Climate and Energy Crises Short Web and Book List

With global warming visibly happening now, not in the distant future, notably with the tipping point crisis of Arctic sea ice, coal power plants have become a policy battleground.

With conventional oil plateauing starting in 2005, and world fuel supplies upheld by short lived deep-water oil (and natural gas liquids), we are entering a period of global energy challenges affecting the economy, transportation, war and food that in a few years will dramatically worsen.

- Jim Mulherin, Research Associate, UCSC, draft October 10, 2009, jimm@ucsc.edu

Selected Websites on Climate Change and Peak Oil

www.earth-policy.org/index.php?/books/pb4 has online PDF version of Lester Brown, *Plan B 4.0: Mobilizing to Save Civilization*. Has overviews of peak oil and global warming as well as of associated food, water, environmental crises, failing states and what we can do. Most chapters focus on solutions with a budget. Translated into many languages.

www.monthlyreview.org issues for July-August and Nov., 2008 (vol. 60, #3 & #6) are a two part series. Part one, www.monthlyreview.org/julaug2008.php, has overview, peak oil and warming, water, while www.monthlyreview.org/nov2008.php addresses political aspects. Specific articles are online. Provides alternative view of a comprehensive solution.

Climate:

http://stephenschneider.stanford.edu/Climate/ClimateFrameset.html has basic info and many links www.eoearth.org/article/Climate_Change_%28collection%29 starting point for series of articles http://en.wikipedia.org/wiki/Effects_of_global_warming Starting point for series of articles www.ipcc.ch is the site of the Intergovernmental Panel on Climate Change. The 52 page synthesis report on their 4th assessment is a free PDF at www.ipcc.ch/ipccreports/ar4-syr.htm www.climateark.org and www.grist.org have frequently updated global warming news www.realclimate.org is a commentary site on climate science by working climate scientists www.columbia.edu/~jeh1 NASA climate researcher, James Hansen's Columbia U. site www.climatecodered.net takes a risk management approach to a sustainability emergency. http://en.wikipedia.org/wiki/Polar_ice_packs Arctic sea ice visuals with importance addressed www.beyondzeroemissions.org Australian campaigner site has podcasts that provide insight. http://350.org youth oriented campaign backing Hansen's call to roll back carbon in atmosphere. www.climateprediction.net contribute idle cycles on your computer for climate modeling

Energy:

http://en.wikipedia.org/wiki/Peak_oil is the Wikipedia peak oil discussion and links. http://en.wikipedia.org/wiki/Oil_Megaprojects Assess prospects of future replacement projects. http://en.wikipedia.org/wiki/Portal:Energy/Explore Gateway to specific topics on coal, etc. www.wolfatthedoor.org.uk has a thorough beginner's guide to peak oil and related issues. www.iea.org and www.eia.doe.gov have OECD country US oriented world energy data series www.peakoil.net is the site of ASPO, Association for the Study of Peak Oil. It links to reports , data and about 20 national ASPO groups,.

www.aspo-usa.org is site of ASPO-USA. Has daily news briefs.

www.communitysolution.org Has PowerPoint slides on peak oil, zero energy housing, food, etc. www.energybulletin.net Has frequent updates from the world press and some original items. www.globalpublicmedia.org Has podcasts, video and transcripts with varying themes

www.theoildrum.com has moderated discussions of specific topics at a high level www.energycrisis.com or www.hubbertpeak.com or www.oilcrisis.com are the same pioneering site by Santa Cruz, CA alternative energy focused engineers. Many links.

Selected Books and PDFs

- Lester Brown, *Plan B 4.0: Mobilizing to Save Civilization*, 2009 paperback (also PDF above). Clear overview of global warming and climate change, associated issues and what can be done. Most chapters focus on proposed solutions. Translated into many languages.
- Monthly Review issues for July-August and Nov., 2008 (vol. 60, #3 & #6) are a two part series. The first part has overview, articles on peak oil and war, global warming, etc. The Nov. issue addresses politics with an argument for system replacement by democratic socialism. Some articles are online. Go to www.monthlyreview.org for prices and translations.

Climate:

