Warning on Peak Oil

"One of Britain's most respected financial institutions has warned of 'catastrophic consequences' for businesses that fail to prepare for a world of increasing oil scarcity and a lower carbon economy. The Lloyd's insurance market and the highly regarded Royal Institute of International Affairs, known as Chatham House, says Britain needs to be ready for 'peak oil' and disrupted energy supplies at a time of soaring fuel demand in China and India, constraints on production caused by the BP oil spill and political moves to cut carbon dioxide to halt global warming. 'Companies able to take advantage of this new energy reality will increase both their resilience and competitiveness. Failure to do so could lead to expensive and potentially catastrophic consequences', says the Lloyd's and Chatham House report, Sustainable Energy Security: strategic risks and opportunities for business". …

"The review is ground-breaking because it comes from financial experts but contains the kind of dire warnings associated with environmental groups. It takes a pot shot at the International Energy Agency, noting: 'IEA expectations [on output] over the last decade have generally gone unmet'. The report predicts the world is heading for a global oil supply crunch and high prices owing to insufficient investment in oil production and a rebound in global demand following recession. It repeats a warning from Professor Paul Stevens, former economist from Dundee University, at an earlier Chatham House conference that lack of oil by 2013 could force the price of crude above $US200 a barrel. It also quotes from a US department of energy report highlighting the economic chaos that would result from declining oil production as global demand continued to rise, recommending a crash programme to overhaul the transport system. 'Even before we reach peak oil', says the Lloyd's report, 'we could witness an oil supply crunch because of increased Asian demand. Major new investment in energy takes 10-15 years from the initial investment to first production, and to date we have not seen the amount of new projects that would supply the projected increase in demand'."
Ref: Terry Macalister, Guardian, 11/7/10

Applying the big moz

"The easy oil has been extracted and it is open secret that we are now relying on hard to reach oil to meet our future needs. Given the extent to which the developed world relies on access to cheap fossil fuels it is incredible how little has been done to improve energy efficiency and increase the proportion of our needs that can be met by renewables. Having squandered so much of the time in which we could have made steady progress to reduce our reliance on finite fossil fuels, I anticipate widespread chaos and panic when demand outstrips supplies and prices shoot up again. **Ref: Matt Prescott, Guardian, 11/7/10**

"The refusal to confront this issue has gone on for decades (the timing was first estimated by Hubbert back in 1956 and he got the US peak right to within a year, so it's not as if there's any excuse for the powers that be not knowing). I suppose it will take the $200 barrel's effect on the price of food to start to make people wake up. And $200 is just the start. Years ago, Matt Simmons estimated on his website that about 1m people were aware of peak oil and the other 6.4 billion (at the time) were 'whistling past the graveyard'. They're still whistling - and most of them have their fingers in their ears too." **Ref: 'Keep Smiling', Guardian, 11/7/10**

"Peak oil is not about a lack of fuel, it is about the collapse of our industrial society. Apart from fuel, oil also supplies most of our plastics - so just about every modern manufactured object, from cars to coffee makers, will no longer be available. Oil also supplies the fertilisers without which our current agricultural production is not sustainable. … Of much more concern will be the daily reality of life without oil. No road transport. No electric light. Empty supermarket shelves once the trucks stop coming. Most kitchens will simply become rooms with a lot of defunct gadgets. There will be no piped water once the waterworks run out of power. No toilets once the sewer pumps stop."
Ref: 'Bellroth', Guardian, 11/7/10

Overheard …

"Don't worry about the parking meter; the fine will only be about $100"

– A rather, shall we say, corpulent man in a suit outside the opening of a new sustainable building in Carlton on July 13. Apart from the obvious, that the fines are not high enough, the act of driving to the grand opening demonstrates an interesting condescension. Nine tram routes pass within 2 minutes walk of the site and there is a train station within 10 minutes walk. Some just don't get it!

