



Committee Secretary
Joint Standing Committee on Northern Australia
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Committee

Re: Submission to the Inquiry into Preparing for Emerging Industries Across Northern Australia

Introduction

The Indian Ocean Territories Regional Development Organisation (IOT RDO) welcomes the opportunity to contribute to the Parliamentary Joint Standing Committee on Northern Australia's Inquiry into Preparing for Emerging Industries Across Northern Australia.

The IOT RDO supports sustainable economic development and regional capability across the Indian Ocean Territories (IOT)—Christmas Island (CI) and the Cocos (Keeling) Islands (CKI)—as part of the national Regional Development Australia (RDA). The organisation works closely with community groups, local businesses, industry partners, government agencies and other stakeholders to strengthen liveability, economic resilience, workforce capacity and regional connectivity.

Although the IOT lie outside the geographical boundary traditionally applied to "Northern Australia", similar challenges and opportunities exist across these remote external territories and the inclusion of the IOT in the Northern Australia Infrastructure Facility (NAIF) in 2023 was welcomed news. The Committee's decision to invite an IOT submission ensures the unique perspectives of these islands are represented in national policy settings affecting remote and emerging industries.

This submission outlines the region's distinct constraints, opportunities and priority needs across the Terms of Reference, with recommendations on how the Commonwealth can better prepare the IOT for new and emerging economic opportunities.

Regional Context – Indian Ocean Territories

The IOT comprise of Christmas Island and the Cocos (Keeling) Islands, located approximately 2,600 kilometres and 2,750 kilometres from Perth where both air and sea connections originate. Both territories rely heavily on the Commonwealth Government for essential services and face a unique combination of geographical isolation, limited economies of scale, high freight costs, and vulnerabilities in critical infrastructure.

Key characteristics of the region include:

- **Population:** Approximately 2,200 people across both territories.
- **Passenger services:** There are just two triangulated flights per week out of Perth that service the islands, underwritten by the Australian Government through the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRCSA).
- **Digital Connectivity:** Submarine internet cables currently serve both territories though satellite connectivity is still dominant on CKI. There are plans from Google to develop a hub on Christmas Island that will see another four submarine cables installed that will link the

Australian mainland to Asia, the Maldives and beyond. 4G mobile reception only arrived on CI in December 2024 while there is no mobile network on CKI.

- **Freight dependency:** The majority of goods, including food is shipped or flown in as there is very limited food production on island. Shipping is weather-dependent and scheduling is limited. Air freight comes fortnightly and is underwritten by the Australian Government.
- **Environmental significance:** High-value ecosystems, endemic species and global environmental importance.
- **Economic base:** A small tourism sector, phosphate mining on CI, service industry employment, and emerging interest in environmental research and digital skills.

The IOT RDO recognises that successful emerging industry development in remote areas requires enabling conditions: reliable infrastructure, strong connectivity, accessible workforce development pathways, and resilient logistics systems.

Responses to the Terms of Reference

a. Global transition to net zero and furthering renewable energy, decarbonisation and carbon abatement

The IOT present a strong opportunity for decarbonisation and renewable energy transformation. Both islands currently rely on diesel power generation, resulting in high energy costs and systems that are vulnerable to disruption. Minimal recycling and reuse programs exist on CKI. No recycling programs exist on CI and most waste goes to landfill.

Opportunities

- Transition to renewable-dominant microgrids (solar, battery storage)
- Energy efficiency improvements in government and commercial buildings
- Circular economy solutions (plastics, textiles, organics)
- “Green destination” tourism branding which aligns strongly with the current tourism draw of pristine natural environments.

Challenges

- Legacy diesel infrastructure
- High capital costs for small markets
- Challenging and high cost supply chains
- Legacy Commonwealth waste
- Limited sustainable waste management and recycling systems, which constrains circular economy development and increases long-term environmental impacts

Recommendations

1. Invest in renewable microgrids for CI and CKI.
2. Fund circular economy and waste-to-energy pilots.
3. Develop local renewable energy technical capacity through targeted training.
4. Support the improvement of local waste management and recycling systems to enable circular economy industries and reduce long-term environmental impacts.

b. Supporting the defence industry

The IOT occupy a strategically significant location close to our Asian neighbours and strategic air and sea transport routes. Our location enables the Australian Defence Force to project much further into

the Indian Ocean while remaining on Australian territory. Recent Defence exercises have taken place on both CI and CKI and there is a major project to improve the CKI runway for use by Defence assets.

Opportunities

- Support services for Defence operations
- Local logistics, maintenance and supply roles
- Training pathways for local residents in defence-related skills

Recommendation

5. Align infrastructure and workforce investment with Defence capability needs in the region.

c. Supporting infrastructure

Ageing and limited infrastructure is a significant constraint to achieving a diversified and sustainable economy.

