

ENVIRONMENT AND CLIMATE CHANGE OVERVIEW AND SCRUTINY COMMITTEE - 11 NOVEMBER 2024

FUTURE APPROACH TO RESIDUAL WASTE MANAGEMENT POST-2031

REPORT OF THE DIRECTOR OF ENVIRONMENT AND TRANSPORT

Purpose of the Report

1. The purpose of this report is to seek the views of the Committee on the proposed future approach to managing residual waste from 2031 onwards. The views of the Committee will be reported to the Cabinet for consideration at its meeting on 17 December 2024.

Policy Framework and Previous Decisions

- 2. In December 2016, the Cabinet resolved that the Council could enter into medium-term (up to 2028-2031) merchanting arrangements to utilise available residual waste treatment and disposal capacity within the marketplace. The Cabinet also agreed that the Director of Environment and Transport could engage with Leicester City Council to investigate the potential for joint commissioning arrangements following the expiry of the City Council's waste Private Finance Initiative contract in 2028.
- 3. The Leicestershire Resources and Waste Strategy 2022-2050 (LRWS), adopted by the Cabinet in April 2023, considered the potential forthcoming legislative changes and these are reflected accordingly within the Strategy. The assumptions in the LRWS were aligned with the market review, modelling and options appraisal outlined in this report.
- 4. The management of residual waste supports the objectives of the Council's Environment Strategy 2018-2030 and the 'Clean and Green' outcome within the Council's Strategic Plan Refresh 2024-2026.

Background

5. In 2018, the Government published its Resources and Waste Strategy for England (Our Waste, Our Resources: a Strategy for England) which sets out key objectives for dealing with waste at a national level, promoting resource efficiency and aiming to establish a circular economy where products are used again and again or for longer through reuse, repair, and recycling.

- 6. Following this, the Environment Act was passed into law in 2021 paving the way for key waste reforms setting out how Government policy will be implemented. The Act supports transition to a more circular economy, incentivising people to recycle more, encourages businesses to create more sustainable packaging and supports the achievement of a 65% recycling target for municipal waste by 2035. It sets legally binding targets for waste and resource efficiency including a legislative target to halve the amount of residual waste per person (excluding mineral waste) that is sent to landfill and incineration for England by 2042 compared with 2019 levels.
- 7. The Government published the Net Zero Strategy in 2021 committing action towards the near elimination of biodegradable municipal waste being sent to landfill from 2028 and providing separate food waste collections for all households from 2026. The previous Government consulted on several separate, but interlinked, legislative changes known as the Collection and Packaging Reforms (a Deposit Return Scheme for drinks containers, the Extended Producer Responsibility for Packaging, Simpler Recycling and Digital Waste Tracking). These changes are being introduced with the intention to reduce waste and increase recycling, although with a new Government in office, there remains some uncertainty on implementation date.
- 8. The Council has a statutory duty as a Waste Disposal Authority to arrange for the treatment and disposal of controlled waste collected in Leicestershire under the Environmental Protection Act. The current budget for the treatment and disposal of residual waste is c. £21.3m (excluding haulage) per annum. The Council currently has a number of contracts with different external suppliers for residual municipal waste treatment and disposal, to enable it to meet its statutory duties (which encompass pre-treatment, Energy from Waste (EfW) facilities and some landfill). These contracts have varying end dates, but feature break clauses across the period of 2028-2031. It is therefore essential for the Council to review how it manages the treatment and disposal of residual waste to ensure that it is appropriate to the current and potential future policy and legislation, and the most efficient method considering the risks and impacts associated with the changing landscape.

Options Appraisal

- 9. Frith Resource Management (FRM) consultants were engaged in July 2022 to carry out an options appraisal and make recommendations for the best approach to managing residual waste from 2028-2031 onwards.
- 10. A summary of the FRM options appraisal report is appended to this report. The stages of the options appraisal process were as follows:
 - a) Forecast future residual waste arisings;
 - b) Research options for managing waste including a focus on new and emerging technologies:
 - c) Review legislation and map potential impacts to apply to the waste arisings forecast;

- d) Create a cost model to compare waste management options;
- e) Provide options for waste management and complete an options appraisal using cost model, comparison of carbon footprint, deliverability and operational resilience.
- 11. For clarity in reading the options detailed at paragraph 12 below, the following definitions apply:
 - a) 'Merchanting' in this context refers to contracts through external suppliers to manage a given waste activity (for example at present the Council has a number of contracts with different external suppliers for residual municipal waste treatment and disposal, to enable it to meet its statutory duties which encompass pre-treatment, EfW facilities and some landfill).
 - b) 'Mixed residual waste' for the purposes of this report refers to all wastes that cannot be otherwise recycled or reused (which broadly relates to traditional black bag household waste from kerbside collections or brought to the recycling and household waste sites).
 - c) 'Bulky waste' for the purposes of this report refers to all other non-size limited residual waste (which broadly relates to waste deposited at the recycling and household waste sites and through bulky waste collection schemes and residual trade waste which is too big to fit in a standard wheelie bin). Bulky waste goes to either landfill or requires pretreatment/shredding ahead of processing through an EfW facility. It should be noted that waste containing Persistent Organic Pollutants (i.e. sofas and armchairs) has not been included in the calculations for any of the options as per the requirements of Persistent Organic Pollutants statutory guidance published in December 2022.
- 12. The detailed options appraised by FRM compared the following nine options:
 - a) Merchanting for mixed residual waste combined with merchanting for the pre-treatment of bulky waste.
 - b) Merchanting for mixed residual waste combined with the development of a Council owned pre-treatment / shredding facility for bulky waste.
 - c) Partnership with other local authority for merchanting of mixed residual waste combined with the partnership merchanting of pre-treatment / shredding facility for bulky waste.
 - d) Partnership with other local authority for merchanting of mixed residual waste combined with the development of a Council owned pre-treatment / shredding facility for bulky waste.
 - e) Partnership with other local authorities to develop a dedicated EfW facility combined with the development of a Council owned pre-treatment / shredding facility for bulky waste.
 - f) Continue with the current arrangements.
 - g) Continue with the current arrangements for mixed residual waste combined with the development of a Council owned pre-treatment / shredding facility for bulky waste.
 - h) Develop own treatment EfW facility for the management of Leicestershire municipal residual waste only combined with the development of a Council owned pre-treatment / shredding facility for bulky waste.