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UK Measures to Reduce Congestion

"Employers will be encouraged to let staff work from home as part of a Government campaign to cut traffic congestion. … Incentives could be introduced to encourage flexible working hours and train companies will be encouraged to overhaul how season tickets are sold, so people who only spend part of the week at an office are not penalized. Norman Baker, the Liberal Democrats' Transport Minister, believes traditional travel patterns have to change if the Coalition is to create the low-carbon economy it promised. … He said: 'Part of my brief as a transport minister is to sometimes encourage you not to travel. I want to be the first virtual transport minister … The kind of initiatives I'm working on will do away with the rush … reducing demand will reduce congestion, pollution, and stress in our daily lives. Working just one day in 10 from home would have a huge impact. … Transport choices in the 21st century should also fit a 21st century world where we shouldn't just use smart cards to travel, we should be smarter about when we travel and when we use office technology for virtual travel instead. The results will be tangible – reduced congestion, reduced carbon emissions, improved quality of life, and if we're all working from home we might even start talking to our neighbours again. Now that can't be a bad thing for our communities'." **Ref: Traffic Technology Today, 12/7/10**

Bike Share

"London has had its first glimpse of the 6000 bikes that are to be used in the city's new congestion-busting Cycle Hire scheme. … The bikes will hit the road on July 30. … The bikes will be lined up at 400 stations all over London ready for residents and tourists to use. … London mayor Boris Johnson, himself a keen cyclist, said: 'London will glitter with the twinkling dynamo lights of thousands of shiny Cycle Hire bikes, allowing Londoners and visitors to zip around the streets unfettered from timetables, queues and crowds' [and presumably helmets]." **Ref: SMH, 11/7/10 (Photo: Getty)**

I really want Melbourne's Bike Share to work but I'm yet to see one bike in use in spite of clement weather. I think the problem is our car-dominated streets rather than the helmet issue. I note that there is nothing on the information pillar – where you pay – about the need for helmets (only on the bikes). But if you want to meet people, stand near the bike racks. People are up for a chat!

Transport from 100% Renewables

"Perhaps the most astonishing feature of the fossil fuel revolution is the lure of mass mobility of people and goods: our 'mass consumption of global space' - the seemingly limitless possibility of moving around the globe by air, sea, rail and road. The very psychology of societal attitudes has been deeply influenced by this: human interactions, mobility and trade patterns, and a myriad of personal and public choices are being driven by an ever accelerating ease of mobility. But the fact is that oil combustion is needed to achieve this: more than 95% of all global motorized movements depend on the oil: whether it is cheap, but extremely polluting bunker crude oil being burnt by the global shipping armada, or subsidized aviation kerosene keeping millions of travellers aloft.

"Our urban lifestyles have grown accustomed to relying on this untenable situation. But intra-urban mobility is another critical issue. To decouple transportation from the use of oil is a good start that can be made in cities. Today's call is for a 100% renewable electricity based individual and public transport system. Most cities can find ways to supply vehicles with the renewable energy sourced locally – and the batteries of these vehicles can even be used as floating storage systems – for electricity peak shaving, for example. Electric and hybrid vehicle technology can greatly reduce urban air and noise pollution. In China's cities a switch to electric bikes – and increasingly cars as well – has greatly reduced pollution and has cut energy costs by up to 80 to 90% at the same time. Now it is becoming clear that regionally supplied wind or solar energy can power urban public transit systems – note the success of Calgary's C-Train which is powered by Albertan wind farms. New Light Rail and bus vehicles can use batteries which means that they too can be part of the floating storage systems of a city. All in all, it is clear that an ambitious, integrated approach to sustainable urbanism based on energy efficiency and renewable energy, starting with local supplies, and utilizing regional supplies where necessary will transform urban living, planning concepts and will greatly enhance urban economies at the same time. …

"The key strategies towards fossil carbon-free transport are to promote walking and biking … and to gradually alter mobility patterns by slightly reducing average transport distances through enhanced land use integration. Also, increasing both the share of public transport within the city as well as long-distance travel dependence is also seen as critically important." **Ref: 100% Renewable Energy - & Beyond - for Cities, March 2010** http://www.worldfuturecouncil.org

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The Transition to Electric Vehicles

"In recognition of what is seen by some as the inevitable transition from internal combustion vehicles (ICVs) to electric vehicles (EVs), Western Power [the electricity utility in Western Australia] supports the market and infrastructure adjustments required to maximise the advantages (such as in load profile management and the provision of ancillary services) while minimising the potential disadvantages (such as increased peak demand) of EVs.

