ASPO-Sydney

www.ASPO-Australia.org.au
Australian Association for the Study of Peak Oil & Gas- Sydney Coordinator, David Bell

Committee Secretary
Senate Standing Committee on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Thursday 26th February 2009

Our organization is a group of professional volunteers studying the timing of the peaking and decline of world petroleum production and the implications for society as a whole. It is Australia wide and is affiliated with ASPO International. There are now over 20 countries with ASPO organisations. ASPO-Australia has groups in most capital cities, and working groups in a wide variety of sectors.

We are concerned that a viable and sustainable transport policy that is less dependent on oil is required for Sydney. The financial crisis is a precursor to the problems it will face in the future, as will most of NSW, as the end of cheap abundant, petroleum becomes more evident. At the same time new population projections from ABS suggest that Sydney will have to cope with an extra half million residents by 2031

Against this the world has been producing more oil than it finds since 1985. (fig1) The world's petroleum is nearing a peak in production and the peak of world discovery was back in 1965. All current data and projections we have seen points to the simple fact that world oil production is at or near peak (figs 2,3,5,6)

Recent price increases over the past 12 months show that peaking is close at hand as bidders for available oil become more intense before it helped trigger a burst in the debt bubble. Recent evidence seems to indicate demand is being reduced by a few percent by the prolonged recession. However this time the price of oil could well rise significantly again when the economy tries to recover due to declining production. In Australia two things mainly influence the price of petrol: the price of Tapis crude (in US dollars - starting to rise again after a recent fall); and the exchange rate (Australian dollar versus US).

Most new supply from the new oilfield projects is costly as the oil is in very remote places so any fall in price will mean producers will shut in these projects. Cost blowouts on oil field projects due to rig, materials and ageing labour force are now very common in this industry.
http://www.upstreamonline.com/live/article163609.ece

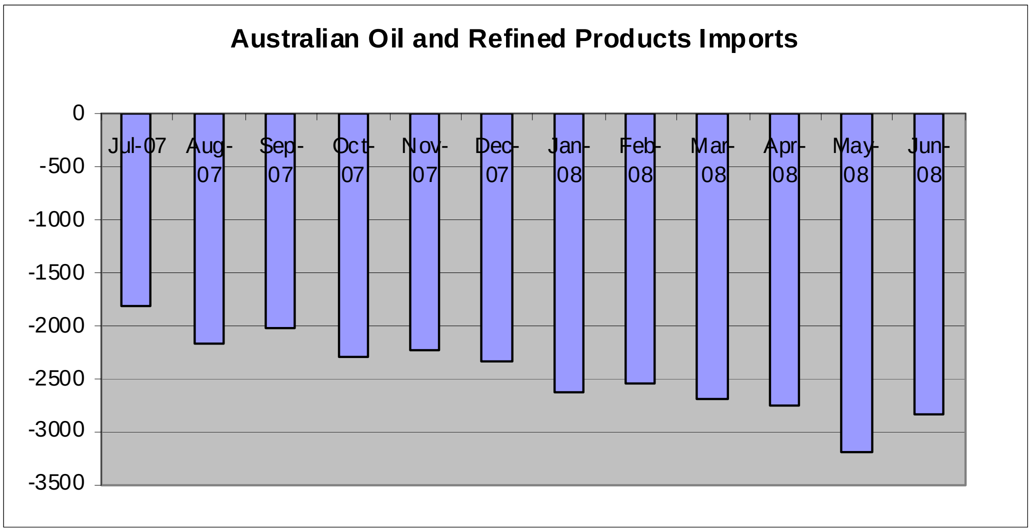
With rising prices we have seen oil exporters many with lower per capita GDP and rising populations increasingly consuming more of their own oil, meaning there is less for export (figs 4,8). For example Mexico, the United States number 3 exporter, is in serious decline and by 2012 will no longer export to the US. This will mean that the volume of available oil will continue to decrease. (Fig 7)

The current reality of means we are now locked into a bidding auction for remaining available petroleum and as such we have three options;

a) Pay or go broke, - current strategy hoping problem will go away
b) Adapt by moving transport away from oil and plan our cities to be less oil dependent. **– Most advisable option**
c) Enter into costly wars for remaining energy with both producer and consumer nations- **Neither- advisable nor capable of succeeding**.

