



A Public Transport And Green City Manifesto For The Federal Election

Posted by [Big Gav](#) on November 15, 2007 - 7:00pm in [The Oil Drum: Australia/New Zealand](#)

Topic: [Policy/Politics](#)

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*This is a guest post by **Garry Glazebrook**. Garry is a senior lecturer in Urban Planning at the University of Technology, Sydney, and has 30 years' experience in transport and urban planning consulting, and in government policy. He gets occasionally obsessed about peak oil, climate change, and sustainable transport (but then dont we all?). He is a member of ASPO Sydney and UITP (International Union of Public Transport). Professor **Peter Newman** heads Murdoch University's Institute for Sustainability and Technology Policy and is an internationally known expert on transport and sustainability in cities.*

Public Transport, Peak Oil and Global Warming

Public transport is a big issue in Australia. As a result of rising oil and petrol prices and rapidly rising road congestion, patronage has risen 20% on Melbourne's trains, 18% on Brisbane's buses, and 12% in Perth in the last two years.

Sydney's rail and bus systems are now overcrowded, as are those in Melbourne, Brisbane and Perth. Adelaide is now facing a major decision about whether to electrify and extend its rail system. The quality, reliability and availability of public transport affects millions of citizens on a daily basis – as evidenced by headlines such as the Sun Herald front page in Melbourne on Monday 18 June.

Continuing population growth and a trend back to urban living make public transport vital for our future. But the likelihood of world oil production peaking makes this an issue for the present. The recent International Energy Agency Medium – Term Oil Market Report (July 2007) warned of increasing tightness in oil markets beyond 2010, as a result of strengthening demand and weakening oil supply.

Roger Bezdek, an expert on peak oil, highlighted in his recent Australian tour the need to take oil seriously in the planning of cities and regions. His key message is that there is likely to be increasing competition for oil and gasoline from China just at the time when global oil production reaches its maximum. There will also be a problem with peaking of gas production in the near future, while options like coal to liquids are not likely to be viable because of CO₂ emissions.

Carbon trading is just a few years away. This will have to be extended to all fossil fuels – oil included – and will further add to oil and petrol prices. Those countries and cities without strong public transport systems will face an uncertain future.

A National Approach Needed

Why should our Federal Government get involved in public transport? There are many reasons:

- * Australia is one of the most urbanised countries on earth, and our cities are amongst the most car-dependent. State governments are trying to address the issue, but strong backing from the national government is needed.

- * Providing better public transport will reduce oil consumption and the trade deficit, road congestion, greenhouse gas emissions, motor vehicle accidents, air pollution and the expense and space required for urban motorways. It will also have health benefits by encouraging more exercise – walking to and from the train or bus every day means an average of 2 km walking – 20% of our daily exercise needs.

Most other OECD countries recognise the role of the Federal Government in supporting public transport. The US has been doing it for a decade and a half, through the ISTEA (Intermodal Surface Transportation Efficiency Act) and subsequent legislation. Other Federal governments such as in Canada and Germany fund part of the cost of urban public transport, as do national governments in the UK, Japan, France and indeed most other OECD countries.

In contrast, the Australian government has so far refused to include urban public transport within AUSLINK, yet it funds urban motorways – such as the M7 in Sydney, the Eastern Arterial in Melbourne, and most recently the promise of \$2.3 billion for the Ipswich bypass. This one-sided approach encourages more traffic and makes our cities more vulnerable to global warming and peak oil. A University of California Berkeley study covering thirty California counties between 1973 and 1990 found that for every 10% increase in roadway capacity, traffic increased 9% within four years' time.

Funding more roads and ignoring public transport is a recipe for unsustainability.

What are State Governments Doing?

Our State and Local Government all recognise the need to accelerate the provision of better public transport, and have major projects underway or on the drawing boards. But lack of funding is the major constraint:

- * In Sydney the \$1.5 billion Clearways program is already partly finished, and the Epping - Chatswood rail line is due to open next year. Planning and land acquisition has started for the \$8 billion NW-SW Harbour link line and the first stage is due to be completed by 2011. But urgent extensions such as the NW rail link have been delayed for years because of lack of funding. Additional metro lines are now under consideration, but again will need financial support, as would light rail in the inner suburbs as proposed by the City of Sydney.

- * In Melbourne, various heavy rail and tram extensions are planned including duplication on the Clifton Hill line and triplication on the Dandenong line, as well as a number of "Smart Bus" projects.

- * In Queensland, several major infrastructure projects are under construction or being planned (eg Gold Coast heavy rail duplication, Springfield line, North Coast line, Gold Coast light rail/busway, Northern and Eastern busways, and light rail for inner Brisbane).

- * In Perth, the SW rail line to Mandurah is nearly finished, due to open at end of this year with extensions planned for each line and a light rail line joining Curtin University and UWA is under consideration.

- * In Adelaide, the Glenelg tram is being extended and there are plans to electrify and extend the heavy rail lines as the diesel fleet is aging as is the O-Bahn.

All of our major cities could significantly increase the capacity and quality of their public transport infrastructure over the next few years and into the future if given funding to support their plans.

A Modest Proposal for Commonwealth Assistance

How can the Commonwealth help? Much could be achieved within three years, given the momentum already building at State level. Five initiatives are suggested:

(a) Fund all urban rail systems to move to 100% greenpower.

For an estimated cost of \$10m in 2007/8, \$25m in 2008/9 and \$50m in 2009/10, all of Australia's electrified urban rail systems could be converted to 100% greenpower. This will reduce greenhouse gas emissions and trigger investment in additional wind or other renewable power. It will also provide millions of Australians a choice to make some of their trips with no CO2 emissions and encourage greater use of public transport. The total cost for the Federal Government is very modest, and the cost beyond 2009/10 may disappear as carbon trading/taxes are brought in which will make coal fired power as expensive as greenpower in any event.

