

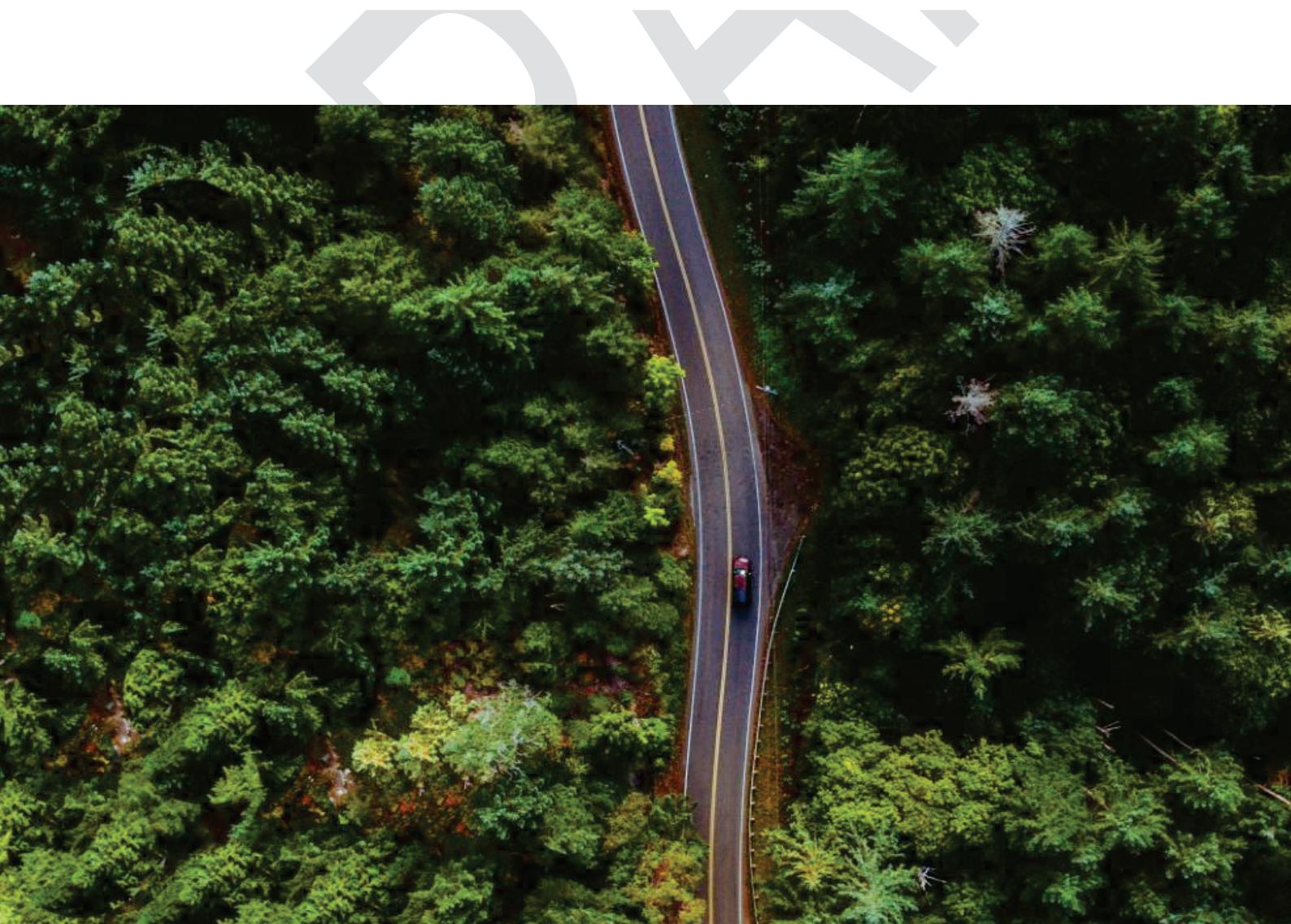


Implementation Plan [Cocos (Keeling) Islands]

Waste and Resource Recovery Strategy

Department of Infrastructure Transport Regional
Development Communications and the Arts

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1. Introduction

The Cocos (Keeling) Islands (CKI) are located within the Indian Ocean Territories (IOT) and are located around 2,900 km from Perth. CKI has its own local shire council, being the Shire of Cocos (Keeling) Islands (SoCKI / the Shire). The IOT also includes Christmas Island (CI). Both CKI and CI are administrated by the Australian Government's Department of Infrastructure, Transport, Regional Development and Communications and the Arts (DITRDCA)

Waste management is an essential service that plays a role in minimising impacts to our environment, providing community amenity and enhancing public health via sanitation. Historically, funding constraints and challenges specific to the local environment have restricted the implementation of traditional waste management practices, commonly used on the Australian mainland. As such, there is a gap between current waste management performance within the IOT and both national and state waste management targets.

