Sustainability Criteria for the Super Industry

This submission responds to:

How to Assess the Competitiveness and Efficiency of the Superannuation System

http://www.pc.gov.au/inquiries/current/superannuation/competitiveness-efficiency/draft/superannuation-competitiveness-efficiency-draft.pdf

An efficient and competitive super system is not necessarily sustainable with regard to

- Resource consumption and depletion – in particular fossil fuel energy
- The environment – including food production
- The climate
- The future of capital cities

In fact, most of the projects and assets the super industry is currently financing would be very efficient at REDUCING sustainability and also in increasing risk. This of course is not in the interest of policy holders. It is the function of government to ensure that the super industry only finances sustainable projects and assets. That of course would require that the government has consistent and appropriate policies and strategies in place, including risk analyses. At present, this is not the case.

Already in 2004 I wrote submission 4 for the Productivity Commission's consultation on energy efficiency.

http://webarchive.nla.gov.au/gov/20080824014903/http://www.pc.gov.au/projects/inquiry/energy/docs/submissions

In the above submission I warned that Howard's energy white paper (June 2004) was flawed with its statement that "there are sufficient oil reserves to supply world demand for around 40 years"

Already a year later oil prices started to surge, meaning that supplies were not sufficient.

In 2006 I warned the Brisbane City Council NOT to build the North South Bypass Tunnel because of impending peak oil. Campbell Newman (then Lord Mayor) ignored my advice. Traffic projections were exaggerated due to assumptions of perpetual growth. Investors lost more than $2 bn

More details are on my website:
http://crudeoilpeak.info/i-told-you-so/north-south-bypass-tunnel-clem7-brisbane

Similar losses were made with the Brisbane Airport Link
http://crudeoilpeak.info/airportlink-brisbane

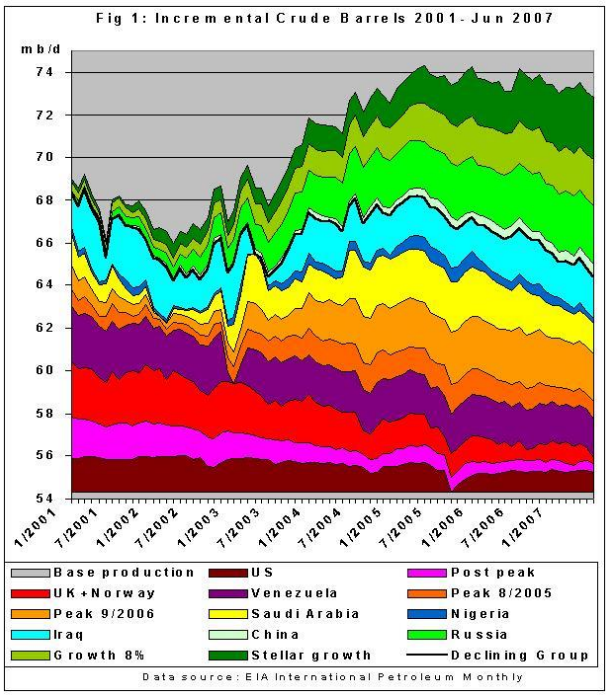
Governments have not learned any lesson and want the super industry to finance the next set of candidates: e.g. NorthConnex and WestConnex in Sydney.

But have US shale oil and lower oil prices not solved the peak oil problem? No. The problem has just been delayed by a couple of years. Here is why:

Crude oil started to peak in 2005. Production declined until 2007. At the time I wrote following article:

Did Katrina Hide the Real Peak in World Oil Production?

