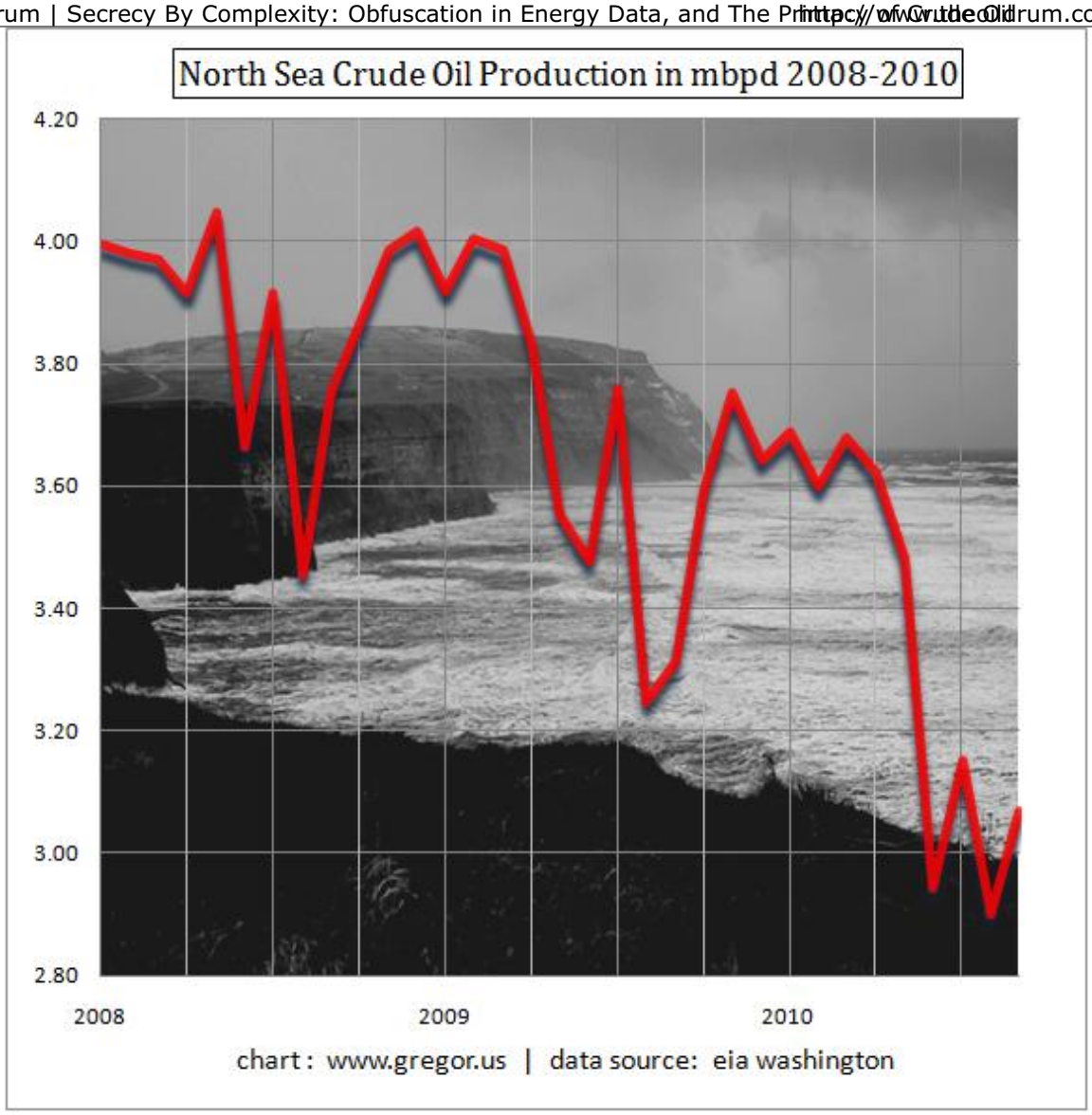
The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

