THE ASSOCIATION FOR THE STUDY OF PEAK OIL AND GAS

"ASPO"

NEWSLETTER No. 66 – JUNE 2006

ASPO is a network of scientists and others, having an interest in determining the date and impact of the peak and decline of the world's production of oil and gas, due to resource constraints.

Independent national affiliates are in existence or formation in Australia, Austria, Canada, Egypt, France, Germany, Ireland, Israel, Italy, Japan, Mexico, New Zealand, Norway, Portugal, South Africa, Spain, Sweden, Switzerland, United Kingdom and the United States.

Missions:

1. To evaluate the world's endowment and definition of oil and gas;

2. To study depletion, taking due account of economics, demand, technology and politics;

3. To raise awareness of the serious consequences for Mankind.

Newsletter: The newsletter is currently compiled under the auspices of ASPO IRELAND, which maintains a full and searchable archive of past issues at www.peakoil.ie.

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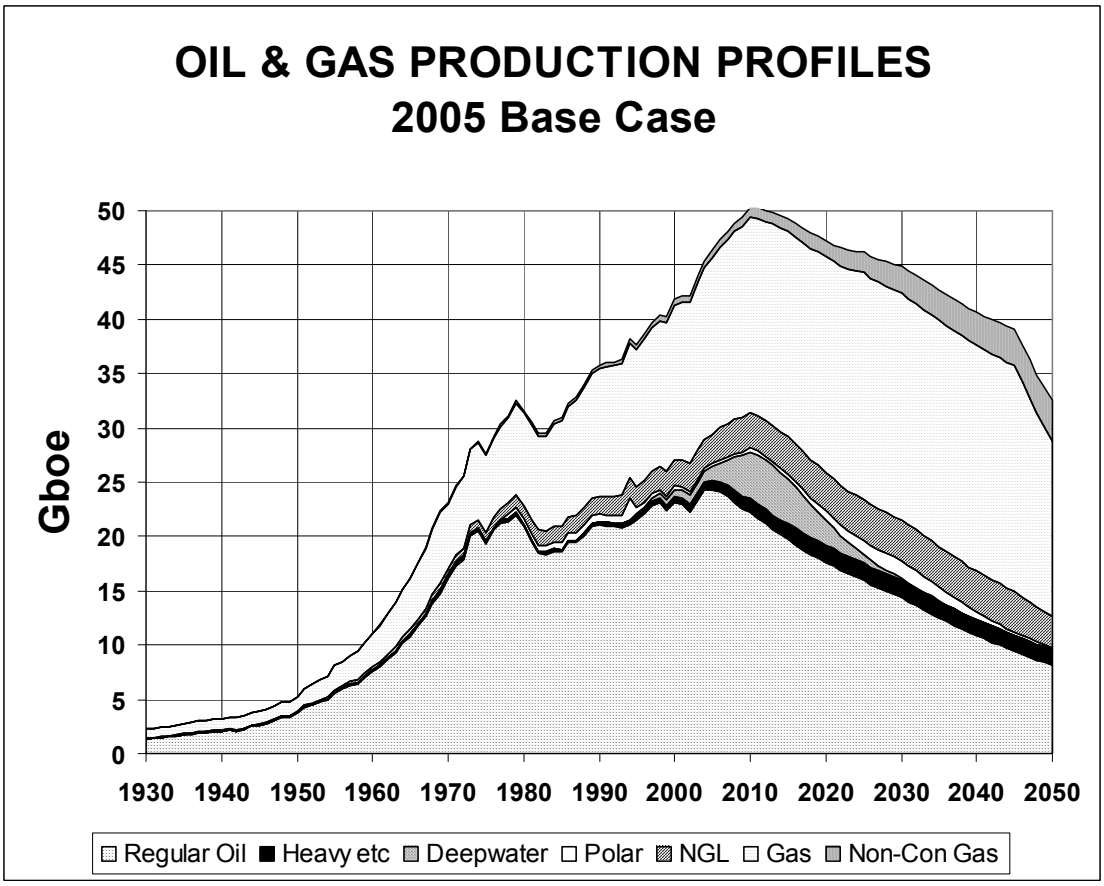
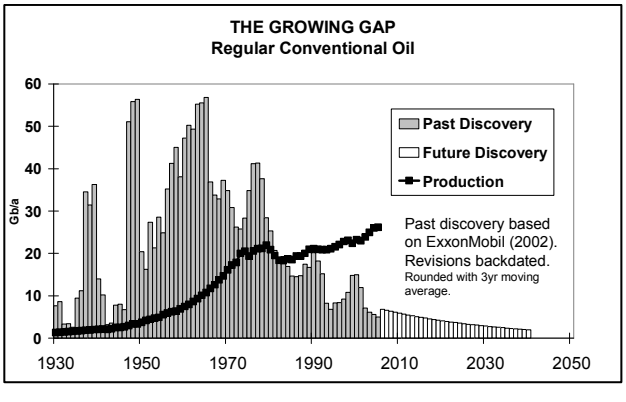
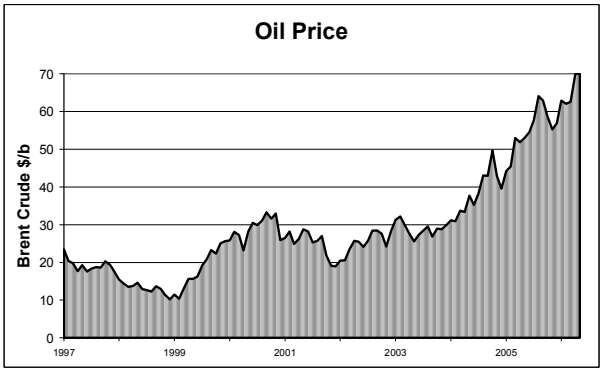
The General Depletion Picture



