The Role of the Bus Industry in Low Cost Abatement

Submission by the Bus Industry Confederation to the Emissions Reduction Fund

November 2013

CONTENTS

About the Bus Industry Confederation of Australia

The Bus Industry Confederation (BIC) is the peak national body representing the interests of Australian bus and coach operators and suppliers to the industry. As the primary voice of the bus and coach industry the BIC works with all levels of Government, regulatory authorities, strategic partners, our industry and the community to:

- Encourage investment in public transport infrastructure and services.
- Coordinate and make more effective existing Federal, State and Local Government policies and programs that relate to passenger transport.
- Improve public understanding of the contribution made by the bus and coach industry to Australia's economy, society and environment.
- Ensure that the accessibility and mobility needs of Australians are met, regardless of where they live or their circumstances.
- Ensure that buses and coaches operate safely and effectively.

About this Submission

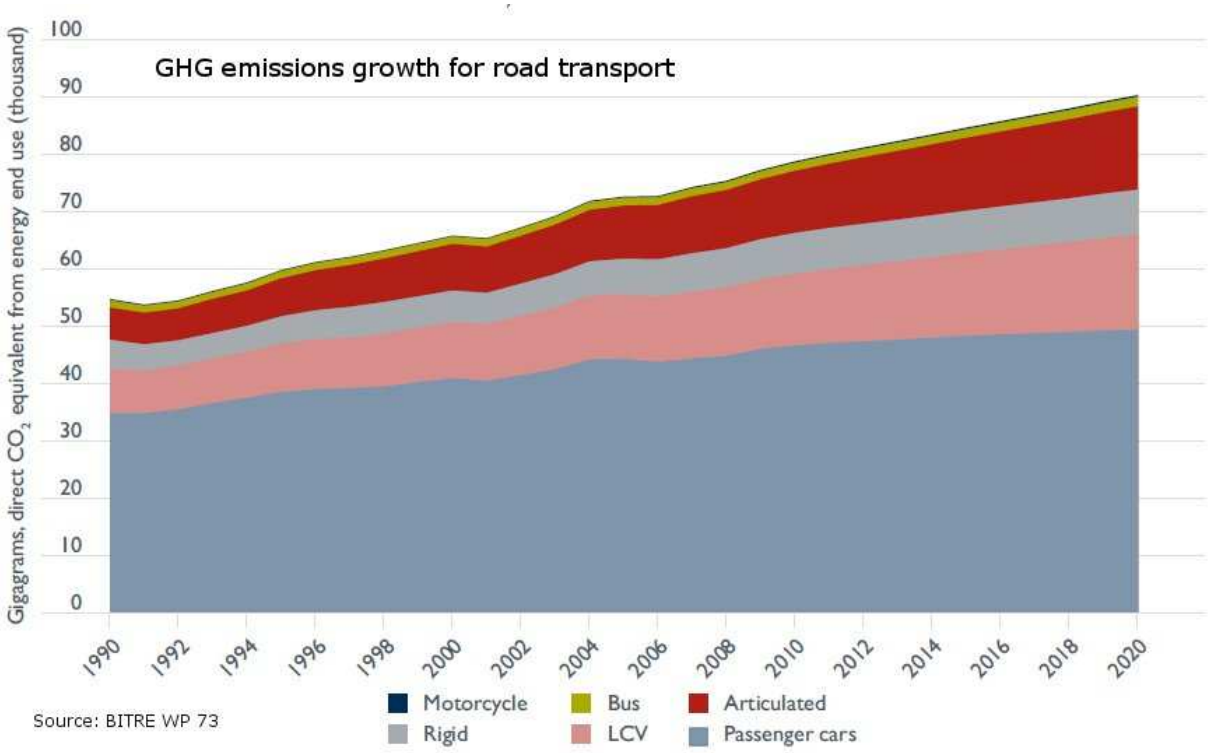
This submission outlines a proposal from the BIC to make the Emissions Reduction Fund a mechanism for encouraging low emissions transport choices through the development of travel behavioural change programs.

These programs, by encouraging low cost travel choices, could reduce transport related greenhouse gas emissions, and play a leading role in improving energy security, public health and road safety.

Public and Active Transport: Reducing Emissions

Road transport contributes almost 15 per cent of total green house gas emissions in Australia. Cars contribute more than 50 per cent of road transport related emissions while buses contribute less than 2 per cent of total emissions from road transport.

By 2020, allowing for some emissions reduction initiatives, greenhouse gas emissions from road transport are predicted to be more than two thirds higher than their 1990 levels with cars still accounting for the majority.



Source: Bureau of Infrastructure Transport and Regional Economics

Shifting from cars to public transport can deliver a 65 per cent emissions reduction during peak times and a 95 per cent reduction in emissions during off peak times from the commuters that make the shift.[1]

At current occupancy rates for cars a full bus load of passengers can take up to 50 cars off the road and a full passenger train can take 500 cars off the road.

