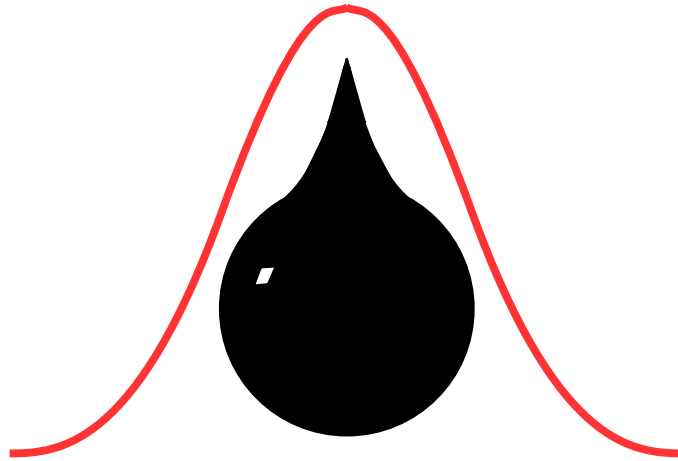


SUBMISSION ON THE DRAFT ENERGY WHITE PAPER



ACT Peak Oil

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Introduction

[ACT Peak Oil](#) was founded to raise awareness of Peak Oil – the inevitable peaking and decline of world oil production.

The basic approach in the draft white paper to future oil supply seems unrealistic and overly optimistic. As a consequence the proposed actions in the draft, to address potential future problems with regard to oil, are inadequate.

Flawed IEA projections

The approach to oil is based on International Energy Agency projections, as set out in the paper. These projections relate to two aspects which are inherently inter-related: global oil production, and price.

One projection is that global oil consumption will be maintained through to 2035 at the level of global oil consumption now - that there will be no decrease in global production over the next 23 years (pages 30, 31). It is a well recognised fact that 'conventional' (low cost) oil supply is steadily falling. The only way for global oil production to be maintained at present levels is for 'unconventional' oil to fill the gap, that is, tar sands, deep sea oil, and oil from shale, coal and gas. As the likely supply of oil from conventional sources relentlessly falls, these other sources of supply will need to expand relentlessly on a scale quite unimaginable compared with now, to maintain the constant level of production projected by the IEA.

New unconventional sources will need to be continually found and developed, involving capital spending on quite a different scale from conventional oil to date. They are very high cost compared with conventional oil. These new sources typically also face barriers, and hence additional high costs, in terms of energy input needed in relation to energy output, environmental costs, and greenhouse gas emissions. In summary, these new sources will only be able to fill the ever-widening gap with an ever-increasing, high price of oil. It is difficult to see, therefore, that oil prices at present day levels will be adequate to finance this very different, much higher cost, global oil scene up to 2035.

However, rather than provide for this necessary support, if oil production is to be maintained, the IEA projects future prices completely at odds with this first scenario. The IEA projects that global oil prices will rise from around US\$78 a barrel in 2010 to US\$120 by 2035 (in current dollars) (page 31). In fact oil prices are currently at about \$120 a barrel for Tapis and well above \$100 for WTC. The IEA oil price projections in effect allow little significant increase over the next 23 years, to finance a vastly different, much higher cost, supply of global oil.

The two projections are thus completely at odds with one another. A highly plausible outcome in fact is that the two related projections are both wrong, and the two related factors will connect with one another by each being modified from the IEA projections: prices will rise much more than the IEA projection and global production will be lower.

The basic assumptions in the draft white paper for Australia seem based on these flawed IEA assumptions, and consequently the conclusions and recommendations of the draft need re-examination.

