THE ASSOCIATION FOR THE STUDY OF PEAK OIL AND GAS

"ASPO"

NEWSLETTER No 58 – OCTOBER 2005

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, Canada, France, Ireland, Italy, Netherlands, New Zealand, Portugal, South Africa, Spain, Sweden 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.

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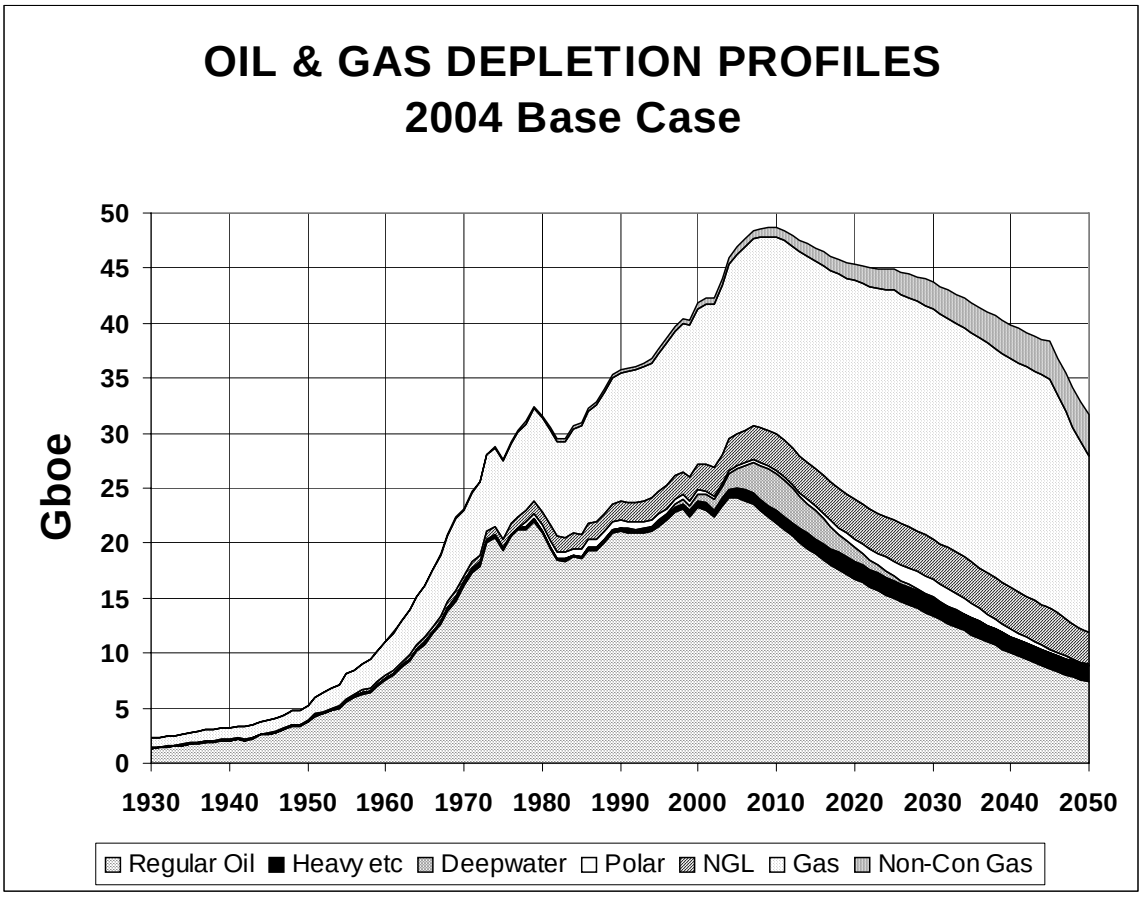
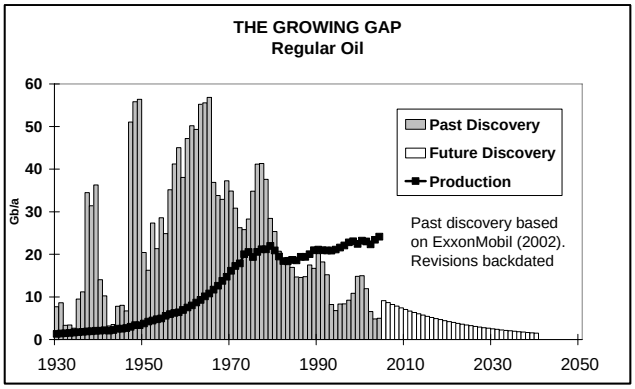
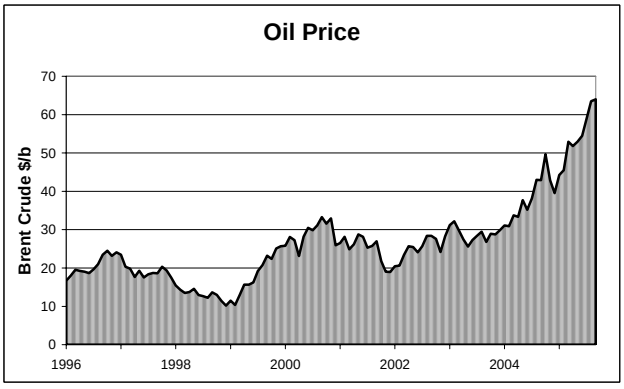
The General Depletion Picture



