



North East Lincolnshire Council Waste Management Strategy

2020 | 2035

Executive Summary

North East Lincolnshire's Council's (NELC) Waste Management Strategy runs from 2020-2035 and focuses on Local Authority collected and managed waste.

The next 15 years will see challenges for waste management and changes to the environmental pressures that contribute to how we manage waste. The types of waste and the way in which we collect and manage waste are expected to change over time as technological innovation transforms society, helping us to implement a circular waste economy. With the declaration of a national climate emergency in England and a local climate emergency in North East Lincolnshire, attitudes towards waste have begun to shift; from simply managing waste to managing it in an environmentally sustainable way.

NELC has developed a strategy which is bold and ambitious. We want to be amongst the very best in the country in ensuring we use our resources sustainably. We realise that some targets will be challenging to achieve, but we want to push for change, working with Government, our contractors, manufactures, retailers and residents to make it as easy as possible to produce less waste and recycle more.

With this in mind NELC has set out clear priorities for our waste strategy. These priorities will form the basis by which NELC will manage waste and meet national and local targets. A timeline has been created which sets out when national and local targets must be met, with the priorities being the underlying means and focus for how these will be achieved.



Contents

1. Introduction	6	5.4 Waste Managed in North East Lincolnshire	38
1.1 The Purpose of this Strategy	7	5.5 Expected Waste Arisings	38
1.1.1 National Framework.....	7	5.5.1 Population.....	39
1.1.2 Local Outcomes Framework.....	8	5.5.2 Packaging	40
1.2 Previous Targets and Progress Made	10	5.5.3 Waste from Other Local Authorities	40
1.3 Priorities of the Waste Strategy	12	5.6 Future Waste Management.....	41
2. The Process of Strategy and Public Consultation	14	6. Objectives of the Waste Strategy	42
2.1 Building the Municipal Waste Strategy	14	6.1 Increased Recycling.....	43
2.1.1 Chapter Summaries	15	6.1.1 Increasing the Number of Households Recycling.....	44
2.1.2 Data Sources Used	15	6.1.2 Collecting a Wider Range of Materials	45
2.2 Public Consultation.....	16	6.1.3 Collecting Larger Volumes of Recycling	45
3. Legal Framework	17	6.2 Waste Minimisation.....	46
3.1 European Union (EU) Directives	17	6.3 Reducing Environmental Impact.....	47
3.2 UK Legislation and Regulations.....	18	6.3.1 Collect Good Quality Recycling with a Low Contamination Rate	47
3.2.1 2018 UK National Waste Strategy	20	6.3.2 Reduce the Travel Distance to Waste Disposal Points	47
3.2.2 New UK Environment Bill	22	6.3.3 Avoid Landfill Wherever Possible.....	47
3.3 Local Framework	22	6.4 High Quality Waste Service Provision.....	48
4. Environmental Responsibility	24	6.4.1 Improved Resilience and Customer Satisfactions	48
5. Waste Produced Within North East Lincolnshire	26	6.4.2 Financially Sustainable Service Provision...	48
5.1 Sources of Waste.....	26	6.5 Improving Education and Community Engagement.....	48
5.1.1 Provisions for Waste	27	7. Achieving the Strategy	50
5.2 Municipal Waste.....	28	7.1 Roles and Responsibilities within North East Lincolnshire.....	50
5.2.1 Municipal Waste Recycling.....	30	7.2 Developing Partnerships and Co-operation	51
5.2.2 Energy from Waste (EfW)	32	7.2.1 Developing Partnerships.....	51
5.2.3 Waste Diverted to Landfill.....	33	7.2.2 Engaging with the Commercial Sector	51
5.3 Non-municipal Waste.....	34	7.2.3 Engaging with the Community.....	51
5.3.1 Commercial and Industrial Waste	34	7.3 Our Timeline.....	52
5.3.2 Hazardous Waste.....	36	7.4 Continued Monitoring Plan	54
5.3.3 Agricultural Waste	36		
5.3.4 Construction and Demolition Waste	36		
5.3.4 Other Non-municipal Waste.....	38		



1. Introduction

North East Lincolnshire is an area of diversity and opportunity. Bordered by the North Sea and the Lincolnshire Wolds, an Area of Outstanding Natural Beauty (AONB), it is situated on the east coast of England at the mouth of the Humber estuary and covers an area of 74.1 square miles (191.9 square kilometres). It is an area that presents challenges as well as future potential. The area includes the port towns of Grimsby and Immingham, the seaside town of Cleethorpes and a range of villages of varying size and composition.

North East Lincolnshire's population was estimated to be 159,821 in 2018 (Source: Office of National Statistics). The 2019 Council Tax base in North East Lincolnshire indicates there are 73,600 households within the borough. Out of these: 36.34% are occupied by a single adult; 0.53% are occupied by multiple adults that are not a family and 63.13% of houses are occupied by one family. North East Lincolnshire Council is responsible for providing a kerbside collection, recycling and disposal service for the waste generated by these households. This waste is known as municipal solid waste (MSW).

In addition to MSW, commercial waste is also produced by the various businesses operating in the borough. North East Lincolnshire is a base for various industries including chemical production, manufacturing, port logistics and food processing. These are all major employers in the area but they also contribute to the production of waste which needs to be collected and managed before final disposal. The waste from these premises and also from the construction, demolition and agricultural industries are mainly handled by private sector waste management companies.



1.1 The Purpose of this Strategy

1.1.1 National Framework

This new waste strategy is designed to replace the 2008 North East Lincolnshire Council (NELC) waste strategy which is set to expire in 2020. The expiration of the 2008 NELC waste strategy coincides with the new national Waste Strategy policy that was set out in 2018 for waste management.

Within the 2018 National Waste Strategy (Our Waste, Our Resources: A Strategy for England) the Department for Environment, Food and Rural Affairs (DEFRA) set new national targets that are to be implemented over the course of 15 years: starting in 2020 and ending in 2035. One of the main targets to come out of the strategy are the 15 year targets for recycling rates on municipal

waste disposal. Targets set out by the government aim for England to achieve a municipal waste recycling rate of 50% by 2020; this target increase to: 55% by 2025, 60% by 2030 and 65% by 2035. To accompany the municipal waste recycling rate targets, the government has set out aspirations for separate food waste collections by 2023.

Along with the focus on recycling rates and food waste collections, the government has set out the need to implement a circular economy model across England. This means ensuring that as much as possible can be done to limit the amount of raw materials that are used in the initial production of items and instead look to re-purpose and re-use old materials for production instead.

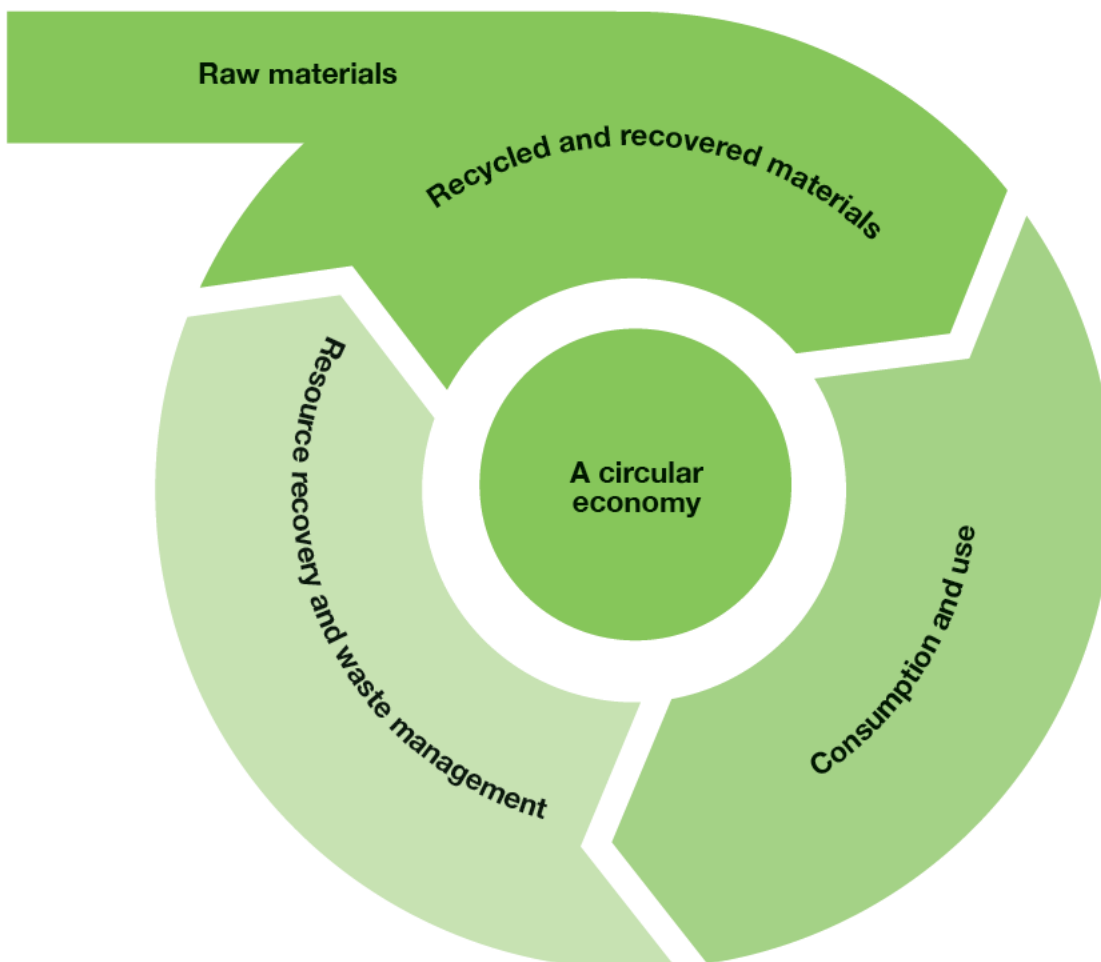


Figure 1 is the circular economy as presented in the 2018 UK national Waste Strategy Report.

1.1.2 Local Outcomes Framework

North East Lincolnshire Council has set itself a priority to build a Stronger Economy and Stronger Communities. We want North East Lincolnshire to be seen as an attractive place to live, work, visit and invest, and know that we have significant and exciting opportunities for growth in our area. Our priorities are underpinned by a key strategic framework which sets out the five high level outcomes. The outcomes are shown in figure 2 below:



Figure 2 shows the five high level outcomes set out within North East Lincolnshire Council’s key strategic framework.





To achieve these outcomes we have set out some priority interventions, including ‘Remodelling our waste strategy and increasing recycling’. This waste management strategy has been commissioned under this priority intervention to support our commitment to Sustainable Communities.

The outcomes framework is broad-reaching and includes various indicators which relate to our strategies on waste management and waste related services. We will measure our progress against the following indicators:

- air quality
- CO2 emissions
- local environmental quality
- waste recycled
- electricity generated or supplied from renewable sources
- access to online services

Built in to NELC’s outcome framework is the

commitment to a place based approach to social value. Social value is defined as “outcomes and activities that will improve the quality of life and life chances of our residents and enhance the economic, social and environmental sustainability of the local area” (source: Social Enterprise UK). Our Social Value Policy aims to:

- Involve local people and organisations in how we meet the needs of local communities through the commissioning cycle.
- Tackle disadvantage and address inequalities of health, wealth and opportunity across the borough.
- Promote the local economy by supporting micro, small and medium sized enterprises and the voluntary and community sector to thrive.
- Further our sustainable procurement objectives to protect and enhance the environment.

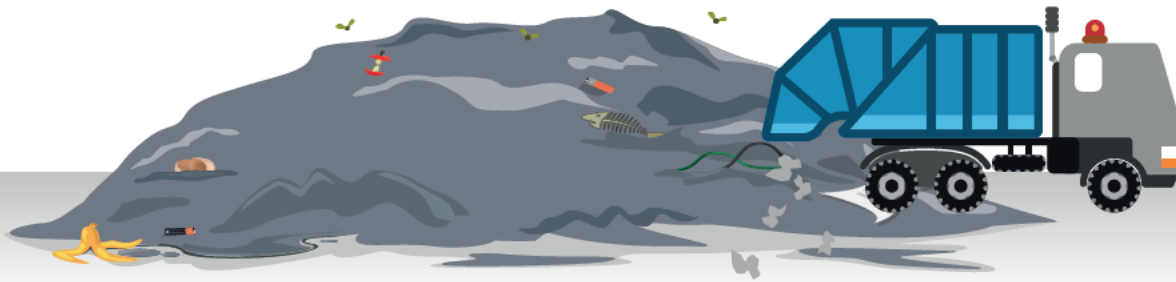
In developing our strategy and corresponding action plan we have considered these aims and will adopt them as guiding principles when delivering our service priorities.

