

## A Shift in Attitude I

“Climate change, urbanisation and resource shortages - most notably oil - are fuelling a move away from large cars to smaller, lighter alternatives. There has been a significant shift in attitudes towards the car of late, although until recently these attitudes did not noticeably translate into major behavioural shifts. We all know about the environment, of course, but for a large number of people a bigger concern is the price of petrol. Have we seen this before? Certainly. The oil crisis of 1973 sent shockwaves through the automotive industry and for a while car dealers in some countries couldn't shift sports cars, convertibles or gas-guzzlers for love or money. But this time it's different. In '73 the crisis was caused by a supply problem. In '08 the problem is demand. There may be some short-term relief, but it's probably a safe bet to assume that it's more a case of "when" rather than "if" the price of oil is driven even higher.

“So what does the road ahead look like now that cheap oil is history? In the short term we'll see taxation, loan rates and even parking charges linked to vehicle type. We'll also see more anti-car sentiment, which will drive car-sharing schemes, green-car rental, fractional ownership and more hybrid and electric vehicles. You can see this already in the US, where companies like Zipcar are re-inventing the wheel by introducing car-sharing clubs for city-dwellers. You can also glimpse the future in Japan where many younger drivers are finding car ownership too difficult and expensive and are switching their enthusiasm to other forms of machinery. Mobile phones and computers are fast becoming a measure of status and independence in the same way that cars were for previous generations.

“Of course, the future can also have two wheels. In Paris, bicycle vending machines are a big hit. Another thing we'll hopefully see in the future is a re-invention of public transport. We've been waiting a long time for this and from an energy efficiency point of view this is a must. However, it's unlikely to happen until politicians themselves get out of their chauffeur-driven cars and start using public transport themselves.”

Ref: Richard Watson , Herald Sun, 9/8/08



Back To The Future

## A Shift in Attitude II

“Mercedes has surprised the Senate review into the luxury car tax with a radical proposal to include cars in a carbon reduction scheme. The German manufacturer says the proposal would kill two birds with one stone: it would tackle emissions on vehicles at the same time as enhancing Australia's bargaining power in free trade negotiations. The idea would provide an incentive to replace older vehicles with greener cars by applying a sliding impost on CO2 emissions. It would be phased in over five years as the luxury car tax was phased out. ‘We believe that the LCT is in effect a false tariff and damages our free trade reputation’, the company told the Senate review on Tuesday. ‘It is a tax on safety and penalises vehicles that introduce low emissions and reduced fuel usage’.”

Ref: Philip King, The Australian, 9/8/08

## Meantime in the Mail ...

“Dear Mr Ingrouille,  
“The meek might inherit the earth (sic) one day but until then you'll own the road when you drive the new” [model of car with] “opposed boxer engine whipped into even tougher shape” [Wow! It] “goes from 0-100 in just 5.2 seconds. That's 0.2 of a second faster than its predecessor. To anyone else that doesn't sound like much” [actually it doesn't sound like much] but to those in the know it's a lifetime.” [Albeit a pretty short lifetime, perhaps a microorganism or something. But wait there's more:] “So for Power, Dominance, Control and a rush you'll never forget, test drive ...” [No thanks]. Ref: Mr Sica, Subaru, 15/8/08

## And Also ...

“A controversial plan backed by Indonesia's president to turn water into cheap and limitless energy has run aground, with tests showing the wonder fuel is just plain diesel, a report said today. Government scientists have revealed that tests on the so-called ‘Blue Energy’, purportedly made from water, showed it was diesel from state oil company Pertamina, The Jakarta Post reported. ... The plan was exhibited at the United Nations climate change conference in Bali in December with the president's blessing. Suprpto went missing last month but was found in a hospital in West Java suffering from heart problems after Yudhoyono, fearing he had been abducted by jealous oil barons, ordered a police search, Tempo news magazine reported.” Ref: The Age 3/6/08

## And Also ...

“Why would Putin want to invade a country that hasn't got oil?” US President George Bush (in Tanberg cartoon) on Russia's incursion into Georgia. Ref: Tanberg, The Age, 15/8/08

## Victorian Monorail Proposal

*“German company ThyssenKrupp Transrapid has proposed the construction of a maglev monorail between Geelong and Frankston, with connections to Melbourne and Avalon airports, that would travel at an average speed of 275km/h and possibly up to 500km/h in rural areas. Its proponents say the monorail would reduce the Geelong-Melbourne commute to just 20 minutes.” Ref: F R Perry & Associates, July Newsletter, 2008*



