

Petroleum

The Arrival of Peak Oil

Excerpt from *Powering Our Future: An Energy Sourcebook for Sustainable Living*. The text was modified to fit the website.

Petroleum has appropriately earned the term black gold. Aside from a few leading agricultural crops, more than any other commodity, petroleum is so closely integrated into our livelihoods that supply shortages could cripple world economies. Supply shortages would serve as the impetus for wars, diminish world food production, and cause unprecedented chaos. Oil has emerged as the lifeblood of the global economy - and the backbone of its success. Yet, just as the world's wealthiest economies have built most of their infrastructures upon oil, global reserves are drying up. In just over a century, humanity has used half of the world's oil reserves to fulfill its daily needs for electricity, transport, agricultural production, and the manufacture of goods. The most vital resource to our modern economy is, in large measure, combusting into the atmosphere.

At a time when developing nations are demanding increasing amounts of fossil fuels, oil is becoming more difficult and costly to produce. The United States crossed the top of the bell curve for domestic oil production more than three decades ago. Excluding the Middle East, the rest of the world has been on the production downslide since 1997. So far, the Middle Eastern region has been willing to close the gap between dwindling supplies and growing demand, though this last remaining oil-rich region is slotted to reach its maximum production around 2012. At the end of 2004, Colin J. Campbell, a renowned oil production expert, predicted that 2006 would be remembered as the year of the world's peak in oil production and a crucial turning point in the history of humanity. There was speculation that the oil peak had passed in 2000 when production declined slightly in 2001 and 2002. Then 2003 oil production edged past the 2000 levels. Many energy experts believe that this trend marks a short plateau at the height of the bell curve just prior to its irreversible descent.

In early March 2005, oil was selling for \$54 per barrel. This brought the average price of gasoline to almost \$2.00 per gallon in the United States, the highest price ever paid during the late winter season. According to the secretary-general of OPEC, Adnan Shihab-Eldin, oil is expected to remain steady at \$50 to \$60 per barrel for roughly two years, followed by a jump to \$80 per barrel soon thereafter. This projected price increase is a likely harbinger of peak oil and the tightening gap between supply and demand. The majority of industry experts agree that the oil peak will arrive before 2010. Still others think that the peak will not arrive until after 2035. Based on current trends, the peak is likely to arrive sooner - much sooner.