

Colin Campbell: Country Assessment UK

Posted by Chris Vernon on March 6, 2006 - 4:09pm in The Oil Drum: Europe

Topic: Miscellaneous

Tags: aspo, gas, oil, united kingdom [list all tags]

In a convenient coincidence with the launch of TOD:UK Colin Campbell, founder of Association for the Study of Peak Oil and Gas (ASPO) has this month updated his 2000 country assessment of the United Kingdom. Campbell has carried out these assessments on many counties over recent years with one included in each ASPO newsletter. These can be found by entering the country name in search box on the ASPO Ireland site.

Britain's brief oil age is in decline. The major companies are withdrawing to be replaced by smaller companies, mopping up satellite fields and step-outs, as well as scavenging tail end production from ageing platforms.

Oil production is set to decline at 7-8% a year on the basis of the current depletion rate, falling to less than half its present level by 2010. Britain currently consumes 1.75 Mb/d, making it a net importer on a steeply rising trend. With a population of 60 M, per capita consumption stands at about 11 b/a. Britain exported much of its flush production at a time of depressed oil prices, to which its exports contributed, but now faces buying imports at high prices. It furthermore may find some of its production being exported by the foreign companies who own it, despite growing domestic needs. It would be hard to imagine a less appropriate policy by which to have managed the depletion of a national resource.

The <u>ASPO March 2006 newsletter</u> also includes an interesting paper from Mr Bakhtiari of the National Iranian Oil Company (<u>NIOC</u>), On Middle Eastern Oil Reserves. After considering the likely reserves of key producers he comments:

Oil reserve estimates were useful in the era before 'Peak Oil'. But, in the aftermath of the mighty Peak (as, for example, in the present 'Transition One' period), they tend to become stale and rather useless, as field-by-field analysis and prediction takes over (eg., Ghawar, Cantarell).

So, it will not be long now before we will have to say goodbye to all these mesmerizing oil reserve figures and dump the whole reserves file into the all-encompassing 'dustbin of history'.....

It is inevitable that the closer we get to the peak, field by field and project by project assessments will illustrate the global peak with more accuracy that the traditional Hubbert's curve based on estimated ultimate recoverable reserves (URR).

Campbell's full essay reproduced below the fold.

681. Country Re-Assessment - United Kingdom

The United Kingdom had a strong Neolithic culture, highlighted by the famous astronomical observatory of Stonehenge, long before falling to the Romans in 55 BC. That occupation lasted only a few centuries, but left an indelible mark. It was followed by the dark ages of Viking and Saxon incursions, culminating in the arrival of recycled Danish Vikings from Normandy in 1066, the last military invasion.

General stability brought political and economic progress, including the creation of Parliament, as one of the earlier democratic institutions. The diverse people of the British Isles were absorbed into a single monarchy at various points in history, becoming the United Kingdom and Ireland in 1801. Seafarers stimulated trade and exploration throughout the world, paving the way for the British Empire. At its peak in the reign of Queen Victoria, Britain had become the premier world power, reaping great rewards from the use of the pound sterling for world trade. Great achievements were recorded in the fields of science, literature and culture.

Britain also led the Industrial Revolution during the 18th Century with mills powered by water to make cloth for export to its colonial markets. The wealth, so created, led to the rapid growth of capitalism, banking, usury, investment and a financial economy. Self-sufficient peasants became wage-earners, consumers and tax payers, many working in gruesome industrial slums. Mechanisation based on iron and steel took many directions. Iron smelting made new demands for energy: first from firewood and later from coal. It was at first collected from beaches and outcropping seams before mining commenced. The development of steam driven pumps made it possible to deepen the mines below the water tables. The pumps evolved into steam engines that were later used to power transport, opening the age of the railway that further stimulated trade.