DITRDCA and the Shire are seeking to improve waste management practices and performance on CKI to deliver waste services that can benefit the local economy, the community and the environment. A Waste and Resource Recovery Strategy (the Strategy) for the IOT (both CKI and CI) was developed to outline a realistic pathway for improving waste management through the development of better practice resource recovery objectives and priorities. To assist with the execution of the Strategy an implementation plan is required to provide a clear understanding of the implementation pathway and bridge the gap between the Strategy and action. As CKI and CI have specific contextual challenges, separate implementation plans have been developed to guide each Shire in executing the Strategy.

1.1 Purpose

DITRDCA engaged GHD Pty Ltd (GHD) to assist with the execution of the Strategy and this document is intended to support implementation of the Strategy for CKI.

1.2 Limitations

This report has been prepared by GHD for Department of Infrastructure Transport Regional Development Communications and the Arts and may only be used and relied on by Department of Infrastructure Transport Regional Development Communications and the Arts for the purpose agreed between GHD and Department of Infrastructure Transport Regional Development Communications and the Arts as set out in Section 1.1 of this report.

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2. Roadmap

A waste strategy implementation roadmap has been developed in Figure 2.1 to provide a summary of the key priorities from the Strategy, assign a responsible party and outline the timing for implementation. Details of the priorities and associated opportunities and challenges are explored further in Section 3.

