10 September 2008

Carbon Pollution Reduction Scheme Green Paper Submission
Department of Climate Change
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Carbon Pollution Reduction Scheme Submission

I refer to the request for submissions in response to the Carbon Pollution Reduction Scheme Green Paper. This submission is made by the Australasian Railway Association on behalf of its membership.

The rail industry accepts that it has a dual role to play in positively responding to climate change issues by improving its environmental performance and also by carrying a greater share of transport more environmentally efficiently. However, the rail industry submits that emission trading scheme concepts and details need to be significantly modified in order to achieve the best benefits for all Australians.

At present there is insufficient information available about the Carbon Pollution Reduction Scheme and the transport systems to determine whether the desired objectives will be achieved. Depending on the energy and environment policies and implementation which are chosen, the consequences for land transport are likely to negatively affect environmental outcomes. Certainly the proposed scheme is ineffective in maximising the emissions benefits of the Carbon Pollution Reduction Scheme.

The rail industry looks forward to continuing to work co-operatively with the Australian Government on issues relevant to the rail industry. It would be greatly appreciated if in future you could liaison with the ARA’s Director Policy, Brett Hughes on (02) 6270 4508 or bhughes@ara.net.au and our other rail industry members throughout Australia.

Yours sincerely

Bryan Nye
Chief Executive Officer
Summary

The Rail Industry’s Position on Emissions Trading

The rail industry must play a positive role in responding to climate change issues.

- the rail industry must improve the environmental performance of its activities by using existing technology, which will further reduce its emissions to lower levels (zero if using electricity from zero emissions sources)
- increased rail use, relative to total transport use, will positively improve environmental outcomes including reducing the impact of climate change.

Rail industry supports an emissions trading scheme which includes all transport which means:

- excluding transport from the emissions trading scheme will threaten the integrity and viability of scheme and therefore the ability of Australia to reduce emissions to acceptable levels.
- excluding transport from the emissions trading scheme will transfer the burden of cost to other sectors and increase costs in those sectors to higher and disproportionate levels.
- excluding transport will not reduce the cost of emissions trading to Australia, but will merely increase the costs on a narrower group of industries (including domestic electricity).
- coastal shipping carrying domestic freight must not be completely excluded from the scheme but must pay an equivalent emissions charge.

Railways with substantial emissions should have the choice to purchase and acquit emissions permits directly. Railways with small emissions and other transport (including trucks and cars) should pay for emissions permits downstream (eg at the point of purchase of fuel).

The government should include in its legislation the ability for companies to pass on reasonable carbon permit costs if contracts don’t have existing means to do so.

Emissions reporting for companies with a permit liability should not be required at facility level and is instead reported at entity level.

The government should use the revenue from the auction of the emissions trading permits to facilitate even greater environmental benefits by supporting energy efficient industry, including rail.

With respect to the CPRS as outlined in the Green Paper, the rail industry proposes the following specific measures to optimise the effectiveness of the CPRS and mitigate transport's impact on climate change.

Improvements to the Carbon Pollution Reduction Scheme

1. Optimising Rail’s Economic and Environmental Credentials
   - Offset intermodal railways fuel to match heavy road transport
     Intermodal rail carrying contestable freight, should be granted the same offset of emissions costs which are to be granted to heavy road transport. A subsidy of the
carbon price for heavy road transport provides competitive cost advantage to road over rail. This subsidy will drive shippers to use energy intensive trucks increasing greenhouse gases, and result in further market share loss from rail that will take many years to recover.

- **Accelerated taxation depreciation for environmentally friendly rolling stock and infrastructure**
  The average age of Australian rail rolling stock is more than 30 years resulting in opportunities for significantly improving environmental performance. Sympathetic taxation arrangements will encourage the introduction of new technology to speed faster deployment of environmentally efficient investment. Accelerated taxation depreciation should be introduced for new, environmentally friendly locomotives and wagons, and for infrastructure within the rail industry.

