Dick Cheney, Peak Oil and the Final Count Down

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In the April 2004 issue of the magazine the Middle East I found a statement that Vice-President Dick Cheney had made in a speech at the London Institute of Petroleum Autumn lunch in 1999 when he was Chairman of Halliburton. A key passage from his speech was: *"That means by 2010 we will need on the order of an additional fifty million barrels a day."*

It suggested that he was fully aware of the issue of peak oil. A full text of the talk had been available on the website of the Institute of Petroleum, but has now been removed (wwww.petroleum.co.uk/speeches.htm). Nevertheless, further research did bring to light a printed version, dated 24.08.00, as follows:

Dick Cheney: *"From the standpoint of the oil industry obviously - and I'll talk a little later on about gas - for over a hundred years we as an industry have had to deal with the pesky problem that once you find oil and pump it out of the ground you've got to turn around and find more or go out of business.* ***Producing oil is obviously a self-depleting activity.*** *Every year you've got to find and develop reserves equal to your output just to stand still, just to stay even. This is as true for companies as well in the broader economic sense it is for the world. A new merged company like Exxon-Mobil will have to secure over a billion and a half barrels of new oil equivalent reserves every year just to replace existing production. It's like making one hundred per cent interest; discovering another major field of some five hundred million barrels equivalent every four months or finding two Hibernias a year.* ***For the world as a whole, oil companies are expected to keep finding and developing enough oil to offset our seventy one million plus barrel a day of oil depletion, but also to meet new demand. By some estimates there will be an average of two per cent annual growth in global oil demand over the years ahead along with conservatively a three per cent natural decline in production from existing reserves. That means by 2010 we will need on the order of an additional fifty million barrels a day.*** *So where is the oil going to come from? Governments and the national oil companies are obviously in control of about ninety per cent of the assets.* ***Oil remains fundamentally a government business.*** *While many regions of the world offer greet oil opportunities****, the Middle East with two thirds of the world's oil and the lowest cost, is still where the prize ultimately lies,*** *even though companies are anxious for greeter access there****, progress continues to be slow. (Bold by the auther)****"*

To understand the magnitude of the problem that Dick Cheney is addressing we can compare "fifty million barrels a day" with the total production coming from the six countries bordering the Persian Gulf (Saudi Arabia, Iran, Iraq, United Arab Emirates, Kuwait and Qatar), that in 2001 produced 22,4 million barrels per day (Energy Information Administration).

Harry J. Longwell, director and executive Vice-President of ExxonMobil, later confirmed this number (World Energy, Vol5 No3, 2002): "The catch is that while demand increases, existing production declines. To put a number on it, we expect that by 2010 about half the daily volume needed to meet projected demand is not on production today – and that's the challenge facing producers."

Jon Thompson, President of ExxonMobil Exploration Company, has also confirmed the fact that the world needs this additional oil. He told the shareholders in 2003 that "In other words, by 2015, we will need to find, develop and produce a volume of new oil and gas that is equal to eight out of every 10 barrels being produced today." In 2001 was the consumption 77.1 billion barrels per day (Energy Information Administration) and 80 percent of that is more than 60 million barrels per day.

The next question to ask is where the oil industry can find this huge amount of new oil. Let's go back to the speech by Dick Cheney: *"It is true that technology, privatisation and the opening up of a number of countries have created many new opportunities in areas around the world for various oil companies, but looking back to the early 1990's, expectations were that significant amounts of the world's new resources would come from such areas as the former Soviet Union and from China. Of course that didn't turn out quite as expected."*