9/10/2007

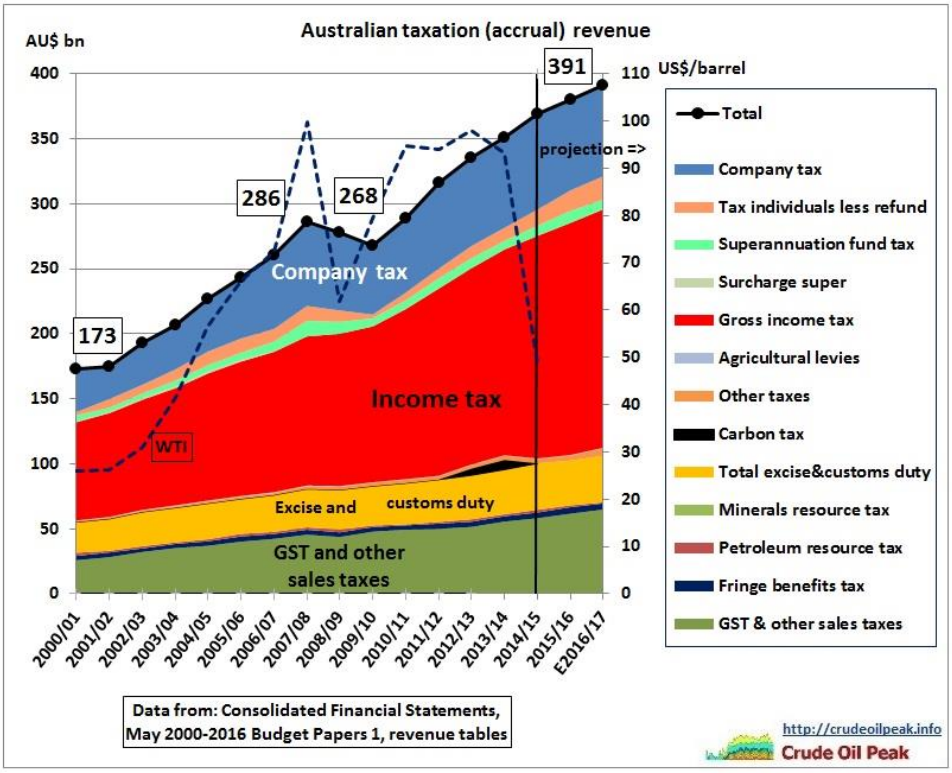


http://www.theoildrum.com/node/3052

High oil prices as a result of these insufficient oil flows (supply shock, note the Saudi decline!) caused the US recession end 2007. In 2008 China went on the oil market with 800 kb/d of extra demand for the Olympic Games. That pushed oil prices to over $140 a barrel and broke the camel's back. High petro dollar debt from ever increasing US oil imports had accumulated since the 1970s oil crisis (Nixon shock). In car dependent US suburbia $4 per gallon petrol prices in combination with an ill-timed mortgage reset triggered the financial crisis.

Causes and Consequences of the Oil Shock of 2007–08
https://www.brookings.edu/wp-content/uploads/2016/07/2009a_bpea_hamilton-1.pdf

The financial crisis caused companies to reduce their tax burden. Company closures also contributed. 80% of the Australian budget deficit is caused by lower company tax income after the GFC. It has nothing to do with the ALP. The same would have happened to Howard.



Read my article here:
28/6/2016
80% of Australian budget deficit comes from lower company tax revenue after GFC (part3)
http://crudeoilpeak.info/80-of-australian-budget-deficit-comes-from-lower-company-tax-after-gfc-part-3

The Australian public was warned about the 2006 conventional oil peak in this ABC TV Oil crunch story in April 2011:

Dr Fatih Birol
When we look at the oil markets the news is not very bright. We think that the crude oil production has already peaked in 2006

NARRATION
Hang on - did you get that? Crude oil production for the world peaked in 2006.
http://www.abc.net.au/catalyst/stories/3201781.htm

In the US, the response to the conventional oil peak was low interest rates, money printing (so that economy can afford high oil prices) and shale oil. But despite increases in shale oil production, oil prices did not go down. The high oil price period 2007-2014 has damaged the financial system (more debt, budget deficits) and the economy (company closures and job losses) irreversibly (like a heart attack or stroke when blood does not flow freely).

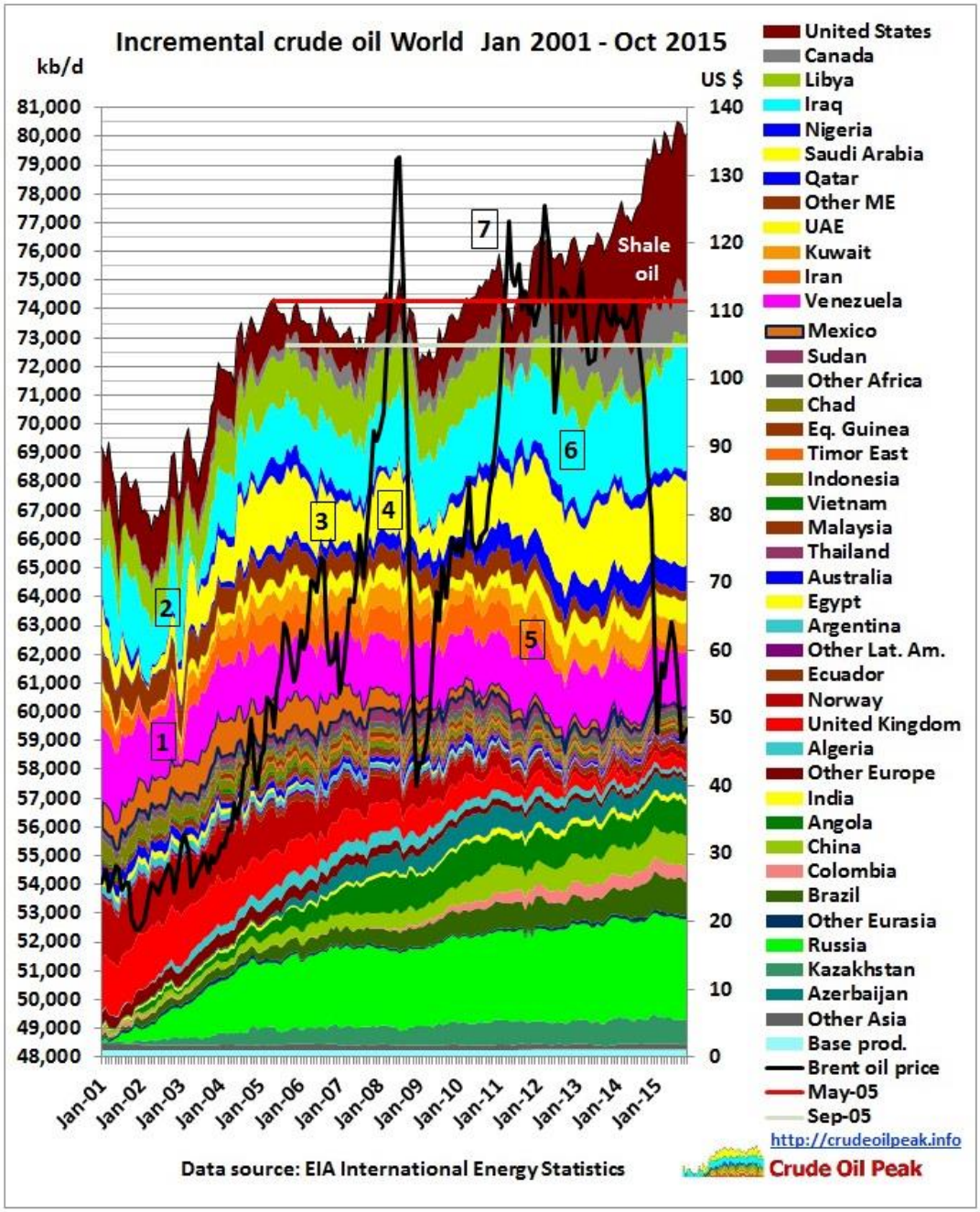
In 2014 oil prices dropped for following reasons:

- End of QE announced by the Federal Reserve: higher US dollar – lower oil prices inverse relationship

- Oversupply of US shale oil

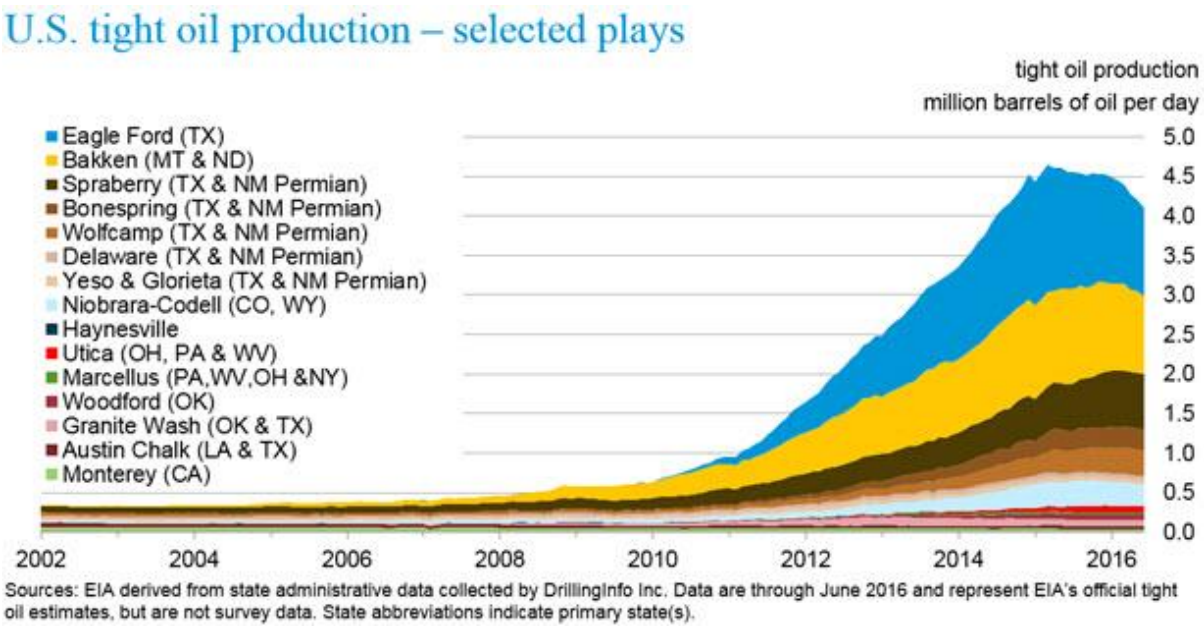
- Lower demand growth due to weakened economy as a result of previous high oil price period

The experiment with money printing, $100 oil prices and shale oil has ended in failure.

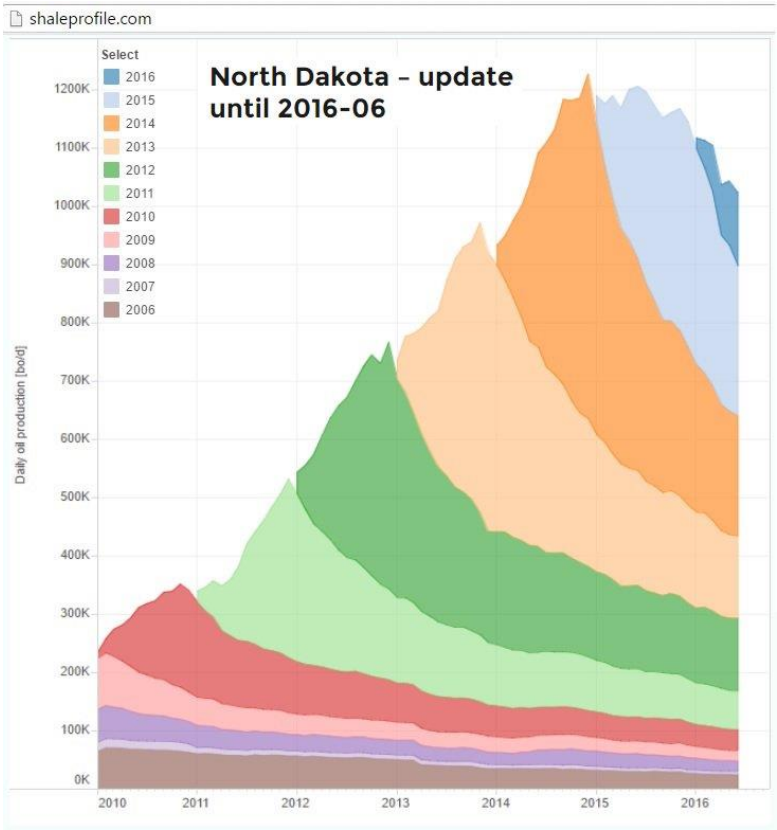


The grey horizontal line shows that the world outside the US and Canada did not produce more oil than in 2005. That is conventional peak oil!