Britain successfully resisted and eventually defeated an epoch of French expansion under Napoleon, but during the 19th Century found itself increasingly threatened by a newly united Germany that was overtaking it in industrial prowess, although lacking the benefit of the pound sterling, the world trading currency that delivered a handsome hidden tribute to the banks in the City of London. These pressures eventually led to two world wars during the 20th Century. One outcome was the break-up of the Middle East into independent countries whose oil rights were shared by the victorious allies. The oil was needed to fuel the internal combustion engine, invented in Germany, which was replacing steam power. Although victorious, Britain was mortally weakened by the wars and voluntarily gave up its once splendid Empire that had brought order and fair administration to much of the world. It half-heartedly joined a newly united European community, preferring to retain its particular financial links with the United States, which eventually replaced the old empires of France and Britain with a new global economic, and now military, hegemony driven by, and for, the dollar.

Massive immigration from the former Empire followed the Second World War, being permitted at first in a sense of colonial responsibility, but later exploited as a source of cheap labour. The indigenous population aged and declined from falling fertility due to affluence, but the overall population expanded to 60 million with the immigrants and their descendants making up more than ten percent.

Most of Ireland had seceded in 1922, with 26 of its counties becoming a Republic in 1947, leaving a form of civil war to fester in the remaining six counties in the north of the island. Scotland and Wales are now recovering earlier autonomies with independent legislatures. Various immigrant cities have developed, some becoming almost small replicas of Karachi or Kingston, Jamaica.

Britain has had a long oil history, both within its own territory, and through the early prominence of its oil companies in the Middle East, Mexico and Venezuela. BP was the flagship with major holdings in Iran, Iraq and Kuwait, while Shell, an Anglo-Dutch enterprise, had a strong position in the Western Hemisphere. BP was once almost a national oil company with a 51% government shareholding and corresponding responsibilities. Formerly the World's largest vendor of crude oil, it now secures its needs more by merger and acquisition, exemplified by the take-overs of Arco and Amoco. Its Chairman and Chief Executive now sit on the board of Goldman Sachs, underlining its new financial priorities. It is the least forthright of the major oil companies on the issue of depletion but does nevertheless now claim that BP stands for Beyond Petroleum, which carries an oblique message.

Non-conventional oil shale had been mined in Scotland in the 19th Century, leading to pioneering refinery processes, and minor oilfields had been found onshore during and before the Second World War. But the breakthrough came during the 1960s, with the development in the southern North Sea of a prolific belt of gas fields, derived from the natural coking of deeply buried coal, first discovered in the Netherlands in 1957. Exploration moved northwards to be rewarded by the discovery of Jurassic rifts, containing prolific source rocks, deposited in one of the prime epochs of generation 150 million years ago, which yielded one giant field after another, extending into Norwegian waters.

Britain had a series of socialist governments to deal with post-War reconstruction, such that the early stages of its oil boom were dominated by State entities, principally the British Gas Council and the British National Oil Company. That ended as a reaction to excessive Trade Union demands, especially from the coal miners, leading to an eruption of new capitalism under Mrs Thatcher, who came to power in 1979 and was able to undermine the miners' control of energy by the new indigenous oil supplies that were coming ashore. The State entities, which could have managed long-term depletion to the national interest, were disbanded, and the major international oil companies, along with many small independents, were given every encouragement to deplete the resources as fast as possible. Production soared as the giant fields were brought on stream with the help of impressive advances in offshore engineering. An early peak was reached in 1987 at 2.6 Mb/d, before production fell partly as a consequence of a major accident at Occidental Petroleum's substandard Piper Field that called for widespread revisions to operating practices and installations. Production growth later resumed, partly also reflecting a second cycle of smaller discoveries, before the country reaches its an overall peak in 1999 at 2.7 Mb/d.

Although the rich deposits of the North Sea dominated production, some other lesser finds were made elsewhere. Lean Lower Jurassic source-rocks gave a solitary large field in Dorset in the otherwise barren English Channel and Western Approaches, and a Carboniferous gas field was found in the Irish Sea. Efforts to find another oil play on the Atlantic margin continue but are likely to be doomed, because the essential prolific Jurassic source-rocks, if present at all, are now too deeply buried to generate oil. The isolated large deposits, West of the Shetlands, are effectively freak occurrences depending on unique re-migration from earlier accumulations. The scope for gas in this province is more promising, but it will not be cheap.

