The oil 'peak' has been reached

Posted by Luis de Sousa on September 29, 2010 - 9:28am in The Oil Drum: Europe
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Tags: net oil exports, oil prices, original, peak oil, piigs [list all tags]

Jorge Nascimento Rodrigues is perhaps the only journalist in Portugal aware of the issue of oil scarcity. During the past few years, I have had the opportunity to collaborate with him several times, bringing the Peak Oil message to a larger audience on an almost regular basis. Last weekend, the largest weekly newspaper in Portugal (and among the diaspora), Expresso, had another article in its Economy section, penned by Jorge with a few thoughts on present events and trends. Samuel Foucher kindly provided an updated version of one of his graphs to illustrate the article.

Below the fold you will find an English translation of this article.

This is an improved version of a log at the EuropeanTribune.

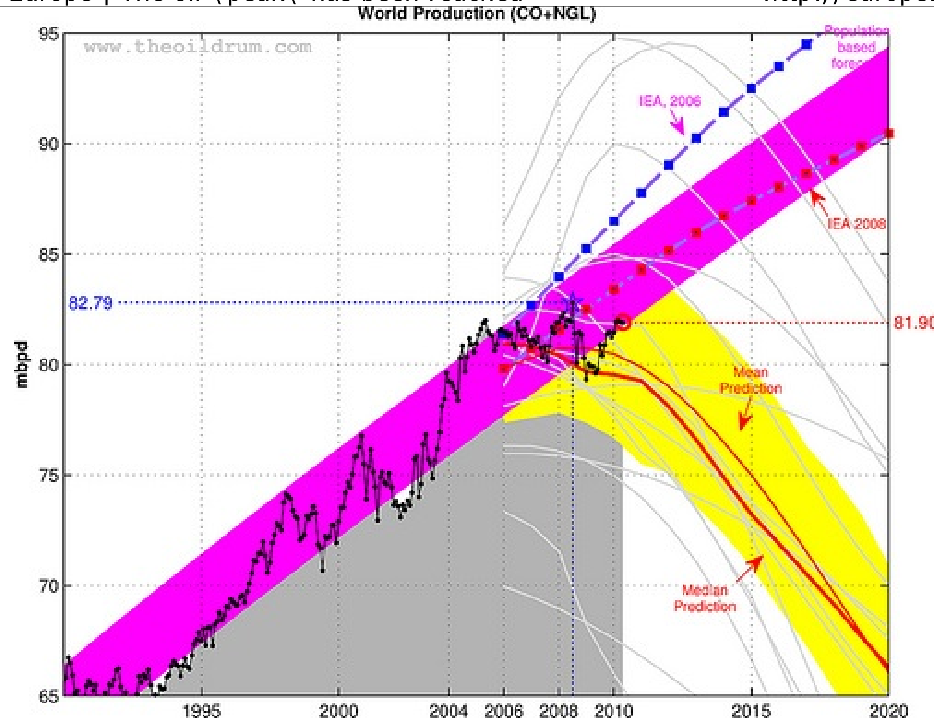
The alarm has sounded: the scarcity of oil will affect everyone, say analysts

'Peak' oil is no longer debatable. The projections for the year, the five-year period, or the decade when global oil production would start declining "are now a part of history", says Luís de Sousa, member of ASPO-Portugal and contributor to the blog "The Oil Drum", talking to the Expresso. "The period of peak is already being lived. Predicting it is no longer relevant", he adds.

According to this specialist, the vast majority of the important mathematical and accounting models of oil production used by entities independent from the oil industry all point to a similar time period when oil production reaches a maximum and begins to decline. This is a period of about a decade centred between 2008 and 2010, and the maximum oil produced is between 78 and 85 million barrels daily.

Luís de Sousa emphasizes that since 2005 world liquids production has been bound between 80 and 82 million barrels per day, clearly in agreement with those models. This plateau "has been sustained by the increase of natural gas liquids, with pure crude [petroleum] in decline since 2005".

Recently, the 'peak' has returned to the spotlight because of a secret report by the Future Studies group of the German Centre for the Armed Forces Transformation, a military think tank working for the Berlin Ministry of Defence. The study was published by "Der Spiegel", causing considerable concern by those less used to the issue and its geopolitical implications.



The Diplomacy of Oil

The report has an alarming tone: "scarcity shall affect everyone" and "oil price increases pose a systemic risk, not only for transport systems, but also for all other systems". And left a message: "It is vital to secure access to oil", for in a fairly short time-frame, between now and 2040, we may see "a change in the international security panorama with new risks - like that of fuel transport - and new actors in a possible conflict around the distribution of an increasingly scarce resource".

