

Agenda Item	11.
Report No	CP/31/24

THE HIGHLAND COUNCIL

Committee: Communities and Place

Date: 27 November 2024

Report Title: Long-term Waste Management

Report By: Assistant Chief Executive - Place

1. Purpose/Executive Summary

1.1 This report provides Members with a recommendation on the direction of long-term residual waste management for Highland Council. Officers undertook to do this within the November 2023 [report](#) to this Committee.

2. Recommendations

2.1 Members are asked to:

- i. **NOTE** that the most appropriate strategic approach for The Highland Council's long-term residual waste management is considered to be one of seeking a long-term contract with a merchant service provider operating within Scotland. (A merchant provider is one which sells residual waste processing capacity within its facility to customers which may include local authorities and commercial organisations);
- ii. **NOTE** that the feasibility study findings previously reported to this Committee identified that the current medium-term merchant provider contract represents good value.
- iii. **NOTE** that continuing to investigate the possibility of developing an energy-from-waste facility within the Highlands is not considered to be a suitable course of action.
- iv. **NOTE** that the basis for the perspective is based on the likelihood of a better cost outcome and more certainty of provision through using a merchant provider and these factors being more favourable for the planning and delivery of effective, strategic waste management operations.
- v. **NOTE** that the Waste Service will seek, through tendering at the appropriate time, and subject to Communities and Place Committee agreeing vi below, a long-term waste management solution through a merchant facility to succeed the current medium-term contract; and
- vi. **AGREE** that the most appropriate long-term strategic direction for residual waste management is to tender for a merchant provider solution.

3. Implications

3.1 Resource

- a. Waste management is necessarily resource intensive in terms of finance, equipment, infrastructure and personnel to meet statutory obligations for the safe and legally compliant management of waste streams.
- b. There is an on-going revenue budget cost for the management of residual waste through the established medium-term contract. Once retendered at the appropriate time, there will be a continuing, long-term revenue budget cost, at a level to be determined through a procurement process.

3.2 Legal - The Council's Waste Management Service operates in a highly regulated environment. This regulatory regime covers the type of collection services that must be provided to households and businesses, the operation of our landfill sites and other facilities, and how material can be processed. Within Scotland there is the significant regulatory issue of the ban on landfilling biodegradable municipal waste as introduced through the Waste Management (Scotland) Regulations 2012. There is to be full compliance by the end of 2025. This underpins the requirement for a suitable long-term residual waste management solution.

3.3 Risk

- a. There is no immediate risk affecting Highland Council related to this report to Members today.
- b. In sourcing a future long-term waste management solution for residual waste Highland Council's Waste Service will seek a service provider suitably qualified to manage the Council's tonnage in a safe and legally compliant manner.

3.4 Health and Safety (risks arising from changes to plant, equipment, process, or people) – There are no implications.

3.6 Gaelic - There are no Gaelic implications of this report.

4. Impacts

4.1 In Highland, all new policies, strategies or service changes are subject to an integrated screening for impact for Equalities, Poverty and Human Rights, Children's Rights and Wellbeing, Climate Change, Islands and Mainland Rural Communities, and Data Protection.

4.2 Considering impacts is a core part of the decision-making process and needs to inform the decision-making process. When taking any decision, Members must give due regard to the findings of any assessment.

4.3 Integrated Impact Assessment

4.3.1 An Integrated Impact Assessment Screening has been undertaken on the long-term residual waste management proposal. The conclusions have been subject to the relevant Manager Review and Approval.

4.3.2 The Screening has concluded that there is an unavoidable climate change impact.

Impact Assessment Area	Conclusion of Screening
Equalities	No impact
Poverty and Socio-economic	No impact
Human Rights	No impact
Children's Rights and Well-being	No impact
Data Protection	No impact
Island and Mainland Rural Communities	No impact
Climate Change	Impact

4.3.3 As the residual waste will require to be treated at an energy-from-waste facility, the climate change impact within the proposal would be associated with the unavoidable need to contract for the transport of residual waste to a processing facility within Scotland. This would most likely, in the first instance, be undertaken via road transport using articulated lorries. Transporting residual waste by road to a processing destination within Scotland would be a continuation of the Council's current contract practice of ensuring its residual waste is safely and legally conveyed (the current processing facility being in East Lothian).

4.3.4 It is envisaged that the tonnage of residual waste transported is likely to reduce over time - through the impacts of waste management collection service changes already being implemented across the Highlands which aim to reduce the amount of residual waste collected and requiring to be processed. The current, medium-term residual waste management contract enables the processing of up to 72,000 tonnes of such waste per year. The aim of the new collection services is to reduce the annual residual waste tonnage within Highland by nearly 9,000 tonnes (8,851 tonnes). At an average load of 24 tonnes per lorry this would save 368 return lorry journeys per year. As a result, by the time Highland Council requires a long-term residual waste management contract to start (provisionally 2028), there could be a reduced transport requirement and lower transport emissions associated with managing residual waste.

