

# Iraq and the Problem of Peak Oil

By <u>F. William Engdahl</u> Global Research, August 06, 2004 Current Concerns, No 1, 2004 22 June 2005 Region: <u>Middle East & North Africa</u> Theme: <u>Oil and Energy</u>, <u>US NATO War</u> <u>Agenda</u> In-depth Report: <u>London 7/7</u>

Today, much of the world is convinced the Bush Administration did not wage war against Iraq and Saddam Hussein because of threat from weapons of mass destruction, nor from terror dangers. Still a puzzle, however, is why Washington would risk so much in terms of relations with its allies and the entire world, to occupy Iraq. There is compelling evidence that oil and geopolitics lie at the heart of the still-hidden reasons for the military action in Iraq.

It is increasingly clear that the US occupation of Iraq is about control of global oil resources. Control, however, in a situation where world oil supplies are far more limited than most of the world has been led to believe. If the following is accurate, the Iraq war is but the first in a major battle over global energy resources, a battle which will be more intense than any oil war to date. The stakes are highest. It is about fixing who will get how much oil for their economy at what price and who not. Never has such a choke-hold on the world economy been in the hands of one power. After occupation of Iraq it appears it is.

The era of cheap, abundant oil, which has supported world economic growth for more than three quarters of a century, is most probably at or past its absolute peak, according to leading independent oil geologists. If this analysis is accurate, the economic and social consequences will be staggering. This reality is being hidden from general discussion by the oil multinationals and major government agencies, above all by the United States government. Oil companies have a vested interest in hiding the truth in order to keep the price of getting new oil as low as possible. The US government has a strategic interest in keeping the rest of the world from realising how critical the problem has become.

According to the best estimates of a number of respected international geologists, including the French Petroleum Institute, Colorado School of Mines, Uppsala University and Petroconsultants in Geneva, the world will likely feel the impact of the peaking of most of the present large oil fields and the dramatic fall in supply by the end of this decade, 2010, or possibly even several years sooner. At that point, the world economy will face shocks which will make the oil price rises of the 1970's pale by contrast. In other words, we face a major global energy shortage for the prime fuel of our entire economy within about seven years.

#### Peak oil

The problem in oil production is not how much reserves are underground. There the numbers are more encouraging. The problem comes when large oilfields such as Prudhoe Bay Alaska or the fields of the North Sea pass their peak output. Much like a bell curve, oil fields rise to a maximum output or peak. The peak is the point when half the oil has been extracted. In terms of reserves remaining it may seem there is still ample oil. But it is not as rosy as it seems. The oil production may hold at the peak output for a number of years before beginning a slow decline. Once the peak is past however, the decline can become very rapid. Past the peak, there is still oil, but each barrel becomes more difficult to exploit, and more costly, as internal well pressures decline or other problems make recovery more expensive for each barrel. The oil is there but not at all easy to extract. The cost of each barrel past peak is increasingly higher as artificial means are employed to extract it. After a certain point it becomes uneconomical to continue to try to extract this peak oil.

Because most oil companies and agencies such as the US Department of Energy speak not of peak oil, but of total reserves, the world has a false sense of energy supply security. The truth is anything but secure.

#### Case studies

Some recent cases make the point. In 1991 the largest discovery in the Western Hemisphere since the 1970's, was found at Cruz Beana in Columbia. But its production went from 500,000 barrels a day to 200,000 barrels in 2002. In the mid-1980's the Forty Field in North Sea produced 500,000 barrels a day. Today it yields 50,000 barrels. One of the largest discoveries of the past 40 years, Prudhoe Bay, produced some 1.5 million barrels a day for almost 12 years. In 1989 it peaked, and today gives only 350,000 barrels daily. The giant Russian Samotlor field produced a peak of 3,500,000 barrels a day. It has now dropped to 325,000 a day. In each of these fields, production has been kept up by spending more and more to inject gas or water to maintain field pressures, or other means to pump the quantity of oil. The world's largest oil field, Ghawar in Saudi Arabia, produces near 60% of all Saudi oil, some 4.5 million barrels per day. To achieve this, geologists report that the Saudis must inject 7 million barrels a day of salt water to keep up oil well pressure, an alarming signal of near collapse of output in the world's largest oil kingdom.

The growing problem of peak oil has been known among oil industry insiders since the mid-1990's. In 1995, the leading oil consulting firm, Petroconsultants in Geneva, published a global study, 'The World Oil Supply.' The report cost \$35,000, written for the oil industry. Its author was petroleum geologist, Dr. Colin Campbell. In 1999 Campbell testified to the British House of Commons, 'Discovery of (new oil reserves) peaked in the 1960's. We now find one barrel for every four we consume ...'

