A Sustainable Environment: Our Obligation to Protect God's Gift

by

George P. Nassos

A Proposed Energy Plan With Wrong Priorities

Last month, the U.S. House of Representatives passed an energy bill that was sent to the Senate for approval. It is very similar to the bill that passed the House in 2003 but failed in the Senate. Although I have not read the bill (over 1,000 pages), I would like to make some comments on its general provisions.

The primary emphasis of the bill is to increase domestic production of crude oil, natural gas, coal, nuclear and other energy sources in order to reduce our dependence on foreign sources. To achieve this increase in energy production, the bill will funnel more than $12 billion in tax breaks and subsidies to energy companies. This is fine, but the missing component of the energy bill is emphasis on conservation. Producing more crude oil is *temporary*, but conserving energy is *permanent*.

Basically, the House bill is saying that we can continue to use all the energy we want and the energy companies will make it available to us. As Director of the MS in Environmental Management program at IIT – Stuart Graduate School of Business, I use an analogy describing the traditional environmental manager who tells the manufacturing department to make all the products and associated waste it wants to meet demand. The environmental manager will make sure the generated waste does not pollute the air, water or soil. The forward thinking environmental manager (current graduates studying "sustainability") will make every effort *not* to produce the waste at all. This is the current priority.

It is important to understand the availability of oil reserves. It has been shown that the oil production rate increases as more reserves are discovered, and the rate peaks when half the estimated ultimately recoverable oil is produced. This is followed by a falling production rate, all along a classic bell curve. This same analysis has shown that it took 110 years to produce about 225 billion barrels of crude oil in the U.S., but half of that oil was produced in the first 100 years and the second half in the next ten years. In the U.S. this production rate peak was achieved in 1970, the year when we utilized half of the estimated ultimately recoverable oil and then production started its steady decline. The U.S. lost its preeminence as the world's leading producer of oil and caused a spike in gasoline prices and long lines at the pumps. On a global basis, this milestone is expected to occur in the year 2010 – only five years from now. And we will probably see the same long lines again – unless we start conserving this valuable fuel.

The energy bill also contains provisions to allow oil drilling in Alaska's Arctic National Wildlife Refuge, which could produce as much as one million barrels a day. However, it is unlikely that it would be available within the next ten years, and it probably would have little impact on oil prices. This oil would represent no more than one percent of the U.S. demand, and would most likely be delivered to a closer destination like China – not the U.S.

Another provision of the House bill will shield manufacturers of methyl tertiary butyl ether (MTBE) from lawsuits. This is a chemical that has contaminated the drinking

water serving hundreds of communities and has a potential cleanup cost in billions of dollars. MTBE is a gasoline additive that improves the octane rating and is a replacement for lead. It is produced by large oil and chemical companies – the same companies that will be provided with these tax breaks and subsidies. These are the same companies that today are reporting record profits. Exxon Mobil reported its largest profit ever ($8.4 billion) in the fourth quarter of 2004, and its second largest profit ($7.9 billion) in the first quarter of 2005. And now there is a proposed bill to give them tax breaks in order to produce more oil and make even greater profits.

Instead of providing incentives to produce more oil, the tax breaks and subsidies should go to producing more efficient automobiles. If the average fuel efficiency of cars in America increased by a little over five miles per gallon, it would eliminate the need to import any oil from the Persian Gulf. In the last few years, the average automobile fuel economy has fallen rather than increasing – thanks to the proliferation of SUVs. An attempt to require automakers to increase fuel economy was defeated by the House. This is something I do not understand. We should be providing incentives for hybrid automobile production, developing the hypercar (www.rmi.org) and the air car (www.theaircar.com), and accelerating the development of fuel cells. With the addition of these kinds of cars, an increase of five miles per gallon would be no problem at all – and the technology exists today. Oil is a limited resource and with the rapid growth in demand of huge economies like China and India, the second half of the estimated ultimately recoverable oil (after 2010) will be consumed considerably faster than the first half. We owe it to our future generations that a sustainable environment is available for them.

If you would like to receive copies of earlier articles in this series, please contact me at george.nassos@iit.edu.