- **Provide a Climate Change Credit**
  Freight forwarders should be encouraged to use rail for contestable freight instead of more emissions intensive transport. This arrangement places the incentive on those who decide the mode of transport, and equalises the offset provided to road transport industry. Taxation measures should be introduced to provide incentives for freight forwarders to use rail instead of more emissions intensive transport, by offsetting emissions costs.

- **Provide incentives to use public transport**
  Employers should be encouraged to maximise the environmental advantages of using public transport. Taxation measures should be introduced to provide incentives for employers to encourage employees to use rail public transport.

2. **Climate Change Action Fund (CCAF)**

- **Allocate CCAF funds for targeted rail investment**
  Investment in railway facilities and rolling stock would advance the climate change agenda and improve productivity. This would include the use of alternative fuels, hybrids and new technologies.

- **Allocate CCAF funds for programs to inform transport choices**
  There are several products which provide information to users about the consequences of their travel choices. Schemes such as TravelSmart and internet carbon calculators change users behaviour resulting in cost effective environmental benefits. Other transport and environmental information would assist freight forwarders and developers to better integrate land use and transport resulting in lower emissions.

3. **Include Australian Shipping in the CPRS**

- **Introduce a charge equivalent to the emissions cost into shipping permits**
  Currently under the proposed CPRS, international ships operating under Continuous Voyage Permits (CVP's) and Single Voyage Permits (SVP's) will be exempt. This will see leakage from long distance rail, particularly Perth to Melbourne, to international shipping. All shipping carrying cargo within Australia should pay an emission charge.
1. Background

The rail industry welcomes the introduction of a Carbon Pollution Reduction Scheme into the Australian economy. The need to reduce greenhouse gas emissions is urgent and the introduction of a Scheme that drives Australia to a lower emissions target is needed.

The rail industry provides the following comments in relation to the design of the Scheme which in its early design phase could benefit from the consideration of a number of factors and amendments, to ensure its long term success.

The Role of Rail

Greater use of both passenger and freight rail will benefit business, the environment and the Australian community in general. Rail should be the preferred mode of transport for high volume, long distance freight including

- all intermodal freight between capital cities;
- bulk freight; and
- mass public transport.

Rail transport is around four times as energy efficient as road transport for freight and twice as efficient as for moving people. These efficiencies are much higher for tasks with higher demand. Therefore any climate change legislations should maximise the inherent advantages of rail transport to be successful. If Australia is to achieve its emissions reduction targets, a significant increase in rail transport must be part of the solution. Government policy and infrastructure investment must ensure that rail transport contributes as a key solution in reducing transport emissions.

Principles

The ARA proposes that the following principles should guide the development of climate change policies and programs:

- there should be positive environmental outcomes at all levels (not just overall);
- consequences should be equitable and fairly distributed;
- the regulatory burden should be as low and possible;
- any perverse regulatory, market or environmental outcomes should be minimised; and
- compensatory mechanisms should be implemented where these principles are not achieved.

At present there is insufficient information available about the energy and emission policy proposals (including emissions trading), the legislation and the transport systems to determine whether these principles will be achieved.

1. The Rail Industry’s Position on Emissions Trading

The rail industry must, and is in a prime position to play a positive role in responding to climate change issues.

- the rail industry must improve the environmental performance of its activities by using existing technology, which will further reduce its emissions to lower levels (zero if using electricity from zero emissions sources)
• increased rail use will positively improve environmental outcomes including reducing the impact of climate change.

Rail industry supports an emissions trading scheme which includes all transport which means:
• excluding transport from the emissions trading scheme will threaten the integrity and viability of scheme and therefore the ability of Australia to reduce emissions to acceptable levels.
• excluding transport from the emissions trading scheme will transfer the burden of cost to other sectors and increase costs in those sectors to higher and disproportionate levels.
• excluding transport will not reduce the cost of emissions trading to Australia, but will merely increase the costs on a narrower group of industries (including domestic electricity).
• coastal shipping carrying domestic freight must not be completely excluded from the scheme but must pay an equivalent emissions charge.

