



Climate Change Adaptation and Environment Committee

Agenda

Date: 19 February 2024

Time: 10.00am to 12.00nn

Venue: **TEAMS MEETING**
Meeting ID: 451 948 283 089
Passcode: EBd6ee

Agenda

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Time	Agenda
10.00am	1. Welcome & Quorum Confirmation (Chair)
10.05am	2. Opening Prayer
10.10am	3. Attendance / Apologies
10.15am	4. Conflict of Interest (COI) - Declarable/Prescribed
10.20am	5. Ratified Minutes of Meeting held on 14 September 2023 ➤ <i>For information</i>
10.25am	6. Action Items from Previous Meetings ➤ <i>Nil</i>
	7. Priority Recommendations for Incoming Council
	8. Information Report – Environmental Initiatives & Projects
11.00am	9. General / Other Business (on notice)
	10. CLOSE MEETING TO THE PUBLIC
	11. Information Update: Mirabou Energy - Renewable Energy Project (<i>verbal update</i>)
	12. REOPEN MEETING TO THE PUBLIC
	13. CONSIDERATION OF MATTERS DISCUSSED IN CLOSED SESSION
11.55am	14. Next Meeting Date: N/A
12.00nn	15. Closing Remarks & Prayer



Climate Change Adaptation & Environment Committee Meeting

Minutes

Date: 14 September 2023

Time: 10.00am to 12.00nn

Venue: (VC) VMR 8 – 0299 165 402
#Guest PIN 6905

Minutes

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1. Welcome (Chair)

Prior to commencement of proceedings, the Committee Chairperson, Cr Hilda Mosby, advised attendees that she was unable to speak for too long due to throat soreness and advised that Cr Seriako Dorante had kindly agreed to Chair the meeting.

The Acting Chairperson welcomed Committee Members and TSIRC staff.

2. Opening Prayer

Cr Dorante delivered the opening prayer.

3. Apologies/Attendance

Cr Kabay Tamu was an apology for this meeting.

The following attendances were noted:

Chairperson & Committee Members

Chairperson

Cr Hilda Mosby

Acting Chairperson

Cr Seriako Dorante

Member

Mayor Phillemon Mosby

TSIRC Officers

Executive Director – Engineering Services

Mr David Baldwin

TSIRC Secretariat

Darryl Brooks

The Acting Chairperson and Chairperson Hilda Mosby both thanked the Mayor for his attendance.

4. Conflict of Interest (COI) – Declarable/Prescribed

The Chairperson invited Committee Members to make any relevant conflict of interest declarations. No declarations were made.

5. Confirmation of Draft Minutes of the Committee Meeting held on 27 April 2023

RESOLUTION:

Moved: Cr Hilda Mosby

Seconded: Cr Seriako Dorante

The Committee confirmed the Draft Minutes of the Climate Change Adaptation and Environment Committee Meeting held on 27 April 2023.

[Ratified @ October 2023 Ordinary Council Meeting]

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MOTION CARRIED

6. Action Items from Previous Meeting

The Executive Director Engineering Services spoke to this item and advised the Committee that there were no outstanding actions from the previous meeting held on 27 April 2023.

7. Sustainability Project and Initiative Update Report

The Executive Director Engineering Services spoke to this report highlighting key points throughout.

In relation to Item 6 in the report (**Seawalls**), the Executive Director Engineering Services also advised the Committee that a final inspection has been done on Boigu now that the 18 months defects liability period has ended. A few minor defects were identified and a contractor will be addressing these matters over the next few months.

In relation to the recent Torres Strait Climate Centre of Excellence matters, the 3rd Steering Committee Roundtable was held in Cairns on 8 September 2023. One of the outcomes from that meeting was in-principle agreement to funding **Climate Warriors** (DCCEEW enters an arrangement with the TSRA to fund the Centre and Warrior program to be delivered by councils and PBCs on ground). Already identified that TSRA would have 4.5FTE positions based on Thursday Island to coordinate Climate Warrior engagement.

The Committee noted the report.

