



### **Response to the Productivity Commission draft report into Road and Rail Freight Infrastructure Pricing**

The Australian Conservation Foundation (ACF) welcomes the Productivity Commission's inquiry into road and rail infrastructure pricing, but is concerned that the Commission has failed to consider the emerging issue of climate change in its deliberations.

There is increasing recognition of the urgent need to reduce greenhouse gas emissions across the economy. Action to reduce emissions will inevitably have significant ramifications for transport decision making. Indeed, transport infrastructure pricing that doesn't consider the inevitable costs of greenhouse emissions is likely to result in unacceptable future costs to the Australian economy.

Many submissions to the Commission's inquiry argued that in the absence of pricing distortions rail freight would be economically preferable to road, at least on inter city freight routes. While the Commission has refuted that these distortions exist, the ACF argue that the exclusion of greenhouse gas externalities in freight transport infrastructure pricing provides a significant distortion.

An efficient freight system in Australia will be one that encourages the growth of efficient modes, and for inter city freight this will be rail. We now have the opportunity to build an efficient and sustainable freight transport network, but in order to do so, all externalities must be considered in investment decisions.

ACF recommends that all future freight infrastructure investments decisions factor in a shadow carbon price to ensure inevitable future carbon costs are factored into decisions made today.

### **Climate Change Certainties**

The Productivity Commission's discussion paper states that:

*'While the general link between the use of fossil fuels and global warming is widely accepted, uncertainty remains regarding the exact mechanisms involved and, in particular, the likely impacts and their related costs, especially in the longer term.'*

While it is true that there are uncertainties about how severe the impacts of climate change will be and exactly what the costs are, there is absolute certainty that the impacts will be large and the costs will too.

As the Stern report on the Economics of Climate Change, a report compiled by Sir Nicholas Stern, former Chief economist of the World Bank, for the UK government, states -

*'The scientific evidence is now overwhelming : climate change is a serious global threat, and it demands an urgent global response'.*

After assessing a wide range of evidence on the impacts of climate change and on the economic costs, the Stern report concludes that the benefits of strong and early action far outweigh the costs of not acting.

The discussion paper also claims that estimates of the economic cost of greenhouse gas emissions are 'either simply assumptions or are observed values which are highly sensitive to the actual

or hypothetical constraints placed on emissions (for example, emissions quotas in

the United Kingdom).' This claim can not be sustained in the light of recent studies on the social cost of carbon. Like all exercises in economic forecasting, such studies deal with an uncertain future, but that does not mean that they are founded on mere unsupported assumptions. These studies are based on sound scientific modelling of the likely environmental developments and economic modelling of the implications of those developments. They represent our collective best estimate of the probable economic costs of continuing greenhouse gas emissions at various levels.

We refer, for instance, to Clarkson & Deyes, "Estimating the Social Cost of Carbon", a review conducted in 2002 for the U.K. Treasury of the methodology and outcomes of such modelling.<sup>1</sup> More recently, the Stern report gives a range of estimates for the social cost of carbon of US\$85 (A\$108) per tonne under a 'business as usual' case – a figure well above the A\$10- A\$40 range given in the discussion draft.

Draft Finding 6.9 Productivity Commission's discussion draft stated that:

*"In the absence of economy wide greenhouse pricing mechanisms, it would be economically costly to pursue national emissions targets by applying taxing instruments solely to key business inputs such as freight transport".*

We note that costs related to greenhouse gas emissions reductions are already imposed on a number of other sectors; accordingly it would be misleading to suggest that freight transport would be regulated while other important business inputs are not. Indeed, the situation is if anything the other way around: the electricity generation, resources, and manufacturing sectors all have important, if not yet adequate, restrictions under a variety of state and federal regimes related to greenhouse gas emissions. Key among these are mandatory energy efficiency audits for large energy users, the NSW Greenhouse Gas Abatement Scheme, state and federal renewable energy targets, minimum building efficiency requirements, and project-specific conditions attached to planning and environmental approvals. Applying a notional greenhouse gas cost to freight transport would merely be a step in encouraging abatement of emissions from that sector analogous to measures already partially in place in other sectors.

Although there is a strong argument for economy wide pricing measures, it does not make sense to exclude consideration of these issues in long lived infrastructure investment decisions. Indeed, as the Prime Minister stated on 8 November, *'we need to take steps, take out insurance, be certain that we do reduce greenhouse gas emissions.'*

It is certain that the Australian economy will face a carbon price in the future. Constraints through emission targets or other regulation is inevitable. It will be necessary for all sectors of the Australian economy to reduce their greenhouse gas emissions and as a carbon intensive industry; transport will hold much of this responsibility.

