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**PEAK OIL THEORY: A REALITY OR HYPE?**

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Six years into the 21st century, the United States and the world remain heavily dependent on the fuel that powered the last 100 years: crude oil. President Bush has gone so far as to call that dependence an “addiction”.

But despite the almost quadrupling of the oil price since 2002, the world still seems reluctant to buy into high oil prices anything but the normal fare of Chinese demand, temporary shortages of refining capacity, political instability in the Middle East and the occasional hurricane. May be we should start looking into the oil prices from a new perspective: peak oil.

Peak oil theory concerns the long-term rate of extraction and depletion in conventional oil and other fossil fuels. It states that any finite resource such as crude oil will have a beginning, middle, and an end of production, and at some point it will peak. Oil production typically follows a bell-shaped curve when charted on a graph, with the peak of production occurring when approximately half of the oil has been extracted. With some exceptions, this holds true for a single well, a whole field, an entire region, and presumably the world. Peak Oil does not mean 'running out of oil', but 'running out of cheap oil'. There is a big difference between oil supplies not running out, and supply meeting demand.

Many experts think the peak in global oil production could be reached some time between now and 2010, others that it will come between 2010 and 2020. My own research, however, indicates that the peak had already been reached in 2004 if we factor in what I describe as “OPEC’s inflated proven oil reserves”.

Even the US army now predicts that global oil production is at or near peak and that current global demand exceeds the supply. In a report entitled:” Energy Trends & Their Implications for US Army Installations”, it says that the almost quadrupling of oil prices since 2002 is not an anomaly but a picture of the future.

Eight of the top oil producers in the world have already peaked. The only one among the top producers that has clear capability to increase production is Iraq once stability is restored to the country. In fact of the 65 largest oil-producing countries in the world, up to 54 have past their peak of production and are now in decline. Moreover, the three largest oilfields in the world have peaked: Kuwait’s Burgan peaked in November 2005, Mexico’s giant Cantarell in March 2006 and Saudi Arabia’s Ghawar, the largest oilfield in the world, in 2006 and is now declining at a rate of 8% per year.

In the US, discovery peaked in 1930 and production peaked 40 years later in 1970. And despite all the technology we hear about, world discovery peaked in 1965 and production of conventional oil peaked in 2005 with a time lag of 40 years. As for the Middle East, discovery peaked in 1965 and peak production will be reached by 2009. Since production has to mirror discovery, it should surprise no one that we now face the corresponding peak of production.

A peak in oil production would manifest itself by rapidly escalating prices, a slowdown in production, a growing supply deficit, declining discovery rate of new oil and also a declining Energy Return on Investment (EROI) ratio. All these characteristics exist today. It is against this background that the concept of peak oil becomes more worrisome.

This paper will argue that the sustained high oil prices since 2002 might be an early indication of a serious global supply-demand imbalance brought about by peak oil. It will also argue that all the characteristics of peak oil exist today. It will suggest that unconventional oil production may not be able to delay the decline in global oil production but could only ameliorate it. It will conclude that peak oil is not only a reality but is already impacting on oil prices, the world economy and the global energy security. The paper will warn that the days of inexpensive, convenient, abundant energy sources are quickly drawing to a close.

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