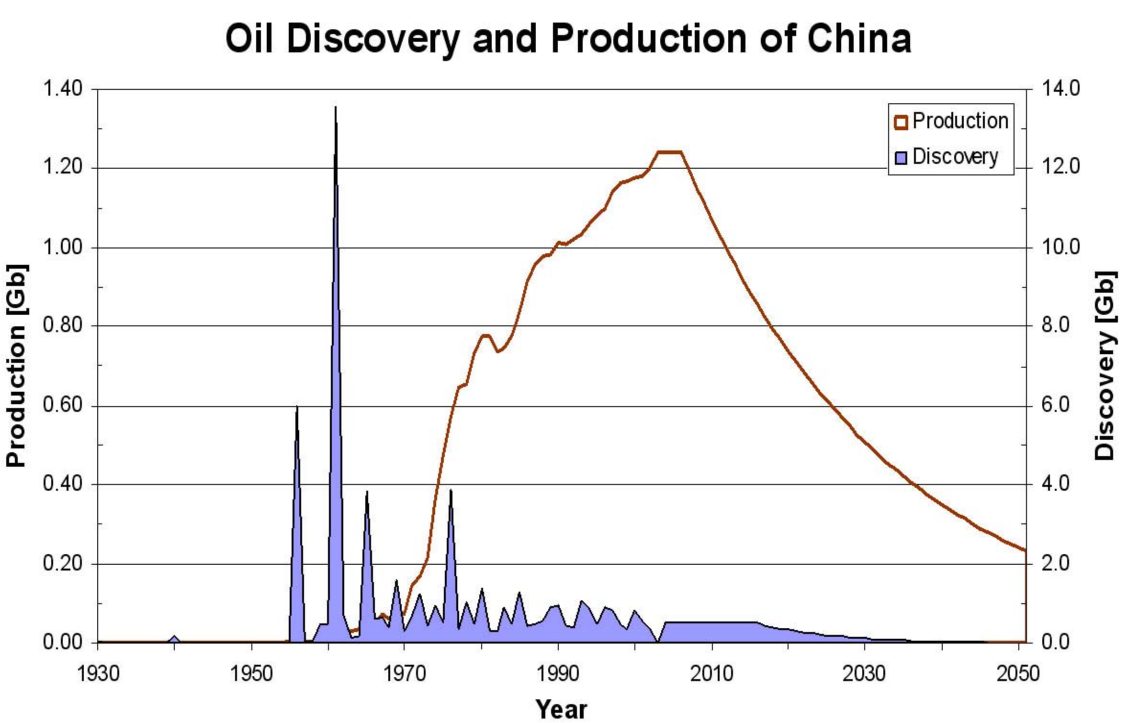

Figure 1. Discovery and production in China

As the demand from China is said to be one of the reasons for the increasing price of crude oil, The Uppsala Hydrocarbon Depletion Study Group (UHDSG), models China's production as indicated in Figure 1. Although there are conflicting reports, we think that the best number for remaining reserves in 2003 was 25.7 billions barrels. The peak of discovery was in 1960 and 73 percent of the discoveries were in giant fields. The evidence suggests that production in China peaked last year giving depletion rate of 3.7 percent. With China's internal demand soaring, Cheney is right not to expect exports from China.

There is no doubt where Dick Cheney thinks the oil is to be found: "*While many regions of the world offer greet oil opportunities, the Middle East with two thirds of the world's oil and the lowest cost, is still where the prize ultimately lies"*.

At that time Cheney did not put a number to the expectation from the region. He was later appointed as Chairman of the National Energy Policy Development Group, and a first number was given. The report was handed to President Bush in May 2001 and includes the following statement from Dick Cheney: *"As you directed us at the outset of your Administration, we have developed a national energy policy designed to help bring together business, government, local communities and citizens to promote dependable, affordable and environmentally sound energy for the future."*

In Chapter 8 of the **National Energy Policy** we get some hint of real numbers for the expected future production in the Middle East: "*By 2020, Gulf oil producers are projected to supply between 54 and 67 percent of the world's oil. Thus, the global economy will almost certainly continue to depend on the supply of oil from Organization of Petroleum Exporting Countries (OPEC) members, particularly in the Gulf. This region will remain vital to U.S. interests*".