US developments

Recently there have been claims that the discovery of new gas sources in the US will transform the supply of oil in the US, so that 'an energy revolution' will take place in the US, that it will be freed from significant dependence on oil imports, and that the whole concept of peak oil can be discarded. These claims are utterly unbelievable, and in fact are not supported by sober projections. For instance, the US Government Energy Information Administration (part of the US Department of Energy), in its 2011 Energy Outlook projected that the natural gas-sourced percentage of US liquid fuels would rise from 10% in 2009 to 13% in 2035. Thus liquids from gas are likely to contribute only a small, inadequate and high cost offset to the decline in oil production.

BITRE report

The unrealistic optimism of the IEA projections on production are underlined by the conclusions of the comprehensive 2009 report from the Bureau of Infrastructure, Transport and Regional Economics: Transport Energy Futures: long-term oil supply trends and projections, Report 117. Based on an exhaustive survey of data, it concludes that total conventional oil production peaked in 2006 (a conclusion widely accepted now), and that taking into account all likely other sources of unconventional oil, following a plateau to 2016, during which unconventional oil sources will replace the fall in conventional oil production, there will be an unavoidable steady decline in total global oil production from all sources, continuing on through the 21st century. So as to pursue the national interest in a prudent way, the probable, or at least quite possible, projections in the BITRE report should be the basis for policy on oil, rather than unrealistic scenarios of increased oil consumption in Australia (see below), steady oil production globally, and oil prices scarcely higher than today.

Australian projections

Even accepting the IEA projections, some of the projections for Australia seem unrealistic. For instance, it is assumed that the total share of energy used in Australia represented by oil will remain stable, and that the consumption of refined petroleum products will rise by an average of 1.2% a year, to 2035 (page 113). This means that in a world where total oil production does not rise, according to the IEA, and where emerging markets are taking a growing share of oil, and developed economies a shrinking share, Australia by contrast will be consuming 32% more oil, and a significantly larger share of world oil than now. This is a scarcely credible projection, and can only be based on various questionable assumptions, such as that the high Australian dollar continues for more than two decades, and that we will ignore potentially large efficiency gains in using oil, in contrast to other developed countries. This scenario is even more incredible if global oil production in fact falls, as discussed earlier.

