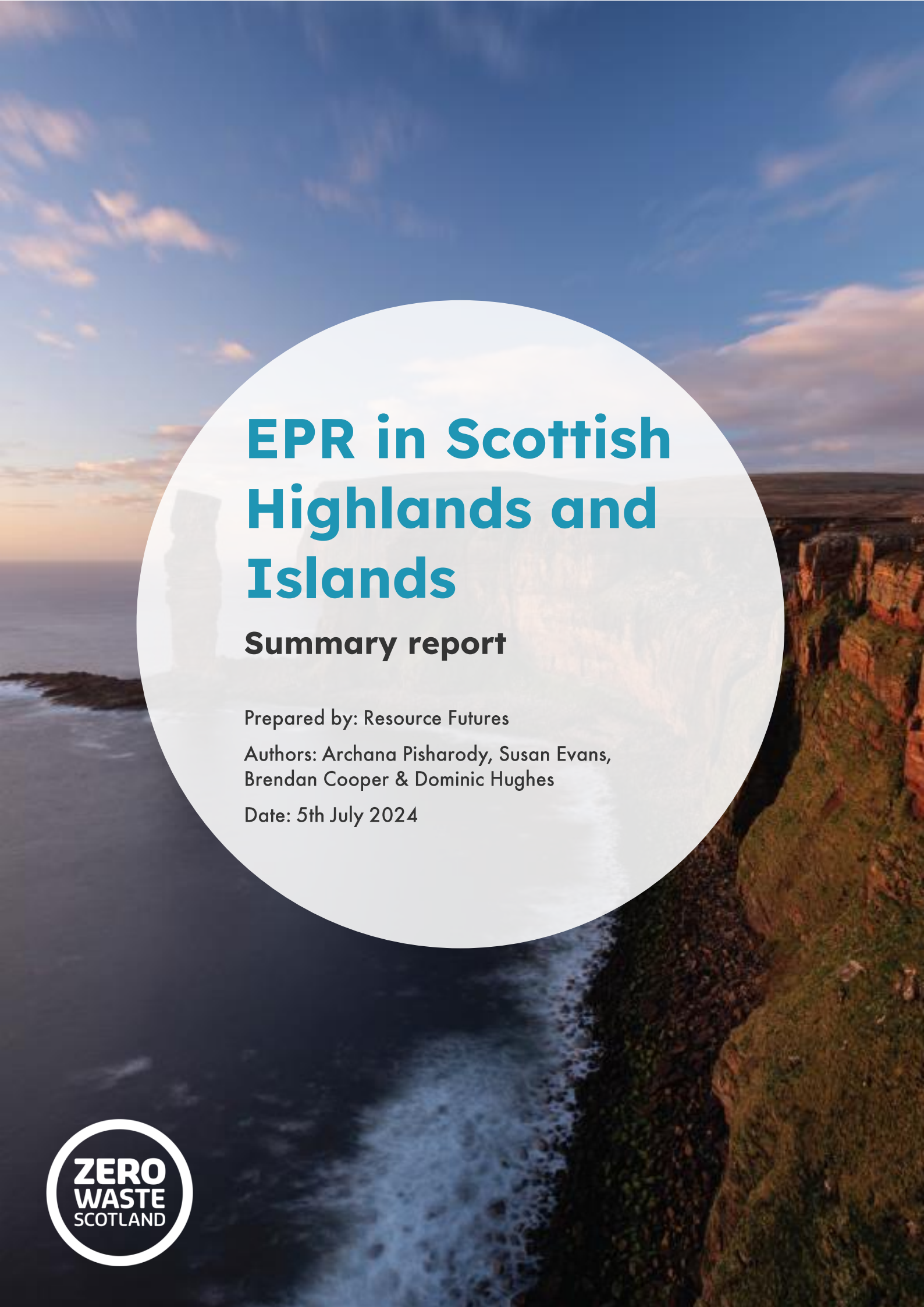

EPR in Scottish Highlands and Islands

Summary report

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Date: 5th July 2024

ZERO WASTE SCOTLAND

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1 Introduction

This report presents the key findings from a qualitative study aimed to understand the implications of implementing the three extended producer responsibility (EPR) schemes (packaging, batteries and waste electrical and electronic equipment or WEEE) in the Scottish Highlands and Islands. The five Highlands and Islands local authorities (LAs) or the 'focus areas' of this study – Orkney Council, Shetland Council, Comhairle nan Eilean Siar (Western Isles Council), Argyll and Bute Council and the Highland Council – cover predominantly remote and very rural areas, in terms of their population density and accessibility.[1,2] This presents them with unique challenges and considerations in delivering an efficient waste service, which may be distinct to other rural and remote LAs in the UK.

The key objectives of the research include:

- A high-level assessment of the current waste management landscape in the focus areas, to understand the key considerations and challenges associated with LA-provided waste services.
- Identifying which challenges are perceived as unique or greater compared to other UK LAs and why, as well as the commonalities and differences between the LAs in the focus areas.
- Identifying the impacts from EPR implementation to understand key risks and opportunities to mitigate them, in order to develop a circular economy in the region.
- Identifying cumulative impacts of other waste policies on focus area waste management services and how they may affect EPR implementation.

Producer fees paid under the EPR schemes will be used to reimburse local authorities (LAs) to cover their costs for providing waste management services. These costs may vary based on the unique circumstances of the different LAs. This study identifies and reviews these unique challenges and resultant impacts as well as risks of EPR and other upcoming policy changes for the focus LAs. Based on these findings and stakeholder input, it explores the opportunities to deliver a just transition for LAs and the communities they serve, both in terms of the outcome and the process of implementing the schemes.[3]

A summary methodology and high-level findings of the research conducted between December 2023 and March 2024 are presented in following sections.

[1] Scottish Government (2022) Scottish Government Urban Rural Classification 2020
[2] Accessibility is based on drive time to a settlement of 10,000 people or more.
[3] Scottish Government (n.d.) Just Transition Commission; Just transition is a process through which change is implemented 'in partnership with' and achieves 'a fairer, greener future' for the stakeholders it impacts

2 Methodology

The qualitative research conducted in this study involved focus area stakeholder engagement, undertaken remotely, to understand their lived experience of waste services and their views on implications of future policy changes. Any knowledge gaps and areas for further research identified have been highlighted. It is, therefore, recommended that additional quantitative research (to understand waste quantities and costs, for example) and qualitative assessments (such as through field visits and additional engagement) be undertaken to develop the findings from this research further.

Key steps conducted as part of the methodology used in this study are summarised in Figure 1.

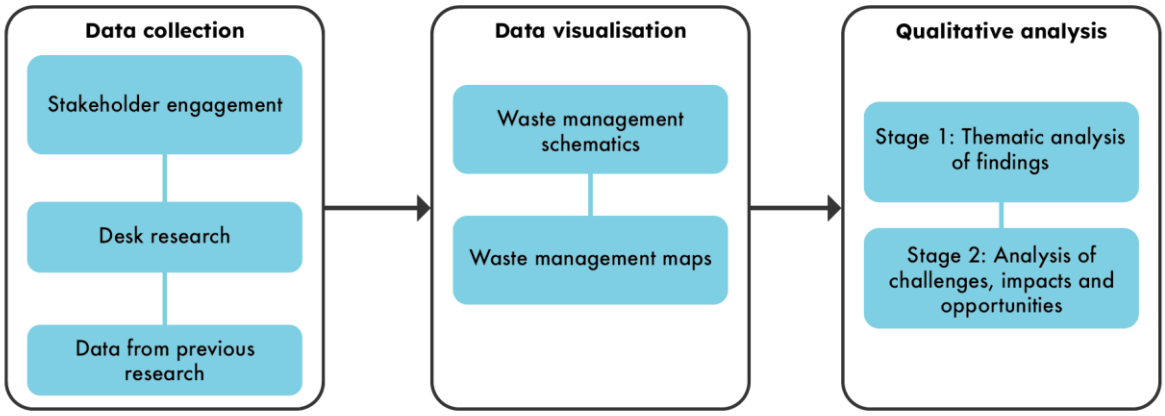

Figure 1: Overview of the methodology

A participatory approach was used, where key stakeholder groups – the focus LAs, private waste management companies, ferry operators, community and business groups – were engaged through a series of interviews and a workshop. This helped to ensure that as the stakeholders who are likely to be directly impacted by the EPR schemes, these 'research collaborators' could help define the local issues and challenges accurately, informing the policy development process and identifying opportunities tailored to their specific needs.

Desk research of publicly available sources and in-house expert experience of UK waste management systems were used to verify the feedback received through interviews and workshop and supplement information gaps, where possible.

The insights from interviews and the workshop were systematically analysed to draw out the following types of findings:

- Key features of the waste management system in each focus area with the help of visualisations as maps and schematics. This included the identification of types of collection systems, materials captured, local infrastructure and transportation options and end destinations of waste.
- Comparative analysis of waste management challenges and considerations to understand variations between the focus areas and other rural and remote LAs in the UK.
- Anticipated impacts from EPR and interactions with other policies likely to be implemented in the next 5-7 years.

- Key risks associated with EPR implementation and opportunities available to the LAs and other stakeholders, such as community groups and businesses, to mitigate risks and maximise the potential for EPR and other policies to develop a circular economy in the region.

Due to a limited research timeline and associated project constraints, the following recommendations are made to address research limitations in future studies:

- Need for additional detail on policy measures to be considered when they become available to ensure any new impacts or greater nuance around impacts already identified may be captured.
- Repeating some of the comparative analysis against specific comparator LAs identified by considering LA parameters used in this study such as (and not limited to) rurality, remoteness, population density or road density.
- Quantitative research to understand quantities of EPR material currently handled and likely changes to these from EPR and other policies.
- Research to identify how the identified or new impacts may affect LA costs associated with waste management.

3 Key features of waste services in the focus areas

EPR materials are captured through three types of collection systems – kerbside collections, bring banks and household waste recycling centres (HWRCs). WEEE and batteries are collected via a network of bring banks and/or HWRCs in some of the LAs. The coverage of packaging materials varies.

Table 1 shows the spread of kerbside collections for these items in each focus area.

Table 1: EPR material separately collected at kerbside by focus area.

	Plastic bottles	Plastic PTTs[4]	Plastic flexibles	Cartons	Metal tins/cans	Paper & card	Glass
Shetland	Y			Y	Y	Y	
Orkney	Y				Y	Y	Y
Western Isles	Y	Y	Y	N/A	Y	Y	S
Argyll & Bute	Y	Y		Y	Y	Y	S
Highland	Y	Y		Y	Y	Y	

Y Covered in all kerbside collections

S Covered by some but not all kerbside collections

N/A Information not found

Four of the focus areas include groups of islands, while the Highland Council covers a vast geographical area. This results in variations in the types and coverage of the different collection schemes–with some limitations on kerbside collections on certain islands, for instance–and the ability of the LAs to access suitable waste transfer, sorting and treatment/processing infrastructure. More detail on the challenges faced by the focus areas is provided in Section 4.

Waste flows and infrastructure locations were presented using visualisations to highlight the key features of the waste service provided by each focus LA. These include schematics of the waste services and ArcGIS based maps of the focus areas.

Schematics were designed to highlight the range of EPR materials collected via the LA's existing services and the level of separation at source for the same. Information regarding types of infrastructure and any processing activity conducted by the LA (e.g., sorting of mixed streams) and types of transportation used for moving waste around (e.g., ferries or overland transportation) were also represented.

The schematics and ArcGIS-based maps supporting this review are available in Appendix A: Schematics and Maps, with an example of each provided below.