Sydney will share part of this pain in mortgage defaults, unemployment and falling house prices. This does not include the personal costs to individuals in stress and ill heath. Areas with inadequate public transport (especially rail) will be the most affected. This is in line with the work of Messrs Dodson & Sipe from Griffith University in their paper Unsettling Suburbia: The New Landscape of Oil and Mortgage Vulnerability in Australian Cities- August 2008 This makes this point very clear.
http://www.griffith.edu.au/__data/assets/pdf_file/0003/88851/urp-rp17-dodson-sipe-2008.pdf

Australia's own dwindling production and increasing consumption is now contributing to a very poor balance of trade report. On ABS figures we imported oil and refined products worth $29.6 billion in 2007/08(not including the imported vehicles to use some of this fuel). This helped contribute to the $18 billion Trade Deficit for the 2007/2008, year. (Source ABS). This was money that left Australia for foreign shores and was paid for by borrowing more foreign debt. This position is not sustainable especially given the current banking and financial crisis. Long-term sustainability should be independent of short-term crises, even if the present crisis won't be short-term.



Source ABS

Australia's net foreign debt stands at over $658 billion as at Sept Qtr 08.
http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/5302.0/

Unless we make serious steps to reorganise transport investment we will not solve the balance of payments problems or the current account. Continuing to borrow money offshore is getting harder as the recent Interview of Frank Gelber indicated on Lateline business

"We're tapped into overseas market because we have an overseas borrowing requirement to finance the current account deficit and to rollover our external debt. And so, we're feeling the credit squeeze here. And the banks who were aggressively pursuing, you know, business a year and two years ago are now starting to want to cut back on gearing, and so, financial feasibilities don't work for projects and banks are trying to pull the rug out from under. There's no equity finance to replace it. And so, what happens? We can't invest."

http://www.abc.net.au/lateline/business/items/200902/s2500424.htm

Our organization has a clear voice when it comes to transport and it is the same as the Chief Economist of the IEA Mr Fatih Birol "get out of oil before oil leaves us". He recently said this in an interview "***With the World Energy Outlook 2007. It was a clear signal to the governments of all our member countries. They take energy and oil security much more important than before, now. And when we present the WEO 2008 this November, I think it possible that the sirens will shrill even louder."***

Since then the 2008 World Energy outlook says this

The world's energy system is at a crossroads. Current global trends in energy supply and consumption are patently unsustainable — environmentally, economically, socially. But that can — and must — be altered; *there's still time to change the road we're on.*

Securing energy supplies and speeding up the transition to a low-carbon energy system both call for radical action by governments — at national and local levels, and through participation in co-ordinated international mechanisms. Households, businesses and motorists will have to change the way they use energy, while energy suppliers will need to invest in developing and commercialising low-carbon technologies.

http://www.iea.org/Textbase/npsum/WEO2008SUM.pdf

At this stage we do not see sufficient action at NSW State government level to address IEA concerns. This compares to the Queensland Government that has already begun planning to address its oil vulnerability.

http://www.epa.qld.gov.au/environmental_management/sustainability/oil_vulnerability_mitigation/

However the recent NW Sydney Transport inquiry by the NSW Upper House has begun raising the issue of oil vulnerability in their recent report. It also seriously looked at how the NW part of Sydney is vulnerable to problems with oil. ASPO Sydney did put in a submission to this inquiry as well as give evidence to the members of the Committee. I would encourage the inquiry to consult with the Committee.

http://www.parliament.nsw.gov.au/prod/PARLMENT/committee.nsf/0/6F4B11BA339506B6CA2574B4001955D3

Recommendation

We recommend the Senate push to include Oil vulnerability studies into State planning laws where possible as well as at the Federal Government policy level.

Outcomes Required

We advocate the following.

- A concerted nation-wide campaign is needed to raise community awareness of and engagement with the science of Peak Oil and the very serious risks posed by our high oil vulnerability. Without community support, it will not be possible for Governments to divert investment from the current counter-productive roads and tollways into the needed public transport and active transport alternatives. As with water shortages, if people understand the risks of future oil shortages, they will be far more likely support measures designed to minimise consumption of a scarce non-renewable resource
- Federal transport and economic bodies (ABARE and BITRE, for instance) seem complacent to the point of negligence about the risks of Peak Oil. This reminds us strongly of the approach of the US financial regulatory authorities to risks from the sub-prime mortgage frenzy, and the associated "innovative" financial products.