ESTIMATED PRODUCTION TO 2100					End 2004							
Amount			Gb	Annual Rate - Regular Oil						Gb	Peak
Regular Oil				Mb/d	2000	2005	2010	2020	2050	Total	Date
Past	Future		Total	USA	4.5	3.4	2.7	1.7	0.4	200	1971
Known Fields		New		Europe	6.3	5.2	3.7	1.9	0.3	75	2000
945	775	130	1850	Russia	6.3	9.1	8.4	5.4	1.5	220	1987
	905			ME Gulf	19	20	20	20	12	680	1974
All Liquids				Other	28	28	25	17	7	675	2004
1040	1360		2400	**World**	**64**	**66**	**60**	**46**	**21**	**1850**	2004
2004 Base Scenario				Annual Rate - Other							
M.East producing at capacity				Heavy etc.	1.7	2.3	3	4	4	151	2021
(anomalous reporting corrected)				Deepwater	1.6	3.6	11	5	0	62	2011
Regular Oil excludes oil from				Polar	1.0	0.9	1	2	0	52	2030
coal, shale, bitumen, heavy,				Gas Liquid	6.3	8.0	9	10	8	276	2035
deepwater, polar & gasfield NGL				Rounding			0	3	2	9	
Revised 26/09/2005				**ALL**	**74**	**81**	**85**	**70**	**35**	**2400**	2010





607. The financial subtext of Conflict

It seems that the principal benefit of Empire was control of world trading currency. The British Empire at its prime was a magnificent construction spanning the World. It was built, not so much on military prowess, but on the back of traders who wanted political and administrative support. A huge hidden tribute flowed to the City of London from the use of the pound sterling for world trade. Germany was overtaking Britain as an industrial power in the 19th Century but lacked the advantage of controlling the world currency. Some see the two World Wars as a consequence.

The European Union started as a co-operative effort to better manage the iron and steel industries but has evolved in a classic imperial mode, seeking economic and financial hegemony through eastward expansion. This reflects the mindset and politico-economic environment of the First Half of the Age of Oil when banks lent more than they had on deposit, confident that *Tomorrow's Expansion,* driven by cheap, largely oil-based, energy, was collateral for *To-day's Debt.* The Second Half of the Age of Oil now dawns and will be marked by the decline of oil and all that depends upon it, calling for a radically new politico-economic system.

Meanwhile, the United States naturally fights to preserve its financial hegemony facing increasing opposition from the oil-rich Middle East. Iran seeks to develop a financial base for marketing Middle East oil, escaping from the domination of the dollar, but finds itself under increasing pressure under various pretexts. The following article explains the implications:

From www.financialsense.com:

IRANIAN OIL BOURSE COULD KILL THE US DOLLAR

by Toni Straka ,August 23, 2005

Can the Iranian Oil Bourse become the catalyst for a significant blow to the position of worldwide power that the US Dollar enjoys? Manifold supply fears have driven the price of crude oil towards its historical records in real dollar terms. With the world facing a daily bill of roughly $5.5 billion for crude oil at current price levels, it becomes apparent that sellers and purchasers of the black gold are looking into all ways that could lead to a financial improvement on their respective side.

While the worldwide bottleneck of inadequate refining facilities and partly dramatic declines in production - for example in the North Sea - are two factors that cannot be eliminated in the short term, there is one area left which could result in smiling faces of oil producers and (most) buyers likewise. Non US dollar thinkers are the victim of a transaction cost in the oil trade. The necessary conversion of local banks can be considered a hidden tax, charged and enjoyed by the banking sector.

Until now oil is solely priced, traded and paid for in the greenback on both markets in London and New York. The Treasury Inflow Capital data from mid-2005 show that OPEC members have parked only a skimpy $120 billion in direct dollar holdings, which are almost equally split between equities and debt paper. This is a clear indication that oil producers are investing their windfalls elsewhere. The yield spread between US and EU debt papers in favor of the EU is clearly another hint where the petrodollars might flow after conversion.

The Iranian Oil Bourse (IOB) will become a factor that could further unsettle the dollar's dominant position.

Especially in the case of Iran, it does not make sense to accept dollars only for its much desired commodity. Being seen as a hostile country by the USA for its intention to build its own nuclear reactors one wonders whether the new IOB will not try to attract other buyers than Americans who are particularly unwelcome in that corner of the globe. Iran has recently announced that the new oil exchange will start up its computers in early 2006.

The IOB can count on two sharp arrows in their holster. It can - and probably will - lure European buyers with oil prices quoted in Euros, saving them transaction costs. And it can strike barter deals with oil-hungry giants like China and India who have a lot of products and commodities to offer. I doubt that hamburgers and legal services will be considered adequate collateral for the world's most after-sought resource.

A Renunciation of the Dollar Is Worse Than An Iranian Nuclear Attack

Steering away from the almighty commodity, currency and commodity currency - the US dollar - can have a deeper impact on the US economy than a direct nuclear attack by Iran. The permanent demand for dollar denominated paper stems to a good part from the fact that until now almost all resources of the world are quoted in it.

While this has led to the Eurodollar market in the 1970's, new terms of trade could ring the demise of the dollar as the premier reserve currency. With the world economy depending so much on oil, the black gold itself can be seen as a reserve currency that will be handed out only against the best collateral in the future. The Fed's recent San Francisco paper about the progress of the diversification of international Central Bank' reserves shows that the dollar is in decline in many countries. *NOTE:* China has officially decided to diversify a part of its foreign exchange holdings into oil.

Iran holds a strong hand as the No.2 producer of crude behind Saudi Arabia. Politicians there will also keep in mind that dollar deposits might become a burden in the future when the US steps up its current war of words to the level of economic sanctions in the crusade against nuclear power plants. Money in the bank does not help when you have no access to it.

An abdication from the current status quo has only one real enemy: the USA, where less than five percent of the global population consume roughly one third of global production. Oil in Euros would benefit several million people more in the EU and its trading partners. And it would loosen the grip the USA has on OPEC members. Thinking of the rapid growth of hostilities between the USA and Arab nations in recent years a renunciation of the dollar appears to be more than just a wish in Arabic dreams.

As this development poses a very real and big danger to the superior status of the greenback and the interests of the USA the "president of war" can be expected to steer a close tack against the winds blowing from the Middle East. One may be reminded that the Iraqi despot Saddam Hussein had entered into discreet talks with the EU, proposing to sell his oil for Euros. That was in the year before the first oil war of this century.