[4] Pots, tubs and trays

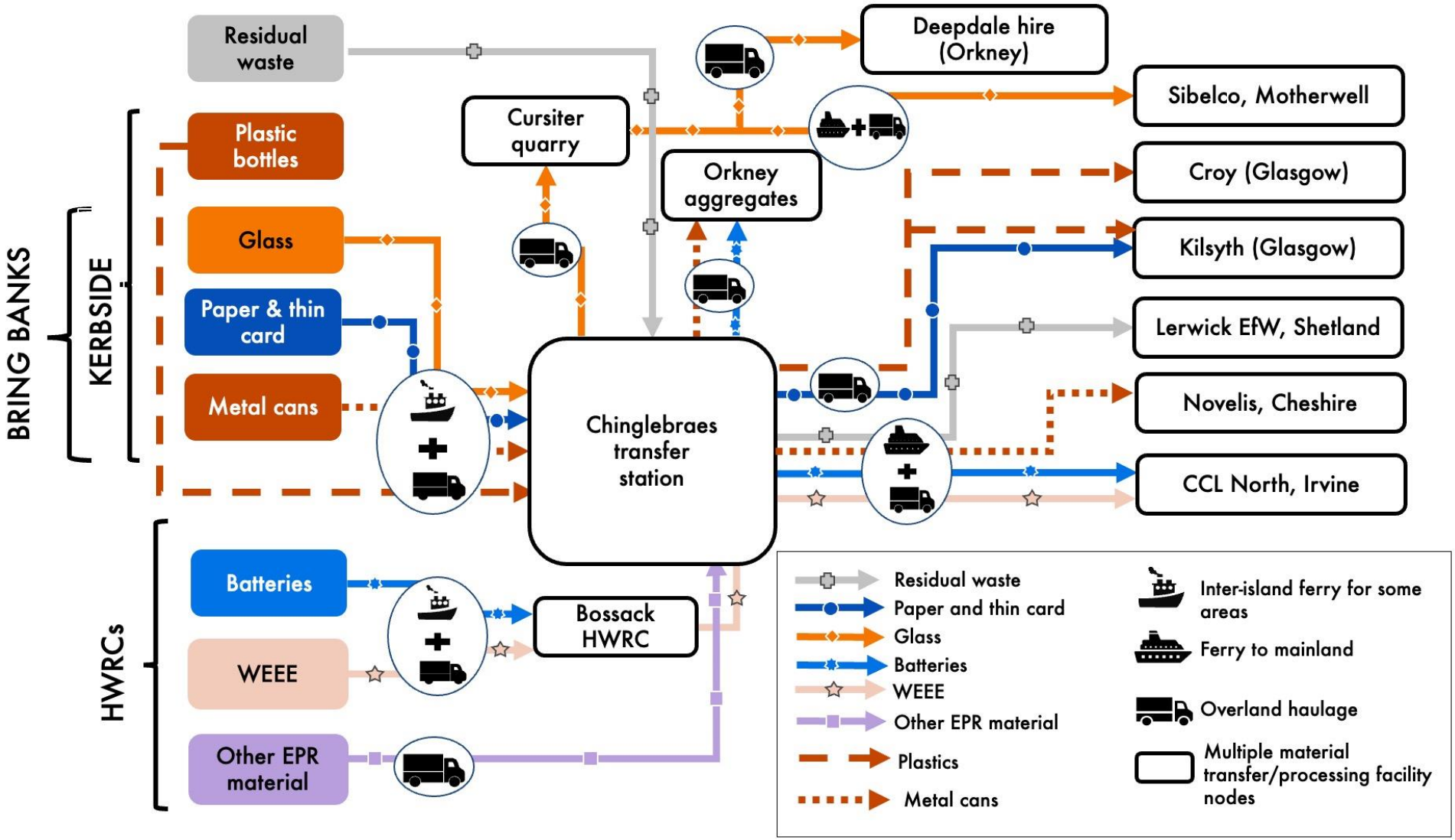

Figure 2. Orkney waste flow schematic for EPR material

Figure 2 shows the waste collection systems and flows for EPR materials in Orkney. The availability of kerbside services is limited to mainland Orkney and Shapinsay, where packaging material are collected segregated at source. In other areas (including the outer isles), these items are captured by bring banks and HWRCs. The remaining EPR material captured are either collected via bring banks or HWRCs depending on specific material types. All waste material is routed through the single transfer station on mainland Orkney, before being shipped to various treatment and processing locations in mainland Scotland.

Information presented in schematics are geographically represented in maps created using the ArcGIS software, highlighting waste infrastructure locations in the focus LAs and in mainland Scotland, and the distances that waste had to be transported between collection and treatment.

Figure 3 and Figure 4 respectively show the locations of key waste infrastructure in Orkney and the end destination of different waste streams sent from Orkney to mainland Scotland or beyond.

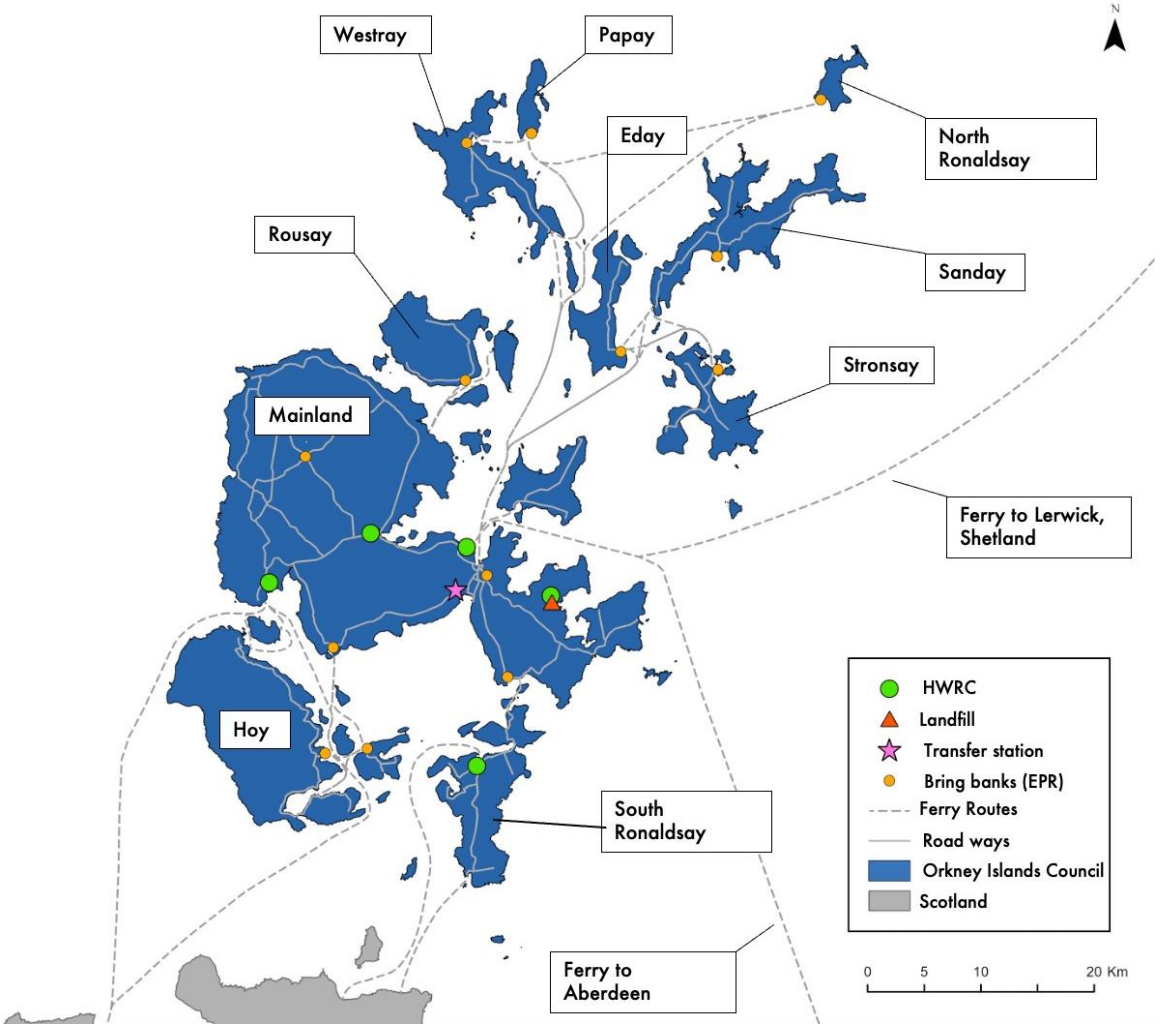

Figure 3: Orkney waste infrastructure

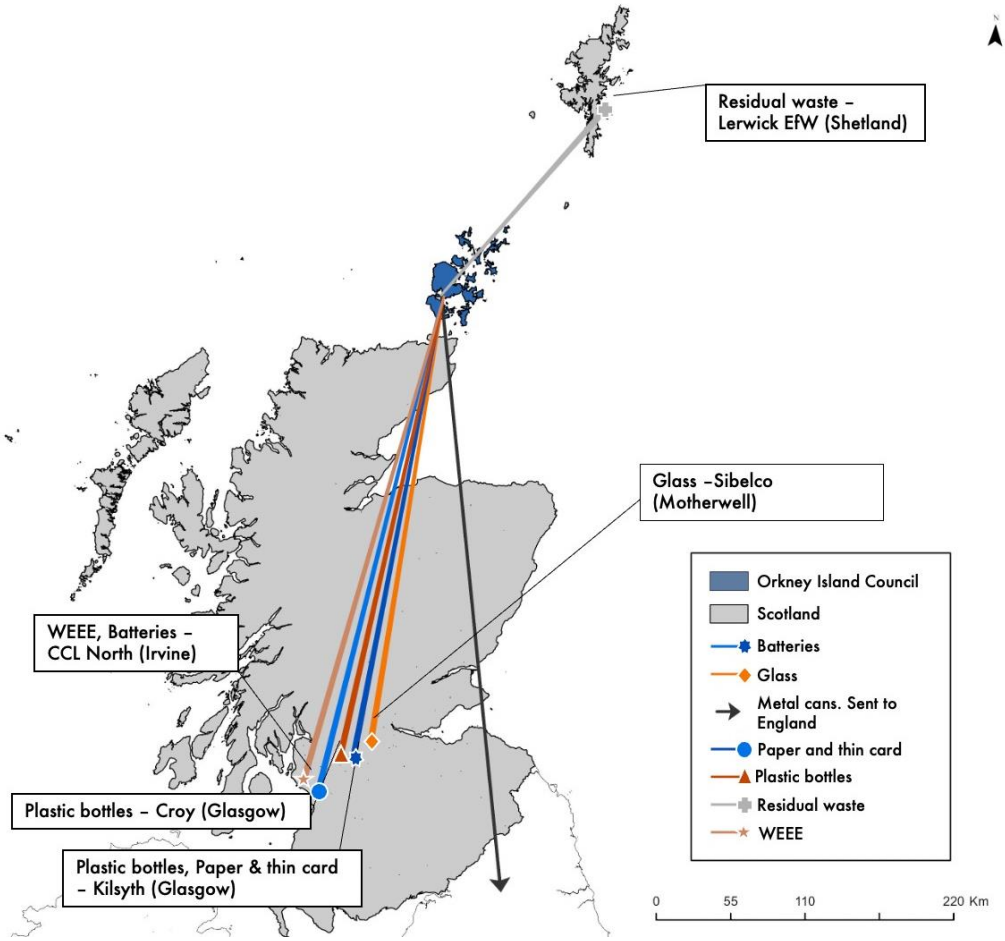

Figure 4: Orkney waste end destinations

The LA-provided waste service extends to the geographically distributed islands via a network of bring banks (Figure 3), from where waste collected is transported via the ferry routes to the transfer station on mainland Orkney. Household waste recycling centre (HWRC) services are also limited to the main island. Figure 4 shows that most waste streams have to be transported to the Central Belt of Scotland or beyond for first treatment or processing.

