Item: 5

Development and Infrastructure Committee: 3 June 2025.

Integrated Waste Strategy.

Report by Director of Infrastructure and Organisational Development.

1. Overview

1.1. Existing waste services are delivered across a range of operational sites and are subject to significant constraints and pressures. Work carried out over several years culminated in a Business Case being developed in 2019 for an Integrated Waste Facility, which would enable more efficient collection of a greater range of recyclable materials, thus increasing the recycling rate, provide resilience with regards to future legislative changes, assist in the reduction of the volume of residual waste sent to Shetland for processing and enable waste and recycling collection services to reflect both local and national aspirations with regards to the management and processing of recyclable materials.

1.2. Subsequently, in 2021, a capital project was approved, at a total cost of £17.2m, contingent on a successful grant application to the Scottish Government Recycling Improvement Fund of £12m. Unfortunately, this grant application was unsuccessful.

1.3. In 2024, the costs of the proposed project were reviewed and found to be £26.8m. The ongoing revenue costs to repay this would be around £1.3m per year for a period of 30 years. As the total revenue budget for Environmental Services is £2.6m, the project was therefore deemed unaffordable.

1.4. Notwithstanding this, the Council remains firmly in support of the principle of modernised and improved waste and recycling facilities and so agreed to instead develop an integrated waste strategy, setting out a portfolio of projects designed to increase recycling rates, reduce revenue costs and improve the overall resilience of these services.

1.5. Development of this strategy was funded through the remaining Capital Project Appraisal funding, originally allocated to develop the Business Case and associated capital project. This enabled the procurement of consultants who worked with the Environmental Services team to develop the draft strategy, contained in the

Orkney Islands Council Waste and Resource Management Strategy, attached at Appendix 1 to this paper.

1.6. The Strategy contains a list of opportunities which has been classified as High, Medium and Low priority and together outline a set of projects which, individually and collectively, will assist the Council to navigate the changing legislative and regulatory landscape around the management of resources and ensure that services are delivered in accordance with the resources available.

1.7. If approved, the individual projects contained within the Strategy will be developed as resources allow, noting that they will be brought to the relevant Committee(s) for consideration in accordance with existing governance procedures.

2. Recommendations

2.1. It is recommended that members of the Committee:

i. Approve the Waste and Resource Management Strategy, attached as Appendix 1 to this paper.
ii. Instruct the Corporate Director for Neighbourhood Services and Infrastructure to develop the projects contained within the Strategy, as resources allow and in accordance with existing governance procedures.

3. Waste and Resource Management Strategy

3.1. The overall vision of the Strategy is to provide Orkney with cost-efficient reuse, recycling and waste services, that maximises the recovery and recycling/reuse of valuable natural resources and meets the needs and expectations of residents and businesses. We will ensure that this service is compliant with forthcoming national legislation and compatible with any partnership working arrangements.

3.2. The Strategy identifies a range of projects, which can be implemented as resources allow, and which are focused on fulfilling the following key objectives:

- Delivery of a more efficient waste service by reducing costs per tonne and increasing the recycling rate performance by implementing an expanded kerbside collection service encompassing a wider range of materials.
- Implement actions that deliver wider benefits to the community, such as employment, low-cost goods or materials for use on Orkney.

- Reduce waste generation by implementing practices to minimise waste at source, for example by supporting and encouraging waste prevention and reuse.
- Developing the Council's Household Waste Recycling facilities (HWRCs) to maximise items and materials for reuse and recycling.
- Promote a sustainable approach to the use of infrastructure by encouraging the reuse of existing vehicles and buildings.
- Ensure compliance in terms of cost recovery from commercial waste management.

3.3. This portfolio of projects is a mix of relatively small-scale capital projects, operational efficiencies, community engagement initiatives and commercial opportunities. Together they form an integrated strategy, aimed at delivering the objectives noted above within the resources available and to appropriate timescales. The expected outcomes of the Strategy are:

- An incremental improvement approach adopted that fits with budget and funding opportunities and constraints.
- The delivery of a more efficient waste service, which maximises the potential to reduce costs or mitigate effectively against future price increases.
- An increase in reuse and recycling levels, where the value of achieving improved recycling is balanced with the cost and income landscape.
- Opportunities to manage resources locally are prioritised.
- Opportunities to reuse existing infrastructure are maximised.
- Beneficial partnership opportunities are maximised, which may include collaboration with potential community partners and private contractors.
- Compliance in terms of commercial waste management and charging is demonstrated.

3.4. All projects would be subject to appropriate governance and reported to Members accordingly. Any costs associated with delivery of the strategy will come forward as separate reports for consideration by Members, as follows:

- Potential capital projects will follow the Capital Project Appraisal process approved at Policy and Resources Committee on 27 November 2024.
- Additional revenue budget requirements to deliver any of the projects in the strategy will be submitted as Unavoidable Service Pressure Bids for consideration as part of the annual budget setting process.

- Any savings generated from the changes in waste management will also be put forward for consideration as a part of the annual budget setting process.

For Further Information please contact:
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Implications of Report

1. **Financial –** There are no direct financial implications associated with approval of the strategy at this stage, see paragraph 3.4.
2. **Legal-** The Council is aware of forthcoming legislative changes impacting on waste collection and treatment which will place additional requirements on the Council's facilities and collection services. As the existing infrastructure is not capable of addressing all of these requirements, approving the recommendations will assist the Council in preparing for these legislative changes.
3. **Corporate Governance-** None.
4. **Human Resources-** None.
5. **Equalities-** The requirement for an Equality Impact Assessment (EqIA) was considered and found to be not relevant at this point. Any projects identified and implemented will address the requirements for an EqIA individually.
6. **Island Communities Impact-** An Island Communities Impact Assessment has been undertaken and is attached as Appendix 2 to this report.
7. **Links to Council Plan-** The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Council Plan strategic priorities:
   ☒ Growing our economy.
   ☐Strengthening our Communities.
   ☒Developing our Infrastructure.
   ☐Transforming our Council.
8. **Links to Local Outcomes Improvement Plan-** The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Local Outcomes Improvement Plan priorities:
   ☐Cost of Living.
   ☒Sustainable Development.
   ☐Local Equality.
   ☐Improving Population Health.
9. **Environmental and Climate Risk-** The Strategy contains a focus on diverting materials from landfill and energy from waste and will assist with a reduction in carbon emissions as a greater quantity of materials will be re-used and recycled.

10. **Risk-** No risks associated with the Strategy. Risks associated with any individual projects will be managed appropriately as required.
11. **Procurement-** None.
12. **Health and Safety-** None.
13. **Property and Assets-** None.
14. **Information Technology-** None.
15. **Cost of Living-** None.

List of Background Papers

Paper entitled Proposed New Waste Management Facilities (Item 6) submitted to Development and Infrastructure Committee, 26 September 2018.
Paper entitled Integrated Waste Facility (Item 9) submitted to Development and Infrastructure Committee, 7 September 2021.
Paper entitled Former Abattoir, H21, Hatston Industrial Estate (Item 6), submitted to Asset Management Sub-committee, 2 November 2021.
Paper entitled Integrated Waste Facility - Stage 2 Capital Project Appraisal (Item 8) submitted to Policy and Resources Committee, 29 November 2021.
Paper entitled Integrated Waste Facility – Revised Stage 2 Capital Project Appraisal (Item 17) submitted to Policy and Resources Committee, 18 June 2024.

Appendix
Appendix 1 - Orkney Islands Council Waste and Resource Management Strategy.
Appendix 2 – Islands Communities Impact Assessment.

Appendix 1

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Waste and Resource Management Strategy

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Executive Summary

This Strategy aims to establish a comprehensive and sustainable approach to waste and resource management in Orkney, based on a vision of increased activity to prevent waste from occurring, to increase recycling levels and provide a service that is more efficient. This involves the delivery of actions that can provide wider benefits to the community, supporting increased employment, provide lower-cost goods and materials by keeping these in circulation for longer in Orkney. The result of this will be outcomes which deliver a more circular economy and reduce greenhouse gas emissions compared to business as usual. This Strategy aligns with national policy and regulatory developments and outlines key initiatives and actions concerning prevention, reuse, recycling and disposal, the latter in terms of both energy from waste and landfill.

An important aspect of this Strategy is the cost implications that island authorities such as Orkney face, in terms of distance to large markets and the impacts this has on service delivery. Larger local authorities on the Scottish mainland have larger quantities of waste and are able to work collaboratively with neighbouring authorities to develop management options. This assists with significant capital investments as well as developing contracts with waste management contractors to deliver improved recycling and recovery services. Many of these local authorities have also been mandated to put in place food waste collections systems, a legal requirement, with funding support provided by the Scottish government to facilitate this. Orkney therefore has significant constraints which need to be understood when considering options for a strategy.