In short, the IOB this way could help the Euro to become the interim primary reserve currency before China and India rise to the first two slots in the global economic ranking in the next few decades, an issue discussed in the post "What will be the next big reserve currency ."

A decline of the dollar's position in oil trading might also open the floodgates in other commodity markets where the dollar is the medium of exchange but where the USA has only a minority market share. A global economy driven by tough efficiency demands, in the light of thin profit margins almost everywhere, is a good primer for accounting changes in other commodity markets. This process could begin in resources like steel and energy and spread to all other resources that are marketed globally. The world outside the USA has a lot to gain and nothing to lose from it . *(Reference furnished by Prof. Rosa)*

608. Country Assessment – Qatar

Qatar is a small sheikdom of 11 500 km^2 , occupying a barren peninsular and adjoining islands on the western shore of the Persian Gulf. It supports a population of 860 000, most of whom are Sunni Muslims of the strict Wahhabi sect. Doha on the east coast is the capital with a population of 350 000. The country's modern history began in 1766 when it was settled by the Al Khalifah clan from Kuwait. At the time, it was a poor place, living on pearling and piracy. In 1868, Britain recognised the claims of the Al Thani family, which had risen to prominence after the departure of the Al Kahalifah's to Bahrain. Ottoman forces then occupied the territory between 1871 and 1913, before Britain re-exerted control by making it a Protectorate in 1916. Full independence followed in 1971. A dispute over the share of oil revenues within the ruling al-Thani family led to a palace revolution in 1995. Border disputes with Bahrain and Saudi Arabia were finally settled in 2001. The country is run by the ruling family, not having had elections since 1970.

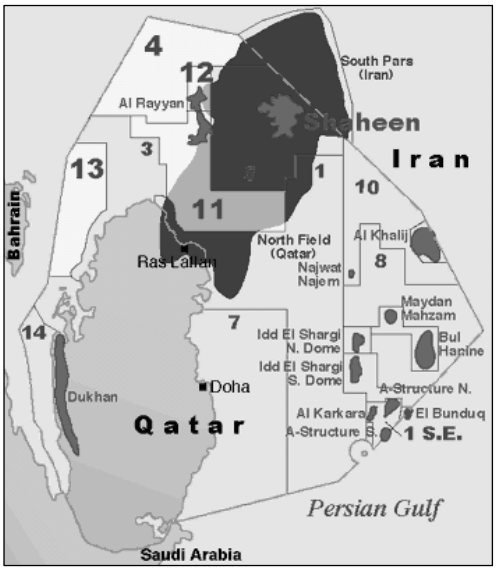
QATAR		*Regular Oil*	*Gas*
Population M		0.86	
Rates		Mb/d	Tcf/a
Consumption	2004	0.84	0.4
per capita b/a (Mcf/a)		1	465
Production	2004	0.78	1.0
	Forecast 2010	0.53	?
	Forecast 2020	0.27	?
Discovery 5-yr average Gb		0.001	?
Amounts		**Gb**	**Tcf**
Past Production		7.3	15
Reported *Proved Reserves**		15.2	509
Future Production - total		4.9	985
From Known Fields		4.1	960
From New Fields		0.1	25
Past and Future Production		11.5	1000
Current Depletion Rate		6.4%	<1%
Depletion Midpoint Date		1998	?
Peak Discovery Date		1940	1971
Peak Production Date		2004	?

*Oil & Gas Journal

In geological terms, Qatar lies in the axial part of the Persian Gulf Basin, where Jurassic source rocks have yielded oil while deeper Silurian sources have given a massive gas charge. An oil concession was granted to the Iraq Petroleum Company (then owned by BP, Shell, Mobil, Exxon, Total and Mr Gulbenkian) in 1935, but its rights later lapsed. A State-owned oil company, the Qatar General Petroleum Corporation, was then formed, and works in cooperation with foreign companies under production sharing agreements.

Exploration drilling commenced in 1940, and has continued at a modest pace bringing the total number of *wildcats* to 95. The largest gas field in the World is the North Dome Field which was found in 1971, straddling the northern coast. As might be expected, confusion surrounds estimates of its size. Initially, Qatar reported 300 Tcf but when an extension into Iranian waters, known as South Pars, was found in 1991 and reported to hold 430 Tcf., Qatar felt obliged to retaliate by doubling its original estimate. Based on a range of estimates from different sources, the total size of the combined field is here taken to be about 1200 Tcf, of which about 950 Tcf may be in the Qatar section. As much as 500 Mb of NGL have been produced from gas

plants, currently producing at a rate of about 160 kb/d. Gas production stands at about 0.9 Tcf/a. The country has been exporting Liquefied Natural Gas for some time, and has plans to expand the capacity greatly, such that production is expected to rise to 1.4 Mb/d by 2011, making it the world's largest exporter. Several gas-to-liquids plants are also being developed by Chevron/Sasol, Exxon, Shell and others, which are expected to yield 1 Mb/d in a few years' time. Petrochemical production, including the world's largest ammonia-urea plant providing critical synthetic nutrients for agriculture, is also set to expand.



Other important oilfields are Dukhan found in 1940 with 11 Tcf of gas and 4.6 Gb of oil, and Bul Hanini found in 1970 with 5 Tcf of gas and 1.5 Gb of oil. Approximate country totals are given in the table, but are far from reliable.

Qatar is in a sublime position to meet the Second Half of the Age of Oil unless it is invaded: it being never easy to be a rich man in a crowd of beggars. How the ruling family will dispose of the massive income arising is difficult to imagine. Indeed in the face of world recession, it may eventually conclude that the best available investment is to leave the oil and gas in the ground for as long as possible, producing it more slowly than current plans seem to indicate. But that may not be so easy, as the foreign companies presumably have long term contracts, which their home countries may seek to enforce by military means if necessary.