Similar schematics and maps produced for the remaining focus areas highlight the key considerations and challenges they face in ensuring adequate and consistent service levels across the areas they administer.

Key features of waste management in the focus areas are summarised below.

Collection schemes:

- Shetland and Orkney offer kerbside collection systems with the greatest level of source segregation, while the remaining three LAs provide comingled collections with some variations. The Western Isles has two distinct collection schemes, one for Lewis and Harris and the other for Uist and Barra. The Highland Council will move to a twin stream service in 2024-2025.
- WEEE and batteries are commonly collected via HWRCs.
- Collection coverage for island LAs varies across the different islands, with bring banks or LA-provided skips used in areas without kerbside collections.

Waste infrastructure and transportation:

- Local storage and transfer infrastructure in all focus areas is ageing and/or limited, with little scope to process additional separated waste streams, though Highland Council recently received funding for some new transfer stations.
- Shetland is the only LA to have local infrastructure for sorting mixed recyclables (a small materials recovery facility or mini-MRF) as well as an energy from waste (EfW) incineration plant.
- The island LAs rely on ferry-based waste transportation between their constituent islands to the main transfer and bulking locations within the LA. Waste transportation in the Highland Council meanwhile faces significant overland distances between collection and transfer locations.

End destinations:

- Most of the EPR waste material from the focus areas is sent to treatment and processing facilities in Scotland's Central Belt. The Highland Council sends most of its recyclable waste outside Scotland.
- Orkney sends residual waste to Shetland's EfW.

4 Unique challenges faced by the focus areas

To compare the situation in the focus areas with that in other relatively remote and rural LA areas elsewhere in the UK, factors that can impact waste service provision and infrastructure access were assessed, such as area, population density, road density, transport links and weather. It was not possible within the scope of this project to do detailed mapping to compare these factors with specific other remote and rural LAs. Recommendations to further develop these findings have been made in section 7.

Key features that made the focus LAs standout were as follows:

- **Large areas, with low road and population density**: The focus areas cover some of the largest land areas in the UK with the lowest road and population densities. Highland is exceptionally large.
  Long distances to waste destinations: Waste from the focus LAs travels extremely long distances from collection to initial waste processing destinations, which are mainly located in the Central Belt of Scotland or beyond.
- **Limited infrastructure sharing with adjacent LAs**: The island LAs and remoter parts of Highland do not have the option of sharing infrastructure with adjacent LAs, which is often an option in other relatively remote and rural parts of the UK.
  Reliance on ferries: Unlike the most remote and rural English and Welsh LAs, all of the island LAs, Argyll and Bute, and parts of the Highland LA area rely on ferries for waste transportation, whether to move waste within the LA or to transport it across LA boundaries.
- **Susceptibility to weather disruption**: Four of the focus areas (Shetland, Orkney, Western Isles, and Highland) are in the northernmost extremes of the UK; Highland and Argyll and Bute are among the most mountainous LAs;[5] and four of them (Shetland, Orkney, Western Isles, and Argyll and Bute) have the highest average wind speeds in the UK.[6] The susceptibility of services in these LAs to weather disruption is also influenced by the reliance on long-distance transport of waste via ferries and smaller roads.

In combination, the above features impact on waste management costs, revenue, reliability and other aspects. The key differences in these impacts, comparing the focus areas and other relatively remote and rural areas, are outlined in Table 2.

[5] Some other LAs in Scotland, such as Perth and Kinross and Stirling, have multiple mountains of a similar size to Highland and Argyll and Bute, so this comparison is mainly in respect to rural and remote LAs outside of Scotland.
[6] Met Office (n.d.) Where are the windiest parts of the UK?

Table 2: Comparison between focus areas and other relatively remote and rural areas

	Focus areas	Other remote and rural areas
Collection costs	**Higher collection costs relative to geographical area and population served,** with smaller quantities of waste collected across large collection distances.	Costs (relative to population) of serving remote/rural areas are expected to be lower than in the focus areas due to greater population density and road density.
Transportation costs	**Reliance on ferries and large overland haulage distances** to the nearest treatment or processing facilities located in the central belt of Scotland or beyond, add significant costs to the service, especially for island LAs for whom costs can typically be over £1000 per tonne of waste.	Transportation is overland, with no dependence on ferries, and distances are lower as there is greater choice of local and regional infrastructure.
Revenue from recycling	High (collection and transportation) costs lead to **no revenue or negative revenue, even for source segregated collections of high-quality items** (e.g. plastic bottles).	Source segregated collections of recyclables typically result in revenue for the higher quality materials. Note: it was not possible to verify whether the most rural/remote LAs elsewhere experience revenue or losses for these materials. This could be explored in future work.
Weather impact	**Winter weather disruptions** (Highland Council) **and severity of winds, especially in northern islands** (Western Isles, Shetland and Orkney) can cause significant service disruptions to both collections and transportation.[6]	Areas which are further south in the UK, less mountainous, and not reliant on ferries are less susceptible to disruption from severe winter weather and high winds. However, the statistical impact of increasing occurrence of extreme weather events on waste service provision merits further investigation in all LAs.
Seasonality impacts	Disruption to waste transport via ferries is common due to the **prioritisation of tourist traffic (in the summer); prioritisation of perishable goods such as farming and aquaculture produce; and reduced winter ferry services.**	Waste haulage is independent of other competing demands.
Inter-LA resource sharing	**Ability to share storage, transport and other service elements** with adjacent LAs is limited in most cases, due to the distances and sea travel involved.	They are able to share services and infrastructure or have combined contractual arrangements to a greater extent with neighbouring LAs. For example, groups of LAs can form waste partnerships, allowing them to share transfer stations, collection fleets or transport waste bulked from different LAs together to treatment sites.

	Focus areas	Other remote and rural areas
Skills and experience	**Recruitment and retention of skilled workers is challenging** due to low population, ageing demographic and competition with better paying industries like tourism, fisheries and renewable energy farms.	Recruitment in the waste sector is a challenge across the UK.[7] The stakeholders interviewed in the focus areas viewed labour shortages as a particular challenge in their areas; and this is supported by wider research into labour shortages in Scotland.[8] However, further research is required for a thorough comparison against key comparator LAs.[9]

The five focus areas were also compared among themselves, to understand which challenges are distinct to certain LAs. The key variations related to their level of dependence on ferry transportation, which also affected their degree of control over transportation costs. Another difference was their relative proximity to treatment and processing facilities for different waste streams. In all these respects, Highland has advantages over the other four focus LAs.

[7] CIWM (2023) CIWM warns of skills and labour shortage in UK recycling sector
[8] FSB (2023) How Highlands & Islands firms are faring, and what of the staffing crisis?
[9] For example, analysis of the construction sector in 2022 found that the balance of labour supply and demand in the Highlands and Islands region had fluctuated in the past four years and that supply in 2022 outstripped demand, suggesting variability in labour market trends. See Construction Industry Training Board (CITB) and Whole Life Consultants (2023) Local skills – Scotland 2023 update

5 Impacts of EPR and other policies

Stakeholder feedback indicates that the full extent of EPR impacts is not well understood or factored into waste service planning, compared to for example the impacts of the ban on biodegradable waste to landfill. This is due to the uncertainty and lack of detail around implementation plans, particularly for WEEE and batteries, and around the mechanisms for compensation of LA costs.

EPR impacts were considered against the following likely changes:[10]

- **Expanding kerbside collections to all/more packaging in scope of EPR:** potentially requiring LAs to collect a wider range of waste materials that may not already be collecting. For instance, some LAs may need to expand their service to include plastic PTTs, cartons, and flexible plastic packaging.
- **Potential increases in WEEE and batteries collections**, especially in areas where collections are not currently available with uncertainties around types of collection modes.
- **Increases in collection quantities and targeted waste streams,** as a result of expansion of collection services due to the above two changes.

A short list of anticipated impacts from EPR (sections 5.1 and 5.2) and other policies (section 5.3) are presented below, with notes to indicate impacts that might have additional sensitivities associated with them recommended for further research and verification.

5.1 EPR impacts on services

The main EPR impacts on the focus LAs' ability to provide an efficient and consistent service is presented below.

- **Changes to design and coverage of collection services:** Expanding services to capture all EPR material, that are not currently being captured may necessitate changes to existing collection systems and operational arrangements. However, further research and assessments (e.g, feasibility studies) may be required to understand how this may affect the considerations and challenges the LAs currently face and what impacts may be felt on for example, material quantities to be handled and stored, waste transport arrangements and contracts.
- **Changes to collection services from increased WEEE and battery collections:** There may be additional operational and administrative requirements for LAs from increased recovery of batteries and WEEE, associated with HWRC booking systems, and bulky and hazardous waste management procedures. This may be particularly relevant to LAs where all areas may not receive collections or where collections are provided with the support of the community sector or retail takeback schemes. Further research to

[10] These changes were suggested in this research based on the available information at the time and may vary or need further developing as detail around policy changes emerge in the future.

verify the extent of recovery of WEEE and batteries in the focus LAs is recommended and additional detail from the policy will be required to understand the full impacts.

- **Challenges dealing with plastic flexibles and PTTs:** With some focus LAs excluding certain plastics packaging types due to challenges around material handling and sorting, packaging EPR rules may require them to start capturing these items. The mode of collection and quantities collected can have implications on the LA's handling and storing capabilities, revenue from material streams and availability of end destinations.

Whether changes from EPR will result in implications for the existing infrastructure and the extent of the same has been identified as an area of future research. This may require reviewing current capacities, waste material quantities, current or future plans to upgrade, retrofit or build new facilities and other requirements around storage and handling equipment.

5.2 EPR impacts on costs

Changes from EPR may to lead to impacts on **operational costs** of running waste services. Stakeholder feedback indicates that the starting point for the focus LAs is a loss-making service, due to the unusually high costs they face (see Sections 3 and 4). Whether they will face **capital costs** arises from the need to upgrade infrastructure, for instance, will need to be considered in future studies. This is particularly the case in light of the cumulative policy impacts – see Section 5.3.

In this context, stakeholders see both opportunities and risks from the implementation of EPR.

- Stakeholders anticipate EPR payments—if they truly cover full waste management costs—to ease some of their waste management cost burden.
- Potential increases in material quantities and volumes collected, especially with bulkier items like WEEE, could have implication for the waste transportation costs, which is already key area of concern, especially for the island LAs. Additional factors influencing this include the long distances to end destinations, competition with other cargoes and seasonality impacts (see section 4).
- In case of packaging EPR, there are some concerns that introducing items like plastic flexibles and PTTs to existing plastic bottle only collections, may reduce the revenue from these higher value materials due to likely increase in contamination.

The impact of other materials on costs, including WEEE, batteries and glass (linked with DRS, see 5.3) are yet to be understood and will require further details through policy updates.

5.3 Cumulative policy impacts

With several policies coming into force at different points in the next 7 years (Figure 5), there could be knock-on effects on EPR waste services due varying timelines, challenges to waste service planning, lack of clarity regarding what requirement the different policies might have and their direct and indirect impacts.