1.2 Previous Targets and Progress Made

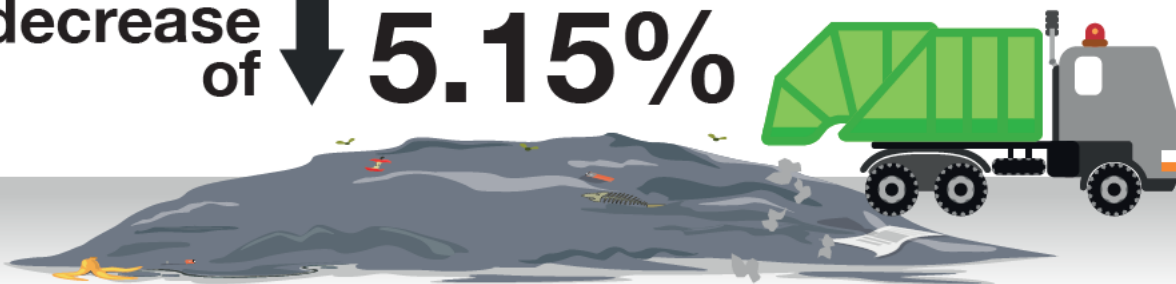
Previous government targets set out to reduce biodegradable landfill waste to 35% of the 1995 baseline by 2020. A current legally binding EU target states that by 2030 all waste sent to landfill should be no more than 10% of the total municipal waste produced.

Both the 2020 and 2030 targets for landfill have been surpassed by NELC with the percentage of total municipal waste sent to landfill for the 2018/2019 financial year being

↓ 6.01%



a decrease of ↓ 5.15%



since the implementation of the 2009 waste strategy.

Further details of NELC's municipal waste to landfill performance over the 2009 waste strategy implementation period are shown in figure 3.

Whilst the target for landfilled waste has been achieved, recycling targets are not, with NELC only achieving a household recycling rate (excluding inert materials) of 35.08% for 2018/2019: 14.92% below the target of 50% by 2020. This indicates there is a large gap to close between recycling rates in NELC and government targets. This strategy will play an important role in our plan to close the gap.

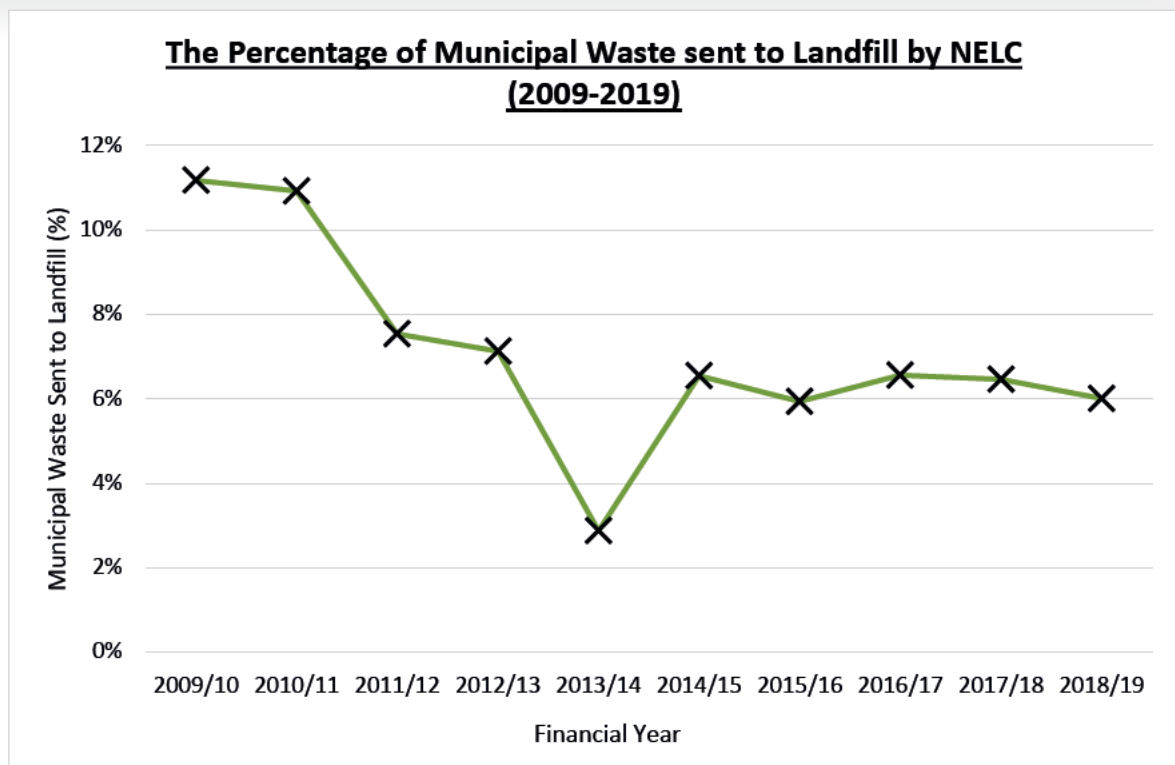


Figure 3 is the percentage of total Municipal Waste sent to Landfill by NELC for each financial year (2009-2019).

1.3. Priorities of the Waste Strategy 2020-2035

Steered by national policy and our local outcomes framework we have established our key priorities for the future. When asked in our public consultation on waste management, 93.27% of respondents agreed that these were the right priorities to focus on.

PRIORITIES		
WE WILL AIM TO BE:	WHAT THIS MEANS	KEY OBJECTIVES
Resilient	We will ensure efficient and reliable collections of waste and recycling from all households, which are responsive to future changes in legislation and local needs.	Improved customer satisfaction.
Customer friendly	We will provide a waste collection method, which is easy for households to use and encourages residents to recycle more.	• Increase the number of households that participate in recycling • Increase the amount of recycling collected from each household
Environmentally responsible	We will ensure our arrangements for collection and disposal of waste are designed and operated in a way that reduces our environmental impact as far as practicable. We will aim to achieve reduction in emissions from disposal, treatment and transport, but also from the production of the materials long before those materials are discarded as waste via waste reduction.	• Reducing the amount of waste which is produced • Collect good quality recycling with a low contamination rate • Reduce the travel distance to waste disposal points • Avoid landfill wherever possible
Education focused	We will help and encourage learning about sustainable waste management by developing stronger relationships with schools and the community.	Improve sustainable waste management education and awareness.
Collaborative	We will work with neighbouring authorities and our business partners to explore better service delivery and contract management for waste disposal.	Improved value for money for waste disposal.
Responsible commissioners and effective contract managers	We will maximise the use of and value from our current contract and plan for effective commissioning for the future.	Ensure effective future commissioning, considering both service quality and value for money.

These priorities will be the foundation on which NELC will continue to develop a high quality waste management service to meet its legal obligations and contribute towards the UK's waste rate targets.



2. The Process of Strategy and Public Consultation

2.1 Building the Municipal Waste Strategy

Prior to writing the waste strategy, it was considered whether a Strategic Environmental Assessment (SEA) needed to be conducted. It was concluded that a new SEA was not needed for the following reasons:

- A thorough SEA was conducted on the previous policy which consisted of a 140 page scoping report.
- No new disposal methods for the municipal waste we collect will be introduced as a result of this waste strategy, other than for food waste, which was considered in our previous strategy.
- Whilst there is a slight change to the waste targets, these are fundamentally targets on the same waste sources.
- There are no significant changes to the strategy and so we do not expect to see any significant changes to the environment.

However, a review of the current SEA will be conducted in conjunction with the strategy. This will include an update of data and information within the SEA. As changes will be made to the current SEA, a consultation process will be undertaken with the amended report sent to statutory consultees:

- Environment Agency,
- Historic England,
- Natural England.



2.1.1 Chapter Summaries

Chapter	Title	Description
3	Legal Framework	Summarises the national and local legal requirements for how waste is managed within a local authority.
4	Environmental Responsibility	Provides greater context to the strategy by explaining why it is important we consider the impact waste has on the environment. Considerations have been made for both the national and the local context to ensure an understanding of and commitment to environmental sustainability.
5	Waste Produced within North East Lincolnshire	An overview of how much waste has been produced within NEL over the past decade and where the waste produced comes from. The chapter also establishes how the waste produced is managed within the authority. Considerations are also made for future waste management in NEL.
6	Objectives of the Waste Strategy	Sets out NELC's objectives for waste management and also addresses the main challenges facing North East Lincolnshire during the period covered by this strategy.
7	Achieving the Strategy	Provides an overview of the actions identified by NELC as being needed to achieve the objectives of this Strategy. It essentially sets out a 'route map' showing how those objectives will be achieved.

2.1.2 Data Sources Used

To write this waste strategy, various sources of data were consulted. Data was obtained from:

- North East Lincolnshire Council's Waste Management Team;
- The Department for Environment Food and Rural Affairs (DEFRA);
- WasteDataFlow (Waste Data Interrogator and Hazardous Waste Data Interrogator);
- The Environment Agency;
- The Waste and Resource Action Programme (WRAP);
- Legislation.gov.uk;
- Europa.eu/european-union/law_en.

2.2 Public Consultation

NELC and its partners have committed to developing an 'on the ground' understanding of North East Lincolnshire and its communities through a number of engagement strategies. The aim of this is to involve local people and organisations in how we meet the needs of local communities through the commissioning cycle.

In the development of this strategy a full public consultation and engagement process was undertaken to better understand the needs of our communities, their views on waste and the environment and to gauge public perception of our approach and proposals for the future. The consultation included questions about the municipal waste collection service NELC currently offers and potential alternatives that could be implemented. The results of the consultation are published on our webpage.



3. Legal Framework

North East Lincolnshire Council's waste strategy is governed by an extensive legal framework in the form of: national policy and legislation, together with local policy covering environmental, social and economic issues. As of 2019, much of the legal framework governing the UK's national policy and legislation is set out within European Union (EU) legislation through European directives. It is these European directives that currently provide the main source for UK legislation on waste. While there is currently uncertainty with the UK's exit from the EU, the UK government has indicated their intention to comply with current European law and targets: with the 2018, waste strategy indicating the UK government will try to improve on current EU waste targets.

3.1 European Union (EU) Directives

Three main directives set out by the EU have been the foundation for waste strategy for the past 20 years. Initially the Landfill Directive (1999/31/EC) set out the targets for reducing biodegradable municipal waste sent to landfill so that by 2020 no greater than 35% of biodegradable municipal waste would be sent to landfill for each country within the EU. Following the 1999 Landfill Directive, the EU set out the 2008 Waste Framework Directive (2008/98/EC). The 2008 Waste Framework directive set out the obligation for nations to:

- Take the necessary measures to ensure waste is recovered or disposed of without endangering human health or causing harm to the environment;
- Act appropriately to encourage firstly, the prevention or reduction of waste production and its harmfulness and secondly the recovery of waste by means of recycling, reuse, reclamation, or any other process with a view to extracting secondary raw materials, or the use of waste as a source of energy.

The European Waste Framework Directive introduced the concept of the waste hierarchy, which is shown in figure 4.

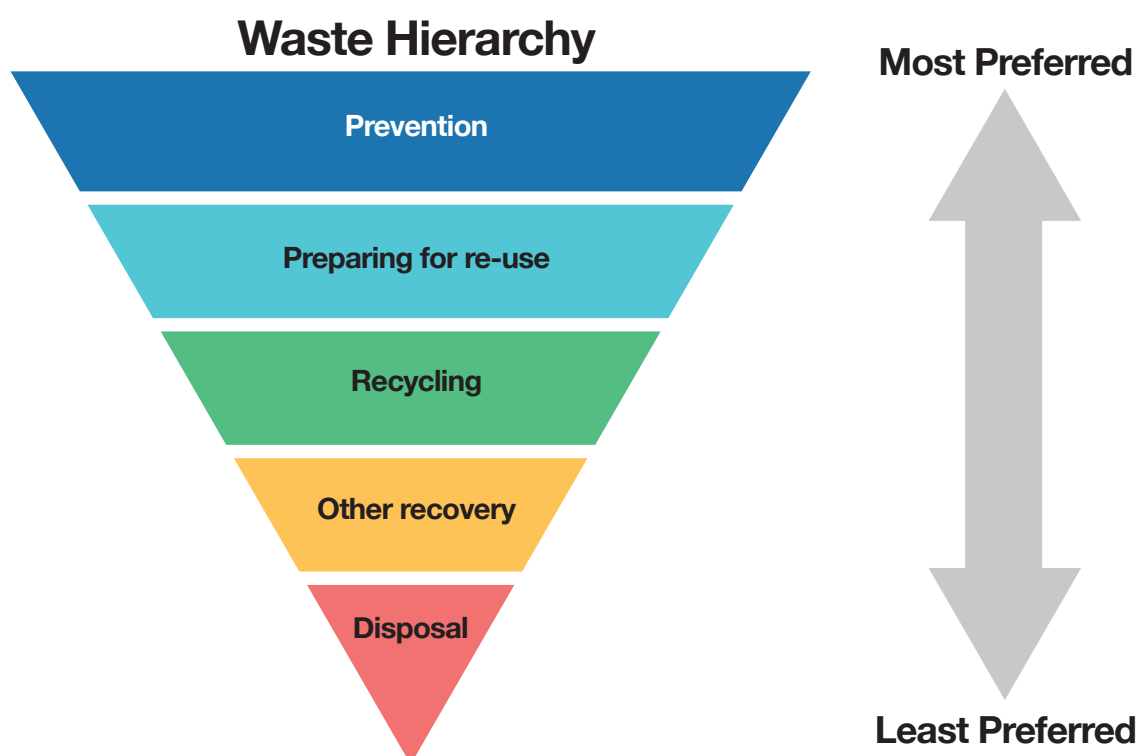


Figure 4 is the waste hierarchy as set out by the 2008 Waste Framework Directive (2008/98/EC).

