



Integrated Marine Observing System

As we move deeper into the 21st century, Australia's Integrated Marine Observing System (IMOS) has never been more essential for rising to the grand challenges and realising the great opportunities of Australia's oceans and coasts. The IMOS Strategy 2030 has been designed to help us answer this century's clarion call.

Since IMOS' inception in 2006, our ocean and coastal data have helped Australia sustainably manage the third largest marine estate in the world. Our data have helped forecast and predict ocean and weather conditions, supported the operational needs of marine industries, informed marine policy-making and more. But there is still much that Australia doesn't understand about its marine estate. Nor can Australia meet its challenges and opportunities without the knowledge base to make decisions, plan, invest and mitigate risk.

Over the coming decade, Australia needs to better track and understand the impacts of climate change and extreme weather events on coastal communities, iconic marine environments and maritime operations. Ocean and coastal observing data will help drive the projected \$100 billion-a-year blue economy, technological advancements, the potential of marine renewable energy and cutting-edge research on contemporary issues. Our regional and international neighbours also need IMOS data to close knowledge gaps about global oceans.

The scale of these challenges and opportunities requires a coordinated national marine monitoring system with the scale, capabilities, leadership and impact to match. IMOS is that system, and we have developed five Missions to guide our work over the next 10 years.

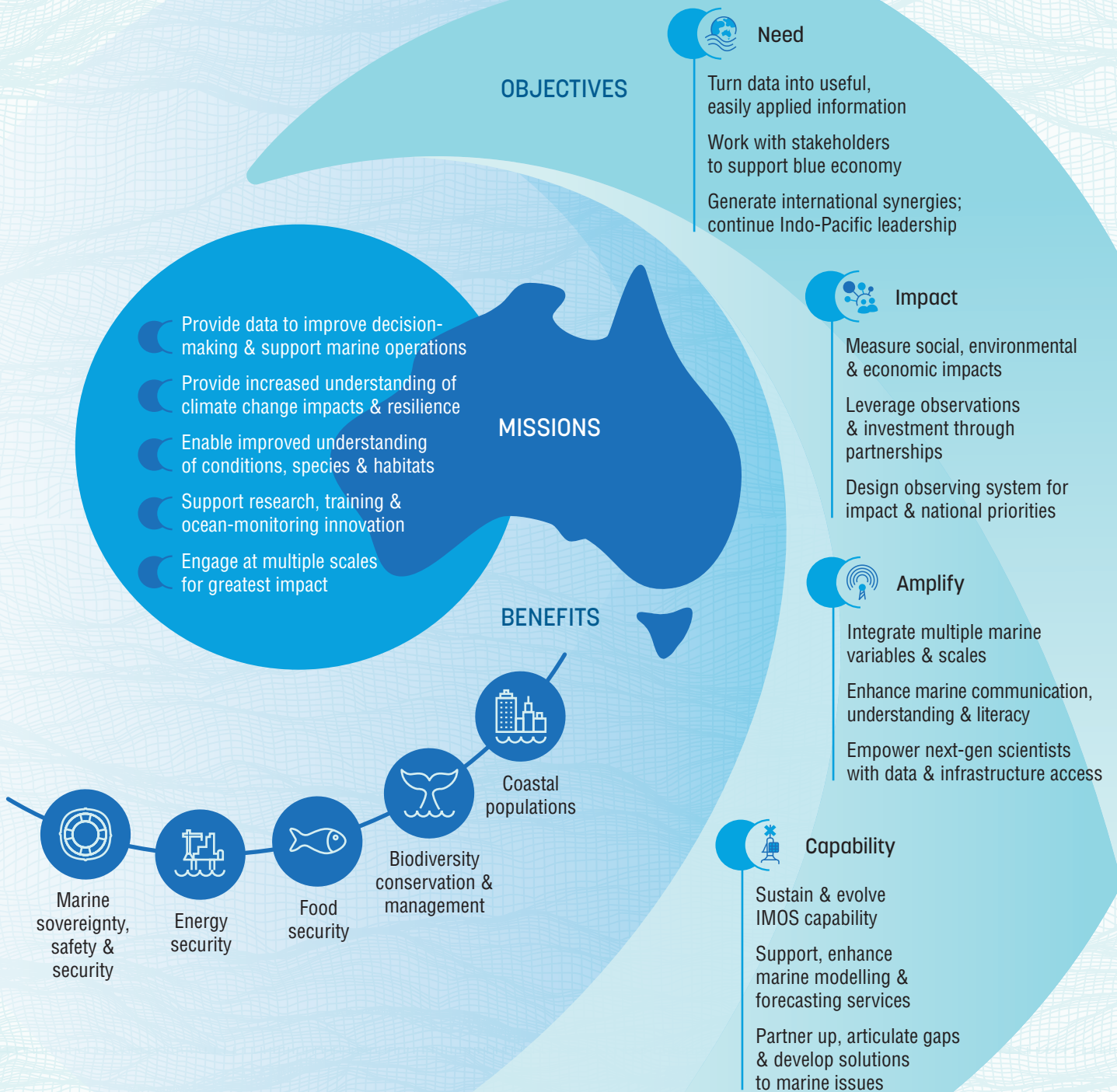
- Provide data and knowledge to improve decision-making and support marine operational safety and efficiency, including weather forecasting and prediction services.
- Provide an increased understanding of the environmental, economic, social and cultural impacts of and resilience to climate change and extreme events.
- Enable improved understanding of conditions, species and habitats to support management and protection of our precious marine estate.
- Support research, training and education, and facilitate innovative approaches to provide future ocean-monitoring capabilities for industry, science and management.
- Engage at local, national, regional and international scales to ensure our capacity and capability is leveraged for greatest impact.

Twelve Objectives underpin our Missions and aim to fulfil Needs, grow Impact, Amplify capacity and apply Capability. IMOS will:

- turn data into useful, easily applied information for end users
- work with stakeholders to support decision-making and the blue economy
- generate international synergies and continue Indo-Pacific leadership
- measure social, environmental and economic impacts to maximise benefits
- leverage observations and investment through partnerships
- design our observing system for impact and national priorities
- integrate multiple marine variables and scales
- enhance marine communication, understanding and literacy
- empower next-generation scientists with data and infrastructure access
- sustain and evolve IMOS capability
- support and enhance marine modelling and forecasting services
- partner up, articulate gaps and develop solutions to marine issues.

Over the last 14 years, the IMOS partnership has developed into a world-leading observing system with investments in infrastructure, data systems and human capability by the federal government (\$24 million p.a.) and our partners (\$39 million p.a.). The impacts of these targeted and sustained observations have been profound. As we look forward in this Strategy to the future needs of end users and stakeholders, it is clear we must continue to observe many of the systems and variables we have focused on to date.

However, there are also significant gaps, particularly in the coastal zone where most Australians — city dwellers, regional centres and First Nations peoples — live and access the oceans. Our Strategy encompasses these currently unmet needs and will require sustained and increased funding if we are to achieve our Missions, and help deliver the energy, food, jobs, security, recreation and wellbeing of all Australians.



For the full IMOS Strategy 2030, visit imos.org.au

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Australia's Integrated Marine Observing System (IMOS) is enabled by the National Collaborative Research Infrastructure Strategy (NCRIS). It is operated by a consortium of institutions as an unincorporated joint venture, with the University of Tasmania as Lead Agent.