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Freight Transport and the Environment

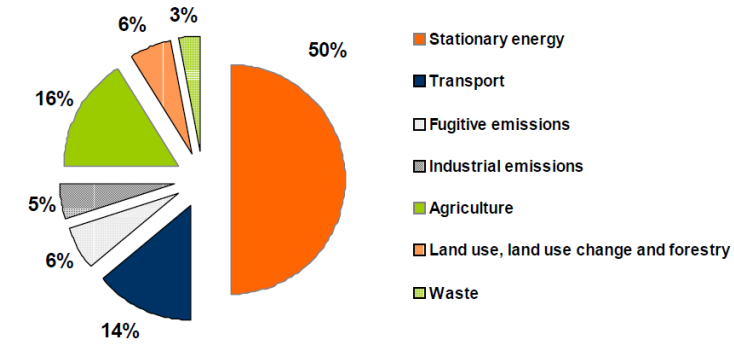
Environmental Responsibility

The transport and logistics industry has a responsibility to constantly improve its environmental performance. The challenge is to find ways of reducing environmental impact, while allowing industry growth in line with the demands of the community (as freight transport supports the quality of life desired by a community). The National Transport Commission (NTC) is looking into ways of achieving a balance between industry growth and environmental impact.

Greenhouse Gas emissions from Freight Transport

According to the NTC, transport represents approximately 14% of Australia's greenhouse gas emissions.[1] The chart below depicts greenhouse gas emissions by sector:

Table 1: Australian greenhouse gas emissions by sector (2005)



Freight transport, in particular, produces only 6% of greenhouse gas emissions. The freight transport sector can be broken into:

- Road transport, responsible for 89% of freight greenhouse gas emissions
- Rail transport, responsible for approximately 6%
- Sea freight, responsible for the remaining 5%.

Cutting Freight Carbon Emissions

National Transport Policy

The Australian Transport Council (ATC) has established a National Transport Policy framework.

The policy identifies the following possible government measures:

- Productivity reforms, including road maintenance and improvements in rail infrastructure bottlenecks, to help to reduce freight costs and cut carbon emissions.

[1] http://www.ntc.gov.au/filemedia/bulletins/ThecarbonemissionschallengeJul08.pdf

- The increased use of larger trucks, especially Super B-Double vehicles that can each carry two 40' containers – 50% more than a semi-trailer. Fewer trucks on the road means less greenhouse gas emissions.

Industry measures

The following table details possible industry measures suggested by the National Transport Commission[2]:

Possible Action	***Outcomes***
Targeted investment in urban road and rail freight infrastructure bottlenecks, such as older bridges, and separation of freight and passenger rail networks.	*Reduce travel times (and therefore emissions) for road and rail freight transport.*
Map meaningful networks for high productivity vehicles such as quad axle semi-trailers and B-doubles, SMART trucks and B-triples.	*Fewer, safer trucks on the road will burn less fuel, cut carbon emissions and reduce road damage.*
Improve rail freight productivity.	*Encourage better use of rail and intermodal freight options.*
A national ports and intermodal terminal strategy to plan efficient road and rail links and support future freight growth.	*Encourage more efficient sea-rail-road transport movements.*
Fuel efficiency ratings for commercial vehicles.	*More informed truck buying decisions to reduce fuel costs and cut carbon emissions.*
Encourage the take-up of clean engine technologies such as hybrid trucks.	*Immediate reduction in carbon emissions.*
Trial incentives to scrap older high polluting trucks.	*Encourage freight operators to accelerate investment in cleaner trucks.*
Trial congestion pricing for all vehicles.	*Spread travel demand to reduce congestion, improve freight efficiency and cut GHG emissions.*
Allow operators to "buy productivity" by paying for the extra road damage caused by running trucks at higher weights than currently allowed (incremental pricing).	*Move freight safely with fewer vehicles to reduce freight costs and cut carbon emissions.*
Run pilots for night time operation in urban areas using "quiet" trucks and trains.	*Running trucks and trains outside 'peak' times will reduce loading delays, improve fuel consumption and cut GHG emissions.*
Improve "whole of supply chain" efficiency.	*Australia's supply chains are structured around cheap transport. Pricing the real cost of carbon emissions will encourage supply chains to transition to a sustainable model.*

[2] http://www.ntc.gov.au/filemedia/bulletins/OptionstocutfreightcarbonemJul08.pdf

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Further Information

Many organisations within the freight transport sector are investing in environmentally friendly technologies. Airports, ports, and road and rail transport operators are all making significant investments in infrastructure, procedures and fleets in order to reduce their carbon footprint. For more information, visit: http://www.ntc.gov.au/filemedia/Reports/FreightTsptCarbonConstEcoJul08.pdf