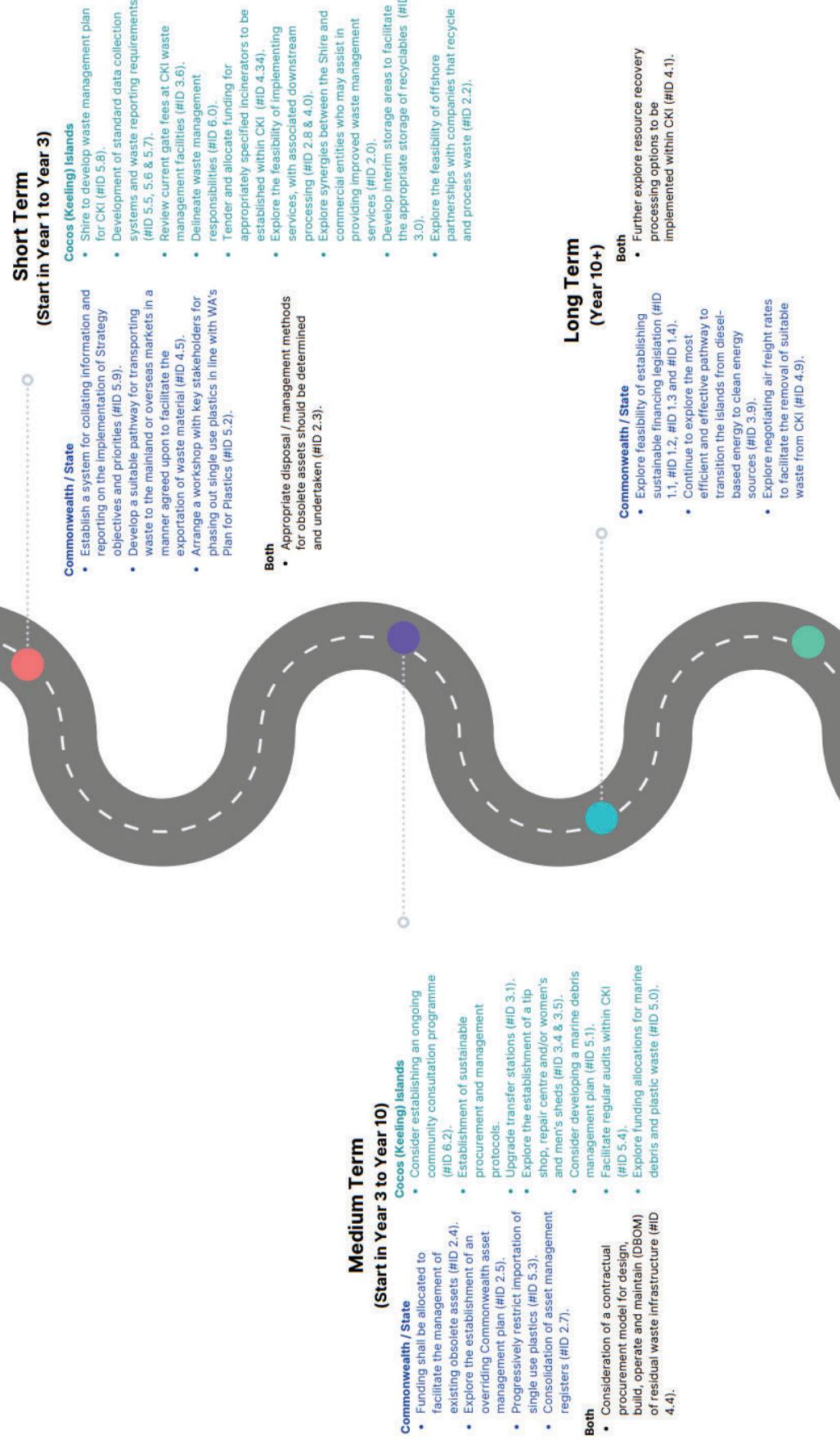


Figure 2.1 Cocos (Keeling) Islands Waste Strategy Implementation Roadmap

GHD | Department of Infrastructure Transport Regional Development Communications and the Arts | 12564012 | Implementation Plan [Cocos (Keeling) Islands]

3. Implementation plan

In planning for future waste management on CKI, an implementation plan has been developed (summarised in Table 3.1) to assist with bridging the gap between Strategy and action. The implementation plan maps a pathway for waste management over the next 10+ years and details the specific priorities included in the Strategy and the proposed implementation stages, challenges, opportunities, timing and ownership of the identified priorities.

The priorities have been further categorised into short (1-3 years), medium (3-10 years) and long term (10+ years) actions, based on recommended timeframes to begin implementation.

In Table 3.1, priorities highlighted in '**blue**' are priorities where SoCKI are considered the primary or one of the primary 'owners'. While priorities highlighted '**grey**' are priorities where the Commonwealth and State are the primary 'owners' of the priority.

It is noted that although the Commonwealth, State and/or SoCKI have been identified as 'owners' of the various priorities, input will be required from various stakeholders. The purpose of assigning ownership for the priorities is to allow for a clear understanding of who will initiate and manage implementation. The implementation plan demonstrates the Commonwealth and SoCKI's commitment to improving waste management on CKI to achieve the best outcome for the environment and for future generations.