The waste hierarchy sets out a list of disposal options in order of preference. This organises waste management into a priority system, which aims to reduce the amount of waste sent to disposal by offering as many renewable and environmentally beneficial alternatives as possible. Organisations, including local authorities, must therefore take all reasonable measures to avoid waste disposal. The hierarchy also aimed to change the perspective on how waste was viewed: educating people to think of waste as a resource and not an unwanted product.

Following the implementation of the 2008 Waste Framework directive, the EU outlined a new circular economy package (as referred to in Figure 1). The EU circular economy package was followed by a legislative framework which aimed to implement the vision by reducing raw materials used and increasing the amount of waste materials recycled. It sets out targets for both national recycling rates and recycling rates on individual packaging materials.

The third main directive governing waste strategies is the Strategic Environmental Assessment (SEA) Directive (Directive 2001/42/EC). The assessment underpins both the earlier Landfill Directive and the later Waste Framework directive. The SEA directive sets out the requirement for a strategic environmental assessment to be carried out for local authority waste management plans that, 'set the framework for future development consent of projects listed in the EIA Directive'. SEAs are designed to inform on the potential environmental impacts and effects that could be caused by future planning developments and require Environmental Authorities to be consulted at the screening stage.

3.2 UK Legislation and Regulations

Legislation/Regulation	Key Requirements/Targets
Control of Pollution (Amendment) Act 1989	- Makes it a criminal offence for a person who is not a registered carrier to transport controlled waste in Great Britain. - Enables the seizure and disposal of vehicles used for illegal waste disposal.
Environmental Protection Act 1990	Establishes the Duty of Care, powers and responsibilities of waste collection and disposal authorities.
Clean Neighbourhoods and Environment Act 2005	The Act provides local authorities with the power to: - Issue fixed penalty notices for littering and fly tipping. - Immediately remove and impound abandoned vehicles involved in fly-tipping. The Act also gives councils more powers over waste services and recycling.
Climate Change Act 2008	Amended in 2019 this sets out the target of reducing the UK's emissions of greenhouse gases (identified in the 1997 Kyoto Protocol) account to at least 100% lower than the 1990 baseline by 2050.

Legislation/Regulation	Key Requirements/Targets
The Waste (England & Wales) Regulations 2011	This legislation chiefly transposes the requirements of the 2008 EU revised Waste Framework Directive into UK law. The Regulation: • Prioritises recycling over disposal • Requires Local Authorities to refer to the waste hierarchy in the preparation of waste development frameworks and local development plans. • Requires every waste collection authority where technically, environmentally and economically practicable to collect: waste paper, metal, plastics and glass separately
The Controlled Waste Regulations 2012	For the provisions of the Environmental Protection Act the regulation sets out waste classifications: according to household, industrial and commercial. The regulation also sets out where charges for the collection or disposal of certain types of non-domestic household waste can be made.
Materials recovery Facility (MRF) Regulations & Code of Practice 2014	The regulation aims to: • Improve transparency on material quality in the supply chain, through provision of accurate information on contamination levels. • Monitor and report on material quality to deliver high quality recycling.
Producer Responsibility Regulations - Packaging waste (2007) and waste electrical and electronic equipment (WEEE) (2012)	Sets out requirements for the producer of the original item to maintain end of life responsibility (and cost) for the waste.
Waste Enforcement Regulations 2018	Makes amendments to the Environmental Protection Act 1990 enabling: • Local Authorities to order an occupier or landowner to remove all waste from an illegal/non-compliant landfill site. • The Environment Agency to immediately restrict access to waste sites that are suspected of breaching pollution limits.

Much of the legal framework set out in the EU directives relating to waste and in the circular economy has been transposed into legislative text for the UK. This can be seen in the post 1999 legislation. However, legislation in the UK is not solely driven by EU framework directives and policies but also UK national policy which is delivered through a national strategy document published by DEFRA.

3.2.1 2018 UK National Waste Strategy

The 2018 UK waste strategy (Our Waste, Our Resources: A Strategy for England) sets out the UK’s policy on waste which aims to contribute in delivering the recently set out 25 year environmental plan. The policy document details how the UK will invoke principles such as the ‘polluter pays’ principle into its management of waste. Overall targets to remove ‘avoidable’ plastic waste over the lifetime of the 25 year environment plan and removing all ‘avoidable’ waste by 2050 are outlined in the strategy. The evolutionary shift in how avoidable waste will be removed over time is displayed in figure 5.

Evolution of Waste Management Practices: In the past, most waste was dealt with by disposal, but over time that will shift increasingly to recycling, reuse and ultimately prevention.

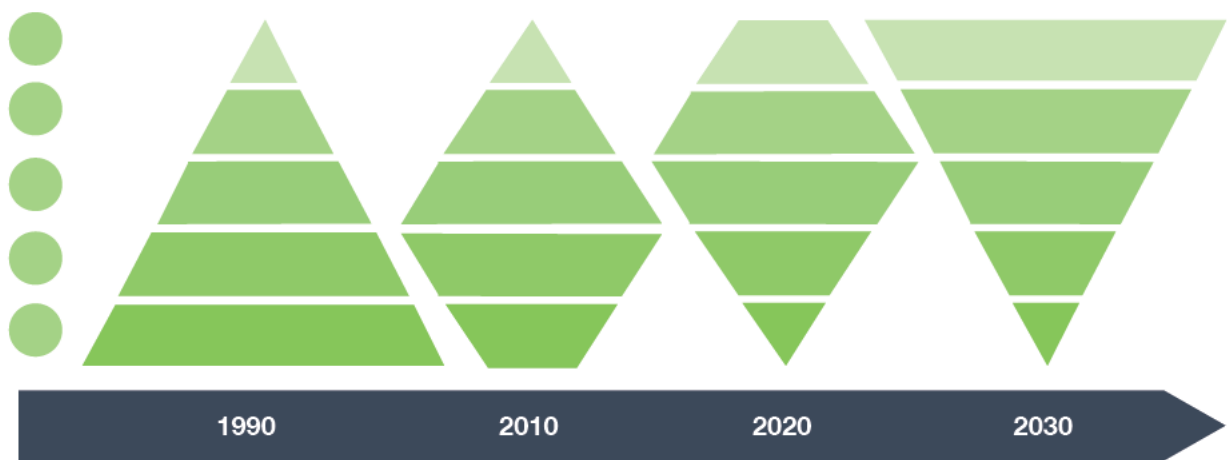


Figure 5 shows the national aspiration for a fundamental shift over time in how waste is prevented, reused, recycled, recovered or disposed in the United Kingdom.

1 Prevention

Using less material in design and manufacture. Keeping products for longer; reuse. Using less hazardous materials.

2 Preparing for reuse

Checking, cleaning, repairing, refurbishing, whole items or spare parts.

3 Recycling

Turning waste into a new substance or product. Includes composting if it meets quality protocols.

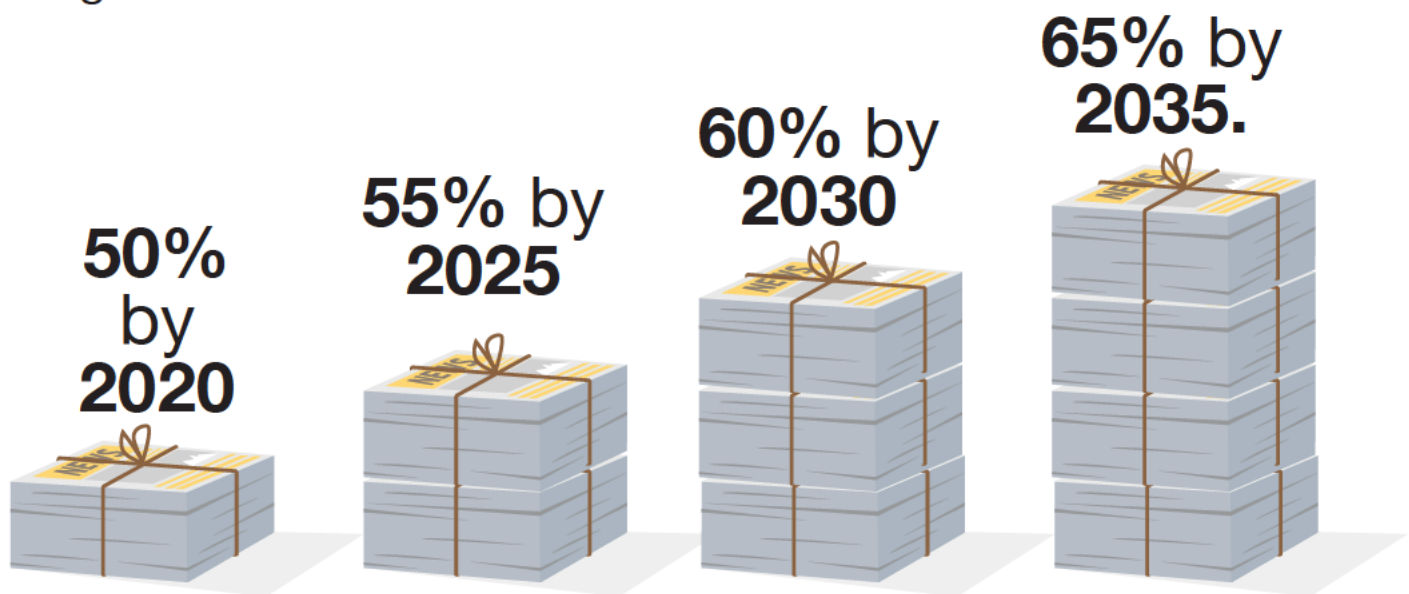
4 Other recovery

Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste; some backfilling.

5 Disposal

Landfill and incineration without energy recovery.

Targets were also set in the UK waste strategy, with specific targets on: recycling rates, food waste and plastic packaging. On a local level the targets for municipal waste recycling rates are most likely to be of relevance, with targets of:



To help with recycling rates the strategy aims to introduce a standard set of materials that should be recycled in all local authorities: helping standardise waste collections and disposal.

There is also an aim to introduce separate food waste collections by 2023 and textile collections by 2025, to reduce the amount of biodegradable waste sent to landfill and reduce the amount of potentially recyclable waste that is not recycled. Food waste is targeted to be reduced by 50% by 2030 and this target is underpinned by the UK's involvement in the voluntary Courtauld Agreement 2025 which sets out aims to increase the prevention of food waste and reduce the cost of food and drink.

Targets set out in the document look to move away from weight based metrics and instead look to reduce the overall percentage of waste produced. While this moves the UK away from the weight based targets of landfill reduction, the strategy still aims to reduce waste sent to landfill to 10% of all municipal waste by 2035. As well as a reduction in the percentage of waste sent to landfill there are also set to be restrictions in what will be sent to landfill; with biodegradable waste set to be banned in landfill sites due to the slow release of methane it produces. Whilst these new targets help to reduce the waste that is disposed and set a framework for supporting a circular economy model, they also place pressure on all local authorities to deliver these targets.

Other policies provided from the 2018 national waste strategy that are relevant to local authorities include:

- working with businesses to improve urban recycling rates;
- increasing inter-authority communication;
- improving the efficiency of energy from waste plants;
- making a 5p carrier bag charge mandatory to businesses and potentially increasing it to 10p;
- helping consumers make considered actions regarding what they buy and how they dispose of waste.

Ambitions are also set for reducing carbon pollution from waste disposal and reducing the miles travelled for waste. These are important ambitions to set for the UK as several areas of the country are currently breaching World Health Organisation's air pollution and air quality targets.

3.2.2 New UK Environment Bill

To accompany the 2018 waste strategy and 25 year environmental plan a new environmental bill has been written which will incorporate the policies of the waste strategy and environmental plan into UK legislation. The new environmental bill that is set to be published by the UK government will aim to:

- Improve air and water quality;
- Improve green spaces and biodiversity
- Implement biodiversity net gain for developments;
- Stop the UK from being a 'throwaway society'.

The bill will ensure targets set to enforce these key objectives and the policies from the supporting strategy documents will be legally binding.

The new environment bill will aim for a wider set of materials to be collected in waste collection streams, so that a greater range of plastics and other materials such as cardboard and paper can be collected and recycled. Introduced with the wider range of collected recyclable materials will be a deposit return scheme for drinks containers. It is worth noting that an introduction of a deposit return scheme should aid in reducing the amount of single use drinks containers that are produced and sent to waste increasing recycling in England. Whilst this is an environmentally beneficial outcome, the deposit return scheme could impact on local authority recycling reducing the volume of recyclable drinks containers a local authority can collect. Local Authorities such as NELC will need to consider this when planning for future waste management costs.

3.3 Local Framework

The Local Plan is the main piece of local framework that encompasses waste management for NELC. Strategic objective 10 of the local plan sets out to: promote the application waste hierarchy in the management of waste and deliver sustainable facilities to manage waste. Covered in the strategic objective is also the need to 'deliver adequate provision for the management of waste arisings', which sets out how adequate planning for waste management will be made over the course of the local plan.

Conclusions made within the local plan state that no further capacity will be needed for waste

management in NELC, however more adequate planning will need to be in place to ensure the waste hierarchy is followed and lower rates of landfill are achieved. As such, the local plan advises on how new waste management facilities, should they be needed, be constructed and the preference for where these facilities should be constructed. Policy 49 of the local plan also covers how new landfill capacity should be planned for, should the need arise. Provisions are made within the plan to reduce waste arisings and increase recycling capabilities of NELC's current waste management options.



