

North Lanarkshire Local Development Plan 2

Survey Paper - Evidence Report

Topic 12 - Zero Waste

Purpose of Topic Papers

We are currently identifying and assessing the evidence available for each policy topic area identified in NPF4 and the Scottish Government's local development planning guidance.

We will issue online surveys for each topic, or group of topics, outlining:

- the relevant information and datasets we have identified so far
- our assessment of the evidence gathered, based on the identified information and datasets
- any potential connections to other topic areas
- potential implications for site selection at the Proposed Plan stage, and
- potential implications for the Local Development Plan

This will be an early opportunity for you to confirm if we have identified the appropriate evidence, provide any other evidence you have or would like us to consider, and offer your views on our initial considerations of the use and implications of the available evidence.

We will then consider the responses to the surveys and what they mean for our evidence base. This will help inform the preparation of our Evidence Report later this year.

Some of the information gathered are particularly technical on a specific topic, and may not be relevant to everyone. We welcome comments on all or some of the information published. There will be more opportunities to comment as we progress through the LDP preparation process.

1. Introduction

- 1.1 The Planning (Scotland) Act 2019 requires Planning authorities to prepare an Evidence Report that contains sufficient information to enable the planning authority to prepare a Local Development Plan.
- 1.2 The Evidence Report has two main functions. The first is that it should set out the evidence that will be used to inform and prepare a new Local Development Plan. The second is for local authorities to identify the issues they think based on the evidence presented that need to be addressed by the new Local Development Plan, and for other interested parties and stakeholders to express what they think are the issues.
- 1.3 There are specific matters that the Evidence Report must cover; these are set out in the Planning (Scotland) Act 2019:
 - *the principal physical, cultural, economic, social, built heritage and environmental characteristics of the district;*
 - *the principal purposes for which the land is used;*
 - *the size, composition, health, and distribution of the population of the district;*

- *the housing needs of the population of the area, including, in particular, the needs of persons undertaking further and higher education, older people and disabled people;*
- *the availability of land in the district for housing, including for older people and disabled people;*
- *the desirability of allocating land for the purposes of resettlement;*
- *the health needs of the population of the district and the likely effects of development and use of land on those health needs;*
- *the education needs of the population of the district and the likely effects of development and use of land on those education needs;*
- *the extent to which there are rural areas within the district in relation to which there has been a substantial decline in population;*
- *the capacity of education services in the district;*
- *the desirability of maintaining an appropriate number and range of cultural venues and facilities (including in particular, but not limited to, live music venues) in the district;*
- *the infrastructure of the district (including communications, transport and drainage systems, systems for the supply of water and energy, and health care and education facilities);*
- *how that infrastructure is used; and*
- *any change which the planning authority thinks may occur in relation to any of the matters mentioned above.*

- 1.4 This topic paper examines the Zero waste evidence surrounding the Zero waste topic for the forthcoming North Lanarkshire Local Development Plan 2 (NLLDP2). The paper identifies what evidence and information has been sourced and subjected to an initial assessment as to the relevance of that evidence and information to NLLDP2.
- 1.5 Key points from the evidence and information on this topic are highlighted and potential future relevance is discussed with a view to this informing the approach in progressing the Evidence Report and NLLDP2 more generally.
- 1.6 The final Evidence Report will detail the stakeholder engagement and public survey that has taken place in developing its conclusions and will highlight the agreements and disputes that have arisen through this process.

2. Identification of Relevant Evidence

- 2.1 The relevant evidence has been identified through an evaluation of the Zero waste topic and assessment of available information linked to the topic. Where available evidence shared by external stakeholders has been included. Should additional evidence become available we will consider its implications for the Evidence Report.

3. Consideration of Relevant Evidence

- 3.1 The following are datasets, national standards and/or regional benchmarks which have been used in this Survey Paper and are considered relevant for NLLDP2.

Main Evidence considered:

Source: The Plan for North Lanarkshire (2019)

Reason for using the Evidence: The plan sets out the vision for North Lanarkshire to be a place to Live, Learn, Work, Invest and Visit. NLLDP2 will be a tool to assist

in the realisation of this vision. The vision consists of five priorities that are comprised of 25 high level Ambition Statements. These statements amongst other issues cover refocussing town centres, maximising the use of marketable land, and maintaining a clean, safe and attractive environment and specific to this topic look to ensure we keep our environment clean, safe and attractive.

Links to Evidence: [The Plan for North Lanarkshire](#)

Source: Scotland's Zero Waste Plan 2010

Reason for using the Evidence: The Zero Waste Plan was intended to create a stable framework that would provide confidence for the investment necessary to deliver a zero waste Scotland over the next 10 years.

Links to Evidence: [Scotland's Zero Waste Plan](#)

Source: Waste Scotland Regulations: Zero Waste Scotland

Reason for using the Evidence: Scotland's waste regulations have changed for all organisations, whether private public or voluntary. Since 1 January 2014, the Waste (Scotland) Regulations have been in force.

Links to Evidence: [Waste \(Scotland\) Regulations | Zero Waste Scotland](#)

[The Waste \(Scotland\) Regulations 2012](#)

Source: Making Things Last – A Circular Economy Strategy for Scotland (2016)

Reason for using the Evidence: This strategy sets out Scottish Government priorities for moving towards a more circular economy – where products and materials are kept in high value use for as long as possible. It builds on Scotland's progress in the zero waste and resource efficiency agendas. A more circular economy will benefit:

- the environment – cutting waste and carbon emissions and reducing reliance on scarce resources;
- the economy – improving productivity, opening up new markets and improving resilience; and
- communities – more, lower cost options to access the goods we need with opportunities for social enterprise.

Links to Evidence: [Making Things Last: A Circular Economy Strategy for Scotland](#)

Source: Climate Change Plan – The Third Report on Proposals and Policies 2018-2032

Reason for using the Evidence: The Plan comprises three parts: Part One sets out the context for the Scottish Government's climate change proposals and policies. The Scottish Government's statutory duties are covered in Part Two

(Statutory duties, methodologies and monitoring), alongside our annual emissions targets to 2032. Part Three of the Plan provides detailed information on the emissions envelopes and emissions reduction trajectories for each sector.

Links to Evidence: [Climate Change Plan: The Third Report on Proposals and Policies 2018-2032](#)

Source: Scotland's Circular Economy and Waste Route Map to 2030 Consultation (2024)

Reason for using the Evidence: Founded on evidence and collaboration, the Route Map is part of the Scottish Government's wider response to these challenges, sitting alongside a range of other strategies and plans. Delivery of the Circular Economy and Waste Route Map is a key commitment set out in the Scottish Programme for Government 2023-2024. It is designed to drive progress on three key fronts:

- Setting the strategic direction and laying foundations for how we will deliver our system-wide, comprehensive vision for Scotland's circular economy from now to 2030 – based on Responsible Production, Responsible Consumption, and Maximising Value from Waste and Energy.
- Setting out priority actions from now to 2030 to accelerate more sustainable use of our resources across the waste hierarchy. We acknowledge the progress we have made against our existing 2025 waste reduction and recycling targets, the areas we have fallen short, and the lessons we can learn as we set out the framework for what comes next.
- Reducing emissions associated with resources and waste. In 2024, the Scottish Government will set out how it will continue to drive down emissions in a draft Climate Change Plan (CCP). The Route Map sets out the opportunities we will take to decarbonise the waste sector.

Links to Evidence: [Scotland's Circular Economy Waste Route Map to 2030 Consultation](#)

Source: Stop, Sort, Burn, Bury? – Independent Review of the Role of Incineration in the Waste Hierarchy in Scotland

Reason for using the Evidence: The Independent Review of the Role of Incineration in the Waste Hierarchy ('the Review') commenced in November 2021, with this report being delivered in April 2022. The Review set out to answer five key questions:

1. Given Scotland's waste management ambitions and current progress towards these, what capacity is required to manage residual waste in Scotland?
2. What are the options for managing residual waste?
3. What are the economic, environmental and social trade-offs of those residual waste management options?
4. How do we decide where capacity should be located, and in what form?

5. What can be done to improve existing residual waste treatment facilities in terms of carbon performance and societal impacts?

Links to Evidence: [Stop, Sort, Burn, Bury](#)

Source: SEPA Waste Data

Reason for using the Evidence: SEPA is responsible for reporting national waste statistics to the Scottish Government and European Union among others. As regulator, SEPA also has a duty to assess whether waste management sites comply with the conditions of their licence or permit.

To do this, SEPA collects and verifies data from a number of sources, mainly:

- Operators of all licensed and most permitted waste management sites
- Operators of certain activities exempt from full waste management licensing
- Local authorities.

Links to Evidence: [Waste data | Scottish Environment Protection Agency \(SEPA\)](#)

[SEPA Waste Data Reporting](#)

[SEPA Scotland's Waste Sites and Capacity Data Tool](#)

[SEPA Scottish Household Waste Data Analysis Tool](#)

[SEPA Scotland's Environment Waste Discover Data Tool](#)

[SEPA Business Waste Data](#)

Source: Calculation Methodology for Waste Management Infrastructure Capacity Estimates 2018 Data (published December 2020)

Reason for using the Evidence:

This document describes how SEPA uses operator-provided waste data to populate the waste management infrastructure capacity requirements for the Scottish Government's circular economy strategy for Scotland, [Making Things Last: A Circular Economy Strategy for Scotland](#)

Links to Evidence: [SEPA Calculation Methodology for Waste Management Infrastructure Capacity Estimates 2018 Data \(Published December 2020\)](#)

Source: REA – The Association for Renewable Energy and Clean Technology

Reason for using the Evidence: This Map shows all operational anaerobic digestion plants in the UK (excluding water treatment facilities). It is provided courtesy of the NNFFC.

Links to Evidence: [UK Anaerobic Digestion Sites Map - REA \(r-e-a.net\)](#)

Source: Extended Producer Responsibility (Zero Waste Scotland October 2023)

Reason for using the Evidence: The concept of extended producer responsibility (EPR) is about ensuring that producers bear responsibility for the environmental impacts of products they place on the market, and are incentivised to reduce these impacts.

Links to Evidence: [Extended Producer Responsibility | Zero Waste Scotland](#)

Source: Scottish Government Consultation: Code of Practice on Sampling and Reporting at Materials Facilities.

Reason for using the Evidence: The Scottish Government intends to issue a new Code of Practice on Sampling and Reporting at Materials Facilities to replace the current Code issued on 2 March 2015. The draft Code was open for consultation until 19 April 2024.

Links to Evidence: [Code of Practice on Sampling and Reporting at Materials Facilities: Scottish Government Consultation Draft](#)

Dataset Name / Source: Scottish Government: Managing Waste – Deposit Return Scheme

Reason for the use of the Dataset

(relevance, interlinkages, currency, etc): The Scottish Government are committed to introducing a deposit return scheme (DRS) for single-use drinks containers in Scotland. This will help increase recycling, reduce litter and meet our climate change targets. They have announced plans to delay the launch of the scheme until October 2025 at the earliest. This is when other nations in the UK plan to launch their own schemes.