609. Those with eyes could see it coming

The following note from Matt Simmons demonstrates how it was possible to forecast the peak of UK production from the decline of the giants fields, which are normally found first when a new area is opened to exploration. The industry has had advanced technology for many years and has used it to keep production as high as possible for as long as possible, but technology has its limits too.

FORECASTING PEAK OIL by Matt. Simmons

I have just finished reviewing the paper I presented in Sept. 1995 at Kincardine during the Offshore Europe Conference of 1995. Since I leave later today for Kincardine a decade later, I wanted to remind myself what how the situation looked ten years ago. I was amazed to find that the forecast of 1995 has proved to be so accurate.

To put the scene into its proper context, conventional wisdom at that time held that new technologies had made a rig about 5 to 8 times more efficient; that the number of dry holes was shrinking dramatically; and that new recovery techniques were getting more oil out of existing fields than ever before.

The IEA had presented a series of papers that led to David Knapp to publish a report in the fall of 1996 entitled he IEA Global Offshore Oil Prospects to 2000. This highly optimistic study predicted that North Sea production would hit 7.52 million b/d by 2000.

My presentation gave a history of North Sea output and showed that the Super Giant fields that had been the mainstay of the North Sea's astonishing success had all gone into tail spin declines. The new fields coming on in abundant numbers were all far smaller and would peak much faster.

I gave a detailed review from the Grampian Report of 1991 that predicted that the UK sector of North Sea would reach a secondary peak of around 2.4 million in 1995. I wholly endorsed this study and used its data to begin my decade-long search for better information on the fast growing declines that were setting in on almost all large offshore fields through the aggressive use of the same technology that the major E&P companies were swearing would allow easy production growth while oil prices kept declining.

Subsequent actual production statistics show that the UK reached a secondary peak in 1997/98 at just above 2.6 Mb/d and now struggles to stay above 1.6 Mb/d. All the optimists about the role of technology were totally wrong. But the same folks still believe the same hype. They have merely moved the goal posts. I wonder how long it will take mainstream energy thinkers to awake to the threat that the world is approaching peak oil output and might have already passed this crucial global milestone.

Will Katrina perhaps serve as a genuine wake-up? Time will tell but I sense we are now in a very crucial sea change of energy thinking.

610. The European Commission stirs.

The European Union has noticed the surge in oil prices and begins to react by trying to curb demand, bring in alternative renewable energy and secure more oil supply, as the following memorandum explains. It

is to be hoped that in the course of these deliberations, the Commission will become aware of the nature of depletion and seriously consider adopting the provisions of the Rimini Protocol as an efficient way by which to manage its predicament.

MEMO/05/302

Brussels, 6 September 2005

Five-point plan to react to the surge in oil prices

Reducing demand for energy

To make further progress in this area, Commissioner Piebalgs signaled his intention to

(i) Accelerate the European Action Plan on energy efficiency;
(ii) Increase pressure for the full and rapid implementation of the new Buildings Directive;
(iii) Push strongly for an agreement on the Energy Services Directive in the December Energy Council;
(iv) Promote more effective international action on energy efficiency, both through its bilateral contacts and the IEA;
(v) Promote, together with the UK Presidency, an international conference on energy efficiency in November;
(vi) Establish the Sustainable Energy Forum, first meeting on the 13 – 14 October 2005.

Increasing reliance on other forms of energy

Commissioner Piebalgs will

(i) Table a biomass Action Plan before the end of the year;
(ii) Press strongly for an increase in research on wind, wave and solar, hydrogen, clean coal and carbon sequestration in the context of the FP7;
(iii) Table a Communication on bio-fuels in early 2006;
(iv) Table a Communication in 2005 on the financial support schemes for renewable energy sources in the different Member States.

Increasing transparency and predictability of oil markets

Commissioner Piebalgs will:

(i) Instruct his services to publish as soon as possible, twice monthly consolidated statistics on oil security stocks in the EU;
(ii) Establish a new Unit in DG TREN, the "Oil and Gas Market Observatory Unit" to improve statistics and transparency;
(iii) Give priority in its energy dialogues with OPEC, Russia and Norway to work together to improve transparency;
(iv) Create the Fossil Fuels Forum to identify how to improve the stability and predictability of oil and gas markets. It will meet for the first time on 20 October in Berlin.

Increasing the supply of oil and gas

The Commission can contribute by

(i) Working together with producer countries through the EU's energy to promote further investment and a better investment climate;
(ii) Hold talks with the major European oil companies to ensure that the companies and the Commission are playing their respective roles to the full in meeting this objective.

Reacting effectively to emergency situations with respect to oil stocks

As a first step the Commission will convene the Community's Oil Supply Group on a regular basis during the ensuing months with the next meeting taking place on 9th September 2005. This issue will be further discussed at the first meeting of the Fossil Fuel Forum with the aim of tabling a revised proposal for some form of European coordination of oil stocks 2006. *(Reference furnished by Prof. Rui Rosa)*

611. France accepts Peak Oil

The French Prime Minister is the first world leader to publicly recognize Peak Oil with his statement *"We have entered the post oil era"*. Perhaps France will take a lead on implementing the Rimini Protocol. It would incidentally help the poor countries of the world which are already suffering extremely from the high price of oil.

> PARIS, Sept 1 (Reuters) - The French government will pay 75 euros ($91.49) to millions of families to help them cope with the rise in oil prices, French Prime Minister, Dominique de Villepin said on Thursday.
>
> Villepin said several million low-income households which use fuel for heating would receive a 75-euro cheque, and promised to boost the use of renewable energy. "I know that some of our compatriots are suffering head-on from the rise in domestic fuel and petrol, without being able to immediately adjust their consumption," Villepin told a news conference.
>
> "We have entered the post-oil era," he said. "I want to draw all the consequences of this and give a real impulse to energy savings and to the use of renewable energies."

