind turbine affair makes clear, there is money potentially to be made from pursuing the global warming mythology and if, by nature or nurture, you are of a religious bent, I suppose that one mythology may be thought of as pretty much like another. In any event, I'm sure that cupidity in no way impacted upon the decision making processes of the diocese in its originally misguided efforts to reduce its 'carbon footprint'. Clearly, though, the fatuousness of that sobriquet fails to strike you.

This letter is already long enough, so I will resist the urge to comment further - well, save perhaps to say that, with one shining exception, namely George Pell, Cardinal Archbishop of Sydney, the positioning of the prelatariat in the so-called climate change controversy has been devoid of moral insight, but rich in sanctimonious self-preening.

Your own recent declarations are at one with that.

Yours sincerely

R.C.E. Wyndham

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3. Feel-Good Environmentalism at the U.N.

Why do the global glitterati ignore water and air pollution?
By Bjorn Lomborg, WSJ, Jun 20, 2012
http://online.wsj.com/article/SB10001424052702304765304577478470785293702.html?mod=ITP_opinion_0

The United Nations environment summit in Rio this week is a great example of how good intentions can thwart real progress on global problems.

What's the world's biggest environmental challenge? Ask the global elites at U.N. conferences, and they're likely to answer: "global warming." Global warming is indeed a concern, and we need smart solutions. But let's put things in perspective. According to statistics from the emergency disasters database, deaths caused by flooding, droughts, heat waves and storms—including the effects of global warming—now account for about one-twentieth of one percent of all deaths in the developing world. From 1990-2007, that averaged about 27,000 deaths per year.

By contrast, lack of access to clean drinking water and sanitation kills almost three million annually. Almost two million people, meanwhile, die each year inhaling smoke from inefficient and dirty fuels such as dried animal dung, crop residues and wood. Another one million die from the effects of outdoor air pollution.
All told, more than 13% of Third World deaths—about six million in total—stem from air and water pollution. This means that for every global warming-related death, at least 210 people die each year from old-fashioned air and water pollution.

Even an extremely ambitious climate policy—aiming to cut global carbon-dioxide emissions by 50% below 1990s levels—would entail enormous costs but save very few lives. Inexpensive policy changes, however, could virtually eliminate pollution-related deaths, which are so much more numerous than global warming-related ones.

Why then, do U.N. elites focus all their efforts on a feeble attempt to assist one person before successfully preventing 210 deaths? Because global warming feels more important—more hip. The majority of people in wealthy countries have lived their entire lives with clean air, clean water and electricity supplied through a grid. Air and water pollution is just old hat.

But surely "helping the world" isn't about making us feel good. It's about actually helping poor nations.

Nowhere are these misplaced priorities more apparent than in U.N. Secretary-General Ban Ki-Moon's favorite program, "sustainable energy for all," which has emerged as a key goal of this year's summit. The program aims to ensure that all people have access to energy, but it places an inordinate emphasis on "green" technologies.

The program's celebrity backers correctly point out that 1.3 billion people lack electricity, meaning it's "lights out" when the sun goes down. They rightly anguish that three billion people rely on dirty fuels. But then they argue that "green" energy is the way to help.

Why would we choose inefficient, intermittent and costly technologies to solve a simple problem? Simply put: Because it makes us feel good.

Take former Norwegian Prime Minister Gro Harlem Brundtland, a member of Mr. Ban's global sustainability panel. In a recent statement, she gave perhaps the starkest example of attempting to solve a substantial problem with a feel-good policy: "Smoke from wood, dung and coal from cooking and heating remains one of the world's major public health problems. Major investment is needed to accelerate the move away from carbon fuels and to improve energy efficiency."

Sure, sometimes solar panels in far-flung communities can work. But generally, reliable electricity for those billion-plus people who lack it should come from simple, cheap solutions like hooking up generators or, better yet, power plants—which, just like ours, mostly run on fossil fuels.

