

# Oil: Demand & Supply

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*The key facts about demand and supply of oil show that we have a crisis on our hands. By Stephen Porter*

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The United States has 5% of the world's population and uses 25% of the world's oil. China's oil consumption (7.6% of global consumption) has now passed Japan's (7.4%), making China the world's Number 2 oil-consuming nation. Oil consumption is increasing in all areas of the world, but the increase is most rapid in the developing countries. World oil demand since 1988 has increased 25%, from 65 million barrels per day (bpd) to 82 million bpd. In these 16 years, EU consumption is up 16%, US consumption up 18%, Japan's 25%, and China's 175%.

There are insufficient hydrocarbons in the world for the entire population of the world to rise to the American level of consumption. World oil production per capita peaked in 1979 and has been declining since then. Given rising global demand for hydrocarbons, it is possible that demand may exceed supply within the next few years, perhaps as soon as 2005.

In 1956, Mr King Hubbert predicted that US oil production would peak in the early 1970s. Hubbert was widely criticized by oil experts and economists, but in 1971 Hubbert's prediction came true. US oil production has declined 40% since 1971. Hubbert's methods of oil reserve analysis predict that a peak in world oil production is occurring now. At the same time, global demand for oil is growing rapidly. Shortages and rising prices are inevitable. Even a global recession would only postpone the approaching shortage of oil. So these are analyses that cannot be taken lightly.

In 1995, Petroconsultants Pty Ltd, a respected oil industry consulting firm, released a report called *World Oil Supply 1930–2050*. This report cost \$32,000 per copy and predicted global oil production would peak around the

year 2000 and decline 50% by 2025. In fact, worldwide conventional oil production did peak in 2000. We are on a bumpy plateau at the top of the bell curve for global oil production. People will become more aware of this when we start to slide down the far side of the bell curve.

One of the reasons oil production will decline precipitously is because the size of oil reserves around the world have been overestimated. The “value” of oil companies is directly related to the size of their reserves, so there is an advantage to them to manipulate these estimates. OPEC countries have an agreement that limits their export quotas of oil in proportion to their reserves, so they also have an incentive to inflate their reserve estimates. Plus, there is a big difference between total reserves in the ground and the reserves that may ultimately be recoverable.

The current stated reserves serve well to induce stoicism among the optimists and a lack of concern among the general public. The recoverable oil that these figures really represent ought to create a sense of emergency among the world's population and a demand for alternatives. Unfortunately, the reality is going to become known only when it hits—when it will be too late. This is why it is important to spread awareness of the coming crisis.

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## SIDEBARS

### Hard Facts

World oil production peaked in 2000 and may start contracting as soon as mid-2005. It may decline as much as 50% by 2025.

In the 16-year period from 1988–2004, world oil demand rose 25%. European consumption is up 16%, US consumption up 18%, Japan's up 25%, and China's up 175%.

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### Demand Just Grows

By some estimates, there will be an average of two percent annual growth in global oil demand over the years ahead, along with, conservatively, a three percent natural decline in production from existing reserves.

*– Richard Cheney, US Vice President from 2001, in 1999.*