4. Environmental Responsibility

As a local authority NELC has a legal responsibility to ensure waste is managed correctly but we also have an environmental and moral obligation that should be shared with our residents and communities, if we hope to make lasting and impactful changes. According to an Intergovernmental Panel on Climate Change (IPCC) report in 2018 on the long term projection of climate change; average global temperatures are set to exceed 1.5 degrees Celsius between 2081 and 2100. A possible likely worst case and best case prediction scenario for global temperature change over the current century is outlined in figure 6.

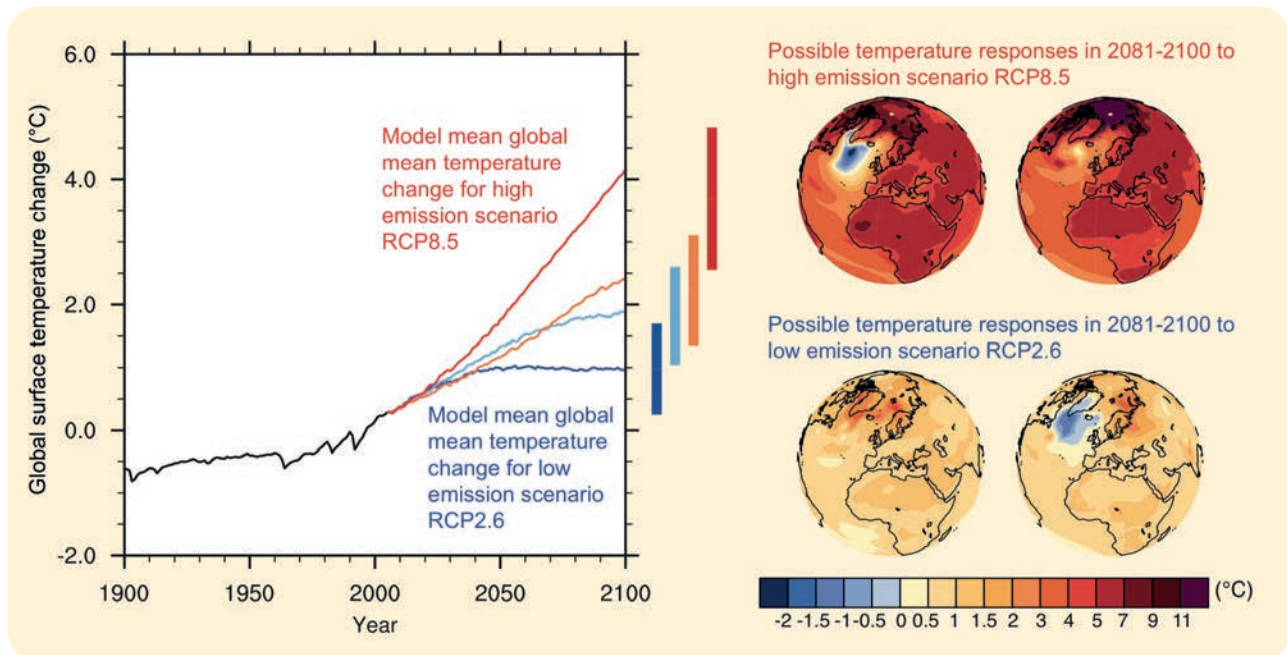


Figure 6 Shows two predicted likely global temperature change maps for 2081-2100 relative to 1986-2005. RCP8.5 is based on a worst case scenario model and RCP2.6 is based on a best case scenario model. Both models are based on climate trends observed 1986-2005. Source: IPCC.

With the predicted temperature changes, come potential changes to the earth's physical processes such as:

- The water cycle
- Climate stabilisation
- Changes to ocean currents
- The carbon cycle.

Given the potential changes being faced for the global climate the Paris Climate Agreement in 2015 (implemented 2016) aims to take measures to reduce the global average temperature increase to less than 1.5 degrees Celsius. Following the Paris Climate Agreement, the UK government declared a national climate emergency in May 2019. North East Lincolnshire Council followed this with a local climate emergency declaration in September 2019. These decisions highlight the growing need to act in reducing emissions and our environmental

impact, with waste management being a key part of this.

Waste not only contributes to our emissions directly from the carbon cost associated with its disposal, transport and potential emissions from toxic waste, but also from the production of the materials long before those materials are discarded as waste. This is considered in the circular economy and highlights the importance of managing waste to extract the most resource we can from it before disposal to landfill. This is because utilising waste in other ways prevents carbon emissions from the production of replacement materials.

Carbon dioxide pollution from waste is not just an issue for climate change but also for ocean acidification. The increases carbon dioxide

recorded in the atmosphere since 1850 by the IPCC has led to a decrease in average ocean pH from 8.3 to 8.15. Ocean acidity is expected to rise with the temperature increase and the increase in carbon dioxide in the atmosphere, with the global average pH decreasing from 8.15 to 7.7 by 2100. The increase in acidity is expected due to the ocean acting as a natural carbon sink: as the ocean becomes more saturated by carbon dioxide more carbonic acid will be produced, increasing ocean acidity. Such an impact to the ocean's acidity could impact global fish stocks, potentially impacting a key area of North East Lincolnshire's economy and food supply. This further raises the importance of our environmental responsibility to manage waste and reduce our carbon footprint from the waste we produce.



As well as the direct carbon and emissions impacts produced by waste there is potential for pollution either by toxic waste, pollution or by plastic pollution. This usually occurs in the form of littering and fly-tipping. Direct littering can be harmful to the environment and to the biodiversity of an area. Litter can not only harm the areas' environment and biodiversity but also damages the visual appeal of the environment, having a negative effect on residents and visitors perception of a place. This can have a knock on impact on the visitor economy when visitors consider whether they should return to the area. Reduction in and good management of waste is, therefore, essential to combat these environmental issues.



5. Waste Produced Within North East Lincolnshire

Within the borough of North East Lincolnshire waste is produced from a variety of sources. This section will set out:

- The types of waste NEL produces
- The sources of this waste
- How the waste is managed.

5.1 Sources of Waste

As an authority, North East Lincolnshire Council is responsible for:

- The collection of household waste
- The management of Municipal Solid Waste (MSW)

However, there are other sources of waste production in the borough that NELC does not have direct responsibility for, such as:

- Commercial Waste
- Industrial Waste
- Construction and Demolition (C&D) Waste
- Agricultural Waste

While NELC does not have direct responsibility for this it must ensure appropriate and correct management is being implemented in accordance with national legislation and policy.

5.1.1. Provisions for Waste

Waste Collection and Management Service	Description of Service
Regular collection of household waste, dry recyclables and green (garden) waste	A free fortnightly collection is offered for domestic waste and recycling waste to residents. There is also a fortnightly garden waste collection offered at a cost which is reviewed yearly.
Community Recycling Centres	NELC has two Community Recycling Centres (CRCs) for residents to deposit household waste. Trade and commercial waste is not accepted at the CRCs.
Bring to Sites	NELC provides various bring to site recycling banks around the borough where residents can dispose of household recyclables such as: glass, cardboard, paper, cans and plastics.
Bulky Household Waste Collection	NELC provides a collection service for bulky waste items that do not fit in domestic waste containers. There is currently a charge for Bulky Household Waste Collections which varies depending on the number and type of items that need collecting.
Clinical Waste	NELC offers a free clinical waste collection service to domestic properties. Residents can obtain yellow clinical waste bags from their doctor's surgery or Grimsby Hospital.
Street Cleansing	NELC currently carries out street cleansing daily in its town centres with high density areas swept every 2-3 weeks and low-density areas swept every 4-5 weeks.
Abandoned Vehicles	Following communication with Humberside Police, NELC may remove abandoned vehicles where there is no local registered keeper. The abandoned vehicle will be recycled where possible.
Fly-tipped Waste	Fly tipping is against the law; but it is a significant problem across the UK with North East Lincolnshire being no exception. NELC collects fly-tipped waste and investigates the waste source taking enforcement action if the source can be identified.

5.2. Municipal Waste

North East Lincolnshire’s Municipal Waste by Month (2018-2019)

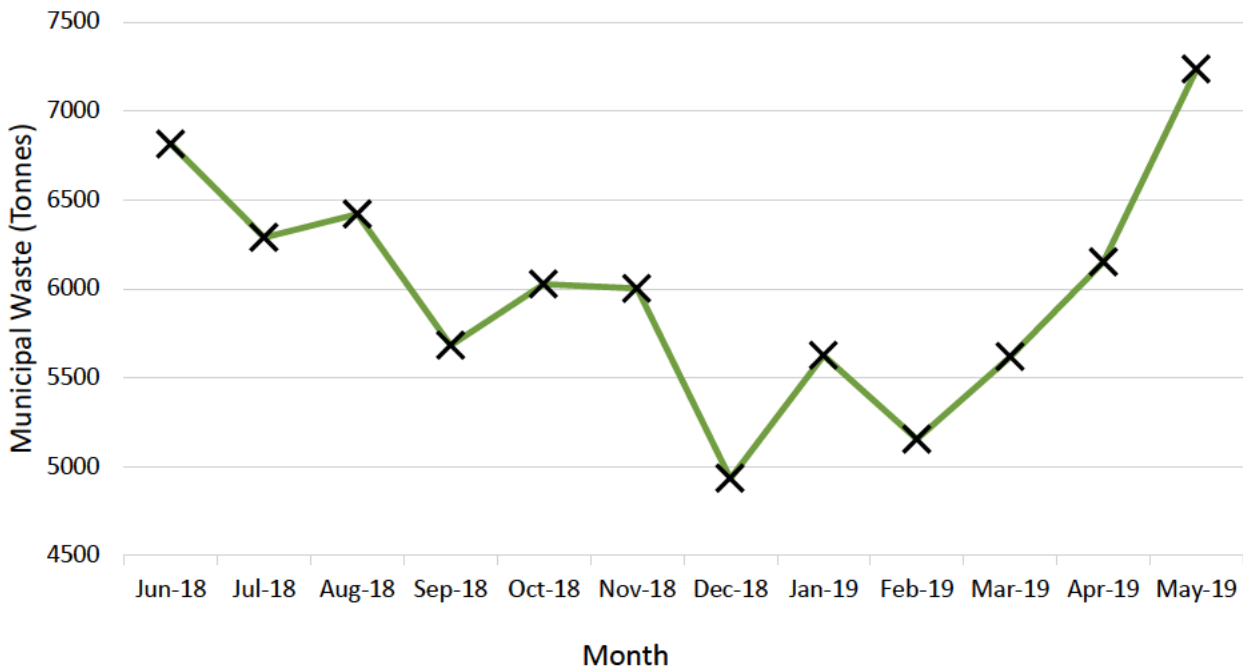


Figure 7 shows the tonnage of municipal waste produced in North East Lincolnshire monthly between June 2018 and May 2019.

Between June 2018 and May 2019 North East Lincolnshire (NEL) produced a total of 71,951 tonnes of municipal waste (including asbestos and inert material). A breakdown of the municipal waste NEL has produced per month (2018-2019) can be seen in figure 7.

7235 tonnes of municipal waste was produced in May 2019. This was the highest of any month between June 2018 and May 2019.

Whilst this suggests that municipal waste is once again increasing within the authority, waste produced in May 2019 is comparably less than the waste produced during the same month in the previous year. In May 2018 7528 tonnes of municipal waste was produced: 294 tonnes more than in May 2019. This indicates that the mass of municipal waste produced within the authority over the last year is decreasing.

The decrease in municipal waste produced was not expected when the previous waste strategy was written. The 2008 NELC waste strategy estimated that a total of more than 120,000 tonnes of municipal waste would be produced within the authority by 2019: approximately 50,000 tonnes more than the waste actually produced in 2019. Current waste production therefore is far below what was expected upon the writing of the previous waste strategy.

Unexpectedly the trend of decreasing total municipal waste collected by NELC has declined for the past decade, since the publication of NELC’s 2008 waste strategy. In actuality since 2009/2010 the total municipal waste collected has decreased by 9,814 tonnes: an average decrease of 981 tonnes per year. The year on year decrease in tonnes of municipal waste collected across the authority can be seen in figure 8.