Table 3.1 Cocos (Keeling) Islands Implementation Plan

Priorities	Order of priority	Proposed implementations steps	Opportunities and challenges	Ownership of implementation
Short term				
Shire to develop waste management plan for CKI (#ID 5.8).	1	The Shire should develop its own waste management plan to support the overarching Strategy and promote small scale initiatives. As part of the development of this plan the Shire should nominate a community 'champion' to monitor implementation of the Strategy and new smaller scale initiatives in waste management (#ID 6.1). For example, the community champion can assist with educational campaigns and research into alternative eco-friendly packaging (i.e. types of material, costs, freight, etc.). This type of information can be reported and used by Shire to inform additional initiatives. The waste management plans should align with the priorities set out within the overarching Strategy. An example includes the establishment of a co-op style refill station for every-day consumables. This could also be promoted to the community as a cost-effective option which may be substantially cheaper than individually shipping products from the mainland.	Opportunities: Supports local initiatives and implementation of the overall Strategy. Provides a waste management pathway for the Shire to achieve the greatest environmental benefit. Challenges: May be difficult to implement if not aligned with the overarching Strategy. The Shire or selected representatives of the community will need to take ownership for the implementation of the waste management plan.	Primary: SoCKI Input: DWER
Establish a system for collating information and reporting on the implementation of Strategy objectives and priorities (#ID 5.9).	2	DITRDCAs in consultation with WA Department of Water and Environmental Regulation (DWER) and the Shire should establish a system for collating information and reporting on the implementation of Strategy objectives and priorities.	Opportunities: Supports implementation of the Strategy and allows for further coordination and collaboration with the Shire, DITRDCAs and DWER. Challenges: Requires continual monitoring and reporting.	Primary: DITRDCAs Input: DWER SoCKI
Development of standard data collection systems and establish waste reporting requirements (#ID 5.5, 5.6 & 5.7).	3	To assist with this priority, the Shire will need to undertake the following actions: 1. <u>Data collection system:</u> Select or develop a standard data collection system for waste on CKI. This should be undertaken in consultation with DWER to understand requirements and recommendations for waste data collection. 2. <u>Establish waste reporting protocols for the Shire and Commonwealth entities:</u> Implement waste reporting protocols to assist with waste data collection and inform future infrastructure planning. For the Shire, data on waste quantities should be collected on a continual basis, while regular waste audits can improve the understanding of the quantity of material being received at waste management facilities and may be a suitable way to collect waste data. 3. <u>Monitor:</u> Undertake continuous monitoring and reporting to track against strategic targets.	Opportunities: Provides a better understanding of the volume and quantities of waste being generated on CKI. This allows for more efficient waste management practices to be implemented and assists with the planning and procurement of future waste management infrastructure. Challenges: Potential resourcing constraints within the Shire to manage the continuing monitoring and reporting requirements.	Primary: SoCKI Input: DITRDCAs DWER
Review current gate fees at CKI waste management facilities (#ID 3.6).	4	Review current waste management situation and seek to recover the "true cost" for disposal / recycling of each material stream from waste generators, to the extent reasonably practicable. This should consider potential environmental issues, current and future infrastructure needs, equipment, systems, contracts, transport, consumables, legacy waste and possible seed funding requirements. <i>GHD has been engaged by SoCKI (March 2023) to address this priority.</i>	Opportunities: Potential to generate a revenue stream to offset the cost of waste management for the Shire. Challenges: Potential to increase illegal dumping and mismanagement of waste if not appropriately implemented. The "true cost" of managing waste will be high due to the CKI context and distance from the mainland.	Primary: SoCKI Input: DITRDCAs
Deliniate waste management responsibilities (#ID 6.0).	5	A workshop between the Shire and Commonwealth will be required to discuss funding and strategic leadership for waste management. This workshop will also facilitate program implementation planning and support the objective of developing improved waste management solutions for CKI. Additional discussions between the Shire and Commonwealth will be required to understand how the Shire will operate and manage waste management infrastructure and contribute to the costs of providing the services used to collect, transport, treat and dispose of the wastes they generate.	Opportunities: Supports collaboration to achieve best practice waste management on CKI. Challenges: Potential difficulties in reaching agreement on the responsibility for various components of waste management on CKI.	Primary: SoCKI Input: DITRDCAs
Develop a suitable pathway for transporting waste to the mainland or overseas markets in a manner agreed upon to facilitate the exportation of waste material (#ID 4.5).	6	To assist with this priority, the Shire will need to undertake the following actions: 1. Investigate Australian-Singapore Comprehensive Strategic Partnership: In the context of waste management, investigate how best to capitalise on the Australian-Singapore Comprehensive Strategic Partnership and investigate the potential to capitalise on similar partnerships with Indonesia and Malaysia (#ID 2.1). 2. Collaboration workshop: The Commonwealth, DWER and DCCEEW ⁴ should identify pathways for the Shire and other commercial entities on the islands to transport material back to Australia or export to overseas markets. 3. Implementation: When opportunities have been realised both through the strategic partnership and collaboration workshop, these opportunities should be brought forward to offshore partners (in consultation with the Shire) for collaboration, discussion and feedback. During this process, ideas will be refined and the feasibility of waste management partners will be realised. Specific opportunities for the management of batteries and car bodies include: 3a. Removal of batteries: When exportation becomes a more feasible waste management option, the Shire should consider implementing a rolling five-year project to ensure all batteries are removed from the islands (#ID 4.6). 3b. Bulk removal of car bodies: There are many obsolete / in operational car bodies within CKI. Explore the bulk removal of car bodies off the islands (#ID 4.7).	Opportunities: Potential to generate revenue from the recovery of certain waste stream materials and offset waste management costs for other streams. Reduces volumes of waste classified as quarantine and requiring deep burial. Increases material removed from the islands and in turn reduces the risk posed to the environment from stockpiling and incineration of waste. Challenges: There is currently no straightforward and cost-effective pathway to export waste to the mainland or overseas. Exporting waste from the islands may be costly if there are no mechanisms available to offset the costs (i.e. backloading, recycling, etc.)	Primary: DITRDCAs DWER Input: SoCKI
Tender and allocate funding for appropriately specified incinerators to be established within CKI on West and Home Islands (#ID 4.3).	7	To assist with this priority, the Shire will need to undertake the following actions: 1. Incinerator tender: Tender and allocate funding for new incinerator units(s). 2. Incineration procurement: The new incinerator unit(s) will need to be appropriately procured to suit CKI and provide ongoing operational supporting, training and maintenance. The quantity of residual waste requiring disposal needs to be	Opportunities: Potential to appropriately plan residual waste infrastructure to reduce risks posed to the environment. Challenges: Potential difficulties in obtaining funding.	Primary: SoCKI Input: DITRDCAs DWER