Key infrastructure gaps include:

- Port infrastructure (weather-dependent access, existing infrastructure is at end of life and vulnerable to extreme weather conditions)
- Airport infrastructure (outdated passenger facilities, lack of ARFF service, exemption required for the CI Runway End Safety Area (RESA) due to its size)
- Waste management and recycling infrastructure
- Ageing, expensive and resource intensive utilities (energy, water, wastewater)
- Essential service reliability and broader liveability challenges, which impact the region's ability to attract and retain a skilled workforce

Recommendations

6. Investment in improved port infrastructure for both islands.
7. Support for feasibility studies into long-term freight solutions.
8. Investment in airport infrastructure, particularly on Christmas Island.
9. Invest in waste management infrastructure.
10. Investment in renewable energy and power storage.

d. Managing biosecurity risks

The IOT are world renowned biodiversity hotspots. Invasive species cost the Commonwealth millions to manage. Effective biosecurity is essential for:

- Protecting endemic species
- Reducing invasive species threats
- Safeguarding tourism and research industries
- Strengthening national biosecurity frontiers

Recommendations

11. Increased investment in local biosecurity capability, including training and staffing.
12. Support for modernised quarantine and biosecurity infrastructure.
13. Support for food production on island to reduce the reliance on imported food which may contain invasive species.

e. Training, attracting and retaining a skilled workforce

There are many challenges in training, attracting and retaining skilled staff in the IOT. The remote location and challenges of isolation, difficult supply chains and lack of access to services is not suitable for everyone and suitable incentives are required to attract skilled workers. Other challenges include:

- Small labour pool
- Limited local training delivery
- Commonwealth legislation that prohibits WA registered training providers from operating in the IOTs
- High cost of bringing trainers to the islands

Emerging industry workforce needs

- Renewable energy technicians
- Digital and data skills
- Tourism and hospitality
- Marine science
- Maritime and logistics roles
- Environmental rehabilitation
- Horticulture roles

Recommendations

14. Amend legislation to remove the barrier of using WA registered training providers.
15. Expand remote training subsidies and incentives.
16. Support partnerships with local organisations (Indian Ocean Group Training Association (IOGTA), Community Resource Centres (CRC), schools).
17. Increase incentives for skilled workers to relocate to or remain in the IOT.

f. Barge landings and marine access for remote communities

Freight is critical to the day-to-day functioning of the IOT island communities, and improved marine access is therefore essential. Existing infrastructure is at end of life and requires significant repairs to remain fit for purpose, particularly in harsh conditions caused by the changing climate.

Challenges:

- A monopoly provider of shipping.
- Weather-dependent offloading.
- Restricted mooring infrastructure that poses challenges for most container vessels due to the spatial constraints of the crane berth on CI.
- Frequent delays impacting food security and business continuity.
- Freight unreliability contributing to cost-of-living pressures.

Recommendations

18. Conduct feasibility studies into modernised marine logistics systems that enable all weather offloading.
19. Provide incentives for new operators to encourage competition.
20. Upgrade port infrastructure to ensure ongoing availability and greater capacity.
21. Include the IOT in remote freight and maritime innovation trials.

g. Research and development

The IOT provide a unique environment for innovation in remote area technologies, climate resilience and environmental science.

Opportunities:

- Marine and reef science
- Climate resilience technology pilots
- Remote workforce and digital inclusion research

- Circular economy innovation
- Renewable energy microgrid research
- Improved data collection, monitoring and evaluation systems to strengthen the region's evidence base for planning and investment decisions

Recommendations

22. Include the IOT in national regional innovation programs.
23. Fund IOT-led R&D partnerships with universities and research organisations.

4. Summary of Recommendations

1. Invest in renewable microgrids for CI and CKI.
2. Fund circular economy and waste-to-energy pilots.
3. Develop local renewable energy technical capacity through targeted training.
4. Support the improvement of local waste management and recycling systems to enable circular economy industries and reduce long-term environmental impacts.
5. Align infrastructure and workforce investment with Defence capability needs in the region.
6. Investment in improved port infrastructure for both islands.
7. Support for feasibility studies into long-term freight solutions.
8. Investment in airport infrastructure, particularly on Christmas Island.
9. Invest in waste management infrastructure.
10. Investment in renewable energy and power storage.
11. Increased investment in local biosecurity capability, including training and staffing.
12. Support for modernised quarantine and biosecurity infrastructure.
13. Support for food production on island to reduce the reliance on imported food which may contain invasive species.
14. Amend legislation to remove the barrier of using WA registered training providers.
15. Expand remote training subsidies and incentives.
16. Support partnerships with local organisations (IOGTA, CRCs, schools).
17. Increase incentives for skilled workers to relocate to or remain in the IOTs.
18. Conduct feasibility studies into modernised marine logistics systems that enable all weather offloading.
19. Provide incentives for new operators to encourage competition.
20. Upgrade port infrastructure to ensure ongoing availability and greater capacity.
21. Include the IOT in remote freight and maritime innovation trials.
22. Include the IOT in national regional innovation programs.
23. Fund IOT-led R&D partnerships with universities and research organisations.

5. Conclusion

The Indian Ocean Territories face challenges common across northern and remote Australia; high freight costs, limited connectivity, workforce shortages, essential service pressures and significant infrastructure deficiencies. These constraints currently limit the region's ability to diversify its economy, scale emerging industries and attract or retain the skilled workforce required to support long-term growth.

Despite these challenges, the IOTs possess substantial untapped potential in renewable energy, circular economy innovation, digital services, tourism, marine science and environmental research. Strengthening foundational systems such as energy, digital connectivity, freight reliability, training pathways and biosecurity, will unlock opportunities that align with national priorities for a resilient, productive and sustainable northern Australia.

With targeted investment, improved coordination and supportive policy settings, the IOTs can make a meaningful contribution to the emerging industries landscape and strengthen Australia's engagement in the Indian Ocean region. The IOT RDO welcomes ongoing engagement with the Committee and stands ready to support further work as this Inquiry progresses.

Yours sincerely,



Mrs Farzian Zainal
Chairperson – Indian Ocean Territories Regional Development Organisation
Administrator of Christmas Island and the Cocos (Keeling) Islands

12 January 2026