"Although it's not certain when, EVs are coming! With the market demonstrating its enthusiasm for Hybrid Electric Vehicles (HEVs) such as the Toyota Prius, many major car manufacturers are on the verge of releasing mass production Plug-in Hybrid Electric Vehicles (PHEVs) and even full Battery Electric Vehicles (BEVs) (e.g. Mitsubishi's i-MiEV planned for release in 2010). While a handful of EVs owned by local enthusiasts are operating already, their effect on the SWIS [the South West Interconnected System] is insignificant. With an expected influx of manufacturers' PHEVs and BEVs, however, the potential effects on the SWIS range from highly advantageous to disastrous depending on how this transition is managed and our collective understanding of the necessity to do so.

"In a worst case scenario, where EVs become very popular and no changes are made to our management of the SWIS or to electricity market frameworks, large numbers of EVs would have very serious and costly consequences for the system as a whole. Research from a variety of sources, including the Curtin University Sustainability Policy Institute working in collaboration with Western Power, suggests that large numbers of EVs charging at the same time of day under the current tariff framework would add significant loads to the daily peak demand period to the extent that they may cripple the entire system. This could result in either system failure when demand exceeds capacity or require significant new levels of investment in peaking generation and network augmentation to increase capacity.

"With the right market reforms, however, an influx of EVs could provide a number of highly desirable improvements to the SWIS. With a network of interconnected EVS plugged into a Smart Grid (incorporating mechanisms to optimise consumer behaviour such as variable pricing, EVs can potentially offer the following highly attractive services once they reach an aggregate fleet of significant size:

- *System balancing and ancillary services.*
- *Overnight recharging adding load to the low demand period that coincides with high wind energy supply and therefore effectively allow for 'wind powered vehicles'.*
- *Lower overall greenhouse gas emissions and other air borne pollutants.*
- *Provide a long sought after and highly valued energy storage solution for greater System Management efficiency.*

"Innovative enterprises are already in motion overseas and in Australia offering services to future EV drivers such as car leasing (to guard drivers against the initial high cost of purchasing an EV), battery recharging and swapping stations, and in turn (through the aggregation of large numbers of EVs) offering services back to system operators such as balancing and storage. Under such rapid changes it is not hard to imagine a not too distant future where drivers will acquire the services of a car in a fashion similar to the way most people acquire mobile phone services today – through the purchase of a plan delivered through a physical device that you do not necessarily own but for which you pay a monthly fee. In return the service provider ensures the functionality of the EV to the customer by ensuring it's always charged and simultaneously sells aggregated services to the grid system operator at a rate cheaper than can be met by more traditional infrastructure investment. By ensuring our market frameworks and Smart Grid policies are attuned, Western Power anticipates a bright future for a relatively rapid transition from ICVs to EVs where the significant benefits are realised and the pitfalls are averted." **Ref: Western Power, Submission to Strategic Energy Initiative's Issues Paper, 26/2/10**

Melbourne Bike Share

"The net health benefit potential from the use of at least 600 Melbourne Bike Share (MBS) bikes in the wider community is quantifiable. My short trip use of bikes for nearly all trips instead of walking (or PT) has lowered my sugar readings sufficiently not to register as a pre-diabetic anymore after MBS started on 31 May 2010. Short trip cycling can delay the onset of other preventable diseases for some people. So far the providers of MBS have kept the infrastructure free of graffiti vandalism. The solar panels for the kiosks are aesthetically acceptable and blend into Melbourne's heritage sensitive environment. However users of MBS will need to routinely carry their helmets like hats for the summer. From speaking with the curious at the docking stations the conclusion can be drawn that MBS usage could increase three to tenfold if some helmets are available at or close to the docking stations." **Ref: Oz Kayak, 8/7/10**