Priorities	Order of priority	Proposed implementations steps	Opportunities and challenges	Ownership of implementation
Explore the feasibility of implementing self haul, kerbside GO or FOGO services, with associated downstream processing (#ID 2.8 & 4.0).	8	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <ol style="list-style-type: none"> 1. Organic processing pre-feasibility assessment: Undertake a pre-feasibility study focusing on organic waste recycling and potential for reducing residual waste quantities. <i>DITRDCA have engaged GHD (March 2023) to undertake an organic pre-feasibility assessment to explore the implementation of organic processing further.</i> 2. Organic collection trials: It is recommended, before significant investment into organic waste collection and processing, a FO/GO, FOGO or Vegetable Organics GO (VOGO) collection trial should be undertaken. 3. Organic collection and processing business case / feasibility assessment: Based on the finding of the pre-feasibility assessment and collection trials, undertake a business case /feasibility assessment. 4. Engagement: Engagement during planning, implementation and post implementation is needed to facilitate successful service implementation. This includes engagement with community, public, tourists and internal and external stakeholders. 5. Implementation: During this stage, a collaborative approach with the Shire is needed for successful implementation. 	<p>Opportunities: Potential to reduce residual waste management costs. Output product could be reused on islands. Reduces the risk posed to the environment from incineration of putrescible waste.</p> <p>Challenges: Costs and logistics required for ongoing maintenance of processing technology. Requires community engagement and endorsement for successful implementation.</p>	Primary: SoCKI DITRDCA Input: DWER
Explore synergies between the Shire and commercial entities who may assist in providing improved waste management services (#ID 2.0).	9	<p>Undertake consultation with commercial entities (e.g. WaterCorp) to identify and understand any potential synergies or efficiencies.</p>	<p>Opportunities: Alleviates some strain and responsibilities from the Shire for waste management. Supports collaboration with commercial entities and the Shire.</p> <p>Challenges: Requires ongoing engagement and resourcing.</p>	Primary: SoCKI
Develop interim storage areas to facilitate the appropriate storage of recyclables while exportation opportunities are being explored (#ID 3.0).	10	<p>Develop interim storage areas by investing in storage containers, an undercover hardsand area or an alternative appropriate storage solution for recyclables while exportation opportunities are being explored.</p>	<p>Opportunities: Potential to reduce quarantine issues associated with exporting materials. Provides an interim solution to reduce waste from incineration while exporting opportunities are being explored.</p> <p>Challenges: Storage areas need to be appropriately designed with consideration for future waste management infrastructure that may be procured. Appropriate health and safety controls are required to handle and store materials.</p>	Primary: SoCKI DITRDCA
Explore the feasibility of offshore partnerships with companies that recycle and process waste (#ID 2.2).	11	<p>Undertaken an analysis of the current active offshore markets that may be available to accept recyclable materials from CKL. This analysis should include identifying and communicating with offshore partners / companies, identifying waste groups (e.g. Cleanaway) that may be able to facilitate exportation (if required), examining economic viability, required waste material quality, standards, quarantine and export license requirements. The study should provide recommendations for offshore partnerships, contracts of offshore partners and next steps to facilitate this process (if found to be feasible).</p>	<p>Opportunities: Potential to reduce waste being sent for deep burial due to quarantine issues. Potential to generate additional revenue stream from recovery of materials from waste stream.</p> <p>Challenges: Pre-processing requirements to recover materials (i.e. manual sorting or dismantling of white good and vehicles). Potential to increase stockpiling of wastes and environmental and safety risks associated with stockpiling.</p>	Primary: SoCKI DITRDCA
Appropriate disposal / management methods for obsolete assets should be determined and undertaken (#ID 3.3).	12	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <ol style="list-style-type: none"> 1. Engagement with owners of obsolete assets. The owner of the obsolete assets on CKL should be engaged to manage the obsolete asset. This engagement should focus on the organisation / company maintaining ownership of the obsolete asset(s) and disposing the asset(s) until they are finally disposed and / or assisting with the final disposal pathway. 2. Disposal / management methods: Identify appropriate disposal / management methods for legacy assets based on the findings of the <i>IOT Part A – Asset Disposal Management Report</i> (GHD, 2022). 3. Opportunities and management: When the disposal / management method for the remaining assets have been selected, backloading opportunities should also be identified for multiple assets to be handled concurrently. 	<p>Opportunities: Assists with accountability for waste generation on the islands and assigns ownership and responsibility (including costs) for the management of the waste.</p> <p>Potential to increase removal of legacy waste on the islands, assisting with safeguarding amenity and environmental values.</p> <p>Challenges: Large volumes of legacy waste currently requiring removal. Difficulty identifying and engaging with owners of assets.</p>	Primary: SoCKI DITRDCA
Arrange a workshop with key stakeholders for phasing out single use plastics in line with WA's Plan for Plastics (#ID 5.2).	13	<p>DWER to facilitate meeting with the Shire, WA Waste Authority and DITRDCA to discuss targets for phasing out single use plastics in line with WA's Plan for Plastics. This workshop should seek to delineate responsibilities to ensure effective implementation of WA's Plan for Plastics. This workshop will also assist in identifying next steps for the phase out plastics on CKL.</p>	<p>Opportunities: Opportunity to collaborate to assist with phasing out plastics. Supports Commonwealth and State waste management targets. Potential to reduce impact to surrounding environment from plastic waste.</p> <p>Challenges: Requires engagement and education campaigns with community and commercial entities.</p>	Primary: DWER Input: SoCKI
Medium term				Primary: SoCKI
Consider establishing an ongoing community	2	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <p>Opportunities: Supports the successful implementation of the Strategy.</p>		