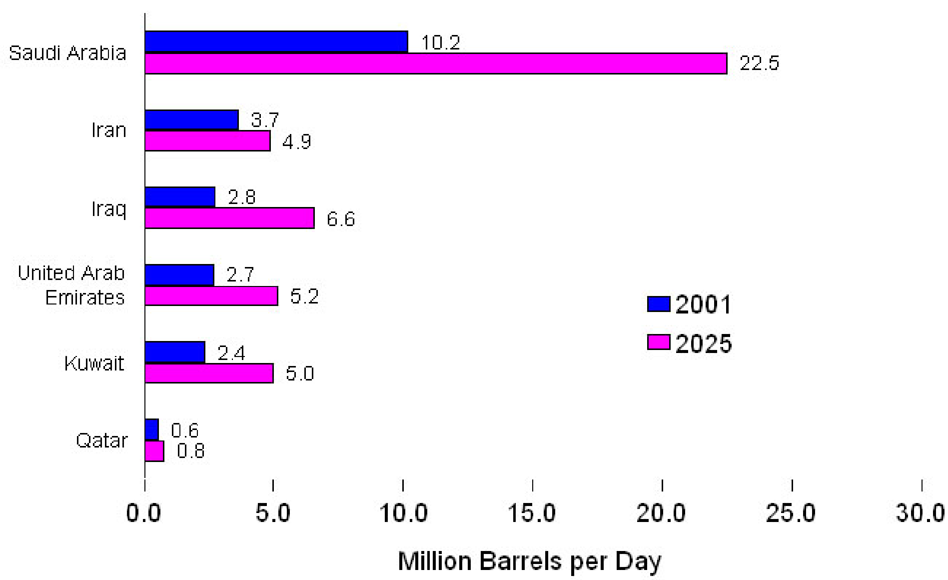

Figure 2. Data presented by Energy Information Administration, April 2004

In 2001, the Gulf countries produced 29 percent of the world's oil, and the Energy Information Administration has now forecast production to 2025. The sum of the estimates in Figure 2 for the Gulf producers is 45 Mb/d (million barrels per day), which implies a 100 percent increase. Mahmoud M. Abdul Baqi and Nansen G. Saleri from Saudi Aramco gave a seminar at CSIS, Washington D.C. on February 2004. They discussed the future production capacity for Saudi Aramco and indicated that the goal is to have a future production capacity of 10 Mb/d. They indicated that it might be possible to increase to12 million barrels per day to meet a rise in world demand, but this is far short of the 22 Mb/d expected by Cheney. Even assuming that it has the physical ability to do so, it is difficult to see why Saudi Aramco should increase production to 22 Mb/d and thereby accelerate the depletion of the only resource the county has.