- Basic transport data, and the social science behind transport are sadly under-resourced. As just two examples, the "Queensland Transport Facts 2008" report has not been released due to lack of funding, and the world-leading oil vulnerability research at Griffith University (Dodson and Sipe, 2008) is very poorly resourced. Both provide evidence that urban toll-roads are poor investments and increase our oil vulnerability.
- Investment in rail, other forms of public transport, walking and cycling is essential.
- Encourage more use of Natural gas buses over diesel but recognising gas is also peaking worldwide and is finite.
- Land use planning based around the car has to change in favour of less oil dependent transport.
- We see freeway building as over. The Cross City tunnel, the Lane Cove tunnel as well as Bris Connections floats as proving our point. We see proposals for the F3 to M2 as being contrary to the future fuel availability and sustainability requirements.

Rail

We support an electrified rail solution that allows for both passengers and freight as both Peak Oil and Climate Change require solutions that work together. This can be heavy, medium and light rail depending on the right mode for that part of the city. Land use planning has to be around new urbanism principles rather than suburban sprawl that is, reliant on the motor vehicle. In parts of Sydney where all transport is oil based we advocate more investment in rail. In parts of Sydney where there is rail, improved urban amenity and land use planning is occurring around railway stations. This way public transport improves the lifestyle of people.

We would like to see more, light rail in parts of Sydney where it was in the past before it was phased out in favour of buses. Buses could be redeployed into outer suburbia where there is a public transport drought.

Cycling and Walking

Walking and cycling has a great opportunity to be more integrated into public transport. We would encourage the Senate to ask serious questions of state transport authorities to boost catchment capture by providing more bike parking around railway stations, ferry terminals, and bus stops. We have concerns that both state governments and local councils need to do more by planning and investment in this infrastructure.

We need better and safer bike lanes to be planned and integrated around public transport.

We need this

Not this

Buses

In Sydney as at 30 June 2008, the average age of a State Transit bus is 13 years. Average age of passenger vehicles on the road is 9.7 years.

http://www.audit.nsw.gov.au/publications/reports/financial/2008/vol5/pdf/103_0371_state_transit_authority_of_new_south_wales.pdf

http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/9309.0Main+Features131%20Mar%202008?OpenDocument

Also the Sydney CBD suffers from too many old diesel buses coming into the city and them creating problems with air quality and urban amenity. The older ones in the fleet are over 20 years old and create more pollution than newer ones. The Federal government could help phase older more polluting buses out. They could also encourage more Compressed natural gas buses into the fleet and reduce diesel imports. Many old buses in fleet are not favourable to the disabled or the elderly, like newer “low floor” ones.

Also the bus timetables do not seem to be particularly flexible. For example many Sydney Bus timetables assume most people do not work past 7pm. In a city like Sydney this is not the case. In some parts of Sydney the Sunday timetable is one bus every hour, but Saturday it may be one every half hour and as such it only encourages you to take the car.

There are opportunities there for improvements to buses. In parts of Sydney buses are essential and provide good public transport.

Also there are some routes where the bus will not stop due to agreements between Government and operators regarding right of passage that encourage people to drive. Example 136 Route will go through Forestville but will not stop there presently. These have to go.

Transport Bureaucracy

There is also many problems between rail, bus and ferry operators in the transport bureaucracy. This needs to come under one transport agency as well as the RTA. There has also been great resistance to light rail in Sydney as this article suggests.

http://www.smh.com.au/news/national/the-future-of-bus-city--clogged-streets/2006/01/09/1136771500679.html

This article by John Lee seems to be typical of what we describe as the Bus brigade. These attitudes seem to be too common.
http://www.smh.com.au/news/opinion/time-to-get-off-the-light-rail-bandwagon/2006/01/16/1137260000769.html
None of this has been helpful to neither improving public transport nor reducing oil vulnerability.

Rural & regional rail

The closure of many rural rail lines in NSW has meant that rail no longer runs to these towns. Examples are Mudgee, Cooma, & Bourke to name a sad few. We would like to see improved rural rail lines and a plan to bring back passenger and freight rail to these regional areas which will suffer from the effects of peak oil.