4.3.5 Subsequently, waste transport journeys may be made by lower emission road vehicles or potentially by rail, if sufficient progress occurs with transport-enabling technology and infrastructure provision. The Council's Waste Service would seek to ensure contractual haulage possibilities for the proposal are kept under review to assist Highland Council's delivery of net zero ambitions.

5. Long-term Waste Management

5.1 Background

5.1.1 Within Scotland it will be prohibited to send biodegradable municipal waste to landfill from 31 December 2025. As a collector of biodegradable municipal waste from households and commercial businesses throughout the Highlands, the Council's Waste Service requires to have in place suitable, legally compliant, waste management practices.

5.1.2 Highland Council has a medium-term solution in place currently. This began in January 2023 and runs until December 2027. It has the potential to be extended to the end of 2030 if both parties agree to apply the extension provisions built into the contract.

- 5.1.3 This contract ensures that the biodegradable municipal waste collected by Highland Council – the residual waste that will not be recycled –will not go to landfill. It is processed at a licensed facility in Dunbar which incinerates the waste, generating electrical energy for the national grid from doing so.
- 5.1.4 The contract enables The Highland Council to comply with the Waste (Scotland) Regulations prohibiting landfilling of its residual biodegradable municipal waste. Progressively, over 2023-25, Highland Council is directing its residual waste tonnage to this facility.
- 5.1.5 Highland Council has been examining long-term waste management options. Feasibility study results examining the potential for the development of an energy-from-waste facility within the closed Longman landfill site and for the option of using the services of energy-from-waste facilities out with the Highlands, were provided to 29th November 2023 Communities and Place Committee ([Item 7](#)). It was reported that:-
- a. The current medium-term contract which Highland Council has represents good value for money.
 - b. There is the potential to benefit from market competition for long-term contracts should Highland Council seek to use merchant energy-from-waste facilities to manage its long-term requirement.
 - c. The financial analysis made it clear that an Inverness-located energy-from-waste facility might only make economic and financial sense if it could incorporate a heat offtake plan, such as a district heating scheme, to optimise its efficiency. However, the service provision from a merchant processor is likely to remain a lower cost.
- 5.1.6 It was notified within Item 7 that a perspective would be taken on whether there seems to be reasonable grounds to recommend progressing, or halting, the assessment of an Inverness-located energy-from-waste facility; and that recommendations for long-term waste management would be reported to a subsequent meeting of the Communities and Place Committee.

5.2 National Context

- 5.2.1 The [Independent Review](#) report, published by the Scottish Government during May 2022 set out a series of recommendations concerning ‘...the Role of Incineration in the Waste Hierarchy of Scotland’. Two of the Review’s recommendations have particular resonance for determining a long-term waste management approach.
- a. Recommendation 4, ‘Effective immediately, the Scottish Government should ensure that no further planning permission (i.e. beyond that already in place) is granted to incineration infrastructure within the scope of this Review unless balanced by an equal or greater closure of capacity. The only exceptions to this should be those outlined in Recommendation 10.’

The Scottish Government accepted this recommendation in their [June 2022 response](#) ‘...while remaining conscious of the relevant statutory obligations which must apply to all planning decisions.’

- b. Recommendation 10, 'Scottish Government should urgently work with local authorities in remote and rural areas of Scotland without a settled residual waste management solution to meet the Ban to explore options that might, if fully justified, lead to the creation of a small amount of additional capacity.'

The Scottish Government accepted this recommendation in their June 2022 response noting '... that local authorities with remote and rural communities may face particular challenges and opportunities in managing their residual waste.'

- 5.2.2 The May 2022 Independent Review advised that under all of their modelling scenarios there is likely to be more capacity available than needed for Scotland's residual municipal waste from 2027 onwards.
- 5.2.3 Currently, six new merchant processing facilities are under construction within Scotland as in **Appendix 1**. These will introduce over one million tonnes of additional municipal waste processing capacity. Another three, comprising additional aggregate capacity of over 500,000 tonnes, have planning granted. Existing and future capacity is principally located to the south of the Highland area.
- 5.2.4 The residual waste market position in the second half of this decade, where Highland Council's current contract concludes, is likely to be characterised by market competition for processing tonnage.
- 5.2.5 [National Planning Framework 4](#), published by the Scottish Government during February 2023, cements the Scottish Government's perspective, the presumption against facilities which create energy by burning waste, through Policy 12: 'Development proposals for energy-from-waste facilities will not be supported except under limited circumstances where a national or local need has been sufficiently demonstrated (e.g. in terms of capacity need or carbon benefits) as part of a strategic approach to residual waste management and where the proposal:-
 - a. is consistent with climate change mitigation targets and in line with circular economy principles;
 - b. can demonstrate that a functional heat network can be created and provided within the site for appropriate infrastructure to allow a heat network to be developed and potential local consumers have been identified;
 - c. is supported by a heat and power plan, which demonstrates how energy recovered from the development would be used to provide electricity and heat and where consideration is given to methods to reduce carbon emissions of the facility (for example through carbon capture and storage);
 - d. complies with relevant guidelines published by Scottish Environment Protection Agency (SEPA); and
 - e. has supplied an acceptable decarbonisation strategy aligned with Scottish Government decarbonisation goals.'
- 5.2.6 The Scottish Government is aware of The Highland Council's feasibility work to inform long-term arrangements for managing residual biodegradable municipal waste.