This Strategy has been developed at a time of uncertainty in terms of policy developments which could have significant implications in terms of costs, income and requirements in terms of materials that should be captured for recycling. However, initiatives which prevent and reduce waste, and recycle what is not prevented are those which are most likely to provide the most robust future proof waste service.

The vision is to provide the Orkney Islands with cost-efficient reuse, recycling and waste services, that maximises the recovery and recycling/reuse of valuable natural resources and meets the needs and expectations of residents and businesses. We will ensure that this service is compliant with forthcoming national legislation and compatible with any partnership working arrangements.

Key objectives

- Objective 1 - Delivery of a more efficient waste service by reducing costs per tonne and increasing the recycling rate performance by implementing an expanded kerbside collection service encompassing a wider range of materials.
- Objective 2 - Implement actions that deliver wider benefits to the community, such as employment, low-cost goods or materials for use on Orkney.
- Objective 3 – Reduce waste generation by implementing practices to minimise waste at source, for example by supporting and encouraging waste prevention and reuse.
- Objective 4 - Developing the Council’s Household Waste Recycling facilities (HWRCs) to maximise items and materials for reuse and recycling.

- Objective 5 - Promote a sustainable approach to the use of infrastructure by encouraging the reuse of existing vehicles, buildings, etc.
- Objective 6 - Ensure compliance in terms of cost recovery from commercial waste management.

Strategic initiatives

- Considering Orkney's distance to markets, and its island setting, reach agreement within local and Scottish Government, on the acceptable limitations, exemptions and expectations, with respect to recycling and associated methodologies used for data reporting.
- Preparing for a potential significant increase in the cost of waste managed for Orkney Islands Council (OIC), by Shetland Islands Council (SIC) if additional costs associated with the UK Emissions Trading Scheme (ETS) are applied to the incinerator there.
- Managing services to maximise the potential opportunities that are going to arise from extended producer responsibility schemes, circular economy, deposit return schemes and a potential visitor levy.
- Reviewing the current approach for waste shipped to Shetland to identify opportunities for greater transparency in reporting and landfill tax charging.
- Engaging with a wide range of stakeholders, including potential community partners, to promote a circular economy and culture of sustainability.
- Assessing the capacity of the existing fleet of vehicles and buildings to manage an expanded kerbside collection service.
- Assessing how the existing HWRCs can be most effectively managed to support greater reuse and recycling. This could include the potential of a booking system to prevent commercial waste being illegally discarded at the sites.
- Develop an understanding of how services in the outer isles can be delivered in partnership with community organisations and contractors, for example by collaborating to deliver improved reuse by delivering bulky waste services.
- Understanding the potential value of new technologies for the treatment of residual waste.
- Community engagement through awareness raising and partnering with local communities to support household and community initiatives that result in reduced levels of waste.

Expected outcomes

- An incremental improvement approach adopted that aligns with budget and funding opportunities and constraints.
- The delivery of a more efficient waste service, which maximises the potential to reduce costs or mitigate effectively against future price increases.
- An increase in reuse and recycling levels, where the value of achieving improved recycling is balanced with the cost and income landscape.
- Opportunities to manage resources locally are prioritised.
- Opportunities to reuse existing infrastructure are maximised.
- Beneficial partnership opportunities are maximised, which may include collaboration with potential community and private contractors.

- Compliance in terms of commercial waste management and charging is demonstrated.
- Discussions with SIC to explore efficiencies the services could deliver.

Actions for delivering the strategy

The actions required to deliver the vision and objectives are summarised below, with the priorities indicated.

1. Preparing for the forthcoming policy and regulatory change:

- Being an active contributory part of a future Deposit Return Scheme (DRS) system – high priority.
- Avoid major changes in collections service until the new Code of Practice is confirmed – high priority.
- Engage with the Scottish Government to ensure Orkney's unique challenges are understood in the design of policy and regulations. This may be most effectively facilitated by engaging through existing networks, such as the Waste Management Officers' Network (WMON), the Convention of Scottish Local Authorities (CoSLA), or a separate new group of island local authorities with similar challenges – high priority.
- Plan for the potential inclusion of SIC Incinerator in the Emissions Trading Scheme (ETS) and an accelerated programme of actions to reduce costs if necessary – high priority.
- Review this Waste Strategy in 2030 when more information is known about the impacts of policy and regulatory change.

2. Delivering an enhanced composting service:

Investigate food waste capture and recycling by OIC

The capture of food waste for composting would require significant investment in vehicles for kerbside collections and the construction of an In Vessel Composter (IVC), with food waste mixed with garden waste. Unless required by government, and funding is provided, this is a Low Priority.

Enhanced garden waste recycling by OIC

Conforming with the PAS100 standard to produce an enhanced compost and achieve recycling status requires the construction of a shed to reduce rainwater ingress and associated slab to ensure only compostable material is being handled. This could involve the expansion of the current composting slab at Bossack and the construction of a building to reduce rainwater ingress or could be at another site in collaboration with a third party e.g. UHI Orkney. Unless required by government, and funding is provided, this is a Low Priority.

3. Supporting householders and community composting:

Household food and garden waste composting

OIC to continue negotiating discounted home composting units suitable for efficient processing of both food and garden waste. Communication and awareness raising provision required to support the successful and meaningful delivery of this

programme. Although there is an operational cost for OIC in providing support through staff time, this may be offset by avoided waste disposal costs. Medium Priority.

Community composting projects for food and garden waste

OIC to support the development of community composting projects in terms of policy, awareness raising and communications (may be part of community food growing projects). Although there is an operational cost for OIC in providing staff time support, this may be offset by avoided waste disposal costs. Medium priority.

4. Supporting improved kerbside recycling of Dry Mixed Recyclates (DMR)s - introduction of expanded dry mixed recycling:

Assessing the capacity of the existing Refuse Collection and Recycler fleet. Need to understand what existing vehicles could be used, the future needs and costs. High priority.

Route reviews to inform capacity assessment of existing fleet. Significant time since this has been done - the most effective routes need to be considered along with the vehicle capacity assessment. High priority.

Consider if the collection of separate DMRs and their sorting in Orkney continues to be the preferred approach e.g. compared to hauling mixed DMRs to contractors in other parts of the UK for separation, with the higher costs incurred. Not sorting DMRs (e.g. at Chinglebraes) means that there would be no sorting equipment required, but also no compaction (preferred by sorting facilities elsewhere), which would increase haulage costs. High priority.

If sorting in Orkney is preferred, move to two stream collection with 2x 240l bins for paper/card/cardboard and plastics & cans - providing extra material storage for households. Supported by a major communications campaign. High priority.

Understand if outer isles' communities can provide a different role to make DMR recycling more effective (learning from previous services) including support of bring centres. High priority.

5. Supporting improved bulky waste services for reuse & recycling:

Evaluate the cost and income for the current collection (for cost recovery) and amend service if/where required. High priority.

Carry out investigations in the outer isles, for sourcing collections through organisations and groups in these islands, maximising potential for reuse and recycling through collaborations. High priority (starting with Hoy, Flotta, Westray and Shapinsay).

6. Actions to improve Household Waste Recycling Centre (HWRC) services:

Developments for enhanced recycling & cost savings

Consider business case, including manpower, cost-benefits, for managing Hatston and Stromness HWRCs to deliver efficiencies e.g. compacting of waste to reduce the number of

haulage trips. Manpower and compliance in terms of commercial waste to be understood and improvement plans initiated. High priority.

Where a business case permits, develop Hatston HWRC to be Orkney's premier recycling centre - use Packaging Extended Producer Responsibility (pEPR) payments or approach Scottish Government and other island-focused grant programmes for funding to expand the site. High priority.

Deliver pilot projects to investigate the opportunities around the capture of waste wood and inert materials separately for recycling, using separate skips where space can be made available. High priority.

Develop a business case for the introduction of a booking system (for commercial or all users) which can then prevent significant quantities of commercial waste being illegally discarded and reduce costs. High priority.

Development for enhanced reuse

Understand the full potential for developing the sites to improve collections of items for reuse. This should consider the potential for collaboration with Orkney social enterprises. High priority.

7. Improve communications and campaigns:

Major communications plan to be developed and implemented to support new kerbside collections scheme, as well as other new initiatives described in this strategy e.g. the development of HWRCs to allow new materials to be accepted for recycling, providing links to community and household composting resources. High priority.

8. Improved data management:

The current data reporting templates and methodology to be reviewed to allow quarterly and annual waste reporting on recycling and waste disposal to be clearer. This includes the methodology for distinguishing commercial from household waste generated. Opportunities associated with digital waste tracking to be included in this assessment. High priority.

The reporting of reused items and materials collected through OIC infrastructure to be captured consistently in data outputs. High priority.