Mind you Sydney to Canberra takes 4 hours and 26 minutes a distance of roughly 300 kilometres and an Xplorer train can travel around 140 km/hr. Something is seriously wrong here. This encourages flying or driving from Sydney.

http://www.aptnsw.org.au/newsletters/19952.html

In Victoria there appears to have been some serious investment in V/ Line and improve rail and trains and this has resulted in more passengers returning to rail.

http://www.vline.com.au/about/ourfleet/vline_is_expanding.html

If Victoria can do it why cannot NSW?
Taxation

We encourage the abolishing of the favourable FBT regulations on motor vehicles that work as a subsidy and a drain on the Federal Treasury. This is not in the interest of the country and can only described as a benefit to higher income earners. It does nothing to help our problem with oil. This was raised in other inquiries. The tariff concession to urban 4WDs is incongruous and counterproductive. Why should the import duty rate on a Prius hybrid be higher than on an large inefficient Landcruiser? Excise duty on petrol and diesel should be gradually raised to European levels, following Margaret Thatcher's 1988 successful fuel tax escalator example. Funds raised should be hypothecated to improving Australia's health system, providing resources for a substantial public transport infrastructure programme and to providing increased services and support for transport disadvantaged communities in outer urban areas,

Current government Stimulus package

Because the Federal government is not thinking of Peak oil seriously we are not getting good policy outcomes.

- Funding the car industry is pouring good money after bad, "What is good for International car company's is probably bad for Australia" The money should go towards local manufacture of buses, trains and renewable energy equipment.

- Infrastructure Australia must be asked to review the infrastructure implications of Peak Oil, and to put a moratorium on the funding of any more urban roads, unless justified within a Peak Oil framework, which is unlikely.

- The stimulus package should be directed where possible towards options that reduce our oil vulnerability. Buying a $900 commuting bicycle is a better step towards reducing oil use (and CO_2 emissions) than buying a $900 flat-screen TV.

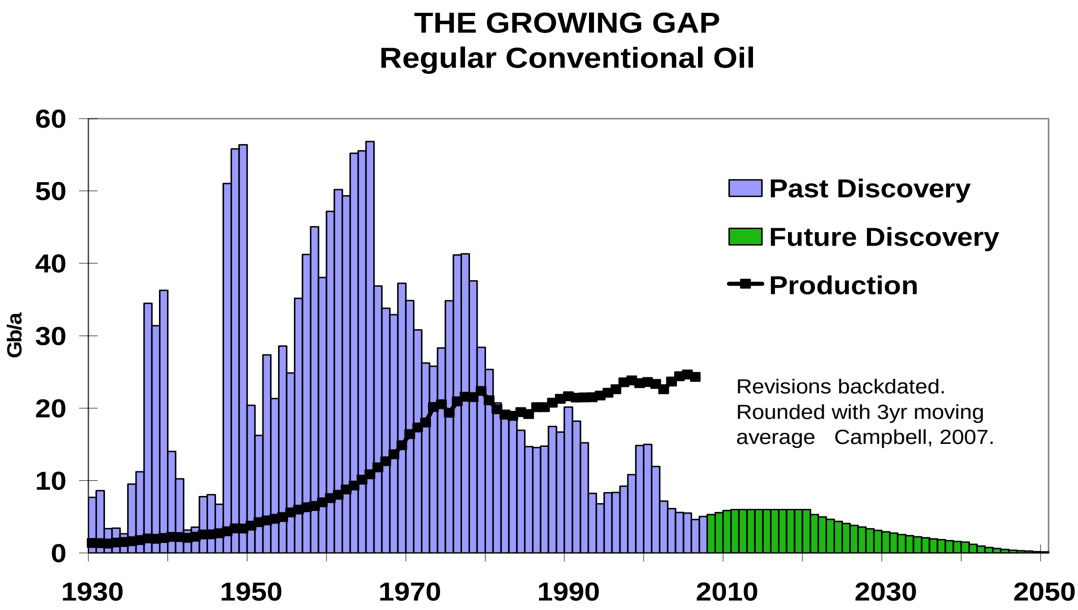
Conclusion

Finally, I would like to encourage the Senate committee to get a resolution of the previous inquiry on Australia's Future Oil supplies. Neither the Howard nor Rudd Government seems to have taken the time to respond. Our members put a lot of effort into it and nothing seemed to have happened. We hope for a better outcome this time.

Our organisation is willing to brief Committee members on Peak Oil and Public transport in much more detail than has been presented here. We wish you and your staff the best in this important inquiry.