ESTIMATED PRODUCTION TO 2075								End 2005
Amount			**Gb**	**Annual Rate - Regular Oil**						**Gb**	**Peak**
Regular Oil				Mb/d	**2005**	**2010**	**2015**	**2020**	**2050**	**Total**	**Date**
Past	**Future**		**Total**	US-48	3.6	2.8	2.2	1.7	0.4	200	1971
Known Fields		New		Europe	5.0	3.4	2.3	1.6	0.2	75	2000
968	794	138	1900	Russia	9.2	8.5	6.9	5.7	1.5	220	1987
	932			ME Gulf	20	19	19	19	11	680	1974
All Liquids				Other	29	27	23	20	9	725	2004
1073	1377		2450	**World**	**67**	**61**	**54**	**48**	**22**	**1900**	2005
2005 Base Scenario				**Annual Rate - Other**							
M.East producing at capacity				Heavy etc.	2.3	3	4	4	4	151	2021
(anomalous reporting corrected)				Deepwater	3.6	12	11	6	4	69	2011
Regular Oil excludes oil from				Polar	0.9	1	1	2	0	52	2030
coal, shale, bitumen, heavy,				Gas Liquid	6.9	9	9	10	8	276	2035
deepwater, polar & gasfield NGL				Rounding				-1	-2	2	
Revised 03/03/2006				**ALL**	**80**	**86**	**80**	**70**	**37**	**2450**	2010





710. Venezuela buys oil

Evidently, Venezuela has discovered that its *Regular Oil* production has peaked and that the Heavy Oil of which it has huge resources is slow, costly and difficult to produce. It has forced the country to buy oil from Russia to meet its short term commitments.

Venezuela buys Russian oil to avoid defaulting on deals

By Andy Webb-Vidal

Financial Times , CARACAS Petroleumworld.com 04 28 06

Venezuela, the world's fifth-largest oil exporter, has struck a $2bn deal to buy about 100,000 barrels a day of crude oil from Russia until the end of the year.

Venezuela has been forced to turn to an outside source to avoid defaulting on contracts with "clients" and "third parties" as it faces a shortfall in production, according to a person familiar with the deal. Venezuela could incur penalties if it fails to meet its supply contracts.

Documentation obtained by the Financial Times shows that the state-owned Petróleos de Venezuela (PDVSA) made a financing arrangement this month with investment bank ABN Amro to facilitate the purchases of oil from Russia via Rotterdam.

PDVSA is believed to have dropped the Dutch bank after the Russian government agreed to provide Venezuela with an "open account" facility to buy the oil.

The Ruhr Oel refinery in Germany, in which PDVSA has a 50 per cent stake, may be among the clients that are being supplied with the Russian oil.

PDVSA would not confirm yesterday that it was buying oil from Russia but said a statement would be issued today. The company said it would be "logical" that the Ruhr refinery was sourcing some of its oil from Russia because it would be cheaper than transporting it from Venezuela.

One US trader who deals in Venezuelan oil agreed, saying: "We have been expecting PDVSA to start buying [oil from the] Urals for the Veba system for some time. It is possible that they are trying to buy directly from Russian producers."

The move suggests a growing gap between Venezuela's declining domestic output and its expanding contractual obligations to international customers.

Luis Pacheco, a former planning director of PDVSA, said: "Why would Venezuela be buying crude oil from Russia? I would imagine it would be to meet obligations for light oil deliveries, but they are relatively small. Most of PDVSA's obligations are for heavy oil."

Under President Hugo Chávez, PDVSA's oil output has declined by about 60 per cent, a trend analysts say has accelerated in the past year because of poor technical management.

Mr Chávez's push to extend his influence throughout Latin America and the Caribbean with promises of cheap oil for friends and allies may be overstretching PDVSA's finances, however.

Venezuela currently supplies about 300,000 barrels per day of oil and products to Cuba, Nicaragua and others under favourable long-term financing arrangements.

This week, Venezuela signed a deal to send oil to town mayors in Nicaragua aligned with the leftwing Sandinista party.

711. Saudi Arabia struggles to maintain production

Saudi Aramco admits that the natural decline of its old fields is now running at 8% a year. Infill drilling can of course help offset the decline but it is a losing battle. Overall it begins to sound as if Saudi Arabia has passed its Peak (see Item 713 below for a re-evaluation of this country).

Saudi Aramco's mature crude oil fields are expected to decline at a gross average rate of 8%/year without additional maintenance and drilling, a Saudi Aramco spokesman said Tuesday.