In the meantime it is clear that shale oil itself peaked in 2015



Shale oil is not your average crude oil. Decline rates are astronomical compared with conventional oil



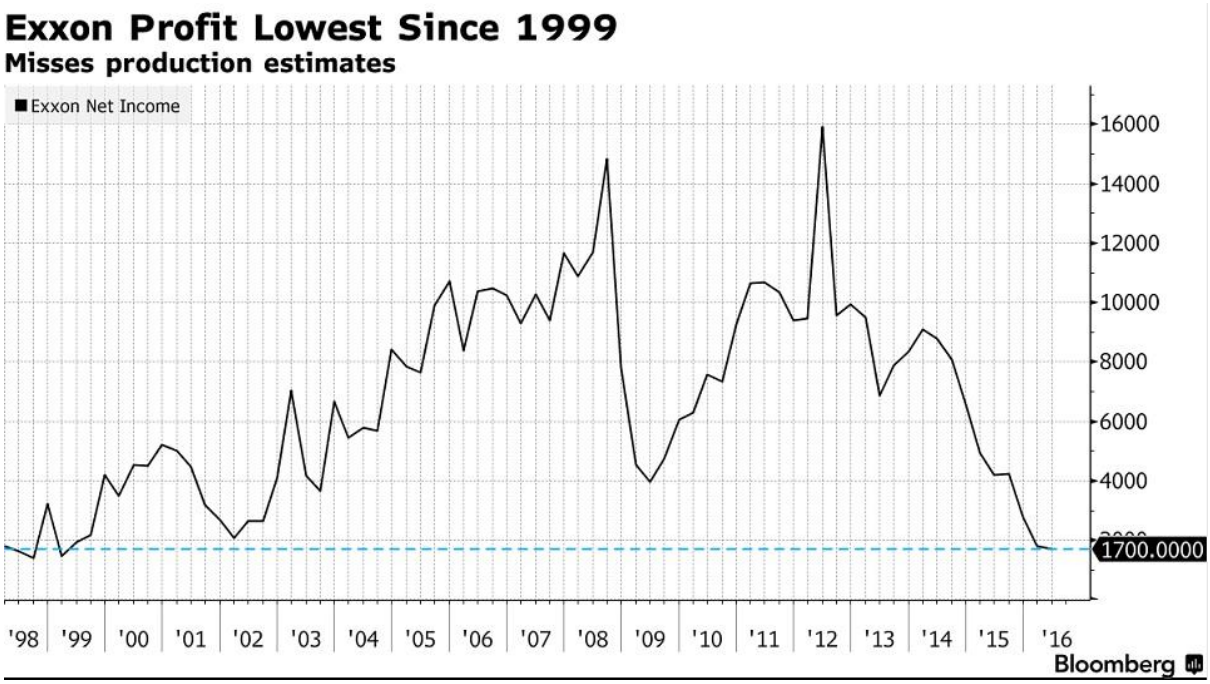
Graph from: http://shaleprofile.com/

For example, production from all wells drilled (and put to production) before 1/1/2015 has declined from 1,200 kb/d to 650 kb/d, almost half, in just 18 months!!

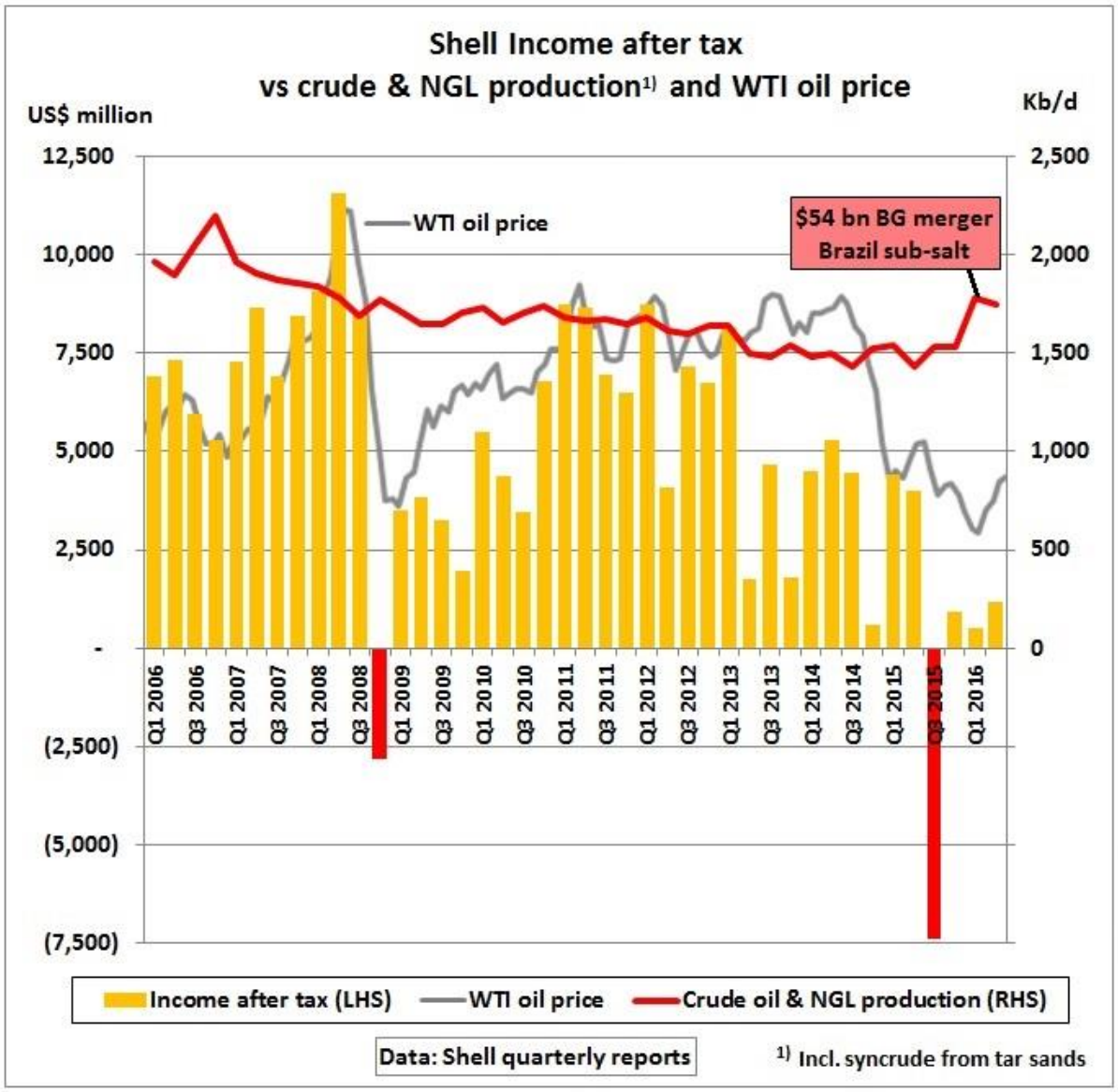
It is generally assumed that in case oil prices go up again, shale oil production will pick up as well. The North Dakota graph shows how difficult that will be. And shale oil is not your average crude oil which can be used in all refineries. It definitely does not directly compete with Saudi or Iranian oil, for example.