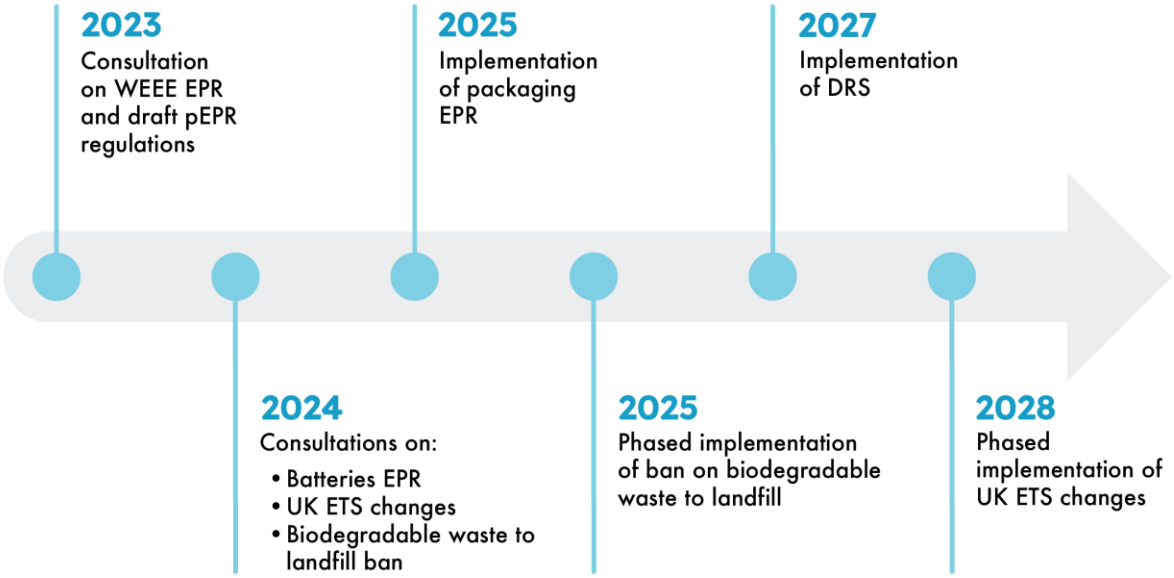

Figure 5: Timeline of waste policy changes. (updated from source data: DAERA and Tolvik)[11,12]

The main challenges evident from an assessment of policy interactions were:

- Increased pressure on limited and ageing transfer and storage infrastructure, for example with the need to keep both food waste and more types of potentially hazardous waste separate.
- Increased pressure on ferry services due to greater segregated handling and transporting of waste material and potential increases in quantities, with the potential for more delays and higher costs.
- Uncertainties around implementation of the policies like DRS, what role LAs will have in its delivery and whether glass will be included in the scope of the future iterations of the policy.
- Increased costs of residual waste management due to the inclusion of EfW in the UK Emissions Trading Scheme can become an added burden unless recycling reforms, including EPR, are successful in driving separate collections.

[11] DAERA (2023) DAERA waste policy tracker; Scottish Government (2023), News Deposit Return Scheme
[12] Tolvik (2024) The Emissions Trading Scheme – The what, why and how going into 2024 (webinar)

6 What is needed to ensure a just transition?

A just transition would help ensure that future policies are designed to enable LAs to provide improved recycling and waste prevention services within the constraints of their geographical locations, and to predominantly rural and remote populations. For the residents and communities, this would ideally facilitate their active participation in and fair and consistent access to these services, whilst achieving the broader social and environmental objectives of the policies.

The identification of risks and opportunities was driven by stakeholder expectations regarding the impacts from and concerns around EPR and other policies and how current and future opportunities, especially those led by the local communities, could be leveraged to mitigate negative or increase positive impacts.

6.1 Key risks

Risks relevant to just transition include those that are unique or have a greater impact in the focus LAs due to their specific characteristics. However, other risks identified as common to other LAs, were nevertheless considered for the focus LAs to support their implementation of EPR and the process of just transition.

To achieve a just transition, key risks that need to be mitigated through EPR implementation are presented in Table 3.

Table 3: Extent of risks in focus areas versus other LAs

Risks unique to focus LAs	• Potentially greater demands on ferry services due to increased material quantities and collection frequencies can add to transportation cost burdens. • Insufficient levels of WEEE and battery recovery due to inability of LAs to comply with specialised handling and storage requirements can negatively impact their recycling performance and perceived service efficiency, which in turn can affect EPR payments. • Heavy reliance on LA-provided waste services in focus areas, unlike mainland LAs where private waste contractor services ease some of the burdens. This can add strain to the focus LAs services. • Pressures due to increased tourism during certain times of the year, when waste transportation via ferries can be de-prioritised.
Risks with greater impact in focus LAs	• Greater transportation costs if end destinations do not develop in Scotland, exacerbated by reliance on ferry services. • Poor coverage of EPR material capture in difficult to access areas can mean some residents do not have access to EPR collections and recycling performance is negatively impacted. • Alienation of rural communities due to lack of access to services and inconsistent service provision. • Pressures from tourism also relate to the excess waste that comes into already overburdened island LAs waste management systems which are relatively closed systems compared to high-tourism areas on the mainland.

Risks common to other LAs	• Labour shortages and lack of access to skilled workers to persist due to inability of the waste sector to compete with more lucrative sectors.
	• Limited end market development for recyclables due to lack of suitable infrastructure, particularly within Scotland, can negatively impact recycling performance. • Lack of resident engagement with recycling schemes if communication programmes are not coordinated and clear. This can hinder recycling efforts, due to frustration and reduced public confidence in LA-schemes. • Lack of coordination between different policy measures risks intended benefits of building a circular economy.

6.2 Opportunities

Stakeholders highlighted the importance of the participation of and securing the buy-in of local communities and businesses in order to mitigate risks and enable a regional circular economy.

Opportunities to leverage EPR to achieve a just transition for communities in the focus areas were identified. These are summarised below.

- **Leveraging local knowledge and resourcefulness:** Supporting existing local initiatives and recent innovations within local communities as well as building on generational knowledge can help introduce resource resilience through skills in repair and waste avoidance practices. For example, local 'repair sheds' in areas such as Skye provide a complementary service to the WEEE and batteries collections. Such initiatives may benefit from support and advice, to ensure that local initiatives are sustainable, impactful have positive environmental outcomes compared to alternative options.
- **Identifying linkages with other areas of community wealth building:** Identifying growth opportunities in other sectors such as farming and agriculture or skills development could lead to symbiotic relationships between waste management and other local sources of employment.
- **Greater networking of community initiatives:** Some local initiatives may be scalable with the right support, for example developing reusable cup schemes along the North Coast 500 tourist route.
- **Diversifying local revenue sources:** Through greater engagement with dominant revenue generating sectors in the focus areas (such as fisheries, distilleries and renewable energy farms) to identify innovation in circular management of their waste streams.
- **Prioritisation of waste as a ferry cargo:** Given that ferry services in the focus areas typically operate through public contracts or are publicly owned, one way of keeping costs down for waste transportation may be to consider introducing requirements for waste to be treated as a priority cargo, to minimise delays and the labour costs associated with these.

7 Recommendations for future research

The following recommendations for future research studies in terms of areas for further research and key uncertainties that need to be addressed are presented below:

- LAs will require sufficient lead in time and sufficient clarify on upcoming policies to prepare for changes can support service readiness. Future research will need to be planned and implemented at critical points when more detail on policies become available. This should also consider any new policies that come into play in the future.
- The measurement of service efficiency, a key metric for EPR payments, should take into consideration the local and unique challenges, that prevent focus areas waste services from perfuming to the same parameters as other rural and remote LAs in the country. This can be a key focus of a future quantitative study.
- Some challenges were highlighted as more critical than others, such as waste transportation, distance to end markets and infrastructure pressures. Future research can include assessments of gaps in local infrastructure and transport capacities, suitability, and availability.
- Any new initiatives and services would benefit from lifecycle assessments and ample feasibility assessments to prevent any negative and unintended environmental consequences.
- Communications designed for the local context should target local residents, businesses and tourists by ensuring all available avenues of sustainable resource management are highlighted.
- The wider community, business and tourism sector can be vital actors in supporting future work on the development of a circular economy. Their role, knowledge gaps and capabilities can be key areas for further exploration.