5.2.7 The Scottish Government has undertaken to develop and deliver a Residual Waste Plan to ensure the best environmental outcome for unavoidable and unrecyclable waste and set strategic direction for management of residual waste to 2045 ([Strategic Aim - Decarbonise Disposal](#)). Furthermore the Scottish Government has undertaken to facilitate the development of a Sector-Led Plan to minimise the carbon impacts of the Energy from Waste Sector.

5.2.8 These plans are expected in 2025/26. It is intended that the Residual Waste Plan will set the long-term vision for future disposal practices in Scotland to minimise the environmental and climate impacts of waste whilst ensuring that Scotland has appropriate capacity in place to manage the expected, declining volumes of waste in the future. The Sector-Led Plan will form a specific strand of the Residual Waste Plan. It will set out how the sector will minimise climate impacts of energy from waste specifically and ensure that actions across the energy from waste sector are aligned with net zero ambitions.

5.3 Long-term Waste Management Options

5.3.1 The two principal options which were under consideration by Highland Council were:-

- a. Send the biodegradable municipal (residual) waste, that which will not be recycled, to a merchant energy-from-waste facility outside the Highland area (as per the developing, current practice). Most likely, it is thought at this juncture, to the Central Belt area of Scotland.
- b. Or process waste collected by The Highland Council at an energy-from-waste facility located locally, potentially at the closed Longman landfill site, Inverness.

5.4 Risks

5.4.1 Risks: Long-term Contract with a Merchant Facility

5.4.1.1 Highland Council would have exposure to market forces when tendering its requirements for long-term waste management. This risk may be lessened to an extent by the new processing capacity being built within Scotland, by the positive impact of the new twin-streaming recycling collection services within Highland reducing the residual waste tonnage, and by Highland Council's experience of framing its waste management requirements. Waste Service will study the market within the context of its current service provision, its long-term requirement and the evolving market supply capacity, to ascertain when it would be prudent to tender its residual waste management specification.

5.4.2 Risks: Developing an Energy-from-Waste Facility

5.4.2.1 Cost.

- a. The consultant's feasibility study identified that using the services of a merchant facility is likely to be less expensive over the long-term for Highland Council, noting the absence of a compelling case for seeking to progress a locally based EfW development. If it were possible to create a viable heat offtake to sell all of the energy outputs of a potential Longman-located EfW, the long-term costs may be broadly similar. However, the study identified that service provision from a merchant processor is likely to remain a lower cost.

- b. There is a changing energy-from-waste landscape in Scotland, and more facilities are due to come on stream over the next two years. This may affect pricing. The increasing capacity is likely to introduce more competition for waste tonnage.
- c. There is no current provision within the Council's financial plans for an energy-from-waste facility. Given the timescale for any energy-from-waste facility would be several years away, an updated assessment of prevailing costs would be required.
- d. The Scottish Government intends to publish two plans focusing on residual waste and the energy-from-waste sector during 2025/26 which could also impact the cost assessment.
- e. The 26th October 2023 report to Council ([Item 8](#)) identified that strategic priorities need to be established for future capital spending programmes. Future strategic priorities for capital investment need to reflect local and national priorities. The risk is that given the current national context it may prove difficult to argue that there is a supportive national priority for new energy-from-waste sector development.

5.4.2.2 Planning

- a. The option of seeking to develop an energy-from-waste facility at the closed Longman landfill site would require major development planning permission. A range of studies and consultations would be required to investigate and prepare the submission for seeking planning permission in principle. There would be no guarantee of success.
- b. The planning process would incur significant cost in terms of:
 - i. Staff resource (personnel inputs from various teams including Finance, Legal, Engineering, Design, Waste, Ecology, Climate and Energy, Environmental Health, Community Support and Engagement, Commercial and Procurement Shared Service) over a period, envisaged to be circa three years (2025/26 – 2027/28) if all were to proceed smoothly to the point of being granted planning permission in principle (stage 1).
 - ii. Consultancy fees to undertake the range of stage 1 studies and consultations required, associated with each of site location, ground conditions, ecology and environment, public consultation, and socio-economic impacts. These may cost (depending upon tender returns) in the region of £0.75m plus to complete.
 - iii. Highland Council would need to be prepared to spend this sum and apply these resources with no guarantee of planning permission in principle being granted.
 - iv. Subsequently, to undertake stages 2 and 3, securing a development partner and preparing an application seeking approval of matters specified in a condition (that is, full planning permission) there would be further requirements for inputs from Council personnel. Stages 2 and 3 may be expected to run over a further three years (2028/29 – 2030/31), with spend dependent upon the range of conditions to be addressed and the nature of agreement with a development partner.

