



## 20 new fields needed every year in the UK

Posted by [Chris Vernon](#) on June 5, 2006 - 5:00pm in [The Oil Drum: Europe](#)

Topic: [Supply/Production](#)

Tags: [north sea](#), [oil](#), [united kingdom](#) [[list all tags](#)]

[The Scotsman](#) today reports on a new study by Professor Alex Kemp and Linda Stephen of Aberdeen University on the prospects for the UK Continental Shelf (UKCS) until 2035.

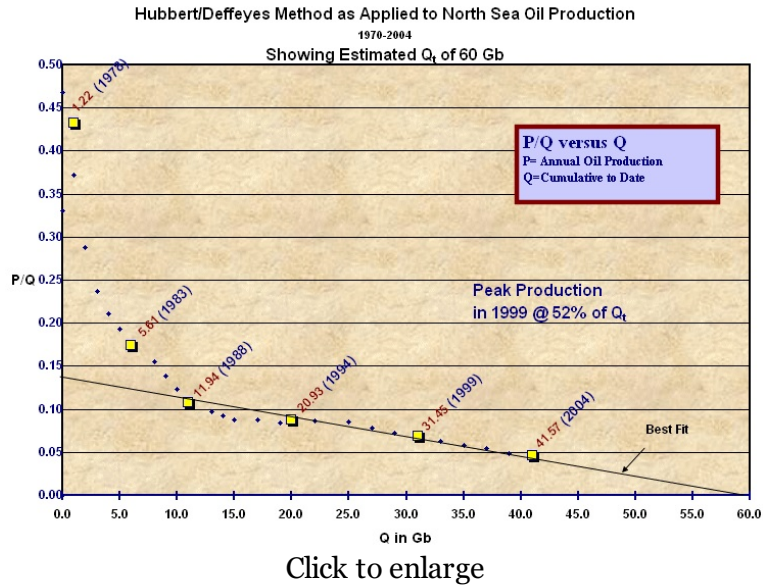
Professor Kemp, a leading oil expert with the university's Department of Economics, said that a "striking feature" of the prospects for undeveloped fields was their relatively small size, with the average size of the probable and possible fields estimated at under 15 million barrels of oil equivalent. He said: "The long-term future of the UKCS depends on the successful development of large numbers of small fields and enhanced oil and gas recovery schemes. The remaining reserves are large but they are mostly located in relatively small accumulations."

But he revealed that the study's economic modelling suggested total production, which stood at 3.35 million barrels of oil last year, could reach the industry's target of maintaining production at a level of three million barrels in 2010, perhaps reach two million barrels by 2020 and one million barrels in 2030, despite the dwindling role of production from major North Sea platforms.

Kemp must be talking about oil *and gas* here since oil extraction was only 1.8mbpd last year not 3.35, his rates of decline are surprising though. Just looking at the numbers above suggests a rate of decline of 2.2% to 2010 then 4% to 2020 and 6.7% to 2030. These decline rates seem optimistic in light of the declines we've seen recently.

Between now and 2030 a cumulative total of 25 billion barrels of oil could be produced, compared with the 35.4 billion already extracted from the UKCS since the first North Sea oil find.

Kemp's forecast cumulative production of 25 GB between now and 2030 should be compared with this graph kindly provided by TOD member Westexas indicating just 17GB remaining.



Interestingly Kemp's total  $35.4 + 25 = 60.4$ GB, equal to that shown above. Why does Kemp think we're living in 2003?

Perhaps the economist's key point is this:

Professor Kemp said: "These figures depend on a high rate of new field development requiring on average over 20 new field developments per year. This is because the average size of new field is likely to be quite small - less than 20 million barrels of oil equivalent."

As the remaining oil and gas is left in a large number of smaller fields the logistical challenges are likely to be greater than faced in the past. The title is 20 new fields needed each year, more accurately the article could have been titled '20 new fields needed to meet arbitrary depletion envelope'. However we are left questioning whether such prolific development is feasible.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](http://creativecommons.org/licenses/by-sa/3.0/).