To quote Tim Olsen, 2015, Working with Tight Oil, Chemical Engineering Progress:
"Light oils typically pose unique challenges because they:
* are difficult to transport due to a lack of pipeline infrastructure
* contain entrained hydrogen sulfide
* require the addition of amine-based H2S scavengers in the pipeline, truck, or railcar prior to transport.
* are contaminated with paraffin waxes that cause fouling in piping, tank walls, and crude preheat exchangers
* contain large amounts of filterable solids
* can have a wide range of API gravity
* require crude blending to balance the atmospheric crude fractionator cut-point yields for best downstream utilization
* may be incompatible with other types of crudes used for blending
* require energy balancing across the crude preheat exchangers
* may experience cold flow property deficiencies that require modifications to catalysts… "
http://www2.emersonprocess.com/siteadmincenter/PM%20Articles/Olsen_CEP_April2015.pdf

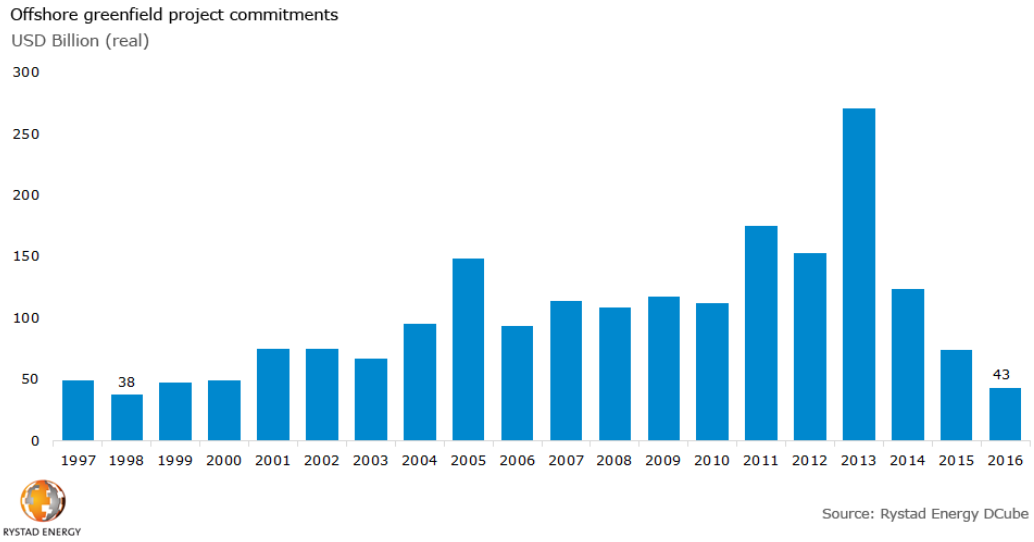
Low oil prices have led to a drop in oil company profits



This cannot continue for very long.



The trend is clear: Shell's income after tax is in long term decline. The problem started already before oil prices came down. Low oil prices also means a drop in investments.



This will negatively impact on future oil production. It will take 5 years until new oil can flow after investment decisions.