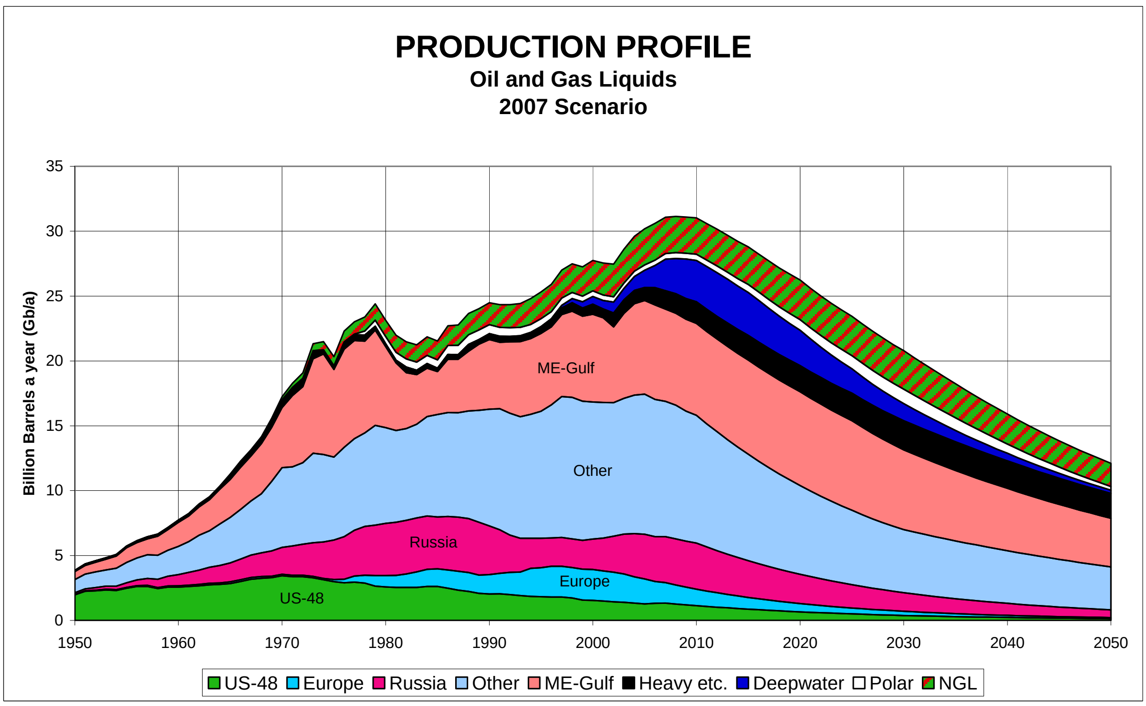
Yours sincerely
David Bell
Coordinator, ASPO-Sydney