Appendix A: Schematics and Maps

Shetland Council

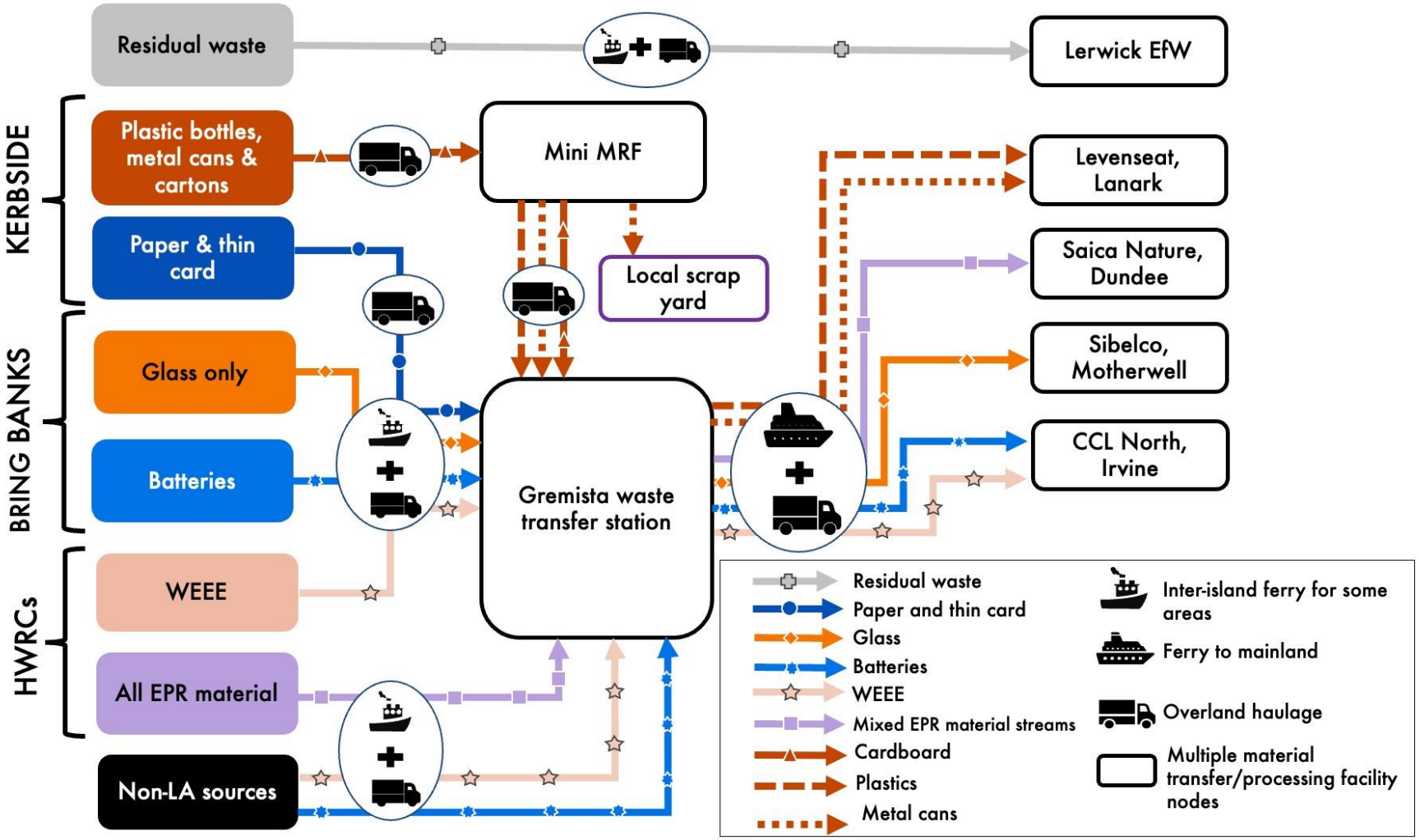

Figure 6: Shetland waste flow schematic for EPR material

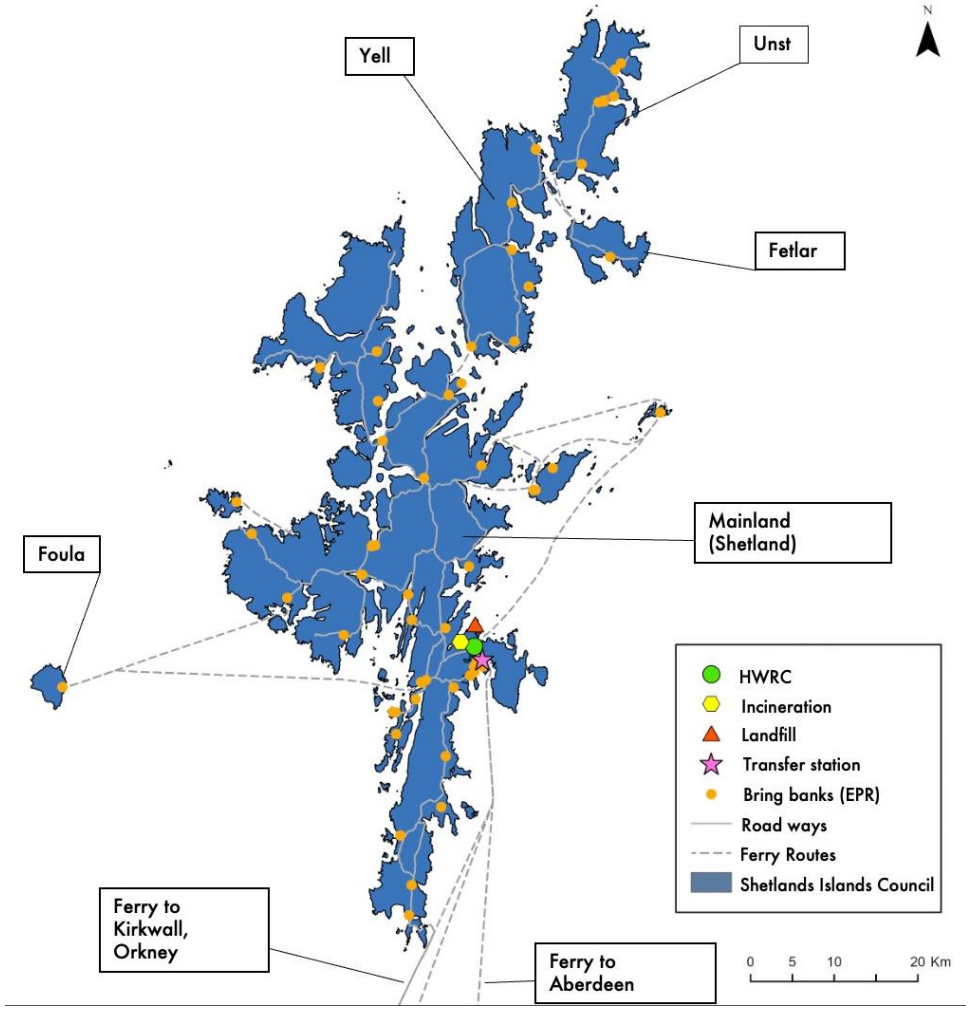

Figure 7: Shetland waste management infrastructure.

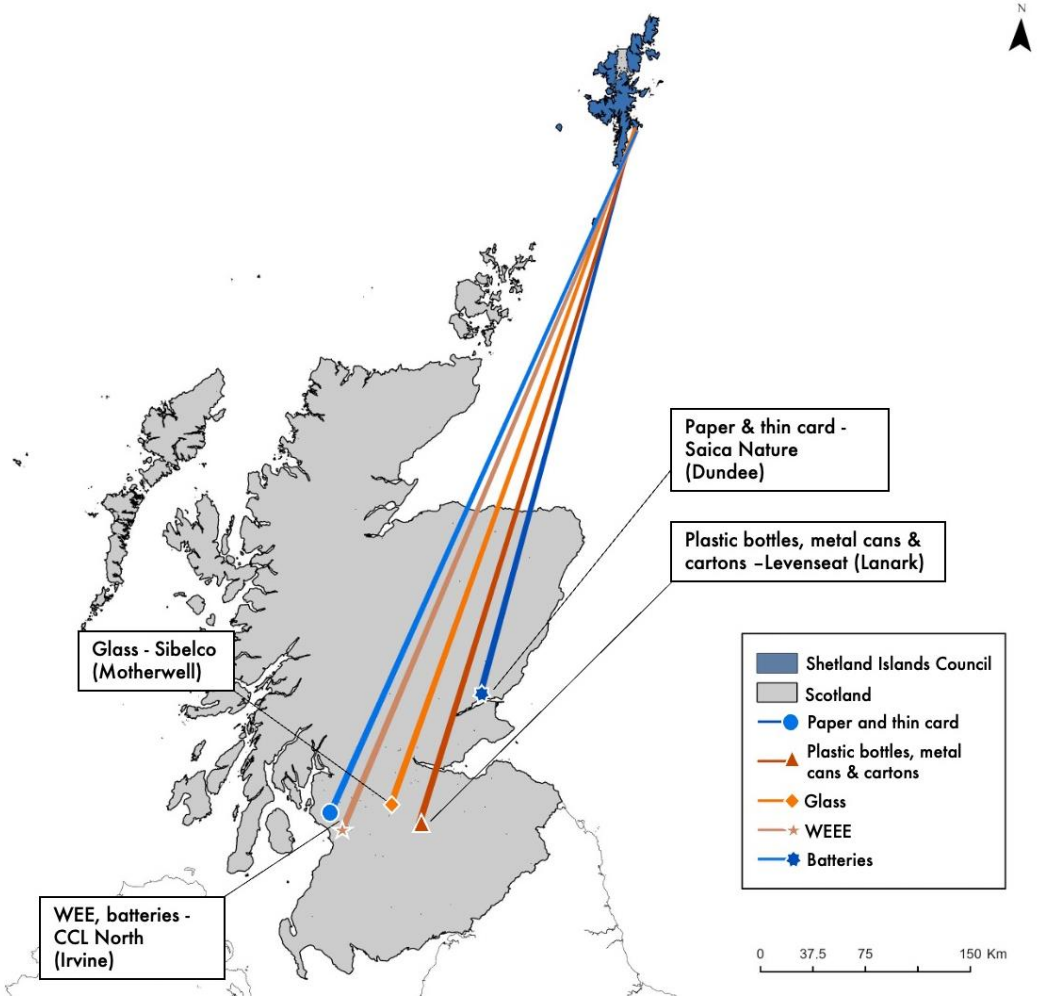

Figure 8: Shetland waste end destinations.