5.4.2.3 Scottish Government consent. Additionally, related to planning, there is the Scottish Government's stated position against further capacity being provided, which includes the [Energy from Waste/Incineration and Advanced Thermal Treatment Facilities Direction](#). Initially issued on 17th November 2021 by the Chief Planner, this requires planning authorities to advise Scottish Ministers of the receipt of new planning applications for Energy from Waste (Incineration and Advance Thermal Treatment) Facilities and to notify them when they are minded to grant planning permission for Energy from Waste (Incineration and Advance Thermal Treatment) Facilities.

5.4.2.4 Heat Network.

- a. Critical to the possibility of securing planning permission in principle would be the ability to provide a persuasive heat and power plan demonstrating how energy recovered from the development would be used to provide electricity and heat. SEPA will be especially interested in ensuring that a functional heat network is created, and all waste heat used. Proof that a functional heat network can be created is needed to support an energy-from-waste proposal under Scotland's National Planning Framework 4 strategy.
- b. Highland Council is at an early stage of exploring what the heat network potential within Inverness may be defined as, drawing on the potential of various possible energy sources. Study work on the technical exploration and outline business case commenced in late September 2024 and will require a period of 12-15 months.
- c. At present, there are no developments planned which would be dependent upon energy input from a local energy-from-waste facility.
- d. Recently emerging market knowledge has suggested that heat input from an energy-from-waste source may not be desirable for some potential, future heat network customers (the heat being considered to derive from a source insufficiently environmentally friendly).
- e. The risk is twofold:-
 - i. That the study does not reflect favourably upon the inclusion of heat energy inputs from a potential energy-from-waste facility at the Longman site.
 - ii. That it cannot be demonstrated that a functional heat network can be created.

5.4.2.5 The Longman Site

- a. Initial technical advice from engineering consultants identifies that construction of an energy-from-waste facility would be possible, subject to further, more detailed studies and geotechnical investigations to ensure that the site could accommodate the nature of development likely to be required. There is a risk that the detailed geotechnical investigations could conclude the site unsuitable.
- b. An Extended Phase 1 Habitat Survey has identified that there are no specific habitats that are of high intrinsic conservation value within the area of the Longman site which might potentially host an energy-from-waste facility. The site's ability to support a number of important species, however, means that it has significant ecological sensitivities.

Under Policy 3 of National Planning Framework 4, development proposals for national or major development or for development that requires an Environmental Impact Assessment will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention. Creating an acceptable biodiversity net gain is a risk likely to prove formidable and complex.

6. Long-term Residual Waste Management Direction

- 6.1 Highland Council's Waste Service will continue to work closely with its current residual waste management service provider to obtain maximum benefit from the existing contract.
- 6.2 It is proposed that Highland Council's Waste Service should seek to secure its long-term waste management requirements through a merchant service provider contract, rather than seek to pursue the development of a local energy-from-waste facility. Based on what is known at this time, the intended approach would seem to offer a greater certainty of provision, and a stronger likelihood of a better cost outcome, with the possibility of tendering within a marketplace characterised by heightened competition for residual waste tonnage as a result of six new merchant facilities undergoing construction in Scotland.
- 6.3 Waste Service will study the market within the context of its current service provision, its long-term requirement and the evolving market supply capacity, to ascertain when would be the most prudent time to tender its residual waste management specification.

Designation: Assistant Chief Executive, Place

Date: 11 November 2024

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Background Papers: Long-Term Waste Management [Report](#)

Appendices: Appendix 1 - Merchant Energy-from-Waste Facilities Under Development in Scotland

Appendix 1

Merchant Energy-from-Waste Facilities Under Development in Scotland

Facility	Capacity Tonnes/Year	Notes
Earlsgate Energy Centre, Grangemouth	216,000	Beginning commercial operations during 2024.
Westfield Energy Recovery Facility, Fife	240,000	Commercial operations starting during 2025.
Oldhall Energy Recovery Facility, Irvine	186,000	Targeting operational status during 2025.
Binn Farm Eco Park Energy-from- Waste, Perthshire	85,000	Target operational period is early 2026.
South Clyde Energy Centre, Glasgow	350,000	Planned to open by end of 2026.
Drumgray Energy Recovery Centre, North Lanarkshire	300,000	Planning for 2027 opening.