But Saudi Aramco has taken a number of measures to offset a decline in output from the country's aging oil fields, the spokesman added. "A variety of remedial activities are always being taken in oil fields influencing their effective decline rates," the spokesman said. "The drilling of additional development wells in the producing fields is Saudi Aramco's standard practice to offset normal declines of older wells."

This is particularly important when oil fields are progressively depleted under a well thought out strategy of maximizing the sweep and displacement efficiencies, leading to high ultimate oil recovery, the spokesman said.

"This maintain potential drilling in mature fields combined with a multitude of remedial actions and the development of new fields, with long plateau lives, lowers the composite decline rate of producing fields to around 2%," the spokesman said.

Underscoring these efforts, Saudi Aramco signed two contracts with J. Ray McDermott Middle East and McDermott Arabia Company Ltd, subsidiaries of J. Ray McDermott, to detail design, procure, fabricate, transport and install offshore facilities for the Maintain Potential and Khursaniyah Upstream Pipeline programs, Saudi Aramco said April 6.

The first contract includes two drilling support structures in Zuluf field to be installed in December 2006 and one new wellhead production platform in the Central Safaniya oil field to support onstream start-up in May 2007, Saudi Aramco said. Three additional wellhead platforms will be installed in the Central Safaniya and Zuluf fields by December 2007. New associated flowlines will connect these platforms to existing offshore tie-in (manifold) platforms.

To support increasing production in the Central Safaniya field, a new tie-in platform (Safaniya TP-18) will also be engineered, procured, fabricated and installed by December 2007, along with a 24-inch trunkline between it and a subsea connection on the new 42-inch trunkline flowing to the onshore Safaniya GOSP-1, installed under a separate contract.

The second contract is associated with the subsea portion, some 22 km (14 miles) long, of the 30-inch gas pipeline from Abu Ali Island to an onshore site at Khursaniyah to be installed by May 2007.

This subsea portion is part of the new 66 km BKTG-1 pipeline that will transport 220 million cubic feet/day of gas from Abu Ali Plant to Khursaniyah Gas Plant.

--Glen Carey, glen_carey@platts.com

712. Bolivia takes a lead

The new government of Bolivia has decided to nationalise the country's oil and gas industry. In earlier years, any policy change in this remote Andean country would barely attract attention, but now its action carries global significance. Latin America is clearly seeking to escape from the burden of foreign intervention described as *investment,* which has brought a crippling debt burden. New industries were established but much of the produce and profit was transferred overseas, not least by the local elite, leaving the ordinary people no better, and perhaps worse, off than before. Now, populist leaders have come to power in Venezuela, Bolivia and Peru and are set on recovering their sovereignty in the widest sense of the word. It could be said that *money* represents little more than a permit to use energy. Coal, oil and gas provided massive amounts of new, easy and cheap energy over the last 200 years, and it is no coincidence that slavery was abolished in parallel with its arrival. But now, these prolific new sources peak and decline, so it begins to make sense for countries to regain control of what remains of their resources. There is nothing particularly new about nationalisation : for example, Britain did so widely in the 1960s and 1970s, clawing back oil rights previously granted to foreign companies to give to a newly created State oil company. Bolivia now does the same, but its timing is better as world resources become scarcer and more valuable. More and more oil and gas exporting countries will likely follow its example seeing merit in conserving their resources to postpone the date at which they become net importers. This itself will exacerbate the global supply crisis, providing still more justification for their actions in a strange self-fulfilling process. With hindsight, Norway might have been better advised to produce its oil more slowly, rather than export at a high level and build up an oil fund of $120 billion which is placed on much less sure international markets, whose value may well collapse in parallel with global oil supply.

In short, Bolivia's action may be far more sensible than many commentators care to depict.

713. The Power of Community: How Cuba Survived its Peak Oil

An excellent new film has been produced by The Community Solution (53 min) addressing the response to Peak Oil.

When the Soviet Union collapsed in 1990, Cuba experienced a major economic depression. With imports of oil cut by more than one-half, and food imports by 80 percent, people were desperate for food. This film tells of the hardships and struggles as well as the community spirit and creativity of the Cuban people. They moved from highly mechanized agriculture to using organic farming and urban gardens, transforming themselves from an industrial country to a sustainable one. The film opens with a short explanation of Peak Oil, the imminent crisis caused by the all-time peak in world oil production. That Cuba faced and overcame just such a crisis shows the possibilities for the rest of the world.
For more information: http://www.communitysolution.org/cuba

714. Oil Trade Currency

Oil has been traded in dollars for many years, meaning that anyone buying or selling it builds up stocks of this species of money, helping to support it as the world's premier trading currency. Iraq started trading oil for euros under the previous regime which subsequently fell to an invasion. Some commentators think that the current threats against Iran are related to its decision to open an International Oil Bourse. On Friday, May 5, the Associated Press covered the oil bourse with their article *Iran wants oil market in Euros,* quoting Bill O'Grady a top Wall Street analyst as saying: *But if one day the world's largest oil producers allowed, or worse demanded, euros for their barrels, it would be the financial equivalent of a nuclear strike*' said A.G. Edwards commodities analyst. *If OPEC decided they didn't want dollars anymore. It would signal an end of American hegemony by signalling an end to the dollar as the sole reserve currency*.