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Georges Pompidou Expressway (Pt 2)

"The Delanoë government created exclusive bus-bike-taxi lanes in Paris, separated from traffic lanes by planters and other types of barriers. The city government fell behind its goal of creating 41 kilometres of car-free bus-bike-taxi lanes a year, because these lanes needed approval of the national police, who are not answerable to the mayor and who do listen to complaints of drivers. The lanes that were built were not completely successful, because there were complaints that speeding taxis were a threat to bicyclists, but they did speed up bus service, reducing trip times by an estimated 10 to 20 percent – and they caused temporary traffic jams while traffic patterns were changing to adjust to the new street capacity.

"In the summer of 2002, as a symbolic centre-piece to this new transportation policy, the Delanoë government closed the Pompidou Expressway to cars from July 15 to August 15 between 6am and 11pm – just a few months after he was elected. This is a time when many Parisians are out of the city on vacation, but it is also a time when the city does most construction work on the streets, which causes traffic jams in itself. For several years previously, the expressway was closed to traffic for a few hours during Sundays in late July and August. The longer-term closure came as a surprise to many motorists, because it was done without adequate notification to the public. About 70,000 cars a day normally use this expressway, and when they were suddenly displaced, there were traffic jams on parallel routes, such as boulevard Saint-Germain. Drivers complained that they were suffering for no reason, because the closed expressway was not heavily used by pedestrians.

"In response to these criticisms, the Forum of Young Greens of d'Ile-de-France Green Party, joined by several Green city council members, held a ceremony to 'debaptize' the expressway, so it would no longer be named after Pompidou. A couple of days later they gave it the new name 'Voie de La Velorution'. (The word 'velorution' is a play on the words 'revolution' and 'velo', French for bicycle.) But Delanoë condemned this effort, and one of his aides commented, 'One should not joke about the name and memory of a former president of the republic'.

"The first moves to reserve lanes for buses came shortly after the expressway closing. The Rue de Rivoli, which was congested when it was three lanes, became more congested temporarily when a lane was reserved for buses and only two were left for cars. This plan also provoked intense criticism. Yves Galland of the centrist UDF party said the plan was 'actually increasing pollution in Paris by blocking the traffic'. And Jean-Pierre Jerabek of the Ile-de-France Automobile Club said, 'Car use is not a whim, it's essential for people's work, especially those who live in the suburbs. People want traffic to flow better in Paris, not worse. Mr Delanoë must rid himself of this idea that motorists will just abandon their cars'.

A view of Paris Plage
Photo: Hank Resnik

"Delanoë responded that he expected 'a bit of initial fuss' when streets were closed. He added 'I'm not obsessed by cars. I'm obsessed with the health of Parisians. Is it my fault that the automobile is the city's major source of pollution and that it takes up two-thirds of the road surface? Things have to be brought back into balance - that's what our policy is all about'.

"Despite the criticism, a poll found that 66% of Parisians approved the 2001 closure of the Pompidou expressway, both because it made the banks of the Seine more pleasant and because it limited air pollution. Approval was strongest among young people, women, and those who did not use or rarely used cars. Because 56% of Parisians do not own cars, Delanoë had a good reason to expect support for his policies.

