

A VISION IN BLUE

Industry and Science Minister launches ten year plan for the investment and research needed to grow and manage Australia's blue economy

Embargoed until 9 pm Tuesday 11/8/15

Australia's vast oceans are a vital part of the heritage, heart and economic future of our country. The value of this marine estate to the homes, work, play, energy, food, safety and security of all Australians is matched only by the enormous economic and environmental wealth that this national asset affords us.

By 2025, Australia's marine industries will contribute around \$100 billion each year to our economy, with our oceans and coasts providing a further \$25 billion worth of ecosystem services, such as carbon-dioxide absorption, nutrient cycling and coastal protection.

This marine or "blue" economy is projected to grow three times faster than Australia's Gross Domestic Product over the next decade, more than doubling its current contribution of \$47.2 billion a year. The National Marine Science Plan, released today (11/8/2015) at Parliament House by the Minister for Industry and Science, the Honourable Ian Macfarlane, focuses on seven key challenges associated with our oceans that provides a template for striking a balance between reaping Australian ocean's economic potential and the need to safeguard its longer term health. These range from energy and food security; to national sovereignty and safety; understanding the roles of the oceans in climate change and developing effective adaptation strategies; protecting unique marine ecosystems and biodiversity; and ensuring that industry, government and the community have the tools to make good decisions about sustainable development of our marine estate and blue economy.

The consensus document from over 23 marine research organizations, universities and government departments and more than 500 scientists, provides a set of recommendations for science that will be at the heart of dealing with these challenges. The Plan's Recommendations are:

1. Create an explicit focus on the blue economy throughout the marine science system.
2. Establish and support a National Marine Baselines and Long-term Monitoring Program, to develop a comprehensive assessment of our estate, and to help manage Commonwealth and State Marine Reserves.
3. Facilitate coordinated national studies on marine system processes and resilience to enable understanding of development and climate change impacts on our marine estate.
4. Create a National Oceanographic Modelling System to supply the accurate, detailed knowledge and predictions of ocean state that defense, industry and government need.
5. Develop a dedicated and coordinated science program to support decision-making by policymakers and marine industry.
6. Sustain and expand the Integrated Marine Observing System to support critical climate change and coastal systems research, including coverage of key estuarine systems.
7. Develop marine science research training that is more quantitative, cross-disciplinary and congruent with the needs of industry and government.
8. Fund national research vessels for full use.

Australia's marine territories remain largely a mystery, despite the fact that 85% of Australians live within 50 kms of the sea. We have yet to explore more than 75 per cent of our marine estate, and a basic lack of information on what is beneath the ocean's surface, and how they function impacts on everything from the way we manage coastal development, protect our borders, protect an amazing array of ecosystems and plan naval and coastguard activities.

According to John Gunn, Chair of the National Marine Science Committee that coordinated the National Marine Science Plan (NMSP), "Australia's marine sector – already a significant contributor to the nation's economy – has the potential to provide even greater economic wealth through growth in offshore oil and gas production, renewable energy resources, biotechnology, marine and coastal tourism, fishing and aquaculture. But importantly oceans are critical to our planet and the country's future as they are key drivers of climate and weather. "

"This Plan outlines the science needed to provide the knowledge, technology and innovation cornerstones that will grow a sustainable blue economy. Our oceans have a very large number of stakeholders, particularly if we include all those Australians who expect their coasts and oceans to be healthy and productive. The NMSP is a call to action, to the nation's marine scientists, but also to all those who will benefit from a strong marine science sector that is dedicated to working with governments, industries and communities in the mission of ensuring that we get the most out of our marine estate while protecting the things we all care about", he said.

The Plan outlines seven interconnected grand challenges facing Australia. Marine science plays a significant role in meeting each of these challenges. The grand challenges are:

- marine sovereignty, security and safety
- energy security
- food security
- biodiversity, conservation and ecosystem health
- urban coastal environments
- climate variability and change
- resource allocation.

FACTS ABOUT AUSTRALIA'S OCEAN TERRITORIES:

- Only 25% of the seafloor of Australia's marine jurisdiction has been mapped.
- From Antarctica in the south to the Torres Strait in the north, from the Cocos-Keeling Islands in the west to Lord Howe Island in the east, our marine estate straddles three oceans: Indian, Southern and Pacific.
- It is the third largest marine jurisdiction of any nation on Earth—13.86 million km²—giving us a natural security buffer and the responsibility for a search-and-rescue area more than double our landmass.
- More than 85 per cent of Australia's population live within 50 kilometres of the coast.
- Marine industries contributed approximately \$47.2 billion¹ to our economy in 2011-12. This is projected to grow to approximately \$100 billion by 2025² with the expansion of current industries and development of new opportunities in areas such as renewable energy.
- In addition to their economic and aesthetic value, our oceans also provide a suite of essential "ecosystem services" – most importantly in their role within the global climate system. Since the end of the 18th century, about 30% percent of human-induced carbon dioxide emissions have been taken up by the oceans while over the past 50 years, they have absorbed about 90% of the additional heat caused by the greenhouse effect.

1. <http://www.aims.gov.au/documents/30301/23122/The+AIMS+Index+of+Marine+Industry+2012.pdf>

2. http://www.aims.gov.au/documents/30301/550211/Marine+Nation+2025_web.pdf