# Secrecy By Complexity: Obfuscation in Energy Data, and The Primacy of Crude Oil

Posted by nate hagens on January 12, 2011 - 10:19am

*The following is a guest post from Gregor Macdonald, adapted from his website Gregor.us.*

The dramatic fall of Mexican oil production, and its largest field Cantarell, is often cited as a signature example of the problems facing Non-OPEC supply. Since the production highs of 2004-2005, Mexican production has lost over 800 kbpd (thousand barrels per day) which is fairly dramatic for a country that was producing around 3.4 mbpd as recently as 5-6 years ago. But as accelerated as these declines have been in Mexico, there's another oil producing region has seen even quicker declines. The North Sea, which comprises "United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore" has just lost 20% of its production in 24 months. Daily production is down 600,000 barrels per day in that period. | see: *North Sea Crude Oil Production in mbpd 2008-2010.*

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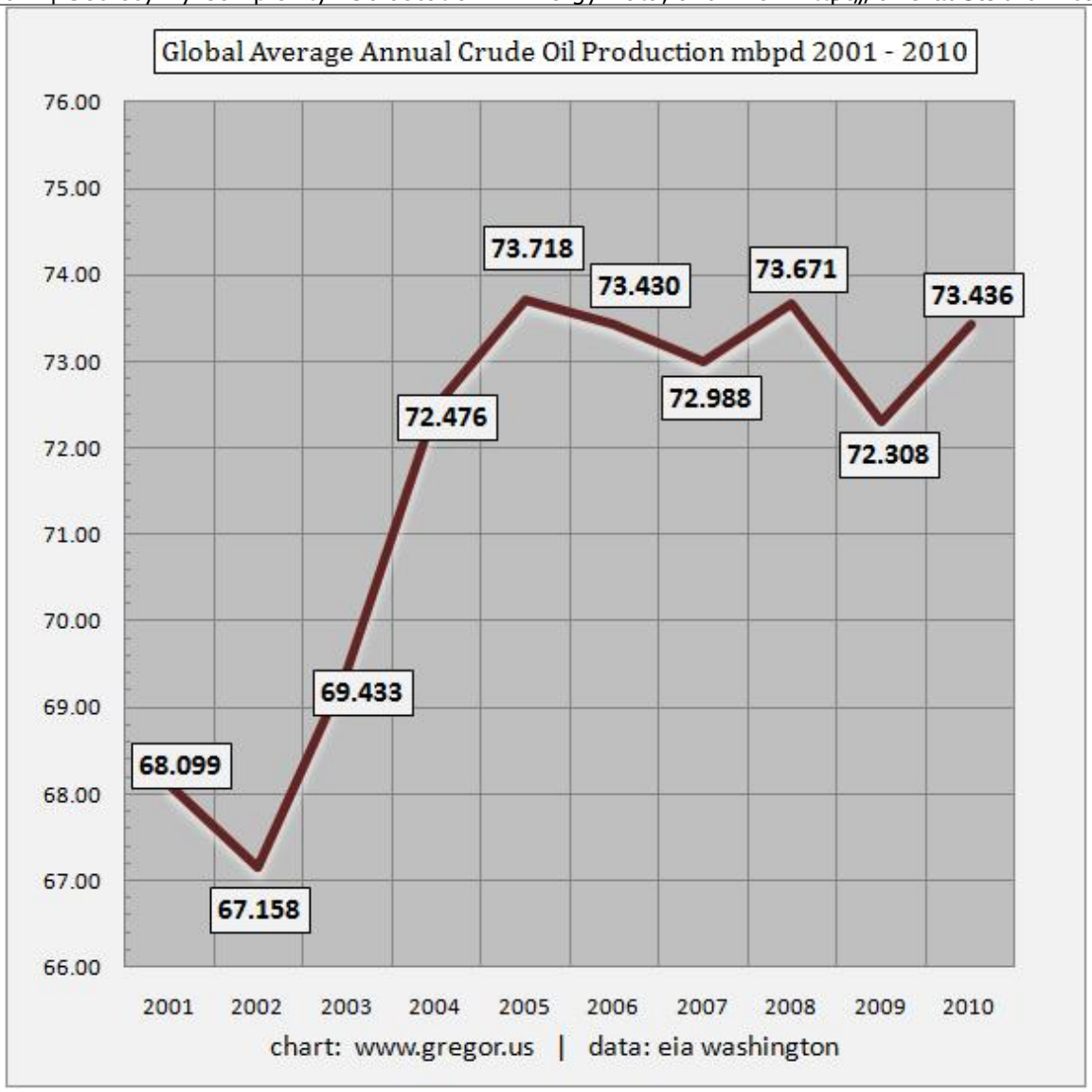