(Reference furnished by Mark Griffiths)

612. The wider significance of Hurricane Katrina

Professor Klare, who has spoken at ASPO conferences, reviews the wider strategic consequences of the

hurricane that struck New Orleans with such a tragic but foreseeable impact.

Katrina and the Coming World Oil Crunch

by Michael T. Klare

[posted online on September 6, 2005 **http://www.thenation.com/doc/20050919/klare**]

More than any other domestic disaster, Hurricane Katrina has significant implications for America's foreign and military policies. There is, of course, the obvious connection to the war in Iraq: National Guard troops that were desperately needed to conduct rescue operations in New Orleans and southern Mississippi were instead fighting a pointless war in the Middle East, and a President whose attention should have been focused on hurricane relief was instead trying to put a positive spin on the Iraqi Constitution debacle. The international coverage of the human tragedy of New Orleans has also torpedoed the Administration's just-announced campaign to enhance America's image abroad. But far more important than any of these is the impact of Katrina on the global oil supply and the resulting increase in US dependence on foreign petroleum. To appreciate the significance of all this, it is first necessary to conduct a quick review of the pre- and post-Katrina oil situation, both in this country and abroad.

Before Katrina, the United States was consuming 20.4 million barrels of oil per day; some 44 percent of this was being refined into gasoline for use by motor vehicles, while another 30 percent was used to make diesel and jet fuel. Continuing a long trend toward increased dependence on foreign oil, imports accounted for 58 percent of America's total petroleum supply in 2004. And here's the kicker: Of the 5.5 million barrels of oil produced every day in the United States, 28 percent (or 1.6 million barrels) came from Louisiana and adjacent areas of the Gulf of Mexico. One cannot underestimate the importance of the Gulf area in America's overall energy equation. While oil output is dropping everywhere else in the United States, it has been increasing in the Gulf, with new wells being drilled in ever-deeper waters. "Generally speaking," the Department of Energy reported in January, "Lower-48 onshore production, particularly in Texas, has fallen in recent years, while offshore (mainly Gulf of Mexico) production is rising." The Gulf Coast also houses approximately 10 percent of the nation's refining capacity and a significant share of its natural gas production.

Meanwhile, the global oil equation has become increasingly dire. While international consumption has been rising at a torrid pace, with much of the new demand coming from China and India, the frenzied search for new fields has largely come up empty. At the same time, many older fields in Mexico, Canada, Russia, Indonesia and even the Middle East have gone into decline. These developments have led some analysts to conclude that the world has reached the moment of "peak," or maximum sustainable daily oil output; others say that we have not yet reached peak but can expect to do so soon. This is not the place to elaborate on the matter, except to say that there was widespread worry about the future availability of petroleum *before* Katrina struck, as demonstrated by record high prices for crude. (For background on "peak" oil, see Klare, "Crude Awakening," November 8, 2004.)

And then came Katrina. In the course of a few hours, the United States lost one-fifth of its domestic petroleum output. Some of this is expected to come back on stream in the weeks ahead, but it is doubtful that all of the offshore rigs in the Gulf itself will ever be operational again. On top of this, most of the refineries in the Gulf Coast area are shut down, and imports of oil have been hampered by the damage to oil ports and unloading facilities. How quickly all of these installations can be repaired is not currently known. With no idle facilities elsewhere in the nation to replace lost Gulf capacity, supplies are likely to remain sparse (and prices high) for months to come.

But it is not the short-term picture that we should worry about the most; it is the long-term situation. This is so because the Gulf was the *only* area of the United States that showed any promise of compensating for the decline of older onshore fields and thus of dampening, to some degree, the nation's thirst for imported oil. There has been much discussion about the potential for drilling in the Arctic National Wildlife Refuge (ANWR) in Alaska, but energy professionals scoff at the prospects of obtaining significant amounts of crude there; instead, all of their attention has been on the deep waters of the Gulf. Spurred by the Bush Administration's energy plan, which calls for massive investment in deep-water fields, the big oil firms have poured billions of dollars into new offshore drilling facilities in the Gulf. Before Katrina, these facilities were expected to supply more than 12 percent of America's Lower 48 petroleum output by the end of 2005, and a much larger share in the years thereafter.

It is this promise of future oil that is most in question: Even if older, close-to-shore rigs can be brought back on line, there is considerable doubt about the viability of the billion-dollar deep-water rigs, most of which lie right along the path of recent hurricanes, including Ivan and Katrina. If these cannot be salvaged, there is *no* hope of slowing the rise in US dependence on imports, ANWR or no ANWR. This can mean one thing only: growing US reliance on oil from Saudi Arabia, Iraq, Angola, Nigeria, Colombia, Venezuela and other conflict-torn producers in the developing world.

And it is this that should set the alarm bells ringing. If recent US behavior is any indication, the Bush Administration will respond to this predicament by increasing the involvement of American military forces in the protection of foreign oil potentates (like the Saudi royal family) and the defense of overseas oil installations. American troops are already helping to defend the flow of petroleum in Iraq, Kuwait, Saudi Arabia, the United Arab Emirates, the Republic of Georgia, Colombia and offshore areas of West

Africa, producing an enormous strain on the Pentagon's finances and capabilities. In addition, plans are being made to establish new US bases in Azerbaijan and Kazakhstan, two promising producers, and in the oil-producing regions of Africa. (See Klare, "Imperial Reach," April 25, 2005.) Given the need for even more foreign oil, these plans are likely to be accelerated in the months ahead. This means that the United States will become even more deeply embroiled in foreign oil wars, with an attendant increase in terrorist violence.

Hurricane Katrina has many distressing domestic consequences, and these should rightfully command our attention and compassion. But we must not lose sight of its foreign policy implications, as these are sure to spark new crises and disasters. We must not allow the White House to exploit our current energy woes to justify the further militarization of America's petroleum dependency, with all that entails. Along with other critical measures, we should use this time of reflection and reconstruction to fashion a new national energy policy, based above all on conservation and the rapid development of petroleum alternatives.