[Ratified @ October 2023 Ordinary Council Meeting]

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8. General / Other Business (on notice)

- *The Committee agreed to a request from the Executive Director Engineering Services to table a late report for consideration by the Committee.*

8.1 CHAS Naming and Public Exhibition

RESOLUTION:

Moved: Cr Seriako Dorante

Seconded: Cr Hilda Mosby

The Committee resolves to support a formal 28-day public review/consultation period for the Coastal Hazard Adaptation Strategy (CHAS) and to make the document publicly available following the consultation period, subject to full Council endorsement.

MOTION CARRIED

- *The Committee considered a number of options for naming the report, including:*

- *Zenadth Kes Coastal Hazard Adaptation Strategy; or*
- *Zenadth Kes Coastal Hazard Adaptation Strategy (Torres Strait Island Regional Council)*

8.2 Climate Change Priorities for TSIRC

Mayor Phillemon Mosby made a general request to the Executive Director Engineering Services to identify two key/priority/risk concerns that the Committee and Council may need to be aware of.

The Executive Director Engineering Services responded by saying that, in relation to the Committee's Terms of Reference, his main concerns relate to:

- (a) Waste Management / Land Fills
- (b) Rising Sea Levels for low-lying Islands / Water Security

The Mayor also noted that strategic planning to combat these issues was needed. The Executive Director Engineering Services noted that initiatives such as the CHAS report are instrumental in documenting and highlighting these issues. The Committee agreed that the CHAS report should be a 'living document' that can be adjusted as issues rise.

9. Next Meeting Date: TBC

The Committee requested the Secretariat to select an alternative date out of session for the next meeting of the Committee, possibly 30 November 2023.

[Ratified @ October 2023 Ordinary Council Meeting]

Minutes

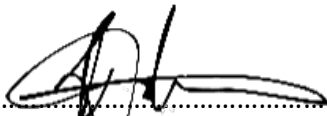
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10. Closing Remarks & Prayer

The Acting Chairperson thanked all attendees for their participation - particularly Mayor Mosby - and also thanked Chairperson Mosby for the opportunity to Chair the meeting, before formally closing the meeting at 11.40am.

Mayor Phillemon Mosby delivered the closing prayer.



Mr James William
Chief Executive Officer
Torres Strait Island Regional Council
Date: 24 October 2023



Cr Phillemon Mosby
Mayor
Torres Strait Island Regional Council
Date: 24 October 2023

RATIFIED

TORRES STRAIT ISLAND REGIONAL COUNCIL

INFORMATION REPORT

STANDING COMMITTEE: Climate Change Adaptation and Environment Committee

DATE: 19 February 2024

SUBJECT: Information Report - Environmental Initiatives and Projects

AUTHOR: Jarrah Doran-Smith – Waste & Sustainability Engineer
David Baldwin – Executive Director, Engineering Services

Recommendation:

That the Climate Change Adaptation and Environmental Committee notes this report.

Purpose:

The purpose of this report is to provide an update on various ongoing projects and initiatives, as well as discuss recent meetings and potential funding opportunities. The report aims to inform Climate Change Adaptation and Environmental Committee about the progress made in different areas and highlight key actions and next steps required.

Updates:

1. 'Funding Envelopes' with DES

In June 2023, a meeting took place with the Department of Environmental Science (DES) to explore potential funding opportunities for TSIRC to support initiatives promoting environmental compliance within the region. Post this meeting, a series of letter seeking funding support for various crucial areas were developed. Some of the key topics discussed include:

- **Erub Landfill Closure:** Requesting funding assistance to determine the requirements necessary to meet environmental requirements for the closure and rehabilitation of the Erub Landfill. Additionally, proposing a generic plan or template applicable to other communities' landfills slated for closure.
- **Asbestos Audit and Management:** Emphasizing the need for a comprehensive audit and management plan for asbestos, including staff capacity building considerations.
- **Equipment and Infrastructure:** Seeking support for waste management equipment and infrastructure, encompassing a small shed/office at each landfill. This space is intended to house a permanent Waste and Resource Recovery Officer, facilitating chemical storage and biosecurity inspections.
- **Concrete Crusher and Batcher:** Exploring the potential requirement of a concrete crusher and batcher, a topic that was discussed during the meeting.
- **Waste and Resource Recovery Officer Positions:** Drafting a letter to secure funding for permanent positions overseeing landfill operations, with a focus on sorting, separating, and appropriately disposing of various waste streams. These positions will require tailored training.