Municipal Waste Collected in North East Lincolnshire (2009-2019)

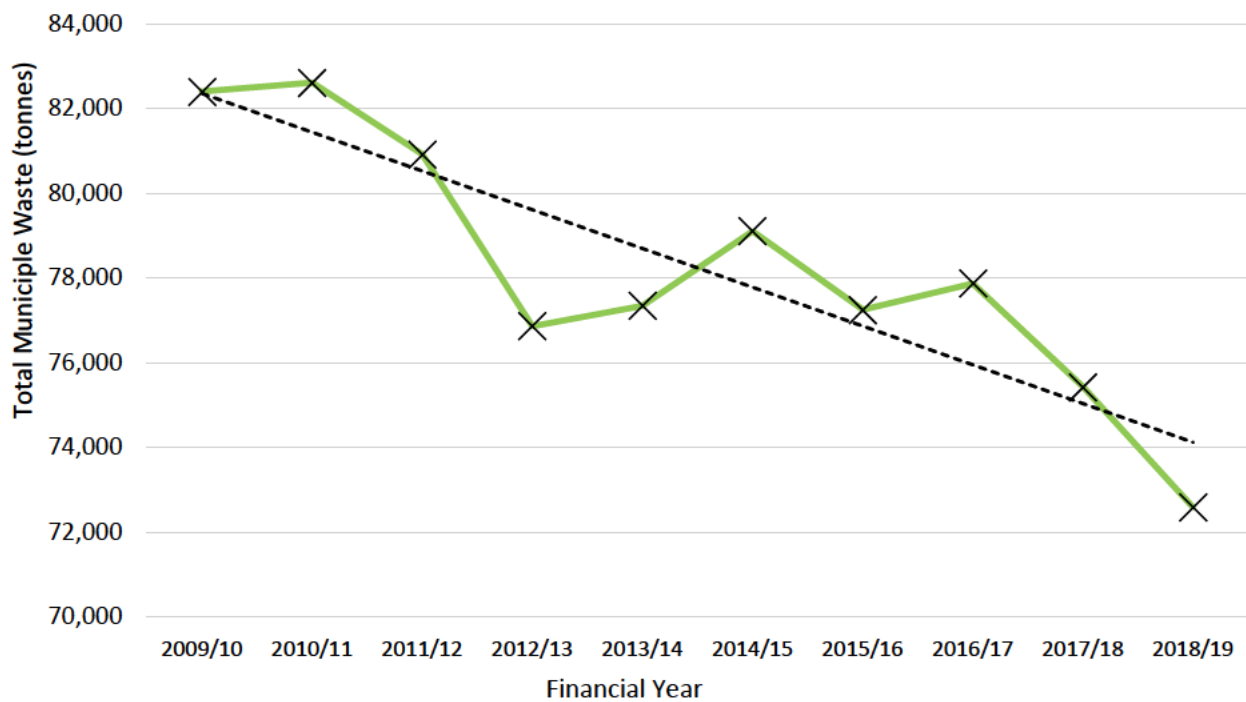


Figure 8 is the mass of municipal waste collected by North East Lincolnshire Council for each financial year (April-March) from 2009 to 2019.

The decline in waste collected by NELC is also noticeable when considering the amount of waste collected per head of population. In 2009/10 NELC collected 518.5kg of waste per person, this has decreased to 445.4kg per person in 2018/19. This is a decrease of 73.1kg of municipal waste collected per person, per financial year. Waste produced within NELC has not simply decreased

as an overall total but it has also decreased per person, this once again is an unexpected decrease: with NELC's previous waste strategy expecting municipal waste produced per person to increase. This could be an indication of greater environmental thinking and responsibility within the borough.



5.2.1 Municipal Waste Recycling

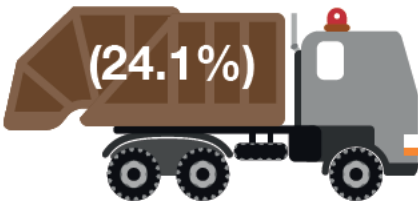


Of the municipal waste that is collected by NELC **26,196.56 tonnes** is recycled.

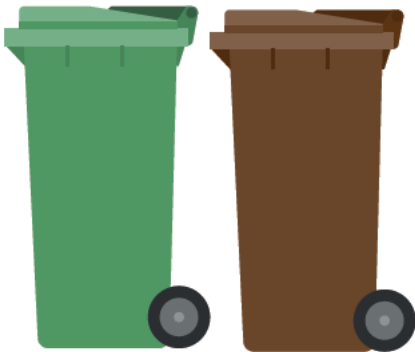
Of the waste that is recycled:



(5.9%)
1540.06 tonnes
(5.9%) is collected as inert material at the Community Recycling Centre (CRC);



(24.1%)
6320.02 tonnes
(24.1%) is collected (as dry recycling) and green waste by the CRC;



(70%)

18,336.476 tonnes
(70%) is collected as recyclable material from kerbside collections

Where waste is recycled and the percentage of overall municipal recycling it contributes to is illustrated in figure 9.

Municipal Waste Recycling Source for North East Lincolnshire

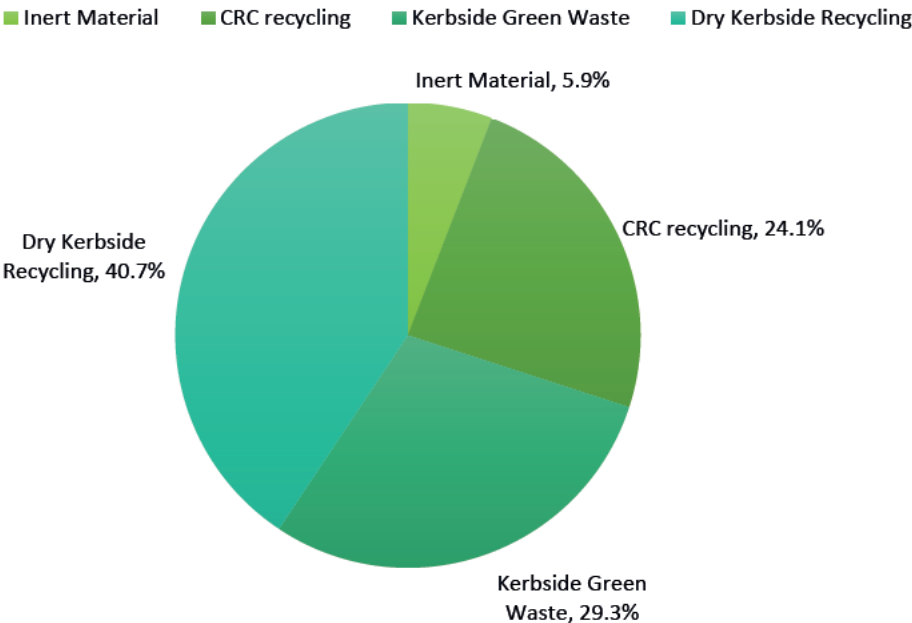


Figure 9 illustrates the sources of municipal recycling in North East Lincolnshire.

Since the 2006/2007 financial year, recycling in NEL has improved with over 3,000 tonnes more municipal waste recycled and an improvement on the recycling rate by 9% (excluding inert materials). Although the annual municipal recycling rate has improved by 9% since 2006/2007 with a current recycling rate of 35.08% (excluding inert materials), there is still variation in the recycling rate from month to month. Annual variation in recycling rates and the mass of recycled material deposited is shown in figure 10, with the recycling rate varying from 39.9% in June 2018 to 27% in December 2018: providing a range of nearly 13% in the recycling rate for NELC.

The wide range of recycling rates in figure 10 display themselves across specific periods of the year, with the two lowest recycling rates of 27% each month presenting during the winter months of December and January whereas the two highest recycling rates during

A comparison of Municipal Waste Recycled against total municipal waste in North East Lincolnshire (2018-2019)

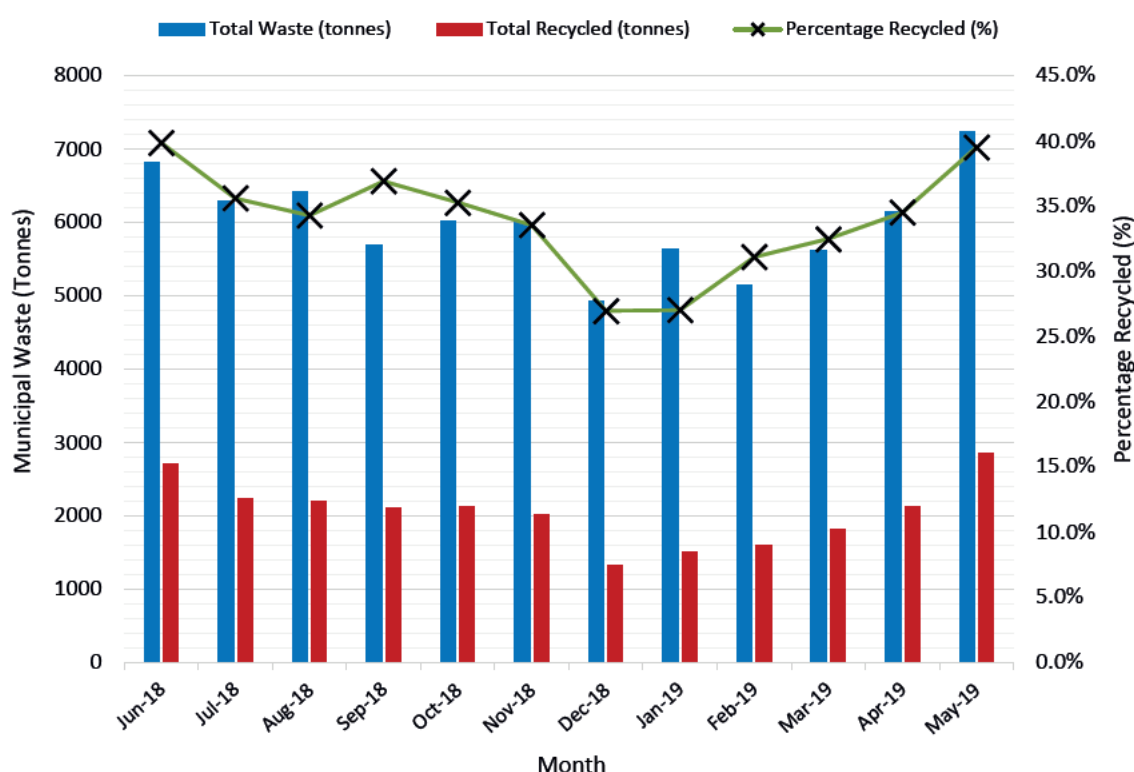


Figure 10 is municipal recycling figures for NELC plotted against all municipal waste collected.

2018-2019 were presented in June 2018 and May 2019. It is also worth noting that the highest recycling rates in NELC were provided during months where the most municipal waste was collected, similarly the months with the lowest mass of municipal waste also provided the lowest recycling rates. This is primarily due to the amount of green waste collected in the authority with December only yielding collections of 73.42 tonnes of green waste, whereas in June during the same year, 1138.36 tonnes of green waste was collected in the authority. A similar pattern for green waste was observed in the CRC with only 47.76 tonnes collected in December and 269.4 tonnes collected in June.

While recycling rate has improved over the past decade it has not improved enough to meet the municipal recycling rate target for 2020 of 50% and has increased at a lower rate than the targeted 42% in the 2009 waste strategy. Compared to the national recycling rate NELC is approximately 7% behind, a gap that has increased over the last decade. Whilst the gap has increased by approximately 2% between national recycling rates and NELC recycling rates, both figures have stagnated since the financial year of 2011/2012.

NELC and National Recycling Rates (2009-2019)

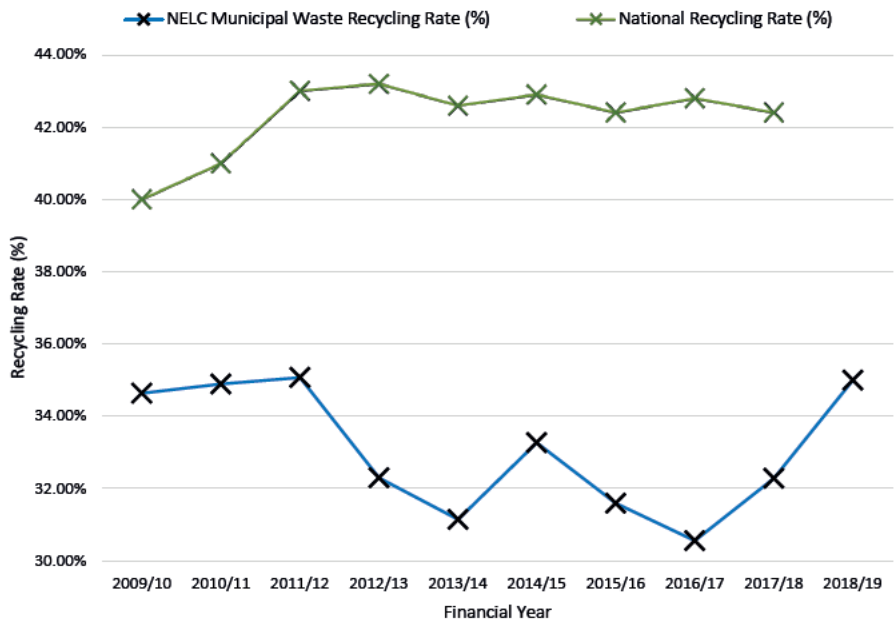


Figure 11 shows the annual municipal recycling rates for NELC and England during each financial year (2009-2019). Data source, Gov.UK Waste Statistics, available online: <https://www.gov.uk/government/statistics/local-authority-collected-waste-management-annual-re>

After nearly a decade of stagnation NELC’s current municipal recycling rate is equivalent to what it was in 2010/2011: representing nearly a decade where NELC has not improved on the municipal recycling rate. Whilst this was unpredicted in the 2009 NELC Waste Strategy it is worth noting NELC has faced various challenges since the publication of the previous waste strategy and over the last decade; not least the impact of the financial crash and reduction in local government funding. Whilst little progress has been made on the recycling rate for NELC, indicated in figure 11, progress has been made elsewhere in waste management within NELC.