613. Reuters picks up the Peak Oil story

Reuters, the international news agency, reports on the official reactions to soaring oil price. Governments and official institutions have yet to draw aside their curtains of denial about the underlying global depletion that transcends the present shortage, but chinks in the curtains are appearing. As they might say in Arabia, Katrina may prove to have been the straw that broke the camel's back.

IEA Chief sets the Pace on Energy Conservation

By Barbara Lewis and Peg Mackey

LONDON, Sept 7 (Reuters) –

The head of the West's energy watchdog is taking record high oil prices in his stride by walking to his Paris office each day. Claude Mandil, Executive Director of the International Energy Agency (IEA), is urging consumers the world over to be as serious when it comes to conserving energy.

"It seems that even with very high prices people are willing to consume as much petroleum products as before. That does not help to calm the market," said Mandil.

"It would be extremely useful for all governments in consuming countries to be serious about energy efficiency. "That last happened in the mid 1970s, when the Arab oil embargo choked off supplies to the industrial world. But that oil crisis was political, not a problem of supply and demand, and hastily-introduced measures of rationed gasoline and lowered household thermostats were soon abandoned.

"In the 70s, high oil prices were a shock... People woke up, but then they relaxed," said former oil company geologist Colin Campbell, now a leading proponent of the view global oil supply is near its peak. "We went from the Stone Age to the Bronze Age and it was a natural, onward progression. But for the first time in history, we're running out of the best thing and we have to go on to the next best thing. That is really awfully hard to face," he added. Campbell is a trustee of the London-based Oil Depletion Analysis Centre and chairman of the Association for the Study of Peak Oil and Gas, whose ideas, he said, are gaining currency in this high-oil climate. He cited French Prime Minister Dominique de Villepin, who said last week: "We have entered the post-oil era."

Katrina, trigger not cause

Last week's march to a record high for U.S. light crude of $70.85 a barrel was triggered by the devastation wrought by Hurricane Katrina on U.S. oil and gas production. But prior to that a sustained rally has been driven by surging demand, led by the United States and China, and dwindling supplies as investment in new capacity has lagged consumption.

The question is whether this new energy squeeze will make the world change its ways more permanently. "Don't buy gas if you don't need it" -- U.S. President George W. Bush's plea to Americans has been the extent of an official government policy response to the country's petrol shortage in the wake of Hurricane Katrina.

The United States has lost about 1 million barrels a day of gasoline, about 10 percent of normal consumption, after Katrina shut down refineries and forced others to cut runs. The result has been retail gasoline prices in the United States above $3 a gallon and long queues at service stations that have at least temporarily reawakened some U.S. motorists to the need to stop guzzling gas.

In much of Europe, petrol has climbed to more than a euro a litre and governments are beginning to talk of curbing fuel use. EU Energy Commissioner Andris Piebalgs has called for an international conference on energy efficiency in November. This week, he presented a five-point plan to counterbalance high oil prices, ranging from reducing energy demand and boosting renewable fuel sources to improving transparency in oil markets and increasing the supply of oil and gas. The EU had to pay particular attention to renewable and green forms of energy, he said. But there is also huge pressure to maintain the status quo. With the election in Germany just two weeks away, there is no talk there of unpopular measures such as reducing speed limits, even though much of its motorway network has no speed limit at all.

The conservatives of Angela Merkel, tipped to be the next Chancellor, have even said they would consider reducing tax on gasoline by three cents per litre. Rising fuel costs in France moved French truckers to set up blockades, most of which have now been lifted after the Minister of Transport promised to help them cope with fuel costs.

614. Control of pipeline routes

The Caspian is a landlocked area, and so the control of export pipelines is critical. Already a major US military base has been located on a pipeline route through Kosovo, even called Bondsteel, which sounds suspiciously like an allusion to welding (see Item 393). It seems too that various western organizations have been funding political upheaval in the former Soviet Union in the name of democracy but probably with an eye to oil and gas supply.

Putin tells West not to interfere in ex-Soviet republics
London Times, 6 September 2005

Still angry at the Orange Revolution that toppled Ukraine's pro-Russian leader in December, Mr Putin denounced non-governmental organisations that were quietly backed by Western governments and fomented uprisings in Moscow's former sphere of influence. 'Our foreign partners may be making a mistake,' he said during a 2½-hour meeting in the Kremlin with Western academics and journalists, including The Times. 'We are not against any changes in the former Soviet Union. We are afraid only that those changes will be chaotic. Otherwise there will be banana republics where he who shouts loudest wins.' Mr Putin poured scorn on the new Ukrainian Government of President Yushchenko, saying that it was riven by corruption and had caused the collapse of an agreement for a new Russian gas pipeline to Western Europe. He had warned Europe of those consequences, he said, but 'no one wanted to listen to us - and we have to be listened to'."

615. Reform or Decline

The Sunday Times of September 11th (not an auspicious date) carried an Editorial with the above title. Speaking of the allegedly sluggish economies of Japan and Germany, it urges that *"Money needs to be put in the pockets of their consumers, not the state. If they cheer up and spend, the global economy will cheer up too"*. This epitomizes typical flat-earth thinking from the First Half of the Age of Oil.

The message now should be to try to be more cheerful consuming less, because there is less left to consume, especially oil-based energy. The price of natural gas in Britain is soaring, such that energy costs for a typical household have increased 36% since January, with the power companies blaming dwindling North Sea reserves. This may be the beginning of a pandemic, with threats of demonstrations and industrial action reappearing in various places. In a certain sense, they are justified because the costs of producing oil and gas have not changed materially: the higher prices are simply profiteering from shortage, which is a normal attribute of flat-earth economic markets, not designed to cope with finite resources lacking competitive substitutes.