## No new giant discoveries

After OPEC raised oil prices in the 1970's, non-OPEC oil projects began to be profitable in the North Sea, Alaska, Venezuela and other places. Oil production increased markedly. At the same time, in response to the higher oil price, many industrial countries like France, Germany USA, Japan dramatically increased the energy from nuclear power plants. The combination gave the illusion that the oil problem had vanished. It has not, far from it.

If in fact many of today's major sources of oil have peaked, and are about to fall off drastically, and at the same time, if world energy demand continues to grow, and not enough oil is found even to replace existing depletion, the global economy faces a crisis of staggering dimension. This would also begin to explain the shift of US foreign policy in the direction of a crude neo-imperial military presence globally, from Kosovo to Afghanistan, from West Africa to Baghdad and beyond.

Obviously, the easiest, most economical solution is to find new giant or super giant oilfields

where large volumes of oil can be extracted and brought to world markets at low cost. That is just what is not the case today. According to a recent report from the Colorado School of Mines, 'The World's Giant Oilfields,' the world's '120 largest oilfields produce close to 33 million barrels a day, almost 50% of the world's crude oil supply. The fourteen largest account for over 20%. The average age of these 14 largest fields is 43.5 years.' 1

The above study concludes that 'most of the world's true giants were found decades ago.' Over the past 20 years despite investment of hundreds of billions dollars by major oil companies, results have been alarmingly disappointing.

The world's major oil companies – Exxon-Mobil, Shell, ChevronTexaco, BP, ElfTotal and others – have invested hundreds of billions of dollars in finding enough oil to replace the existing oil supply sources. Between 1996 and 1999, some 145 companies spent \$410 billion to find enough oil only to keep their daily production stable at 30 million barrels a day. From 1999 to 2002, the five largest companies spent another \$150 billion and their production grew only from 16 million barrels a day to 16.6 million barrels, a tiny increase. With the collapse of the Soviet Union in the early 1990's, western oil companies placed high hopes on the oil potentials of the Caspian Sea in Central Asia.

### Disappointing Caspian results

In December 2002, just after US troops took Afghanistan, BP, a major oil company announced disappointing Caspian drilling results which suggested that the 'oil find of the century' was little more than a drop in the ocean. Instead of earlier predictions of oil reserves above 200 billion barrels, a new Saudi Arabia outside the Middle East, the US State Department announced, 'Caspian oil represents 4% of world reserves. It will never dominate the world's markets.' PetroStrategies published a study estimating that the Caspian Basin contained a mere 39 billion barrels of oil, and of a poor quality. Soon after this news, BP and other western oil companies began reducing investment plans in the region.

#### Interest in West Africa

One of the most active areas of new exploration is in the offshore region of West Africa from Nigeria to Angola. President Bush made a high profile trip to the region earlier in the year, and the US Pentagon has signed military basing agreements with two small strategic islands, Principe and San Tome, insuring a military presence should anything threaten the flow of oil across the Atlantic. Yet, while the volume of oil is important, it also is hardly a new Saudi Arabia. Geologist Campbell estimates that if all deepwater oil, perhaps 85 billion barrels, were produced from fields off Brazil, Angola and Nigeria, it would meet global demand for 3-4 years.

#### Growing energy demand

Against the prospect that many of the largest oil fields today are in a marked decline in output, world demand for oil is rising ruthlessly, marked by the growing economies of China, India and Asia. Even at today's weak GDP growth rates, economists estimate that world demand for oil at today's prices will rise by some 2% per year.

Ten years ago, China was not a factor in world import of oil. It produced most of its limited needs domestically. Beginning 1993 however, China began to import oil to meet its economic needs. By end 2003 China has surpassed Japan to be the second largest oil importer next to the USA. China now consumes 20% of total OECD industrial country energy.

China oil imports are rising now by 9% a year and this is predicted to rise significantly in the coming decade, as China emerges as the world's largest industrial nation. China currently is growing at 7-8% a year. India has recently emerged as a rapidly growing economy as well. Combined they account for some 2.5 billion of the world population. Little wonder that China vehemently opposed the US unilateral war against Iraq in the UN Security Council. The China National Petroleum Company had long sought to secure major oil supply from Iraq.