Maglev System Transrapid

Ref and Submission to Edgington:

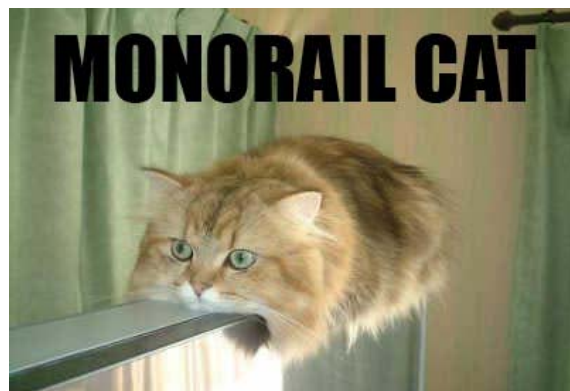
[http://210.15.220.118/ewina\\_submissions/EastWestResponse\\_100708\\_ThyssenKruppTransrapidAustralia.pdf](http://210.15.220.118/ewina_submissions/EastWestResponse_100708_ThyssenKruppTransrapidAustralia.pdf)

*“The consortium's submission said the monorail would: Hover above the track using magnetic levitation; Reach speeds of 500km/h in rural areas; Silently cruise at 250km/h in urban areas; and, Operate safer and cleaner than normal rail transport. But the submission also revealed considerable cost - calculated to be about \$4 billion per 100km of double rail lines.”*

Ref: Martin Watters, Herald Sun, 30/7/08

*“For half the price of the planned rail tunnel Transrapid can build a high-speed monorail from Geelong to the Airport to Frankston - more than 100km. However, maglev track takes up far more space than a conventional ALWEG monorail so should only be routed down existing freeway easements. The CBD - Frankston section of a Maglev could only run down St. Kilda Road and Nepean Highway which is likely to be unacceptable.” Ref: New Australia [www.newaustralia.net/significant\\_subs.html](http://www.newaustralia.net/significant_subs.html)*

## And Also ...



## New Country Trains in Victoria

*“An extra nine trains will be added to Victoria's country rail system at a cost of \$236 million. The new Vlocity train sets will be running by 2012, putting 2000 extra sets on the regional train network, dramatically boosting its fast rail capacity. The additional trains, which will operate on the Geelong, Bendigo, Ballarat and Traralgon lines, will be built by Bombardier in Dandenong. Announcing the new carriages in Ballarat yesterday, Premier John Brumby said the rail package would help deal with the massive growth in patronage across the regional rail system. ‘If you look at the orders which are presently in the system, plus the 28 extra carriages today — 50 in total — (they) will enable a 50% increase in patronage’, he said. Twenty-two carriages under construction will be rolled out from this month.”*

Ref: David Rood, The Age, 1/8/08

## Flying Green II {continued from last issue}

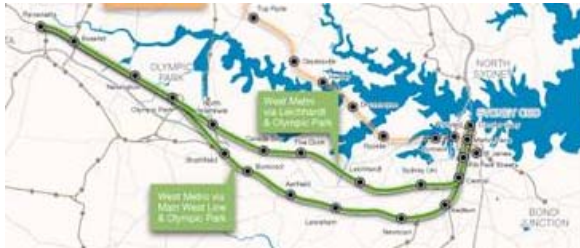
*“Behind the news about oil prices and climate change, the airline business is fighting a rearguard action to save its reputation. Somehow - and the industry doesn't understand why - the aviation industry has earned a reputation among environmental groups as one of the dirtiest and most dangerous polluters on the planet. ... Air travel contributes just 1.5 per cent of global greenhouse emissions (and only 1 per cent of Australia's emissions), a fraction of the emissions of land transport, which contributes about 14 per cent. According to figures that Qantas ... air travel on average uses 3.5 litres of fuel per passenger per 100 kilometres, the same as for a small, ultra-fuel-efficient car, but at eight to nine times the speed.” Ref: Clive Dorman, SMH, 8/8/08*