9. Improve practices related to landfilling:

Discussions with SIC to take place to re-evaluate the current approach for managing waste stored at landfill prior to incineration – the aim being to create a more transparent method which makes it easier to attribute tonnes of waste being managed with the costs incurred. High priority.

Understand the potential tonnage of inert waste that could be recovered for recycling by piloting the introduction of skips at HWRCs and assessing the viability of future reprocessing activities. The latter would require discussions with OIC departments to understand if demand for such materials could be generated. High priority.

Engage with commercial operators managing waste to understand how collaboration may result in more effective and lower cost waste management for all parties. High priority.

10. Optimising and understand the most effective utilisation of OIC sites for waste processing:

Optimising the Chinglebraes site

The potential to expand Chinglebraes to take additional DMRs and sorting equipment requires layout design work to be undertaken, with drawings and costs produced. This may also need to consider the potential for changes to external areas to accommodate residual waste drying equipment. High priority.

Optimising the Hatston site

The potential of the Hatston site is linked to the potential at Chinglebraes and the needs of different departments at OIC. An assessment should be carried out after the Chinglebraes review is completed and the potential there is understood in detail. Expansion of the HWRC to facilitate greater material separation and reuse opportunities should be a key focus. High priority.

Understanding what the optimal garden waste composting site is

Understanding and agreement of the need, or otherwise, to produce a PAS100 compost. If this is established, or to assist in reaching this conclusion, an assessment of the costs and the potential for collaborating with UHI Orkney needs to be understood. Medium priority.

The following table summarises the ten overarching actions and priorities of the waste strategy.

Summary of actions and priorities

Number	Actions	Priority
1	**Preparing for the forthcoming policy and regulatory change**	High
2	**Delivering an enhanced composting service**	
2a	Investigate food waste capture and recycling by OIC	Low
2b	Enhanced garden waste recycling by OIC	Low
3	**Supporting householders and community composting**	
3a	Household food and garden waste composting	Medium
3b	Community composting projects for food and garden waste	Medium
4	**Supporting improved kerbside recycling of Dry Mixed Recyclates (DMR)s - introduction of expanded dry mixed recycling**	High
5	**Supporting improved bulky waste services for reuse & recycling**	High
6	**Actions to improve Household Waste Recycling Centre (HWRC) services**	
6a	Developments for enhanced recycling and cost savings	High
6b	Development for enhanced reuse	High
7	**Improve communications and campaigns**	High

8	**Improved data management**	High
9	**Improve practices relating to landfilling**	High
10	**Optimising and understand the most effective utilisation of OIC sites for waste processing**	
10a	Optimising the Chinglebraes site	High
10b	Optimising the Hatston site	High
10c	Understanding what the optimal garden waste composting site is	Medium

1.0 Introduction

1.1 The Vision and Objectives

In a world of finite resources, the prevention and management of waste is an increasingly important challenge. Waste is a threat to our environment, a drag on our economy, and has a negative impact on our communities. Orkney has its own unique challenges in reducing and managing waste. This strategy sets out how Orkney Islands Council (OIC) can optimise its performance for the benefit of all, working with partners, businesses and residents.

The vision is to provide Orkney with cost-efficient reuse, recycling and waste services, that maximises the recovery and recycling/reuse of valuable natural resources and meets the needs and expectations of residents and businesses. We will ensure that this service is compliant with forthcoming national legislation and compatible with any partnership working arrangements.

This Strategy aims to reduce the amount of waste produced and recover as many valuable materials from it as possible. The focus of the strategy is to make a significant contribution towards tackling rising costs and build a more resilient, efficient and effective waste service, with a greater focus on high quality recycling and reuse.

The associated objectives are:

- Objective 1 - Delivery of a more efficient waste service by reducing costs per tonne and increasing the recycling rate performance by implementing an expanded kerbside collection service encompassing a wider range of materials.
- Objective 2 - Implement actions that deliver wider benefits to the community, such as employment, low-cost goods or materials for use on Orkney.
- Objective 3 – Reduce waste generation by implementing practices to minimise waste at source, for example by supporting and encouraging waste prevention and reuse.
- Objective 4 - Developing the Council’s Household Waste Recycling facilities (HWRCs) to maximise items and materials for reuse and recycling.
- Objective 5 - Promote a sustainable approach to the use of infrastructure by encouraging the reuse of existing vehicles, buildings, etc.
- Objective 6 - Ensure compliance in terms of cost recovery from commercial waste management.

1.2 The Waste Hierarchy

This Strategy is aligned with the waste hierarchy and the principles of the circular economy – where the model of production and consumption involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products for as long as possible. In this way, the life cycle of products is extended.

The waste hierarchy ranks waste management options for solid wastes according to the best environmental and cost outcomes taking into consideration the lifecycle of the material. The lifecycle of a material is an environmental assessment of all the stages of a product's life from-cradle-to-grave (i.e. from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling).

In its simplest form, the waste hierarchy gives top priority to preventing waste to save resources and costs of disposal. When waste is created, it gives priority to preparing it for reuse, then recycling, then other recovery such as creating energy, and last of all, disposal such as landfill.

Figure 1. Scotland's Waste Hierarchy

1.3 Data and background research informing the strategy

This Waste and Resource Strategy has been informed by the development of a detailed Position Paper, which provides data, stakeholder engagement, costs etc. to inform the actions and priorities described here. Waste arisings in Orkney fluctuate on an annual basis, as they do in any other local authority. In recent years the total arisings of both household and commercial waste have amounted to around 14,000 tonnes, with circa 70% of this (just under 10,000 tonnes) generated from households and 30% coming from commercial sources (just over 4,000 tonnes). More than 80% of the household waste generated is diverted from landfill i.e. 20% recycled, 50% incinerated and circa 10% managed under waste exemption regulations, as a composted soil conditioner.

Currently, kerbside recycling collections are in place in Mainland Orkney and the linked isles of Burray and South Ronaldsay, together with Shapinsay. This is a four-weekly recyclates collection system and fortnightly for residual waste. These collections consist of one bin containing glass and one bin containing plastic bottles on one cycle and then, two weeks later, one bin for paper and thin card and one bin for ferrous metals and aluminium. All other isles have bring sites for recycling, with separate skips for glass, paper/thin card and ferrous metal/aluminium mixed. A weekly residual waste collection service operates on the outer isles in addition to the bring sites. The same service is provided for commercial waste, with the addition of corrugated cardboard packaging (Mainland and linked isles – not Shapinsay or other non-linked isles). Bulky waste collections are provided by the Council across all of Orkney.

The current system for household waste is shown below.

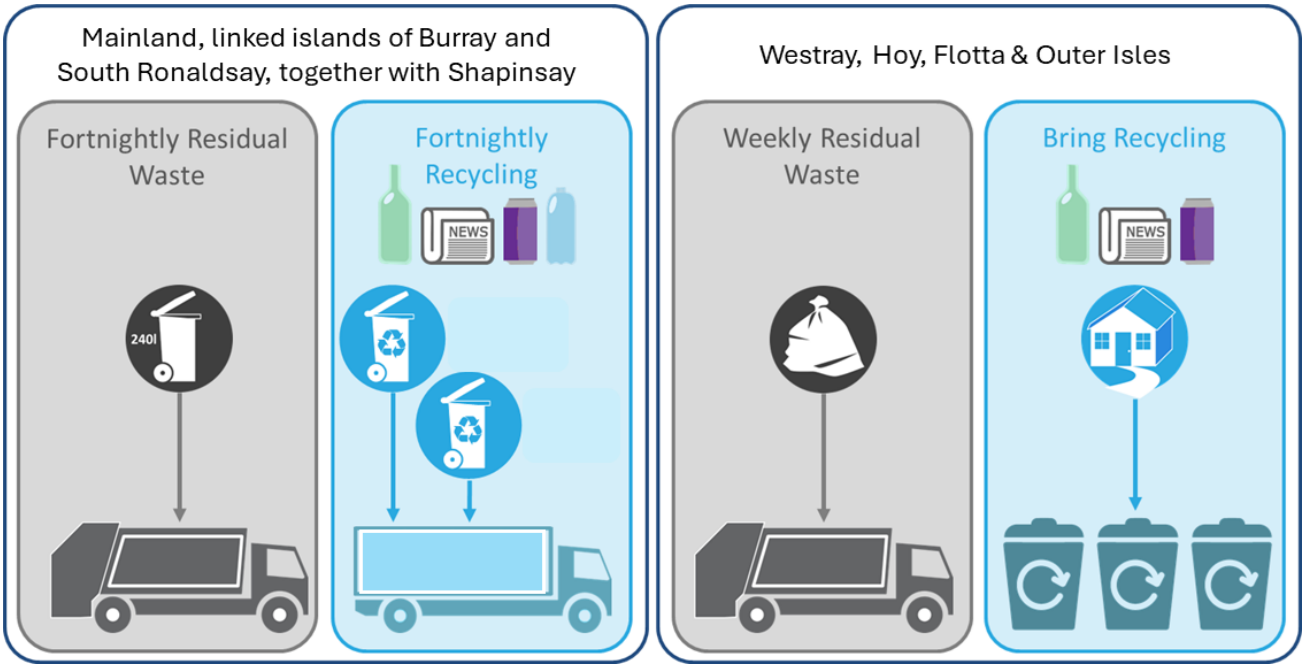

Figure 2. Overview of current (Feb 2025) kerbside system

1.4 Overview of the strategy approach

The work done to develop the Strategy has involved looking at affordable options to minimise waste arisings, increasing options to reuse materials within Orkney, increase the quantity of materials recycled and opportunities to manage resources locally where possible.