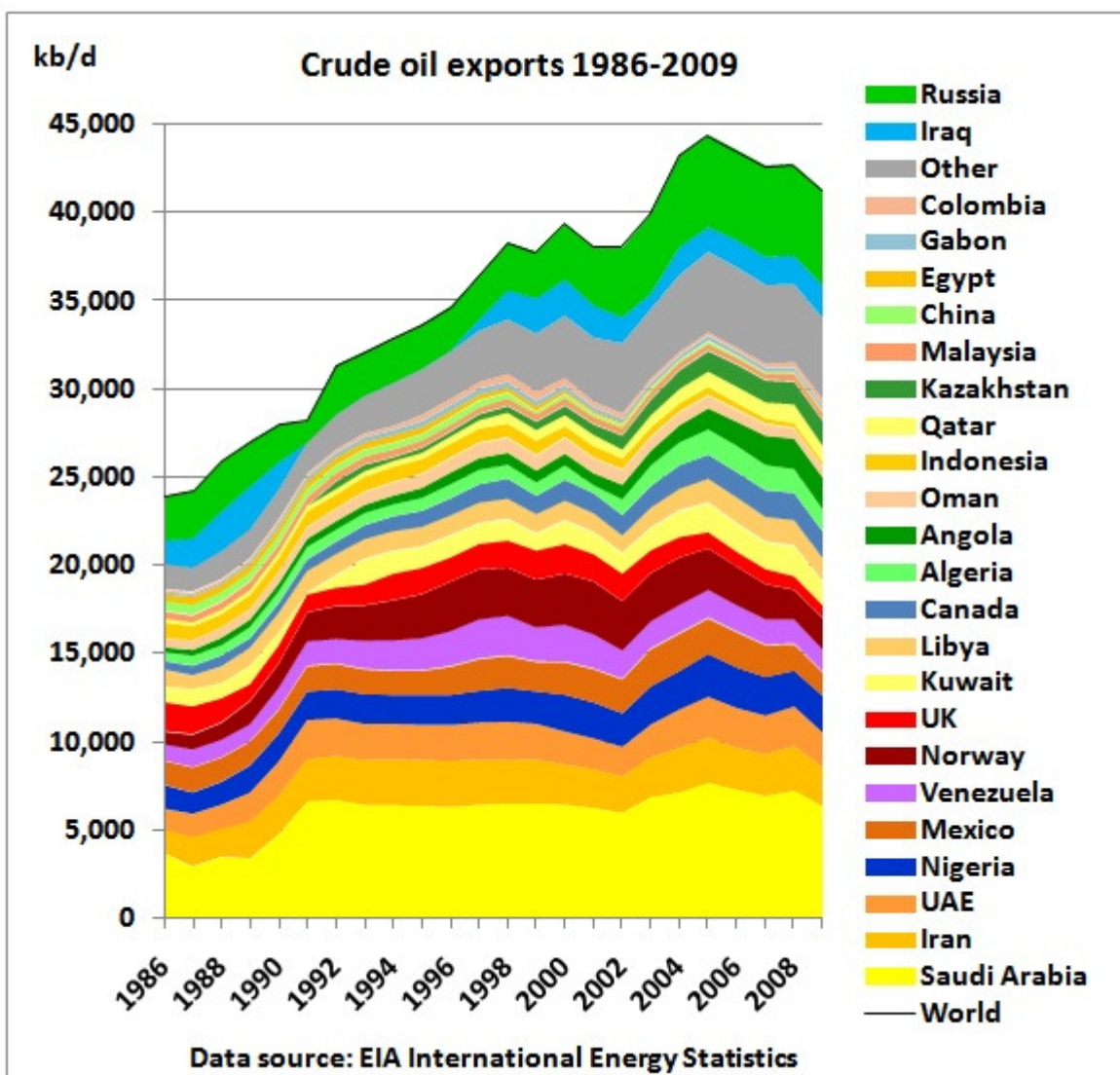
Over-reliance on market forces

The central theme of the draft paper is that Australia will rely essentially on market forces to bring about change with regard to oil. While market forces are an effective, indeed essential, tool in bringing about change in policy areas such as energy, it is dangerous to rely solely on them to determine long-term change for countries. An instance is fuel efficiency in vehicles. Readily available technology gains may not be picked up as readily as they should if taking up the technology relies essentially on the car choices of ordinary motorists, many of whom have a limited knowledge of technical possibilities. Governments

need to use additional incentives, such as changes to the structure of motor vehicle registration fees, to encourage quicker uptake of technical change which is beneficial to all.

The catch-cry used against government action of this kind is that governments cannot 'pick winners'. In fact governments bring about desirable change constantly in many policy areas by intervening in markets, using market incentives and regulation. For instance, this is done routinely in the areas of environmental protection and climate change.

An outstanding area where governments very successfully picked a winner is in relation to global oil markets. After the 1973 and 1979 oil shocks, most western governments realised how dependent they were on unreliable oil suppliers. Driven by this and by oil conservation concerns as well, in the 1980s they sharply raised oil taxation, especially in Europe. As a result of this many western economies became much less dependent on oil, eliminating,



Graph 1: World oil exports in decline

Source: Mushalik, M. <http://crudeoilpeak.info/no-number-crunching-in-alan-kohler-opinion-piece-on-premature-peak-oil-death>

for instance, oil burning for electricity. They achieved over several decades far higher efficiency in the use of oil for cars compared with the US which was the main western country to not take this wise course. It has also been argued that in moderating demand levels they put off by decades the peaking of conventional oil production, to the late 2000s.

Oil insecurity

“Australia’s liquid fuel demand will increasingly be met by imports of crude and refined product.”
Draft Energy White Paper, page 111

The draft white paper seems to address the question of oil insecurity essentially as a matter of physical disruption of supply lines between Australia and its main supply areas in South East Asia. It seems to ignore the fact that major disruption to supplies anywhere in the world will impact on global prices everywhere, so that it is not just a matter of threats in our region. The fragility of the entire global oil market is a reason to bring about urgently greater efficiency of oil use, and the minimisation of our reliance on oil.