- **Solar Panel Disposal Management:** Addressing concerns raised during the meeting about the disposal of solar panels, with plans for further discussions with DES to develop a strategy.

Notably in Jan 2024 DES offered Council \$150,000 in funding to develop the proposed Erub Landfill Closure and template closure plans applicable to all TSIRC communities. This financial support marks a significant step forward in advancing our environmental initiatives.

In Jan 2024 DES have advised that Council's request relating to the asbestos project proposal would be discussed by the Interagency Asbestos Working Group so that other departments including Queensland Health and QBuild can provide input. The next meeting of this group is in early February and DES will inform Council about the outcome.

2. Zenadth Kes Coastal Hazard Adaptation Strategy (CHAS) – Public Consultation

In December 2023 the draft Zenadth Kes CHAS was released for public consultation. The consultation period allows for community to provide feedback on the draft document. Accompanying the release of the draft document has been media content, such as video interviews, poster and other graphics. To ensure that effective feedback is provided the consultation period has been extended beyond January to allow sufficient time for community to read the strategy. Below is a timeline of CHAS milestones.

- End November 2023 – Draft CHAS released.
- February 2024 – Feedback assessment
- End February 2024 – Development of CHAS implementation recommendations
- March 2024 – finalisation of the CHAS
- End March/April 2024 – Final CHAS collated to seek subsequent Council endorsement.
- Late April 2024 – Final CHAS and Implementation Plan released and available to public.

It is important that the draft CHAS document is distributed to the communities for public exhibition to allow for community feedback and input on the document.

3. COEX Matters

COEX has initiated Container for Change drop off point on Badu Island. Council been asked to act as the drop off point on outer Islands. However, biosecurity and logistical details are still being developed. Further updates and clarification are required for Council considerations.

4. Decarbonisation of Energy

A meeting with Ergon/QLD Energy Senior Isolated Network Engineers took place on Friday 16th June 2023. There have been other brief meetings held since then including as part of the Technical Working Group. They informed their objective is to achieve net-zero carbon emissions in their isolated networks by the year 2050 possibly as early as 2040. To accomplish this, they are developing a priority list for their 33 Isolated Networks. The prioritisation will be

based on various factors, including the feasibility of projects, such as land tenure, energy consumption/ carbon emissions, and cost-benefit analysis.

In terms of overall emissions from the 33 isolated networks, as a comparison Horn and Thursday Island (combined) accounts for approximately 32% of total emissions, whereas Badu accounts for 2.6%.

Ergon Energy will seek advice from Council on the challenges and issues that may arise during the implementation of their net-zero carbon emissions plan. They acknowledge that each isolated network has unique characteristics and constraints, making it essential to consider localised factors in the decision-making process.

Council's input will be crucial in addressing potential issues and providing insights on the specific requirements of each network. By collaborating with the council, Ergon Energy/QLD Energy aims to ensure a comprehensive and effective approach to achieve their long-term sustainability goals. This partnership signifies the recognition of the council's role as a valuable stakeholder and contributor to the transition toward a low-carbon future in the isolated networks.

Mirabou Energy

On the 29/1/2024 David Baldwin attended a Project Governance meeting with Mirabou Energy and the EDCS. This meeting was a follow-on from the Jan 2024 Council resolution that endorsed Council to pursue appropriate arrangements to enable working with Mirabou in partnership to progress with a proposed Renewable Energy Project. Discussed and agreed were progression to enable the undertaking of an Island based feasibility study and to determine Council's energy requirements.

5. Metal Waste Collection

As of 14th August 2023, all 15 island communities have been successfully completed. An estimated 980 wrecked vehicles and over 4,000 tonnes of metal waste have been collected during the project with over 11,000 hours of local employment to date. It is estimated that through the recycling of these metal wastes rather than disposal has offset up to 8,000 tonnes of carbon dioxide emissions.

All materials collected during the Project were shipped off Badu Island in August/September 2023. McMahons Services made arrangements for the transportation and recycling of the collected waste materials by transferring from Sea Swift barges and loading materials onto a bulk carrier ship ultimately bound for a metal recycling facility in Vietnam (South-East Asia).