5.2.2 Energy from Waste (EfW)

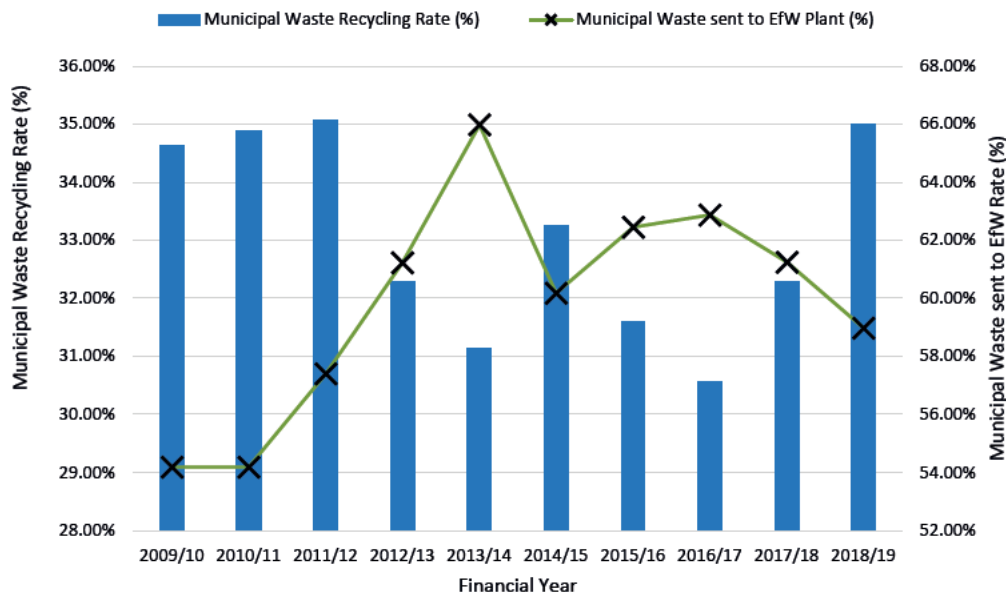


Figure 12 is a comparison of recycling and incineration rates in NELC for each financial year (2009-2019).

Municipal waste that is not recycled is currently processed by the EfW plant located in the Newlincs Integrated Waste Management Facility where the municipal waste is incinerated and energy is produced from the incineration of the materials. In 2018/2019 of the 72,474 tonnes of municipal waste collected, 58.98% was sent to the energy from waste plant to be incinerated. The rate of municipal waste incinerated in NELC was 4.8% more than in the 2009/2010 with a total of 42,745 tonnes of waste incinerated. While the incineration rate for municipal waste has increased since 2009/2010, the total mass of waste incinerated has decreased, with 1,905 tonnes less waste incinerated in 2018/2019 compared to 2009/2010. While the total mass of waste incinerated has decreased, this is to be expected given that as an authority NELC now produces and manages less waste than it did in the 2009/2010 financial year.

Information provided in figure 11 indicates that over financial years where incineration rates have been greatest, recycling rates have been at their worst. This is most noticeable in the 2013/14 financial year where the incineration rate for municipal waste was recorded at 65.98% (the highest it has reached over the last 10 years) whereas the recycling rate was recorded at 31.15%: the second lowest recycling rate over the past decade. Although recycling rates and incineration rates have often been inversely linked over the past decade it should be noted that the combined recycling and incineration rate has increased by 5.15%. This shows the progress NELC has made in reducing the amount of waste diverted to landfill with a total of 93.98% of municipal waste being either incinerated or recycled in the 2018/2019 financial year.

5.2.3 Waste Diverted to Landfill

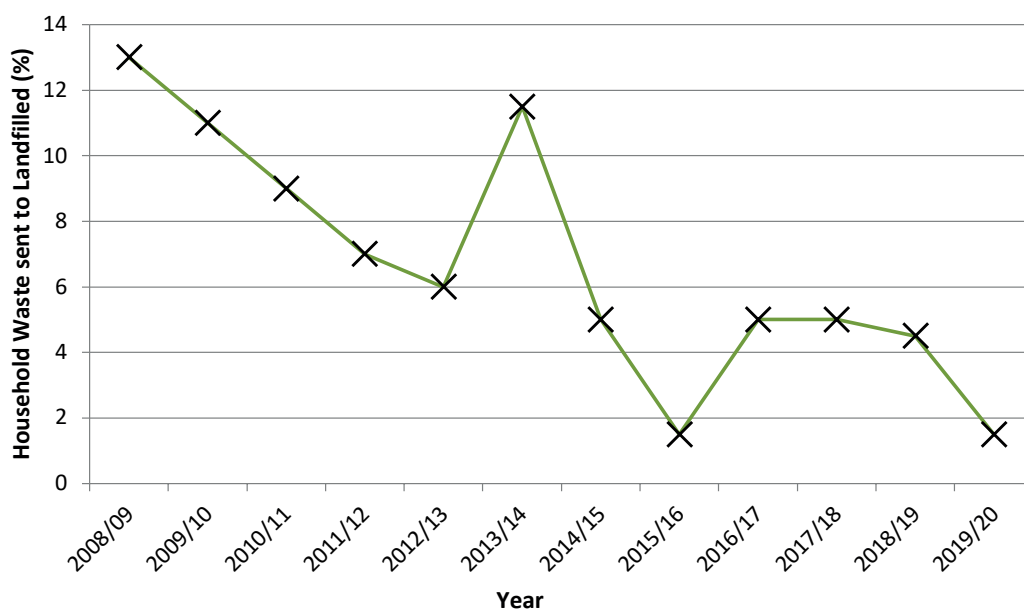


Figure 13 is the percentage of household waste sent to landfill by North East Lincolnshire Council for each financial year of the implementation period of the NELC 2008 Municipal Waste Strategy (2008-2020).

Municipal Waste that is neither incinerated nor recycled is diverted to landfill. Landfill rates in NELC have been on the decline over the past decade as other options for waste management have been explored and utilised, this has meant that only 6.02% of municipal waste was diverted to landfill in the 2018/2019 financial year. Figure 3 (Page 11) displays the full progress made on landfill diversion with an overall decrease in municipal waste landfill diversion of 5.15% and a decrease in the mass of waste sent to landfill by 4841.75 tonnes. Whilst much progress has been observed in the decrease of municipal waste sent to landfill, the greatest decrease can be seen in household waste sent to landfill. From the waste collected at kerbside, 11.5% less waste is sent to landfill: with 2019/20 landfill figures from kerbside currently at 1.5%. The progress NELC has made on landfill diversion from kerbside collections can be seen in figure 13.

5.3 Non-Municipal Waste

Not all waste generated within the UK comes from household and municipal sources. In 2016, according to official DEFRA estimates, only 12% of waste came from households, meaning 88% of the waste produced in the UK was produced by non-household sources.

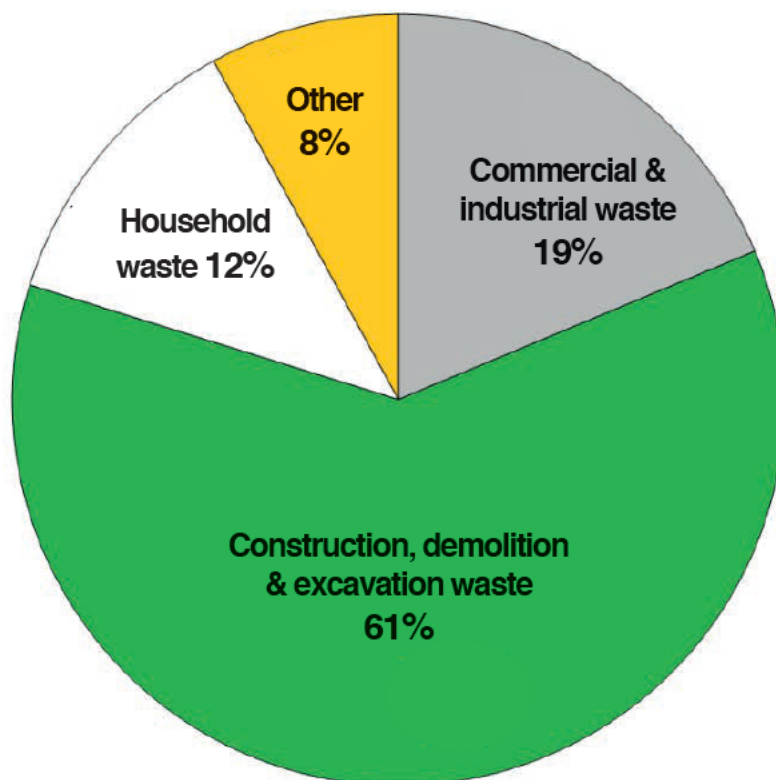


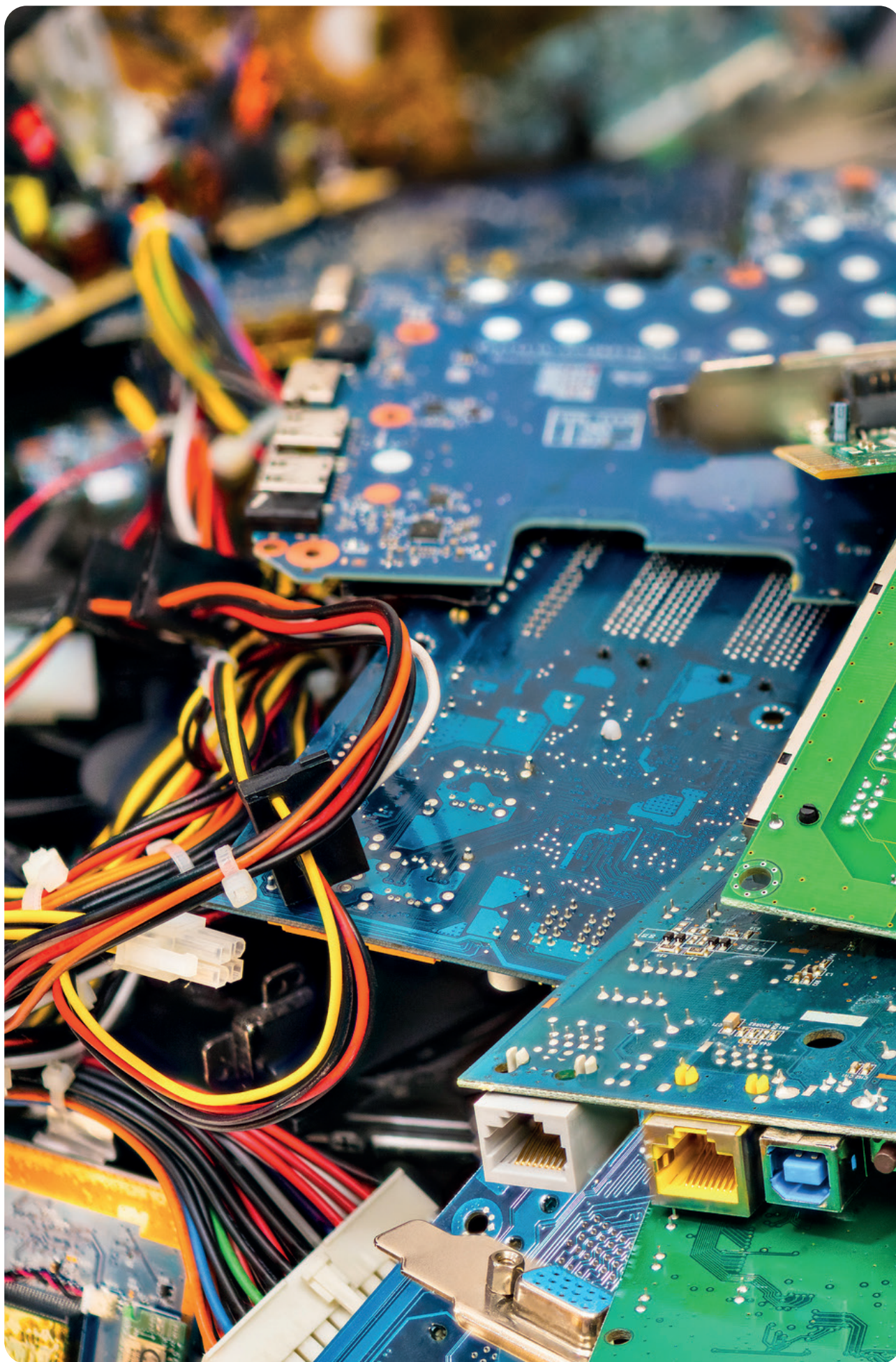
Figure 14 shows the percentage breakdown of UK waste sourced in 2016. Source: DEFRA.

According to government figures, NEL produced a total of 419,594.52 tonnes of controlled waste in 2018. Comparatively to the 2006/07 data obtained via the Environment agency this would mean NEL has produced approximately 120,000 tonnes less controlled waste than it did more than a decade ago. This contrasts to national trends in waste production which have increased over the last decade.

5.3.1 Commercial and Industrial Waste

According to official UK waste statistics in 2017 a total of 39.1 million tonnes of commercial and industrial waste was produced in England alone. Due to how statistics are currently reported it is unknown how much of the commercial and industrial waste was produced in NELC. Given that the overall mass of waste recorded to have been produced in NEL has decreased over the last decade, it could be assumed that commercial and industrial waste production has decreased in the area.

Businesses that transport, buy, sell or dispose of waste need a waste carrier licence to operate legally. A waste carrier license can be obtained via the government website. Businesses that are required to register for a license and do not, can be fined up to £5,000. If further local collections are required to support commercial waste management, NELC is committed to reviewing these provisions.