- Robert Henson, *The Rough Guide to Climate Change*, 2nd Edition, 2008. Called "a perfect example of how to write a science book for nonscientists." See http://www.ucar.edu/news/staff/henson.shtml
- Kirstin Dow and Thomas E. Downing, *The Atlas of Climate Change: Mapping the World's Greatest Challenge*, 2nd Ed., 2007. This is a short primer on global warming.
- Mark Bowen, Censoring Science: Inside the Political Attack on Dr. James Hansen and the Truth of Global Warming, 2008 hardcover. Fast read about Hanson's 30 year career at NASA.
- Gabrielle Walker and David King. 2008. *The Hot Topic: What We Can Do About Global Warming*. Recent overview by science writer and the UK science advisor.
- George Monbiot, 2007. *Heat: How to Stop the Planet From Burning*. The book is passionate and practical at the same time. Monbiot is a thoughtful journalist.
- David Spratt and Philip Sutton. 2008. *Climate Code Red: The case for emergency action*, Order July 2008 Australian book direct from www.climatecodered.net (ISBN: 978-1921372209) or send me an email for the 1 MB, 75 page text draft PDF. Amazon.com in the US is now shipping imported copies. Their study takes a detailed risk management approach based on rapid warming beyond IPCC projections, esp. loss of Arctic sea ice, etc.
- Johannes Lehmann. "Commentary: A Handful of Carbon," *Nature* (Vol 447, 10 May 2007) online at www.css.cornell.edu/faculty/lehmann/publ/Nature 447, 143-144, 2007 Lehmann.pdf (Accessed 17 Sept. 2009). Cornell agricultural sciences expert discusses "biochar" as way of drawing down carbon from air (sequestration of carbon).
- James Hansen, Makiko Sato, et al. "Target Atmospheric CO2: Where Should Humanity Aim?." Published in 2008 in the online *Open Atmospheric Science Journal*. Go to: http://pubs.giss.nasa.gov/abstracts/2008/Hansen_etal.html (Accessed May 18, 2009). Technical paper with a clear summary calling for WW II style mobilization of economic and political institutions to halt emissions of GH Gases and draw down CO2 to reduce accumulated CO2 to below 350 ppm as an initial target (currently the world is at 387 ppm, far above pre-industrial level of 280 ppm). The world last saw 350 ppm in 1988.
- Pushker A. Kharecha and James E. Hansen. 2008. "Implications of "peak oil" for atmospheric CO2 and climate." *Global Biogeochem. Cycles* Go to: http://pubs.giss.nasa.gov/abstracts/2008/Kharecha_Hansen.html (Accessed October 24, 2008). Uses official (IPCC and WEC) data [too high for most oil peak geologists to find credible], but makes strong case for need to curtail coal emissions, especially.

John Houghton, *Global Warming: The Complete Briefing*, 3rd. Ed., 2004 paperback. Sir Houghton chaired many IPCC sessions. His primer is for educated readers who are not specialists in climate science to elucidate the technical issues and their human meanings.

Energy:

- Richard Heinberg, *The Party's Over: Oil, War and the Fate of Industrial Societies*. 2nd Ed., 2005 paperback. This is still my favorite popular overview. His social ecology understanding is what makes his treatment deeper. His website is www.museletter.com
- Richard Gilbert and Anthony Perl, *Transport Revolutions: Moving People and Freight Without Oil.* 2008 hardcover. Canadian experts show how it can be done. They have website with data and slides at www.transportrevolutions.info
- David Strahan, *The Last Oil Shock*. 2007 UK Paperback available at Amazon in USA. Former BBC financial journalist covers political and economic dimensions with great insight. He does many on-the-record interviews. See also http://lastoilshock.com
- Richard Heinberg, *The Oil Depletion Protocol: A Plan to Avert Oil Wars, Terrorism and Economic Collapse.* 2006 paperback. Plan decline in consumption with loss of oil.
- Kenneth S. Deffeyes, *Beyond Oil: The View from Hubbert's Peak*. 2006 paperback. Considers alternatives to oil like natural gas, coal, tar sands, oil shale, nuclear that he understands as a geophysicist.. Has short updates at www.princeton.edu/hubbert/current-events.html
- Kenneth S. Deffeyes, *Hubbert's Peak: The Impending World Oil Shortage*. 2001 hardcover now has updated 2003 paperback edition. Deffeyes worked with Hubbert at Shell Research. He explains how oil is created and why we can't drill our way out of the crisis. I read this book after reading a review in *Scientific American* that is still available on the www.Amazon.com site for the book.
- Colin J. Campbell, *Oil Crisis*. 2005 paperback. This updates his 1997 *The Coming Oil Crisis*. Campbell tells the story of his growing understanding of oil depletion. Campbell and French natural gas expert, Jean H. Laherrère, wrote an earlier well argued and illustrated article for *Scientific American* that you can find at http://dieoff.com/page140.pdf
- Matthew R. Simmons, *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy*. Paperback updated edition, 2006. Houston based energy investment banker challenges optimistic Saudi Aramco assurances. Search for online interviews.
- David Goodstein, *Out of Gas: the End of the Age of Oil*. 2005 small paperback. Cal Tech Dean Goodstein outlines energy situation with insight from development of physics. Goodstein, Simmons and Colin Campbell are on the Advisory Board of ASPO-USA.
- Michael T. Klare, *Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum*. 2005 paperback. Military affairs and peace studies expert Klare puts Iraq in context.
- Julian Darley, *High Noon for Natural Gas: The New Energy Crisis*. 2004 paperback. Focuses mostly on North America's emerging natural gas shortage and the alternatives. North America and Britain face simultaneous, worsening natural gas and oil crises.
- Robert L. Hirsch, Roger Bezdek, and Robert Wendling. *PEAKING OF WORLD OIL PRODUCTION: IMPACTS, MITIGATION, & RISK MANAGEMENT*. 2005. Go to: http://www.netl.doe.gov/publications/others/pdf/Oil_Peaking_NETL.pdf This is a key risk management approach. Note mitigations take decades, some worsen global warming.
- Bruce Podobnik, *Global Energy Shifts: Fostering Stability in a Turbulent Age*. 2006 paperback. Sociologist Podobnik uses the World Systems perspective in an extraordinarily thorough historical review of prior energy transitions to put the current one in context.