Excerpts from: How a New Energy Order Will Dramatically Change our Daily Lives

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Introduction by TomDispatch editor Tom Engelhardt.

It's strange that the business and politics of energy takes up so little space on American front pages -- or that we could conduct an oil war in Iraq with hardly a mention of the words "oil" and "war". Strange indeed. And yet, oil rules our world and energy lies behind so many of the headlines that might seem to be about other matters entirely.

Take the food riots now spreading across the planet because the food prices are soaring, while supplies are falling. In the last year, wheat (think flour) has risen by 130%, rice by 74%, soya by 87%, and corn by 31%. Governments are shuddering. This is a fast growing horror story and, though the cry in the streets is for bread, this, too, is largely ruled by energy: Too many acres have turned into to corn and sugar cane for the creating biofuels; a historic drought in Australia and other global warming extremes of weather -- a result of burning fossil fuels -- has affected crop yields; and many new middle-class consumers desire meat, the production of which is heavily petroleum based.

The End of the World as You Know It...and the Rise of the New Energy World Order by Michael T. Klare

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Oil at $110 a barrel. Gasoline at $3.35 (or more) per gallon. Diesel fuel at $4 per gallon. Independent truckers forced off the road. Home heating oil rising to record prices. Jet fuel so expensive that three low-cost airlines stopped flying in the past few weeks. This is just a taste of the latest energy news, signaling a profound change in how all of us in this country and around the world, are going to live -- trends that, so far as anyone can predict, will only become more pressing as energy supplies dwindle and the global struggle for energy intensifies.

Energy was once abundant, making possible the worldwide economic expansion of the past 60 years. This expansion benefited the United States above all -- and its allies in Europe and the Pacific. Recently, however, former "Third World" countries -- China and India -- have sought to participate in this energy bonanza by industrializing their economies and selling a wide range of goods to international markets. This has led to an unprecedented spurt in global energy consumption -- a 47% rise in the past 20 years alone, reports the U.S. Department of Energy (DoE).

This increase would not cause deep anxiety if the world's energy suppliers could produce more fuel. Instead, we face a frightening reality: a slowdown in the expansion of energy supplies just as demand rises. Supplies are not exactly disappearing -- though that will occur sooner or later -- but they are not growing fast enough to satisfy soaring global demand. The combination of

rising demand, the emergence of powerful new energy consumers, and the contraction of the global energy supply is demolishing the energy-abundant world we are familiar with and creating a new world order. Think of it as: rising powers/shrinking planet.

This new world order will experience fierce international competition for dwindling stocks of oil, natural gas, coal, and uranium, as well as a tidal shift in power and wealth from energy-deficit states like China, Japan, and the United States to energy-surplus states like Russia, Saudi Arabia, and Venezuela. The lives of everyone will be affected -- with poor and middle-class consumers in the energy-deficit states experiencing the harshest effects. That's most of us and our children, in case you haven't quite taken it in.

Here, in a nutshell, are five forces in the new world order which will change our planet:

1. Intense competition between older and newer economic powers for available supplies of energy: Until recently, the mature industrial powers of Europe, Asia, and North America consumed the lion's share of energy and left the dregs for the developing world. As recently as 1990, members of the Organization of Economic Cooperation and Development (OECD), a club of the world's richest nations, consumed about 57% of world energy; the Soviet Union/Warsaw Pact bloc, 14%; and only 29% was left to the developing world. But that ratio is changing: With strong economic growth in developing countries, a greater proportion of the world's energy is being consumed by them. By 2010, the developing world's energy use is expected to reach 40% and, if current trends persist, 47% by 2030.

China plays a critical role. Projected to consume 17% of world energy by 2015, and 20% by 2025 -- it will have overtaken the United States as the world's leading energy consumer. India, which in 2004 used 3.4% of world energy, is projected to reach 4.4% by 2025, while consumption in other rapidly industrializing nations like Brazil, Indonesia, Malaysia, Thailand, and Turkey is expected to grow also.

These new economic powers will have to compete with older economic powers for the remaining untapped reserves of exportable energy -- in many cases, bought up long ago by Exxon Mobil, Chevron, BP, Total of France, and Royal Dutch Shell. But the new contenders, to compete, have created their own companies and built alliances with the national oil companies that now control oil and gas reserves in many major energy-producing nations. China's Sinopec, for example, is allied with Saudi Aramco, formerly owned by Chevron and Exxon Mobil, to explore for natural gas in Saudi Arabia and sell Saudi crude oil in China. Likewise, the China National Petroleum Corp. (CNPC) will collaborate with Gazprom, the Russian natural gas monopoly, to deliver Russian gas to China. Several of these state-owned firms, including CNPC and India's Oil and Natural Gas Corporation, are set to collaborate with Petróleos de Venezuela S.A. in developing the oil of the Orinoco belt formerly controlled by Chevron. In this new competition, the Western energy companies' advantage has been eroded by developing world upstarts.

2. Insufficient energy supplies: The capacity of the global energy industry to satisfy demand is shrinking. The global supply of oil will expand for about another 5 years before reaching a peak and beginning to decline, while supplies of natural gas, coal, and uranium will likely grow 10-20

years before peaking and beginning to decline. In the meantime, global supplies of these existing fuels will prove unable to fulfill the demand.

Daily business-page headlines point to clashing trends: worldwide demand will continue to grow as hundreds of millions of Chinese and Indian consumers line up to purchase their first automobile (some selling for as little as $2,500); huge older oil fields in Saudi Arabia and in Mexico are already in decline or expected to be so soon; and the rate of new oil-field discoveries plunges year after year. So expect global energy shortages and high prices to be a constant source of hardship.