Key points of consideration in developing actions within the Strategy were:

- The opportunities to maximise the use of existing infrastructure, such as buildings, vehicles, bins, recycling centres and other waste sites etc.
- An incremental improvement approach was adopted, recognising that there are budget constraints and OIC will require to prioritise actions based on their impact for the investment made.
- Improving the environmental performance of the current waste service, including air quality and climate related emissions.
- Factoring in Orkney's remote and rural location to ensure the Strategy accounts for the distance and expense of moving materials to market, and the low volume of materials produced in the islands.
- Opportunities for partnership or collaboration with the third sector and other organisations to be explored and the view of key stakeholders to be taken into account.
- Delivery of a more efficient residual waste treatment service.
- Any cost efficiency opportunities to be maximised, however, recognising any procurement challenges and complexities in delivering changes within the service.
- Recognising the major change required in communications and services to underpin a wider culture of resource efficiency and circularity in Orkney that supports the "green" image Orkney desires for visitors.

- The value of achieving recycling targets balanced against costs, income and the wider benefit to the Orkney community when financial resources are limited.
- Developing strategic options for waste services in Orkney, which will ensure Orkney complies with regulatory requirements and meets its required environmental outcomes.
- Ensuring that commercial waste services are fairly charged for cost recovery wherever possible.
- The potential for securing alternative sources of funding that could assist with investment required in the recycling services.

1.5 Future obligations

The Waste Strategy aims to ensure that Orkney Islands Council will meet its regulatory obligations. A number of future regulations and policies have been identified that will affect waste services in the near future, including:

- Increases in Scottish Landfill Tax.
- The UK Emissions Trading scheme inclusion of Energy from Waste facilities.
- A UK driven Deposit Return Scheme for drinks containers.
- The Circular Economy Act (Scotland) 2024 and its associated Route Map.
- The Charter for Household Recycling and its Code of Practice.
- Extended Producer Responsibility for packaging materials.
- The biodegradable waste ban for landfilling.

These are discussed in more detail in the next section.

2.0 National Policy Implications

2.1 Overview

At the time of the production of this Strategy there are a range of significant changes occurring in the legal and policy framework for waste management and the circular economy, both in Scotland and the UK. There is considerable uncertainty about how some of these changes will be implemented and what further regulations will follow. In this section the most significant of these changes are outlined along with the potential high-level impacts on OIC, using the information available as at December 2024.

2.2 Emissions Trading Scheme (ETS) and Landfill Tax

The Scottish landfill tax for household waste is £126.15 per tonne in the 2025/26 fiscal year (£103.70 24/25), with the lower, inert waste rate also experiencing a rise to £4.05 per tonne (£3.30 24/25). These are significant increases designed to encourage greater levels of reuse, recycling/composting.

In addition to the landfill tax rate increase, the UK ETS is proposed to apply to energy from waste (EfW) facilities by 2028. Monitoring of such facilities for inclusion in the ETS will begin in 2026. This change is anticipated to increase the cost per tonne of disposal at such facilities by around £40.

It is unclear if the incinerator facility at Shetland used by OIC will be incorporated into the ETS under the current scheme rules. It may, or may not, receive an exemption for the 2026-2030 allocation period. If the Shetland EfW facility is exempt from ETS this would be of significant benefit to OIC, as the cost per tonne is likely to avoid the expected increases that will be experienced by larger mainland facilities. If the incinerator is not ETS exempt then the increased disposal costs will make reuse, recycling and composting options more economically viable. In combination the impact of increased landfill tax and potential ETS payments would increase disposal costs by around £381-470K per annum based on 2023/24 tonnages. Therefore, these changes could have significant cost impacts on OIC without mitigations measures.

2.3 Deposit Return Scheme (DRS)

After the scrapping of the implementation of a Scottish DRS there are plans for a UK wide system. Recent statements from the UK Government suggest they wish to introduce this by October 2027. There will be aligned deposit return schemes covering Scotland and England & Northern Ireland which will include polyethylene terephthalate (PET) plastic, steel, and aluminium drink containers, but not glass at this stage.

The DRS for drinks containers would include single-use drinks containers from 150ml to 3 litres in size. The Deposit Management Organisation (DMO) responsible for running the scheme will be required to reach a collection rate of 90% of DRS containers in year 3 of the scheme.

Should a DRS be established then the overall waste arising and recyclate tonnage handled will drop, impacting upon OIC’s recycling performance and budgets. This will be common to

all Scottish Councils and so it is likely that an agreement will be formed on how this change will impact on any future recycling targets.

With the logistical challenges of collecting drinks containers in Orkney there is the potential that OIC could position its kerbside collections as a form of DRS collection. This may be a potential income stream, if such an approach is accepted by the DMO, however, it may require investment in sorting equipment and staff resource to manage material quality.

2.4 Circular Economy (Scotland) Act 2024

The Scottish Parliament passed the Circular Economy (Scotland) Act on 26 June 2024. The key features of the Act affecting OIC are:

- Imposing a duty of care on householders and setting targets for local authorities regarding household waste and its recycling; and
- Expanding Local Authorities' enforcements powers, for example in relation to fly tipping and littering from a vehicle.

Councils will have to consider how they meet any statutory targets imposed upon them by 2030 for reuse or recycling/composting as well as the use of any new enforcement powers regarding household waste separation for reuse, recycling or composting. Until any secondary legislation and the Scottish Government's revised Circular Economy Strategy are produced there are many unknowns arising from the Act.

2.5 Charter for Household Recycling and the Code of Practice

The Charter and Code of Practice (CoP) on household recycling, was agreed by the Scottish Government and CoSLA in 2015. It requires signatory councils to abide by the charter and collect waste and recyclate according to a code of practice. This Charter and Code of Practice have been voluntary to date however, it is expected this code will become mandatory by 2027.

The impact of the revised charter cannot be estimated yet although it may reconfirm existing principles, such as the two stream collection of recyclates to improve quality. Potential changes include an expansion of the current food waste collection requirement and garden waste collections becoming mandatory. OIC does not currently offer these services and if it were obligated to provide this service, it would require significant capital investment in treatment facilities, wheeled bins and collection services, along with an extensive campaign of communications to householders.

2.6 Extended Producer Responsibility for Packaging (pEPR)

This scheme is still in an early stage of development and its planned approach may change. Payments are made by the industry to all local authorities for the waste packaging they collect and recycle. In the initial year the payments will be 100% based on the existing waste collection and the classification of the local authority type. Thereafter payments can be reduced by up to 20% where the local authority collection is considered as not meeting best practice guidelines. The Scheme Administrator may be likely to adopt national standards, such as the Household Waste Recycling Charter Code of Practice to determine what is a best practice collection in Scotland. Payments for 2025/26, subject to final calculations, are estimated to be £1,692,000. However, it should be noted that if significant numbers of producers do not pay then the amount will reduce.

2.7 Biodegradable waste ban for landfill

The ban on landfilling biodegradable municipal waste is scheduled to come into place in 31 December 2025. The ban covers mixed waste and separately collected wastes from households and businesses.

Wastes from non-municipal sources (e.g. agriculture, construction and demolition, water and wastewater treatment etc.) are not banned from landfill disposal. Currently, it appears that OIC is already in compliance with the ban as most of its residual waste is incinerated except for some agricultural and construction waste, transported in containers to Shetland's landfill site. It appears that OIC have a solution through using the SIC facilities.

2.8 Summary of known impacts

Cost impacts on OIC for 2025/26 can be estimated for some of these potential changes, based on 2023 waste tonnages and performance.

- The Scottish Landfill Tax increase will add approximately £28,898 in costs per annum.
- A DRS could result in a £14k p.a. loss of revenue from the sale of materials.
- The EPR for packaging scheme may provide c. £1,692,000 of income in 2025/26.
- The anticipated cost impact if the Shetland incinerator fails to get an ETS exemption would be £353,000 – £442,000 p.a.