#### What Cheney knew in 1999

In a speech to the International Petroleum Institute in London in late1999, Dick Cheney, then chairman of the world's largest oil services company, Halliburton, presented the picture of world oil supply and demand to industry insiders. 'By some estimates,' Cheney stated, 'there will be an average of two percent annual growth in global oil demand over the years ahead, along with, conservatively, a three percent natural decline in production from existing reserves.' Cheney ended on an alarming note: 'That means by 2010 we will need on the order of an additional fifty million barrels a day.' This is equivalent to more than six Saudi Arabia's of today's size.

Perhaps it was no coincidence that Cheney, as Vice President, was given as his first major assignment the head of a Presidential Task Force on Energy. He knew the dimension of the energy problem facing not only the United States, but the rest of the world.

Cheney is also well identified as the leading Iraq warhawk in the Bush Administration, together with Defense Secretary Rumsfeld. Repeatedly it was Cheney pushing for military action against Iraq, regardless of which allies support it.

When we examine what is known about global oil reserves, and where they are, in light of the above 'peak oil' analysis of much of today's existing oil production, it becomes clearer why Cheney would be willing to risk so much in terms of America's standing among allies and others, to occupy the oilfields of Iraq. Cheney knows exactly what the global oil reserve situation is as former CEO of Halliburton Corporation, the world's largest oil services company.

The Achilles heel of the US?

The burning question is where will we get such a huge increase of oil? In the decade from 1990 to 2000, a total of 42 billion barrels of new oil reserves were discovered worldwide. In the same period, the world consumed 250 billion barrels. In the past two decades only three giant fields with more than one billion barrels each have been discovered. One in Norway, in Columbia and Brazil. None of these produce more than 200,000 barrels a day. This is far from 50 million barrels a day which the world will need.

Is the era of cheap, abundant oil to fuel the world economy about to end? One most important issue in the entire debate over why Washington went to war in Iraq is the question of how much oil remains to be found in the world at today's prices. The debate has been remarkably little over an economic issue of enormous consequences.

According to the estimates of Colin Campbell and K. Aleklett of Uppsala University, five countries hold the overwhelming bulk of the world's remaining oil and could potentially make up the difference as other areas pass their peak. 'The five major producers of the Middle East, namely Abu Dhabi, Iraq, Iran, Kuwait and Saudi Arabia (including the Neutral Zone), with about half the world's remaining oil, are treated as swing producers making up

the difference between world demand and what other countries can produce...'2.

These five countries – Iraq, Iran, Saudi Arabia, Kuwait and the UAE – through circumstances of geology, contain the oil and gas reserves vital to the future economic growth of the world. In an article in the January 7, 2002 issue of Oil and Gas Journal by A. S. Bakhtiari of the National Iranian Oil Company, noted, 'The Middle East (is) simultaneously the most geostrategic area on the globe and the ultimate energy prize: Two-thirds of global crude oil reserves are concentrated in five countries bordering the Persian Gulf.'3

In a paper published in November 2001, eminent Princeton geologist, Kenneth Deffeyes wrote, 'The biggest single question is the year when world oil production reaches a Hubbert peak and then declines forever. Both the graphical and the computer fits identify 2004 as the probable year. The largest single uncertainty is the enormous reserves of Saudi Arabia.'4

If the peak oil analysis is accurate, it suggests why Washington may be willing to risk so much to control Iraq and through its bases there, the five oil-rich countries. It suggests Washington is acting from a fundamental strategic weakness, not from absolute strength as is often thought. A full and open debate on the problem of peak energy is urgently needed.

1 'The World`s Giant Oilfields', Matthew R. Simmons, M. King Hubbert Center for Petroleum Supply Studies, Colorado School of Mines, January 2002.

2 Aleklett, K. and Campbell, C.J., 'The Peak and Decline of World Oil and Gas Production,' published by the Association for the Study of Peak Oil and Gas, <u>www.asponews.org</u>.

3 Bakhtiari, A.M. Samsam, '2002 to see birth of New World Energy Order,' Oil and Gas Journal, January 7, 2002.

4 Deffeyes, Kenneth S, 'Peak of world oil prodction,' Paper no. 83-0, Geological Society of America Annual Meeting, November 2001. <u>gsa.confex.com</u>.

The original source of this article is Current Concerns, No 1, 2004 Copyright © <u>F. William Engdahl</u>, Current Concerns, No 1, 2004, 2004

## **Comment on Global Research Articles on our Facebook page**

#### **Become a Member of Global Research**

Articles by: F. William Engdahl

**Disclaimer:** The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: <a href="mailto:publications@globalresearch.ca">publications@globalresearch.ca</a>

<u>www.globalresearch.ca</u> contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those

who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: publications@globalresearch.ca