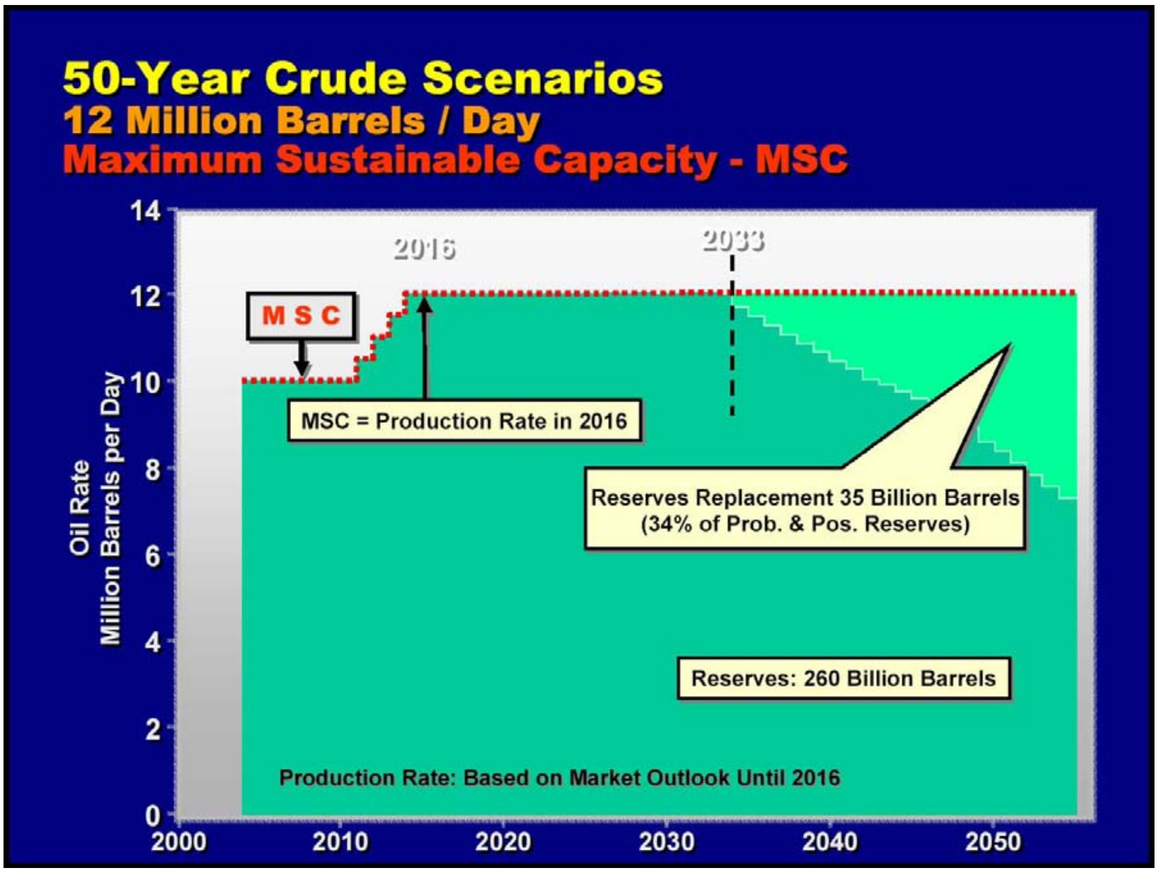

Figure 3. Data presented by Saudi Aramco.

Figure 4 is reproduced from "The peak and decline of world oil and gas production" by Aleklett and Campbell in Minerals & Energy (2003; 18: 5-20) As shown, we estimated that the peak of the oil production will come around year 2010. One reason was that we did not believe that the production from the Gulf States can reach 45 Mb/d.