The ship arrived in the Torres Strait on 14th August 2023 and anchored in deep waters to prevent biosecurity risks. Materials were then barged with Sea Swift barges to the ship. This step ensures that the metal waste will be properly managed and disposed of, minimizing any potential negative impact on the Islands and surrounding marine environment.

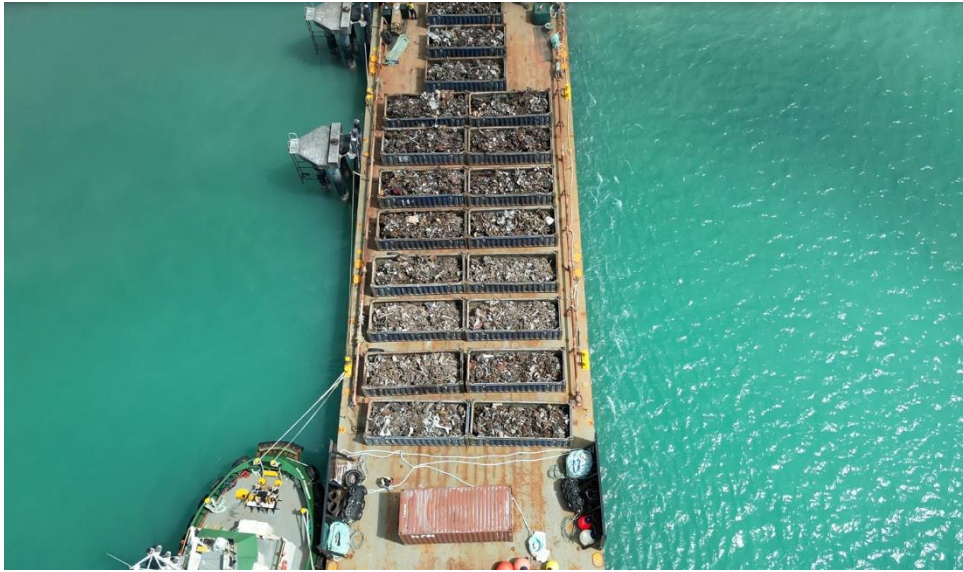


Figure 1 Barge carrying metal waste materials



Figure 2 Ship loading from barge

6. Seawalls

The following are updates regarding seawall projects:

Iama Works: The formal award of the Iama seawall project has been entered into with the Contractor Gulf Civil. Clearing and grubbing have been completed in alignment of seawall and suitable treatment of seawall foundation has begun. Precast concrete wave return panels are being prepared in Cairns.

Masig: Most machinery, equipment and sandbags are on-Island. Seawall alignment has been surveyed and set out. Civil crew mobilisation and commencement of work anticipated to start in February 2024.

Warraber: Warraber has been programmed to commence after Masig and be built by the Civil Crew. Warraber is currently having the Geobag Option planning and approval phase

undertaken in-light of the PBC and Communities endorsement of the approach, with sand harvesting to commence prior to construction and likely to start in March 2024.

7. Marine Debris Task Force (MDTF)

In June 2023 Council received \$440K in funding from Parks Australia through their Ghost Net Innovative Solutions program. Council resolved to engage Salty Monkeys to lead the Marine Debris Task Force (MDTF) project with Council. Project is underway with the MDTF undertaking the following works so far:

- Marine debris drone surveys across 28 isolated islands across region
- Marine debris drone surveys across 8 community islands across region
- 8 Ghosts nets located, including GPS marks, on different reefs across the region
- 2 ghost nets recovered and provided to local artists in Eastern community
- 38 GPS buoys located and will be reassigned for project purposes
- Beach clean-ups and youth engagement activities undertaken on Maisg Island, Friday Island, and Poruma Island.
- Quantitative and qualitative data of the marine debris has been collected.



Figure 3 Marine Debris Task Force leading community beach clean-up in Kudoell and Masig Island

8. Griffith Universities Australian Research Council (ARC) Linkage Project - Collaboration Agreement

The Griffith ARC Linkage project "Co-designing a Resilient Water and Energy Toolbox for Aboriginal and Torres Strait Islander Communities" program is a collaborative initiative between TSIRC, Griffith University and other organisations. It has received Council resolution to engage in a Collaboration Agreement with Griffith and other stakeholders. The agreement has now been formalised. The project has also received Council resolution for Warraber Island to host as the project.