5.3.2 Hazardous Waste

Some of the waste that is produced and collected within NEL will be categorised as hazardous by law. To identify if waste is classed as hazardous, waste producers/holders must check on the government website. If the waste is classified as hazardous the waste producer/holder must follow the strict hazardous waste management steps outlined on the website.



5.3.3 Agricultural Waste

Alongside the production of commercial and industrial waste, there is also agricultural waste. According to the Chartered Institute of Waste Management, the UK produces 135,500 tonnes of plastic agricultural waste each year. However, plastic is not the only agricultural waste in the UK, there is also manure and slurry. The last national survey on manure and slurry waste in 2003 found that there was approximately 43 million tonnes of waste produced in that year.

5.3.4 Construction and Demolition Waste

According to the DEFRA's statistics on waste, in 2016 the UK produced 66.2 million tonnes of non-hazardous construction and demolition waste. 59.6 million tonnes of this was produced in England. However, of the 59.6 million tonnes of non-hazardous construction and demolition waste produced in England 55 million tonnes was recovered, meaning a recovery rate of 92.1% was achieved. This ensures that most of the non-hazardous construction and demolition waste is not sent to landfill. Whilst there is no specific data reported for NEL's non-hazardous construction waste production it can be assumed that the data is not dissimilar to the national statistics. This would mean NEL is likely contributing to the UK achieving its minimum recovery of non-hazardous construction and demolition waste target of 70% by 2020 set by the EU.



5.3.5 Other Non-municipal Waste

There are two other main types of waste produced in NEL:

- Waste Water – According to Environment Agency (EA) data approximately 80,000 tonnes of waste water passes through the Pyewipe Waste Water Treatment Works each day.
- Low Level Radioactive Waste (LLRW) – Currently two sites exist in NEL which produce LLRW: Millennium Inorganic Chemicals Ltd and Diana Princess of Wales Hospital.

Both types of waste are monitored and regulated by the Environment Agency. It is also worth noting that whilst LLRW comprises 90% of UK radioactive waste it only contributes to 0.1% of the radioactivity of all radioactive waste produced in the UK.

5.4 Waste Managed in North East Lincolnshire

NEL has various waste management sites within the borough. These sites range from biological treatment facilities, operated by Anglian Water, to the Newlincs integrated waste management site which manages all municipal waste in the borough. The Newlincs site also ensures that no municipal waste is exported from NEL, meaning all of the municipal waste produced in the borough is managed within the borough.

While the Newlincs site manages all municipal waste and the biological treatment facility handles water waste produced in the borough there are also waste treatment facilities which manage waste produced outside of the borough. Waste management facilities such as the Ryepower incineration plant manage up to 75,000 tonnes of non-local authority collected waste. There are also waste transfer stations at Immingham docks which manage waste that is imported and exported out of the country: this is due to Immingham docks being a major import centre for goods in the North of England. Regardless of waste management type, all waste management facilities must obtain a permit from the Environment Agency to operate in England. A full list of all permitted waste management organisations in NEL can be found on the Environment Agency website.

5.5 Expected Waste Arisings

During the lifetime of this strategy, the volume of waste produced within the authority and how it is managed is expected to change. The changes to waste production and management will be affected by a variety of factors. These factors are outlined later in this section.



5.5.1 Population

According to the Office of National Statistics in 2016 the estimated population for NEL was 159,144; down by 0.27% on the previous year. This was primarily due to 0.47% of the population being lost to internal migration within the UK. A net total of 355 people aged 15-19 left the local authority due to internal UK migration, the most of any age group.

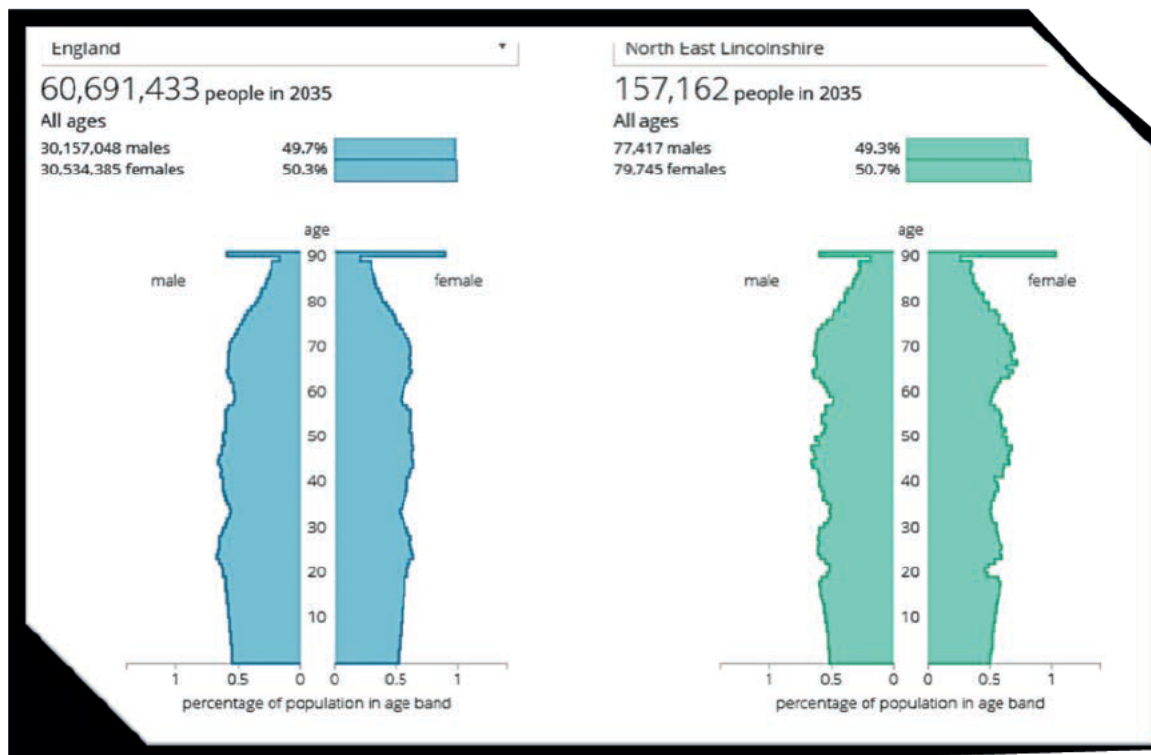


Figure 15 shows the projected population distribution by age for England and North East Lincolnshire in 2035. Source: Office of National Statistics.

The population decrease in NEL contrasts with the population increase seen across the UK with the overall UK population rising by 538,100 during the course of the year. This opposing trend is expected to continue over the duration of this waste strategy with the population of the UK expected to continue to rise but the population of NEL expected to decrease. By 2026 a total decrease of 0.7% in population is expected. By 2035, which is the scheduled end date of this strategy, the population in NEL is expected to be 157,162 (Figure 15): 1,982 less than in 2016. The main driver for the population decrease is expected to be internal migration of people to other areas of the UK. From 2016-2026: a net of 2,658 people are expected to have migrated to other areas of the UK. This will likely be due to the number of outgoing young people in the area.

An expected reduction in population for NELC, projected by the office for National Statistics, contrasts with the current local plan and proposed housing schemes in NELC. The current local plan, operating alongside Grimsby's 'new town deal' aims to develop areas of Grimsby and bring people back into the area. Alongside this is the proposed construction of 5,000 new houses before 2035. These plans could offset or even reverse the decline in population the Office of National Statistics expects for NEL. Should these plans be successful NELC's population could be expected to increase, with an expected increase in households from 73,600 to 78,600 over the lifespan of this waste strategy.

Should a decrease in population occur, it should be expected that no additional waste will be produced within the borough as a result of population

pressure. In all likelihood it should be a contributing factor to a continuation in the reduction to municipal waste production that has already been observed over the past decade. Whilst a reduction in municipal waste and in particular waste from households could be expected within the borough, it is possible that due to population growth in the rest of the United Kingdom waste management in NEL may increase. As a waste transfer station operates at Immingham docks, it is anticipated it will continue to receive waste from other areas of the UK. Should the UK population continue to increase, more waste could be produced as a result: meaning the transfer station at Immingham docks would have to process more waste.

Alternatively an increase in population could mean a higher number of people consuming goods. Whilst more goods may be consumed, it does not always lead to an increase in waste: as observed in the predictions made in the previous waste strategy. As such it should not be expected that a rise in population should increase waste to the Energy from Waste plant. It should also not be expected that a reduction in population for NEL will contribute a decrease in municipal waste arisings. However, an increase in households would lead to longer collection rounds for refuse collection vehicles and should be factored in to future waste management plans and costings.

Whilst population is one contributing factor to waste production it is not the only factor to consider and therefore a greater range of factors need to be considered.

5.5.2 Packaging

The introduction of the new environment bill will bring in a new tax for any packaging with less than 30% recyclable material. It is hoped this tax will reduce the volume of material used for packaging and help to provide a more circular economy by producing packaging with more sustainable materials. The new producer responsibility system should also reduce waste arising's by ensuring fewer materials are used in packaging. This will mean there is less overall

waste but also that there are less raw materials used in the packaging process. Further to this, the introduction of individual recycling rate targets for specific packaging materials should increase the implementation of a circular economy and should bring greater awareness for companies when producing packaging. A deposit return scheme should also benefit these aims: by reducing waste from single use plastic bottles it should reduce the total waste produced in the UK.

Although it is expected that waste from packaging will reduce and become more sustainable, it is still not known how effective the proposed targets from the new environment bill will prove to be.

5.5.3 Waste from Other Local Authorities

NELC has committed itself to working with North Lincolnshire Council on waste management for the benefit of both authorities. As a result waste will be received from North Lincolnshire Council, for treatment in NELC. This will increase the annual mass of waste NELC will be responsible for: meaning that NELC is likely to manage more than 80,000 tonnes of municipal waste per year. This would be based on NELC producing a similar total mass of municipal waste as it has done over the past decade.

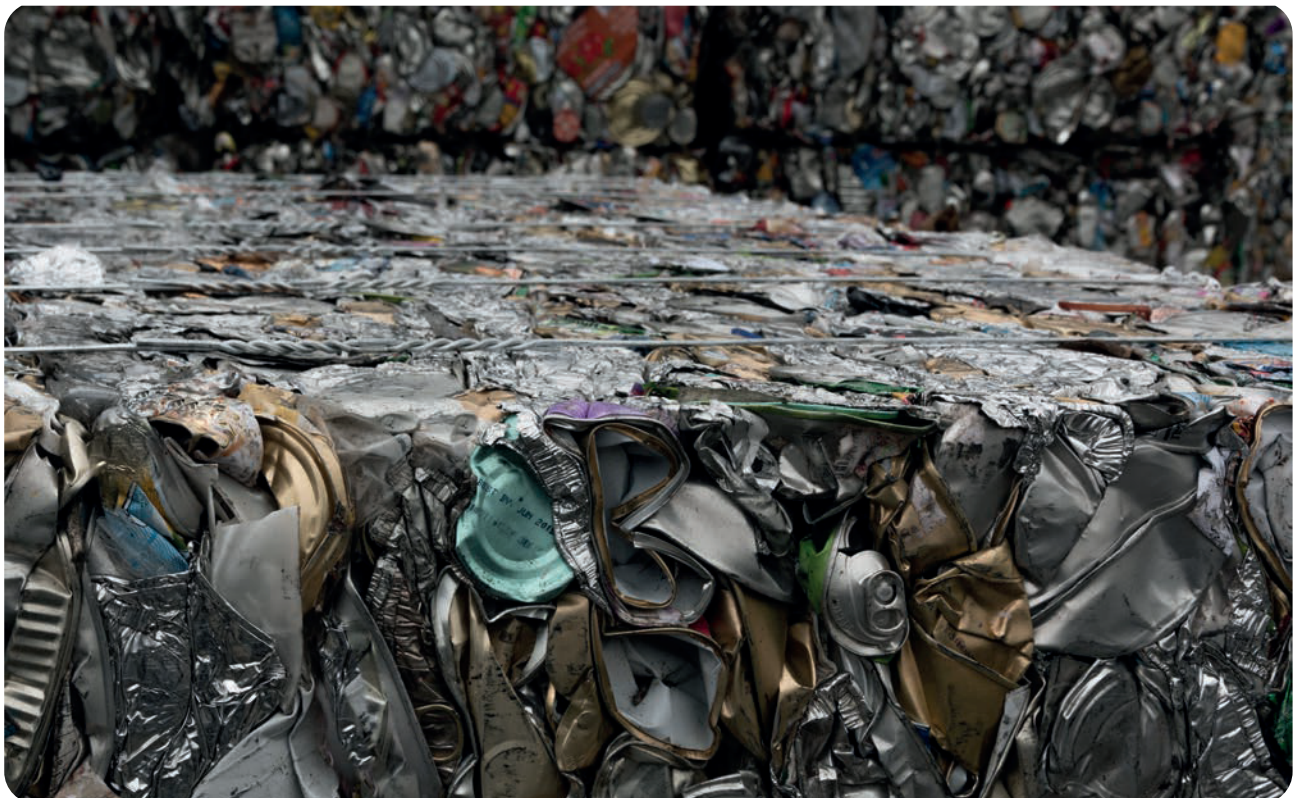
If the same mass of municipal waste was produced by NELC in 2020 as was produced during the 2018/2019, NELC would be responsible for approximately 82,000 tonnes of waste: similar to the mass of municipal waste produced and managed by NELC in 2009/2010. This indicates that future municipal waste will be manageable even with the addition of North Lincolnshire Council's waste. It is worth noting that with the current decreasing trend of municipal waste totals for NELC, it is likely that the total municipal waste arising's for NELC to manage will total below 80,000 tonnes in the coming years.