Railways with substantial emissions should have the choice to purchase and acquit emissions permits directly. Railways with small emissions and other transport (including trucks and cars) should pay for emissions permits downstream (eg at the point of purchase of fuel).

The government should use the revenue from the auction of the emissions trading permits to facilitate even greater environmental benefits by supporting energy efficient industry, including rail.

2. Liquid Fuels

The emissions that result from liquid fuels are a considerable part of Australia’s greenhouse gas emissions. These fuels, by their nature of being easily transportable, are used significantly in the transport sector. The Green Paper suggests a number of design elements specifically related to liquid fuels. The rail industry has concerns with some of these elements which it believes diminishes the aims of the Scheme.

One new and surprising introduction into the Carbon Pollution Reduction Scheme which appears at odds to its whole economic principle, relates to the protection of road users and in particular Heavy Vehicle Road Users of the carbon costs.

Including all Transport in the Carbon Pollution Reduction Scheme

It is self evident to market economists and transport planners that transport should be included in the Carbon Pollution Reduction Scheme. Professor Ross Garnaut in his Draft Report (June 2008) states:

"an effective market-based system will be as broadly based as possible, with any exclusions driven by practical necessity and not by short-term political considerations. It will include transport and petroleum products. This will allow abatement to occur in the enterprises and industries and regions in which it can be achieved at lowest cost."

"The emissions trading scheme and associated mitigation policies will contribute to large structural change throughout the Australian economy. The
changes will be most profound in the sectors in which emissions are most important—first of all energy, and then transport, and agriculture and forestry."

"The more sectors included in the emissions trading scheme, the more efficiently costs will be shared across the economy. The transport sector should be included."

Interpretation of Australian Government data\(^1\) indicates that if there is no significant new intervention, emissions from the transport sector alone will comprise over 66% of the target for all Australian emissions in 2050 (ie 40% of year 2000 emissions).

![Australian Transport Emissions Forecast](chart.png)

Clearly incremental changes alone will not achieve the target required and fundamental structural changes to Australian transport systems are essential. Therefore, the rail industry accepts the policy agenda to address climate change issues and the general parameters of the policies outlined by the Australian Governments various activities.

**Protection of Heavy Road Vehicles Users**

The Green Paper has devoted much thought and consideration to the protection of vulnerable business. These vulnerable businesses have been categorised as Trade Exposed Emissions Intensive and Strongly Affect Industries. Contrary to the proposed Carbon Pollution Reduction Scheme design in having mechanisms to assist these businesses in

\(^1\) *Greenhouse Gas Emissions From Australian Transport: Base Case Projections to 2020*, Bureau of Transport and Regional Economics (BTRE), Report for the AGO, DEH, August 2005
transitionary phases of the Scheme, the Government has introduced a new category of vulnerable businesses, namely those that operate heavy road vehicles.

The concept of having a Scheme that embraces as many sectors as practically possible in the economy is immediately compromised by removing categories of energy use from the Scheme and the protection of a select part of an Industry. Other members of the Transport Industry who compete with Heavy Vehicle Road Users are immediately put into a position of competitive disadvantage with an industry sector that is the most inefficient transport mode in respect of emission per tonne kilometre.

Intermodal rail, which carries container freight between the interstate capital cities is much more energy efficient than heavy vehicle transport. Intermodal rail emissions are at least three time lower than heavy vehicle road transport, even when the road pick up and delivery of the goods at either end is taken into account. Therefore, the introduction into the Carbon Pollution Reduction Scheme of a new design element that lowers the competitive position of the most greenhouse favourable mode of transport is absolutely incongruous with the intent of the Scheme.

The protection of Heavy Vehicle Road Users in the Carbon Pollution Reduction Scheme will result in the rail freight industry losing market share to road, which achieves the total opposite of the desired outcome. While the protection to road may be reviewed after one year, such protection is notoriously difficult to remove. It is rail’s experience that after such price corrections, it still takes many years for rail freight market share to recover.