Warraber Island has been endorsed as the program's project site, given its distinct characteristics, energy-intensive infrastructure, climate-induced vulnerabilities, and alignment with waste management innovation.

The aim is to collaboratively create a toolbox of innovative, community-based approaches for water and energy management in remote Australia. This project will combine digital and cultural approaches to create a novel set of tested and evaluated tools for engaging both community and service providers in transforming water and energy use practises in remote Indigenous communities. The key output will be an empirically tested and user friendly water-energy toolbox tailored to reduce the currently extreme cost of supplying essential services to remote communities. Application of these outputs will significantly reduce demand on local water sources and diesel generated energy use while creating a skill base for local employment opportunities.

9. Coastal Hazard Resilience Officer (CHRO) Position

Council has received an extension of time until the June 2025 to execute this project. The initial grant was only stipulate for shorter contract period. Council was concerned that the shorter contract period would not allow for successful outcome deliveries and thus requested extension of time to appoint a suitable candidate that can deliver projects over 1.5 year period.

10. Waste and Biosecurity

The Torres Strait Island Regional Council (TSIRC) is developing a Waste and Resource Recovery Biosecurity Management Plan (WRRBMP) to provide practical guidance for managing biosecurity risks associated with waste movement across the region. The WRRBMP has been shaped by several key plans for the Torres Strait Region (**Figure 1**). In 2021, the "Respecting Country" strategy, developed by the Local Government Association of Queensland (LGAQ) and the Queensland Government, facilitated tailored waste management solutions for First Nation Communities, aligning with the Queensland Waste Management and Resource Recovery Strategy. The draft Torres Strait Regional Waste Management and Resource Recovery Plan further addressed waste management challenges faced by Torres Shire Council (TSC), Torres Strait Island Regional Council (TSIRC), and Northern Peninsula Area Regional Council (NPARC). The WRRBMP is also underpinned by both the *Commonwealth Biosecurity Regulation 2016* and the *Queensland Biosecurity Regulation 2015*.

A series of biosecurity procedures have been drafted by the Australian Department of Agriculture, Fisheries and Forestry (DAFF) for recyclable drink containers, cardboard, separated waste materials and general waste materials. The procedures have varying and ambiguous treatment applications involving -14/-18° freezing for 72hrs/48hrs with or without fumigation or disinfection requirements.

Concurrently, in July 2021, TSIRC amended their local laws to restrict on-island disposal of commercial and construction waste. Further to this, the amended local laws also require an application to be made to the CEO of the TSIRC for written approval to:

- Transfer ownership of construction waste materials suitable for reuse; and
- Temporarily store construction and commercial waste materials on island ahead of transfer for disposal or recycling on the Queensland mainland.

Purpose

The WRRBMP focuses on handling and preparations for reusable, recyclable, general and hazardous materials that are to be moved within and from the Torres Strait Region. The WRRBMP outlines conditions for waste inspection, treatment and storage ahead of and during transport and at receipt destinations which align to the Australian and Queensland Government biosecurity controls and strategies.

Additionally, the plan addresses the need for Queensland and Commonwealth permits and approvals for biosecurity management and waste movement, involving various stakeholders such as commercial operators, construction contractors, freight providers, local governments, and community organisations. Overall, the WRRBMP aims to ensure effective waste management while minimising biosecurity risks and emphasises collaboration between stakeholders and compliance with regulations.

Notwithstanding the above, full alignment with the Torres Strait Regional Waste Management and Resource Recovery Plan is pending funding.

Challenges

The WRRBMP aims to facilitate efficient and compliant waste removal. However, the DAFF procedures for treating diverse waste types, risk an inconsistent application, given the number of island locations within the region, the range of stakeholders and significant reliance on barge and ship transport.

These difficulties may be compounded given the storage and handling infrastructure proposed by the Torres Strait Regional Waste Management and Resource Recovery Plan are not yet in place and await funding to progress.

