

# Australia's crude oil self-sufficiency:

## Does it matter?

Eriks Velins

In calendar year 2004, Australia produced 357,000 barrels per day (b/d) of crude oil towards a demand of 858,000 b/d of petroleum products, resulting in us being roughly 42 per cent self sufficient. If the 14,700 b/d condensate produced in Bass Strait is included, which is co-mingled with its crude oil, then self sufficiency would rise to 43 per cent, considerably less than present Government estimates of some 65 per cent. Furthermore, this number is declining rapidly, perhaps by some 5 per cent per annum. Why is there such a discrepancy?

Australian refineries have been designed to refine indigenous crude oil as well as a range of imported crude oils from the Middle East and Far East. They are not designed to process condensate though they can process small volumes of it. Condensate contains very poor quality gasoline, kerosene and diesel blending components and is usually exported as a feedstock for the production of petrochemicals. It is a byproduct from the production of natural gas and thus totally dependent upon the size of the natural gas market. Crude oil has always been produced at the maximum economic rate. Australia has negligible capacity to vary in the short term either its crude oil or natural gas production. However, Government statisticians add all condensate to crude oil, some 154,000 b/d and may sometimes even add Liquid Petroleum Gas (LPG), around 81,000 b/d, which results in a misleading total availability figure. The real question is whether 43 per cent is an 'actual' problem or a 'perceived' problem, in either or all of general economic, national strategic and military strategic terms. The answer to this question is really a function of the expectations and acceptable cost of a short or long-term interruption to Australia's supply of crude oil.

Australia is the only member of the International Energy Agency (IEA) which does not stockpile the equivalent of 90 days net imports of oil. Furthermore, the strategic fuel stocks held by the Australian Defence Force (ADF) are believed to be minimal. Even the USA, being in a similar overall self-sufficiency situation to Australia, complies with the IEA's requirement for 90 days of holdings because of the

strategic value of such an asset (and despite the very high cost involved).

The Australian supply chain, from oil production to final consumer, contains some 45-55 days worth of 'oil and petroleum products' but these represent minimum operational requirements, being the largest outlay of working capital for the oil company, and include oil at sea and all blending components in the refineries. Thus, should there be a short-term interruption to supply, as was the recent case in the USA during the hurricane season, Australia has no buffer other than what is in the consumer's own tanks. So it had to accept a large spike in price. Does that matter? For many consumers it matters, as is shown by the continuing debate on petrol prices and the implied request for an immediate subsidy or lowered taxation. Given the extremely tight global production and refining chain, an incident anywhere in the world can now lead to a short-term pricing crisis.

Should there be a longer-term emergency, Australia would invoke the Commonwealth Liquid Fuel Emergency Act 1984 and the National Liquid Fuel Emergency Response Plan, managed by the National Oil Supplies Emergency Committee. This is essentially a rationing process, which neither increases supply nor reduces real demand and will lead to a sub-optimal economic solution. It would also be most unlikely for other members of the IEA to share their reserves with Australia on such an occasion. But how often has such an emergency arisen? Only once or twice in my memory, although that may not necessarily be a guide for the future, since oil production has peaked in most non-OPEC countries. Some oil producers now view oil as a political weapon and its strategic role is well recognised – as is acceptance that there are no practical alternatives to oil in the short or medium term.

Politically Australia favours a market-led approach to diminishing crude oil self sufficiency. But would there be enough time in an international or domestic crisis to create an economic supply as well as reduce national demand? For the medium term, the Government has a number of 'no regrets policy' options, though none will have much of an

*Continued on page 26*

My view is that Australia is at war – at war with a new form of totalitarian ideology, as evil as the fascist and communist forms which the democracies fought during the 20th century. It is not a war Australia sought, nor a war that we can escape by feeding others to the crocodiles in the hope that they will eat us last. We are told that the cause of this war is Australia's involvement in Iraq. But even if we concede that Iraq is currently exacerbating jihadist terrorism, that doesn't alter the fact that it began well before Iraq, and it will continue after coalition forces leave Iraq.