*“Planes emit a range of greenhouse gases that directly and indirectly raise the temperature of the atmosphere. And at the high altitudes at which planes cruise, the warming effect of these emissions is 2.7 times as great as the same emissions at ground level. The real issue is not so much the emissions produced for each kilometre a passenger travels. It is that planes allow us to travel so many kilometres in one journey, thus producing so much more pollution per passenger than driving a car does in a year. For example, a return flight from Sydney to London emits the equivalent of nine tonnes of carbon dioxide per passenger, David Spratt, the co-author of Climate Code Red, told me. That is double the amount the world population on average produces each year through eating, driving and heating and cooling their home. In other words, two years' worth of our individual quota of CO2 emissions is gobbled up in one trip to Europe and back.”*

Ref: Adele Horin, SMH, 9/8/08

## NSW Green Line

*"The Commonwealth and NSW governments have agreed the terms of the studies into the proposed Western Metro (Green Line) ...*



*The Green Line would be independent of the existing CityRail network, with transfer opportunities at key points. The feasibility study will identify the best route options and develop a business case using estimates of patronage, revenue and cost. On a typical weekday, almost a quarter of a million people travel by train between Parramatta and the CBD – and this is likely to rise significantly with predictions that the population of Greater Western Sydney will grow by another 500,000 over the next 25 years. The feasibility study's \$30 million price tag will be paid by both the Commonwealth (\$20 million) and NSW (\$10 million) governments." Ref: Federal Government Media Release, 11/8/08*

## Qld Green Vine

*"A hectare of the trees can produce 5500 litres of biodiesel a year – enough to run 100 cars for a year. All of Queensland's fuel needs could be met by about 1.5 million hectares of the trees – an area about 10 times the size of Brisbane. The potential for large-scale commercial production is 'super high' says Professor Peter Gresshoff, an expert in plant biotechnology and biofuel at the University of Queensland. 'In a few decades' time, I believe we will have large forests of pongamia [pongamia pinnata – sometimes referred to as native wisteria] along the Bruce Highway', Prof Gresshoff said. Growing trees as a source of biodiesel has a double appeal in countering climate change. The trees would absorb carbon and reduce future greenhouse gas emissions by offering a renewable alternative to fossil fuels.*

*"The native wisteria, often grown as an ornamental because of its purple flowers, could be ideal as it has already adapted to Australian conditions and will tolerate drought, frost and salty soils, meaning it could be grown in many areas, Prof Gresshoff said. And because it's a legume, it produces its own nitrogen, eliminating the need for fertiliser. The oil, similar to olive oil,*

*is produced in seeds inside large pods. The trees take five years to reach their first yield but then produce annually for up to 100 years. And the bonus, Prof Gresshoff said, was that as a legume the trees would provide a high-protein feed for cattle which would be worth as much, or more, than the diesel itself. The researchers are looking at the best areas for planting and trying to develop variations which could produce five times the number of seeds.*

*"Gum trees are also being looked at as a possible source of biofuel. Queensland Sustainability, Climate Change and Innovation Minister Andrew McNamara recently returned from a trade delegation visit to Brazil where major companies including Dow Chemicals are looking at how to produce lignocellulosic – or second-generation – ethanol from the woody parts of plants, rather than sugar or grains. 'They feel they are five years away from correcting this process', Mr McNamara said. 'It's tantalisingly close'. Queensland scientists are watching closely, believing the method could be used to produce fuel from eucalypts. 'Gums grow quite quickly and have quite a mass', Mr McNamara said. 'We need to pursue every rabbit down every hole in the search for sustainable energy sources. There's no silver bullet, but there's a lot of silver buckshot'.*

*"Mike Jubow, who runs the Nunyara Forest Nursery at Mackay, has been importing seeds for the so-called 'diesel tree' – copaifera langsdorff – from Brazil for two years. He has supplied about 100 growers with a total of 50kg of wild seed, enough for about 50,000 trees. 'But we've been getting a lot more inquiries since the fuel prices have gone right up', he said. Mr Jubow, who normally imports 10kg lots of seed, said he would have to place an order in for 20kg-30kg to keep up with the growing demand. A latex-type oil can be extracted from the trees and converted quite simply to biodiesel. A 1ha plantation is expected to produce 10,000 to 12,000 litres a year and the first harvest would cover the cost of planting and nurturing, but the trees take about 15 years to mature and have to be hand-harvested. They are suited to high rainfall areas.*