Priorities	Order of priority	Proposed implementations steps	Opportunities and challenges	Ownership of implementation
consultation programme (#ID 6.2).		<p>1. Draft community consultation programme: Several of the recommended priorities require community consultation and engagement for the successful implementation and / or uptake. The draft communication programme should include:</p> <ul style="list-style-type: none"> 1) Consideration of all stakeholders in CKI (including transient groups); 2) Preparation of a new resident's pack with information on the CKI environment, water and power supply, waste management arrangements, and marine ecosystems. 3) Community consultation protocol when acquiring new waste infrastructure (#ID 6.3); 4) Development of waste management environmental inductions for visitors and workers to CKI (#ID 6.4). <p>2. Finalise community consultation programme: The draft programme should be reviewed and backed by DITRDCA and distributed to relevant Commonwealth parties.</p> <p>3. Engage with relevant parties: To enable appropriate distribution of the community consultation programme and inductions developed, engage with tourist operators, Virgin Airlines and Commonwealth entities.</p>	<p>Opportunities: Assists with community and visitor engagement in improving waste management practices.</p> <p>Challenges: Ongoing community consultation can be a costly and time-consuming process.</p> <p>Requires management of a range of stakeholders.</p>	Primary: SoCKI DITRDCA DWER
Establishment of sustainable procurement and management protocols. This should consider the following priorities: #ID 1.5, #ID 1.6, #ID 1.7, #ID 1.8 and #ID 1.9.	3	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <ol style="list-style-type: none"> 1. <u>Development of procurement protocols and/or clauses:</u> These procurement protocols should define objectives, targets, governance framework and focus areas and the various stages of procurement lifestyles as specified in Section 6.2 of the Task 4: <i>IOT Best Practice in Waste Management for Islands report</i> (GHD, 2022). 2. <u>Workshop:</u> Key stakeholders should be consulted in the design and establishment of procurement protocols. This is to get feedback from key players in CKI. 3. <u>Finalise terms and conditions for protocols and evaluation criteria:</u> For clarity and consistency across contacts and SDA's, a standard set of terms and conditions for the procurement process should be developed. This is through the preparation of a clear and concise terms of reference for the protocols to assist in the tender process. A set of evaluation criteria to assess tenders should also be drafted and these criteria should consider alignment with protocol. 4. <u>Communication Strategy:</u> Develop a communication strategy for engagement with suppliers and key stakeholders for implementation of procurement protocols. 	<p>Opportunities: Supports the successful implementation of the Strategy. Has previously proven to be very effective in island contexts.</p> <p>Ensures accountability for waste generation.</p> <p>Provides clear and consistent guidance on procurement protocols for contractors.</p> <p>Challenges: Requires engagement with various stakeholders.</p> <p>Potential difficulties in enforcing protocols.</p> <p>Requires additional planning to support successful development and implementation.</p>	Primary: SoCKI DITRDCA
Funding shall be allocated to facilitate the management of existing obsolete assets (#ID 2.4).	4	DITRDCA to obtain a once off funding allocation for the management and disposal of obsolete Commonwealth assets.	<p>Opportunities: Supports the removal of legacy waste on the islands, assisting with safeguarding amenity and environmental values.</p> <p>Challenges: Potential difficulties securing funding to address the large quantity of legacy waste requiring removal.</p>	Primary: SoCKI DITRDCA