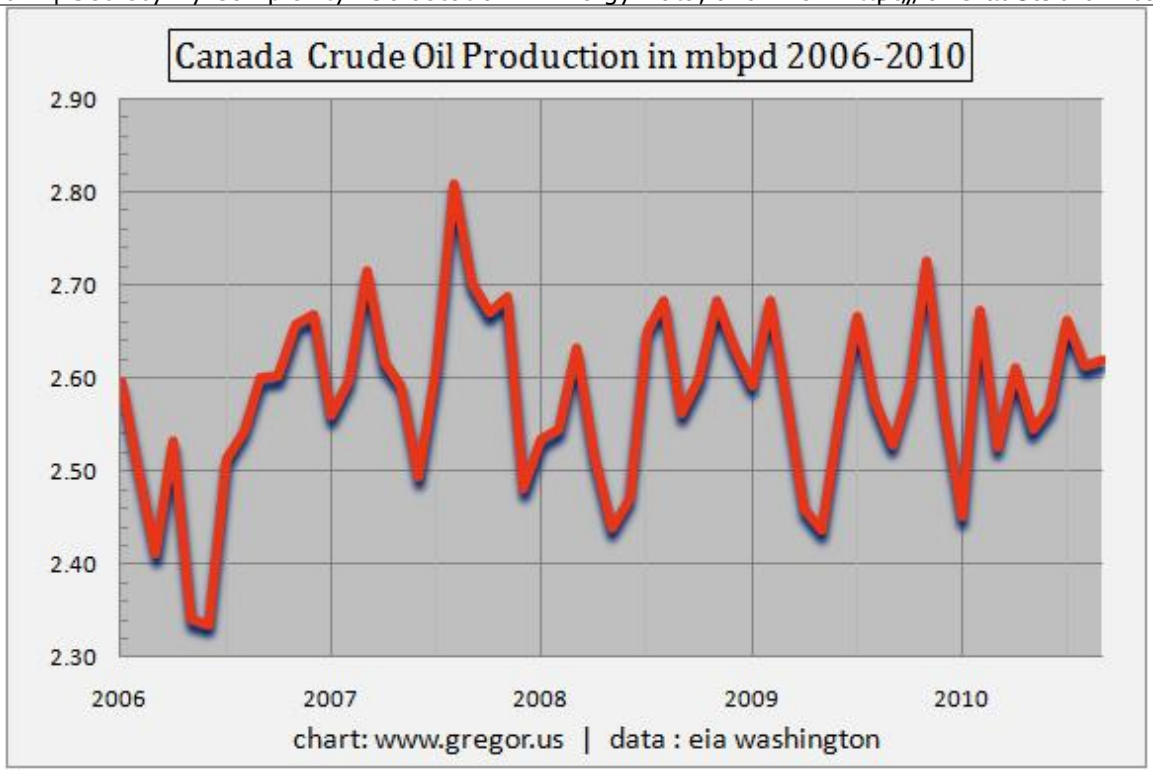
I mention this because as 2010 comes to a close, it appears that for the fifth year in a row the peak production year of 2005–in which the world produced oil at an average, annual rate of **73.718** mbpd–will once again not be exceeded. This is truly an astonishing result given that a new pricing era for oil began in 2004 as oil rose above 40.00 dollars a barrel. For over five years national oil companies and publicly traded oil companies have been free to sell oil into an ever-rising price environment. But no increase in global crude oil production has been forthcoming. Moreover, during the five year period from 2006-2010, global crude oil production actually fell in three of those years: 2006, 2007, and 2009. Equally notable is that OPEC–which currently accounts for about 42% of global supply– has been roughly steady in producing 30-32 mbpd each year during the same same period while Non-OPEC, accounting for 58% of world production has struggled with decline. | see: *Global Annual Average Crude Oil Production in mbpd 2001-2010*.