Easily inspectable materials, like electronic and construction waste, can be cleared on the island by a biosecurity officer and safely shipped. However, items like drinking containers and cardboard pose inspection challenges and require freezing (to different temperatures) on the sea swift barge and at the consolidation point on Horn Island prior to shipment to Cairns where fumigation may also be required. This process, although effective for smaller quantities, may not be scalable due to limited freezer space. Other treatment methods such as fumigation or heat treatment on the mainland are suitable for larger items, however Cairns lacks an approved facility for either treatment type.

Consequently, uninspected or untreated materials must be buried at the Approved Arrangement Springmount Landfill, incurring significant costs. Furthermore, the disposal of recovered materials excludes the Region from contributing to the Queensland Waste Reduction and Recycling Plan 2022-2025, Governments and waste reduction targets or indeed participate in the transition to a circular economy. To address this, alternative simplified processes and/or a treatment facility in Cairns must be developed before large material volumes are transported from the region.

During the development of the WRRBMP, several key challenges have emerged:

- Clarity from DAFF on consistent treatment/management processes for different material streams.
- A new heat treatment/fumigation facility needed in Cairns to effectively support resource recovery.
- Concerns regarding sufficient space on the barge if freezing becomes a significant waste/material treatment method.

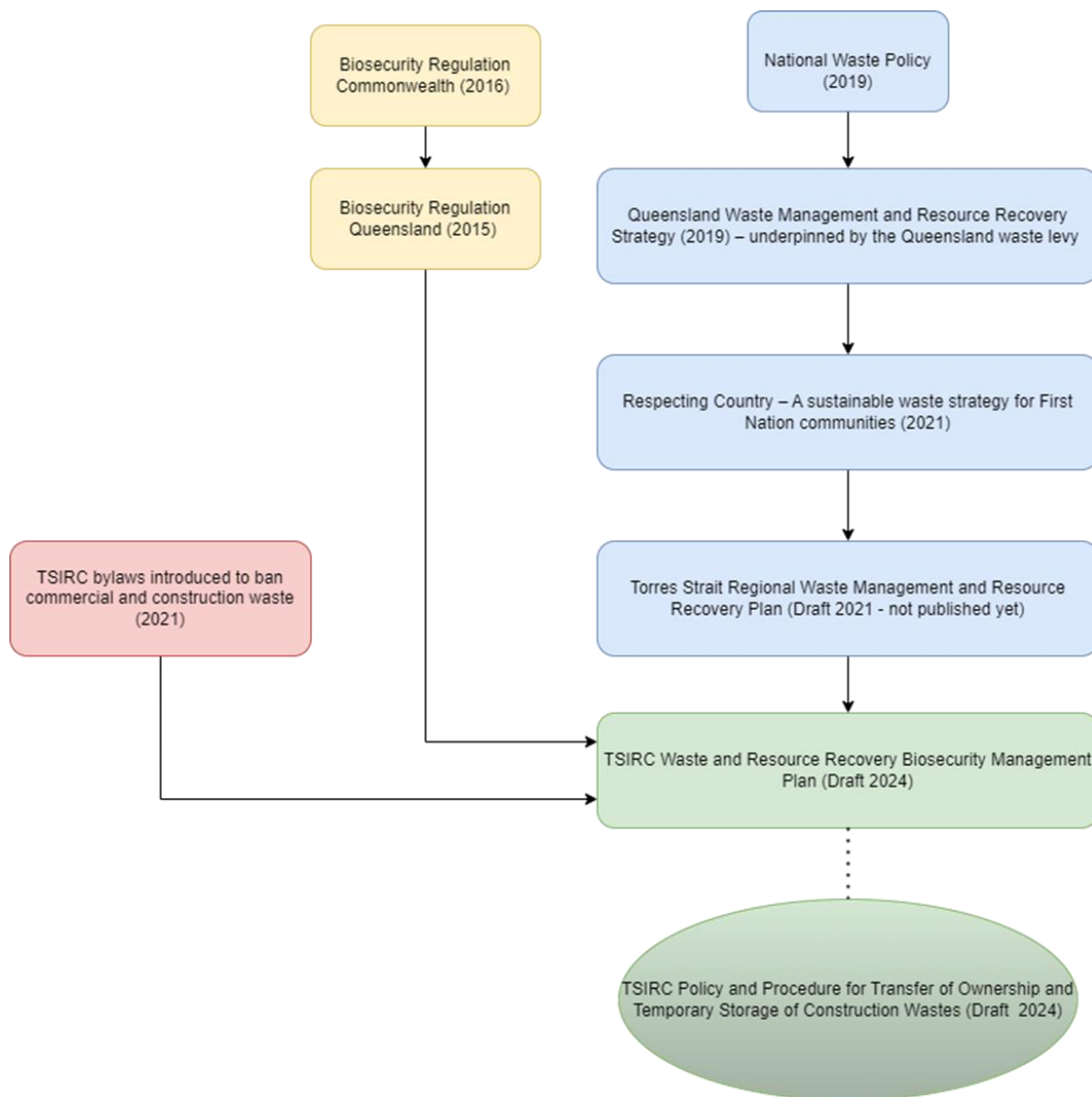


Figure 4 Document hierarchy which lead to the development of the WRRBMP and subsequent Policy/Procedure for Transfer of Ownership of Materials and Temporary Storage of Construction Waste.

11. Source Hydropanels

In April 2023 Council was donated 24 Hydropanels by Source Global in association with the Patty Mills Foundation. Hydropanels are an innovative solar-powered technology designed to extract moisture from the air, storing it in a sanitised holding tank. They have the capacity to provide clean, safe, and reliable drinking water supply to the community.

In August 2023, a comprehensive community consultation and subsequent site suitability inspections took place on Masig Island. The primary objective of these activities was to identify suitable locations for the installation of 24 Hydropanels, generously provided by Source Global as part of a demonstration project. The Patty Mills Foundation and the Torres Strait Regional Authority (TSRA) are also supporting the funding of this demonstration project.

The community consultation and inspections were instrumental in engaging the community and seeking their input to select the most suitable and agreeable sites for the Hydropanel