Argyll and Bute Council

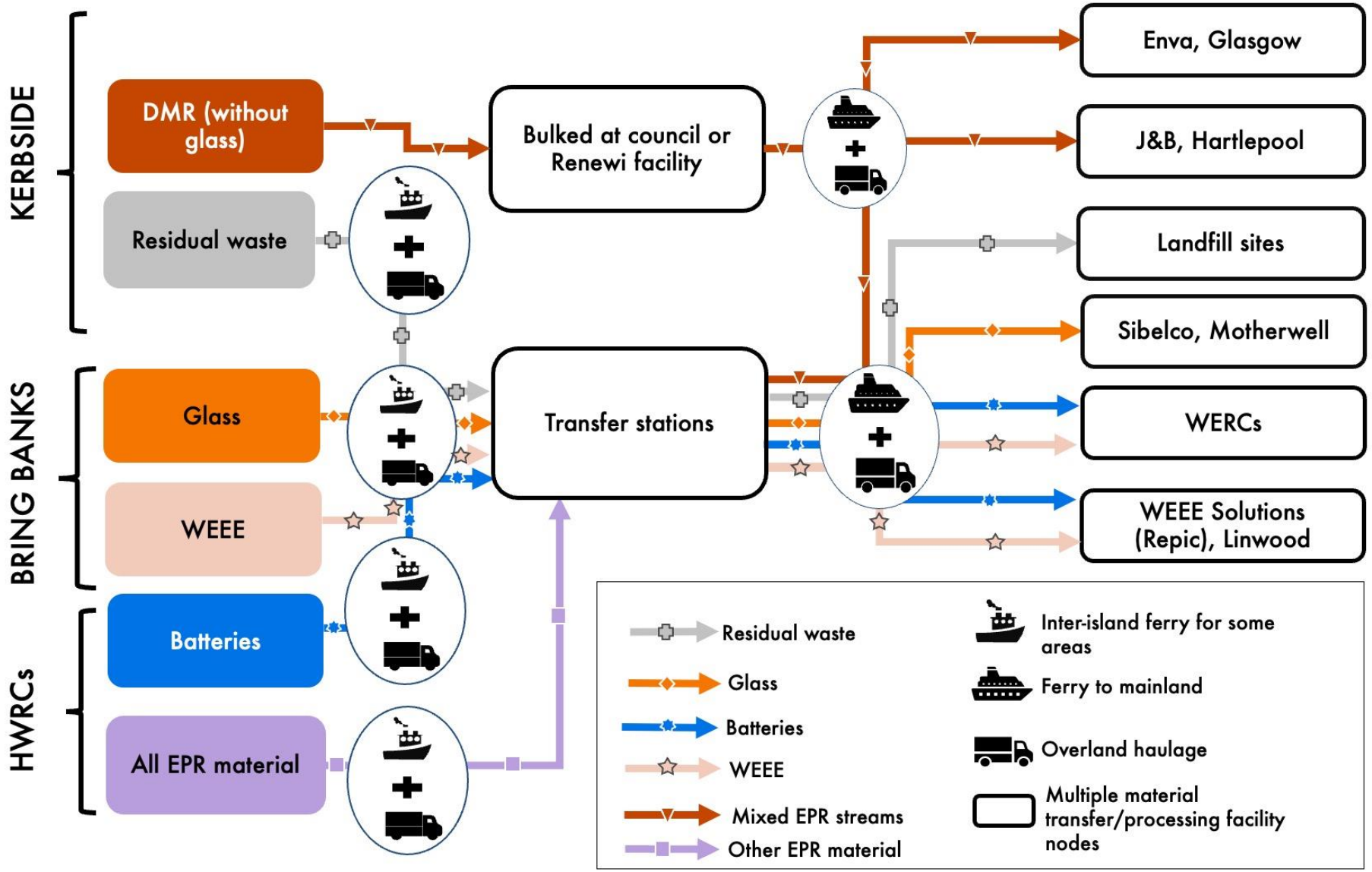

Figure 9: Argyll and Bute waste flow schematic for EPR material

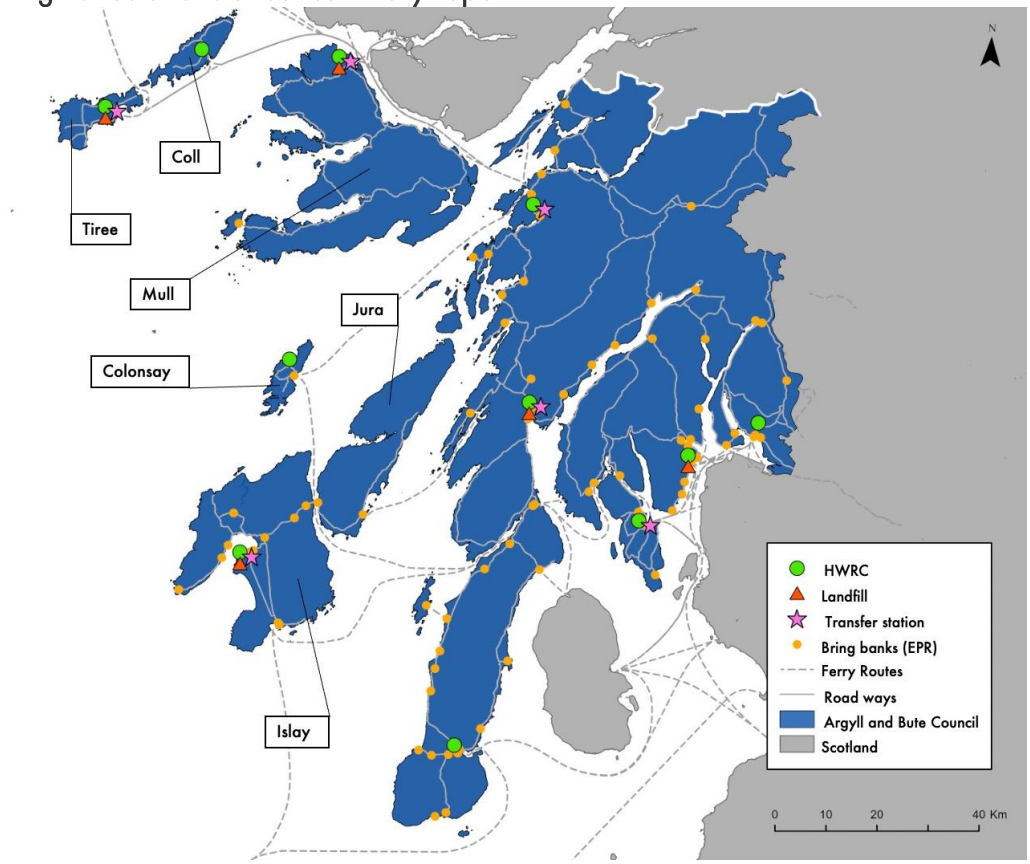

Figure 10: Argyll and Bute waste management infrastructure

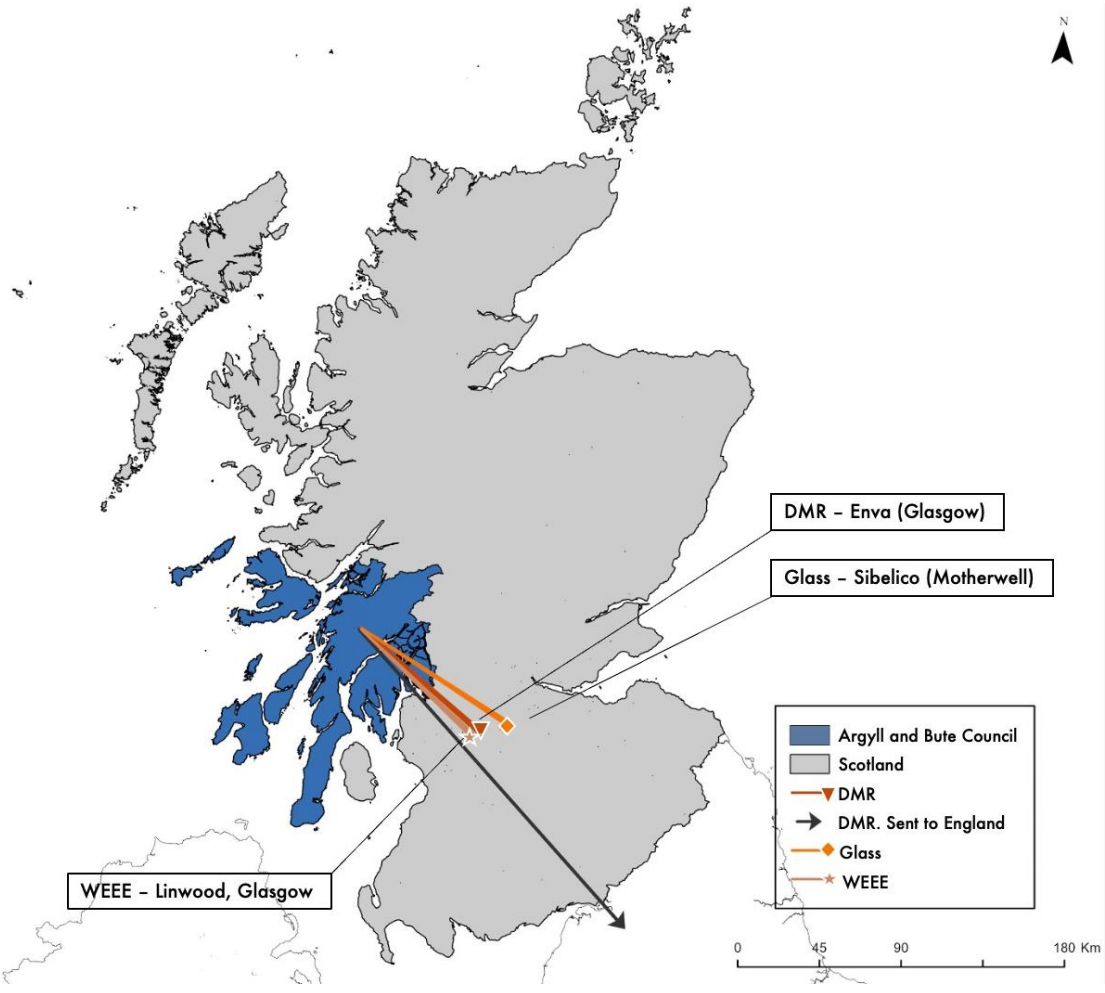

Figure 11: Argyll and Bute waste end destinations

Western Isles Council

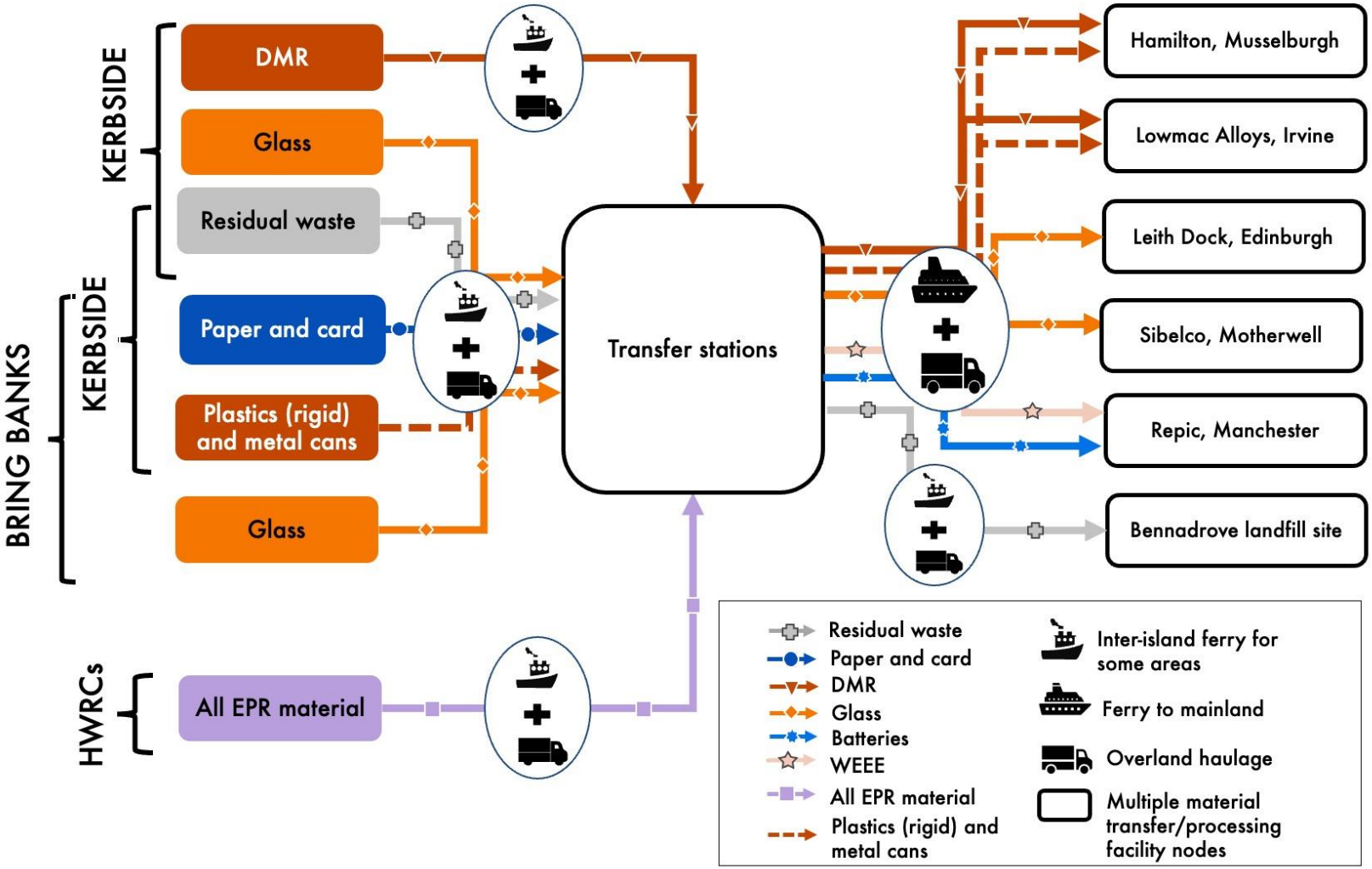

