

GLOBAL PEAK OIL

Peak Oil Task Force, 20 January 2009

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Peak oil is the term for energy resource depletion, specifically, the peak in global oil extraction. Oil is a finite resource, an energy dense resource that has powered phenomenal economic and population growth over the last century and a half.

The oil of concern is “light sweet crude”, the free-flowing *conventional oil* which is predominant world over. US extraction peaked in 1970. Virtually all other nations have peaked also, including the giant Ghawar field in Saudi Arabia, so the *global peak* is imminent.

The *rate* of oil extraction (now about 87 million barrels/day), has grown almost every year of the last century. Global oil reserves are estimated at *2.5 trillion barrels*, and we have used up about half of the original reserves. Meanwhile, new discoveries are smaller than the existing extraction rate, while global demand exceeds extraction. With the oil extraction rate slowing and entering terminal decline, oil is essentially past 'peak'.

Many mistakenly view Peak Oil as an environmental crisis. It is not. It is an *economic crisis*, a budgetary crisis. The costs and consequences of Climate Disruption are environmental costs. The costs and consequences of Peak Oil are economic costs, felt increasingly anywhere in the economy that oil plays a role – which is everywhere. The diminishing supply of *light sweet crude* combined with *rising global demand results in price inflation*. After oil extraction has peaked, oil prices can be lowered *only* by lowering demand. The International Energy Agency's main strategy for that is *demand restraint*, commonly called conservation.

The \$147.00 per barrel oil price peak of July 2008 was the first shot across the bow. Because of the consumer credit crisis that burst the housing bubble and triggered global recession, oil demand has dropped along with economic contraction. Drop in global demand means drop in oil price to the current \$42.00 per barrel. But the main feature of Peak Oil is *price volatility*.

The extraction “peak” is more accurately a bumpy plateau extending for a few years as oil price rises and drops. Today it's tempting to be lulled by the drop in oil and gasoline prices. But the current *cheap oil moment* is our window of opportunity to plan for community mitigation against the return of expensive oil, which most experts predict within a decade.

Dr. Robert Hirsch of SAIC¹, a Fortune 500 consultant to the Pentagon, has done a scenario analysis for mitigation. He concluded that initiating a crash program anything short of twenty years prior to the peak would result in significant liquid fuel shortages for two decades.

Mitigation is needed at the local level for compelling reasons. Oil-linked *price inflation in food, commuting, construction, health care, plastic consumer goods, etc.* will impact locally most heavily. With oil central to our economy, disruptions are expected to be severe, and emergency planning is most effective when done locally. For a decade or more, our Federal officials have not addressed the issue, though that may be changing as of today.

But the macro solutions will take decades to implement, so *near term* micro mitigation is needed in our community. If steps are not taken to mitigate against the rising cost of oil, any attempt to solve any other problem, whether it is local asphalt paving or global Climate Disruption, will become prohibitively expensive.

¹ <http://www.saic.com/about/>

http://en.wikipedia.org/wiki/Science_Applications_International_Corporation