Face Reality: Peak Oil, 9 Billion People, and Global Warming

by Carol Masters

We cannot make meaningful statements about, or act to ameliorate, climate change without addressing militarism, specifically the U.S.'s "mad quest of military dominance, wars, and resource grabs." The Department of Defense is the largest institutional oil consumer in the world.



photo: Tom Bottolene/CircleVision.org.

On March 19, the eight anniversary of the second U.S. war on Iraq, hundreds marched from the Martin Luther King Center to the State Capitol in St. Paul in protest of wars for control of the world's oil.

Can we come to a consensus about reality? asks James Howard Kunstler, author of World Made by Hand, and The Long Emergency, as part of a video series on "Peak Oil and a Changing Climate." (1) We are coming to the limits of everything, including the energy to run our societies: humanity is running up against the limits of aquifers, soils, fisheries, forests, even our air. "We've got too many people using too much stuff, too fast, in an economy that knows only how to grow!" according to Richard Heinberg, author and director of the Post Carbon Institute. Alarming data from everywhere, from climate scientists, energy analysts, food producers, and hunger activists – most from outside the United States – paint a dismal picture. Social systems depend on energy – a surplus of energy –and complex economies will go into decline without it.

But Kunstler and others in the series (renowned political analyst Noam Chomsky, political commentator and radio host Thom Hartmann, scientist and author Richard Heinberg) fear that the mass of information may be incoherent – too scattered, at once too varied and too partial – incapable of forcing human beings to take off the blinders and face reality. Responses at U.S. policy levels are inadequate and often disingenuous. Chomsky states that the U.S. Chamber of Commerce, the big business

lobby, has embarked on a campaign to convince the public that global warming is a "liberal hoax." He postulates that business interests and policy makers may indeed know that the situation is desperate, and fear for the future of their grandchildren, but they are enmeshed in their personal, short-term institutional needs and legal requirements to protect the bottom line.

Peak Oil

Oil is a finite resource. The peak in oil production, which the U.S. reached in the early '70s, does not mean "running out of oil," but it is the end of inexpensive oil for us and for most economies based on continuous growth. Globally, analysts believe that the peak of oil production is upon us. We probably should be talking about post-peak oil, certainly the end of cheap oil. And the decline, as engineer and author Dmitri Orlov points out, will not be the gradual slope that many graphs show, but a "stepwise" decline, with various parts of the globe experiencing disruptions, then permanent cut-offs in fuel needed for transport.

The oil that remains is more difficult and/or expensive to extract: offshore, distant from markets, and lower in quality, requiring more money and energy to refine. All oil fields will reach a point at which, if extraction takes the energy of a barrel to produce a barrel, further drilling is pointless.

Oil companies and policy makers currently put too much dependence in ultra-deep water drilling, of depths up to a mile. And Brazil's touted offshore fields are two or three miles down, with as yet unresolved challenges to technology and danger to the environment. The U.S. Presidential Commission investigating the disastrous Deepwater Horizon oil spill reports that all companies involved were careless and ignored warning signs. But in March, Interior Secretary Salazar issued new drilling permits without setting tough new standards for operation. The door is open for new, worse disasters.

Is there a cover-up about peak oil? Richard Heinberg says there is: in the Department of Energy and in the International Energy Agency, there are people who would like to sound the alarm, but they are being muzzled. It's inevitable in a political and economic system that is tied to growth. We need to take peak oil as a signal to transition to sustainable systems.

Peak Everything

Even if decision makers in the U.S. and elsewhere deliberately ignore or sugarcoat reality, change is coming. Ordinary people will no longer be able to deny what is in front of them. As they see or experience climate disasters, as water supplies dwindle, as crop failures destroy livelihoods and create hunger, they will be impelled to act.

Let's look at just a few of the current projections. The Intergovernmental Panel on Climate Change (IPCC) predicted that Earth's average temperature will rise 2.0 - 11.5°F during this century, and the current trajectory is already outpacing the forecasts. Glaciers and ice sheets will melt, causing sea levels to rise. For every 1°C rise in temperature during the growing season, yields of wheat, rice, and corn drop 10 percent. Nineteen countries set high-temperature records last year, including Pakistan, which hit 128.3°F in the same year that saw flooding of the Indus River, affecting nearly 20 million people.(2)

Almost a third of the world's cropland is now losing topsoil faster than it can be reformed. Many countries are losing the ability to feed themselves. A recent publication of Great Britain's The Economist had a special report on feeding the world, pointing out that the global population is expected to reach 7 billion by the end of this year (9 billion by 2050), as food prices have plunged into poverty millions who spend more than half their income on food.(3) Yields are slowing, cars and people compete for crops, and land is being lost to nonfarm uses. Global warming places agriculture – particularly industrial agriculture—as both cause and victim. The thrust of The Economist's analysis is toward the view that a new Green Revolution, with advanced technologies and better practices, offers the best hope of feeding the world. But the magazine gives less attention to the detrimental effects of years of intensive farming and overuse of chemical fertilizers, as well as the still unknown but "profound damage to farming from climate change, which could reduce yields by one-third."