Figure 12. Western Isles waste flow schematic for EPR material

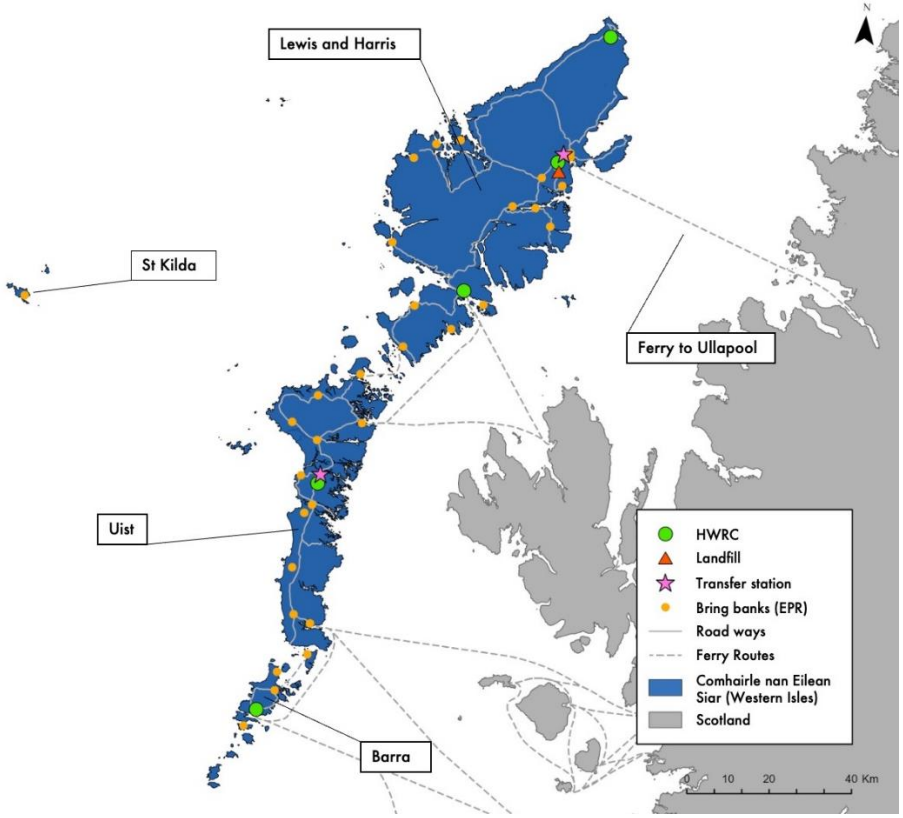

Figure 13: Western Isles waste management infrastructure

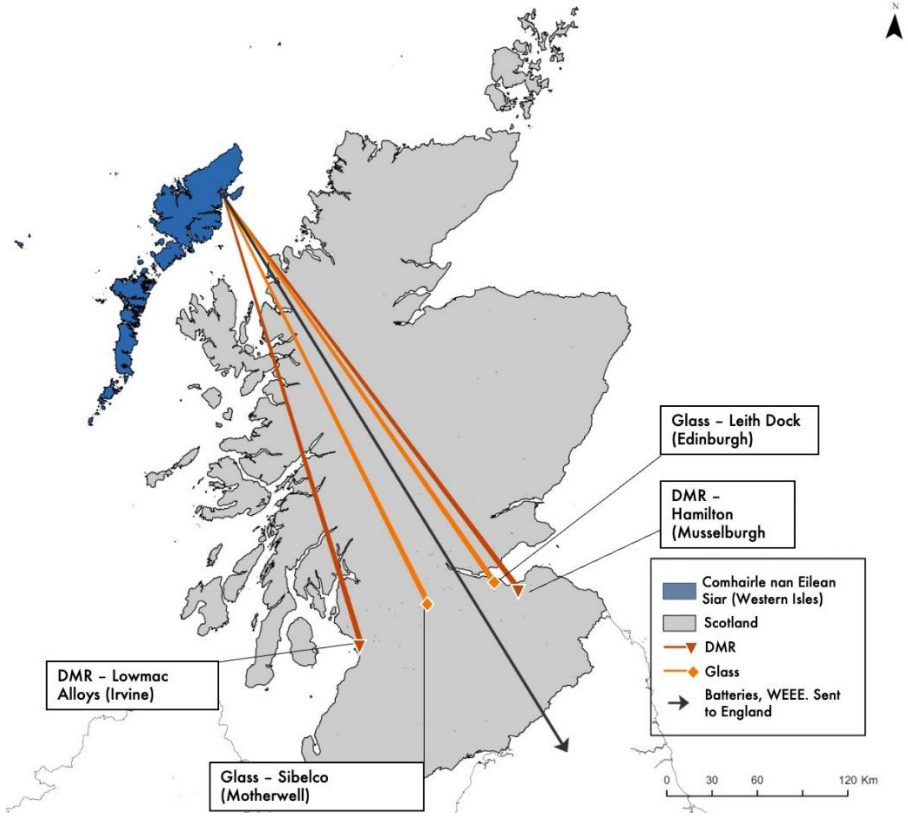

Figure 14: Western Isles waste end destinations

Highland Council

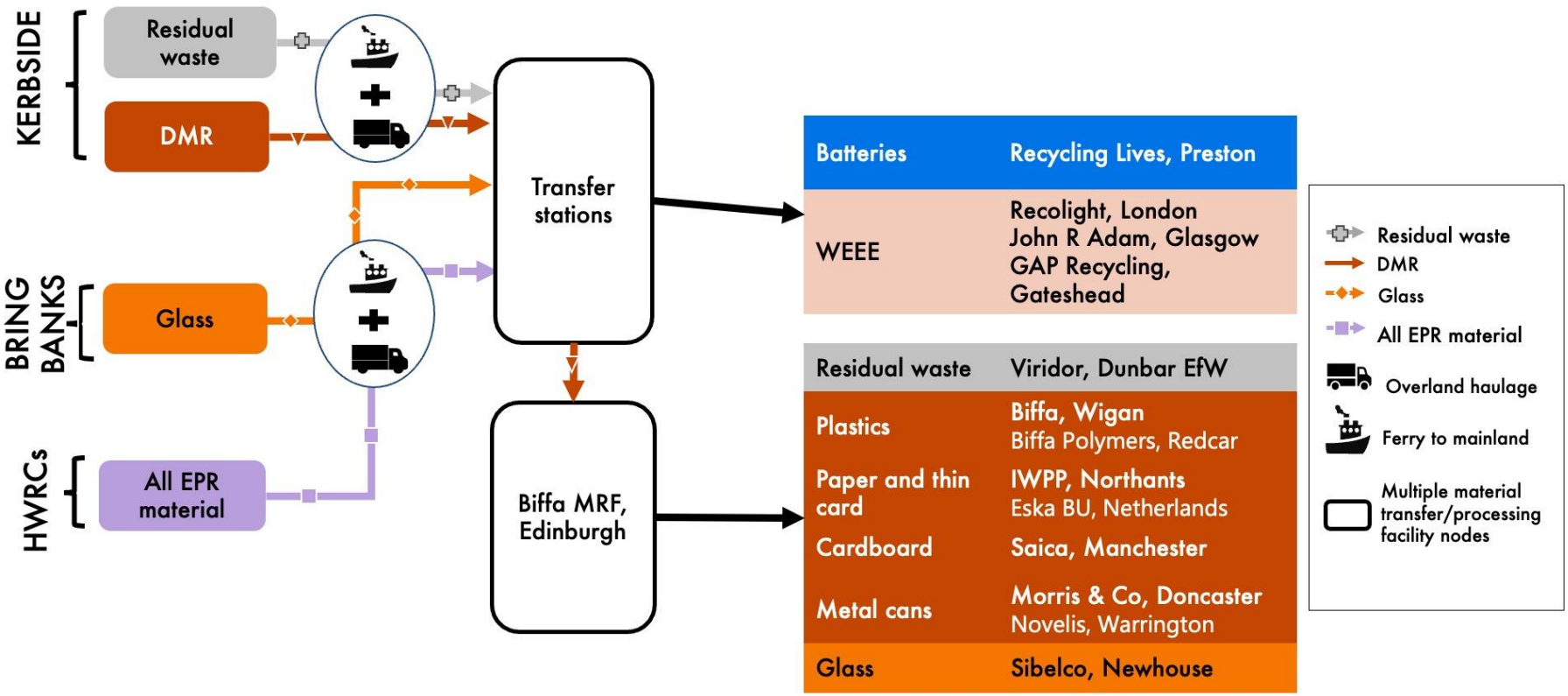

Figure 15: Highland waste flow schematic for EPR material

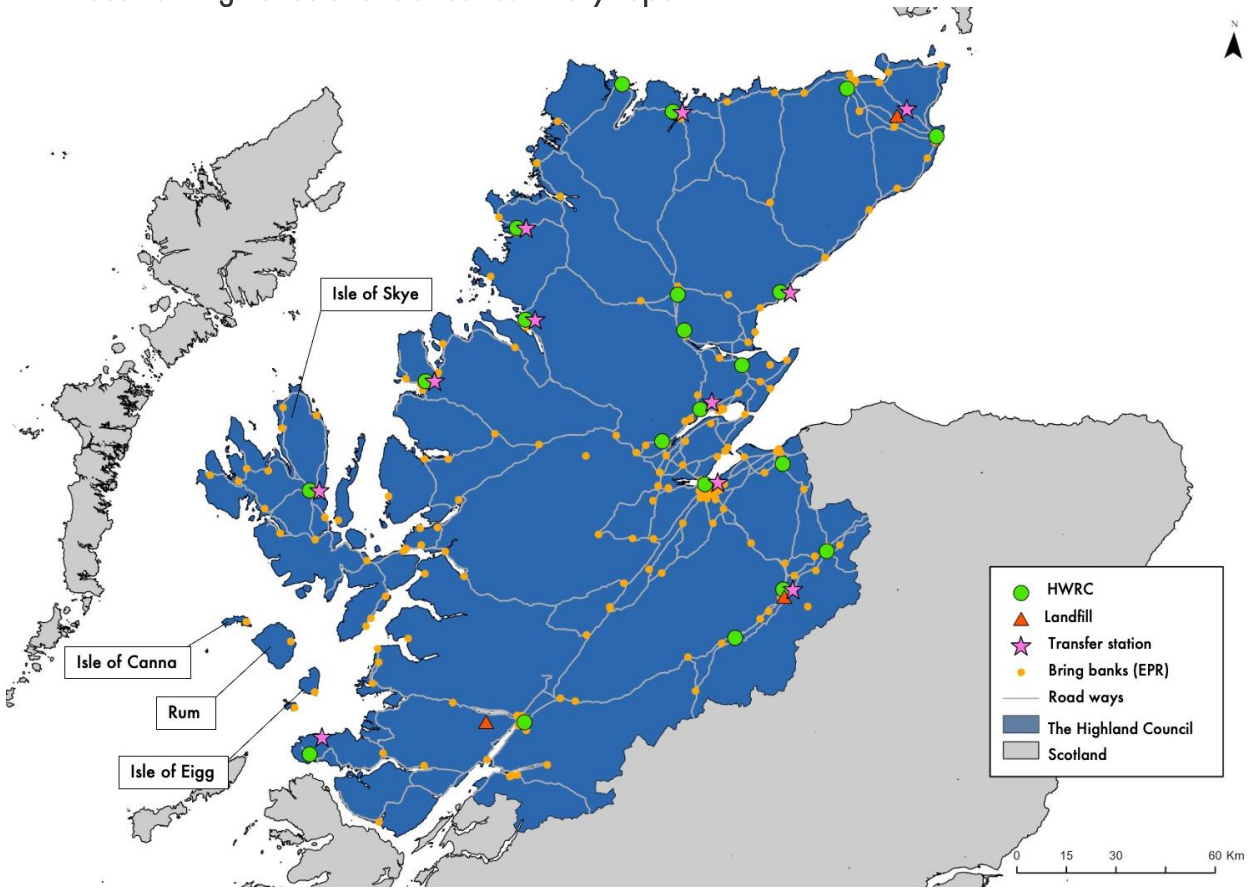

Figure 16: Highland Council waste infrastructure

