

# FACT SHEET 6



## Ships are Efficient and Competitive

**S**ea freight rates compare favourably with Road and Rail – and are not subsidised.

**Ships are highly price-competitive** in many domestic freight routes with road and rail, the two main competitors in the domestic freight market.

### Ships offer non-price competitive advantages:

- the capacity to move large volumes of cargo in a single shipment (an option for oversize cargo);
- they save inventory costs by acting as warehouses while in transit;
- they do not cause urban congestion or accidents by competing in transport corridors also used by citizens.

Ships are already adopting emission reduction measures overseen by the International Marine Organisation (IMO) such as the Energy Efficiency Design Index (EEDI) for new ships and the Ship Energy Efficiency Plan (SEEMP) for all ships.

A 2008 report on an *Economic Appraisal of Australia's Shipping Future*, prepared for the Department of Infrastructure, Transport, Regional Development and Local Government found **coastal shipping exhibited a 10-20% freight rate advantage over rail.**<sup>1</sup>




In a study published by the National Institute of Economic and Industry Research (NIEIR)<sup>2</sup> in 2010 a comparison of sea, rail and road freight modes found:

**Shipping offers competitive service/cost packages where:**



- Freight origins and destinations are on the wharf or, where this ideal condition is not met, intermodal costs are low;
- Flows are of the order of several thousand tonnes a day; or
- Flows are moderate and frequency of service is not important (so that the flow can be interrupted while loading builds up to shiploads).
- Competitiveness of coastal shipping increases at higher volumes and over longer distances.

<sup>1</sup> Meyrick and Associates *Economic Appraisal of Australia's Shipping Future*, Prepared for the Commonwealth Department of Infrastructure, Transport, Regional Development and Local Government, December 2008  
<sup>2</sup> Ian Manning and Peter Brain, *Australian Coastal Shipping: Its future Role*, National Institute of Economic and Industry Research, 2007, published March 2010

MODE OF TRANSPORTATION	NUMBER OF MILES/GALLON CARRYING ONE TON OF CARGO
	<b>514 miles/gallon</b>
	<b>202 miles/gallon</b>
	<b>59 miles/gallon</b>

Adapted from U.S. DOT Maritime Administration, via <http://business.tenntom.org/why-use-the-waterway/shipping-comparisons/>

**Australian ships have a cost structure that impacts on their price competitiveness relative to international ships, which are bound by an entirely different set of labour, tax, safety and other laws.**

COMPARISON OF ENERGY EFFICIENCY OF DIFFERENT TRANSPORT METHODS	
ENERGY USE BY TRANSPORTATION MODE	
Mode	MJ/t-km
Rail	0.3
Truck	2.7
International air	10.0
International water container	0.2

**Note:** MJ/t-km represents energy used per ton mile.

Source: Weber and Matthews (2008), cited in How Transportation Costs Affect Fresh Fruit and Vegetable Prices, ERR-160 <http://www.ers.usda.gov/media/1230835/err160.pdf>



**Australian ships do not receive any subsidy from the Australian Government.**

Ships meet the full cost of each service necessary for their operation (safe navigation, channel deepening, wharfage, towage, pilotage, stevedoring, bunkering). Ships also pay for externality costs via IMO-regulated ship pollution reduction technologies.

This is in stark contrast to road and rail modes – particularly road (where trucks do not pay the full cost of infrastructure such as road construction and maintenance, policing, signage, parking bays).

Nor are externality impacts like pollution and road congestion built into road and rail freight pricing.

Notwithstanding this competitive imbalance, ships are more efficient on a

tonne kilometre basis than road or rail – and are the least energy intensive of any freight mode.

**The Australia Institute reports** “Land freight is heavily subsidised in Australia. In NSW alone this under-recovery has been estimated at \$1.5 billion for one year. Trucks further impose unpriced costs through congestion, pollution and accidents. Rail freight imposes fewer external costs but also benefits from taxpayer support - the Queensland Competition Authority estimates the Queensland Government subsidises rail freight by around \$213 million per year in that state alone.”<sup>3</sup>

3 Rod Campbell & David Richardson, *Shipping Legislation Amendment Bill 2015 - Review of regulation impact statement* The Australia Institute, August 2015



No domestic freight mode would be price competitive if it operated in a market where a competitor had a cost structure based on the price of labour between 25% and 30% of Australian labour costs (if it had to compete with foreign labour paid at rates prevailing in developing nations).



Australian labour and immigration laws do not permit non-nationals to work in Australian domestic industries at rates of pay only 25% to 30% of the Australian market rate.



This competitive imbalance between national and international ships is one reason why so many nations have legislated support for their domestic shipping industry – to enable their domestic fleet to compete on fair terms. That principle has underpinned Australian maritime laws since the early 20th century.

**FACT**

**SHIPS REQUIRE NO SUBSIDY, UNLIKE ROAD AND RAIL**