Explore the establishment of an overriding Commonwealth asset management plan (#ID 2.5).	5	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <ol style="list-style-type: none"> 1. Reconfirm the need; Recommit the need for a separate asset management plan for CKI, or if available, identify existing asset management plans that can be used and amended to assist with Commonwealth asset management. 2. Tender for development of Commonwealth asset management plan: If an asset management plan is determined to be necessary for CKI, the Commonwealth should issue an RFQ for its development. This management plan should include requirements of a yearly sinking fund for assets per their depreciation value. This would cover a portion of the funding for capital equipment replacement and management of assets at end of life. Furthermore, this plan should consider maintenance and funding of machinery and equipment for purchased Commonwealth assets (#ID 2.6). 	<p>Opportunities: Assigns responsibility for Commonwealth waste generation on the islands.</p> <p>Supports the removal of legacy waste on the islands.</p> <p>Challenges: Difficulty consistently implementing the plan across all departments within the Commonwealth government that are involved with CKI.</p>	Primary: SoCKI DITRDCA Input: SoCKI
Upgrade existing transfer stations on CKI (#ID 3.1).	6	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <ol style="list-style-type: none"> 1. Upgrade transfer stations: Upgrade of the existing transfer stations should be undertaken with close consideration of ancillary infrastructure to support waste management and future resource recovery. As well as appropriate storage of material. 1a. <u>Implement best practice hazardous waste management:</u> The transfer stations should accommodate household hazardous waste, which should be segregated and appropriately stored. Dedicated material aggregation areas and best practice management have been detailed in the <i>IOT Part B – General Waste Management Report</i> (GHD, 2022). 2. Implementation / process plan: Once designed and constructed, a document should be developed to outline responsibilities, opening hours, roles, maintenance requirement and other details that are key for the successful operation of the transfer stations. This includes preparing a step by step process on how to handle the various waste streams. 	<p>Opportunities: Allows for the appropriate management of waste on the islands and supports future resource recovery.</p> <p>Challenges: Requires identification of accessible end markets.</p> <p>Needs to be appropriately designed to be suitable for the CKI context.</p>	Primary: SoCKI Input: DITRDCA
Explore the establishment of a tip shop, repair centre and/or women's and men's sheds (#ID 3.4 & 3.5).	7	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <ol style="list-style-type: none"> 1. <u>Community survey:</u> Develop a community survey to understand community outlook on prospective tip shop, repair centre and / or women and men's sheds. 2. <u>Funding allocation:</u> Exploring funding allocations required to support this priority. 	<p>Opportunities: Simple to implement.</p> <p>Supports community involvement and engagement.</p> <p>Challenges: Requires resources for ongoing management.</p>	Primary: SoCKI Input: DITRDCA
Consideration of a contractual procurement model for design, build, operate and maintain (DBOM) of residual waste infrastructure (#ID 4.4).	8	<p>To assist with this priority, the Shire will need to undertake the following actions:</p> <ol style="list-style-type: none"> 1. Workshop: Evaluate the current residual waste infrastructure operation and management. Discuss DBOM or design and construct with operation and maintenance support options with the Shire and other suitable delivery models for the residual waste infrastructure. The DBOM model has been suggested as historically many donor-funded equipment installations operate over relatively short term project lifespans. 2. <u>Economic feasibility:</u> Evaluate the feasibility of implementing a DBOM procurement model with consideration of sustainable financing systems and other strategies which may alleviate funding constraints. 	<p>Opportunities: Reduces responsibility of operation and maintenance of waste assets for the Shire.</p> <p>Challenges: Ability to successfully procure a suitable contractor.</p> <p>Financial viability of infrastructure due to low waste volumes and limited access to end markets.</p>	Primary: SoCKI DITRDCA