Another region in Non-OPEC that has disappointed is Canada. While Canadian oil production soared coming into the last decade, its production halted starting in 2006 and since then has oscillated around 2.6 mbpd. There is much hope for future increases from Canada and there is even a kind of mini-myth taking place in the US right now that Canada will be a strong source of future supply to the US. However, what has happened in Canada the past decade is that cheap conventional barrels of oil have been replaced with expensive tar sands barrels of oil. The result? Running in place in terms of supply, but at a much higher cost structure. | see: *Canada Crude Oil Production in mbpd 2006-2010*.

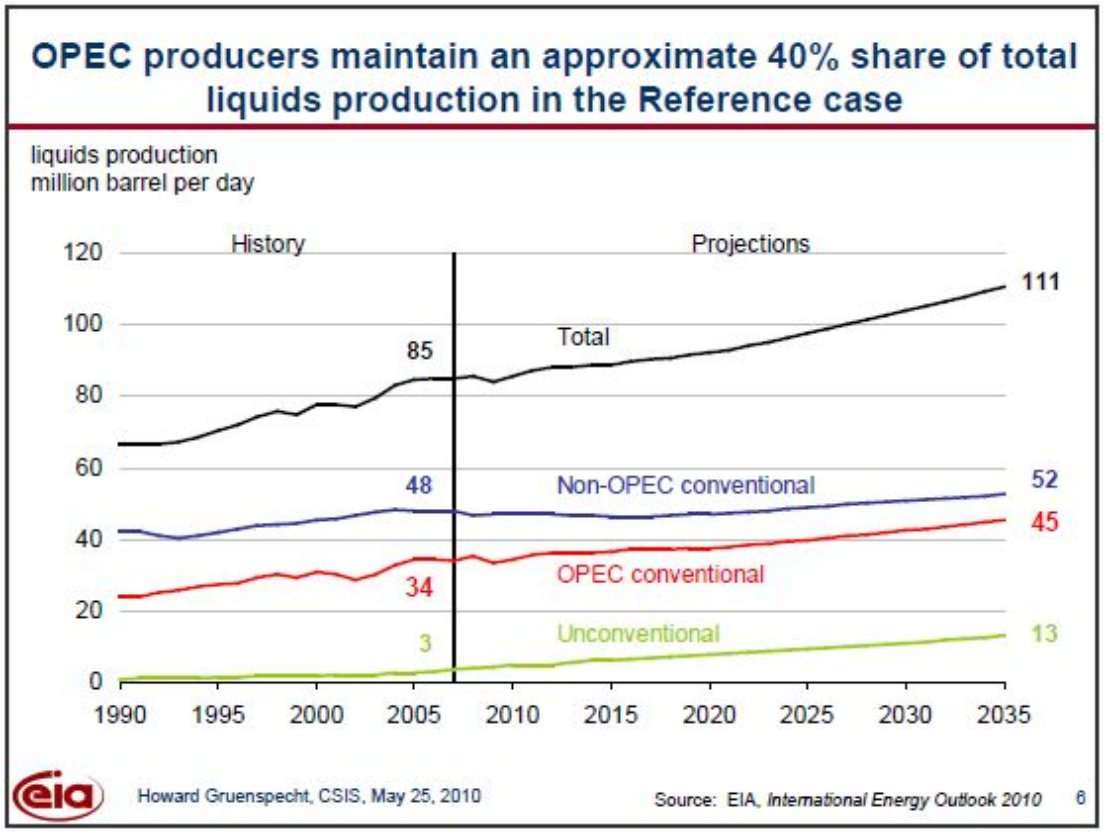



Canada is worthy of discussion for another reason, however, and that's the creeping tendency of the public energy-data agencies to engage in some some channel stuffing. In the case of Canada, the high-cost tar sands production has now been aggregated into that country's measures of "crude oil." While not as egregious as including ethanol into publicly released data measures of oil, the alchemy and energy inputs required to turn oily dirt into usable petroleum can hardly be deemed as conventional crude oil production. To this point, one of the core methods EIA Washington and IEA Paris have increasingly relied on in recent years–to obscure the very serious and now very real problem of oil depletion–is to include biofuels and natural gas liquids in the accounting of global oil production. The technique that both agencies use to conduct this obfuscation is a familiar one, in which the key information is aggregated (buried) into a much larger barrage of data and presentations. For a scholarly look at the methods governments use to work around their obligations to inform the public, do watch the one hour lecture that Jay Rosen gave to the World Bank earlier this year. Rosen's deconstructions of the media have been very helpful to me, over the past two years. See his blog here: PressThink.org. Rosen describes the use of opacity as a kind of hiding in plain sight, or *secrecy by complexity*.