State Failure

Population pressures and hunger also increase political instability. During the time that increasing food prices have brought about panics, export bans, price controls, and food riots, state failure is both spreading and deepening. Worry over rising bread prices played a part in uprisings throughout the Middle East. "Whatever the outcome of the protests, uprisings, and rebellions now sweeping the Middle East," says peace and security professor and analyst Michael Klare, "...everything that's now happening is just the first tremor of an oilquake that will shake our world to its core." He agrees that this is the end of cheap oil, and that we can't count on any new order [read: war on Libya] "to preserve the Petroleum Age." (4)

US Militarism and Climate Change

We cannot make meaningful statements about, or act to ameliorate, climate change without addressing militarism, specifically the U.S.'s "mad quest of military dominance, wars, and resource grabs."(5) The U.S. spends well over \$1 trillion a year on military-related expenses (including for past wars). U.S. taxpayers will pay \$553 billion for the Department of Defense in FY2012, dominating the federal budget and draining the economy, at the same time that it prevents meaningful climate action. Minnesota's share is \$13.3 billion for the DOD. See the National

Priorities website for current budget numbers and interactive tools that allow people to assess the societal impacts of federal spending.(6)

The Department of Defense is the largest institutional oil consumer in the world. Wars to control access to oil and other energy resources cause untold misery; the inadequate attention to environmental devastation is approaching "extinction scale." Our wars and military are significant contributors to the ongoing environmental devastation that impoverishes millions. The U.S. military is the world's largest institutional source of greenhouse gases. A UN environmental report about the first Gulf War points to the damage done by tanks and weapons to the fragile desert soil and ecosystem, along with chemical and radioactive contamination, leaving a legacy of disease, poverty, hunger, and death. At home, one of every 10 Americans lives within 10 miles of a military site listed as a Superfund priority cleanup site.

As climate refugees become more numerous, the social costs, again, will be devastating: bloody conflicts over resources, deeper fascism, oppression towards immigrants, and ecosystem decimation as people desperately seek water and sustenance.(7)

What to Do - Plan B

Renowned environmentalist Lester Brown's Plan B lays out in broad strokes the actions and policies needed to mitigate or slow social collapse and perhaps save civilization.

- 1. Stabilize population
- 2. Eradicate poverty
- 3. Restore the Earth's natural support systems (protect topsoil, restore rangelands and fisheries, stabilize water tables, plant trees)
- 4. Stabilize climate

Local governments such as cities emphasizing underground rail, light rail, and bus rapid transit would save energy and make walking and cycling safer. Intercity rail can reduce air and car travel. Electrified transport systems will curb oil dependence and reap efficiency gains. Plug-in hybrid electric cars would allow low-carbon commuting.

Individuals can participate in raising energy efficiency and restructuring transportation; replacing fossil fuels with renewables; and ending deforestation and planting trees to sequester carbon. Restructuring taxes and eliminating fossil fuel subsidies would drive the transition to a more honest economy.

These actions will require institutional and government leadership. The best action we can take as individuals may be to exert pressure from the grass roots, as we also strive to reduce our personal addictions to disappearing resources. Lifestyle changes such as using more efficient light bulbs are important, but not nearly

enough. Preventing environmental and economic collapse requires political action from all of us.

- 1. Video series, "Peak Oil and a Changing Climate," http://www.thenation.org
- 2. Lester Brown, Earth Policy news, slide show, "World on the Edge," http://www.earth-policy.org. Brown is an American environmentalist, founder of the Worldwatch Institute, and founder and president of the Earth Policy Institute. His most recent book is World on the Edge: How to Prevent Environmental and Economic Collapse (2011).
- 3. The Economist, February 26-March 4, 2011
- 4. Michael Klare, "The Collapse of the Old Oil Order: How the Petroleum Age Will End," 3 March 2011, Countercurrents.org
- 5. "Militarism as Cause and Consequence of Climate Change," www.climatesos.org
- 6. http://nationalpriorities.org/en/tools/tradeoffs/
- 7. "US Imperial Militarism, Climate Change, and Extinction," www.climatesos.org

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