Links to Dataset / Evidence: [Deposit return scheme - Managing waste - Scottish Government](#)

Source: Charter for Household Recycling (7th March 2023)

Reason for using the Evidence: The Scottish Government and CoSLA have agreed a Household Recycling Charter that aims to bring more consistency to recycling services. It aims to:

- A promise to enhance household waste and recycling services to increase resource recovery and improve their quality;
- the ability to customise services to meet the unique needs of all citizens, regardless of their household type or location;
- an opportunity to encourage citizens to participate in recycling and reuse services, ensuring that resources are fully utilised;
- commitment to operating services in a way that guarantees staff safety, competence, and fair treatment, with the necessary skills to deliver effective and efficient resource management on behalf of communities.

Links to Evidence: [Charter for Household Recycling | Zero Waste Scotland](#)

Source: Scottish Government – Food Waste Reduction: Action Plan

Reason for using the Evidence: Scotland is addressing its food waste problem with this ambitious Action Plan designed to: reduce unnecessary demand for food;

improve how we produce, store and cook food so that we waste less; increase food recycling rates and; make better use of food waste as an organic resource. By tackling issues at every level in the food waste hierarchy, Scotland plans to meet its ambitious target to reduce its food waste by one third by 2025. This means that the country must prevent around 297,000 tonnes of food waste each year.

Links to Evidence: [Scottish Government: Food waste reduction: action plan](#)

4. **Assessment of Evidence**

National Context - Zero Waste Plan (2010)

- 4.1 This Zero Waste Plan is intended to create a stable framework that will provide confidence for the investment necessary to deliver a zero waste Scotland with its mission to make the most efficient use of resources by minimising Scotland's demand on primary resources, and maximising the reuse, recycling and recovery of resources instead of treating them as waste.
- 4.2 This vision describes a Scotland where resource use is minimised, valuable resources are not disposed of in landfills, and most waste is sorted into separate streams for reprocessing, leaving only limited amounts of waste to go to residual waste treatment, including energy from waste facilities.
- 4.3 A zero waste Scotland will:
- be where everyone – individuals, the public and business sectors - appreciates the environmental, social and economic value of resources, and how they can play their part in using resources efficiently;
 - reduce Scotland's impact on the environment, both locally and globally, by minimising the unnecessary use of primary materials, reusing resources where possible, and recycling and recovering value from materials when they reach the end of their life;
 - help to achieve the targets set in the Climate Change (Scotland) Act 2009 of reducing Scotland's greenhouse gas emissions by 42% by 2020 and 80% by 2050;
 - contribute to sustainable economic growth by seizing the economic and environmental business and job opportunities of a zero waste approach.

The principle of the waste hierarchy as set out in the European Waste Framework Directive is central to this vision. The hierarchy identifies the prevention of waste as the highest priority, followed by reuse, recycling, recovery of other value (eg, energy), with disposal as the least desirable option.

Waste (Scotland) Regulations 2012

- 4.4 The Waste (Scotland) regulations were passed by the Scottish Parliament on 9 May 2012. They address both domestic and commercial/industrial waste. The Waste (Scotland) Regulations 2012 have three key action points:
- The Scottish Government will introduce progressive bans on the types of materials that may be disposed of in landfill to ensure that no resources with a value for reuse or recycling are sent to landfill by 2020 (this has been delayed to 1st January 2026);
 - The Scottish Government will introduce regulations to drive separate collection and treatment of a range of resources in order to maximise their reuse and recycling value, and generate market supply;

- The Scottish Government will introduce regulatory measures to support the delivery of landfill bans, by ensuring energy from waste treatment is only used to recover value from resources that cannot offer greater environmental and economic benefits through reuse or recycling.

The regulations also set out the requirement for businesses to collect dry mixed waste separately (glass, paper and cardboard, plastic and metal). Businesses that create 5kg or more of food waste per week must have separate collections for it.

Circular Economy Strategy for Scotland (2016)

- 4.5 Making Things Last, A Circular Economy Strategy for Scotland was launched in 2016 and sets out priorities for moving towards a more circular economy – which means keeping products and materials in high value states for as long as possible.
- 4.6 A circular economy is designed to **reduce** the demand for raw materials in products, to encourage **reuse**, and **repair** by designing products and materials to last as long as possible and **recycle** waste and energy to maximise the value of any waste that is generated in line with the waste hierarchy:



- 4.7 The transition to a more circular economy would reduce and minimise demand for new resources whilst maximising the reuse, recycling and recovery of resources, rather than treating them as waste and ultimately would benefit:

The environment – by cutting waste production and carbon emissions;

The economy – by improving efficiency and productivity and opening new markets;

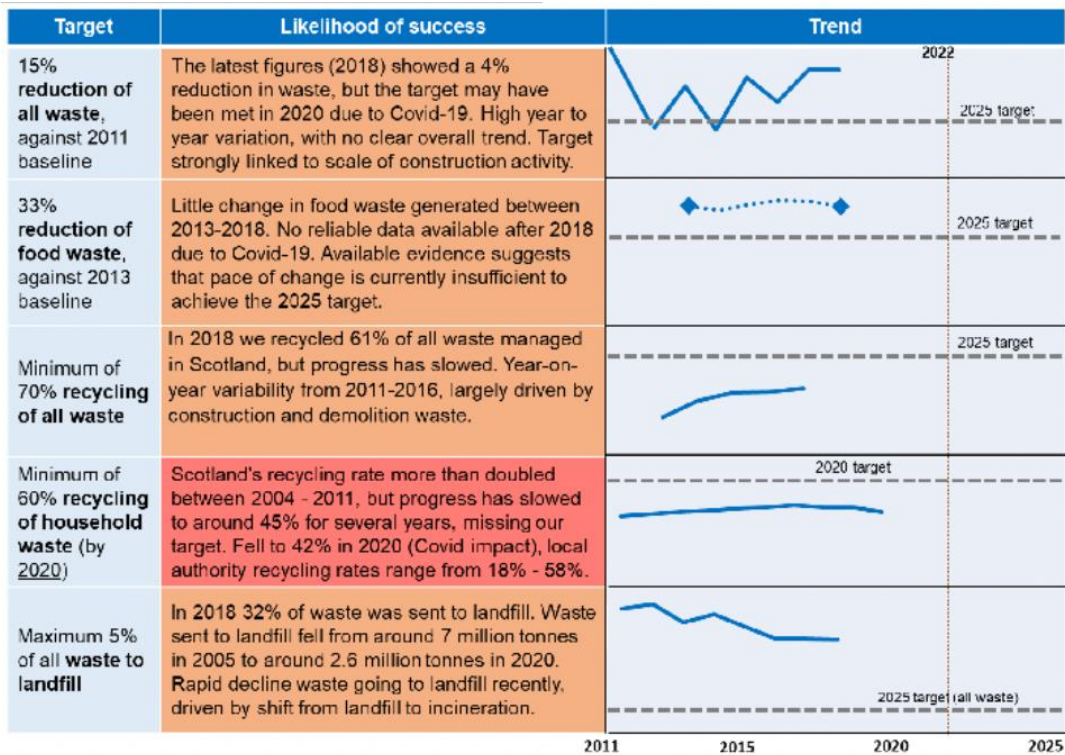
Communities – through more, lower cost options to access goods.

Scottish Government Waste Targets 2025 and Beyond

- 4.8 The Scottish Government is committed to moving towards a circular economy and addressing the climate emergency. They have set five ambitious waste and recycling targets, that span the waste hierarchy, to drive progress towards these goals:
- 15% reduction of all waste by 2025, against 2011 levels
 - 33% reduction of food waste by 2025, based on 2013 baseline
 - Minimum of 60% recycling of household waste by 2020
 - Minimum of 70% recycling of all waste by 2025
 - Maximum 5% of all waste to landfill by 2025, and a ban on all biodegradable waste going to landfill by 2025

4.9 Despite the significant strides Scotland has made, the Scottish Government acknowledges that they are not on track to meet their ambitious waste and recycling targets (Figure 1).

Figure 1: Progress towards Scotland's 2025 waste and recycling targets since 2011.



Key: Red indicates a missed target, orange indicates a target at risk. Source: Delivering Scotland's Circular Economy – Route Map to 2025 and beyond (May 2022)

4.10 The Circular Economy Route Map is a strategic plan to achieve Scotland's zero waste and circular economy ambitions, and to contribute to wider net zero ambitions, including the major policy interventions and milestones required to achieve this ambition. The proposed priorities of the route map are to:

- Encourage sustainable consumption and production practices, which involve reducing the use of single-use items, advocating for thoughtful product design and management, and integrating reuse as a mainstream practice.
- Minimise food waste generated by households and businesses through effective management and reduction strategies.
- Enhance recycling efforts within households and businesses by implementing more effective recycling practices.
- Incorporate circular construction methods, which may involve encouraging the renovation of buildings through incentivisation measures.
- Reduce and minimise the environmental impact of waste disposal for materials that cannot be repurposed or recycled.
- Enhance data collection and analysis capabilities, promote sustainable procurement practices, and bolster skills development and training initiatives.

The route map is partnered with the Circular Economy Bill, which was approved in June 2023. The route map was consulted on in 2022 and it is anticipated that the route map will be published in 2024.

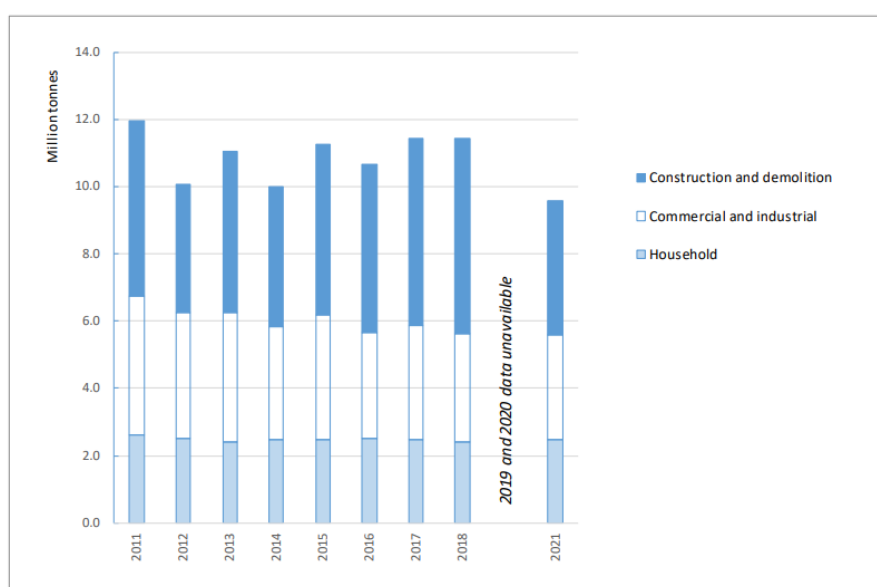
4.11 To minimise the impact of the disposal of waste Scottish Government propose to develop a Residual Waste Plan by 2024; it will aim to ensure that the management of residual waste meets net zero targets. There has also been a review of the role of incineration (Stop, Sort, Burn, Bury? – Report May 2022) in Scotland’s waste hierarchy which recommends that no further planning permission is granted to incineration infrastructure unless balanced by a close of capacity. The approved NPF4 policy 12 supports this position by not supporting energy from waste proposals except under very limited circumstances.