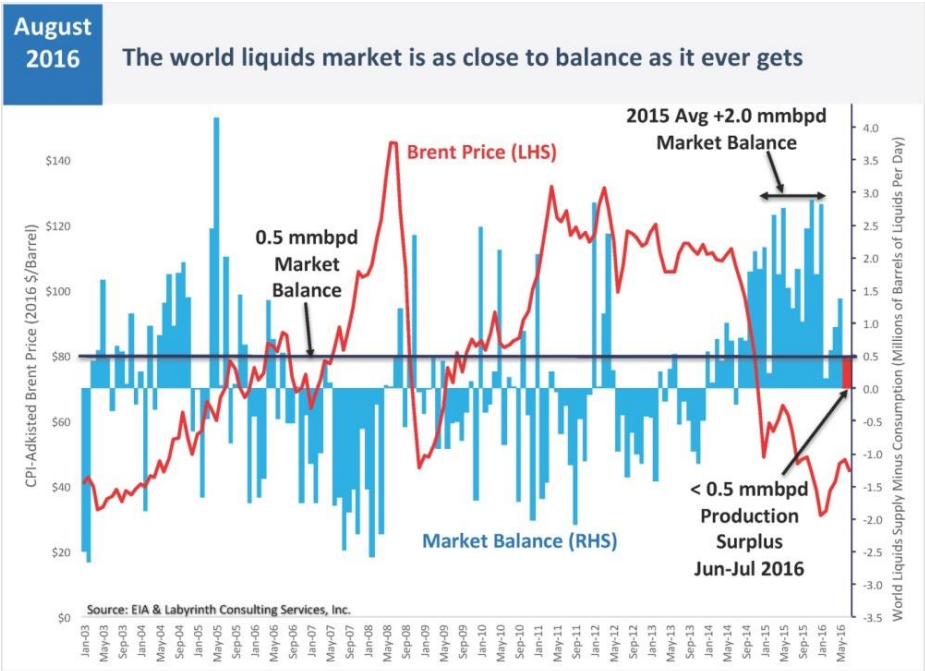
The longer oil prices are low, the deeper the next oil crisis

Warnings were given in Davos in January 2016

9/2/2016 IEA in Davos warns of higher oil prices in a few years' time
http://crudeoilpeak.info/iea-in-davos-2016-warns-of-higher-oil-prices-in-a-few-years-time

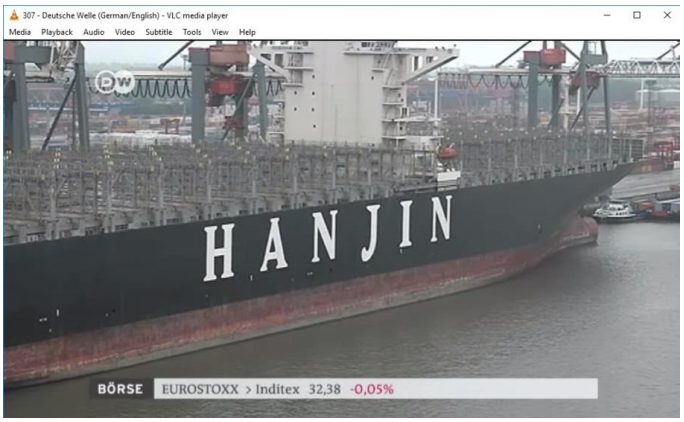
But governments don't want to listen.

Current oil market balance August 2016



http://www.artberman.com/saudi-permian-a-race-to-the-bottom-for-tight-oil/

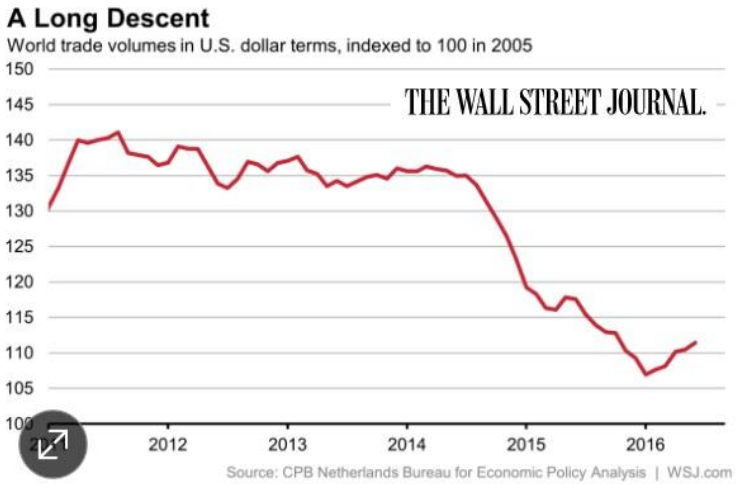
The production surplus has shrunk. Yet oil prices are still much lower than before 2014. This suggests something is dead wrong. Oil demand seems to be too weak because the global economy is ailing.



The latest indicator that the world economy is weak is the bankruptcy of the South Korean shipping company Hanjin

<< Empty container ship stranded in the German port of Hamburg

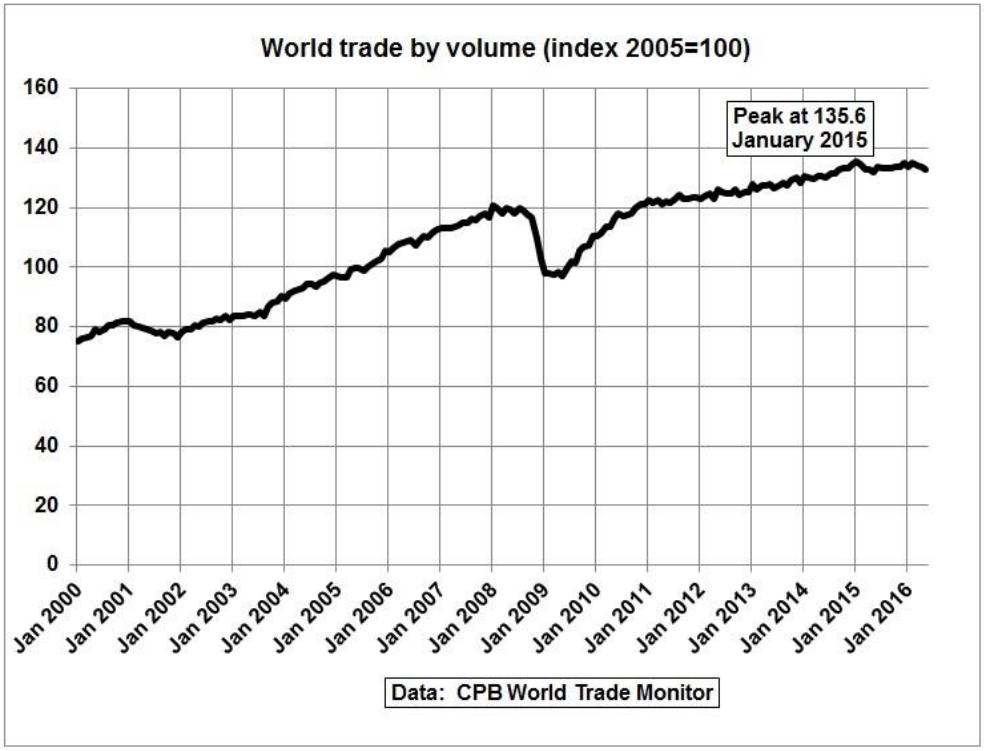
The Global Forces Behind Korea's Shipping Collapse