Al-Jazeerah also quotes American security expert William Clark as predicting that *if Iran threatened the hegemony of the U.S. dollar in the international oil market, the White House would immediately order a military attack against it*.

Both Norway and Russia are also planning new ways to trade oil outside the traditional exchanges of the New York Mercantile Exchange and the International Petroleum Exchange in London.

> MOSCOW, May 10 (RIA Novosti) - President Vladimir Putin said Wednesday that a ruble-denominated oil and natural gas stock exchange should be set up in Russia. Speaking before both chambers of parliament, cabinet members, and reporters, Putin said: "The ruble must become a more widespread means of international transactions. To this end, we need to open a stock exchange in Russia to trade in oil, gas, and other goods to be paid for with rubles." "Our goods are traded on global markets. Why are not they traded in Russia?" Putin said.

It still costs the Middle East countries about $5-10 a barrel to produce oil, so if they sell it for $70 or more, the balance represents a huge amount of artificial liquidity that enters the financial system. Previously the proceeds of such profiteering would probably have gone to dollars but now perhaps it will head for safer havens, which possibly explains why gold is trading at record levels above $600 an ounce.

Probably at the end of the day the primary impact of Peak Oil will be financial : it has long been said that *money speaks.*

715. Saudi Arabia Revisited

Saudi Arabia was described in Newsletter 21 in September 2002, so it is perhaps time to take another look at this important oil country.

SAUDI ARABIA

It is thought that Cro-Magnon Man, the most advanced early human subspecies, may have evolved in the Middle East only to exterminate poor old Neanderthal in an early example of genocide. In any event, the region has had a very long history. It is curious that some of the world's main religions, Judaism, Christianity and Islam, all had their roots here. They are monotheistic, believing that the Divinity shows his hand on Earth. The Jews, to their misfortune, are still awaiting their prophet, but the Christians had theirs who was nailed to a cross near Jerusalem; and the Moslems had theirs when Muhammed was born in Mecca in Saudi Arabia around 570 AD.

Whereas the Christians give emphasis to the life hereafter, Moslems believe they please their God in their daily lives, seeing the wrath of God if things go badly. They are guided by rather secular priests using the *koran*, which records the revelations to the Prophet himself. There was, however, a difficulty over his succession, as the Prophet himself ordained that his mantle should fall to his son-in-law, whereas the elders preferred the son. This conflict later led to a schism between the Sunni and Shi'ite factions, which still manifests itself throughout the region. Saudi Arabia is Sunni, Iran is Shi'ite, and Iraq a mixture, which perhaps explains why it needed a strong leader to remain a single State.

SAUDI ARABIA		*Regular Oil*
Population		27M
Rates		Mb/d
Consumption	2005	1.7
per capita b/a (Mcf/a)		26
Production	2005	9.1
	Forecast 2010	9.0
	Forecast 2020	9.0
Discovery 5-yr average Gb		0.2
Amounts		**Gb**
Past Production		104
Reported *Proved Reserves**		264
Future Production - total		171
From Known Fields		154
From New Fields		17
Past and Future Production		275
Current Depletion Rate		1.9%
Depletion Midpoint Date		2015
Peak Discovery Date		1948
Peak Production Date		2014

*Oil & Gas Journal

Islam spread its dominion from the 7th Century onwards through the East, North Africa and into parts of southern Europe, achieving a high level of culture and learning. In the course of this expansion, the power centres shifted from Saudi Arabia to the outposts of empire, especially in Turkey and Egypt, which at different times effectively controlled the homeland, although the desert interior remained under various warlords. One such was Muhammad ibn Saud, whose dynasty was came to power in the 15th Century near what is now the capital, Riyadh.

A new religious leader appeared on the scene in the mid 18th Century in the form of Muhammad ibn Abd al-Wahhab, who founded a fundamentalist sect, which supported the Sauds. The latter were however defeated in battle with a neighbouring tribe in 1865, being forced to flee temporarily to Kuwait before gradually recovering their lands under a new ibn Saud, a legendary leader of outstanding physical prowess who is said to have sired more than 1000 progeny.

In the epoch leading up to the First World War, most of the Middle East outside Iran belonged to the Ottoman Empire, but enjoyed a degree of autonomy under a rather loose administration. It was a somewhat decadent empire, controlled by its sultan in Istanbul, but was propped up to some extent by Britain and France who saw it as a useful buffer against Russian expansion. Its fate was, however, sealed when it decided to side with Germany in the First World War. That led the British to try to foment an Arab rising under the colourful figure of an Oxford academic, Lawrence of Arabia, who donned Arab kit and headed into the interior on a camel. He sponsored the Grand Sherif of Mecca, who

held dominion over the western part of the Peninsula including what is now Palestine, claiming to be a direct descendent of the Prophet. A British army, assisted by Arab irregulars led by Faisal, the son of the Grand Sherif, marched north to eventually take Palestine and Syria on the promise of the creation of an Arab Kingdom, once the hostilities were over. But the British reneged on this promise at the Treaty of Versailles following the War. This left the door open for the further conquests by ibn Saud, who eventually proclaimed the Kingdom of Saudi Arabia in 1932 that was duly recognised by Britain in return for guarantees for the territorial integrity of the Gulf sheikhdoms. The Grand Sherif left Mecca, when it fell to the Sauds, and retired to Cyprus, thoughtfully taking the Treasury with him.