The key climate change ramifications of this decisions is that this resulting transfer of rail freight to road will result in an additional 10,500 tonnes per annum of greenhouse gases emitted into the atmosphere each year. With a number of years to recover market share, this amount will extend to an estimated 28,500 additional tonnes as a result of one year of protection of the heavy vehicle road users, in addition to the lost opportunities of decreasing emissions during this period.

The ARA concurs with Professor Ross Garnaut who stated in his presentation of his Supplementary Draft Report on 5 September 2008, that all fuel should be included in the Carbon Pollution Reduction Scheme from day one and there are no good reasons not to do so. While the government may be reticent to remove the protection of the fuel carbon costs from road users, on-road business users and heavy vehicle road users, then at least parity on this position should be given to those in direct competition.

The ARA submits that any compensation for the ETS impacts should be delivered independent of fuel costs (ie nil or minimal fuel subsidies) so as to ensure parity between and greater incentives to reduce emissions across all sectors of the high-emitting transport industry.

**Market Failures and Distortions**

Government policies and the decision to offset the emissions cost for road transport results in some bizarre market failures and distortions, including:

- car driver's costs will not change, but rail public transport costs will increase;
- road freight charges will not change, but rail freight costs will increase;
- CPRS charges are not market linked to public transport pricing or provision of infrastructure;
- car owners CPRS costs are discounted by tax rebates or payments by others (eg when used for business purposes);
- international flagged shipping carrying domestic cargo won't pay the CPRS charge, but competing rail and local shipping will incur the charge.

The changes in behaviour that the market costs are intended to achieve cannot occur if the market is distorted in these ways. The result of these distortions is that the CPRS will be inefficient and the outcomes will be more costly to achieve.

**Road and Rail Competitive Freight Environment**

The competitive position between road and rail is active and real on the main North South transport corridor. This corridor covers the goods moved between Melbourne – Sydney, Melbourne – Brisbane, and Sydney – Brisbane. Due to underinvestment in the rail infrastructure on this North South corridor, the market share held by rail is very low compared to the Intermodal market share held on the corridor between Perth and the Eastern States.

The nature of the success in market share for rail on the North South corridor is in direct proportion to:
- its ability to meet key delivery timeframes of the freight market;
- its ability to provide freight goods on time; and
- its ability to carry large volumes and therefore to gain a cost advantage over road.

The introduction of protection to a competitor to intermodal rail will lessen the cost advantage of rail over road, and reduce rail’s competitive position and market share.
The mechanism to protect Heavy Vehicle Road Users from carbon price impacts and not intermodal rail will result in an increase in greenhouse gas emissions. As a bare minimum, parity for these two freight transport industry modes must be maintained to prevent this increase in greenhouse gases.

**Optimising Rail’s Economic and Environmental Credentials**

Intermodal rail carrying contestable freight, should be granted the same offset of emissions costs which are to be granted to heavy road transport. A subsidy of the carbon price for heavy road transport provides competitive cost advantage to road over rail. This subsidy will drive shippers to use energy intensive trucks increasing greenhouse gases, and result in further market share loss from rail, which is a significantly more carbon efficient mode than road transport, that will take many years to recover. **Therefore the Government should offset intermodal railways fuel to match heavy road transport.**

The average age of Australian rail rolling stock is more than 30 years resulting in opportunities for significantly improving environmental performance. Sympathetic taxation arrangements will encourage the introduction of new technology to speed faster deployment of environmentally efficient investment.

Accelerated taxation depreciation should be introduced for new, environmentally friendly locomotives and wagons, and for infrastructure within the rail industry. **The Government should introduce accelerated taxation depreciation for environmentally friendly rolling stock and infrastructure.**

Freight forwarders should be encouraged to use rail for contestable freight instead of more emissions intensive transport. This arrangement places the incentive on those who decide the mode of transport, and equalises the offset provided to road transport industry. **The Government should provide a Climate Change Credit.**

Employers should be encouraged to maximise the environmental advantages of using public transport. Taxation measures should be introduced to provide incentives for employers to encourage employees to use rail public transport. **The Government should provide incentives to use public transport.**