Scotland’s Generation of Waste From All Sources (WFAS)

4.12 The waste generated in Scotland is divided into three categories:

- commercial and industrial waste;
- construction and demolition waste; and
- household waste.

Figure 2. Scottish WFAS generated by source 2011-2021



Source: [SEPA Waste from all sources - Summary Data 2021](#)

Table 1. Scottish WFAS generated by source 2011-2021 (tonnes)

Year	Household	Commercial and industrial	Construction and demolition	Total waste generated
2011	2,606,759	4,156,052	5,195,676	11,958,486
2012	2,500,995	3,764,847	3,796,997	10,062,839
2013	2,412,651	3,857,040	4,789,809	11,059,501
2014	2,459,557	3,369,844	4,172,782	10,002,184
2015	2,468,777	3,714,681	5,092,646	11,276,104
2016	2,498,975	3,154,992	5,027,759	10,681,726
2017	2,460,830	3,399,736	5,592,888	11,453,454
2018	2,405,251	3,236,534	5,808,681	11,450,466
<i>2019 and 2020 data unavailable</i>				
2021	2,483,304	3,259,301	4,007,471	9,750,076

Source: [SEPA Waste from all sources - Summary Data 2021](#)

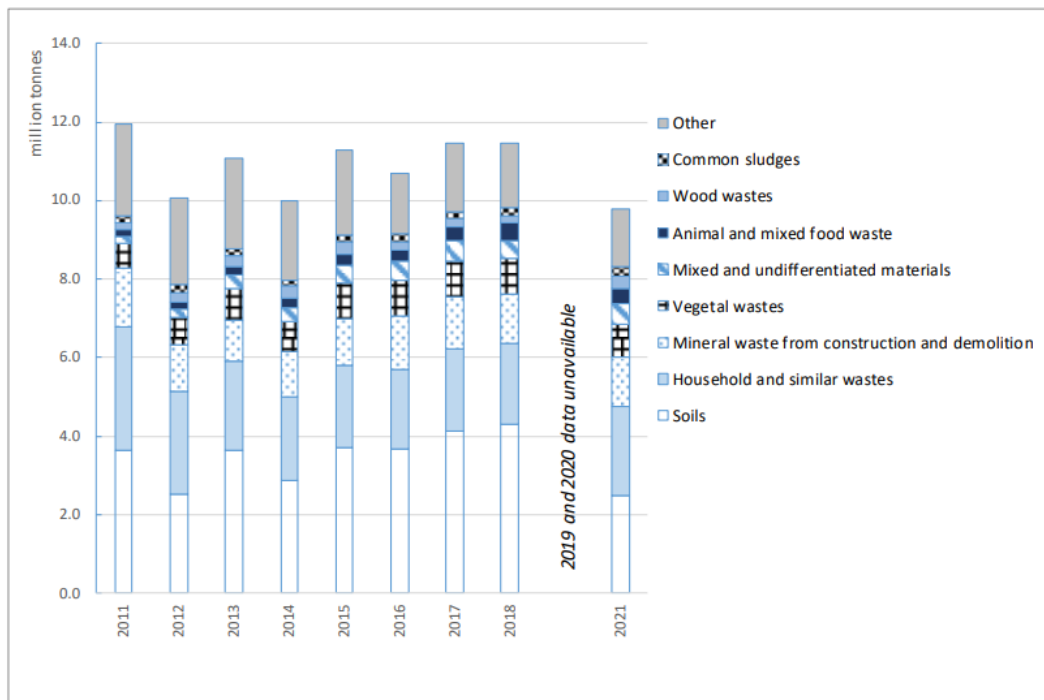
4.13 Commercial and industrial waste includes waste from the following sources:

- Agriculture, forestry and Fishing;
- Commerce;
- Manufacture of chemicals, plastics and pharmaceuticals;
- Manufacture of food and beverage products;
- Manufacture of wood products;
- Mining and quarrying;
- Other manufacturing;
- Power industry;
- Waste management; and
- Water Industry

Excluding construction and demolition waste from the data reveals a general decrease in waste generation in Scotland since 2011. However, trends suggest that meeting Scotland's 15% waste reduction target will largely depend on the management of construction and demolition waste (Scottish Government Technical Annex: Delivering Scotland's Circular Economy – Route Map to 2025 and beyond (May 2022) page 7). The approved NPF4 policy on waste prioritises the reduction and reuse of materials in construction.

- 4.14 Figure 2 illustrates that construction and demolition activities contribute approximately 50% of the waste generated in Scotland. However, the volume of this waste fluctuates annually based on the activity level of the construction industry and the implementation of large-scale regional projects. Since waste from construction and demolition is only reported at the national level, data specific to North Lanarkshire is not available.
- 4.15 In 2021, the largest waste category generated in Scotland was soils, amounting to 2.50 million tonnes, representing 25.6% of all waste generated. This was followed by household and similar wastes at 2.27 million tonnes (23.3%), and mineral waste from construction and demolition at 1.24 million tonnes (12.7%) (refer to Figure 3 below). However, the generation of soils decreased by 1.79 million tonnes (41.8%) from 2018, while mineral waste from construction and demolition decreased by 35,000 tonnes (2.7%).
- 4.16 Since 2011 well over 90% of all construction and demolition waste has been recycled and in 2018 the figure was up to 99.7% and whilst dropping to 89.4% in 2021 (SEPA Waste from all sources – summary data 2018 page 4) is still above the target of the re-use and recycling of 70% (by weight) of construction and demolition waste by 2020, which was set in Article 11(2)(b) of the revised EU Waste Framework Directive, has been met nationally.
- 4.17 Construction and demolition waste comprises a diverse range of materials, including wood, brick, glass, and plastic, each with varying potential for reuse and recycling. Certain materials, like plastic, can be recycled using household processes, while others, such as bricks, can be effectively reused. However, some materials are broken down and ultimately landfilled. Notably, waste reduction has been observed in the wood waste category, which is increasingly directed to biomass plants or reused, rather than being disposed of in landfills. Zero Waste Scotland has developed a guide titled "Maximising Reuse of Materials On Site," focusing on strategies for reusing and recycling construction materials directly at construction sites.

Figure 3. Scottish WFAS generated by waste category 2011-2021



Source: [SEPA Waste from all sources - Summary Data 2021](#)

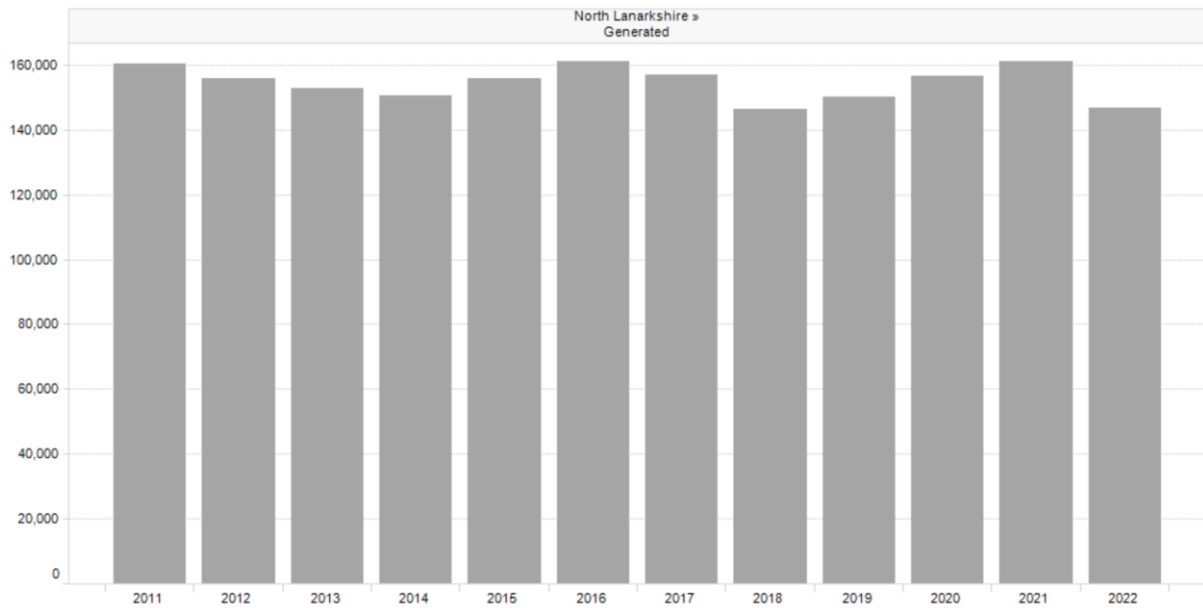
North Lanarkshire Context

4.18 The waste reduction targets set by the Scottish Government include a 15% decrease in all waste generated compared to a 2011 baseline by 2025. Waste arisings, as defined by SEPA, refer to the quantity of waste produced within a specific area over a given time frame. However, it may not be feasible to directly measure this target for North Lanarkshire due to limited data availability, particularly regarding certain waste types like construction and demolition, which are only reported at the national level. Nonetheless, data on household and business waste generated in North Lanarkshire is accessible through SEPA, with the latest figures available for household waste from 2022 and for business waste from 2021.

Table 2. North Lanarkshire Household Waste Generated 2011 - 2022

Local Authority	Year	Generated (tonnes)
North Lanarkshire	2011	160,246
	2012	155,837
	2013	152,725
	2014	150,309
	2015	155,937
	2016	160,914
	2017	156,813
	2018	146,175
	2019	149,977
	2020	156,612
	2021	161,070
	2022	146,546

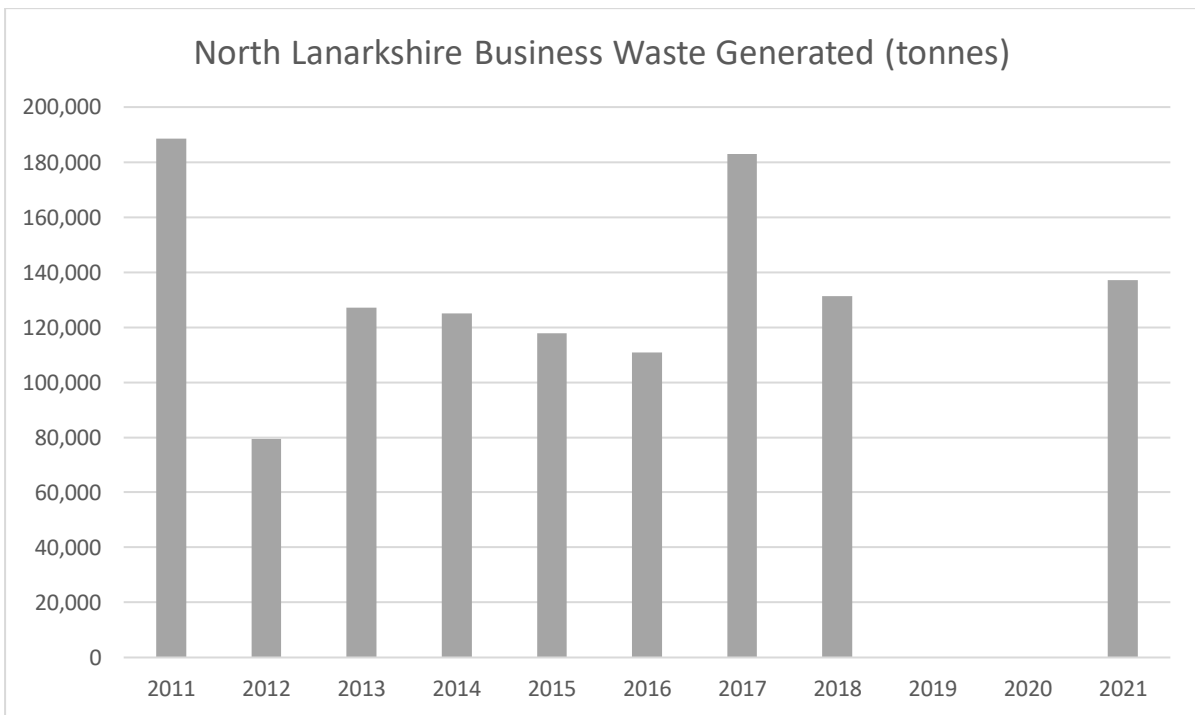
Figure 4. North Lanarkshire Household Waste Generated