"The city government decided to do a better job of closing the expressway the following summer. It gave more advance notice to motorists, it closed the road a week later, when more Parisians were out of the city, and it planned to attract more people by converting the expressway's right of way into 'Paris Plage' – Paris beach. {Cont. #166}

Ref: Preservation Institute, 2007
www.preservenet.com/freeways/FreewaysPompidou.html

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Business Transport Decisions (Part 3)

"A sustainable transport plan should focus on action. Many well developed plans sit idle as corporate objectives change. To avoid this, your team should be supported to implement the plan for achieving its objectives within clear timeframes. It is understood and accepted that the plan will evolve and be refined over time. …

"Transport issues will touch all aspects of your business, so an effective sustainable transport strategy is more likely to succeed when you involve people across and up and down the organisation. For [large organisations] maximum impact, responsibility for delivering on the business objective and achieving the stated sustainable transport goals should be assigned to a multidisciplinary team …

"Smaller organisations: set a goal or target and nominate a sustainable transport champion/ coordinator. You may formulate a sustainable transport team at a later stage or engage your customers and suppliers in the discussion. However, the 'set a target' rule always applies. You could consider collaborating and sharing ideas and achievements with other small organisations. Your industry association may be very interested in the benefits achieved and support your communication and collaboration activities. Demonstrating positive behaviour, as well as influencing beyond your direct operations will engage your staff, enhance your business's reputation as a leader in the industry and most likely save you money. …"

"Avoiding the need for business travel entirely is the most preferred sustainable transport outcome. … A multitude of information and digital technology now exists to support the minimisation of business travel. Alternatively, a range of low cost web conferencing tools are available on the market … Allow[ing] employees to telecommute (i.e. work from home) one or several days per week, where appropriate. Telecommuting is the easiest way to eliminate employee commuting, and has the potential to improve staff retention and productivity. …

"Make access to public transport and bike paths selection criteria when deciding on your next business location. Alternatively, work with other businesses and local councils to demand better and safer active and public transport options for your current location. … Car pooling programs for staff commuting and business travel can help you unlock greenhouse, time, fuel and parking cost benefits." *{Continued in #166}*

Case Studies:

"Little Creatures, a boutique beer business, purchased twenty bicycles to be used by its staff and the public at both its Fitzroy and Fremantle Dining Halls. The initiative has been highly successful, with all bikes hired out almost every day in order to provide a clean, alternative mode of transport for people to get around on."

"Victoria University maintains a car pooling program for employees to use when commuting to and from work. A website enables registered users to publicise their travelling requirements and search for colleague 'matches'."

"Original Foods, a sustainable catering company, runs its transport vehicles on biofuel (recycled cooking oil), diesel and e10 unleaded fuel."

"LeasePlan, the world leading fleet management company, in conjunction with Greenfleet, have launched a program called 'GreenPlan'. Green-Plan has been developed to help LeasePlan's customers better understand their fleet's impact on the environment and to take positive action against climate change, at no extra cost. Responsible fleet managers can use GreenPlan to reduce costs through enhanced fuel efficiency, by helping drivers identify ways to reduce their fuel costs and greenhouse gas emissions. LeasePlan's partner-ship with Greenfleet also extends to LeasePlan offsetting the CO2-e emissions of its own fleet of trade cars. Further information about GreenPlan can be accessed at: http://greenplan.leaseplan.com.au

"Salvos Stores have recognised the environmental impact involved in the logistics of their operations. As a result they have purchased five hybrid vehicles to service the inner city runs. The short distance and stop, start nature of these areas will maximise the benefits from Salvos Stores' hybrid vehicle fleet."

Ref: Your Sustainable Transport Guide, 22/3/10
http://www.greenfleet.com.au/library/scripts/objectifyMedia.aspx?file=pdf/9/56.pdf&siteID=1&str_title=Sustainable%20Transport%20Guide.pdf

The Need for Better Public Transport

"Metro Trains is warning of major disruptions on the Sandringham line this morning … Inbound and outbound services remain suspended along part of the line … Metro Trains has advised commuters to expect 'major delays'."

Ref: Kristine Kellett, The Age, 16/7/10

Yet another reason to have fast ferries on the Bay providing an integrated service and public transport alternatives?

