



National Marine Science Plan 2015-2025 Factsheet

Australia is a marine nation

- We have the third-largest marine jurisdiction of any nation on Earth—13.6 million km²—giving us a natural security buffer and the responsibility for a search-and-rescue area that is over one-tenth of the Earth's surface.
- More than 85 per cent of Australia's population lives within 50 kilometres of the coast.
- We have yet to explore more than 75 per cent of our marine estate.
- Australia has 60,000 kilometres of coastline.
- Australia's marine estate is home to some of the world's most iconic and diverse marine habitats and organisms, and includes several world heritage-listed areas (the Great Barrier Reef, the Ningaloo coast and Shark Bay).
- We have only studied or mapped in detail approximately 25 per cent of the seafloor of Australia's marine jurisdiction, with only a fraction of that area described at the habitat level.

Value of our marine estate

- By 2025, Australia's marine industries will contribute around \$100 billion per annum to our economy, more than doubling its contribution of \$47.2 billion in 2012.
- At an estimated \$450 million, the annual spend on marine science has helped double the blue economy contribution over the last decade to the current \$47.2 billion per annum.
- The ocean's ecosystem services, such as climate regulation, temperature and freshwater variability, carbon dioxide absorption, nutrient cycling, coastal protection and oxygen production, are estimated to be worth a further \$25 billion.
- Over the next decade, the blue economy is set to grow at 7.5 per cent per annum, far outstripping the projected 2.5 per cent growth rate of Australia's GDP.
- By 2025 the doubling of aquaculture value through the development of new sectors, the growth of existing ones through new breed, feed and disease

management, and the export of intellectual property to the global market. The annual value of marine based aquaculture in 2012 was \$1 billion.

- In 2013–14, exports of liquefied natural gas (LNG), Australia's third-largest goods and services export, were valued at \$16.3 billion. This export market is predicted to grow from around 20 million tonnes per annum in 2012–13 to 76.6 million tonnes per annum by 2020.
- Our economy's reliance on imports of crude oil and refined petroleum products is also expected to grow at around 3 per cent per annum over the next 20 years.
- Australia's marine tourism industry has an annual value of \$14 billion in 2012.

Food security

- We currently import 72 per cent of our seafood despite our country's considerable capacity for meeting both existing market demand and potential future growth in demand.

Infrastructure at risk due to climate variability and change

- Around 250,000 Australian homes, roads, rail, ports, airports, water and wastewater services, energy and communications infrastructure, public assets and commercial assets are vulnerable to a 1.1 metre sea level rise by 2100. The estimated sum at risk is \$226 billion.
- Other sectors at risk of sea level and sea temperature rises include aquaculture and fisheries industries, worth about \$2.23 billion, and the Great Barrier Reef, which contributes \$5.7 billion to the Australian economy each year, with most of it derived from tourism.

Australia's marine science capability: current skills base

- Across Australia, over 2300 marine scientists work across a wide range of disciplines and research issues.
- Less than 3 per cent of Australia's higher-degree research completions between 2009 and 2013 had an explicit marine science focus, with biological and ecological sciences dominating these completions at 49–53 per cent.