Source: [SEPA - Household Waste Data 2011 - 2022](#)

4.19 Figures 4 indicate that in terms of household waste the totals have fluctuated downward but then upward over the period 2011 to 2022 which whilst showing a reduction of approximately 15% in the 2022 compared to the 2011 total there is no downward trend to indicate that this reduction will be maintained in line with the 15% reduction target set by the Scottish Government.

Figure 5. North Lanarkshire Business Waste Generated



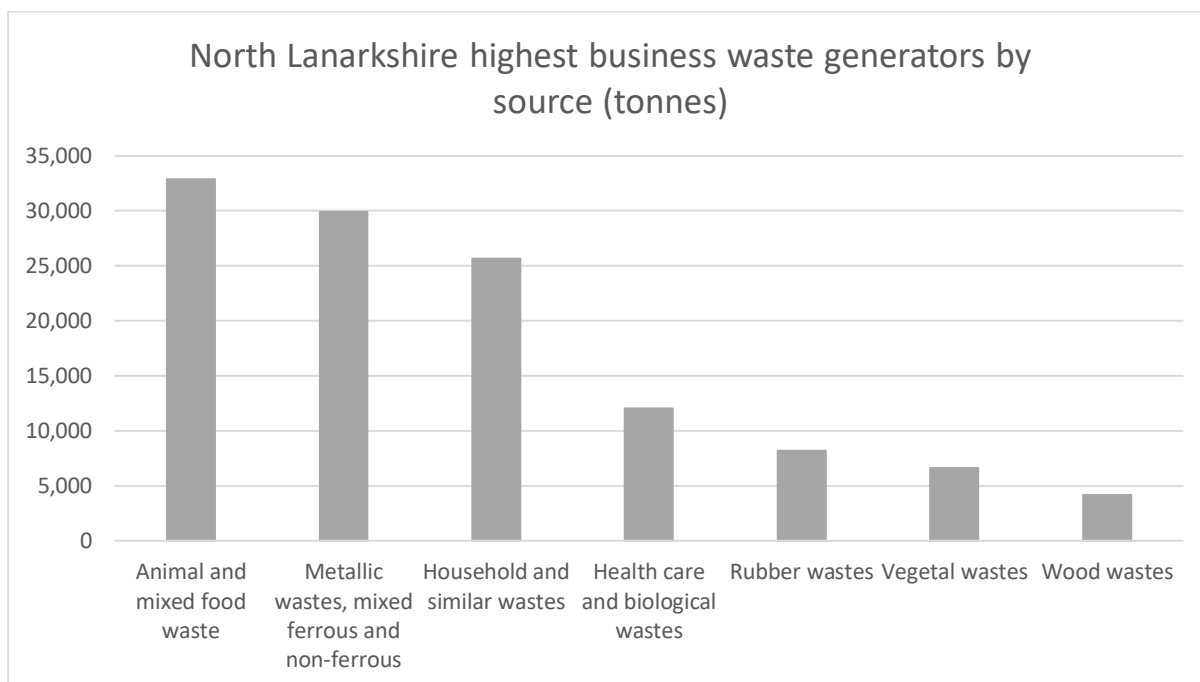
Source: [Business waste data | Scottish Environment Protection Agency \(SEPA\)](#)

4.20 Figure 5 shows business waste which having had a sharp reduction in 2012 have risen and steadily fluctuated – including a sharp rise to almost 2011 levels in 2017

which appears to be an outlier in terms of the general reduction in waste from business within North Lanarkshire.

- 4.21 Figure 6 illustrates the primary sources of business waste in North Lanarkshire, highlighting a substantial volume of animal and mixed food waste, metallic wastes and household and similar wastes which make up 88,377 tonnes or 64.5% of business waste generated within North Lanarkshire.

Figure 6. North Lanarkshire Highest Business Waste Generators



Source: [SEPA 2021 Business Waste Tables by local Authority Area](#)

Waste Management – Landfill and Recycling North Lanarkshire and National Comparison

- 4.22 In terms of North Lanarkshire no business waste is landfilled as this is treated under the Clyde Valley Residual Waste Contract and is sent to the EDF plant. Household kerbside residual waste is also treated under the same CVRW contract however household residual waste is sent to landfill through another waste disposal contract with limited recovery of recyclable materials. Information from SEPA on household waste noted in Figures 7 and 8 which show that the amount of waste being sent to landfill has been reducing in the period of 2011 to 2022. Whilst in North Lanarkshire the amount of waste going to landfill has also decreased over this period but with a sharp drop in 2019 and 2020 and nominal increases in 2021 and 2022. North Lanarkshire over the period of 2011 to 2022 has dropped waste going to landfill by approximately 70% in that period. If you compare with Figure 4 above whilst the generation of waste has remained fairly consistent, the amount of waste going to landfill has significantly decreased within this period.
- 4.23 In terms of recycling Figure 9 below shows that the amount waste recycled within North Lanarkshire has also remained fairly consistent within the period of 2011 to 2022. It is noted that the Scottish Government target for household recycling to reach 60% of the total waste disposal has not been achieved by North Lanarkshire which currently sits at around approximately 42% in terms of household waste.

Figure 7. Scottish Household Waste – Landfilled (million tonnes) 2011 - 2022

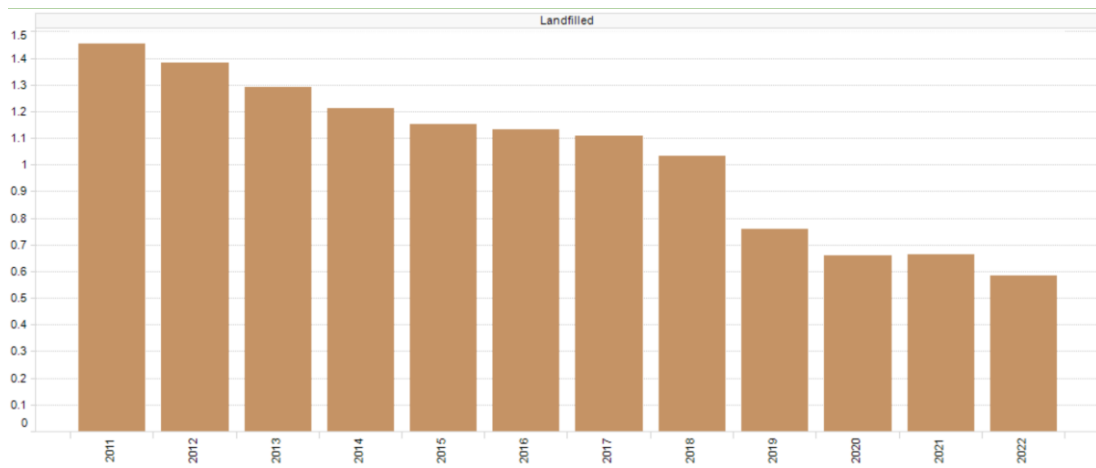


Figure 8. North Lanarkshire Household Waste – Landfilled (tonnes) 2011 - 2022

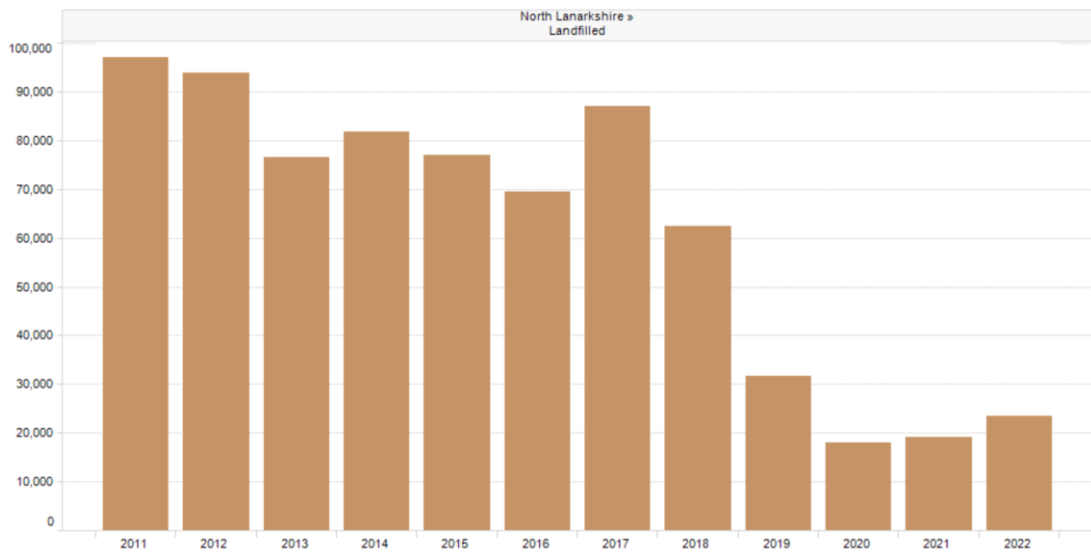
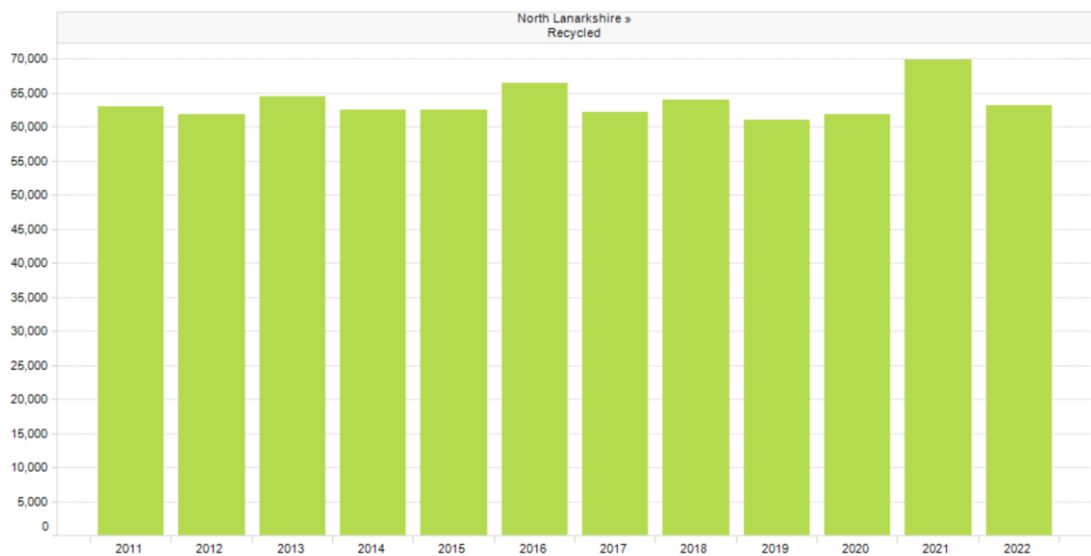