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Noise from Transport (Part 1)

"A large number of people are exposed to transport noise levels that affect the quality of their life and health, notably in large agglomerations. Road traffic is by far the dominant source of exposure to transport noise. A significant though lower number of people are also exposed to railway and airport noise levels that affect their health and quality of life. The number of people exposed to damaging levels of transport noise, particularly at night, could increase if there is no further development of effective policies on noise and if action plans against noise are not fully implemented."

"Directive 2002/49/EC relating to the assessment and management of environmental noise, more commonly referred to as the Environmental Noise Directive (END), introduced obligations on EU Member States to produce strategic noise maps designed for the global assessment of noise exposure due to different sources in given areas and for overall predictions of such areas. This includes reporting the numbers of people exposed to certain levels of noise from some of the busiest transport sources and in the largest of Europe's cities." **Ref: Towards a Resource-Efficient Transport System. EEA, 2010**

"Residents [in Victoria] say it is high time unsafe behaviour and the deafening sound [of excessively noisily vehicles] are curbed and are seeking legislative change to make it more difficult for motorists with modified exhaust systems to keep their cars. … Recently … residents received flyers urging them to join up to www.beaconsfieldparade.weebly.com – a website encouraging residents to collaboratively lobby levels of government. … State government spokesman Chris Owner ruled out any law change, saying it would penalise the majority."
Ref: Christie Peucker, Melbourne Weekly, 14/7/10

"Mitcham Council [in SA] says it is ridiculous that proposed guidelines on train noise will not apply to existing rail networks. The Environment Protection Authority (EPA) has drafted South Australia's first rules on how loud passenger, light rail and freight train noise can be. But EPA air and noise manager Kelvyn Steer says the decibel limits will only apply to new and upgraded rail networks as it would be impossible to apply them to all existing lines. Mitcham mayor Ivan Brooks says the policy should cover noise caused by Adelaide-Melbourne freight services which pass through the Adelaide hills."
Ref: ABC News, 23/6/10

New Noise on the Block

"The vision of tranquil modern cities, with inhabitants gliding by silently in electric cars, may be shattered by European plans to introduce artificial warning sounds to the new generation of zero-emission vehicles. Each manufacturer may be permitted to provide its own signature tune, with the regulation simply setting a minimum volume to prevent pedestrians, cyclists and blind people particularly from stepping into the path of battery-powered cars. Some manufacturers are likely to opt for an engine noise while others are considering adopting the noises of spacecraft from science fiction films, such as the podracers from 'Star Wars'. To minimise disturbance, the noise will be projected in the direction in which the vehicle is travelling. Lotus, which is developing electric and hybrid models, has adapted sound-cancelling technology to project a sound that changes with the speed.

"The industry believes an artificial sound is likely to be needed only at speeds below 20mph - because above that all vehicles create enough tyre noise to be heard. Testing of various sounds begins this month at the UK's Warwick University, which is working with several electric-vehicle manufacturers in the West Midlands. Paul Jennings said: We will have a week with music and weeks with natural sounds, engine noise and also with science-fiction sounds. We need to find noises which alert people to the approaching vehicle without causing the annoyance people already feel when they hear the bleeping sounds of reversing trucks. The Department for Transport could not say when the results of research it is conducting into the risks The European Commission said last week it would consider whether the quietness of these vehicles was potentially dangerous to vulnerable road users by 2012."
Ref: Newscore, The Australian, 4/5/10

"In China, fast electric motorbikes have already been dubbed 'silent death', while research has shown early electric and hybrid cars are much closer to pedestrians when they become aware of them because they are so quiet at low speeds."
Ref: John Beveridge, Herald-Sun, 6/5/10

Some sound sources measured in decibels	
Jet aircraft, 50m distance	140 dB
Threshold of pain	130 dB
Threshold of discomfort	120 dB
Diesel truck, 10m distance	90 dB
Kerbside of busy road, 5m distance	80 dB
Average home	50 dB
Quiet library	40 dB
Threshold of hearing	0

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