The British did try to make amends, when they offered the Kingdom of Jordan to one of his sons, and the throne of Iraq to another in the eventual post-war carve up of the Middle East. The boundaries of the Saudi kingdom remain however a little tenuous, especially with the Yemen.

Having few resources, the desert kingdom relied heavily on the income derived from pilgrims visiting the holy shrines of Mecca and Medina, but during The Great Depression of 1930, the flow of pilgrim dried up, leaving the King strapped for cash. Seeking some new enterprise, he turned to a curious disaffected British colonial administrator, by the name of Harry St John Philby, who had established a Ford dealership in the Kingdom, being none other than the father of the well-known British double agent, Kim Philby, of Cold War fame or infamy.

In 1932, the Standard Oil Company of California (now Chevron-Texaco) discovered oil in Bahrain, a few miles off the coast of Saudi Arabia, and Philby arranged for an American mining engineer cum archaeologist, by the name of Karl Twitchell, to investigate the possibilities of Saudi Arabia itself. The report was favourable, and after lengthy negotiations, a concession to California Standard was signed in May 1933 in return of a payment of £35,000 in gold bars, duly delivered in seven boxes by a P&O liner from London. Neither side realised the immensity of the deal it had struck.

California Standard later brought in Texaco as a partner to help fund Aramco, the operating company, which after some heroic exploration in the best of pioneering traditions made the first discovery in 1940, before hostilities in the Second World War brought operations to a standstill. By 1943, ibn Saud had become partly blind and ailing, and Aramco had become concerned about its rights, seeking the support of the US government. As a result, Exxon and Mobil, two other American companies, were invited to take positions in the company, which they eventually did in flagrant disregard to their commitments under the famous red-line agreement that restricted the partners in the Iraq Petroleum Company.

The American influence in Saudi Arabia was cemented when President Roosevelt met the King in February 1945, presumably promising support for his regime in return for access to its oil.

Ghawar, the world's largest oilfield, had already been tentatively identified before the war, but was confirmed in 1948. It should have assured the four companies and their homeland with an ample supply of oil for many years to come, had not it coincided with the creation of the State of Israel after Zionist terrorists had forced the British to surrender their administration of Palestine. A form of civil war with the indigenous people who lost their lands has followed, raising passions throughout the region.

When ibn Saud died in 1953, the kingdom passed to his son, also named Saud who, proving somewhat inadequate, shared power with his brother, Faisal, before being deposed by the family in 1964. The latter remained on the throne until 1975 when he was assassinated by a disgruntled prince, to be succeeded by his half-brother Khalid, Another half-brother, Fahd, took over in 1982, to be succeeded by still another half-brother, Abdallah, in 2005. It does not sound a very happy royal family, fraught by tensions between the descendants of the many wives of ibn Saud.

The enormous wealth that flowed to the Sauds from their oil revenues made it a curious state. The people were controlled by a Wahabbi religious police under strict laws, whereby adulterers are stoned and thieves subjected to amputation. The population has grown rapidly to 27 million with an average age of 21. It includes large numbers of foreign workers and Palestinian refugees, all of whom depend directly and indirectly on oil revenue, disbursed by the royal family. Much of the wealth has been spent on arms purchases, contrived by enterprising princes for royal fees, such that at times there have been more tanks in the desert than drivers. Deposits were also made in US banks, which indirectly became collateral for growing US domestic debt. Soaring oil prices in the recent past bring Midas-like wealth to the royal family, as production costs have not changed materially. These funds enter the world financial system as artificial liquidity that indirectly challenges the scope for the Federal Reserve Bank to print money, contributing to the pressure on the dollar.

Relations with the United States have not always been easy, despite the long ties. In 1960, the country joined OPEC to try to regulate the world oil price by prorationing, following the example of the Texas Railroad Commission, when the US faced a similar challenge. In 1973, it participated with other Arab countries in restricting exports to the United States in response to the latter's support for Israel's military expansion. This triggered the First Oil Shock when oil prices increased five-fold to $80 (in 2005 dollars), plunging the World in recession. The country expropriated Aramco in 1979, although still maintaining special relations with its previous owners. Nevertheless, it supported the US and its allies in the Gulf War and the subsequent invasion of Iraq in 2003, permitting US military bases to be established in its territory.

In geological terms, Saudi Arabia covers the western margin of the Middle East basin, possessing two petroleum systems. The main system depends of Jurassic source rocks and reservoirs in huge gentle structures, endowed with excellent evaporite seals that prevented the escape of oil. In fact, a single prime structural uplift that straddles the country to which oil from the adjoining basins has migrated over time, supporting the world's largest oilfield Ghawar and its offshore extension Saffaniya, together holding some 130 Gb. In detail, these fields are made up of about ten compartments that would have been separate oilfields had the charge of oil not been so great as to cause them to

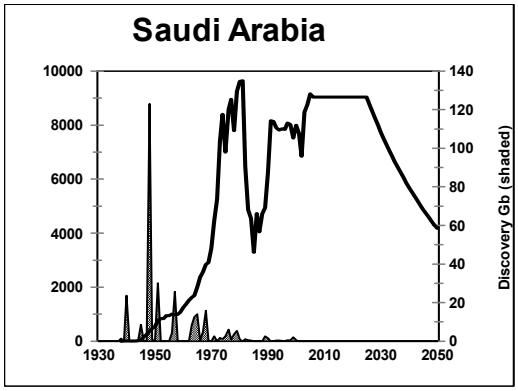
coalesce. A particular feature is the complexity of the reservoir, which is made up of highly porous and permeable pods, representing fossilised seaweed banks, separated by less satisfactory dense partly fractured limestone.