Actions to prepare for the forthcoming policy and regulatory change

- Having the aim of being an active contributory part of a future DRS system – high priority.
- Avoid major changes in collections service until the new Code of Practice is confirmed.
- Engage with the Scottish Government to ensure Orkney's unique challenges are understood in the design of policy and regulations – high priority.
- Plan for the potential inclusion of SIC Incinerator in the ETS and an accelerated programme of actions to reduce costs if necessary.
- Review this Waste Strategy in 2030 when more information is known about the impacts of policy and regulatory change.

3.0 Partnership Working

3.1 Overview

With costs and complexities of waste management rising significantly it is increasingly necessary for Councils to work with each other, or a range of local partners and service providers, to find cost effective solutions.

3.2 Other Council Programmes

The Islands Centre for Net Zero (ICNZ) is an Islands Deal project, being led by the European Marine Energy Centre (EMEC), interested in delivering high value circular economy projects that have the potential to support the development of scientific/technological capacity building in Orkney. The ICNZ could be a partner, providing a pathway to support circular economy projects in the future which deliver on net zero ambitions, with access to a range of funding streams.

3.2 Shetland Islands Council (SIC)

OIC already has a strong working relationship with SIC through the use of the Shetland incinerator and landfill and given the benefits to OIC, there are opportunities for this to develop further and explore future investment opportunities together. In the short term the cost of residual waste will increase significantly due to the landfill tax change, and this therefore further encourages greater separation and recycling of waste to reduce costs impacts. As described later, the current system in place between OIC and SIC is complex for landfill tax and waste data flow recording and there would be value in engaging with SIC to develop a more straightforward system.

In the medium to longer term, should the Shetland EfW facility be brought into the ETS, this partnership may be even more important to minimise ETS costs. Shetland currently utilise the Incinerator Bottom Ash (IBA) as landfill cover however, there is the potential for using IBA as recycled aggregates if this landfill cover requirement reduces with lower levels of landfilling.

3.3 The Third Sector

There are a range of active third sector organisation in Orkney that could potentially work with OIC to deliver waste services. These include:

- Restart Orkney with a focus on the reuse of products and materials.
- Men's Shed (Stromness) with a focus on mental health using reuse and repair as a shared activity.
- Greener Orkney with a focus on community food schemes, beach cleans and awareness raising.
- Zero Waste Orkney with a focus on community/home composting, Stromness reuse yard and composting advice/training.
- The Island of Hoy Development Trust (IoHDT) with a focus on home composting, reuse and recycling points.

3.4 Other potential partners

There is initial interest in the possibility of a collaborative operation, where a composting facility is run in partnership with UHI Orkney. This could provide technical skills and manpower, supported by the Council.

The Island of Hoy Development Trust has expressed an interest in bulky waste collections, working in partnership with the Council and an investigation of out-sourcing waste collections in Hoy, Flotta, Westray and Shapinsay may identify further beneficial options.

See also the section on the Outer Isles below.

3.5 Scottish Government

The key aspects of engagement with the Scottish Government are around future funding and the design of legislation and regulations that may impact OIC. OIC may benefit from a closer relationship with the Scottish Government to ensure that Orkney's unique delivery and cost challenges are fully considered in any legislation and policy being developed, such as the Code of Practice for kerbside collections and statutory recycling targets due by 2030. Similarly, a closer relationship with Scottish Government could increase opportunities for funding for innovative projects that may help Orkney meet any future targets.

4.0 Waste Prevention and Reuse

The implementation of policies that deliver against the waste hierarchy, as well as describing more efficient approaches to managing waste, can also deliver outcomes which produce the lowest costs for OIC and maximise the potential for managing resources locally in Orkney. The socio-economic benefits of doing this can be significant, for example reusing furniture, electrical goods, textiles, bric-a-brac, bikes, etc provides an income for those organisations engaged in such economic activities, with the added value that such items and materials often do not become part of any waste stream because of their continued economic value and reuse potential.

Although reuse activities do not generate as large quantities as those associated with recycling and disposal, they do often create significant numbers of jobs, as well as creating opportunities for associated repair, cleaning and remanufacturing activities. The inclusion of people who may be vulnerable or distant from the job market can often be supported by social enterprises working in this area. To support repair there has been a growth in the interest and delivery of repair cafes across the Council, which can allow skills to be transferred, as well as keeping items in use for longer than would otherwise be the case.

In addition to reuse, activities that lead to the generation of less garden and food waste for processing by OIC is a clear way of demonstrating both environmental and commercial benefits. There are different options when it comes to generating less food waste, one of which includes kerbside collection, while others involve communities and householders diverting their food waste through home composters or community composting projects. Opportunities to reduce waste and reuse items and materials are identified under different headings in this strategy.

5.0 Recycling

5.1 Overview

The management of waste, involving its processing and use within Orkney should always be the first consideration when options are being explored. However, because there are no plastics, metal and paper/card recycling and reprocessing infrastructure at the moment in Orkney the options for these waste streams involve exporting them for (i) recycling; (ii) energy from waste; and/or (iii) landfill (separately collected recyclates cannot be landfilled or incinerated). Currently the Council provides monthly collections of specific materials from households via kerbside collections for recycling. This includes plastic bottles, glass and paper plus thin card (no cardboard).

Glass has been recycled in Orkney before, included in the production of concrete blocks, often used for the Churchill Barriers. Glass can also be processed and incorporated with aggregate mixes for use in construction products. Organic wastes such as food and garden waste have the potential to be kept in Orkney, with garden waste currently composted under a waste management exemption and given away free of charge to local farmers and Orkney residents. OIC does not provide separate collection or processing of food waste at the moment.

5.2 Garden and food waste

In 2023, 1,200 tonnes of garden waste was generated and composted, a level which generally only fluctuates annually by +/-20%. Composting was carried out in the open (windrow method), and did not involve compliance against the Publicly Available Standard (PAS) 100, which is required for the process to be considered recycling by government and its regulator (SEPA). This represents circa 20% of total household waste which means that Orkney's recycling rate would increase from circa 20% to 40% if such composting could be considered a true recycling process. This would immediately shift the local authority's performance significantly upwards in the recycling league table that many authorities are compared against in Scotland and the UK.

A Business Case prepared for OIC in 2019 identified that in vessel composting (IVC) was the preferred method for recycling both food and garden waste, where this complied with the PAS100 standard. It was estimated that the quantity of food waste that may be collected from household kerbside collections is around 500 tonnes per year, with another 100 tonnes from commercial waste uplifts. Recycling this quantity of household food waste would increase the recycling rate by 5%, however, to achieve this food waste would need to be collected separately and then mixed with garden waste for processing using the IVC method. OIC has to consider whether the capital investment costs required, which could be £1 to 2 million is the most sustainable way forward, in particular when composted garden waste already has economic value and is being used locally (branded as a soil conditioner).

Actions at the kerbside and waste transfer stations

Food waste capture and recycling by OIC

Action: The capture of food waste requires significant investment in vehicles for kerbside collections and the construction of an IVC, with food mixed with garden waste. This could be at the Bossack waste transfer station or at another site, and in collaboration with a third party e.g. UHI Orkney.

Priority level: Unless required by government, and funding is provided, this is a low priority.

Enhanced garden waste recycling by OIC

Action: Conforming with the PAS100 standard to produce an enhanced compost and achieve recycling status requires the construction of a shed to reduce rainwater ingress and associated slab. This could involve the expansion of the current composting slab at Bossack and the construction of a building to reduce rainwater ingress or could be at another site in collaboration with a third party e.g. UHI Orkney.

Priority level: Unless required by government, and funding is provided, this is a low priority.

In addition to kerbside collections there is the potential to develop further garden and food waste composting, at a household/business premises level as well as through community projects. Household composting can be used for food and garden waste, providing a resource which avoids purchasing compost produced from outwith Orkney, and which therefore has a lower carbon footprint. Community composting projects can also process a combination of garden and food waste, with current regulations indicating how meat, eggs etc (animal by-products) should be managed – staying below a 10 tonne threshold per annum will mean that there are not the complex waste permission activities required (more information, provided by Zero Waste Scotland here).

The Position Paper describes a scenario where additional home and community composting could mean that 150 tonnes of waste is managed locally. If circa 40 tonnes of this was food waste diverted from the residual stream shipped to Shetland a cost saving of circa £7,000 per annum.

Actions supporting householders and community composting

Household food and garden waste composting

Action: OIC to continue negotiating discounted home composting units suitable for efficient processing of both food and garden waste. Communication and awareness raising provision required to support the successful and meaningful delivery of this programme.

Priority level: Medium priority. Although there is an operational cost for OIC in providing support staff time, this may be offset by avoided waste disposal costs.