(b) Fund expansion of rail and bus fleets.

As mentioned, State Governments are struggling to get the money to expand their bus and train fleets. But much rolling-stock is on order, and additional rolling-stock could be added to the orders. For example:

* Perth and Brisbane are both buying new narrow-gauge electric trains for their systems. These are being built in Maryborough, Queensland. Additional follow on orders could further expand rail capacity in both of these cities significantly.

* Sydney has 122 Outer suburban rail cars currently being delivered, also largely built in Australia (NSW). A follow on order for additional rollingstock to the same design could accelerate the expansion of Cityrail's fleet prior to the commencement of the planned 658 cars which have been ordered under the PPP (Public Private Partnership).

* Melbourne has 10 additional trains on order by 2010, but more sets are needed urgently, and could be based on the same design. Melbourne's tram operator is also buying new trams at present and additional funds could enable this order to be expanded.

* Adelaide is facing a huge increase in expenditure as it moves to replace its aging diesel trains and O-Bahn buses; it appears to be the tipping point for moving to electric rail and extending it to all corridors – if they can find the capital.

* Many cities are buying new buses. These include lower emission Euro5 diesel buses, as well as CNG buses. New buses are all low-floor accessible, air conditioned etc. Additional funds could expand the size of urban bus fleets and improve the quality of the fleets, making public transport more attractive.

These orders could take advantage of the new infrastructure already under construction and due to be completed in the next few years, such as Clearways and the Epping-Chatswood line in Sydney, the New MetroRail project in Perth, and the Gold Coast line duplication and Inner Northern Busway in Brisbane.

(c) Fund an integrated smart card ticketing system for Australia

Perth, Brisbane, Sydney, Adelaide and Melbourne are all at various stages of introducing smart card ticketing systems. An Australia-wide approach could result in reduced costs, greater marketing benefits and greater ease of use for the public.

(d) Create a Sustainable Cities program for Integrated projects.

This would channel Commonwealth's Housing and other urban infrastructure funding to encourage development which will support integrated development and improved sustainability for our cities. It will also support the individual plans of State Governments in key centres and corridors and major new greenfields developments. This is a central conclusion of the House of Representatives Environment Committee Report on Sustainable Cities. This fund can give

substance to the need for climate sensitive development and innovations in green building as well as innovative public transport at its base. These demonstrations can lead to world first opportunities that can enable Australia to hold its head up high in the global arena as well as attracting global capital for such innovation.

(e) New Requirements for Federal Transport Funding

The Commonwealth should change its funding arrangements under AUSLINK to ensure that no Federal funds are allocated in the transport sector unless they can demonstrate that they will save greenhouse gases and have been part of a community-based planning system that enabled all transport options to be considered.

The Australian transport funding system is one of the last in the world to develop a more transparent and democratic approach to its funding. The US system is a model for how ours can be changed and it also shows how significant is the role of the Federal Government in seeding transport initiatives in the nation's cities.

What will this achieve?

It depends of course on how much money can be allocated. The Sustainable Cities Fund could be as large as the former Better Cities Fund and would attract a multiplier of around 5 to 1 from state, local and private capital. If the Commonwealth were able to allocate \$2.2 billion over three years to just the public transport initiatives, it could:

- * Make all urban electric trains and trams in Australia 100% green by 2010 (estimated total cost by 2009/10 \$85m)
- * Add approximately 300 rail cars / trams and 1200 buses to our urban transport fleets. These increases could be accommodated within the infrastructure capacity of our systems as they are upgraded and expanded over the next three years. This would add approximately 10% to our urban public transport capacity. Estimated cost by 2009/10 would be \$2.1 billion.
- * Fund the research required for a national integrated public transport fare payment system. (\$15m)

A likely funding profile could be \$50m in 2007/8, \$300m in 2008/9, \$750m in 2009/10 and \$1.1 billion in 2009/10, because of the time to deliver additional rollingstock. A significant part of the expenditure would be on buses and trains assembled in Australia, generating multiplier benefits and jobs in the local Australian economy.

The sums of money indicated are relatively modest compared, for example, to the current AUSLINK budget (eg it is less than that promised on just one road project, the Ipswich bypass) or to the capital spending just announced on defence projects. However it would benefit millions of Australians in our capital cities and major regional centres as well, which would benefit from bus enhancements and other initiatives.

Should the impact of peak oil hit more severely in that timeframe, the program would be up and running and could be further expanded relatively quickly. The issue here is to build on existing designs. New rail rolling-stock for example, takes several years to get from the drawing board to commercial service.

Looking to the Future

The proposed initiatives will start the process of making our citizens, cities and the country more sustainable, and more able to counter the risks from peak oil and global waring. It will allow our cities to get on with planning the next major round of infrastructure enhancements, and provide a greater role for our citizens in planning their future.

For example in Sydney, this could include new metro lines. In Brisbane, the rail system needs to be expanded at its periphery but also to have a new underground line built under the city with new stations better located to the major office and retail concentrations. Adelaide's suburban rail system needs to be upgraded and electrified, and possibly converted to light rail on some routes. In all cities, additional cross-regional and circumferential bus links are needed as well as better interchanges, to provide a more integrated system capable of handling a wider variety of trips.

Getting to the next level will take time but will be greatly facilitated by Commonwealth involvement. It is crucial to the survival of our cities and way of life.



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