Friday, February 24, 2006

The Secretary
Senate Rural and Regional Affairs and Transport
Parliament House
Canberra ACT 2600

RE: Australia's future oil supply and alternative transport fuels:

Projections of oil production and demand

From a number of highly credible sources, it appears that the global demand for oil will exceed production capacity/supply within our lifetimes. 'Peak oil' may occur as early as within the next few years according to some predictions. Regardless of the exact time, it is important that policies and strategies be put into place as soon as possible to reduce Australian dependency on oil.

One approach that highlights the value of oil and encourages it be conserved is to increase its price. Europe has for many years charged much more for petrol than in Australia, which makes alternative trips more economically viable in comparison. This is an important aspect of travel demand management. Any additional revenue from higher fuel prices should go into public transport or alternative travel modes such as infrastructure for bicycles and walking. There could be variable pricing with lower rates for commercial use compared with private travel, although this might be difficult to apply in practice.

Alternative transport fuels

Probably the most overlooked source of transport fuel is human energy. Currently approximately half of the Australian population is not physically active enough to meet public health guidelines of 30 minutes a day of moderate level physical activity. This could be met by a 15 minute walk to a bus or train station on the journey to work and return each day, or a 5km bicycle ride. Two thirds of urban trips are under 5km, a distance easily cycled. Many short car trips could be substituted by walking or cycling, which would produce health benefits while saving petrol.

Technological developments and environmental and economic costs

The technology for walking and cycling already exists. It is very inexpensive, does not harm the environment, and contributes to more livable neighourhoods which have been shown to be economically desirable. Investment in alternative fuel sources for private motor vehicles will not solve congestion problems, and traffic congestion adversely affects the economy.

Flow-on economic and social impacts in Australia from continuing rises in the price of transport fuel and potential reductions in oil supply

It is clear that the rise in transport fuel will adversely affect the economy and alternatives need to be found for private travel as apposed to commercial transport. Bicycles represent a hugely neglected form of transport that has the potential to be a real part of the solution.

Options for reducing Australia's transport fuel demands

There has been very little Australian or international research evaluating the effectiveness of infrastructure and environmental changes upon increasing population

Submission to Senate from A/Prof Chris Rissel, Sydney South West Area Health Service

levels of cycling and more research is needed.^{1,2} The best example that building and promoting adequate cycleway facilities increases regular cycling comes from Western Australia where a combination of new cycling infrastructure, mass media publicity, and an individualised marketing program to interested people, reported a 53% increase in bike trips at 12 month follow-up.^{3,4} Skills in the use of bicycles and in planning travel behaviour were also found to increase cycling.^{3,5,6}

Nonetheless, there are many positive thing happening that improve conditions for cycling. For example, Brisbane City Council has set a target of eight per cent of all trips to be made by bicycle by 2106 and have built an extensive bicycle network to support this. The NSW Government has announced plans to build a NSW Coastline Cycleway through the state, many local governments are implementing Bicycle Plans (of varying quality) and disused rail lines are being converted to cycleways and proving a huge boon for tourism. Even in Sydney with only a variety of local initiatives there has been a 61% increase in the number of people cycling on their journey to work in inner Sydney, and projects are that this increase will continue.

Despite there being few Australian evaluations of how to increase cycling, the lessons learned from European countries that have substantially increased levels of cycling are very clear. They are in practice consistent with the (unfunded) national cycling strategy for Australia as well as state bicycle policies, although the European models go much further with legislative support that favours pedestrians and cyclists. The recommendations of the NSW Childhood Obesity Summit, Transport Section, also follow similar lines.

The major areas of policy that can be influenced to encourage cycling include:

- Mixed land use policies that encourage homes and workplaces to be closer together
- Lower motor vehicle speeds
- Area-wide traffic calming measures
- Increased technical skills regarding the construction of cycling infrastructure by local civil engineers and town planners
- Dedicated bicycle lanes (off-road and on-road), that are clearly signposted and marked
- Connecting bicycle lanes with good intersection treatments, including 'bicycle streets' where bikes have right of way
- Seamless connections between cycle ways and public transport
- End of trip facilities (for example, secure bicycle storage, showers and change rooms)
- Extensive driver education
- Traffic regulations and enforcement that heavily favours pedestrians and cyclists (even when pedestrians and cyclists do the wrong thing)
- Restrictions on motor vehicle use, including limited parking

There are already signs that many in the community would like to cycle more, and are beginning to do so despite a sometimes hostile road environment. Commitment, advocacy and political will are all needed. We all need to support and encourage policies and infrastructure projects that create more supportive environments for cycling. This will lead to reduced fuel dependency, as well as better health and more livable cities.

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