Fig 1



Source ASPO International

Fig 2 ASPO Forecast Production



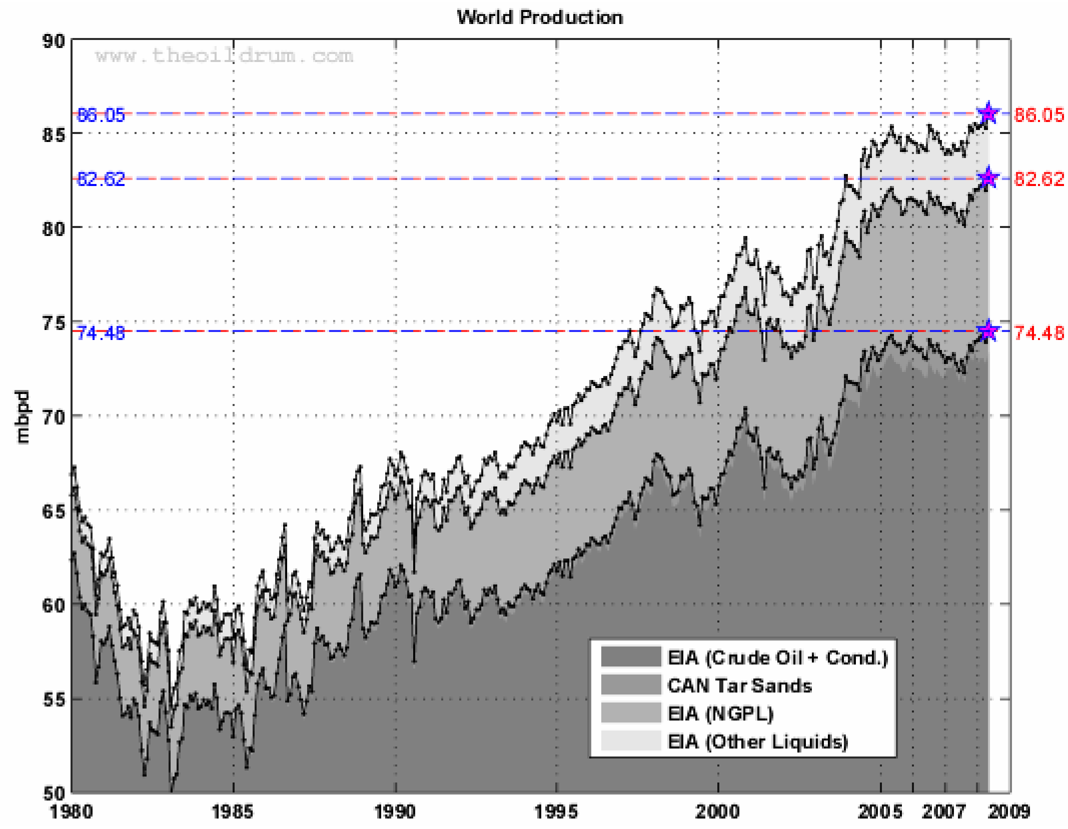


Fig 3.- World production (EIA data). Blue lines and pentagrams are indicating monthly maximum. Monthly data for CO from the EIA. Annual data for NGPL and Other Liquids from 1980 to 2001 have been upsampled to get monthly estimates. (Source The Oildrum)

Fig 4 World Net Exports Top 20 Oil exporters –93% of all exporters

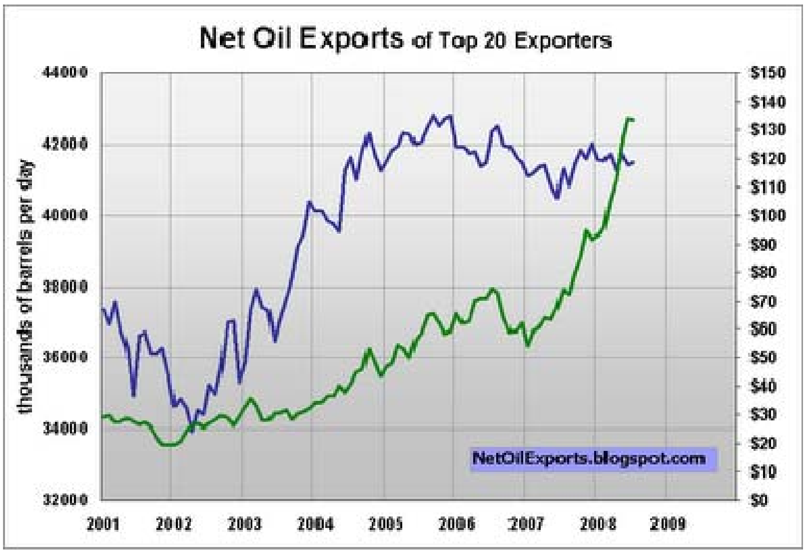


Fig 5

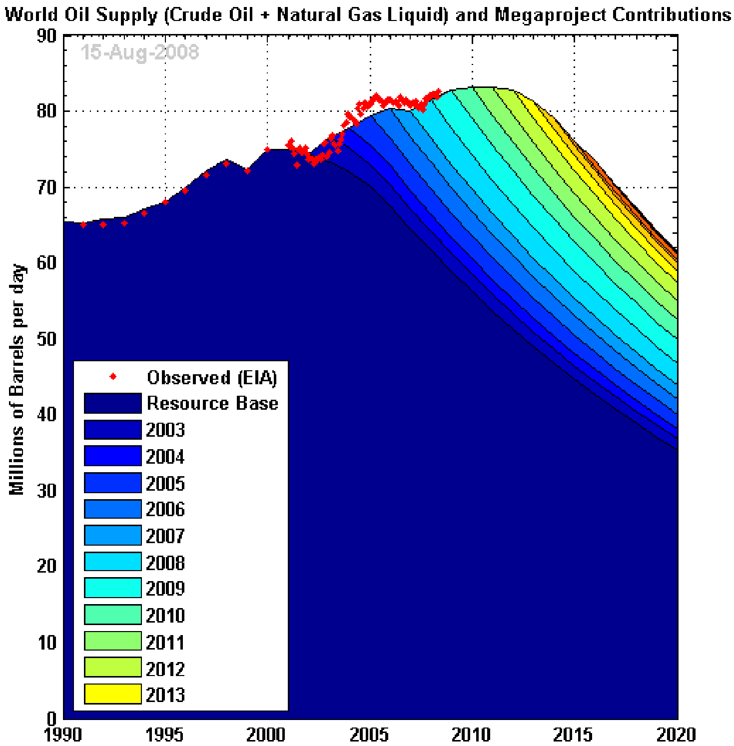


Fig 6

Wikipedia Oil Megaprojects Database, Moderate Decline Rate (4.5% per annum) Scenario, world oil supply and megaproject contributions, compared to observed EIA production data.