The same goes for tackling indoor air pollution. In some circumstances, solar cookers can be a good idea. But the technologies that have served us well, such as kerosene and natural gas, are much more likely to be cheap, flexible and useful for hundreds of millions of people.

It's the height of arrogance to think that Third World countries should use weak and expensive technologies just to make some in the West feel good. In essence, the global elite is telling coughing Third World people sitting in their dark hovels: "Get a solar panel." That's akin to telling people suffering from water pollution to drink Perrier. Or indeed, to suggest that breadless people should eat cake.

There are real and often overlooked environmental problems to be tackled. We need to talk less about ineffective, "feel-good" solutions to global warming and more about smart fixes to air and water pollution. We need to take back our environmental summits from the well-meaning glitterati and do what works.
Mr. Lomborg is an adjunct professor at the Copenhagen Business School and the author of "The Skeptical Environmentalist" (Cambridge Press, 2001) and "Cool It" (Knopf, 2007).

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4. America, Start Your Natural-Gas Engines
Replacing gasoline in our cars could be an energy game changer. Here's what we need to do to get from here to there.
By Tom Fower, WSJ, Jun 18, 2012
http://online.wsj.com/article/SB10001424052702304192704577406431047638416.html

America has a wealth of natural gas in the ground. So, how do we get it into our cars?

The recent deluge of low-cost shale gas is already changing the way the country runs. Electric utilities are turning to gas to power their turbines, and chemical companies that rely on the fuel are coming back to the U.S. after years of investing overseas.

But the holy grail is transportation.

Every day, we consume 70% of our oil getting from place to place—and produce more than 30% of our greenhouse gases along the way. If we could run our vehicles on natural gas, it could kill two birds with one stone: Not only is natural gas a lot cheaper than oil right now, but its emissions are much cleaner than gasoline or diesel.

"This abundance of natural gas is something we weren't expecting as a country, but it's here now, and it's a gift we should take advantage of," says Steven Mueller, chief executive of Houston-based natural-gas producer Southwestern Energy Co. "There's huge savings here and a way to help to environment."

Natural gas is already making big inroads in the commercial-truck market. Delivery companies, trash haulers and other firms that operate big fleets are switching to natural-gas vehicles to save on fuel costs. But the really big leap—and the much more daunting task—will be getting passenger cars running on natural gas.

Cost is a big part of the problem: Natural-gas cars are more expensive upfront, thousands of dollars more than regular models. That's a tough sell anytime, never mind in this economy.

Public refueling stations, meanwhile, are few and far between. And there's the question of consumer psychology: How do you convince drivers that it's wise or even safe to put natural gas in their cars?

The barriers are significant, but pursuing natural-gas transportation is still worth the effort, according to a paper by Christopher Knittel, a professor of energy and economics at the Massachusetts Institute of Technology.

With the right policy incentives, he writes, natural-gas vehicles could "increase the nation's energy security, decrease the susceptibility of the U.S. economy to recessions caused by oil-price shocks, and reduce greenhouse-gas emissions and other pollutants."

Here's a closer look at some of the challenges and how they could be surmounted.

Reinventing the Car
The big issue with building natural-gas vehicles is the fuel tank. Gasoline and natural-gas engines are relatively similar. But natural gas must be stored under high pressure—so the tanks must be stronger, heavier and larger. And that drives up the price. The only natural-gas passenger car sold in the U.S., the Honda Civic GX, costs about $5,200 more than a comparable gasoline vehicle and $3,600 more than the gasoline/electric hybrid Civic.

In other parts of the world, governments have mandated a switch to natural-gas vehicles, regardless of the higher cost of vehicles. In Pakistan and Iran, for instance, the governments made the change because the countries lack sufficient gasoline-refining capacity. Now the two countries have about 2.7 million and 1.9 million natural-gas vehicles, respectively.