In order to rebut this Secrecy by Complexity it's the obligation of responsible energy analysts to explain the falsehood of adding biofuels and natural gas liquids (NGL's) to measures of oil production. The reason is simple: natural gas liquids are not oil. They are not oil in any sense and most important of all NGL's contain only 65% of the BTU of oil. Worse, biofuels are barely an energy source themselves and are the product of a conversion process of other energy inputs. Accordingly, the world is not producing 84, or 85, or 86 million barrels of oil per day. The world is instead producing 73.436 million barrels of crude oil per day. The depletion of oil will not be solved by either by the production of biofuels and NGLs, nor their inclusion into oil data, as the world economy moves into the future.

When the EIA in Washington falsely composes such forecasts, aggregating future natural gas liquids and ethanol into a supply picture for "oil" as they do each year in their various projections, this disables the public's ability to accurately understand the true outlook for global oil supply. While it's still the case that EIA Washington produces data each month for Crude Oil production only, the predominant reporting and forecasting is now weighted towards "liquids", the unhelpful

aggregation of oil with NGLs and biofuels. But most unhelpful of all is that, in forecasts, the EIA has essentially dropped projections for global crude oil supply. For example, in the International Energy Outlook (IEO) 2010 public press conference this May the EIA released to the press the following slide-deck: International Energy Outlook 2010–With Projections to 2035. No accounting or forecast of oil is contained in the document. | see: *Slide 6: OPEC producers maintain an approximate 40% share of total liquids production in the Reference case*.




Little information of any use is actually provided by the projection shown above for one simple reason: the chart does not tell us about the actual energy that will available to society. More egregious is that even in the main body of the IEO 2010 report, more false aggregation occurs with a yet another term of complexity: Conventional Liquids. Indeed, it's not surprising that OECD governments use opacity and secrecy by complexity to handle this extremely important issue. OECD economies are now structurally short energy supply, having lost access to the cheap BTU in oil that built out their societies over the past 100 years. The loss of cheap energy, the loss of the cheap BTU that oil has provided to OECD nations for the past century, is a crucial factor in the dilemma the West now faces: a newly chronic economic restraint that refuses to go away.

Data Notes: All Data through September 2010, via EIA International Petroleum Monthly.