This fragility is underlined by recent threats to global oil supplies from retaliation by Iran to attack, in the form of closing the Straits of Hormuz, or the bombing of Saudi oilfields by Iran. Instability in many parts of the world from where oil is supplied can at any time affect the global supply system, increase prices and create global instability.

The draft report makes no mention of the current decline in world oil exports. Oil producing nations will increasingly hold back oil from export markets for strategic and political reasons. The decline is already apparent (see graph 1), and will accentuate the decline in production. Australia, as a net oil importer, may not necessarily be able to trade its energy commodity exports for imported oil if Australia's exports were to be in relative abundance internationally on the open market during the coming oil crunch. Efforts at trade liberalisation may be of little use in this regard.

Oil prices and recession

Another reason for Australia, along with all other larger global economies, to hasten efforts at becoming less reliant on oil is the well-recognised relationship of oil prices with global economic recession. Rapidly rising oil prices were, at least, a contributing factor to the onset of the global financial crisis in 2007-08. What is now operating is a situation where, because of the arrival of peak oil (at least for 'conventional' oil at this stage), rising economic activity globally sets off significant rises in the oil price, which in turn helps to dampen this rising activity. The only way to avoid this negative feedback, long term, is for economies to become less dependent on oil. Rather than look forward to higher levels of oil consumption, in its own national interest, and to benefit the global economy, Australia should be actively seeking to lessen its dependence on oil and should use its influence internationally, working multilaterally, to assist other countries to do the same. Australia is on course to take the high road – high energy intensity and high risk.

Government actions

It is recommended that government policies and actions be based on a prudent recognition of a high likelihood of a long-term growing scarcity of oil, and an increasing higher price of oil, over coming decades.

As well as using this as a basis for all future policy-making, the following specific actions by the Australian Government are recommended, to begin this put this prudent approach

into place.

- Work with the states and territories to encourage the upgrading of Australia's vehicle fleet from fuel inefficient to fuel efficient through various means.
- Gradually increase the excise (tax) on petrol, LPG and diesel from 38.143c. (Currently petrol excise is fixed at 38.143 cents per litre, and is therefore decreasing in real terms). Additional revenue raised could fund, for example, reductions in registration on fuel efficient vehicles, investment in public transport, assistance to essential forms of motor transport, or income tax cuts.
- Tax aviation fuel, currently 3.5 cents per litre, at the same rate as automotive fuel.
- Impose the carbon tax and emissions trading scheme on petroleum and diesel, as their current exclusion discourages the use of electrified transport.
- Reduce tax incentives for biofuel production, so that its price reflects environmental cost and its net energy yield. Desist from biofuel boondoggles.
- Eliminate the subsidies to Australia's automobile industry and tariffs on foreign cars as this system increases the relative price of small fuel efficient foreign manufactured cars and depresses the price for fuel inefficient vehicles made by the Australian automobile industry. (The money allocated could be spent on public transport, or on retraining programs for Australian automotive workers.)
- Discourage the provision of vehicles and car parks to employees and encourage instead the disbursement of cash payments to encourage the use of public transport. Alternatively, all business tax concessions should be based on a modest 4-cylinder 1500cc vehicle. Those needing a bigger car should be free to buy one, but taxation/mileage/reimbursement should be based on a 4-cylinder 1500cc engine vehicle.
- Determine a population policy for Australia based on its capacity to produce food with a steadily diminishing supply of oil.
- Advocate oil depletion protocols, which essentially require that all countries reduce consumption at the same rate as oil production declines, thereby making the rise in oil prices steadier and more manageable as well as reducing the possibility of conflict over declining supplies.

ACT Peak Oil Incorporated

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