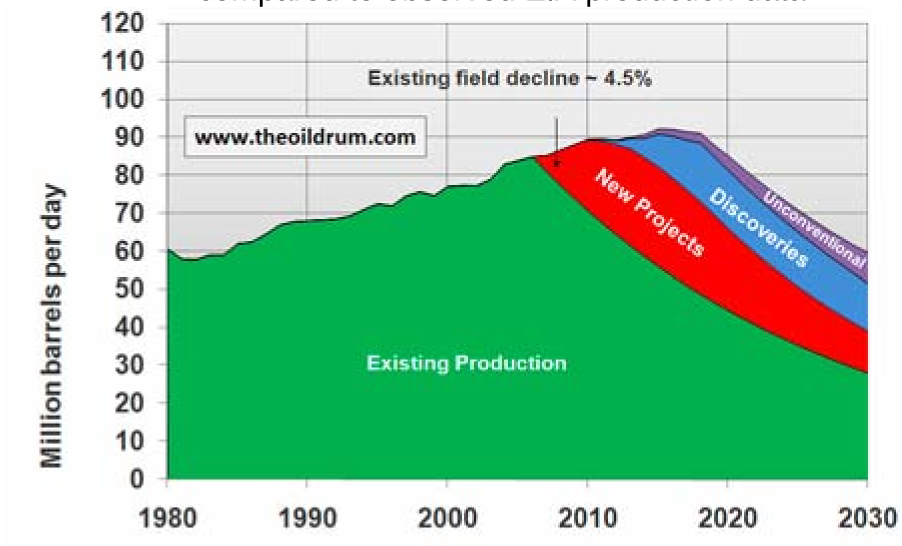
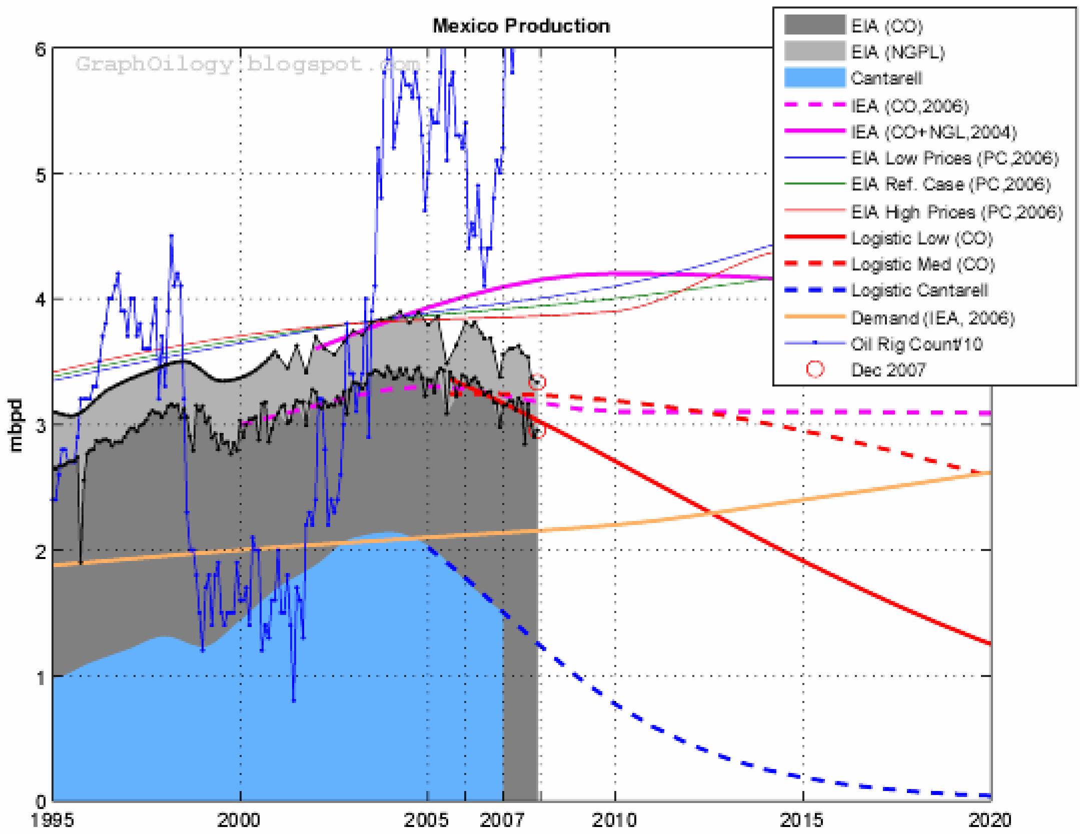
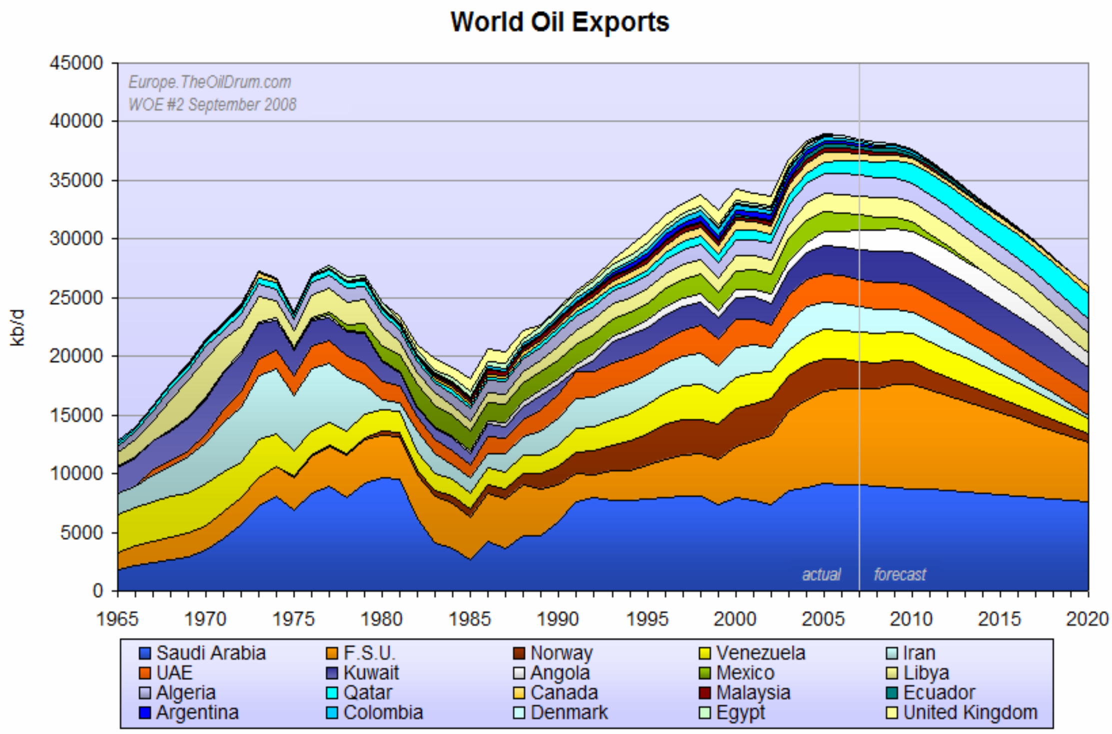


Fig 7 Mexico Production


Mexico Production
GraphOilogy.blogspot.com
mbpd
EIA (CO)
EIA (NGPL)
Cantarell
IEA (CO,2006)
IEA (CO+NGL,2004)
EIA Low Prices (PC,2006)
EIA Ref. Case (PC,2006)
EIA High Prices (PC,2006)
Logistic Low (CO)
Logistic Med (CO)
Logistic Cantarell
Demand (IEA, 2006)
Oil Rig Count/10
Dec 2007
0
1
2
3
4
5
6
1995
2000
2005
2007
2010
2015
2020


World Oil Exports
Europe.TheOilDrum.com
WOE #2 September 2008
kb/d
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
actual
forecast
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Saudi Arabia
F.S.U.
Norway
Venezuela
Iran
UAE
Kuwait
Angola
Mexico
Libya
Algeria
Qatar
Canada
Malaysia
Ecuador
Argentina
Colombia
Denmark
Egypt
United Kingdom