

Case study

Sustainable shipping



BHP is one of the largest global shippers of bulk commodities. Emissions resulting from the transportation and distribution of our products represent a material source of Scope 3 emissions. We are working on initiatives to reduce our freight emissions and seek to drive change more broadly within the shipping industry.

In order to control the emissions from the vessels we charter, we first need to understand them. Over the last few years we have collaborated with RightShip to develop a calculation methodology for measuring a vessel's GHG emissions. RightShip is a leading maritime risk management and environmental assessment organisation equally owned by BHP, Rio Tinto and Cargill. Using this calculation methodology, the Existing Vessel Design Index (EVDI), we can now measure, benchmark and track emissions performance across the freight associated with our business.

Based on the EVDI, a practical GHG emissions rating on an A to G scale has also been developed for use across the industry. This allows transparent comparison of a ship's emissions performance relative to vessels of a similar size and type. As part of our commitment to sustainable shipping, in FY2018 we decided not to accept (almost without exception) vessels with the lowest F and G ratings. As an early adopter of the RightShip rating in our vessel vetting criteria, we are already seeing the impact on the Scope 3 emissions profile for transport and distribution.

There are a number of examples where application of our vetting criteria has resulted in significant reductions in GHG emissions for individual voyages. For example, for a voyage involving approximately 180,000 tonnes of iron ore being shipped from Port Hedland to China, an F-rated vessel was rejected and an A-rated vessel was selected. In this case, the selection of a more efficient vessel resulted in an emissions saving of over 400 tonnes CO₂-e, or 23 per cent of the total voyage emissions.

We have also started to see a response from the shipping industry. Examples of actions taken by our strategic partners (ship owners) include:

- A US-based ship owner, which operates 17 vessels, has engaged with its main engine manufacturer to carry out engineering modification to reduce emissions.
- A Greece-based ship owner, which operates over 40 vessels, has carried out a variety of technical adjustments to reduce emissions, including limiting engine power output, installing propulsion improvement devices and applying advanced silicon paints.