- Develop own treatment EfW facility for the management of Leicestershire municipal residual waste and third-party waste combined with the development of a Council owned pre-treatment / shredding facility for bulky waste.
- 13. Each option was assessed against the following criteria:
 - a) Cost (total over a 20-year period);
 - b) Strategic level carbon modelling;
 - c) Deliverability compared qualitatively considering the challenges of implementing each option;
 - d) Resilience (operational and cost).
- 14. These options are being considered at this time as this is the last opportunity to offer direction with all options still feasible from a project timescale perspective, considering that the current contracts have varying end dates and feature break clauses which may be triggered within the next five years.
- 15. The FRM report considered environmental implications in terms of high-level carbon modelling, which was produced using the Waste Resources Assessment Toolkit for the Environment. This lifecycle assessment showed that all realistic options resulted in no discernible variation in environmental impact.
- 16. A key factor in the report provided by FRM was the consideration of risk across the different options both in terms of implementation (deliverability) and longerterm resilience.
- 17. FRM recommended a low investment merchanting approach to the management of residual waste either through continuing current arrangements (option F) or through re-merchanting arrangements from 2031 (option A). The FRM report highlighted that due to the uncertainties, particularly around energy prices and Emissions Trading Scheme legislation, EfW profitability could not be assured and in the worst case, could be significantly more expensive than continuing or renewing merchanting arrangements. The synopsis of the report produced by FRM consultants, appended to this report, contains further information, which provides rationale within the results and conclusion.

Resource Implications

- 18. The current budget for residual waste treatment and disposal is c. £21.3m (excluding haulage) per annum.
- 19. Whilst the consultancy work is not designed to provide future costs of the options identified, it is noted from the outputs of the consultancy work that the Council's revenue expenditure for residual waste treatment and disposal will likely increase as a result of the following factors:
 - a) The impact of the introduction of EfW facilities to the scope of the Emissions Trading Scheme from 2028;

- Market variability and uncertainty for power prices, including the possible extension of the Electricity Generator Levy (currently scheduled to be withdrawn in March 2028).
- 20. Growth, as identified above, will be addressed through future Medium Term Financial Strategy processes.
- 21. The Director of Corporate Resources and Director of Law and Governance have been consulted on the content of this report.

Timetable for Decisions

22. The views of the Committee will be reported to the Cabinet for consideration at its meeting on 17 December 2024, where the Cabinet will be asked to approve the proposed future approach to managing residual waste from 2031 onwards.

Conclusions

- 23. Arising from the conclusions of the work carried out by FRM, it is recommended that the Council adopts a low investment merchanting approach for the future management of residual waste, either through the continuation of the current arrangements (option F) or through re-merchanting (option A). Partnership working (option C) is not specifically recommended, although the Council will remain open to the opportunities in this area, should any arise in the interim period.
- 24. Should this approach be approved by the Cabinet, then the merchanting activity and any associated works will become part of standard operations by the waste service to provide the optimal competitive tendering process and contractor engagement to ensure the best value for the Council.
- 25. There are a number of future uncertainties that will need to be reviewed and considered over subsequent years. The timeline for all future works will include a number of project gateways to ensure that the service approach remains appropriate to the evolving impact of legislation on the composition and volume of residual waste arisings alongside the wider market factors such as supply chain and energy costs.

Background Papers

24 April 2023 – Report to the Cabinet – 'Leicestershire Resources and Waste Strategy 2022-2050':

https://democracy.leics.gov.uk/documents/s175771/Leicestershire%20Resources%20and%20Waste%20Strategy%20Cabinet%20240423.pdf

13 December 2016 – Report to the Cabinet – 'Appraisal of Options for the Treatment/Disposal of Residual Waste Post-2020':

https://democracy.leics.gov.uk/documents/s125068/Treatment%20Disposal%20of%20Waste%20Post%202020%20FINAL.pdf

<u>Circulation under the Local Issues Alert Procedure</u>

26. None.

Equality Implications

27. There are no equality implications arising from the content of this report.

Human Rights Implications

28. There are no human rights implications arising from the content of this report.

Environmental Implications

29. As outlined in paragraph 15, there are no perceived environmental implications of this proposal. The high-level carbon modelling carried out within the FRM report resulted in no discernible variation across the options considered.

Appendix

Synopsis of the Report produced by Frith Resource Management consultants.

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