

# How much oil have we used?

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Estimates of how much crude oil we have extracted from the planet vary wildly. Now, UK researchers have published a new estimate in the International Journal of Oil, Gas and Coal Technology that suggests we may have used more than we think.

The idea that we are running out of oil is not a new one, but do we even know how much oil we have extracted from since the first commercial oil wells were sunk in the middle of the nineteenth century? In 2008, chemists Istvan Lakatos and Julianna Lakatos-Szabo of the Hungarian Academy of Sciences theorised that less than 100 billion tonne of [crude oil](#) has been produced since 1850 and that the average annual production rate is less than 700 million barrels per year.

They compared proven reserves and estimates of yet-to-find (YTF) resources and echoed the sentiment that we will soon face oil shortages even though a substantial part of those reserves remain in the ground untapped.

Now, John Jones in the School of Engineering, at the University of Aberdeen, UK, suggests that the figures cited by Istvan Lakatos and Julianna Lakatos-Szabo for which they give no references grossly underestimates how much oil we have used already. Jones says that we have used at least 135 billion barrels of oil since 1870, the period during which J.D. Rockefeller established The Standard Oil Company and began drilling in earnest.

The oil industry now spans several generations, says Jones, and has historically been as uninterested in how much oil has been drawn as were economists, day-to-day and annual figures being of much greater concern. However, in 2005, The Oil Depletion Analysis Centre (ODAC) in London provided a total figure of almost 1 trillion barrels of crude oil (944 billion barrels) since commercial drilling began. Even that figure does not add up, Jones explains.

He has calculated a better estimate by using the volume of a barrel (42 US gallons, or 0.16 cubic metres) and a crude oil density of 0.9 tonnes per cubic metre. ODAC's 944 billion barrels is thus the equivalent of 135 billion tonnes.

Jones explains that this figure is of the same order of magnitude as the estimate offered by Lakatos and Lakatos-Szabo, but is nevertheless 35% higher than ODAC's figure. "Their assertion that less than 100 billion tonnes has been produced is significantly inconsistent with the ODAC," says Jones. The implication is that either ODAC or the Hungarian team are incorrect in their estimates, and suggests that clarification of this important figure is now needed.

More information: "Total amounts of oil produced over the history of the industry" by Jones, in Int. J. Oil, Gas and [Coal](#) Technology, 2009, 2, 199-200; [www.inderscience.com/offer.php?id=24887](http://www.inderscience.com/offer.php?id=24887)

"Global oil demand and role of chemical EOR methods in the 21st century" by Lakatos and Lakatos-Szabo in Int. J. [Oil](#), Gas and Coal Technology, 2008 1, 46-64; [www.inderscience.com/search/in...=record&rec\\_id=16731](http://www.inderscience.com/search/in...=record&rec_id=16731)

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