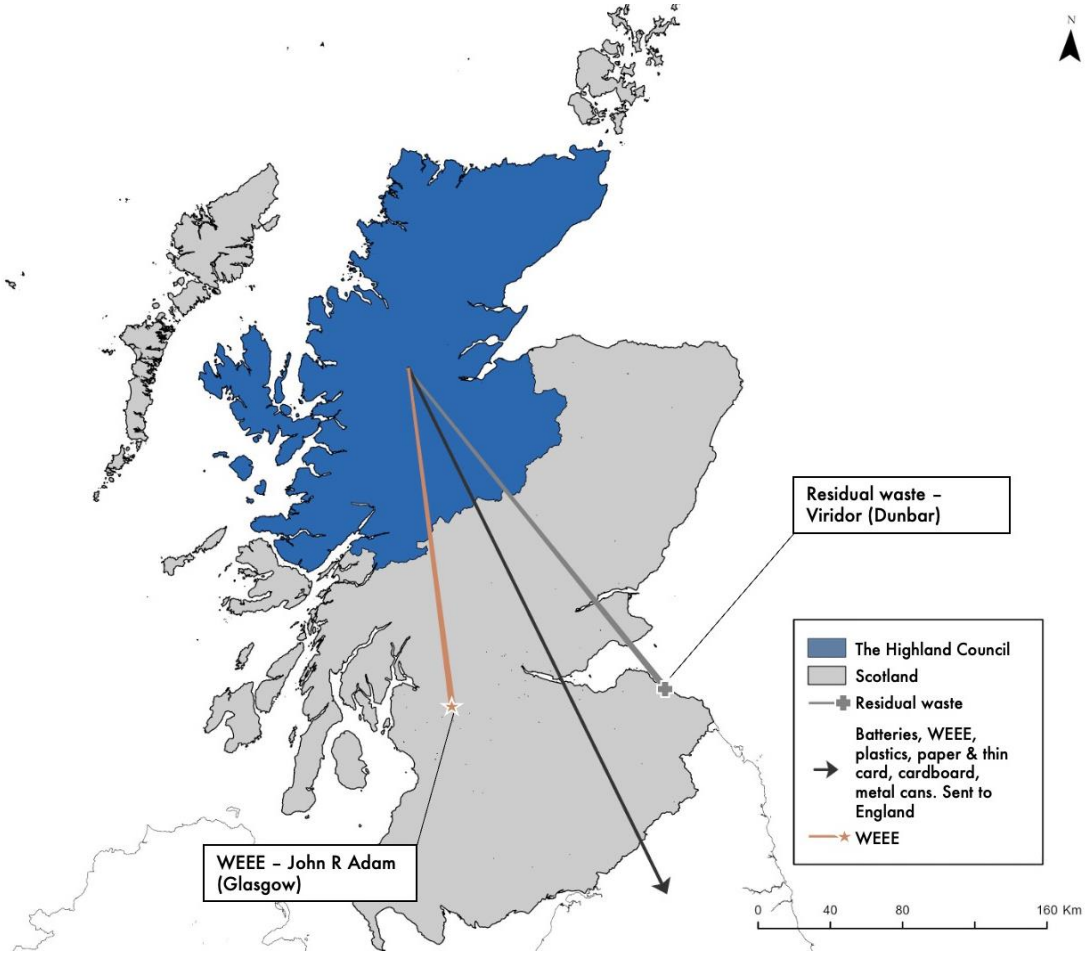

Figure 17: Highland Council waste end destinations

Orkney Council

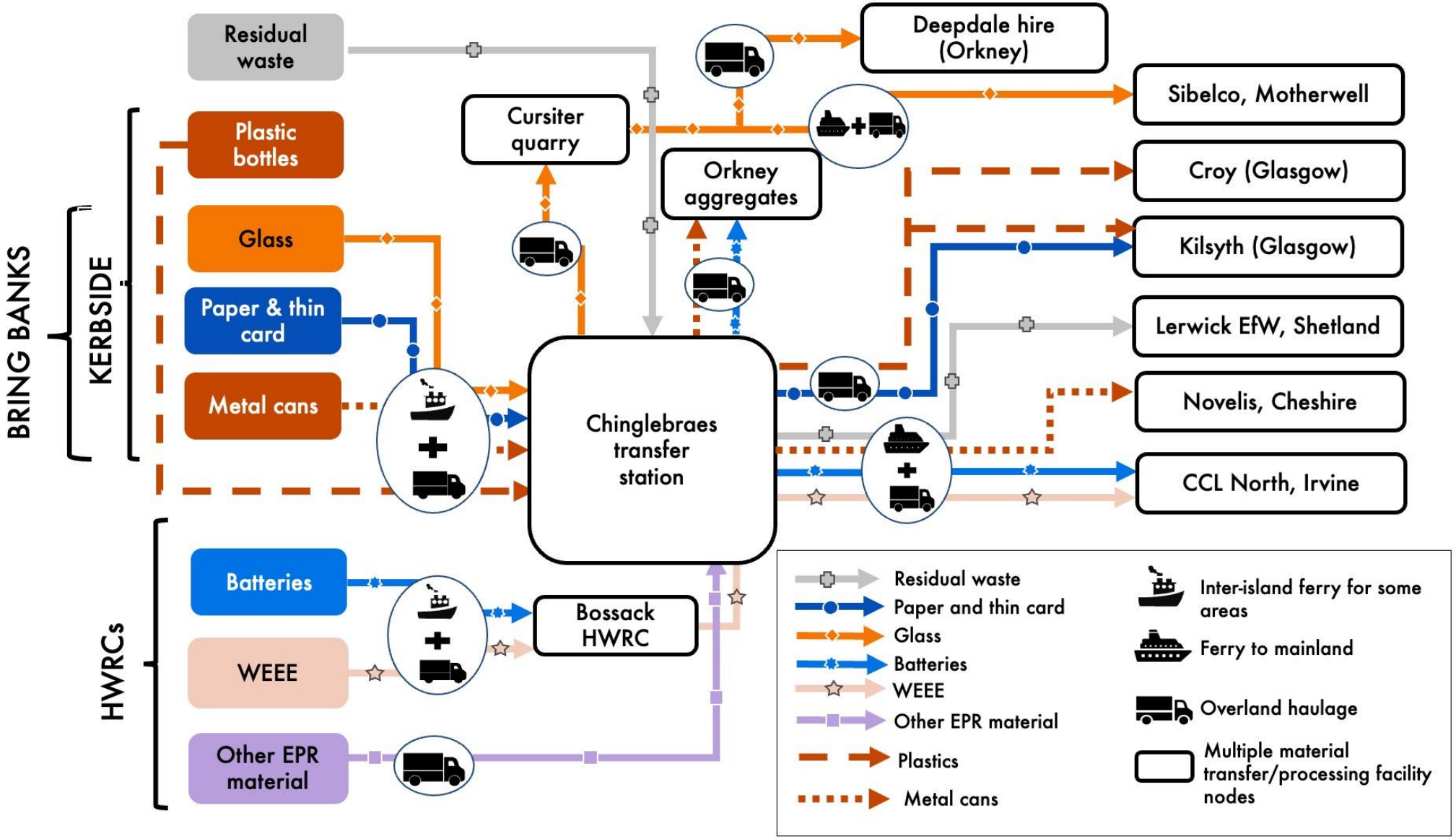

Figure 18. Orkney waste flow schematic for EPR material

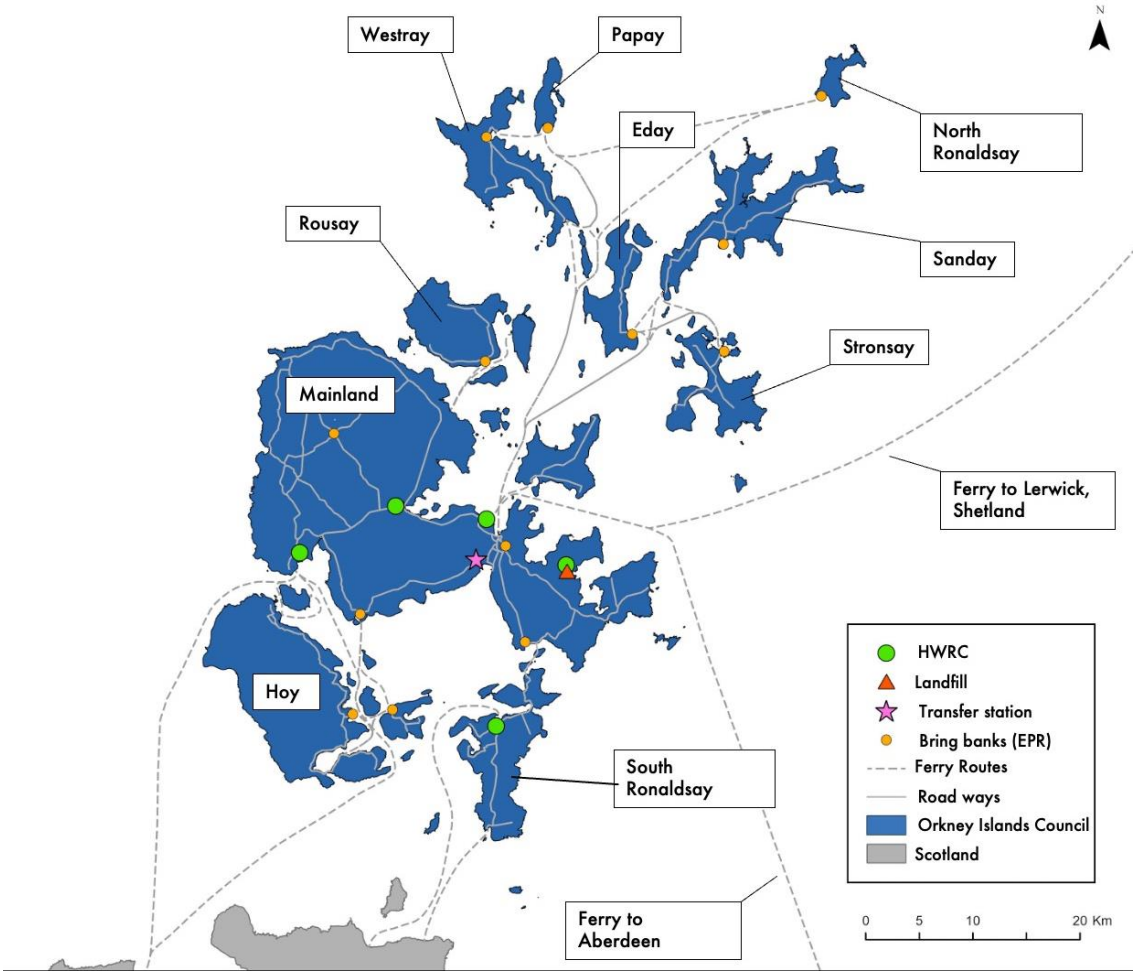

Figure 19: Orkney waste infrastructure

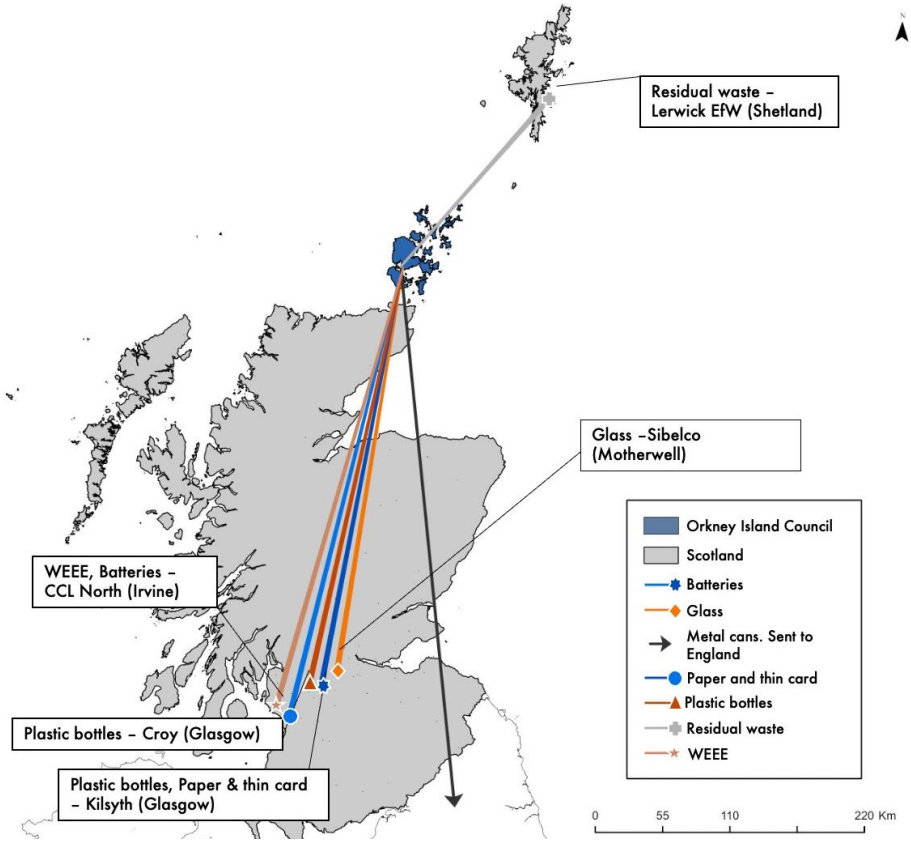

Figure 20: Orkney waste end destinations


ZERO
WASTE
SCOTLAND