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Energy Ethics

WILLIAM H. RAUCKHORST | NOVEMBER 6, 2006

he Arab oil embargo of 1973, initiated to protest U.S. support of Israel in the Yom Kippur War, was a watershed event in U.S. energy history. It sparked higher gasoline prices and, before it was lifted in March 1974, raised concerns about a possible energy crisis. But ethical issues relating to world energy have not received the attention they deserve within most religious denominations, despite the fact that global warming and oil consumption are even more urgent matters today. Religious organizations in particular (along with civic groups and schools) should take the lead in helping to form our individual consciences and shape a national consensus on these world issues.

Global Warming and Peak Oil

Three decades after the oil embargo of 1973, our civilization is facing two specific and related challenges—global warming and peak oil. The threat of global warming has been well publicized since last year's hurricane season. Recent documentaries have shown the effects of rapidly melting polar ice and glaciers and the summer melting of the Greenland ice sheet.

The peak oil challenge, less well publicized, refers to a future where the current rate of oil production is no longer possible. As envisioned by many scientists and engineers, world oil production capability will peak in the next few years, given the finite nature of oil reserves and the effect of oil depletion at individual wells. David Goodstein (*Out of Gas: The End of the Age of Oil*, 2004) and other writers have pointed out that the date when world oil production peaks is very significant. At that point civilization will have used approximately half of the ultimately recoverable petroleum. After that, demand will exceed production capability, and the world will be forced to accommodate itself to the shortfall. The remaining oil, more difficult to produce, will be very expensive.

Peak oil concerns are often dismissed by those who believe that human ingenuity and know-how will inevitably come to the rescue and provide alternatives to petroleum. While this position has some validity, Goodstein examines it in his book, as do Robert Hirsch, Roger Bezdek and Robert Wendling in their 2005 study, *Peaking of World Oil Production: Impacts, Mitigation, and Risk Management*, conducted for the U.S. Department of Energy. Without going into the details, it is fair to say that the transition away from petroleum is a monumental challenge to society. David Goodstein

concludes his book with a prophecy: "Civilization as we know it will come to an end sometime in this century unless we find a way to live without fossil fuels."

Ethical Implications

It is important to recognize that global warming and peak oil challenges are directly related to energy consumption. From 1970 to 2000—except during the Carter administration (1976-80)—the United States declined to buy into an energy efficiency ethic. As a result, total annual energy use increased by an additional 40 percent. The United States, with less than 5 percent of the world's population, still uses 25 percent of the world's energy and accounts for approximately 25 percent of the human-produced carbon dioxide, a major cause of global warming. Our country's extravagant energy behavior can be attributed largely to technological optimism and to the relatively low price of energy we have customarily enjoyed.

In 1973, shortly after the oil embargo, I was one of three faculty members—a physicist, a physical geographer and an economist—who initiated a public affairs colloquium on energy and society to engage students in considering it a major societal issue. As we left the classroom one day, the physical geographer turned off the light switch, in accord with a common admonition to "Please turn off." In a nonconfrontational but intentional way, our economist colleague flipped it back on and said, "Use up the current energy sources and we will develop new ones." To me, these comments exemplified the attitudes of the conservationist and the technological optimist.

That innocuous interaction prompted me to ask, What, if any, moral basis exists for an energy conservation or energy efficiency ethic? After some thought I concluded that, even if one buys into the view that some form of energy to meet society's needs will always be available, a strong moral basis for an energy conservation ethic still exists. It boils down to avoiding the environmental effects associated with waste, that is, using energy unnecessarily. An individual who chooses an energy-inefficient car or home harms the common good by the unnecessary emissions associated with both.

Harm to the common good has reached a new level with global warming. While previous environmental concerns regarding snail darters and acid rain might be dismissed by the average citizen, one need not be an environmentalist or moral theologian to recognize that a threat as serious as global warming has ethical implications that require a change in our behavior. An ethical response is called for, based on concern for the environment.