*"Another import being considered is the jatropha, a drought-resistant shrub being cultivated by BP as a biofuel in India, southern Africa and South-East Asia. But Mr Jubow said the toxic plant, nicknamed 'the bellyache bush', should be kept out of Australia. It has already been declared a weed in Queensland. Another plant with biofuel potential but also regarded as a weed risk is euphorbia lathyris, or caper spurge."*

**Ref: Daryl Passmore, Courier Mail, 10/8/08**

## Peak Oil (Pt 1)

*"In the furore over increasing oil prices, the two words our leaders seem determined not to mention are 'Peak Oil'. Having built our prosperity on cheap energy from fossil fuels, particularly oil, it is perhaps understandable that they cannot bring themselves to admit that business-as-usual is over as cheap energy disappears; firstly due to the need to address global warming, and secondly due to the peaking of global oil supply which will probably have even greater impact than global warming in the short term.*



*"Peak Oil takes its name from the bell-shaped curve which typifies the production profile of any oilfield. Once an oilfield is discovered, oilwells are drilled and production rises until drilling saturation is reached, whereupon production levels off at the peak. It then drops along the declining segment of the bell shape until the reservoir is exhausted. This profile applies to an individual oilfield, to all oilfields in a region and now to the globe, although it may get distorted along the way by, for example, geopolitics.*

*"At the peak, oil does not run out, as roughly half of the ultimately available oil remains to be produced. However, it is the point, globally, at which further expansion of oil production becomes impossible because production from new oilfields is more than offset by the decline of production from existing fields. It may be a sharp peak if, for example, some of the giant fields start to decline rapidly, or it may be an undulating plateau spread over a number of years if, for example, oil demand is destroyed as a result of recession or developing countries are no longer able to afford high oil prices. Once demand begins to exceed supply, oil prices rise, as they have been doing over the last few years; the bigger the gap, the higher the price.*

*"The 'official view' until recently, from organisations like the International Energy Agency, the IEA, the energy watchdog of the developed world, was that we had abundant oil resources available from both conventional and unconventional sources, which would meet rapidly expanding global demand as China and subsequently India, became large consumers. The economists took comfort as the oil price rose, on the grounds higher prices would stimulate additional production so that supply eventually balanced demand and forced the price down in the classical mode, as an eminent*

*Australian economist colourfully put it, 'If the price of eggs is high enough, even the roosters will start laying!'*

*"Maybe so, but it's one thing to have oil resources in the ground, it is quite another to convert those resources into oil flows to the market. It now seems there are unexpected problems in so doing, to the extent that we are probably approaching the peak of global supply. We may have already passed the peak, or it may be some years ahead, but the exact date is less important than accepting the principle and taking action to prepare for it. The 'official view' is now scrambling to catch up with reality. As the Chief Economist of the IEA recently commented, '... putting these two things together, the short and medium term security of our oil markets, plus the climate change consequences of this energy use, my message is that if we don't do anything very quickly, and in a bold manner, the wheels may fall off. ...' In urging OECD governments to rapidly change policy from 'business-as-usual' he commented '...we must leave oil before it leaves us'.*

*"The reasons supply is not expanding are first that we are not discovering new oilfields quickly enough. Second, data on existing fields is suspect, particularly in the Middle East, so we may not have as much oil as we thought. Third, production from many existing oilfields is declining as part of the natural process often more quickly than admitted officially. Fourth, unconventional oil resources such as deep water and tar sands, are proving more difficult to develop, technically and economically, even with higher prices; they also have major environmental problems such as high carbon emissions and high demand for water and energy, to the point where in some cases, almost as much energy is needed to produce the oil as is ultimately recovered. Fifth, oil producing countries are using more oil domestically and are less prepared to export it.*

*"Given the absolute dependence of modern societies on oil and gas, price hikes and supply shortages will be traumatic, as already evidenced by current unrest in Europe, and protests in the Middle East and Asia as oil subsidies are withdrawn. Australia is particularly vulnerable, but the issue was ignored by the previous Federal government and is barely acknowledged by the new government. Peak oil is arguably the biggest issue Australia will have to contend with in the next decade. Strange it did not even rate a mention at the 2008 Summit." {Continued next week}*

**Ref: Ian Dunlop, Ockham's Razor, 27/7/08**

<http://www.abc.net.au/rm/ockhamsrazor/stories/2008/2313512.htm> Image: ABCTV 4 Corners