Fields outside this prime belt are of about the same size as the individual compartments in the range of 5-10 Gb. These two super-giant fields give a misleading impression of the territory's potential. In geological terms, it is a concentrated habitat, implying that future discovery will deliver much, much less. These two fields are ageing, with the southern end of Ghawar already watering out. The second petroleum system depends on deep Silurian source-rocks that have charged patchy and poor reservoirs in the overlying Permo-Carboniferous, yielding mainly gas and condensate, although also some oil on the shallower western extremity of the basin.

The official reserve reports are highly suspect, being a state secret. It is noteworthy that 170 Gb was reported in 1989, before the country had reason to inflate the number to 258 Gb in the following year to protect itself in the "OPEC quota wars". Engineers familiar with the fields think that a reasonable estimate of the oil-in-place is 600 Gb compared with the official estimate of 716 Gb. Applying a fairly generous recovery factor of 45% yields about 270 Gb recoverable, of which 104 Gb have been produced. It suggests that Saudi Arabia is reporting *Original* and not *Remaining Reserves.* New discovery is here estimated at 17 Gb.

Production stands at 9 Mb/d giving a low depletion rate of 1.9%,, which itself is reason to doubt the higher official reserve estimates The country is endeavouring to offset the natural decline of its aging fields by infill drilling as well as advanced horizontal drilling to tap the less productive zones in the reservoir. A tar-seal on the eastern flank of Ghawar, deprives it of a natural water drive, meaning that massive amounts of water have to be injected. It is also bringing on new much smaller fields, including offshore extensions. While the country claims to be able to increase production to 12 Mb/d, it is here thought more likely that it will be hard pressed to hold present production, which is here modelled to remain about flat for another twenty years before decline sets in at about 3% a year. It may not be able even to do that.

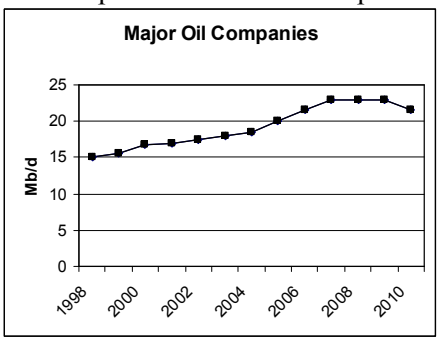
Consumption is reported at 1.7 Mb/d, being approximately the same as that of the United Kingdom, with more than double the population, giving an excessive per capita consumption of 26 b/a. Perhaps it includes petrochemical feedstock or exported product.



In conclusion, we may describe the feudal monarchy of Saudi Arabia as an anachronism in the modern world. Its growing young population, with its large foreign component, who are exposed to the outside world through the antennas of CNN, are increasingly disaffected and disillusioned. While there may be no particular love lost between them and their Palestinian cousins, the universal condemnation of Israel and its US sponsor may galvanise their emotions. Their own understandable despair and resentment may, accordingly, erupt in violent reaction, putting the world's future oil supply in jeopardy, whatever the composition of the future government of the territory. The invasion of Iraq and the current threats against Iran must inflame feelings still further, making it perhaps another candidate for invasion in the growing tensions of the Middle East.

714. Major Oil Companies close to Peak

Business Week of May 15th carries an interesting article explaining both that, although the major international companies are making record profits from high prices, their actual production is close to peak and their *reserve replacement* is slipping to negative. This is essentially a financial term that has not distinguished what was replaced by discovery, acquisition or upward revision of conservatively reported earlier estimates. It looks as if it is no longer possible to obscure the position by under-reporting and merger.



Their only realistic strategy is to plan an orderly and profitable contraction, withdrawing from abortive exploration, albeit largely subsidised as a write-off against taxable income. It makes sense for them to concentrate on their core refining and marketing operations, buying their crude from national companies. Facing the reality of depletion, Governments around the world will likely restrict exports to conserve precious national resources for their own peoples, suggesting that globalism may no longer be a viable objective, as people come to realise that they are better served by self-sufficiency in a new regionalism (see Item 712). Taking oil by right of conquest seems a poor solution as increased short-term production would merely accelerate depletion and steepen the subsequent decline, making a bad situation worse.

716. Britain moves nuclear

Mr Blair, the current Prime Minister of Britain, has made a speech recommending that the country should rebuild its nuclear industry and bring in renewables to the extent possible. He has evidently finally woken up to the long obvious fact that Britain's oil and gas are declining to near exhaustion within twenty years (as indicated by the Department of Trade & Industry). He may have been told that imports from ever more

distant sources will become more costly and unreliable. Since the discovery of Britain's oil and gas reached a peak some thirty years ago, the government can hardly be accused of foresight.