### Recommendations

**Optimising Rail’s Economic and Environmental Credentials**
- Offset intermodal railways fuel to match heavy road transport
- Accelerated taxation depreciation for environmentally friendly rolling stock and infrastructure
- Provide a Climate Change Credit
- Provide incentives to use public transport

**Include Australian Shipping in the CPRS**
- Introduce a charge equivalent to the emissions cost into shipping permits
**Include Australian Shipping in the CPRS**

Currently under the proposed CPRS, international ships operating under Continuous Voyage Permits (CVP’s) and Single Voyage Permits (SVP’s) will be exempt. This will see leakage from long distance rail, particularly Perth to Melbourne, to international shipping. All shipping carrying cargo within Australia should pay an emission charge. **Therefore the government should introduce a charge equivalent to the emissions cost into shipping permits.**

![Recommendation]

**Include Australian Shipping in the CPRS**

- Introduce a charge equivalent to the emissions cost into shipping permits

**3. Ownership of Permit Liability**

The Carbon Pollution Reduction Scheme has the provision for large fuel users to ‘Opt In’ and manage their own fuel permit liability. The rail industry strongly supports this measure. Having the choice to Opt In provides important transparency in the carbon cost component of the fuel charge for large fuel users.

The ability to take over the management of this liability provides many benefits to large fuel users:

- it increases the bargaining power of purchasers to refuse unreasonable carbon permit costs;
- large fuel users may believe they are better placed to manage the price risk elements of the carbon price instead of the supplier; and
- other activities of the large fuel users, may require the company to manage direct permit liabilities (for example in the mining industry where there is the release of fugitive gases), and an Opt In arrangement would allow the company to consolidate its exposure and management of carbon permit costs.

These benefits for large liquid fuel users are the same for large users of electricity. This Opt In mechanism should equally apply to companies that purchase large amounts of electricity. This furthermore would allow companies that use large amounts of electricity and liquid fuels to consolidate their carbon permit costs.

Where large fuel users have equipment of various vintage, there could be benefit in a fuel user having direct management of the permit liability so they could claim actual emissions versus the default emissions value that will be used by the fuel suppliers. These various methods for measuring emissions, as provided for in the National Greenhouse and Energy Reporting System, would further incentivise companies to modernise equipment to obtain the lower actual emissions quantity instead of a default value. This additional benefit would only be obtained through an Opt In mechanism.

Large energy users should have the ability to Opt In to take over all or part of the permit liability from energy suppliers and the ability to Opt Out by handing this liability back to their energy suppliers. By nature of the large quantities and large costs involved, large energy purchasers usually enter into purchase contracts with their suppliers for a number
of years. There would be no administrative reason that these two parties could not Opt In and Opt Out for the management or partial management of carbon emissions permits a number of times during this period on terms agreed between the parties. As long as the total number of permits held by either or both parties at the end of a reporting period is sufficient to cover the energy purchased, then this practice should be accepted within the Carbon Pollution Reduction Scheme.

Therefore large liquid fuel users and large electricity users should be able to Opt In and Opt Out of the direct management of their permit liability.

4. Contracts & Carbon Permit Cost

While many contracts have some mechanism to pass on increases in energy prices, as these can be a key cost element within the contract, it is likely that very few contracts at this point in time have a mechanism to pass on a carbon permit cost.

The need to consider a carbon permit cost in customer contracts is only a recent consideration for energy users, where for energy creators or suppliers this has been a consideration for some time. As a result, few would have any mechanism for a carbon permit cost pass through to customers at commencement of the Carbon Pollution Reduction Scheme.

When the permit cost remains the liability of the energy supplier, the outcome is an increase in the energy costs which in most cases will be easily pass through the contractual chain from customer to customer.

With the ability for large energy users to Opt In to manage direct carbon permit liabilities, this will only be desirable if the company has the contractual means to pass on this cost. Likewise, where companies have industrial or fugitive emissions for which they must purchase permits and therefore recover costs from customers, they must be able to recover these costs.