The ethical implications of the peak oil issue arise from a different set of considerations. For starters, there is already a vast gap between energy availability in industrialized countries and in developing countries. The developing world has roughly 80 percent of the population but uses only 20 percent of the resources. Were oil prices to rise swiftly in a peak oil era, the disparity between what is affordable in developed and underdeveloped countries will grow much greater.

Such an inequitable world adds to the moral basis for an energy conservation or energy efficiency ethic logically independent of the environmentally based ethic discussed earlier. The ethic now would have its basis in a consideration of social justice. Consider again the example of an individual's decision to buy an inefficient car. It is one thing to buy such a vehicle when there is plenty of inexpensive petroleum flowing, but quite another when such unnecessary use of petroleum means that a less fortunate person elsewhere in the world lacks enough energy just to survive. Such an ethic follows from the Golden Rule.

This added basis for an energy conservation ethic is significant. Churches, for instance, that have been lukewarm to an environmentally based energy ethic will become more responsive to one based on concern for social justice. That is my hope: that people of faith could see the relationship between the availability of energy in the peak oil era and the "dramatic urgency of starving families" about which Bruce C. Birch wrote in 1978 [see box at the end of this article]. Two specific ethical conclusions would follow from social justice considerations, independent of environmental considerations:

- 1. Each of us should attempt to conserve energy, most notably in transportation and home heating.
- 2. As a nation, we should take up the challenge to create alternative energy technologies and show the way to a sustainable energy future for the world.

The Role of the Churches

Given the seriousness of the ethical implications of global warming and peak oil scarcity, our religious congregations should take a leading role in prevention. Energy behavior ought to be a principal ethical concern of people of faith. Some religious groups have recognized the importance of these environmental issues.

- The California Interfaith Power and Light organization, founded by the Episcopal priest Sally Bingham and others, has undertaken a major effort to educate people about the energy and environment problem. Their "Congregational Covenant" spells out six specific recommended activities for religious congregations. (It is available at www.interfaithpower.org.)
- The Franciscan order, true to its traditions, has spoken out on these issues in many ways, including publication in 2002 of the booklet *Global Warming and Climate Change: An Issue for Religious Today*, which provides ecological information, recommended actions and supportive background information from the tradition of St. Francis and St. Bonaventure.
- Pope John Paul II delivered a message titled "The Ecological Crisis:A Common Responsibility" in conjunction with the celebration of World Day of Peace, Jan. 1, 1990. In it he wrote "The most profound and serious indication of the moral implications underlying the ecological problem is the lack of respect for life evident in many patterns of environmental pollution.... Ecological

balances are upset by the uncontrolled destruction of animal and plant life by a reckless exploitation of material resources" (No. 7).

• The Unitarian Universalist Association has focused on energy and environmental issues. The group's 2006 *Statement of Conscience* is an impressive, detailed document (available at www.uua.org/actions/ecology/06globalwarming.html).

Such efforts are significant and laudable. Yet more comprehensive, systemic efforts are needed now to bring about major changes in our energy consumption. We cannot afford to ignore two of the biggest threats to civilization: global warming and oil scarcity. Rather, we must work together to create a more sustainable world.

Energy and the Church

Unlike concerns for food and hunger, attention to energy issues has not been highly visible in U.S. churches. With the exception of some statements by denominational boards and agencies, there has been a notable lack of programs and materials designed to sensitize local congregations to energy as an area of Christian moral concern. The reasons for this inattention are many. The dramatic urgency of starving families is hard to duplicate in presenting energy issues.

Bruce C. Birch "Energy Ethics Reaches the Church's Agenda" The Christian Century, 11/1/78

William H. Rauckhorst is a professor of physics and former senior administrator at Miami University in Oxford, Ohio. He has studied the energy issue and taught on the subject for the past 30 years. His career includes appointments with the Energy Research and Development Administration, the U.S. Department of Energy, as well as the Argonne National Laboratory and the National Science Foundation.