Community composting projects for food and garden waste

Action: OIC to support the development of community composting projects (may be part of community food growing projects) in terms of policy, awareness raising and communications.

Priority level: Medium priority. Although there is an operational cost for OIC in providing support staff time, this may be offset by avoided waste disposal costs.

5.3 Kerbside collection system for recycling and reuse

There is the potential to significantly increase the tonnage of recyclates being uplifted for recycling through an expanded kerbside collection, and there may be opportunities for social enterprises and private contractors to support recycling and bulky waste collections in the outer isles. The islands of Hoy, Flotta, Westray and Shapinsay have been identified by the Council as the initial priorities for carrying out investigations for sourcing collections through organisations and groups in these islands.

Recycling rates can be increased eight percentage points (1,295 tonnes) by taking forward the actions that deliver enhanced kerbside collection services for paper, cardboard, card and mixed plastic streams. However there also need to be further work to understand the cost-benefits of doing so, in particular when there are cost implications from the reduced prices paid for mixed plastics (compared to single plastic bottle polymers) and cardboard mixed with paper (segregated cardboard generates the highest price per tonne in income).

To incentivise participation in an expanded kerbside collection system recycling bins could be increased from the current 140 litres to 240 litres (some already have these – provided on request), except for glass (140 litres). Residual waste bins would be retained or reduced to 180 litres when a replacement is needed, however, this process could involve an assessment, for example 180 litre bins may be appropriate for smaller properties. This would be delivered using the current frequency of collections, involving monthly recyclates uplifts for each DMR stream with fortnightly residual collections. The alternative is to move to a three weekly (or longer) collection cycle, which would in turn require separate food waste collections. There are also vehicle and infrastructure impacts and costs (described later), but more positively, through the EPR scheme local authorities, including Orkney are to receive significant levels of funding to improve the recycling of packaging waste (i.e. bottles, jars, cans, boxes etc), which means there is finance available to develop improved infrastructure and services which are more cost efficient.

An alternative to the above is to not do any kerbside sorting of recyclates, all placed in one bin, or to collect them as indicated above and then do no sorting in Orkney (e.g. at Chinglebraes). The recyclates would subsequently be hauled to other locations in the UK for processing. In this scenario the marketplace would want materials to be provided loose, rather than baled, which would increase haulage costs. There would be a gate fee charged for accepting such mixed recyclates which would need to be considered against the savings that could be made by avoiding waste transfer station upgrades to create more space, as well as avoiding the purchase of sorting equipment and associated staff costs.

Actions supporting improved kerbside recycling of DMRs

Introduction of expanded dry mixed recycling

Action: Assessing the capacity of the existing RCV /Recycler fleet. Need to understand what existing vehicles could be used, the future needs and costs.

Priority: High

Action: Route reviews to inform capacity of existing fleet. Significant time since this has been done, - the most effective routes need to be considered along with the vehicle capacity assessment.

Priority: High

Action: Consider if the collection of separate DMRs and their sorting in Orkney continues to be the preferred approach e.g. compared to hauling mixed DMRs to contractors in other parts of the UK for separation.

Priority: High

Action: If sorting in Orkney is preferred move to two stream collection with 2x 240l bins for paper/card/cardboard and plastics & cans -proving extra material storage for households. Supported by major communications campaign.

Priority: High

Action: Develop an outer isles strategy for DMR recycling, learning from previous services.

Priority: High

5.4 Bulky waste collections

The Council's current bulky waste service has a standard charge for up to three items, with additional items also collected on the basis of an individual charge, up to a maximum of 15 items. There is no limit on how many times a bulky waste collection can be booked. Bulky waste is, at the time of drafting this strategy, not securing cost recovery and collections are not rationalised in line with recycling and residual collections.

There are a number of social enterprises already involved in the reuse of bulky items, with interest from others (including the Islande of Hoy), which provides an important opportunity in terms of delivering socio-economic benefits. These have the potential to provide jobs and training, as well as deliver on waste prevention and circular economy policies.

Actions supporting improved bulky waste services for reuse & recycling

Action: Evaluate the cost and income for the current collection (for cost recovery) and amend service if/where required.

Priority: High

Action: Carrying out investigations in the outer isles, for sourcing collections through organisations and groups in these islands, maximising potential for reuse and recycling through collaborations.

Priority: High (starting with Hoy, Flotta, Westray and Shapinsay).

5.5 Household Waste Recycling Centres (HWRCs) development potential

Orkney has a number of HWRCs and recycling bring sites, with those in Kirkwall and Stromness serving the most significant population centres which means that these have the most significant potential for cost savings and improved waste prevention, reuse and recycling. There are immediate opportunities to offer segregated wood skips, which have recycling markets in the Scottish mainland, also offering significant savings per tonne compared to incineration in Shetland e.g. the cost of haulage to Shetland is similar to Aberdeen, however, recycling infrastructure at the latter means that target waste wood will be accepted free of charge, compared to a gate fee of £75 per tonne in Shetland. Inert materials such as concrete blocks, bricks, ceramics, sub soils etc can be processed to produce recycled aggregates and soils in line with existing standards and specifications. For this to be sustainable there has to be market and therefore OIC as one of the largest buyers of aggregates and soils would need to buy in to more sustainable practices.

An important way of making waste prevention happen is to capture items and materials for reuse. There are many operational models across the country which demonstrate how reuse infrastructure, usually in partnership with social enterprises, can be set up to make reuse happen at scale, with HWRCs often at the heart of this (Zero Waste Scotland guidance is available here).

The way in which waste is stored and hauled for further processing can be made more efficient, reducing costs and carbon emissions associated with road haulage. For example, currently garden waste from Hatston is being collected in a skip which is then hauled to Bossack for composting. This takes place without any compaction which means that the number of trips could be two or three times more than needed. Although there is some limited compaction happens at Stromness there are also opportunities here.

The manpower used at the two large HRWCs would benefit from re-evaluation in what are busy sites, at risk of being used by commercial waste operators (e.g. in unmarked vans) which is illegal. The cost of managing commercial waste has to be fully recovered by local authorities, and the current use of HWRCs is free of charge when limited to householders only. Each HWRC is operated by one person, and there would be value in establishing both the efficiencies and compliance benefits of increasing this number as well as considering the value of introducing booking systems, to prevent commercial waste being deposited.

Actions to improve HWRC services

Developments for enhanced recycling & cost savings

Action: Consider business case, including manpower, cost-benefits, for managing Hatston and Stromness HWRCs to deliver efficiencies e.g. compacting of waste to reduce the

number of haulage trips. Manpower and compliance in terms of commercial waste to be understood and improvement plans initiated.

Priority: High.

Action: Where a business case permits, develop Hatston HWRC to be Orkney's premier recycling centre - use EPR payments or approach Scottish Government and other island-focused grant programmes for funding.

Priority: High.

Action: Deliver pilot projects to capture waste wood and inert materials separately for recycling, using separate skips where space can be made available.

Priority: High.

Action: Consider the potential for introducing a booking system (for householders and/or commercial users) which can then prevent significant quantities of commercial waste being illegally discarded and reduce costs.

Priority: High.

Development for enhanced reuse

Action: Understand the full potential for developing the sites to improve collections of items for reuse. This should consider the potential for collaboration with Orkney social enterprises.

Priority: High.

5.6 Communications and campaigns

Any investment in infrastructure and improved household services needs to be matched by a commitment to the required investment in communications and awareness. One of the features of high performing councils is clear and regularly updated information on how services should be used via websites, signage, campaigns and sticklers/leaflets. This investment is not a “nice to have” but an essential part of obtaining the performance data required and making a culture change towards a greener economy within the community that pays back in reduced costs in years to come.

A different aspect of a future communications programme concerns the situation where the Council decides that capital investment and monitoring costs are not merited to meet standards that increase official recycling rates when the status quo already has reasonable outcomes. In this case there may be value in discussions with the Scottish Government to understand if there can be circumstances where the actions of rural, remote communities (such as Orkney) can be considered comparable to recycling on the mainland where, for example, investing in composting infrastructure to meet a recycling standard (PAS 100) is more straightforward to secure. Regardless of whether this engagement with government takes place or not, if the Council decides that the status quo is the more sustainable position, there may be value in communication activities with stakeholders and the community to demonstrate that the Council is working to achieve the best outcomes for Council taxpayers.

Action to improve communications and campaigns

Action: Major communications plan to be developed and implemented to support new kerbside collections scheme, as well as other new initiatives described in this strategy e.g. the development of HWRCs to allow new materials to be accepted for recycling; providing links to community and household composting resources.

Priority level: High.