That kind of mandate is all but unthinkable in the U.S. But there are efforts afoot to work around the fuel-tank issues to bring down the cost. 3M Corp. said earlier this year it is joining with Chesapeake Energy Corp. to develop natural-gas fuel tanks that use plastic linings wrapped in carbon-composite materials. The tanks could be 10% to 20% lighter with 10% to 20% more capacity than current natural-gas tanks, the companies said.

Meanwhile, researchers at the University of Missouri have developed a smaller tank that allows natural gas to be stored at a much lower pressure by keeping it in a material essentially made out of corncobs turned into charcoal briquettes. Early tests of the tank on a natural-gas pickup truck have worked well, according to researchers.

Another approach to the problem is economies of scale: If more natural-gas vehicles were sold, it's likely that the costs would come down.

There aren't any large-scale efforts under way to ramp up sales volume of passenger cars. But some natural-gas exploration and production companies have agreed to replace thousands of their existing pickup trucks used in the field with vehicles running on compressed natural gas, a form of the fuel popular in smaller vehicles.

Following discussions with the American Natural Gas Association, an industry group, Chrysler Group LLC said this year it will build at least 2,000 heavy-duty Ram pickup trucks that run on both CNG and gasoline. General Motors Co. said it would offer similar vehicles in its GMC Sierra and Silverado lines.

Proponents also think a big part of the upfront-cost problem is perception: People, they argue, don't realize how much natural gas can save them over the life of the vehicle. With a gallon of gasoline hovering around $4 in many parts of the country, the comparable amount of natural gas can cost about half as much at current prices.

Still, you may need to drive quite a while to make it pay off. Consider this analysis by Prof. Knittel of MIT: Assume a CNG-fueled car costs $5,500 more than its gasoline counterpart, and assume a $1.40-per-gallon price advantage for CNG. Given that, he says, it could take more than nine years before the car owner broke even.

That's hard for the average car buyer to swallow. "The average person discounts any fuel savings beyond three years," says Kathryn Clay, executive director of the Drive Natural Gas Initiative, a program funded by natural-gas producers and gas utilities.

Reinventing the Pump
Regardless of how big and bulky the fuel tank, if you can't find a CNG station in your neighborhood, you're not going anywhere. Of the 1,500 stations available in the U.S., only about half are accessible to the public; the rest are reserved for fleet vehicles. That's a tiny fraction of the 118,000 public gasoline stations spread coast to coast.

A number of companies are currently setting up new fueling stations. These are on a very limited scale and serve mostly fleet vehicles, but some stations are in prominent public places, and advocates hope they'll spark consumer interest in the vehicles. Apache Corp. for instance, built a CNG refueling station at Houston's Bush Intercontinental Airport to service a small fleet of CNG parking shuttles that the City of Houston operates.

The big barrier to setting up stations on a broad scale is cost. The average cost for building a gasoline station and convenience store in the U.S. was about $2.3 million in 2010, according to data compiled by the National Association of Convenience Stores. Adding the compressor and storage tanks needed for a CNG station can drive up the price by as much as $500,000—assuming the station can even hook into a natural-gas distribution pipeline. That's a big investment when few people are filling up their tanks with natural gas.

CNG vehicle owners also have an in-home fueling option—an appliance called the Phill. About the size of a large upright vacuum cleaner, the Phill can be installed on the wall of a garage with access to a 240-volt, 15-amp electrical circuit and a natural-gas line. A flexible hose plugs into the car and fills it up over the course of about six hours.

So far, there hasn't been a lot of consumer interest, largely because of the steep price tag: about $4,000, not including installation charges. (Why the price disparity between the in-home gadget and the one used at filling stations? The Phill is significantly slower and can't handle multiple vehicles at once.)

Ms. Clay, of the Drive Natural Gas Initiative, says her group has surveyed some 40 companies to see if they'd be interested in developing a lower-cost in-home system. About a dozen expressed interest. "If we can get the units down to $1,000 to $1,500 and reliability over four to five years, it would probably be a game changer for the consumer market," Ms. Clay says.