This not only results in significant emissions savings, but also reduces traffic congestion (which is predicted to cost the economy $20 billion by 2020), reduces ongoing road maintenance costs through reductions in road wear and improves road safety (buses are the safest form of land transport).

Based on 2004 occupancy figures for cars and buses, the fuel consumption of buses for every 100 passenger kilometres was 2.5 litres and the fuel consumption of cars for every 100 passenger kilometres was 7 litres.

A ten per cent shift to bus passenger transport from cars would reduce greenhouse gas emissions by more than 400,000 tonnes a year and every million passenger kilometres on public transport, instead of cars, saves 45,000 litres of fuel. [2]

In the long term reduced dependency on cars will lead to further reductions in emissions from road transport.

In comparison with other greenhouse gas emissions abatement measures a shift of one commuter from driving to buses for a trip from an outer suburb to the CBD in Melbourne or Sydney can deliver the same carbon abatement value of 3 households switching to energy saving light globes. (Extrapolated from Garnaut Review)

Zero carbon modes of transport like walking and cycling are also highly effective in reducing transport related emissions.

[1] Barrett and Stanley (2008), *Moving People: Solutions for a Growing Australia*, ARA, BIC, UITP
[2] CRA International (2006), *Impact on the Australian economy of Increased Bus Patronage*, BIC

Travel Behaviour Change: Travel Smart

TravelSmart programs by the Australian, State and Territory Governments aim to foster travel behaviour change by encouraging people to use other ways of getting about rather than driving alone in a car.

The Australian Government, through the National Travel Behaviour Change Project (NTBCP), partnered with South Australia, Victoria, Queensland, Western Australia and the ACT, over a five year period from 2003 to 2008 to deliver the project.

Since the conclusion of the original project, there has been no further Australian Government involvement in TravelSmart initiatives at a State level.

Over the five years of the NTBCP, it is estimated the project, at a relatively low cost to the Commonwealth Government, resulted in 186,000 Australian households reducing distances travelled by car, resulting in significant increases in active transport and decreases in GHG emissions.

Some state Government programs continue (see case study below). The BIC believes there is an opportunity to expand and improve existing programs and develop new programs, and better capture emissions reduction data centrally through a coordinated program under the Emissions Reduction Fund.

Case Study: Western Australia - TravelSmart and LivingSmart

The Western Australian Travel Smart program achieved

- 10 per cent reduction in car use amongst communities in the program
- 13 per cent reduction in car km travelled across the suburbs in which it delivered an average of 69 fewer car trips per person per year
- 10 million fewer car trips
- 100 million reduction in vehicle kilometres travelled
- 30,000 tonnes reduction in CO2-e (equivalent of taking 6,000 cars off the road)
- 1.6 million extra hours of physical activity
- 1.4 million extra public transport trips.

The reductions in car trips the Western Australian Travel Smart program achieved were largely replaced by walking, bicycle and public transport trips.

Community benefits (based upon the combined results of eight projects reported to date) were projected, for the full program of 418,500 residents, to be an annual reduction of 30 million car trips, 290 million car kilometres and abating 88,000 tonnes of GHG.

Other community benefits included increased public transport fare revenues, reduced local pollution, increased physical activity (from more walking and cycling), improved social well-being (people on the streets) and increased security (eyes on the street).

The TravelSmart program in Perth delivered a reduction of 750 car km per target person per annum. This approximates to 225 kg of CO2-e (full fuel cycle) of abatement per target person.

Each $1 million in project investment (with 28,000 target persons) delivered 6,300 tonnes of GHG abatement per annum. The first year cost was $159 per tonne of abatement. Based on an 80 per cent durability of behaviour changes over five years, and no behavioural maintenance costs, the abatement cost fell to $40 per tonne over five years.

BIC Proposal

The BIC proposes a joint project between relevant industry bodies, all members of the Moving Australia 2030 Taskforce (see attached report), and State and Territory Governments to develop a series of travel behaviour change initiatives to encourage alternative travel choices.

By providing credits to the identified emissions abatements from these through the Emissions Reduction Fund the Commonwealth Government could support the development and ongoing operation of these programs.

The BIC would also like to explore through this project, other initiatives outlined in Moving Australia 2030 that could directly lead to reductions in transport related emissions. An example of such an initiative is the establishment of telecommuting targets for state government departments and their eligibility for credits under the Emissions Reduction Fund.

Conclusion

The Emissions Reduction Fund presents a unique opportunity for the Commonwealth Government to encourage alternative travel choices. These travel choices will provide a greenhouse emissions reduction, road wear, congestion, social mobility and air quality benefit to our cities and regions.

The Bus Industry Confederation is available to discuss our submission and can be contacted on email: enquiries@bic.asn.au or via phone: (02) 247 5990.