

# Peak oil

## What is Peak oil?

MEA factsheet #1b



“Peak oil” is a phrase used to denote the point in time when the maximum global oil production rate is reached; after this the rate of production goes into a terminal decline. Peak oil is certain to happen because oil is a finite resource – there is only so much of it, and no new oil is being created. After the peak of oil discovery and production, the availability of oil will fall, and oil prices will rise – perhaps dramatically. The peak oil problem is made more serious because while the supply of available oil is falling, global demand is growing - by an average of 1.76% per year from 1994 to 2006, with a high of 3.4% in 2003-2004.

## Evidence

**“All the easy oil and gas in the world has pretty much been found. Now comes the harder work in finding and producing oil from more challenging environments and work areas.”**

**William J Cummings, ExxonMobil, 2005**

The global peak of new oilfield discoveries occurred in 1965; since then the number of

new oilfields has been falling, and as the quote from an oil industry spokesman shows, it is widely accepted that all of the easily extracted reserves of oil have already been found, and most of them are already being used up.

As this happens oil companies are being forced to use supplies which are harder and more expensive to extract, even though these new sources will take many years to come onstream. These include supplies that are in environmentally sensitive areas, remote locations or deep under the sea. The technical problems in dealing with the Gulf of Mexico disaster in 2010 were compounded by the depth of the installation and the difficulty of operating in the hurricane season, yet exploration in even more extreme areas such as the South Atlantic continues.

## Timescales

There are various estimates of the point when the peak of oil production will occur, but most well informed commentators within the oil industry agree that we have already passed, or are very close to reaching this point. The US Energy Information Administration suggests global oil production peaked in 2006. Even the most optimistic predictions suggest that we will reach peak oil within 12-15 years, during the 2020s.

**“The oil boom is over and will not return... All of us must get used to a different lifestyle.”**

**King Abdulla of Saudi Arabia, 1998**



# Impacts

The widespread use of fossil fuels has been one of the main causes of economic growth and prosperity since the Industrial Revolution. Some believe that when oil production decreases, human culture and modern technological society will be forced to change drastically. The impact of peak oil will depend heavily on the rate of decline and the development and adoption of effective alternative technologies.



The graph below shows how petrol prices have changed over recent years. Household energy prices have seen a similar price rise over recent years and months. A dwindling oil supply will have a serious effect on our ability to heat our homes, generate power, cook and travel.

## UK Retail Pump Prices



However, the impacts of peak oil are much more widespread than this. Oil and oil-based products are used in almost every area of modern life. If alternatives are not found, all such products, including crop fertilizers, detergents, solvents, adhesives, and most

plastics would become scarce and expensive. The cost of food, much of which is transported over long distances, would also rise unless more locally produced alternatives were favoured. At the very least this would cause a major recession, greater even than the one caused by the 2008-2009 banking crisis, lowering living standards worldwide.

In the worst case it could lead to global famine, worldwide economic collapse and would put a very serious strain on international relations, causing more wars and terrorism, and creating refugees.

The hope must be that increased awareness of peak oil, coupled with rising concern about climate change linked to fossil fuel burning, will encourage the rapid expansion of sustainable energy technologies such as wind, solar and biomass.



## Further Information:

### Websites

All Party Parliamentary Group on Peak Oil & Gas - [appgopo.org.uk/](http://appgopo.org.uk/)  
Powerswitch – [powerswitch.org.uk/](http://powerswitch.org.uk/)  
Association for the Study of Peak Oil [aspo-global.org/](http://aspo-global.org/)

### Books

Half Gone: Oil, Gas, Hot Air and the Global Energy Crisis by Jeremy Leggett  
Beyond Oil: The View from Hubbert's Peak by Kenneth S. Deffeyes

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