It also announces plans for a massive house-building programme to accommodate the influx of immigrants which is expected to increase the population to 67 million within a few years, the indigenous fertility rate being negative. Soaring energy costs may meanwhile adversely affect the economy, reducing the available employment, and increasing the tensions. Whether a nuclear policy, if finally implemented, will materially change the position remains to be seen. Evidently, Mr Blair's successor will have plenty to do but it is always easier for a politician to react to a crisis than to prepare and plan.

717. Water, Energy and Food Prices

The cost of grain is rising steeply on the back of soaring energy costs. In the United States, the cost of fertilizer is rising in parallel with oil and gas. Other key drivers are water availability for irrigation, climate change and the competing demands for land on which to grow bio-fuels. Grain stocks are becoming almost as vulnerable as oil stocks and are now at their lowest level for twenty-five years. It takes 1000 tons of water to produce a ton of wheat and five times more for a ton of cheese. Not only are the aquifers depleting, but the urban population is growing along with industrial usage. China with its huge numbers of people, many of whom have migrated from the land to the industrial cities, faces a particularly dire future of soaring ever more costly oil imports and probably an economic recession spelling the end of its brief attempt to rediscover the last Century. It may be forced to cash in the massive dollar holdings which would itself accelerate their devaluation.

718. US wakes up to Capacity limits

Oil price may hit economic growth: Bodman

By Matthew Robinson

NEW YORK (Reuters) - U.S. Energy Secretary Sam Bodman said on Tuesday that soaring energy prices could damage economic growth but there was little the Organization of Petroleum Exporting Countries could do to help bring them down. U.S. crude prices have hovered around $70 a barrel in recent weeks after striking a record over $75 last month, raising concerns that high energy costs may push inflation higher and curb consumer activity.

But Bodman said the economy of the United States, the world's biggest oil consumer, was holding up well so far under the strain. "Am I concerned about the impact of high oil prices on the economy? Sure," Bodman told the Reuters Global Energy Summit in New York.

"Having said that, it hasn't happened yet in a meaningful way. But we have a very resilient economy, we continue to produce jobs at extraordinary rates. Very strong economic numbers," he added.

SCARCE CAPACITY

Ongoing worries about supply stability from oil producing nations such as Iran, Iraq, Venezuela and Nigeria had added a premium to prices, Bodman said. Asked if oil cartel OPEC, scheduled to meet next week in Caracas to decide on production policy, can do nothing to bring down prices, Bodman said, "Not in my judgment."

Only top exporter Saudi Arabia has spare oil capacity to bring on to ease prices or counter supply disruptions, and that crude is too heavy to be useful to refiners, he added. "The Saudis say they have an extra 1 million barrels (per day) but I take that with a kind of a grain of salt. I know they have the capacity (but) my sense is it is heavy oil and that's not easily refined by most refineries," the U.S. official said.

Bodman said he was encouraging OPEC and non-OPEC oil producers to build new production capacity to ease the global capacity crunch. However, the recent moves in countries such as Venezuela and Bolivia toward nationalizing oil and natural gas resources was a threat to future production, he added.

Bolivia nationalized its natural gas fields earlier this month, weeks after Venezuela took control of two oil fields operated by foreign oil companies. Ecuador has since kicked out U.S. oil company Occidental Petroleum.

"In the past, when we have had reactions of this kind, you get people to go to court. Going to court is not a very good substitute for drilling wells if you're looking at the absolute numbers," Bodman said.

State oil companies frequently come under pressure to transfer more and more petrodollars to the government, eating into money available to make investments in exploration and production, according to analysts.

HURRICANE READY

In addition, the United States has permanently lost some 10 percent of Gulf Coast oil production and 5 percent of natural gas output due to hurricane damage last year, Bodman said. "I don't expect it to come back," the energy secretary said. "The hurricanes have inflicted a lot of damage already."

But oil companies have made adjustments to their emergency storm plans to be better braced for the upcoming hurricane season, Bodman added. Experts have said another wave of hurricane-related energy

supply disruptions from the Gulf Coast and problems associated with new gasoline requirements may mean another summer of pain at the pumps for U.S. motorists.

Bodman said the worst of the supply glitches associated with the U.S. switch to gasoline made with additive ethanol this year was over. "We now have a system in place, and barring some issue that I have not anticipated, I think we're probably in reasonably good shape," Bodman said.

719. Excellent New Film

An excellent new film on Peak Oil has been produced by Lava Production AG (www.oilcrashmovie.com)

720. Registration of national ASPO members

There has been a good response from national ASPO organisations registering with the Secretariat (k.buckley@aspo-ireland.org). It should be noted that any member is free to adopt its own Mission Statement perhaps in its national language, but should attach same if it departs from that suggested text in Item 704.