Pietro Bersani, chief financial officer of Fuel Systems Solutions Inc., manufacturer of the Phill, says the company has been able to drive down the cost of the units by about 30% in recent years, but it will take more orders to help prices fall further.

That's why the company will look to launch more programs like the one it just started with utility Atlanta Gas Light Co.: Natural-gas-vehicle owners can have a Phill installed in their garage free by agreeing to a five-year lease at $60 per month.

Reinventing the Fuel

Some in the industry are tackling the natural-gas transportation challenge another way—by turning natural gas into a fuel that could be used in cars with conventional engines and pumped at regular filling stations. The trouble, once again, is cost. The technology to turn natural gas into a low-sulfur diesel fuel was developed long ago in Nazi Germany, but it continues to be an expensive process that has limited its success.

Last year, Royal Dutch Shell opened its massive Pearl Gas-to-Liquids project in Qatar. The nation has substantial natural-gas resources—much more than its utilities need—so the government wanted to find a use for the excess fuel. The project now produces enough diesel from natural gas per day to fuel 160,000
cars as well as additives for jet fuel and feedstocks for a wide range of other products. But the project wasn't cheap, at $18 billion.

Shell is considering a similar plant in Louisiana, where it hopes to draw upon the abundance of U.S. natural gas and take advantage of the full range of other Shell businesses in the region that might benefit from the plant's output. That project could cost up to $10 billion, but the company hopes lessons learned from building Pearl will help keep those costs down.

Dallas-based chemical firm Celanese Corp. has started to produce fuel-grade ethanol as a substitute for the corn-based ethanol from a plant in Clear Lake, Texas. But the company doesn't expect commercial-scale production in the near future.

In Silicon Valley, Siluria Technologies Inc. has figured out how to turn natural gas into ethylene, a feedstock that can be used to make a wide range of fuels and other products. The technique involves a genetically engineered virus that coats itself with a metal that serves as a catalyst.

Siluria President Alex Tkachenko says it remains a laboratory-scale process for now, however, and won't be commercial anytime soon.

Reinventing the Driver

Beyond the chemical, mechanical and economic challenges of getting natural gas into the vehicle fleet, there are psychological barriers. The average person doesn't think about natural gas when thinking of alternative vehicles, says Mike Omotoso, senior manager for LMC Automotive U.S., a research firm. "They might think of diesels, but they mainly think of gas-electric hybrids or plug-in electrics. They just aren't aware of natural gas."

Much of how the public will react is unknown. Will there be safety fears? Will people be willing to use the same fuel that heats their houses to run their cars? There's no wide-scale effort to answer those questions.

The arguments that will win over buyers aren't clear either. Honda used the cleaner-emissions pitch when its Civic GX came on the U.S. market in 1998, says Brad Johnson, corporate fleet director with Pacific Honda in San Diego. Now, he says, buyers seem more interested in saving at the pump and using a fuel produced in the U.S. Honda is also promoting the fact that CNG vehicles can drive in high-occupancy-vehicle lanes on California freeways.

Even though consumers are slow to adopt natural-gas passenger vehicles, at least a few gas retailers are optimistic that if they build it, drivers will come.

Love's Travel Stops & Country Stores, of Oklahoma City, plans to open 10 retail outlets with CNG pumps this summer, thanks to a partnership with Chesapeake Energy.

And Kwik Trip Inc., an operator of gas stations and convenience stores, opened its first CNG station aimed at passenger-car drivers in La Crosse, Wis., this spring, with plans for several more.

"It's attractive to customers because it's a domestic product, there's a steady supply, and the price is right," says John McHugh, Kwik Trip's communications manager. "If we can offer the consumer a value, we know people will jump on the bandwagon."
Mr. Fowler is a Wall Street Journal staff reporter in Houston. He can be reached at tom.fowler@wsj.com.

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