616. Another Oil Company Confesses

A Director of the Repsol, the Spanish Oil Company, has published an oil and gas depletion profile, showing an imminent peak and decline, almost identical to an earlier ASPO forecast. (see the Spanish language site www.crisisenergetica.org). It follows the example of Chevron, the major American oil company, which has launched a campaign to raise awareness of the issue. (www.willyoujoinus.com).

This is in marked contrast with the position taken by BP when asked to respond to proposed new EU energy saving initiatives, as reported in the EUObserver of 13th September, and quoted as follows;

Proven world oil reserves currently stand at some 1.18 trillion barrels, compared to 761 billion 20 years ago, and are not expected to run dry until 2045 at the earliest, British Petroleum (BP) said. "Based on BP's work and statistics, the world is not facing a shortage of hydrocarbon resources", a spokesman said.

This can only be deliberately calculated to mislead. Has BP not noticed the 40 year-decline in world discovery as published by Exxon, and does it really imagine that production can remain constant until 2045 and then stop dead overnight, when all oilfields are observed to decline gradually to exhaustion? This is simply the misuse of Reserve/Production Ratio, dividing reserves by current annual production to give a certain notional number of years' supply. It was a pragmatic measurement in the early days of the oil business, saying nothing about actual production levels. Furthermore, can BP really advocate waiting until oil is finally exhausted before making some preparations. *(References furnished by Jean Laherrère and ODAC)*

617. Four More Books

Four more excellent books for the growing library on Peak Oil have been received:

Pétrole Apocalypse by Yves Cochet, a former minister in the French Government (ISBN 2-213-62204-3 in French).

The Party's Over : Oil, War and the Fate of Industrial Societies by Richard Heinberg (ISBN 0-86571-529-7 Revised & Updated Edition).

International Petroleum Encyclopedia – 2005 Edition by PennWell (ISBN 1-59370-064-4). This is the latest issue in a series from a mainline oil industry publisher, also responsible for the Oil & Gas Journal. What is remarkable and exceedingly commendable is that a section, entitled Key Stats, includes many depletion plots, unequivocally depicting Peak Oil. For example on page 278 is a review of the deepwater, showing total discovery at 48 Gb, with an indicated peak in 2012. (This is very close to our current estimate of 50.5 Gb, peaking in 2011). It even includes a "creaming curve" showing cumulative discovery against wildcats. It is evident that that the Editor not only understands the true situation but has had the courage to publish it. He deserves the highest praise.

Aspenia Edited by Marta Dassu and Lucia Annunziata (www.aspeninstitute.it) is compilation of articles covering the energy situation and related political issues by the Aspen Institute of Italy

618. Britain considers cutting energy demand.

Britain is considering measures to audit and control energy consumption in both residential and commercial premises. Seemingly, it does so in fear of politically inspired interruptions in supply from the Middle East, its government not yet having woken up to the reality of depletion, but it is certainly a step in the right direction, consistent with the proposals of the Rimini Protocol. Britain has also confirmed the appointment of Energy Attachés at embassies in oil producing countries to implement what are described as *Country Action Plans*. It is to be hoped that they will in due course collect valid information to confirm the status of depletion rather than exert political pressure on the countries to produce what is not available to produce.

The British Chancellor and heir apparent has admitted that his positive economic forecast has been undermined by the high price of oil, and has reacted by pressing the producing countries to lift production despite their lack of capacity to do so. Even King Canute in the 11th Century recognized that the waves would not recede at his command despite flattery from his courtiers who were telling him that he was all-powerful.

Put that light out!

Now Prescott plans to send in the 'energy police' to make us go green

By Melissa Kite, Deputy Political Editor, Daily Telegraph (Filed: 18/09/2005)

'Energy wardens' will police homes and offices to ensure that they do not waste gas and electricity under a radical plan being considered by John Prescott.

An extraordinary blueprint being studied by the Deputy Prime Minister suggests conserving energy by monitoring the habits of home owners in the same way that air raid wardens made people turn off their lights during the Blitz.

Householders will also be forced to conduct an "annual energy audit" of their homes, defending the amount of fuel they have consumed.

The spectre of a force of "green police" is painted in a study warning that Britain risks catastrophe if it remains dependent on Middle East oil and urging a rapid shift to renewable energy and conservation.

The paper, entitled Britain's Energy Future, Securing the Home Front, by the former Labour minister Stephen Twigg and the Foreign Policy Centre, compares a future energy crisis to the Second World War aerial bombardment. It says: "The stakes are as high and the solution will be found only when UK citizens and corporate entities (government included) start acting as if the stakes are that high."

"The mentality at community and householder level must be similar to that of the war years or Britain will have no energy future."

The study paints a doomsday scenario of Islamic extremists controlling the world's oil supplies. Britain must prepare for an "inevitable shock to energy supply in coming years", it says.

It cites a study by the US Brookings Institution soon after the 9/11 attacks pointing to "devastating economic problems" in a "worst-case scenario" where extremists in all Arab Muslim nations have cut production. Oil prices would more than double to $161 a barrel.

The "khaki cost" of defending the world's oil supplies would be $150 billion a year. "Without wishing to scaremonger... rapidly decreasing our dependency on oil and gas imports is a national imperative," the study says.

It calls for a range of action at grassroots level for Britain to "secure its home front".

The heart of the plan is to expand an existing practice in some companies and public bodies, including

the Corporation of London, which appoint "energy wardens" to audit their consumption. The study predicts: "The need for households and small firms to conduct an annual energy audit will become a new part of 21st-Century life."

The study reflects growing concern in the Government at Britain's failure to meet EU energy targets. Less than four per cent of the UK's electricity supply comes from renewable sources. The Government has set the target of reaching 10 per cent by 2010, and 20 per cent by 2020.

Ministerial drives to conserve energy have been fraught with difficulties. Last year the then Trade and Industry Secretary Patricia Hewitt's department was pictured with its lights blazing all night after she announced a drive to encourage householders to save £1 billion a year by switching off theirs.

