

Ocean Transportation

Types of Ocean Transportation

VLCCs

very large crude carriers (tankers)

Bulk carriers –

carry cargoes in bulk, such as iron ore, coal or wheat

Container carriers –

ships designed to carry containers, they are equipped with specialized handling devices to carry freight like machine parts, or high value manufactures such as electronic equipment

Ocean Liners – cruise ships which carry passengers where the quality of the accomodation is paramount

Ocean Transportation Facts

- The equivalent of about 141 million loaded twenty-foot containers were moved across the oceans in 2007
- In one year on average, a container ship travels nearly 300,000 km, That is more than seven times around the world.

Ocean Transportation Facts

Table A. Worldwide cruise demand (in millions)

Passengers by region	1989	1991	1993	1995	1997	1999	2000
N. America	3.29	4.00	4.48	4.40	5.05	5.89	6.88
Europe	0.53	0.70	0.88	0.97	1.36	1.79	1.95
Rest of the world	0.20	0.22	0.25	0.30	0.46	0.85	0.78
TOTAL	4.02	4.92	5.61	5.67	6.87	8.53	9.61

Source: CLIA for the US and Canada, PSA for Europe and GP Wild (International) Ltd for the Rest of the world.

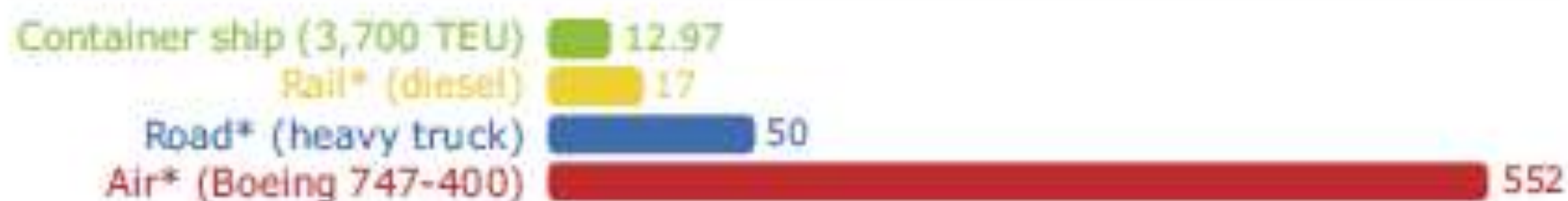
- In 2000m 10 million trips were taken on cruise liners, and is expected to grow to 43.5million customers in the next 5 years

Advantages of Container Shipping

- While aeroplanes are faster, container ships can carry more goods in one go. It would take hundreds of aeroplanes to carry all the goods that can fit on just one large container ship.
- Transporting goods in large volumes makes it cheaper 'economies of scale'.

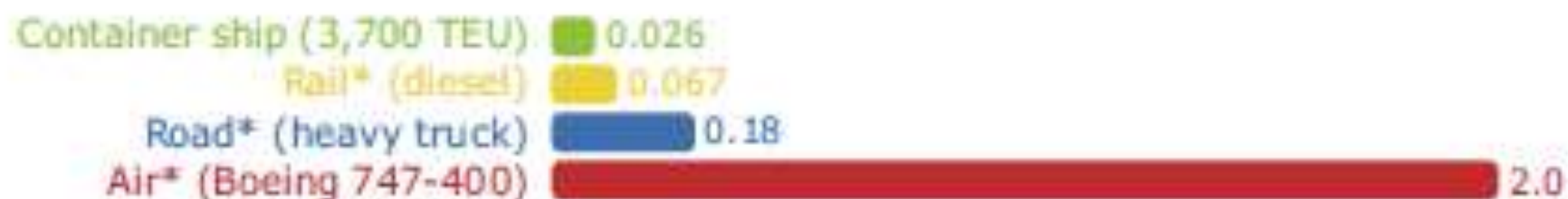
- Transporting goods by container ship is also better for the environment.
 - It is estimated that on average a container ship emits around 40 times less CO2 than a large freight aircraft and three times less than a heavy truck.
 - Container shipping is also estimated to be two and a half times more energy efficient than rail and 7 times more so than road.

CO₂ emissions (grammes) to carry 1 ton of cargo 1km



*Source: The Network for Transport and the Environment

Energy used (kilowatts) to carry 1 ton of cargo 1km



*Source: The Network for Transport and the Environment

Problems of Ocean transportation

- Pirates
- Economic Recession
- Maneuverability
- Lost cargo
- Risk of injury/death loading and unloading
- Technology slow to catch up