Consideration should be given by the Government for legislation that allows companies to pass on reasonable permit costs to customers where there is no existing contractual method to do so.

The government should include in its legislation the ability for companies to pass on reasonable carbon permit costs if contracts don’t have existing means to do so.

5. Reporting

The Green Paper canvases the option of requiring facility level reporting of emissions for permit liabilities. Such a requirement is onerous and does not neatly match the reporting requirement for National Greenhouse and Energy Reporting System. The reporting requirements of the National Greenhouse and Energy Reporting System are comprehensive and this System has adequate public reporting requirements.

Total entity emissions reporting for entities managing permit liabilities in the Carbon Pollution Reduction Scheme is more than adequate.

Therefore emissions reporting for companies with a permit liability should not be required at facility level and is instead reported at entity level.
6. Complementary Policies

The transport sector faces unique challenges in achieving emissions reduction. A paucity of alternative fuel options and technologies, and reliance on government investment and policies in support of transport infrastructure all shape the transport choices made in Australia.

The rail industry submits that the government implement complementary policies as an integral element of the Carbon Pollution Reduction Scheme in assisting the achievement of the National emissions target at the lowest cost.

A copy of the policies suggested by the Rail Industry to the Garnaut Climate Change Review and to the Wilkins Review, is included in Appendix A.

In addition to these previous submitted policies provided in Appendix A, to foster the use of lower emissions transport solutions, The rail industry proposes the Government introduce a tax credit to freight forwarding companies that use and therefore support lower emissions rail and shipping transport modes. Such an incentive would complement shifts in transport emissions in a sector where the carbon price will have limited effect.

**The government should use the revenue from the auction of the emissions trading permits to facilitate even greater environmental benefits by supporting energy efficient industry, including rail.**

7. Climate Change Action Fund

There is a need to make structural changes to transport infrastructure in Australia to place it in a position to provide lower emissions solutions. The Climate Change Action Fund would be a useful mechanism in funding some of this structural change.

Transport efficiency is affected by the whole of the logistics chain. Efficient intermodal terminals and ports are essential to maximise efficiency. The interaction between terminals and other transport modes and the removal of barriers to ensure that these transport hubs operate efficiently, can provide greenhouse gas reduction gains in transport. Funds from the Climate Change Action fund should be available to fund the acquisition of land by government to provide transport facilities and corridors in metropolitan areas.

The capital cost of new rail rollingstock is high which has led to the age of the rail fleet in Australia to be above 30 years, where the United States average is 8 years. The low rate of growth of the carbon price expected in the first years of the Carbon Pollution Reduction Scheme will have no effect on modernising the Australian rail fleet. A program of accelerated depreciation on existing rollingstock with funds to be committed to new rollingstock would introduce lower emissions equipment into the rail fleet. This accelerated depreciation could be funded from the Climate Change Action Fund.

The trial on alternate fuels in locomotives is a prohibitively costly exercise due to the expense of the capital equipment. Some of the solutions being examined internationally may not apply well in an Australian energy context. It is recommended that the Climate Change Action Fund be used to assist in developing future fuels and their application in the rail industry.
**Climate Change Action Fund (CCAF)**

Investment in railway facilities and rolling stock would advance the climate change agenda and improve productivity. The CCAF should be available to acquire and develop transport facilities and corridors in metropolitan areas, fund the accelerated depreciation of the existing rail fleet to fund a fleet renewal program, and assist the development of alternative fuel or energy solutions in the rail industry. **The government should allocate CCAF funds for targeted rail investment**

There are several products which provide information to users about the consequences of their travel choices. Schemes such TravelSmart and internet carbon calculators change users' behaviour resulting in cost effective environmental benefits. Other transport and environmental information would assist freight forwarders and developers to better integrate land use and transport resulting in lower emissions. **The government should allocate CCAF funds for programs to inform transport choices**

**Recommendations**

- **Climate Change Action Fund (CCAF)**
  - Allocate CCAF funds for targeted rail investment
  - Allocate CCAF funds for programs to inform transport choices