The Ramsar Convention, Blue Carbon and Australia: An Update

Australia and Blue Carbon:
- Actions: Protection and Restoration
- Emissions: Reduction and Adaptation
- Wetlands and Nationally Determined Contributions
• 67 Ramsar wetlands
• Scientific assessments show that blue carbon ecosystems can sequester two to four times more carbon per hectare and store it 30-50 times faster than terrestrial forests
• ‘Blue carbon’ hotspot - 12 per cent of the World’s blue carbon ecosystems (7-12 per cent of global carbon stock)
• Seagrasses: 5.1 million hectares in shallow subtidal and intertidal environments. An estimated 11 per cent of the world’s seagrass blue carbon is in the Great Barrier Reef
• Mangroves: 900,000 hectares comprising 41 species
• Saltmarsh: 1.4 million hectares (33 per cent of the planet’s total)
**Actions: Protection and Restoration**

**International Partnership:**
Australia pursues greater recognition and protection of coastal blue carbon ecosystems, domestically and abroad, through the [International Partnership for Blue Carbon](https://www.internationalpartnershipbluecarbon.org) and the Ramsar Convention.

**Australia’s Nationally Determined Contribution (NDC)**
Blue carbon supports Australia’s NDC (both mitigation and adaptation).
- Link: [Australia’s Nationally Determined Contribution](https://climatechange.gov.au/nationally-determined-contribution)

**Blue Carbon Restoration:**
$21.4 million USD to 2025 for blue carbon restoration and accounting.
- Link: [Blue Carbon Conservation, Restoration and Accounting Program - DAWE](https://www.aurora.org.au/)

**Emissions Reduction Fund:**
A new Blue Carbon tidal restoration method under the Emissions Reduction Fund.
- Carbon credits for removing or modifying tidal restriction mechanisms.

**Marine and Coastal Hub:**
Supports blue carbon projects under the National Environmental Science Program (NESP). Includes research on how coastal vegetated habitats store carbon through the [National Centre for Coasts and Climate](https://nationalcentreforcoastsandclimate.org.au) (University of Melbourne).

**Coast Adapt:**
CoastAdapt is a website with tools and information to assist the management of climate change risks on the Australian coast: [https://coastadapt.com.au/](https://coastadapt.com.au/)
Blue Carbon Initiatives

- Australia developed the resolution on the Conservation, restoration and sustainable management of coastal blue carbon ecosystems at COP 13 in October 2018
- Australia committed $300 million on climate change and resilience activities in Pacific Island countries from 2016-2020, including $75 million for disaster preparedness
- National planning and development legislation protects Ramsar wetlands
- Climate change vulnerability assessment methodology for Ramsar wetlands

Issues

- Challenge of maintaining ecological character under a changing climate
- Perverse climate change responses

Carbon

- Mangroves have some of the highest carbon stores per hectare of any ecosystem.
- Surveys indicate that the coastal wetlands of SE Queensland hold approximately 4-5 million tonnes of sediment carbon.
- Coastal wetlands make up about one per cent of the Australian vegetation cover but account for about five per cent of all carbon storage across all ecosystems.
- The impacts of global change, such as sea-level rise and fluctuating sea levels, increased drought conditions and extreme weather events are likely to have a substantial impact on ecosystem health along Australia’s coastlines.
Australia’s light pollution indicates positive opportunities for wetland management across a range of landscapes in non-urbanised areas.
Any Questions?