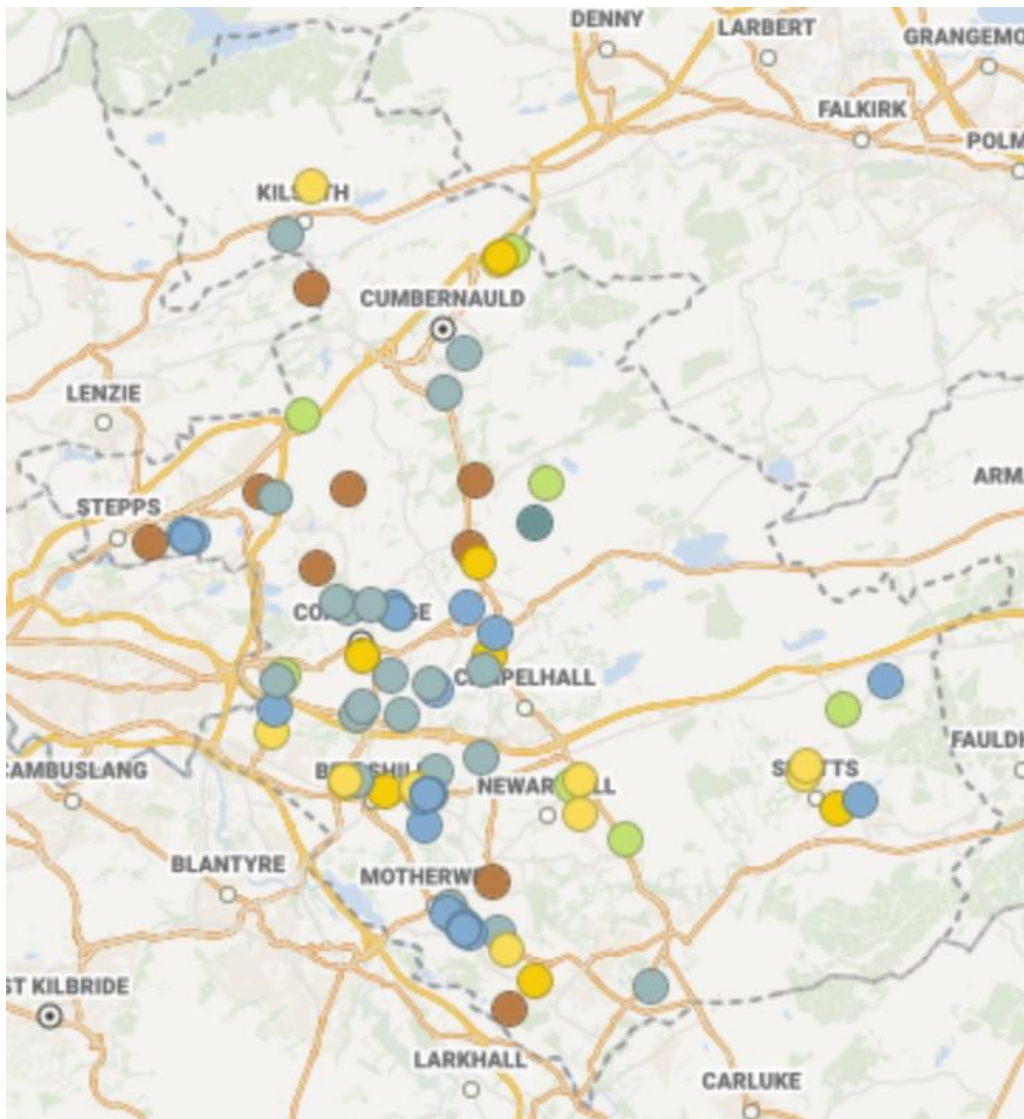
Figure 9. North Lanarkshire Household Waste – Recycled (tonnes) 2011 - 2022



Sources: [SEPA - Household Waste](#)

Waste Management Infrastructure

Figure 10. North Lanarkshire Household Waste – Recycled (tonnes) 2011 - 2022



Color by:
Site Type

- Civic amenity / recycling centre
- Incineration or co-incineration
- Landfill
- Metal recycler
- Multiple activity site
- Other treatment
- Transfer station

Source: [SEPA Waste Sites and Capacity Tool](#)

- 4.24 Various waste management facilities in North Lanarkshire operate across different tiers of the waste management hierarchy, ranging from landfill sites to civic amenity / recycling centres. Figure 10 above provides an overview of the locations and categories of waste management sites in the region. Detail on the capacity of these waste sites and their operational status is available in the SEPA Waste Sites Capacity

Tool for North Lanarkshire 2022 data from SEPA. The table below shows the 2022 SEPA list of operational waste facilities within North Lanarkshire with details of the operator, site address, their waste capacity and waste types:

Figure 11. SEPA Licenced Sites and Capacity Table 2022

Operator Organisation	Site Name and or Address	Waste Capacity (annual) on permit (tonnes)	Waste Type
FCC WASTE SERVICES (UK) LIMITED	Greengairs Landfill, Meikle, Drumgray Road, Airdrie, ML6 7TD	1,300,000	Household / Commercial / Industrial / Special asbestos / Inert
REIGART CONTRACTS LIMITED	16 Hornock Road, Gartgill, Coatbridge, ML5 2QJ	730,150	Household / Commercial / Industrial / Other special / Special asbestos / Inert
REIGART CONTRACTS LIMITED	Drumcavel Quarry, Mount Ellen, Gartcosh	657,000	Commercial
PATERSONS OF GREENOAKHILL LIMITED	Beltmoss Quarry, Tak-Ma-Doon Road, Kilsyth, G65 0RS	450,000	Industrial / Inert
VIRIDOR DUNBAR WASTE SERVICES LIMITED	Bargeddie MRF, Langmuir Way, Glasgow	394,000	Household / Commercial
SIBELCO GREEN SOLUTIONS UK LIMITED	Newhouse Glass Recycling Facility, 5 Dalhousie Business Park, Mossband Farm, Motherwell Road, Newhouse, ML1 5ST	210,000	Commercial
ENERGEN BIOGAS LIMITED	2 Dunnswood Road, Wardpark South, Cumbernauld, G67 3EN	121,135	Household / Commercial / Industrial
NORTHBURN OILS LIMITED	Northburn Road, Coatbridge, ML5 2HY	107,905	Other special
HENDERSON KERR LIMITED	Kirklee Road, Mossend, Bellshill, ML4 2QW	102,750	Household / Commercial / Industrial / Other special
DIVERSE INVESTMENT SCOTLAND T/A NEW TOWN SKIP	22 Albert Street, Motherwell, ML1 1PR	100,000	Household / Commercial / Industrial
TIMBERPAK LIMITED	Unit 11, Belgrave Street, Bellshill Industrial Estate, Bellshill, ML4 3NP	100,000	Commercial
HENRY WASTE MANAGEMENT LIMITED	Coltswood Road, Coatbridge, ML5 2AA	74,000	Household / Commercial / Industrial
DOW GROUP LIMITED	23 Lenziemill Road, Cumbernauld, G67 2TY	70,000	Household / Commercial / Industrial
UK RUBBER LIMITED	Dalzell Works, Park Street, Motherwell	62,050	Commercial
MULBERRY WASTE (SCOTLAND) LIMITED	Bredisholm Refinery, Tannochside Works,	51,732	Commercial / Industrial / Other special

	Aitkenhead Road, Uddingston, G71 5PN		
OLLECO	4-6 Palacecraig Street, Coatbridge, ML5 4RY	40,100	Commercial
CAMERON DALZIEL SKIP HIRE LIMITED	21B Meadow Road, Motherwell, ML1 1QB	31,000	Commercial
NORTH LANARKSHIRE COUNCIL	Wardpark Court, Wardpark, Cumbernauld, G67 1DZ	22,510	Household / Commercial
NORTH LANARKSHIRE COUNCIL	Land south of Unit K, Stobcross Street, Coatbridge, ML5 1BE	22,500	Household / Commercial / Industrial / Other special
NORTH LANARKSHIRE COUNCIL	14-17 Netherdale Road, Netherston Industrial Estate, Wishaw, ML2 0JG	22,500	Household / Commercial / Industrial / Other special
SCRL LIMITED	South Wardpark Court, Cumbernauld, Glasgow, G67 3EH	16,000	Household / Commercial / Industrial / Other special
NORTH LANARKSHIRE COUNCIL	Lady Ann Crescent, Airdrie	12,500	Household / Commercial / Industrial
NORTH LANARKSHIRE COUNCIL	Reema Road, Bellshill, ML4 1RR	12,500	Household / Commercial / Industrial
DALTONS DEMOLITIONS LIMITED	Atlas Works, Carlisle Road, Airdrie, ML6 8AB	12,000	Household / Commercial / Industrial / Special asbestos
HEALTHCARE ENVIRONMENTAL SERVICES LIMITED	Hassockrigg Ecopark, Shotts Road, Shotts, ML7 5TQ	10,000	Household / Commercial / Other special
NORTH LANARKSHIRE COUNCIL	Foundry Road, Shotts	7,500	Household
AUTORECYCLING LIMITED	Cardean Road, Mossend Goods Yard, Bellshill	5,000	Household / Commercial / Industrial / Other special
STRATHCLYDE ALLOYS PROCESSES	323 Orbiston Street, Motherwell, ML1 1QN	5,000	Commercial
EUROJAPS SCOTLAND LIMITED	Unit B, Northburn Road, Northburn Industrial Estate, Coatbridge	5,000	Household / Commercial
MUIRHEAD AUTOPARTS LIMITED	Unit 2, Woodhead Industrial Estate, Muirhead	4,999	Household / Commercial / Industrial / Other special
MURFITTS INDUSTRIES LIMITED	Condor Glen, Holytown	4,200	Commercial
PRO TYRE RECYCLING LIMITED	Unit 14, Centre Space 5, 1 Calderhead Road, Shotts, ML7 4EQ	3,432	Industrial
RENTOKIL INITIAL UK LIMITED	Units 4 & 5, M8 Interlink, Coatbridge, ML5 4RP	2,500	Commercial / Other special
DHL SUPPLY CHAIN LIMITED	Logistics Depot, 10 Woodrow, Mossend, Eurocentral, ML1 4YQ	2,499	Commercial