installation. A strong consensus from community was to locate the panel at both the school and at the aerodrome. Other suggested locations include the barge ramp and roof tops of Queensland housing. Permissions to install the panels at the Tagai College are still pending. Once permissions are finalised, installation can begin.

This project is proposed as a demonstration project, showcasing the innovative technology's capabilities and potential to provide clean, safe, and reliable drinking water to the Masig Island community.

12. Engineers Without Borders

In November 2023 Council resolved to collaborate with Engineers Without Borders (EWB) to enable EWB to facilitate a 2024 'Engineers without borders university challenge'.

Each year, the EWB Challenge engages over 10,000 first-year university students from across Australia and New Zealand, tasking them with producing solutions to real-world problems. In December 2023 a team from Engineers Without Borders (EWB) visited Saibai Island to understand some of the challenges faced within the community. The 2024 EWB Challenge focuses on innovative solutions addressing challenges, such as waste management, water and sanitation, information and communication technology, infrastructure, energy, and climate change/disaster management on Saibai. The scoping trip undertaken at Saibai highlighted both the remoteness and resilience of the community, setting the stage for innovative design solutions. Through immersive experiences and virtual reality technology, students will tackle these challenges while considering the unique cultural and environmental context of Saibai Island. The EWB Challenge represents a valuable opportunity for collaboration between academia and local government, empowering students to make meaningful contributions while shedding light on the unique challenges faced by the Torres Strait communities. This collaboration can be viewed as a positive step towards providing greater exposure to the region's needs.

In addition to the EWB Challenge for the students, they have also offered pro bono assistance from leading engineers to help Council in accessing potential funding opportunities, leveraging their expertise to amplify the impact of Council initiatives.

Summary

Council has achieved successes in environmental and community initiatives, securing a grant offer of \$150,000 for the Erub Landfill Closure and demonstrating commitment to public engagement through the Zenadth Kes CHAS public exhibition.

Collaborations with Ergon/QLD Energy, Mirabou Energy, successful Metal Waste Collection, and the innovative Source Hydropanels project highlight the Council's diverse sustainability efforts.

Council's initiatives, including Seawall Projects, Marine Debris Task Force, Griffith University collaboration, Engineers without Borders, Patty Mills Foundation, and the Waste and Biosecurity Management Plan, position the Council as a leader in driving positive change in the Torres Strait region.



Author:

Jarrah Doran-Smith

Waste & Sustainability Engineer



Approved:

David Baldwin

Executive Director – Engineering Services