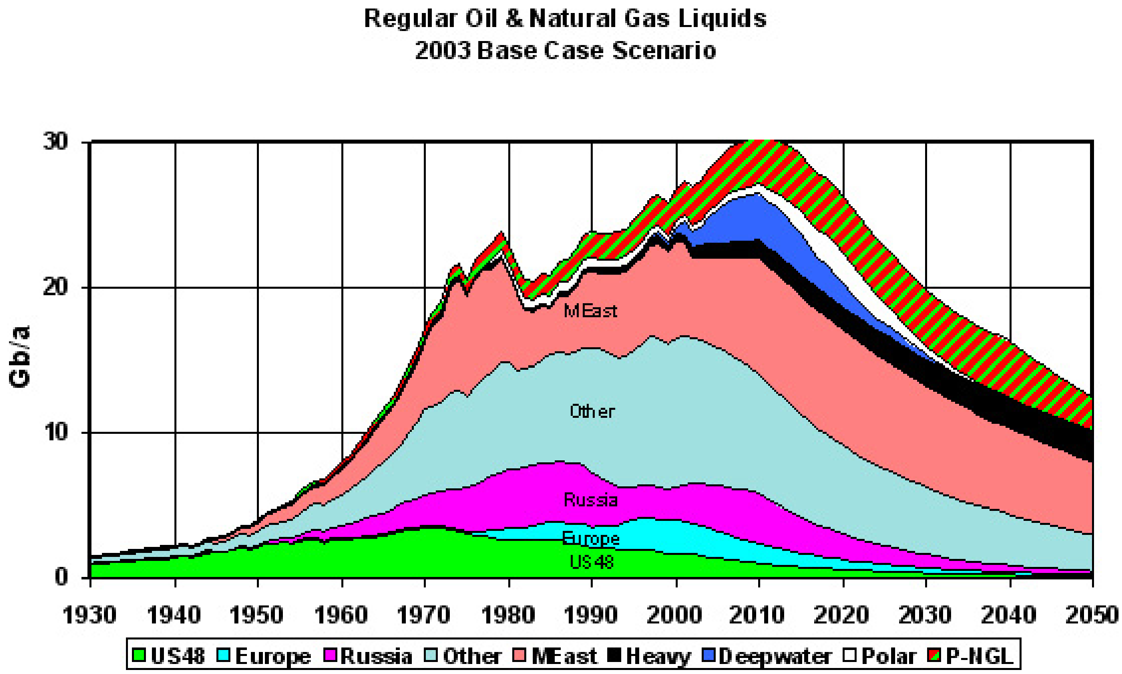

Figure 4. The peak and decline of the world oil production

In short, these three steps, starting with the speech by Dick Cheney, take us to Peak Oil. Dick Cheney*: "The end of the oil era is not here yet, but changes are afoot and the industry must be ready to adapt to the new century and to the transformations that lie ahead."* Year 2010 lies ahead and we are soon there. This is the final countdown for peak oil.

OIL AND WAR

Dick Cheney in London 1999: "*Oil is unique in that it is so strategic in nature. We are not talking about soapflakes or leisurewear here. Energy is truly fundamental to the world's economy. The Gulf War was a reflection of that reality*."

How about the war in Iraq?

More Statements by Dick Cheney in the IP speech

The speech by Dick Cheney is also very interesting from other aspects. First we can read his own opinion about himself: "*I'm often asked why I left politics and went to Halliburton and I explain that I reached the point where I was mean-spirited, short-tempered and intolerant of those who disagreed with me and they said' Hell, you'd make a great CEO'."*

Many are shocked by the fact that Shell has been manipulating its reserve figures, but Cheney saw the pressures Shell was under – "*to turn around and find more or go out of* *business*- you understand how important oil reserves are. From the talk: "*From the standpoint of the oil industry - and I'll talk a little later about gas -, but obviously for over a hundred years we as an industry have had to deal with the pesky problem that once you find oil and pump it out of the ground you've got to turn around and find more or go out of business. Producing oil is obviously a self-depleting activity. Every year you've got to find and develop reserves equal to your output just to stand still, just to stay even*."

One year before the presidential elections in US Dick Cheney thinks that the oil industry should have more power in Washington. Today we know the outcome: *"Oil is the only large industry whose leverage has not been all that effective in the political arena. Textiles, electronics, agriculture all seem oftentimes to be more influential. Our constituency is not only oilmen from Louisiana and Texas, but software writers in Massachusetts and especially steel producers in Pennsylvania. I am struck that this industry is so strong technically and financially yet not as politically successful or influential as are often smaller industries. We need to earn credibility to have our views heard."*

BP has had a hard time to replace production with new discoveries and instead bought Russian reserves. Cheney also discussed that approach: "*Companies that are finding it difficult to create new core areas through exploration are turning to production deals where they can develop reserves that are already known, but where the country doesn't have the capital or the technology to exploit them. In production deals there is less exploration risk but dealing with above ground political risk and commercial and environmental risk are increasing challenges. These include civil strife, transportation routes, labour issues, fiscal terms, sometimes even US-imposed economic sanctions*."

At the end of this paragraph he complains about the fact that there are "US-imposed economical sanctions". Should we be surprised that the sanctions in Libya have been lifted?

The full text of Dick Cheney's speech at the Institute of Petroleum Autumn lunch, 1999, is a very important document and I hope that the Institute of Petroleum once again makes it available for anyone to read. Meanwhile a copy is available on request, Aleklett@tsl.uu.se.

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