Britain's brief oil age is in decline. The major companies are withdrawing to be replaced by smaller companies, mopping up satellite fields and step-outs, as well as scavenging tail end production from ageing platforms.

Oil production is set to decline at 7-8% a year on the basis of the current depletion rate, falling to less than half its present level by 2010. Britain currently consumes 1.75 Mb/d,

UNITED KINGDOM

Discovery 5-yr average Gb

Reported Proved Reserves*

Past and Future Production

Current Depletion Rate

From Known Fields

From New Fields

Future Production - total

Population M

Rates Mb/d

Production

Amounts Gb

Past Production

Consumption

per capita b/a

Regular

Oil

60

01.76

11

1.86

1.25

0.57

0.21

21.8

4.5

8.2

7.0

1.2

30

7.7%

2005

2005

Forecast 2010

Forecast 2020

making it a net importer on a steeply rising trend. With a population of 60 M, per capita consumption stands at about 11 b/a. Britain exported much of its flush production at a time of depressed oil prices, to which its exports contributed, but now faces buying imports at high prices. It furthermore may find some of its production being exported by the foreign companies who own it, despite growing domestic needs. It would be hard to imagine a less appropriate policy by which to have managed the depletion of a national resource.

Gas production is more difficult to forecast due its very different depletion profile. About 100 Tcf have been discovered, of which about 80 Tcf have been consumed. Production reached a peak of 3.8 Tcf/a in 2000 and is now falling at about 12% a year. The compressors are running flat out on the old southern North Sea fields. At this rate, production will end around 2020 as confirmed by the Government Department responsible. Accordingly, demand for imports is set to rise radically in the years ahead, but the rest of Europe (except Norway) is in the same predicament relying on ever more distant sources, including especially Siberia. Recent events in the Ukraine underline the control exercised by the transit countries which may prefer to meet their own needs first and gain financial rewards from the control they exercise.

The original assessment, written in this newsletter in 2000, correctly anticipated soaring energy costs from around 2010 or *Oil & Gas Journal sooner in the event of a US attack on Iraq. Gas and electricity prices have already almost doubled over the past year.

It is difficult to imagine how the country will survive the Second Half of the Age of Oil. Even in the present conditions of affluence, it seems to be subject to a high level of crime and violence with growing tensions from the large immigrant factions, some of whom deeply resent the Government's decision to invade Iraq. The newspapers are full of the threats of Terrorism, although there has in fact only been one incident. There is an old political adage for the successful politician if you don't have an enemy, make one, but it does not seem to have served the present government. There are plans for the reintroduction of Identity Cards, last seen in the Second World War.

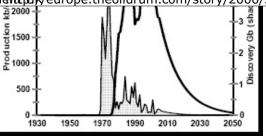
Failure by the Government to recognise natural depletion until too late has left the country unprepared, although it now speaks of the re-development of nuclear power, unpopular as it is. Re-commissioning old abandoned coal mines will prove difficult and costly. The growing contribution of solar, wind, wave, and tide power will be useful, indeed vital, but insufficient so support anywhere near the present population in its current condition.

In these circumstances, the United Kingdom may become less united as Scotland and Wales gain greater control of their destinies with their own legislatures, and as ethnic groups rediscover their identity for survival.



The Oil Drum: Europe | Colin Campbell: Country Assessmentth // (europe.theoildrum.com/story/2006/3/6/144353/5483

Pressures against further European integration are likely to mount, as the outdated nature of its economic and financial principles become more evident. If the dollar faces a massive devaluation as seems increasingly likely, funds would at first flow to the euro, which in turn would then come under pressure. Stirling might accordingly reap at



least a temporary benefit. Perhaps the best hope is that Europe, including Britain, should rediscover the Treaty of Maastricht which encourages regionalism under the slogan that no decision should be taken at any level higher than it need be.

Colin Campbell, ASPO Newsletter No. 63 - March 2006

This work is licensed under a <u>Creative Commons Attribution-Share Alike</u> 3.0 United States License.