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<sup>1</sup> Richard Clarkson & Kathryn Deyes, Government Economic Service Working Paper 140, "Estimating the Social Cost of Carbon Emissions", January 2002, available at <http://www.hm-treasury.gov.uk/media/209/60/SCC.pdf>.

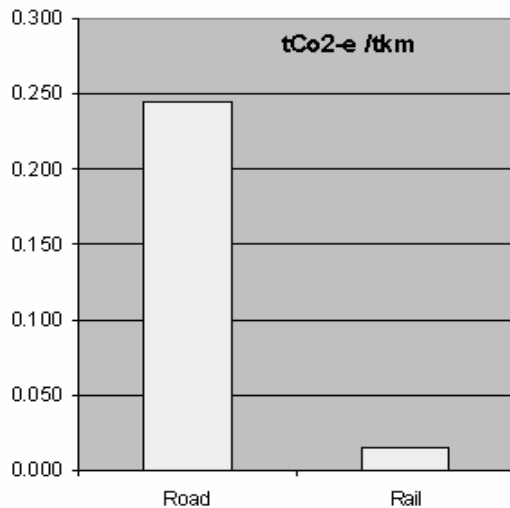
It is short-sighted for the Commission not to consider mechanisms now to ensure that these future costs are incorporated into decision making today.

### Greenhouse pollution from Transport

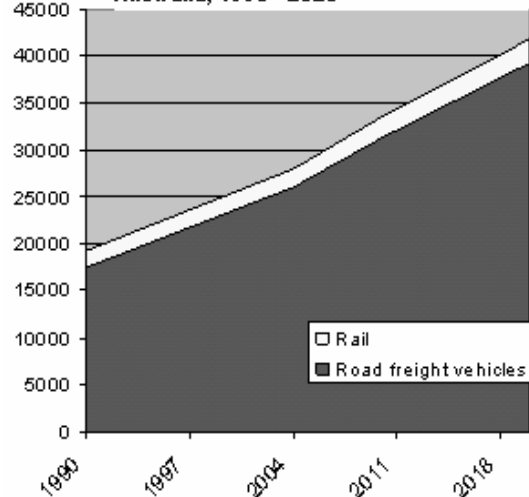
In 2004 the transport sector was responsible for 13% of greenhouse gas emissions<sup>2</sup>. The majority of this came from passenger vehicles but a significant amount (2.7%) came from trucks and rail was responsible for 0.4%<sup>3</sup>.

The Productivity Commission predicts that freight tasks in Australia will double by 2020 and it is currently expected that most of this growth will be up taken by road freight. As graph A below shows, the greenhouse intensity of road freight is almost 20 times that of rail freight. Graph B shows how greenhouse emissions from each mode will rise under the Bureau of Transport and Regional Economics (BTRE) base Case scenario to 2020.

**Graph A Greenhouse gas emissions from freight transport, Australia, 2004**



**Graph B Base case projections - greenhouse emissions for road and rail freight, Australia, 1990 - 2020**



Based on a carbon price of \$25 a tonne of CO<sub>2</sub>-e (an often quoted estimate of possible future carbon prices) the extra cost for a 20 tonne load from between Melbourne and Sydney would be in the order of \$123 for road freight and \$8 for rail freight. These costs would make a significant difference to the relative economic efficiencies of each mode and need to be considered in investment decisions.

### The solution

<sup>2</sup> Australian Greenhouse Office, 2004 *National Greenhouse Inventory*, 2006, *Department of the Environment and Heritage*

<sup>3</sup> BTRE, 2005, *Greenhouse Gas emissions from Australian Transport: Base case Projections to 2050*

In the freight sector the challenge of adapting to climate change is easy. The trend of freight being increasingly carried by road transport can be shifted to efficient rail, especially in the inter capital routes.

Not all freight is suited to rail and roads will therefore always have a role. However, for inter-city where road and rail compete, a pricing regime that does not encourage the projected growth in freight to be carried overwhelmingly will impose extra and unacceptable costs on Australian businesses and our economy.

The sooner that we begin to respond to climate change and reduce emissions, the easier it will be for industry to innovate and adapt, thus lowering the risk that we might cause catastrophic damage to the world's climate system.

The sooner the Australian transport sector responds and internalises greenhouse gas emissions into transport infrastructure decisions the sooner we will be on track to having an efficient transport system for a sustainable Australia.

ACF recommends that all future freight infrastructure investments decisions factor in a shadow carbon price to ensure inevitable future carbon costs are factored into decisions made today.

Yours sincerely,

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