RENAULT SPARES	Stable Road, Shotts, ML7 5DR	2,000	Household / Commercial / Industrial
EASDALE ENVIRONMENTAL DEVELOPMENTS LIMITED	6A Mid Road, Balirlinn Industrial Estate, Cumbernauld	1,397	Commercial / Other special
BELLSHILL AUTOBREAKERS	Yard 4, Cardean Road, Mossend, ML4 1EF	999	Household / Commercial / Industrial / Other special
STEWART METALS LIMITED	Station Road, Muirhead, Glasgow, G69 9EZ	880	Household / Commercial / Industrial / Other special
SCOTTISH WATER	Deerdykes Composting & Organics Recycling Facility, Old Quarry Road, Cumbernauld, G68 9NB		Household / Commercial / Industrial
ON-SITE PROJECT SERVICES LIMITED	6-10 Janetsmith Street, Etna Industrial Estate, Wishaw, North Lanarkshire, ML2 7XJ		
IMPACT RECYCLING LIMITED	Building 1, 100 Inchinnan Road, Bellshill, ML4 3JA		Commercial

Source: [SEPA Waste Sites and Capacity Tool](#)

- 4.25 The changes in legislation and advancements in waste collection and processing methodologies will necessitate a shift in the approach to waste collection, management, and processing. Anticipated demands for new waste management infrastructure are expected to primarily revolve around waste processing, aligning with the transition towards a circular economy and the impending landfill ban. This processing may entail activities such as material sorting for external transport or varying degrees of on-site processing to render materials reusable.
- 4.26 SEPA has developed a Calculation methodology for waste management infrastructure capacity estimates (2020) to support Scottish Governments Circular Economy Strategy.
- 4.27 The methodology assesses the quantity of waste currently landfilled and determines how waste will be managed in 2025 given the targets for recycling 70% and landfilling no more than 5% of the waste from all sources, and the ban on sending biodegradable waste to landfill by 2025.
- 4.28 The additional capacity required is presented regionally and the allocation is based on the proportion of waste generated in the specified area in relation to total waste generated in Scotland and three types of additional capacity are presented:
- Tonnes of additional capacity
 - Additional capacity needed to manage source segregated waste
 - Additional capacity needed to manage unsorted waste.
- 4.29 North Lanarkshire sits within the Glasgow and Clyde Valley plan (GCVplan) area and the following additional capacity information is available for these areas in the Scottish Planning Policy (SPP) Waste Capacity Infrastructure Tables (2018 data) finalised

December 2020 (see tables 1 and 2). This data is not available at local authority level so we do not have required capacity figures for Fife from the document.

Regional capacity calculations for Scottish Planning Policy (SPP) (2018 data)

Table 1: Additional operational waste management infrastructure capacity required to meet the Making Things Last targets (tonnes)

	GCVplan
Total additional diversion capacity needed	535,000
Additional capacity needed to manage source segregated recyclables*	230,000
Additional capacity needed to manage unsorted waste†	305,000

Reported to nearest 5,000 tonnes.

Table 2: Ten year rolling landfill capacity required (tonnes)

	GCVplan
10 year capacity of existing landfill infrastructure	5,700,000
10 year landfill required capacity	4,000,000

Reported to nearest 10,000 tonnes

** clean MRF, AD, composting, and other e.g. baling, shredding and cleaning source segregated recyclables*

† dirty MRF, MBT, MHT, EFW

- 4.30 This data is not available at local authority level so we do not have required capacity figures for North Lanarkshire from the document as it is for the Glasgow and Clyde Valley area only. The additional recycling capacity mentioned in table 1 refers to the capacity of new waste disposal infrastructure needed to meet the 2025 Scottish Government targets. The figures in table 1 are calculated based on the assumption that by 2025, the target of a 15% waste reduction from the 2011 baseline has been met. The volumes given in table 2 have been calculated using the average total volume of waste generated in Scotland (soil excluded) in 2018 times by 10 to understand the total capacity needed over a 10-year period which covers post-2025. SEPA explains this additional capacity required in Scotland 'maximises resource value and minimises the impact of disposal on the environment' through diverting waste to landfill. The figures in table 2 confirm that there is approximately a surplus of 1.7 million tonnes of landfill capacity than required within the GCVplan area.

Energy from Waste

- 4.31 Opting for energy from waste over landfilling effectively mitigates the release of significant methane emissions from landfills. However, the combustion process in incineration facilities results in increased emissions of other gases like hydrochloric acid and sulfur dioxide. To address this, emissions are treated through scrubbing from the flue gas using bag filters, yielding a waste material known as air pollution control (APC) residual or "fly ash." Despite incineration's benefits, residual waste remains a concern, comprising bottom ash and APC residual. While recycling options for this waste are limited, it necessitates either recycling or landfill disposal. Consequently, outputs from incineration will need to be factored into the 5% landfill exception. To

minimize such waste, enhanced waste collection controls are imperative to divert biodegradable or recyclable materials away from incineration.

4.32 It should be noted that NPF4 does not support additional incineration infrastructure however, North Lanarkshire Council are the lead authority of a consortium of five local authorities - East Dunbartonshire, East Renfrewshire, North Ayrshire, North Lanarkshire and Renfrewshire councils - to deliver improved recycling and residual waste treatment. Following a competitive tendering process, we agreed a £700 million, 25-year contract with Viridor Waste Management in May 2016. The contract will deliver long-term, sustainable waste management of 190,000 tonnes of residual household waste annually. The rubbish being treated through the contract is residual household waste, which cannot be recycled and would otherwise be sent to landfill. The contract began on 7 January 2020 and will help the partner councils comply with the Scottish Government Zero Waste Plan and Waste (Scotland) Regulations 2012. The waste is treated at Bargeddie, removing plastics and metals, to produce a refuse-derived fuel. This is transported to Dunbar ERF where it is burned at high temperatures, under carefully controlled conditions, to produce 258GWh of low carbon electricity - enough power for the equivalent of 70,656 homes. The amount of household waste delivered by each local authority to Viridor through the contract can be up to:

- North Lanarkshire – 71,000 tonnes
- East Dunbartonshire – 24,000 tonnes
- East Renfrewshire - 20,000 tonnes
- North Ayrshire – 34,000 tonnes
- Renfrewshire - 41,000 tonnes

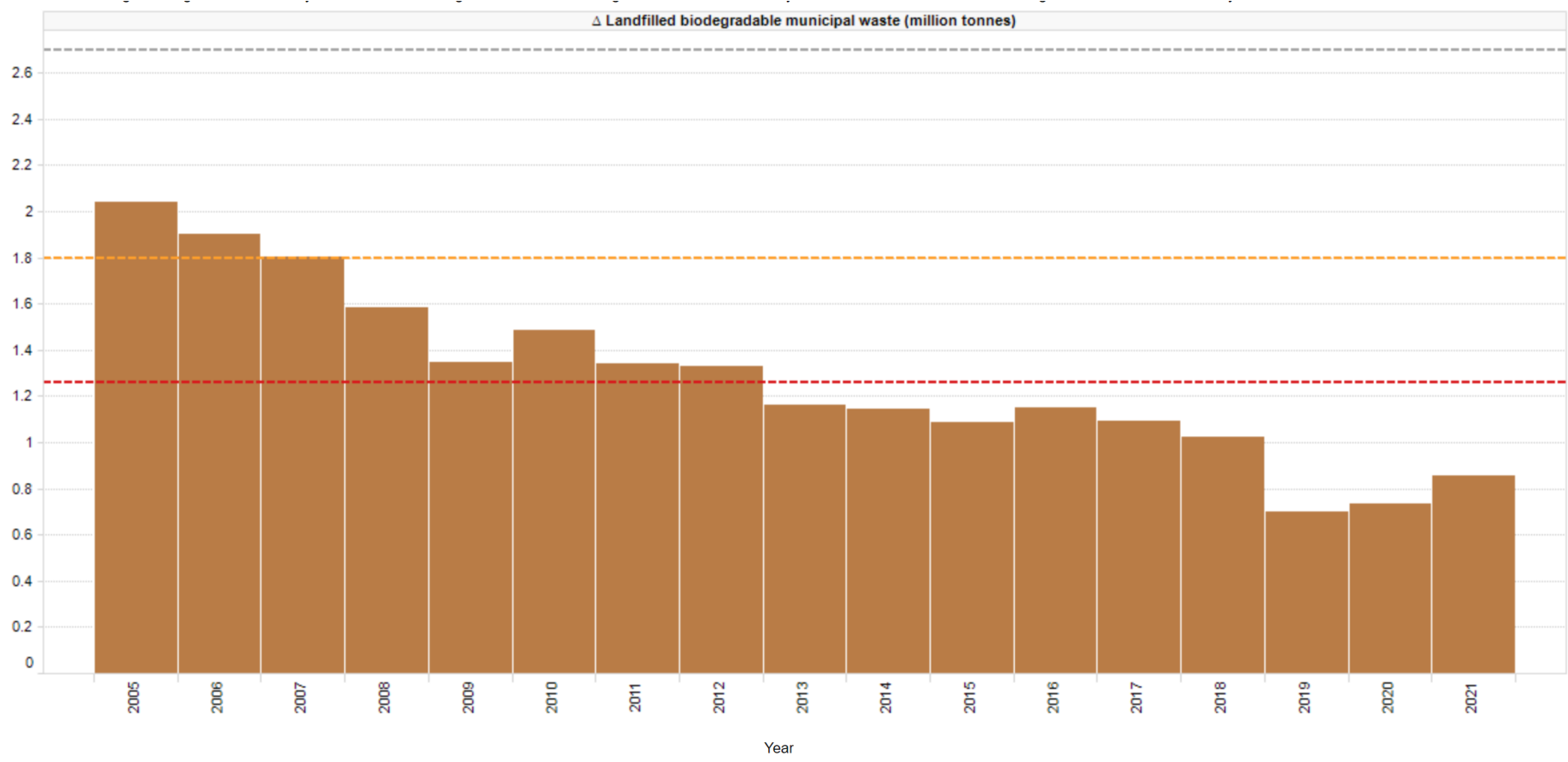
Biodegradable Waste





4.33 By 2026, a complete ban will be enforced on depositing biodegradable municipal waste into landfills, as mandated by the Waste (Scotland) Regulations 2012 (2019 revision). Municipal waste, managed by local authorities, must instead undergo recycling, composting, incineration, reuse, or other recovery methods. This regulation effectively eliminates landfill disposal for all municipal waste due to the challenge of ensuring proper waste sorting. Notably, the amount of biodegradable waste sent to Scottish landfills has been steadily decreasing, with previous reduction targets successfully achieved, as depicted in Figure 12 below.

4.34 In addition the Scottish Government also intends to extend the ban on landfilling biodegradable waste to non-municipal wastes which will likely require both additional and alternative waste infrastructure to be provided either nationally, within the GCV area or within North Lanarkshire specifically.