New members in formation include Japan, Norway (contact Amund Prestegard at amund@troposdoc.com) and Switzerland (contact Daniele Ganser at ganser@sipo.gess.ethz.ch)

721. Russia

The following article is an example of a great deal of useful material in Richard Heinberg's Energy Bulletin (www.energybulletin.net)

When Washington succeeded in engineering the economic and political collapse of the USSR at the end of the 1980s, some heralded this as the "end of history"—a judgment that proved premature at best. After a decade of turmoil, during which foreign (mostly American) companies plundered Russia's treasures, that nation elected as president Vladimir Putin, an ex-KGB officer who, as a career move, had recently spent a stint at the St. Petersburg Mining Institute writing a dissertation entitled "Toward a Russian Transnational Energy Company." His thesis: Russia should use its vast energy reserves for geostrategic advantage.

After entering office in 2000, Putin moved to reconsolidate State control over the country's oil and gas industries. Now, with that task almost fully accomplished, he appears to be making his dissertation a reality. Putin has paid off much of Russia's foreign debt, the nation has accumulated impressive financial reserves, and Gazprom recently overtook BP to become the world's second-largest energy company.

Putin is sewing up an increasing portion of the European gas and oil market (Russia supplies about a quarter of Europe's oil and a third of its gas), and that of Japan as well. He knows his country will need enormous capital investments in order to keep pumping the hydrocarbons; Europe and Japan need those hydrocarbons and have cash to invest. Putin's goal seems to be a kind of natural-gas version of OPEC, a cartel with supply networks throughout Central Asia and with pipelines supplying Europe and China.

Russia's relations with China have warmed in recent years. The Shanghai Cooperation Organization (SCO) was born on June 15, 2001, with Russia, China, and four former USSR Central Asian republics (Kazakhstan, Kyrgystan, Tajikistan, and Uzbekistan) as charter members. While there is little discussion of the SCO in US media, that organization has been patiently expanding its capacity to act as a geopolitical counterweight to Washington.

The US may have won the Cold War, but Russia will not be so easily bested in the energy war. Currently Russia is nearly tied with US ally Saudi Arabia in oil production (though the Saudis export more because Russia uses a larger proportion domestically). While Russia's rate of production is likely to stall in the next year or two and then begin its inevitable and terminal decline, much the same can likely be said for Saudi Arabia's. Meanwhile, Russia is unequalled globally in natural gas reserves. The matter is not simple, though. Russian gas output is currently in decline and this, combined with a severe Russian and European winter, may have forced Russia to reduce its gas exports. Also its own populace pays very little for gas, so indigenous demand is enormous. This is one reason why Gazprom is reputedly short of cash for such matters as large-scale Arctic gas development. *(Reference furnished by N.J.von Glahn)*

722. Mexican Deepwater Discovery Discredited

In Item 695 (April Newsletter) covering world discovery rates we referred to the deepwater well Noxal-1 off Mexico expressing some doubt that the reserves of 10 Gb reported by the press on the basis of government releases were valid. We are now informed by an engineer with detailed knowledge of the project that in fact the well failed to make a significant discovery. It is possible that the 10 Gb estimate mentioned by government officials referred to the expected reserves of the entire deepwater area of Mexico, which would not be unreasonable, but was mistakenly attributed to this particular borehole.

723. Saudi Arabia – Can It Deliver? Audio Conference

ASPO Ireland is holding an Audio Conference entitled:

Saudi Arabia – Can It Deliver?

Presented by Jack Zagar, Consulting Petroleum Engineer

Thursday June 29th 2006 17.00 GMT

Audio Conference

Jack Zagar has worked in the Kingdom managing some of the super giant oil fields, will provide a perspective that throws into question Saudi Arabia's long term ability to sustain or increase their current oil production capacity of 10 million barrels per day.

Increasingly, the world is looking to OPEC and specifically to Saudi Arabia to increase oil exports to cool soaring oil prices and to foster continued growth in global economies.

With perhaps as much as a quarter of the World's remaining conventional oil reserves, will or can Saudi Arabia provide the additional oil production?

Tickets are €50.00
local dial in numbers available where possible

Calendar - Forthcoming Conferences and Meetings

ASPO members and associates [shown in parenthesis] will be addressing the subject of Peak Oil at the following conferences and meetings. Information for inclusion in future newsletters is welcomed.

June 2	The End of Cheap Oil…..Swiss Energy Foundation, **Zurich** [Zittel]
June 6	CERN meeting, **Geneva** [Zittel]
June 7	Futurible, **Paris** [Laherrère]
June 7-8	Baltic Sea Islands, **Mariehamn,** Finland [Aleklett]
June 9	Hearing of the Enquete Commission, North Rhine-Westfalia Parliament [Zittel]
June 11-13	Asia Oil & Gas Conference, **Kuala Lumpur,** Malaysia [Gilbert]
June 13-14	Hong Kong Commodity Conference, **Hong Kong**, China [Aleklett]
June 27-July 2	Tällberg Forum 2006, **Tällberg,** Sweden [Aleklett]
June 29	Saudi Arabia – Can it Deliver? By Jack Zagar, Ireland [Campbell]
July 4	Peak Oil Debate, Limerick University, **Limerick,** Ireland [Campbell]
July 11	Inst. for International Research, Future Energy Supply, **Vienna** [Zittel]
July 18-19	ASPO-5 International Conference, **San Rossore**, Italy
November 30	Air Transport & Energy Challenge, **Toulouse**, France, [Bauquis]

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