The enemy in this war adopts the rhetoric of Islam, but they are in fact quite alien to the traditions of Islam, and particularly to the traditions of Islam as practised in Indonesia. Some call this ideology Islamofascism, others jihadism or Islamism. Whatever we choose to call it, we know what it looks like and we know what it is capable of. It has already claimed the lives of nearly a hundred Australians, in New York, in Bali, in London, in Jerusalem. That it has not so far claimed Australian lives on our own soil is a combination of good luck and good intelligence work by ASIO and the AFP.

As a social democrat, I believe in a pluralist Australia. I believe Australia should accept, and indeed welcome, migrants and refugees from all countries, including Muslim countries, and that we should prevent victimisation of Australian Muslims. I reject the view that all Australian Muslims are potential terrorists. I am always careful to distinguish Islam from the *Islamist* extremists who misuse it for political ends.

A small number of Australian Muslims are active sympathisers with the jihadist death cult, and some have trained abroad with terrorist-affiliated groups. A few, like Jack Roche and David Hicks, are deluded converts. Others are immigrants, and they are an urgent problem that the leadership of our Muslim communities must confront. The days are over when a minority of imams could get away with incitement in Arabic on the assumption that the genial Aussies were too dumb to notice.

Over recent weeks in Canberra, despite all the shouting, we saw a mature democracy at work. When the national interest is at stake, the mainstream parties work together to achieve an outcome which both protects Australia from terrorism and protects the safety of Australians. When a government tries to trample on the long-cherished Australian tradition of fairness in the workplace, the Opposition resists tooth and nail.

When improved safeguards have been inserted in the major anti-terrorism legislation, I will vote for it, and I don't intend apologising to *The Age* for doing so. I will vote for this legislation not out of political expediency but out of principle. I still want the Liberals and their industrial relations laws voted out at the next election. That I can hold both these views simultaneously is what makes democracy worth having and Australia worth protecting. ♦

*Michael Danby is the Labor Member for Melbourne Ports and Secretary of the Caucus National Security Committee.*

### *(Australia's crude oil self sufficiency)*

*Continued from page 31*

impact for a decade or more as they all imply a replacement of the existing transport capital stock. Fuel taxation reforms, already rejected by the Government, would favour diesel fuel and its very efficient engine. The accelerated introduction of clean petrol and diesel specifications would enable Australia to take full advantage of the high-efficiency engines now available in Europe. The introduction of fleet fuel efficiency targets, as was done most successfully in the early 1980s, would reduce the absolute consumption of fuel. Whether Australia does or does not have a self sufficiency problem is not the critical issue. The key imponderable is the world's vulnerability to instability affecting Middle East oil supplies and the implications for our secure long-term supply of crude oil, especially as China's need for imported oil keeps soaring. Australia should try to manage its future transport costs and any prudent Government would take these 'no regrets' measures today.

For the long term new, internationally competitive, oil exploration and production regimes are essential but ultimate success in Australia is limited by continental geology. So is a strong, sustainable economy. A Government-industry production risk-sharing contract for the manufacture of diesel from natural gas is the obvious low-risk choice strategically, because such a structure is necessary due to Australia's high natural gas and construction costs. Two plants could replace Australia's total needs for diesel fuel as well as create value for currently stranded deposits of natural gas. This approach would, however, cost serious amounts of public money.

At 43 per cent (and declining) our crude oil self sufficiency situation is a problem. This waning level of self-sufficiency does matter and can no longer be acceptable for risk management of our fuel supplies. The Government should comply with the IEA requirements for strategic storage of crude oils to handle and smooth out short-term supply issues. The Government should also orchestrate a partnership role in a commercial-scale gas-to-liquids project to cope with the long-term structural problems of the international and domestic oil extraction industry. Should this not be done, there are obvious implications, not least for the defence force. If the ADF is required to deploy overseas in strength at some future date, it better make sure that it has enough fuel to get there as well as to return, for such stocks may no longer be available in Australia or as readily available overseas. ♦

*Eriks Velins is a retired chemical engineer with some 45 years experience in the international petroleum industry. His senior appointments have included Vice-President, Planning and Oil Marketing at BHP Petroleum, General Manager, Corporate Planning and Economics at Shell Australia, and Head of the Marketing Information Systems Division at Shell International Petroleum in London. A graduate of the Australian Department of Defence's Industrial Mobilisation Course in 1977, he is a council member of the Defence and Industry Courses Association.*