4.35 In terms of North Lanarkshire since 2012 we have offered householders kerbside food waste collection in 2017 this moved to a comingled food and garden collection. Businesses including schools are offered food waste collection service. There is currently no statutory requirements to collect garden wastes however NLC have provided this service for over 20 years.

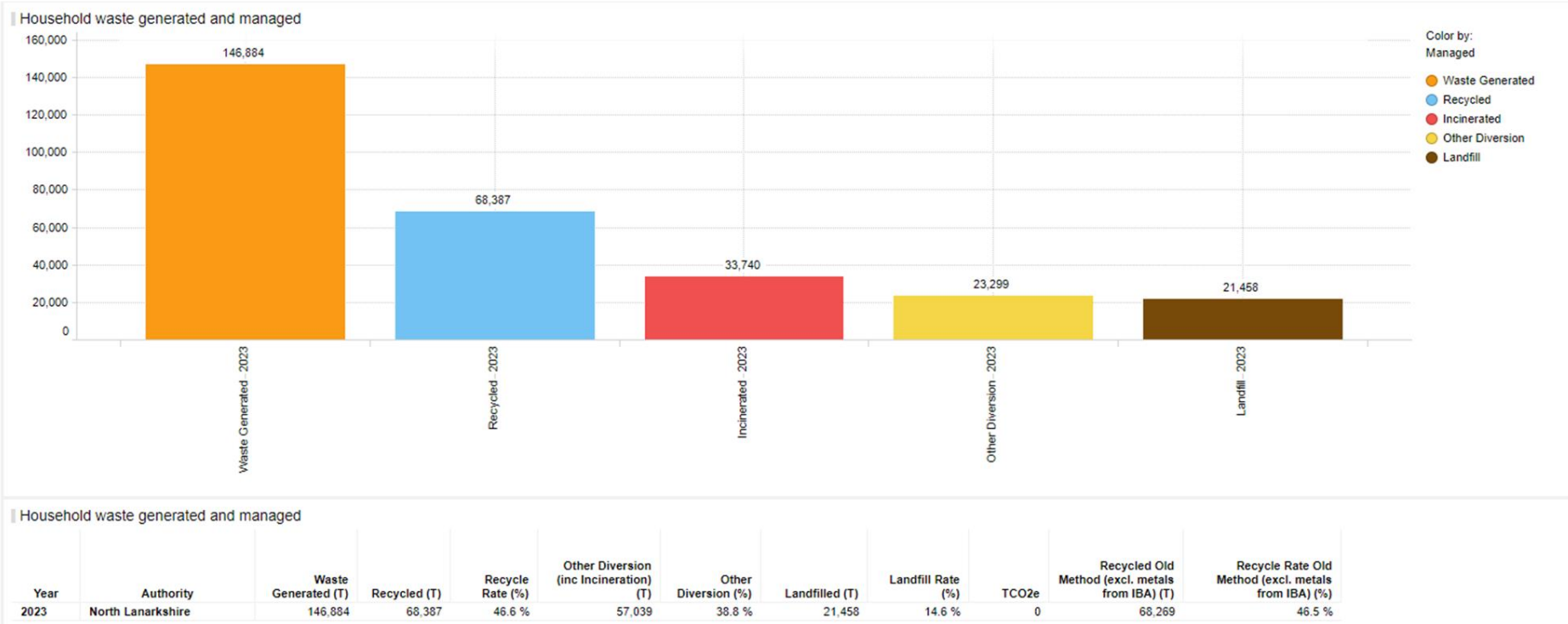
Figure 12. Landfilled Biodegradable municipal waste (million tonnes)



Graph key	Key
BMW to Landfill	
2010 target	
2013 target	
2020 target	

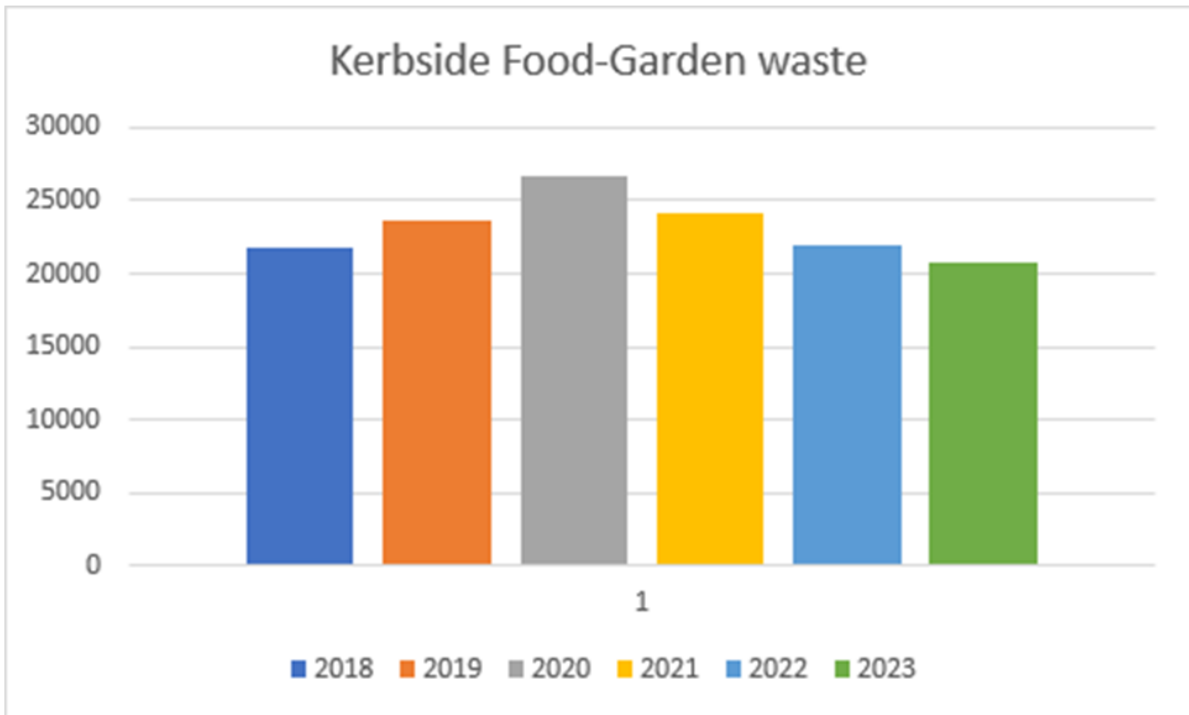
Source: [SEPA Waste from All Sources](#)

Figure 13. Breakdown 2023 North Lanarkshire Council Waste and How it was Treated.



Source: T McNally NLC Waste and Fleet Resources - Performance and Compliance

Figure 14. Kerbside Food & Garden Waste (tonnes) 2018-2023



Source: T McNally NLC Waste and Fleet Resources - Performance and Compliance

Figure 15. Trade Food Waste (tonnes) 2018-2023



Source: T McNally NLC Waste and Fleet Resources - Performance and Compliance

Extended Producer Responsibility

- 4.36 While not directly influencing Planning, Extended Producer Responsibility (EPR) stands as a pivotal waste policy slated to be implemented from late 2025 (exact date pending confirmation). Under EPR, producers bear the financial burden for the packaging waste they generate from production to disposal, with the goal of encouraging the adoption of more sustainable materials. Local Authorities will be obligated to report on the packaging they manage and will receive compensation through the scheme. EPR spans across the UK, including Scotland. Additionally, three other EPR schemes are under consideration, encompassing waste electrical and electronic equipment, batteries and end-of-life vehicles. In addition Zero Waste Scotland is exploring mattress EPR with the National Bed Federation, commissioned research to explore options to improve the circularity of waste tyres and were part of initial discussions on fishing gear EPR to align with Single Use Plastics Directive requirements pre-EU Exit.

Figure 16. Extended Producer Responsibility



Source: [Extended Producer Responsibility | Zero Waste Scotland](#)

The potential applications of Extended Producer Responsibility (EPR) are extensive, spanning from food packaging to architectural design. However, historically, EPR schemes have primarily focused on enhancing recyclability and achieving recycling

objectives for a restricted range of products. There exists significant opportunity to integrate EPR with complementary policy measures within a comprehensive Product Stewardship framework. Such an approach would comprehensively assess the value chain, engage all stakeholders involved, and develop policy instruments aimed at mitigating the social, economic, and environmental impacts throughout the entire lifecycle of products.

Persistent Organic Pollutants (POPs)

- 4.37 Persistent Organic Pollutants (POPs) represent a significant focal point within the waste management sector presently. POPs are substances commonly found in flame retardants used in sofas and other soft furnishings. When these materials deteriorate, there's a risk of POPs escaping, accumulating in the environment, and causing pollution. In both Scotland and the rest of the UK, Waste Upholstered Domestic Seating (WUDS), such as sofas and soft furnishings, that cannot be reused must be directed for incineration. Effective from February 1st, 2024, SEPA will initiate enforcement measures against the landfill disposal of these items. Additionally, DEFRA is presently examining the presence of POPs in construction and demolition waste; however, the results of this examination will not be known for several years. POPs are covered by the Stockholm Convention and implemented in the UK by the POPs Regulations 2007 which SEPA enforce in Scotland. It is envisaged that the principle impact of POPs in land use terms will be the required extra storage capacity needed within waste facilities to segregate such items. In terms of North Lanarkshire as well as dedicated areas within our Household Waste Recycling Centres (HWRC's), there is an impact on how we collect these items from households who request a special uplift service. The service has introduced separate collections for these items as they can't be collected in our Refuse Collection Vehicles (RCV's) as they must remain complete and intact to comply with guidance. New disposal contract arrangements have been put in place to accommodate this new waste stream at an increased cost to the local authority. This process has had significant costs in terms of budget and resources.

Deposit Return Scheme

- 4.38 The Deposit and Return Scheme (DRS) for Scotland Regulations 2020, were passed by the Scottish Parliament in May 2020. The regulations establish the legal framework for a deposit return scheme (DRS) for single-use drinks containers to be introduced. Under these regulations, consumers are required to pay a deposit of 20p upon purchasing a beverage contained in a single-use PET plastic, steel and aluminium, or glass container. This deposit is refundable upon the return of the empty container to any of the numerous return points established across the country. Retailers are mandated by law to accept returned empty drink containers for recycling purposes, ensuring the effective functioning of the scheme.
- 4.39 The Deposit Return Scheme (DRS) will introduce a new network of recycling points and reverse vending machines aimed at facilitating the return of deposits. Additionally, arrangements will be made for pickups of empty containers from online deliveries. Both household and commercial behaviour will need to adapt to ensure the success of the scheme. Originally scheduled to launch in July 2022, the implementation of DRS has been postponed until at least October 2025, aligning with similar schemes planned in other parts of the UK.

4.40 DRS is expected to create business opportunities and generate jobs within the circular economy. However, there is currently a lack of clarity regarding the operational details of the scheme. Key questions remain unanswered, including:

1. **Infrastructure Support:** The need to address how the infrastructure will accommodate the DRS scheme, including considerations for storage and transportation of bottles.
2. **Space Implications for Small Businesses:** An impact analysis is required to understand how DRS will affect small businesses in terms of space requirements for storing empty containers awaiting collection.
3. **Impact on Council Collections:** The diversion of higher quality recyclable materials from recycling bins to DRS may affect Council collections, potentially leaving us with lower quality materials. An assessment of this impact will be necessary to manage the transition effectively when implemented.

