

Submission By

QR Limited

In response to

Issues Paper Forum 5 –

Transport, Planning and the Built Environment

Garnaut Climate Change Review

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Garnaut Review Secretariat
Level 2, 1 Treasury Place
East Melbourne, 3002

Issue Paper – Forum 5- Transport, Planning and the Built Environment.

I refer to the Review's request for submissions in relation to **Issues Paper – Forum 5**. QR Limited thanks the Review for the opportunity to submit comments. Comments in this submission focus as far as practicable on aspects relating directly to *Transport* in line with the issue's paper focus.

QR Limited looks forward to continuing dialogue with the Review. Future correspondence can be directed to Tony Ramsden - QR Manager Environment and Sustainability Strategy.

Thank you for your time.

Yours Sincerely

Tony Ramsden
QR Manager Environment and Sustainability Strategy

Response to Issues Paper- Forum 5

Transport, Planning and the Built Environment

Rail transport is a key in the quest for sustainability as it moves people and freight efficiently and reduces the amount of heavy vehicle traffic, thereby improving quality of life in terms of mobility, health and environmental impacts. Rail also offers greater fuel efficiency, reduced greenhouse gas emissions and reduced general pollution than other transport modes and has many practical advantages in both freight and passenger task efficiency, as illustrated by the following:

- A freeway lane carries around 1,200 cars (or 1,500 people) per hour. A railway line can carry at least 20,000 people (the equivalent of 16,000 cars) per hour;
- A peak hour suburban train carrying 1,000 people keeps 800 cars off the road. This is equivalent to a line of cars over 5km long;
- Each fully laden freight train travelling from Brisbane to Sydney replaces 150 semi-trailers, saves 45,000 litres of fuel and produces 130 tonnes less in greenhouse gas emissions compared to road transport.

Questions for Consideration

What are the key barriers to the adoption of cost-effective and low-emissions mode use in the passenger transport sector?

Lack of infrastructure and availability of services are some of the key barriers to public transport use.

With sufficient infrastructure in place, rail has the ability to command a large percentage of the national transport market – and therefore lessen the demand for Australia’s energy resources and reduce transport’s greenhouse, environmental and social impacts. Other benefits include the cost of building a railway is half that of building a freeway of equal capacity and roads consume three times as much physical space as rail per unit of carrying capacity.¹ Various studies have revealed that rail is at least 7 times and up to 29 times safer than road.²

How might these be addressed effectively and efficiently by government policy?

Rail is one of the most regulated industries in Australia. A national rail operator may potentially have to deal with:

- seven rail safety regulators with nine different pieces of legislation;
- three transport accident investigators;
- fifteen pieces of legislation covering occupational health and safety of rail operations;
- six access regulators; and
- seventy-five pieces of legislation with powers over environmental management

Excessive regulation clearly places an extra cost and resource burden on rail operators which can only detract from competitiveness. Rail requires a streamlined approach under which operators can move quickly to single national regimes where it makes sense, for example in the area of safety.

What policies would be suitable to address barriers to the uptake of more fuel efficient passenger vehicles?

¹ North, P., 2005, ‘Torpor in Utopia’ [Online] <http://www.isoconference.org.au/papers/North9.pdf>, date accessed: 3 February 2006.

² RTBU submission on: Smart Travel Choices for South East Queensland – A Transport Green Paper, p2

Policies suitable to address barriers to the uptake of more fuel efficient passenger vehicles include:

- introduction of higher taxes (such as stamp duty) on vehicles with engine capacities over 4 cylinder;
- changes to the fringe benefit tax on company cars to reduce the amount of motor vehicle use and subsequent greenhouse gas emissions.

How can land-use planning and the built environment be managed more effectively to lower reliance on high emission patterns of transport behaviour?

Land use planning and the built environment can be managed more effectively through Transport Orientated Development (TOD) with appropriate design of modal points to allow transport interchange with higher reliance on public transport. Clearly this needs to be supported by development of appropriate pricing strategies.

Built environments that support the creation of “Sustainability Hubs” where people can both live and work in close proximity to public transport would see patterns of transport behaviour change over time.

Questions for Consideration

What policies could support cost-effective emissions reductions in the freight sector?

Evidence indicates that rail is the least carbon-intensive mode of transport accounting for only 2% of Australia’s GHG emissions. Rail ultimately has an important role to play in reducing carbon emissions from the transport sector.

From a freight perspective, rail transport is more energy efficient than road transport but provides less flexibility in terms of delivery locations and size limitations. Current congestion, emissions and road safety concerns have arisen largely due to the wide usage of trucks for mid to long distance freight transport.

Rail currently has less than 20% freight market share along the North-South corridor compared to 80% market share along the East-West corridor to Perth.³ With Australia’s freight task expected to double in the next 15-20 years⁴, it appears unlikely that Australia’s road system can support such a high volume of traffic. Rail presents a logical and efficient solution to this problem, and given adequate funding will help minimise environmental impact and reduce the strain on the world’s oil supply.

The success of a modal shift from road towards rail will have obvious impacts within the rail sector such as pressures on rail infrastructure, increased energy use and subsequent greenhouse emissions.

Policy and legislative reform should consider improved rail infrastructure and rollingstock investment strategies and improved support for technology research similar to that given to the road industry such as the (\$75 Million / 4 year) Alternative Fuels Conversion Programme (AFCP). Such consideration could be given to reducing bottle necks to create greater capacity for freight trains to get through capital cities and the development of a network of

³ North-south rail corridor study, [Online]
http://www.ministers.dotars.gov.au/ja/releases/2005/April/a49_2005.htm, date accessed: 7 February 2006.

⁴ Government Plans for north-south rail link, [Online]
<http://www.abc.net.au/news/newsitems/200504/s1347255.htm>, date accessed: 3 February 2006.

modern, well-located intermodal terminals in our capital cities with major growth potential to help provide a seamless, integrated road and rail service to interstate and port container freight customers.

An integrated national transport policy to support low emissions transport methods and modes could be supported by other policies which could include:

- Allowing accelerated depreciation of rail locomotives and rolling stock to encourage investment in newer technology. As most rail equipment is kept for 25 years plus, incentives will need to be provided to encourage earlier investment.
- Banning B-Triple trucks from driving interstate, with goods instead carried by rail.
- Road congestion charges to fund rail investment⁵.

Questions for consideration.

What are some of the key barriers to cost-effective low emission opportunities in the building sector?

Barriers to cost effective low emission opportunities in buildings include:

- Lack of funding- extra capital to spend on retrofitting buildings to reduce emissions may not be readily available to some firms to pay the up front costs;
- Lack of readily available information on current technology and the possible financial benefits;
- Pay back periods/return on investment for some low emission technology can be long term, further reducing the incentive to invest in these technologies;
- Ongoing maintenance costs.

What policies could be used to address the low uptake of energy efficient opportunities, given that many of these opportunities already provide financial benefits for firms and households?

Policies to address the low uptake of energy efficient opportunities include:

- The introduction of compulsory Australian Building Greenhouse Rating (ABGR) Standards on all new building construction and retrofits.

What policies would be appropriate to overcome barriers to low emission opportunities in the building sector such as split incentives and information gaps?

Policies to overcome barriers to low emission opportunities include:

- As stated above, the introduction of compulsory ABGR;
- Rebates for purchasing low emission technologies.

Are additional policies necessary to address barriers to low emission opportunities in existing buildings?

Additional policies in existing buildings include:

- Introduction of a compulsory Australian Building Greenhouse Rating Standards on all building retrofits;
- Rebates for appliance retrofits.

⁵ Rail Emission Information for The Treasury, ARA April 2008.