3. The painfully slow development of energy alternatives: New sources of energy are desperately needed to compensate for the eventual disappearance of existing fuels as well as to slow the buildup of climate-changing "greenhouse gases" in the atmosphere. Wind and solar power have gained significant footholds in some parts of the world. Other innovative energy solutions have already been developed and tested in university and corporate laboratories. But these alternatives, which contribute only a tiny percentage of the world's net fuel supply, are not being developed fast enough to avoid the multifaceted global energy catastrophe ahead.

According to the U.S. Department of Energy, renewable fuels: wind, solar, and hydropower (along with "traditional" fuels like firewood and dung), supplied 7.4% of global energy in 2004; biofuels another 0.3 percent. Meanwhile, fossil fuels -- oil, coal, and natural gas -- supplied 86% of world energy, nuclear power 6%. Based on current rates of development and investment, the DoE projects: In 2030, fossil fuels will have exactly the same share of world energy as in 2004. The expected increase in renewables and biofuels -- a mere 8.1 percent – will be meaningless.

The meaning of this is simple. If these figures hold, there is no hope of averting the worst effects of climate change. To meet soaring energy demand, we would need a massive increase in alternative fuels, which would mean equally massive investment -- trillions of dollars -- to ensure that the newest possibilities move rapidly to full-scale commercial production. Instead, the major energy firms (backed by huge U.S. government subsidies and tax breaks) are putting their mega-windfall profits from rising energy prices into vastly expensive (and environmentally questionable) schemes to extract oil and gas from Alaska and the Arctic, or to drill in the deep and difficult waters of the Gulf of Mexico and the Atlantic Ocean.

4. A steady migration of power and wealth from energy-deficit to energy-surplus nations: There are few countries -- perhaps a dozen altogether -- with enough oil, gas, coal, and uranium to meet their own energy needs *and* provide significant surpluses for export. Ten oil-rich states possess 82.2% of the world's proven reserves. In order of importance, they are: Saudi Arabia, Iran, Iraq, Kuwait, the United Arab Emirates, Venezuela, Russia, Libya, Kazakhstan, and Nigeria. The possession of natural gas is even more concentrated. Three countries -- Russia, Iran, and Qatar -- harbor an astonishing 55.8 percent of the world supply. All of these countries are in an enviable position to cash in on the dramatic rise in global energy prices and to extract from potential customers whatever political concessions they deem important.

The transfer of wealth alone is already mind-boggling. The oil-exporting countries collected an estimated $970 billion from the importing countries in 2006, and the take for 2007, is expected to

be far higher. In recent months, the Persian Gulf investors have taken advantage of the United States' financial crisis to purchase large stakes in strategic sectors of its economy. In November 2007, for example, the Abu Dhabi Investment Authority bought a $7.5 billion stake in Citigroup, America's largest bank holding company; in January, Citigroup sold an even larger share, worth $12.5 billion, to the Kuwait Investment Authority and other Middle Eastern investors.

Russia is now the world's leading supplier of natural gas, the second largest supplier of oil, and a major producer of coal and uranium. European Union countries have sometimes expressed dismay at Putin's tactics, but they depend on Russian energy supplies, so have learned to mute their protests to the growing Russian power in Eurasia.

5. A Growing Risk of Conflict: Throughout history, major power shifts have normally been accompanied by violence. Either states at the pinnacle of power have struggled to prevent the loss of their privileged status, or challengers have fought to topple those at the top. Will that happen now? Will energy-deficit states launch campaigns to wrest the oil and gas reserves of surplus states from their control -- the Bush administration's Iraq war might already be thought of as one such attempt -- or to eliminate competitors among their deficit-state rivals?

The high costs and risks of modern warfare are well known, and there is a widespread perception that energy problems can best be solved through economic means, not military ones. Nevertheless, the major powers *are* employing military means to gain advantage in the global struggle for energy. These endeavors could easily lead to unintended escalation and conflict.

One conspicuous use of military in the pursuit of energy is obviously the regular transfer of arms and military-support services by the major energy-importing states to their principal suppliers. Both the United States and China have stepped up their deliveries of arms and equipment to oil-producing states like Angola, Nigeria, and Sudan in Africa and, in the Caspian Sea basin, Azerbaijan, Kazakhstan, and Kyrgyzstan. Russia is also using arms transfers to gain influence in the major oil- and gas-producing regions of the Caspian Sea basin and the Persian Gulf. Its urge is not to procure energy for its own use, but to dominate the flow of energy to others. The danger, of course, is that such endeavors multiplied over time, will provoke regional arms races, exacerbate regional tensions, and increase the danger of great-power involvement in any local conflicts that erupt.

In this new world order, energy will govern our lives in new ways daily. It will determine when, and for what purposes, we use our cars; how high (or low) we turn our thermostats; when, where, or even if, we travel; increasingly, what foods we eat (given that the price of producing and distributing many meats and vegetables is profoundly affected by the cost of oil or the allure of growing corn for ethanol); for some of us, where to live; for others, what businesses we engage in; for all of us, when and under what circumstances we go to war or avoid foreign entanglements that could end in war.

This leads to a final observation: The most pressing decision facing the next president and Congress may be how best to accelerate the transition from a fossil-fuel-based energy system to a system based on climate-friendly energy alternatives.