5.7 Data management

Data is important for OIC to manage its waste and that of commercial customers efficiently, to ensure that processes are compliant with legislation as well as achieving full cost recovery, for example with respect to commercial waste management (which should not be subsidised by household waste collections). Considering how data is managed and used may also provide insights on future waste management options and changes e.g. to describe the impacts of changing practice, for example on specific actions related to construction/building waste, soils and wood, where separate datasets are not currently being recorded.

Consistent data tracking processes can also ensure the full scope of waste management activities, including partnerships with other organisations is understood, for example with respect to the recycling and reuse of items collected through council infrastructure such as HWRCs.

Developments in digital waste tracking (coming into force in April 2026) may provide assistance in making changes in the future, which could be particularly important with the respect to EPR administration, where reviews of data will feed into the scheme and payments received going forward.

The methodology for the export of waste to Shetland, for incineration and landfill, is complex in terms of the data produced on what goes to landfill, or incinerated, with the financial impacts associated with this difficult to understand. The approach requires simplification, to allow OIC to track landfill tax and gate fee costs. This is discussed more in the landfill section.

Actions for improved data management

Action: The current data reporting templates and methodology to be reviewed to allow quarterly and annual waste reporting on recycling and waste disposal to be clearer. This includes the methodology for distinguishing commercial from household waste generated. Opportunities associated with digital waste tracking to be included in this assessment.

Priority: High

Action: The reporting of reused items and materials collected through OIC infrastructure to be captured consistently in data outputs.

Priority level: High

6.0 Waste Disposal and Treatment

6.1 Overview

As indicated in the introduction, OIC manages c14,000 tonnes of waste annually, and it is estimated that around 70% of this is household waste. Both household and commercial waste is managed in the same way, in terms of the disposal routes, which for Orkney include both energy from waste (EfW) and landfill disposal in Shetland.

6.2 Energy from Waste (EfW)

Currently OIC has a very valuable arrangement with SIC, using the SIC incinerator for its household and commercial waste. While the gate fee is cost effective there is the added cost of transport to Shetland and bringing containers back, which makes this type of treatment expensive. Aside from the efforts to reduce residual waste which are noted above, there are some other options and risks to consider.

In the medium to longer term, should the Shetland EfW facility be brought into the ETS, it is anticipated that EfW operators will take a more aggressive pricing approach to different waste types given their impact on their CO_2e emissions allowances in the ETS.

This is likely to encourage greater take up of biogenic wastes by operators and reduced incentives for materials derived from fossil fuel/hydrocarbons. It may also discourage greater use of Solid Recovered Fuel (SRF) production technologies, as these further concentrate the plastic-based waste over biogenic sources.

The pre-sorting of waste to extract more recyclates prior to incineration is currently not attractive or incentivised, however it may be if Shetland's incinerator is within the ETS in the future. This pre-sort could increase recycling rates and non-EfW recovery rates for both OIC and SIC as well as reduce ETS allowance fees.

There are some mitigations that may reduce the overall impact. The efficiency of the plant as a district heating source and potential use of carbon capture technology may reduce the ETS allowances required to operate the facility. However, all of this is essentially speculative at this stage and will depend on the scheme parameters set in the future and SIC's future investment choices that OIC may wish to contribute to.

Alternative options to reduce OIC's overall incineration and associated transportation costs include processing the residual waste in some way at Chinglebraes that reduces its tonnage for transport to Shetland. Western Isles Council is leasing a technology that may do this. A proprietary technology is being leased to shred, bio stimulate and dry residual waste. There is an opportunity to use this as a case study which OIC can learn from before deciding if this is an appropriate way forward for Orkney to reduce the tonnage of waste going to Shetland. Discussions with SIC will also need to establish their view on taking and paying for a lower tonnage of material which may subsequently return to an increased weight if it stored in the open. Alternatively, the viability and cost-benefits of purchasing a baler and wrapper could be considered, to protect bales from rainfall. This could cost several hundred thousand pounds.

The system is leased from the technology provider rather than being a capital purchase. However, to incorporate this within existing operations will require a redesign of the Chinglebraes site, adjacent/external to the residual waste baling area. If the technology reduced the weight of residual waste by 25%, annual savings of over £200k could be made, however a proper costing to assess viability would be required.

6.3 Landfill

The data section in this report refers to the situation in Shetland where residual waste sent from Orkney for incineration is often stored at the active landfill site at Gremista, to allow the Council there to manage the flow of feedstock so that it matches the demand for heat e.g. more heat is needed in winter. A complication that arises from this approach is that landfill tax is incurred as a result of this storage, which is immediately charged to OIC. This is then provided as a rebate after bales of residual waste are then used in the incinerator. The result is that it is difficult to understand in the data and cost reconciliations which year costs are being attributed to, as well as making it more complex than may necessarily be the case to verify tonnages with the costs incurred.

Around 1,000 tonnes of the waste Orkney generates, from both household and commercial waste, is landfilled, both in Shetland and Orkney, the latter being inert waste landfilled at Bossack. In addition, around another thousand tonnes is typically generated as Incinerator Bottom Ash (IBA) from the EfW facility in Shetland, sent to landfill as a capping layer to cover the waste deposited there.

There are opportunities to reduce the quantity being landfilled, and to increase the recycling rate, with the inert waste landfilled in Orkney being one that the Council is able to manage itself. This inert waste is a combination of concrete blocks, bricks, subsoils etc and it is now commonplace in Scotland for such waste to be screened and crushed where required to make recycled aggregates and soils for construction projects. The potential for this material requires a demand for their use, which in turn would be facilitated by awareness raising in OIC departments where such materials are procured (e.g. Roads). The Bossack site may be a location where a separate area could be identified and used for the storage and potentially, for the processing of inert waste. However, since the quarry at Cursiter is where aggregates are produced and where many businesses visit to collect materials from, this may be the more practical and efficient location. Recycled concrete aggregates are a product sold from time to time at the quarry, from material dropped off at the site, usually by private contractors. The tonnage of inert materials being generated can only be estimated, informed by the level of recovery at other Scottish local authorities. The Position Paper indicates that this could potentially be just over 200 tonnes of waste such as bricks, blocks etc, with circa 1,000 tonnes of soils.

The IBA generated in Shetland (used as an inert landfill cover material, charged at the lower rate of tax) could be reprocessed and also used as an inert aggregate material, however, once sent to Shetland it is, in effect, SIC's waste unless contractual agreements are set up between both councils to do things differently. There is limited activity or incentive in Shetland in terms of adding value to this waste stream at the moment, which means that this opportunity to increase OIC's recycling rate will be limited unless both council's decided to take forward action in this area.

Other wastes, from commercial sources such as contaminated bale wrap (farming sector), NHS waste, plasterboard etc are also landfilled in Shetland. Activities are already ongoing

in terms of recycling clean bale wrap and the NHS facility is currently evaluating opportunities to recycle significant quantities of its plastic wastes.

Actions to improve practices related to landfilling

Action: Discussions with SIC around management and acceptance of waste– the aim being to ensure the attribution of tonnage and associated costs is more transparent.

Priority level: High

Action: Understand the potential tonnage of inert waste that could be recovered for recycling by piloting the introduction of skips at HWRCs and assessing the viability of future reprocessing activities. The latter would require discussions with OIC departments to understand if demand for such materials could be generated.

Priority level: High.

Action: Engage with commercial operators managing waste to understand how collaboration may result in more effective and lower cost waste management for all parties.

Priority level: Medium

7.0 Waste Transfer Buildings and Sites

7.1 Overview

OIC has a number of sites delivering waste and resource management services to meet the needs of local communities in as cost effective a way as possible. This involves members of staff working in the collection, sorting and management (e.g. reuse, recycling and disposal) of waste, doing so across a number of sites used to consolidate, bulk and process the wastes collected. The following sections describe the sites and the potential for these to deliver the vision and objectives of this strategy.

7.2 Chinglebraes

Chinglebraes waste transfer station is an existing operation that is key to OIC's management of waste streams collected from the kerbside, for both households and commercial operators. It is also a location where waste can be dropped off by commercial operators. It is currently the location where DMRs and residual waste is processed, for onwards dispatch to recycling markets or Shetland for incineration and landfill. The expanded DMR collections described in this strategy do not result in any additional throughput of waste at Chinglebraes but do shift the balance by making less residual waste available and more recyclates. Opportunities to increase the building footprint externally and modify the layout internally can facilitate the move to increased levels of recycling. Conveyors and an eddy current separator would be required as a result of the expanded DMR kerbside collection system identified above. However, if it was decided that no sorting of DMRs was to take place in Orkney (e.g. to be done in other parts of the UK) this would significantly reduce the area required.

The residual waste drying system referred to previously requires significant consideration and evaluation. If these considerations indicate that it could be a viable option, then future work on the development opportunities for Chinglebraes should consider this.