The German report concludes that "oil exports available through the market of supply and demand will shrink" and that need for oil diplomacy will sky-rocket because of oil's geo-politization.

The increasing scarcity referred by the Germans is associated with "an almost unchanging level of oil production, fixed within a band that began during 2004," emphasizes Luís de Sousa. This variation "band" is called by many specialists, with some humour, an "undulating plateau". Meaning, in this plateau, production variations oscillate, like a wave, from year to year, independent of price variations. The present crisis, whose end continues to be debated, "will likely prolong this undulating period, flattening what otherwise would have been a prominent peak".

More important than the peak itself or the production plateau is the volume of oil available on the international market, or in other words, what is available for export beyond what is consumed by those producing the oil. "Maximum exports were reached in 2005, at an amount equal to 44 million barrels a day (mbd). Since then, production has entered into a slow, but irreversible, decline," says the ASPO specialist. Presently exports amount to 42 mbd, and in 2020 exports are likely to be under 35 mbd. Luís de Sousa also adds that in the contest for the oil available in the international markets, a change is taking place. "There is a transfer of consumption from the countries that form the OECD (developed countries) to those emerging.- If in 1990, half of the oil produced was consumed by the OECD, today that fraction is down to 1/3". The world market has been turned upside down.

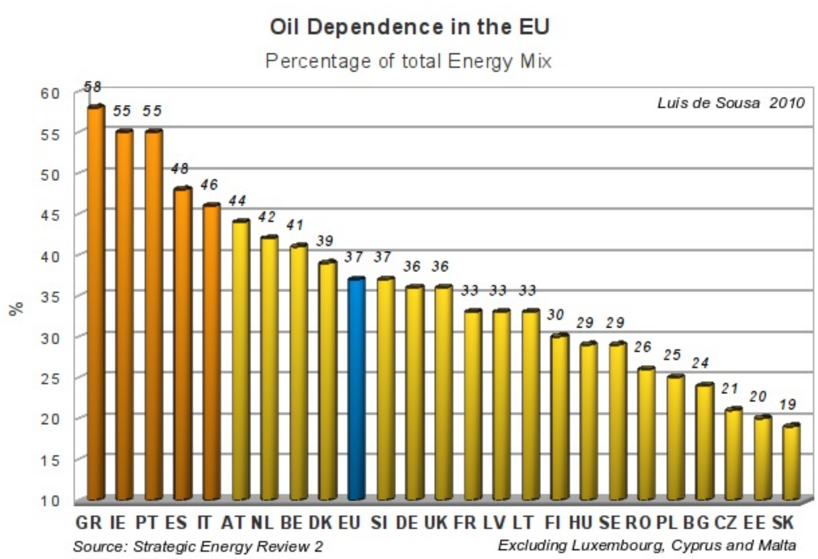
This long term structural change, deriving from the scarcity of this commodity and growing geopolitical risks (including those of navigation through strategic straits), has been further changed, in recent years, by what was dubbed the "financialization" of the crude futures market. This happened when financial speculators nicknamed "Wall Street refiners" entered the marketplace, buying and selling "paper barrels", causing an additional disturbance in the market, with sometimes "wild" oscillations.

PIIGS are the most affected

One of the groups in the OECD that will suffer most with the contraction of available oil is the one formed by those countries most dependent on oil in their energy mix, according to Luís de Sousa. "A detail must be noted - those countries in greatest difficulties will be precisely those called the PIIGS. These countries each have an oil dependence in their total energy mix of over 45%, including Greece with 58%, Portugal and Ireland with 55%, Spain with 48% and Italy with 46%. This is in contrast to the European Union average of 37%. If we add the four countries with oil dependency above the European average, but below 45%, we get a complete map of the zone where the 'undulating plateau' will have the greatest impact. Besides the PIIGS, this includes Austria (44%), Holland (42%), Belgium (41%) and Denmark (39%)."

The weakest sector for the five most vulnerable countries of the euro-zone (Portugal, Ireland, Italy, Greece and Spain) is the transport sector, particularly when road-based. "This dependency can derive from geographic location, inappropriate urban and national planning or both" says Luís de Sousa. He recommends increasing maritime and railway modes of transportation; it is not sufficient to modernize the electrical infrastructure or to encourage other sources of energy.

And here's the graph that identified the PIIGS's reliance on oil:



Thanks to Jorge for continuing to raise awareness of a subject that, as he writes, shall affect us all. Thanks to Samuel for his prompt collaboration.

A list of posts on previous articles by Jorge (from EuropeanTribune):

Have Oil prices bottomed out?

Unmissable interview with Franck Biancheri

The Month of the Psychological Shock (Over Oil) in America?