It is envisaged that addressing these issues will be crucial to ensuring the smooth implementation and operation of the Deposit Return Scheme in Scotland.

Food Waste

4.41 In 2014, Scottish households threw away around 600,000 tonnes of food and drink waste. This meant that, as a nation, we also wasted the resources that went into producing, transporting and buying that food. When food waste ends up in landfill, it produces methane gas that is many times more damaging to the environment than carbon dioxide. It also means that we are losing a potentially valuable resource that could be redistributed to humans, recycled as animal feeds, or even converted to fuel and energy.

4.42 In 2016 the Scottish Government set a target to reduce per capita food waste in Scotland by 33% (from 2013 levels) by 2025. This target was the first of its kind in Europe and recognised the critical role of food waste reduction in the fight against climate change and the transition to a more circular, resource efficient economy and to that end in 2019 the Scottish Government published the Food Waste Reduction Action Plan however it is recognised that progress was not at the scale and speed required, partly as a consequence of Covid-19 and the approach has recently been subject to further review.

4.43 Scotland's Circular Economy and Waste Route Map to 2030 Consultation (January 2024) sets out four strategic aims, which reflect the span of the waste hierarchy:

1. Reduce and reuse
2. Modernise recycling
3. Decarbonise disposal
4. Strengthen the circular economy.

In terms of priority action 1 reduction of food waste is a main objective and based on the review of the 2019 Food Waste Reduction Action Plan it is considered that that we need to reset our approach to tackling food waste. The actions outlined below are based on the evidence gathered by the Scottish Government so far on how best to reset our approach.

Priority Actions:

- Deliver an intervention plan to guide long-term work on household food waste reduction behaviour change (by 2025)
- Develop with stakeholders the most effective way to implement mandatory reporting for food waste and surplus by businesses (by 2025/26)

Further Actions:

- Strengthen data and evidence (ongoing)
- Review the rural exemption for food waste recycling, as part of recycling codesign process (in 2024/25 and 2025/26)
- Investigate feasibility of action plans (after 2025)
- Deliver enhanced support for businesses (ongoing)

This means addressing the whole food system; resetting our approach to food waste; enhancing our circular bioeconomy; and ensuring we have the data needed to understand and drive progress.

- 4.44 As noted above the Scottish Government targets included a target to reduce food waste by 33% from 2013 to 2025, and Scotland is committed to achieving the UN's Sustainable Development Goal to halve food waste by 2030. The Scottish Government published a new Scottish food waste estimate, showing how much food waste was disposed of by households and businesses across different sectors in 2021. This provides a comparison with the 2013 baseline, noting that the 2021 estimate may be impacted by the ongoing implications of the Covid pandemic. The latest data shows the scale of the problem has increased in Scotland over the past decade, and it is highly likely we will fall short in meeting our 2025 target. Part of the challenge is consistent and regular measuring of food waste, rather than estimation: without understanding the volume and source of waste, it is difficult to know where to focus action and resources to make real impact.
- 4.45 It is envisaged that these proposals will have a significant impact on waste policy going forward in the next 5 to 10 years and as such significant impacts on Council resources given the requirements to comply with the changes.

Conclusions

- 4.46 NPF4 Policy 12 Zero Waste seeks to ensure that development proposals align with the waste hierarchy in terms of seeking to reduce, reuse, or recycle materials. Whilst it is envisaged that policy 12 provides sufficient protection against development that does not align with the move towards a circular economy it is likely that the implications of the policy will result in a need for upgraded and additional waste infrastructure at national, regional and local level to sort and process recyclable materials which have been separately collected and management of the residual wastes in a way that maximises resource value whilst minimising the impact of disposal on the wider environment.
- 4.47 It is envisaged that continued collaboration with the council's waste management section will be required to understand the policy requirements across the range of waste management activities both current and required to address the likely requirements of further specialist facilities and consideration of how land designated for a mix of uses will be able to accommodate waste management at a smaller more local scale.

5. **Potential Connections in Evidence**

- 5.1 The Plan for North Lanarkshire is the council's main strategy for the area to improve services and outcomes for the communities who live here. It provides a shared ambition for inclusive growth and prosperity for all. It sets a path for the council and partners to follow. The Plan covers a wide range of activities that can impact on carbon emissions and help to make North Lanarkshire a more sustainable place to 'live-learn-work-invest-visit'.
- 5.2 In the UK the past four decades have been warmer than the one before. In North Lanarkshire it is expected that the average summer temperatures will increase, and the number of rainy days will reduce. The volume of rain on summer's wettest day will increase. Our winters are expected to be milder. Whilst the impact of climate change may seem to be less severe locally, in recent years we have seen an increase in severe weather events. These can affect us through:
- *Travel Disruption*
 - *Emergency Response Situations*
 - *Loss of power supply*
 - *Landslides*
 - *Flooding*
 - *Disruption to service Delivery*
- 5.3 The council recognised that it must take action and declared a climate emergency in June 2019. It has committed itself and the area of North Lanarkshire to achieving net-zero by 2030. Concerned about the impact of climate change on biodiversity, the council became a signatory of the Edinburgh declaration on Post-2020 Global Biodiversity Framework.

Zero Waste - implications for topic 1 tackling the climate and nature crises

- 5.4 It is noted that the zero waste regulations and initiatives have significant implications for tackling the climate and nature crises. Zero Waste strategies encourage the adoption of circular economy principles, which emphasize the reuse, repair, and recycling of products and materials. This reduces the extraction of finite resources, lowers energy consumption, and minimizes pollution associated with the production of new goods.
- 5.5 By minimising waste and promoting recycling and composting, Zero Waste strategies help to reduce the amount of organic waste sent to landfills. This reduces methane emissions, a potent greenhouse gas produced during the decomposition of organic waste in landfills.
- 5.6 By extending the lifespan of products through recycling and reuse, the Zero Waste strategy helps conserve natural resources such as minerals, metals, and forests. This reduces the pressure on ecosystems and habitats threatened by resource extraction and deforestation. In addition, by preventing waste from entering ecosystems the strategy contributes to preserving habitats and protecting wildlife and mitigates the impacts of waste pollution on biodiversity.
- 5.7 Food waste is a significant contributor to greenhouse gas emissions and a major strain on natural resources. The Zero waste strategy to reduce food waste through education, policy, and infrastructure improvements and help mitigate these impacts and promote

more sustainable consumption patterns will be a significant driver of waste policy in the next 5 to 10 years.

Zero waste - implications for topic 2 climate mitigation and adaptation

- 5.8 One of the primary goals of the Zero waste strategy is to minimise the amount of waste sent to landfill. Organic waste decomposition in landfill produces methane, a potent greenhouse gas. By promoting waste reduction, recycling, and composting, the Zero waste strategy helps decrease methane emissions, contributing to climate mitigation efforts.
- 5.9 In terms of energy conservation proper waste management practices advocated by the Zero waste strategy, such as recycling and composting, help conserve energy compared to the production of goods from finite materials. For example, recycling aluminium requires significantly less energy than extracting it from bauxite ore. By conserving energy, Zero waste initiatives contribute to climate mitigation by reducing greenhouse gas emissions associated with energy production.
- 5.10 While the Zero waste strategy is primarily focussed on waste reduction and recycling, its initiatives indirectly support climate adaptation efforts. By reducing waste, communities become more resilient to climate-related challenges such as extreme weather events and resource scarcity. Additionally, proper waste management practices can help prevent pollution and protect ecosystems, which are essential for supporting biodiversity and enhancing resilience to climate impacts. By fostering a culture of sustainability, Zero Waste strategies contribute to climate adaptation efforts by building resilience and reducing vulnerabilities associated with unsustainable consumption practices.

Conclusion in terms of implications for topic 1 and 2

- 5.11 It is considered that overall the zero waste strategy will play a critical role in mitigating the climate and nature crises by reducing waste, promoting resource efficiency, and fostering sustainable practices across various sectors of society. Similarly the strategy also plays a crucial role in both climate mitigation and adaptation by reducing greenhouse gas emissions, conserving energy, promoting sustainable consumption, and enhancing community resilience to climate impacts.

Other topic/policy overlaps stated in NPF4

- 5.12 It is possible that connections may exist with the following topics and in the following ways.
- 5.13 There is potential for some positive effects for the following topic areas:
- Policy 1 Tackling the climate and nature crises
 - Policy 2 Climate mitigation and adaptation
 - Policy 3 Biodiversity
 - Policy 4 Natural Places
 - Policy 5 Soils
 - Policy 6 Forestry, Woodland and Trees
 - Policy 7 Historic Assets and Places
 - Policy 8 Green belt
 - Policy 9 Bownfield, Vacant and Derelict Land and Empty Buildings
 - Policy 11 Energy

- Policy 18 Infrastructure first
- Policy 19 Heating and cooling
- Policy 25 Community wealth building
- Policy 33 Minerals

Given that the proposals seek to reduce greenhouse gas emissions, waste, promote resource efficiency, conserving energy, promoting sustainable consumption, and enhancing community resilience to climate impacts.

5.14 There is potential for some negative effects for the following topic areas:

- Policy 14 Design, quality and place
- Policy 16 Quality homes
- Policy 17 Rural homes
- Policy 26 Business and industry
- Policy 27 City, town and local commercial centres
- Policy 28 Retail

Given the proposals seek to reduce greenhouse gas emissions, waste, promote resource efficiency, conserving energy, promoting sustainable consumption this may place additional requirements on developments within the categories above.

6. Site Selection Implications

6.1 The issues that have been identified as the main implications of moving towards zero waste and a circular economy will be:

Issue 1 The identification of appropriate locations for new infrastructure to support the circular economy and meet identified needs in a manner that elevates waste as high up as possible within the waste hierarchy in line with the requirements of Policy NPF4 Policy 12 (Zero waste).

Issue 2 Consideration on the potential need for additional waste management facilities/infrastructure to:

- sort and process recyclable materials which have been separately collected; and
- manage the remaining residual waste in a way that maximises resource value and minimises the impact of disposal on the environment.

Issue 3 The layout and design of future development will be a consideration in the development requirements and any associated guidance for NLLDP2 as it will be required to consider the consequences for waste management collection and implications for the council's waste management assets.

Issue 4 NPF4 Policy 12 (Zero waste) outlines that 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 meets certain criteria.

7. Implications for North Lanarkshire Local Development Plan 2

- 7.1 It is recognised that continued collaboration with the Council's waste management operations will be necessary to understand the policy requirements across the range of waste management activities. This will include a review of policies to accommodate the location of specialist plant and how land designated for a mix of uses may accommodate waste management at a smaller or local scale.
- 7.2 Based on the evidence, analysis and views presented in this survey paper, North Lanarkshire Council currently considers that the topic policy in NPF4 for Zero waste should be applied as per NPF4 in North Lanarkshire as there is no need to consider locally specific policy to support decision making in this regard.