Optimising the Chinglebraes site

Action: The use of the Chinglebraes site will require evaluation of how an expanded DMR collection should be stored and processed, this determined by the level of sorting required, if any. The preferred options for processing DMRs should be considered along with the storage areas for materials, in and out of the facility. This will require design work to be undertaken, with drawings and costs produced for the layout options. This may also need to consider the potential for changes to external areas to accommodate drying equipment.

Priority level: High

7.3 Hatston

The former abattoir building and site within the Hatston industrial estate is owned by OIC and currently used by the collections team for vehicle parking, bin storage (for issue to householders/commercial customers) and as office and welfare space. The building has a significant internal footprint (2,621m^2), larger than that available at Chinglebraes, however, it is separated into many individual spaces and further work would be required to understand the potential from an operational perspective. The site surrounding the

building, which runs adjacent to the HWRC, provides space that could be used for a number of different opportunities, e.g. windrow composting instead of at Bossack. However, this would require starting from scratch and incur costs such as groundworks, construction of a concrete slab and the purchase of a weighbridge, supported by additional operational staff, all of which are in place at Bossack.

If the work described previously to understand the potential of Chinglebraes indicates limited opportunities for expansion, then understanding the options for Hatston should be the next step in terms of future waste sorting. The existing building space is currently only partly utilised, with the main hall (nearest the HWRC) still configured as an abattoir. Much of the other areas are used for bin storage, with others used by different Council departments for the storage of a range of items. Considering there are other sheds at other locations at the site, in different conditions, the overall potential of the existing Hatston infrastructure for OIC could merit being assessed. A key opportunity which can be considered independently involves areas of the site being evaluated for future expansion of the adjoining HWRC (to incorporate skips for additional segregated materials, as well as reuse infrastructure) as described previously above.

Optimising the Hatston site

Action: The potential of the Hatston site is linked to the potential at Chinglebraes and the needs of different departments at OIC. An assessment should be carried out after the Chinglebraes review is completed and the potential there is understood in detail. Expansion of the HWRC to facilitate greater material separation and reuse opportunities should be a key focus.

Priority level: Medium

7.4 Bossack and other potential sites

Bossack is currently used as a waste transfer station, an HWRC, inert landfill and garden waste composting site. With a recently upgraded weighbridge it is also the key site in terms of where a range of commercial businesses can bring their waste for recycling and disposal. It requires two members of staff to be working at any time. This offers an operational advantage in terms of providing garden waste composting processes, with the existing staff able to provide the required support. Most of the garden waste comes from householders however a significant percentage is also from commercial sources. A significant opportunity for the Council, with respect to Bossack is to enlarge the existing slab used for composting operations, and to construct a basic, Dutch Barn style shed as outlined earlier, to meet PAS100 quality requirements and increase recycling rates. An alternative approach may be to use existing agricultural infrastructure available elsewhere in Orkney, for example the UHI Orkney farm (Weyland, Kirkwall), if there is an opportunity for collaborative working. However, all of this is dependent on the Council determining whether additional investment with the objective of increasing recycling rates is a desired approach, since the output material already has a local market.

Understanding what the optimal garden waste composting site is

Action: Understanding and agreement of the need, or otherwise, to produce a PAS100 compost. If this is established, or to assist in reaching this conclusion, an assessment of the costs and the potential for collaborating with UHI Orkney needs to be understood.

Priority level: Medium

8.0 Outer Isles Service Provision

Due to the cost, logistics, road network and isolation of the outer islands it is not possible to provide the same waste services as on the mainland of Orkney. Budget and logistic challenges therefore require more innovative thinking, more partnership working and perhaps different funding sources.

Outer island recycling point sites and collection services are challenging to maintain and currently the kerbside collection prioritises black bag/residual waste with several past attempts to change this service proving difficult. As they are unmanned, recycling points can be misused and end up as a dumping ground for wastes.

However, Community organisations on outer islands could help run facilities. For example, on Berneray, in the Western Isles, a bring centre at the harbour opens for two hours, on Saturday mornings, between 10:00 and 12:00 run by local volunteers from the community council.

The Community Planning team have been working to develop an understanding of the projects taking place in Orkney at the moment. with capacity building, the potential to create paid work being important ways of developing sustainable projects/initiatives in the future. The outer isles are an important part of this, with the examples of Westray and Sanday highlighted, which have shops selling second hand items.

Alternative funding options may be available for such services. For example, the ICNZ has an accelerator element to their fund which may support a sustainable waste programme in Orkney as part of wider climate action.

A review of the services that could be offered is included in the actions above.

Island Communities Impact Assessment

Waste and Resource Strategy

Preliminary Considerations	Response
Please provide a brief description or summary of the policy, strategy or service under review for the purposes of this assessment.	Waste and Resource Strategy – identification of options and opportunities to improve the recycling rate, improve the resilience of the service and look to identify efficiencies and revenue savings.
Step 1 – Develop a clear understanding of your objectives	Response
What are the objectives of the policy, strategy or service?	To prevent waste from occurring, to increase recycling levels and provide a service that is more efficient.
Do you need to consult?	No
How are islands identified for the purpose of the policy, strategy or service?	Mainland Orkney and the linked Isles, the South Isles and the North Isles
What are the intended impacts/outcomes and how do these potentially differ in the islands?	Increase in the recycling rate, reduction in waste generated. There is not expected to be any difference in the islands.
Is the policy, strategy or service new?	Yes
Step 2 – Gather your data and identify your stakeholders	Response
What data is available about the current situation in the islands?	Information regarding waste arisings
Do you need to consult?	No
How does any existing data differ between islands?	Volumes of material collected depends on the service offered. There are differences within Mainland Orkney and in islands.
Are there any existing design features or mitigations in place?	N/A Services provided reflect regulatory requirements.
Step 3 – Consultation	Response
Who do you need to consult with?	N/A

How will you carry out your consultation and in what timescales?	N/A
What questions will you ask when considering how to address island realities?	N/A
What information has already been gathered through consultations and what concerns have been raised previously by island communities?	N/A
Is your consultation robust and meaningful and sufficient to comply with the Section 7 duty?	N/A
Step 4 – Assessment	Response
Does your assessment identify any unique impacts on island communities?	Not to date
Does your assessment identify any potential barriers or wider impacts?	Not to date
How will you address these?	N/A

You must now determine whether in your opinion your policy, strategy or service is likely to have an effect on an island community, which is significantly different from its effect on other communities (including other island communities).

If your answer is **No** to the above question, a full ICIA will NOT be required and **you can process to Step 6**.
If the answer is **Yes**, an ICIA must be prepared and y**ou should proceed to Step 5**.

To form your opinion, the following questions should be considered:

- Does the evidence show different circumstances or different expectations or needs, or different experiences or outcomes (such as different levels of satisfaction, or different rates of participation)?
- Are these different effects likely?
- Are these effects significantly different?

• Could the effect amount to a disadvantage for an island community compared to the Scottish mainland or between island groups?	
Step 5 – Preparing your ICIA	Response
In Step 5, you should describe the likely significantly different effect of the policy, strategy or service:	N/A
Assess the extent to which you consider that the policy, strategy or service can be developed or delivered in such a manner as to improve or mitigate, for island communities, the outcomes resulting from it.	N/A
Consider alternative delivery mechanisms and whether further consultation is required.	N/A
Describe how these alternative delivery mechanisms will improve or mitigate outcomes for island communities.	N/A
Identify resources required to improve or mitigate outcomes for island communities.	N/A
Stage 6 – Making adjustments to your work	Response
Should delivery mechanisms/mitigations vary in different communities?	Services will reflect the particular geographies and communities across all of Orkney.
Do you need to consult with island communities in respect of mechanisms or mitigations?	No
Have island circumstances been factored into the evaluation process?	Yes
Have any island-specific indicators/targets been identified that require monitoring?	No
How will outcomes be measured on the islands?	Outcomes cannot be measured at island level but apply to the whole of Orkney

How has the policy, strategy or service affected island communities?	There should be no difference
How will lessons learned in this ICIA inform future policy making and service delivery?	N/A
Step 7 – Publishing your ICIA	Response
Have you presented your ICIA in an Easy Read format?	Yes
Does it need to be presented in Gaelic or any other language?	No
Where will you publish your ICIA and will relevant stakeholders be able to easily access it?	OIC Website
Who will signoff your final ICIA and why?	Corporate Director Neighbourhood Services and Infrastructure, in line with Scheme of Delegation

ICIA completed by:	Lorna Richardson
Position:	Head of Neighbourhood Services
Signature:	
Date complete:	13/5/25

ICIA approved by:	Hayley Green
Position:	Corporate Director Neighbourhood Services and Infrastructure

Signature:	
Date complete:	13/05/2025