Priorities	Order of priority	Proposed implementations steps	Opportunities and challenges	Ownership of implementation
Progressively restrict importations of single use plastics (#ID 5.3).	9	The WA government will facilitate this ban. DWER will manage under SDA with IOT.	Opportunities: Already being implemented by state governments across Australia, including WA Government. Challenges: Availability of alternative items in the CKI context.	Primary: DWER Input: SoCKI
Consider developing a marine debris management plan (#ID 5.1).	10	To assist with this priority, the Shire will need to undertake the following actions: 1. Explore funding allocation and Shires' support; Consideration of the development of a marine debris management plan; If the Shire is in support and there is sufficient funding allocation, a marine debris management plan should be developed to address the following key objectives: 1) To publicise the impacts of marine debris and lobby via Australian Federal Government and State Governments; 2) Delineation of responsibilities for the management of marine debris in CKI; 3) To identify processes to manage current / future levels of marine debris including facilitating regular beach clean ups; 4) To investigate ways to best allocate future funding and build capacity.	Opportunities: Opportunity to delineate responsibilities for the management of marine debris in CKI. Supports a more coordinated approach to addressing the issue of marine debris. Challenges: Rourcing requirements for the implementation of the plan.	Primary: SoCKI DITRDC4 Input: DWER
Facilitate regular audits within CKI to gauge the quantity of marine debris and its rate of accumulation (#ID 5.4).	11	To assist with this priority, the Shire will need to undertake the following actions: 1. Marine debris audit organisation: To better understand the rate of marine debris accumulation, marine debris audits should be undertaken, ideally on a yearly basis, and trends monitored based on previous audits. These marine audits should be undertaken in the same month as previous yearly audits. 2. Marine debris data: Data from the yearly audits should be entered into an internal spreadsheet, documenting the same results as previous audits. This can be undertaken in collaboration with various not-for-profit organisations i.e. Tangaro Blue. By doing this, the rate of marine debris accumulation can be better understood.	Opportunities: Provides a better understanding of the volume and quantity of waste being generated in CKI. Supports the implementation of more efficient waste management practices and planning for future waste management infrastructure. Challenges: Requires waste audit training. Resourcing requirements to undertake regular audits.	Primary: SoCKI DITRDC4 Input: DWER
Explore funding allocations for marine debris and plastic waste (#ID 5.0).	12	Based upon the findings of the IOT Part C – Marine Debris Management Report (GHD, 2022), explore funding allocations for beach clean ups, collecting and sorting marine debris and plastic waste.	Opportunities: Existing volunteer organisations assisting with management of marine debris may reduce the fundings requirements. Challenges: Impacts on availability of funds for other priorities.	Primary: SoCKI DITRDC4 Input: DWER
Consolidation of asset management registers (#ID 2.7).	13	Selecting an appropriate system already used and consolidate the list of assets into one register is for ease of tracking and facilitation of efficient asset disposal management. There are various registers already used for managing Commonwealth assets including SAP Asset Register, FARM Tools, SAMPs and AMPS.	Opportunities: Allows for appropriate tracking of Commonwealth assets to facilitate efficient asset management and disposal. Challenges: Significant resourcing requirements for the consolidation of registers due to the large amount of assets owned by the Commonwealth.	Primary: SoCKI DITRDC4 Input: DWER
Long term				
Explore feasibility of establishing sustainable financing legislation, including those suggested in Section 7 (#ID 1.1, #ID 1.2, #ID 1.3 and #ID 1.4).	1	To assist with this priority, the Shire will need to undertake the following actions: 1. Pre-feasibility: Examine the various sustainable financing legislation / frameworks that can be established to understand the most appropriate sustainable financing mechanism to be introduced. 2. Political support / working group: Key stakeholders and political representatives will need continued consultation for the establishment of legislation / frameworks. This support should be considered from the pre-feasibility stage up until implementation. 3. Feasibility and legislative analysis: Review cost of waste management for each material stream. This includes examining operational and capital cost of infrastructure, enforcement, contracts, legacy waste, etc. This will inform the costing system of the sustainable financing system. An important item to consider is how the funds are managed and accessed. 4. Finalise system design: Once the sustainable financing system is designed and backed by relevant stakeholders, the policy and initial legislation should be drafted. 5. Implementation: The implementation stage will need to include training, community and industry awareness and monitoring, evaluation, auditing, and continuous improvement of the system.	Opportunities: Proven to be effective in island contexts. Supports the allocation of funds for waste management. Provides clear guidance on financing mechanisms. Challenges: Difficulties enforcing across departments. Requires stakeholder consultation and engagement to develop and implement legislation.	Primary: SoCKI DITRDC4 Input: DWER
Further explore resource recovery processing options to be implemented within the IOT (#ID 4.1).	2	To assist with this priority, the Shire and DITRDC4 will need to undertake the following actions: 1. Processing options assessment: Based upon the findings of the IOT Part B – General Waste Management Report (GHD, 2022); further work is needed to examine the technical and financial feasibility of implementing the options identified. 2. Community consultation: Undertake extensive community consultation to support to the long-term success of waste management programs implemented.	Opportunities: Reduces waste being incinerated. Assists with meeting Commonwealth and State targets. Potential to generate additional revenue stream to offset waste management costs. Challenges: Requires access to viable end markets.	Primary: SoCKI DITRDC4 Input: DWER
Explore the most efficient and effective pathway to transition the islands from diesel-based energy to clean energy sources (#ID 3.9).	3	<i>This action is already being explored as part of CKI 2030 Strategic Plans and should continue to be developed.</i>	Opportunities: Reduces costs associated with diesel. Reduces greenhouse gas emissions and other direct environmental impacts from storage, handling and combustion of diesel. Challenges: Operation and maintenance requirements for alternative energy generation assets. Continued use of incineration in waste management at remote locations prolongs reliance on diesel.	Primary: DITRDC4 Input: SoCKI
Explore negotiating air freight rates to facilitate	4	Engagement with air freight operators to understand the potential to negotiate rates to facilitate the removal of suitable waste that cannot be recovered or safely disposed within the IOT.	Opportunities: Potential to reduce the cost of waste management to the Shire. Challenges: May require additional pre-processing or sorting of materials.	Primary: DITRDC4

Priorities	Order of priority	Proposed implementation steps	Opportunities and challenges	Ownership of implementation
the removal of suitable waste from CK1 (#ID 4.9).			Potential restrictions around the types of material able to be freighted by air due to safety requirements.	



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