The latest scheme reflects a growing belief that energy targets can be met only by punitive measures. Earlier this year householders were warned that they faced a £1,000 fine for failing to recycle rubbish.

619. US Authority confirms Peak Oil

J.Robinson, the Chairman of the prestigious PFC Energy Company, and formerly Assistant Secretary of the Interior, has testified to the Senate that the World enters the Age of Energy Insecurity, facing a huge and sustained economic shock. He stresses that the World is approaching peak production and that spare capacity is severely constrained, reflecting the growing gap between discovery and production.

620. The IEA World Energy Outlook

The International Energy Agency is about to publish the 2005 World Energy Outlook, a series of publications, well known for their meaningless scenarios and misleading data, which have provided valuable curtains to help the member OECD governments to hide from reality. Advance presentations have been made as reported by Le Monde and other journals. Mr Birol, its Chief Economist, is reported to state that Non-OPEC conventional production will reach a *plateau* after 2010, with subsequent production being dependent on technology and investment. He is by all means an Economist. Mr. Mandil, the Director, who probably himself understands the situation perfectly well, is naturally obliged to observe the political dictates of his member countries. He is quoted as saying that 1.5 Tboe of conventional oil and gas have been produced to date and that reserves stand at 2.2 Tboe. (This estimate corresponds with the official numbers as published for example by BP, which bear little relation to the actual position). Speaking in terms of oil equivalent always helps to confuse the issue, because the depletion profiles are so different, but it might hint of the approach to the midpoint of depletion that normally equates with Peak.

The IEA has also published a book entitled *Resources to Reserves* (ISBN 2-64-10947-1), which explains how rising future demand can be met by new technology and exploration in remote and unknown places, based in part on the flawed study of the USGS. It includes a graph making the classic mistake of attributing the growth of North Sea production to technological advances when in reality most was due to conservative initial reporting.

The organisation faces the increasing challenge of holding on to a vestige of credibility as the reality of the actual situation manifests itself in terms of soaring prices and the loss of spare capacity from the wellhead to the refinery. Katrina and her sister Rita can obscure the issue for only so long before a different sort of storm breaks.

621. The End of Cheap Oil

The October issue of *The Ecologist* gives major and well-considered coverage to the issue of Peak Oil, being summarized on its cover-page as follows:

> **Years of unprecedented upheaval and change are upon us**
> **THE END OF CHEAP OIL**
> **How many of us will survive?**

622. A new Peak Oil study from the Netherlands

The Foundation Peak Oil Netherlands, has issued a valuable new report by R.H.E.M.Koppelaar (see www.peakoil.nl) giving an oil production forecast from 2005 to 2040. It studies the production record by country to identify and explain trends, and takes into account knowledge of specific announced developments.

Although its production numbers for 2004 and forecast for 2010 are generally higher than those in our database, the overall peak comes at the same date around 2010. Most of the differences with ASPO relate to the modeling of production in the five Middle East Gulf countries, which is obviously most uncertain. This is

a, well-considered study stressing the serious implications, and the urgent need for intelligent policy responses. It sees four primary paths for action: behavioral change from society based on exponential growth to one of stability; energy efficiency; energy saving; and bringing in renewable energy.

623. Trend-lines

An interesting website (www.trendlines.ca), produced in the Yukon, includes a comparison of different oil depletion models, illustrating ASPO's evolving evaluations.

624. Revision of the Depletion Model

A detailed revision of the deepwater evaluation has been made on the basis of new information covering the world's fields, which have been modeled individually. The new evaluation suggests an Ultimate recovery of about 52 Gb with a peak of 12 Mb/d in 2011, up from 3.5 Mb/d in 2005. This has an impact on the overall model, as illustrated in the Table on Page 2, shifting the peak of All Liquids from 2007 to 2010. Anyone familiar with this forecasting will know of the many uncertainties and difficulties, but it seems best to advance step by step reporting progress as it occurs, remembering always that it is subject to change.

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.

October 2-3	CERN, **Geneva** [Laherrère]
October 4	End of the First Half of the Age of Oil, USB Bank. **London** [Campbell]
October 5	Petrocollapse, **New York** [Ruppert]
October 11	Peak Oil, Food and the Environment, **London** (www.eafl.org.uk)
October 17	End of the First Half of the Age of Oil, AIB Bank, **Dublin** [Campbell]
October 20-21	Peak Oil, US National Academies, **Washington** [Aleklett, Gilbert]
October 25	Energy : the Big Issues. Inst. Physics, **London** [Leggett}
October 27-28	Baltic Sustainable Development. **Kaliningrad**, Russia [Aleklett]
October 28-29	Realising a Common Vision, **Kaliningrad**, Russia [Aleklett]
October 28-30	Pio Manzu Energy Conference, **Rimini, Italy** [Campbell, Zagar, Zittel]
November 2	Oil Depletion-Facing the Challenges, Inst Energy, **London** [Bentley, Skrebowski]
November 5-6	Energy Futures, **Lausanne**, Switzerland [Aleklett]
November 8-10	Clean Vehicles & Fuels, **Stockholm**, Sweden [Aleklett]
November 10-11	Peak Oil Conference, **Denver USA** (ASPO-USA) [Gilbert, Skrebowski]
November 14-16	Safety & Security of Energy Infrastructures, EU Commission, **Brussels** [Aleklett]
November 17	Institute of Transport, **Dublin** [Campbell]
November 28-30	Solar Energy conference, **Dunedin**, New Zealand [Aleklett]
December 6	Peak Oil. CEMUS, **Uppsala** University, Sweden [Campbell]
December 14	Ireland in the Second Half of the Age of Oil, ICA, **Schull**, Ireland [Campbell]
2006	
April 12-13	Ireland's Response to Peak Oil, **Dublin [**Campbell, Skrebowski**]**

(Information for inclusion in future newsletters is welcomed).

Note

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