http://www.wsj.com/articles/the-global-forces-behind-koreas-shipping-collapse-1472632705

The above graph is alarming. There can be non-linear collapse.

Let's have a look at CPB's trading monitor:



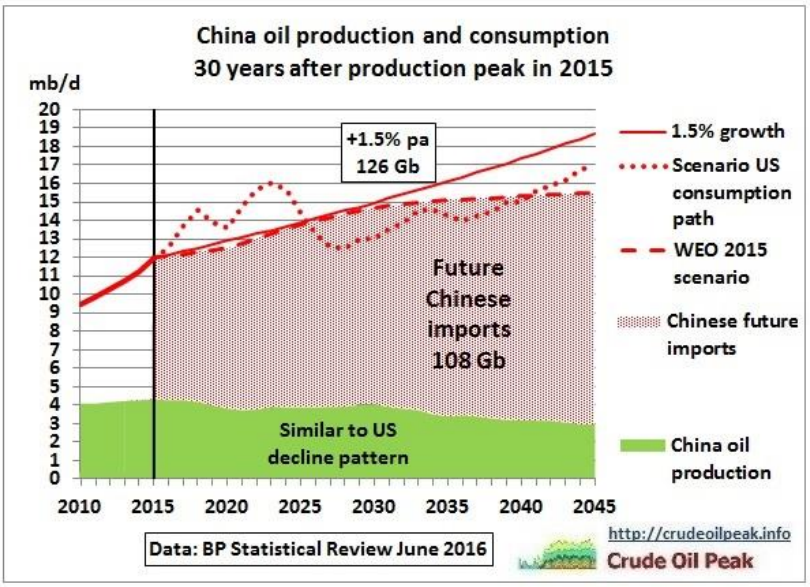
Global trading volumes (as index) have peaked in January 2015

Growth after the GFC (which was caused by the confluence of accumulated petro dollar debt, high oil prices and high petrol prices in the car dependent US mortgage belt) was lower than before and has now come to a standstill.

China has tanked. Chinese investors are fleeing and think Australia is a safe place. They are driving the next bubble after mining: residential high rises.

80% of Chinese investors don't even look at what they are buying

We know Chinese are very experienced in building ghost cities. For the super industry, that is a dangerous place to invest in. And take a look at China's oil imports:



Note the kink in 2015

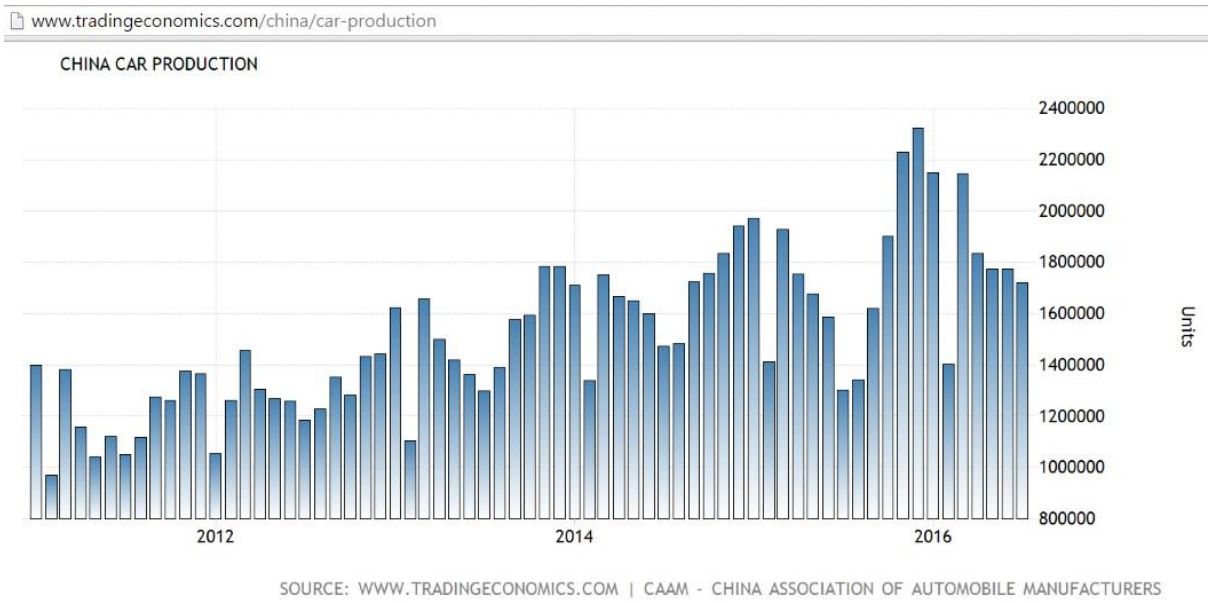
Where will this oil come from and at which prices? More details are here:

5/9/2016 China's oil peak 45 years after the US peak
http://crudeoilpeak.info/chinas-oil-peak-45-years-after-the-us-peak

Even the Wall Street Journal has noticed:

China's Decline in Oil Production Echoes Globally
http://www.wsj.com/articles/chinas-decline-in-oil-production-echoes-globally-1472122393

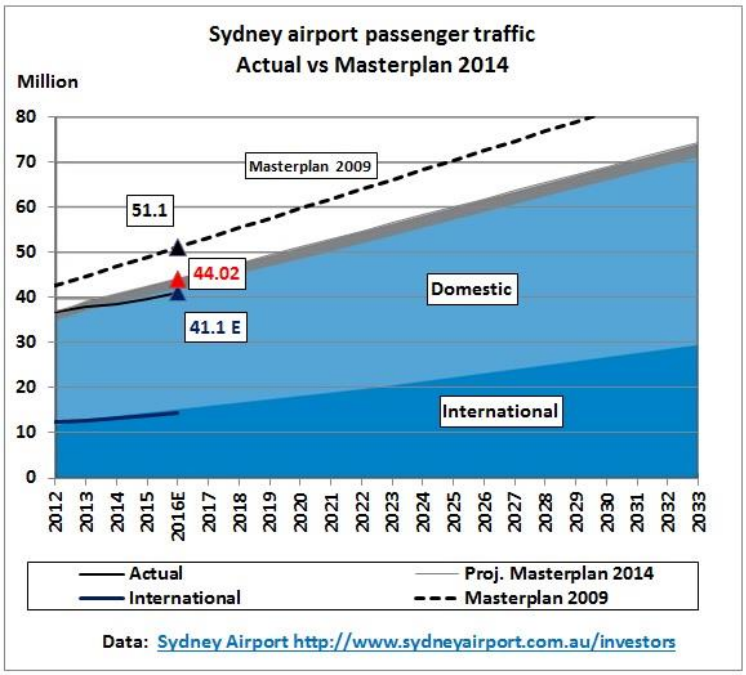
Apparently it hasn't echoed in government departments.



How will the Australian motorist compete with millions of new cars in China?

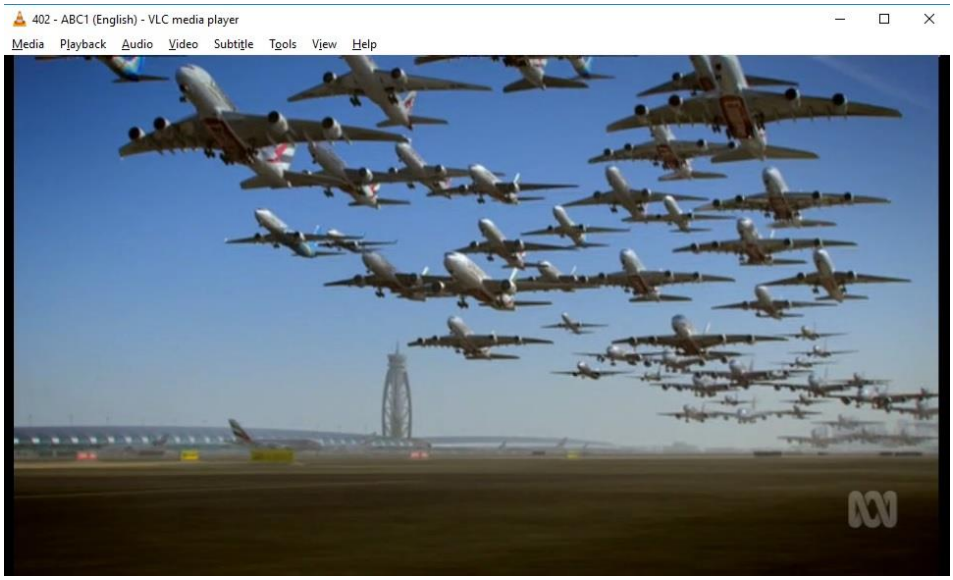
Therefore, all oil dependent infrastructure is at risk.

Badgerys Creek is another example.



This graph shows how previous estimates (of 2009) of future air traffic have been reduced in Sydney's 2014 Airport Masterplan and that actual traffic growth is again lower than in the latest plan.

Are we are heading for over-capacities in the airline industry similar to the shipping industry? All the while the public ABC TV broadcasts a series "City in the sky" claiming air traffic will double in the next 20 years.



Propaganda of the airline industry parroted by the public broadcaster

Recommendations:

(1) The government needs to come up with sustainable plans in all sectors of the economy. Without this framework super investments will be lost. The PC draft paper uses the term “sustainable” mostly in the sense of “continuing for a long time” not in the sense of renewable systems. This wording has to be changed.
(2) The Treasurer should re-assess the value of super investments claimed to be 2 trillion (page iv) and compare it to the cost of acquisition. That will help him to understand what is really going on with the economy since around 2005
(3) The government must not plan, promote, subsidise and implement oil dependent infrastructure which also attracts contributions from super funds. The same applies to all other fossil fuel dependent projects.

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9/9/2016

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