5.6 Future Waste Management

Currently NELC has a waste management contract with Newlincs which is scheduled end in December 2029. All municipal waste produced by residents of NEL will be processed by Newlincs until this point. A review of the waste management contract will be undertaken prior to its expiry to determine what appropriate treatment options are available for NELC's waste going forward.

During the lifespan of the previous waste strategy, various waste management infrastructure projects were proposed and are currently scheduled to be implemented over the lifespan of this waste strategy.

Proposed/Upcoming Waste Infrastructure		
Facility	Expected Completion Date	Description
Altalto Waste to Jet Fuel Facility	Mid 2020's	Set to be located in Stallingborough, the facility will be the first commercial scale waste to jet fuel facility. The facility will take residual waste, which would otherwise be sent to landfill, and convert it to jet and road fuel.
North Beck Energy Centre	Early 2020's	North Beck Energy Centre will take non-hazardous residual waste, which would otherwise be sent to landfill, from the UK and convert it to electricity. The facility is proposed to be located in Immingham



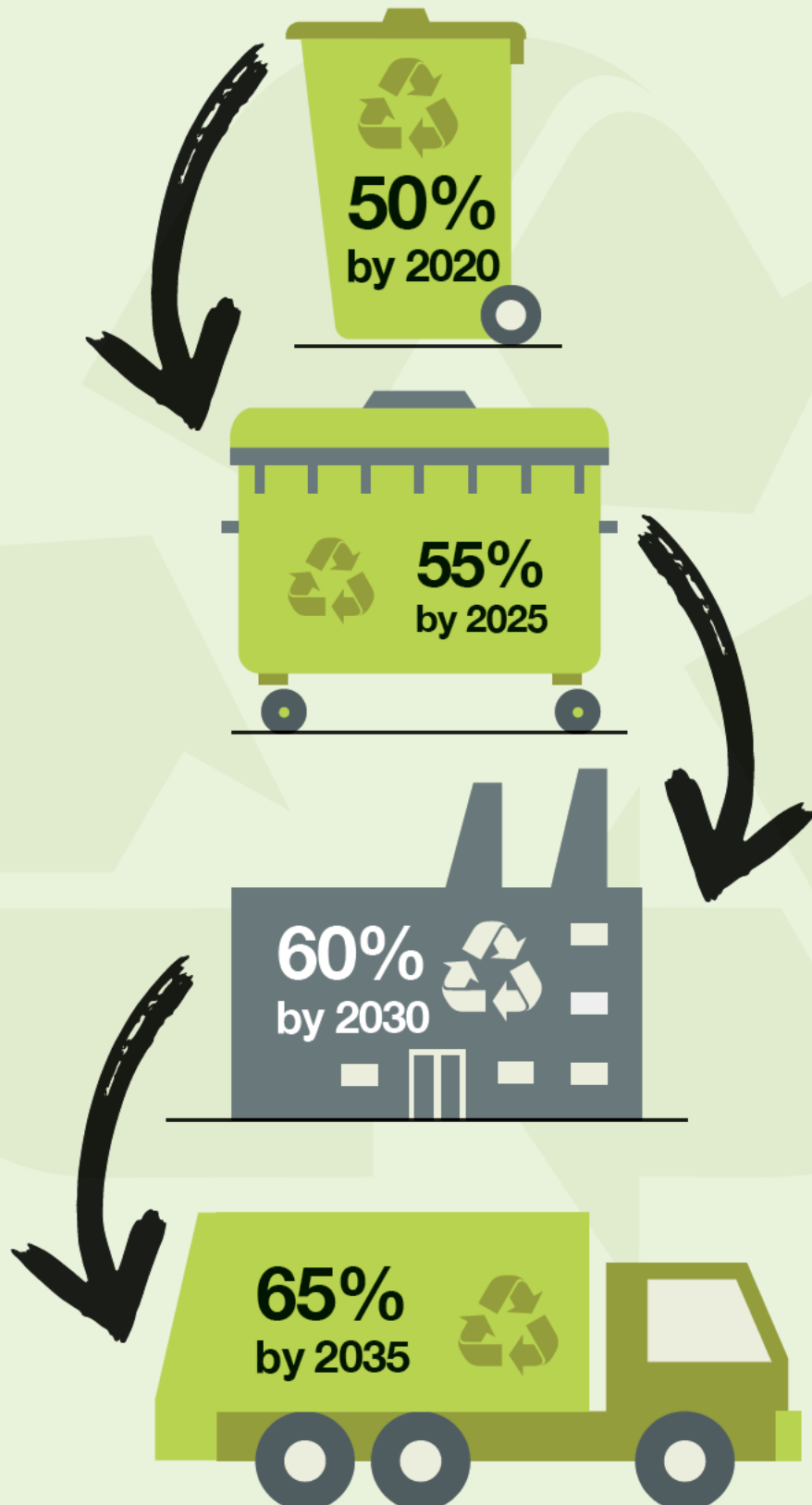
6. Objectives of the Waste Strategy

NELC recognises that its future strategy for waste management will need to meet the challenges that have been identified and the main aims of the 2018 national waste strategy. To achieve this NELC has set the following main priorities and objectives:

PRIORITIES		
WE WILL AIM TO BE;	WHAT THIS MEANS	KEY OBJECTIVES
Resilient	We will ensure efficient and reliable collections of waste and recycling from all households, which are responsive to future changes in legislation and local needs.	Improved customer satisfaction
Customer friendly	We will provide a waste collection method, which is easy for households to use and encourages residents to recycle more.	Increase the number of households that participate in recycling Increase the amount of recycling collected from each household
Environmentally responsible	We will ensure our arrangements for collection and disposal of waste are designed and operated in a way that reduces our environmental impact as far as practicable. We will aim to achieve a reduction in emissions from disposal, treatment and transport, but also from the production of the materials long before those materials are discarded as waste via waste reduction.	• Reducing the amount of waste which is produced • Collect good quality recycling with a low contamination rate • Reduce the travel distance to waste disposal points • Avoid landfill wherever possible
Education focused	We will help and encourage learning about sustainable waste management by developing stronger relationships with schools and the community.	Improve sustainable waste management education and awareness.
Collaborative	We will work with neighbouring authorities and our business partners to explore better service delivery and contract management for waste disposal.	Improved value for money for waste disposal
Responsible commissioners and effective contract managers	We will maximise the use of and value from our current contract and plan for effective commissioning for the future.	Ensure effective future commissioning, considering both service quality and value for money.

6.1. Increased Recycling

Targets set out by the government aim for England to achieve a municipal waste recycling rate of:



For NELC to meet these aspirational targets, a substantial increase in the amount of recycling we collect must be achieved.

6.1.1 Increasing the Number of Households Recycling

Monitoring of the kerbside collection services for dry recyclables and garden waste has shown that not all households use these services. Some houses that use the dry recycling collection services put materials into recycling containers which are not recyclable or collectable. This results in a low rate of collection for recyclable materials and the need for NELC to separate out the unwanted items before the materials are sent for recycling or composting. This adds to the costs associated with recycling. NELC considered the following options for increasing the number of households that recycle:

- Encourage more households to recycle by raising their awareness of waste issues through the use of a suitable publicity and education campaign;
- Make it more convenient for households to recycle by introducing a better recycling offer with higher capacity waste containers;
- Reduce the cost for garden waste collections.

Recycling rates are often higher in sub-urban areas, compared to NELC's more densely populated urban areas. In properties where storage space for waste containers is limited, it is harder for residents to maintain high recycling levels. To improve recycling in all of our communities we are committed to:

- Reviewing collection models for densely populated residential areas to improve ease of recycling for these residents.
- Engaging with landlords and property managers to promote recycling in flats and houses in multiple occupation (HMOs)



6.1.2 Collecting a Wider Range of Materials

NELC considered the following options for collection of additional materials:

- The introduction of a wider offer for kerbside plastics collections;
- Introducing kerbside collections for other materials such as textiles, foil and electrical equipment;
- Collecting food waste.

We use five million tonnes of plastic in the UK every year, nearly half of which is packaging. Plastic waste does not decompose and can last centuries in landfill or as litter on land and in our seas. Whilst not all plastic can be recycled, NELC is committed to review and increase the range of plastics we collect from households as far as is environmentally and financially sustainable.

The collection of other materials such as textiles, foil and electrical items will also be assessed. In

cases where only small amounts are presented in kerbside collections from household waste: collections at bring to sites and Community Recycling Centres will be considered as a more financially sustainable alternative to collecting additional waste from the kerbside.

The 2018 national waste strategy sets the aspiration of weekly collection of food waste from 2023. This could increase the recycling rate achieved in NEL by up to 5%. The Animal By-Products Regulations (ABPR) requires food waste, which contains meat or dairy products, to be either composted in an ABPR compliant facility (an in-vessel composting system) or an anaerobic digestion facility. For this reason the most financially viable option for food waste disposal is to keep it separate from other green waste such as garden waste. This would require a separate collection of food waste on a weekly basis, which would result in a significant increase in collection costs.

6.1.3 Collecting Larger Volumes of Recycling

We want to deliver a comprehensive and sufficiently frequent recycling collection system that: captures as much material as possible, promotes householder participation and ensures that high levels of quality recyclable or compostable materials are available for reprocessing.

Better recycling containers of greater capacity will be necessary to allow households to increase how much recycling they present for collection.

Community Recycling Centres (CRCs) provide an important additional provision to allow residents to recycle a wider variety of material and greater volumes. We are committed to review the current provisions for CRCs to ensure we deliver high quality community recycling services, suitably designed and located to benefit all residents in NEL.

When items arrive at Community Recycling Centres

there is also an opportunity to identify and separate good quality materials that are suitable for reuse instead of disposal. We want to expand what we currently have in place for sustainable waste disposal in this area and work collaboratively with charities to encourage reuse as the first option for items arriving at CRC's when legislation allows this.

As well as taking in domestic waste, NELC is also reviewing the possibility to offer a paid service at CRC's for commercial waste. The service should increase local recycling rates and meet a local need for businesses that do not produce enough commercial waste for it to be viable for them to use a commercial waste collection service. A reduction in fly tipping should also be expected as a result of the new service. It is important to note that this service will be charged to ensure that there is no cost to the tax payer or the authority in providing this service.

6.2 Waste Minimisation

The 2018 national waste strategy contains many initiatives applicable to product producers, which are designed to assist in reducing the waste they produce. This includes:

- Encouraging resource efficient product design and longer life products.
- Reviewing the effectiveness of legislation designed to minimise packaging and encouraging a product design for greater reuse and recycling.
- Encouraging sustainable material choices and reducing the production of single use plastic products.
- The introduction of a deposit return scheme for drink containers (bottles and cans).

These national initiatives are likely to impact both the quantity and types of waste generated by households in NEL in the future. Along with changes to collections and a greater focus on recycling, this will change the composition of the waste collected from households: enabling NEL to achieve the target of 65% municipal recycling by 2035.

	Waste strategy time line The route to 65% recycling target																			
Year																				
%	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
2019	Domestic 65%													Dry 20%				Garden 10%		CRC 5%
2023	Domestic 50%											Dry 25%				Garden 10%		Food 10%		CRC 5%
2029	Domestic 40%								Dry 30%						Garden 10%		Food 10%		CRC 10%	
2035	Domestic 35%							Dry 30%							Garden 10%		Food 15%		CRC 10%	
%	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100

Figure 16 shows an estimate of the change to how municipal waste will be managed in NEL from 2019-2035.

To support our residents through this fundamental shift, the Council will gradually change the waste containers we provide them to larger capacity waste containers for recycling and smaller containers for domestic waste.

6.3. Reducing Environmental Impact

6.3.1 Collect Good Quality Recycling with a Low Contamination Rate

To provide the most environmental benefit from recycled materials and to avoid exporting recycled materials outside of the UK it is essential that the materials we collect are of a quality fit for the UK recycling market. This means that the aspiration for higher quantities must not be allowed to reduce the quality of recycling collected. Maintaining collections where glass is collected separately from paper and moving towards a system where food waste is collected separately, would ensure that a high quality of materials is available for reprocessing in the local area.

6.3.2 Reduce the Travel Distance to Waste Disposal Points

We will ensure our arrangements for collection and disposal of waste are designed and operated in a way that reduces our environmental impact as far as practicable. The recycling we collect is a resource, which can be used by the industry in producing new products and materials. To reduce our environmental impact we want to ensure as far as possible that our waste travels the minimum distance to final destination of re-use. This will reduce our carbon footprint and also support the local economy by making good quality raw materials available.

6.3.3 Avoid Landfill Wherever Possible

Whilst NELC already achieves the 2035 national target for diversion from landfill, the aspiration is to further reduce the amount of waste going to landfill. Sending waste to a local energy from waste plant has contributed greatly to this target, but further work is still possible to look at landfill diversion during the energy from waste plant shut downs and high waste capacity periods.



6.4 High Quality Waste Service Provision

6.4.1 Improved Resilience and Customer Satisfaction

The provision of a resilient and timely waste collection service is key to increasing trust and encouraging residents to work with the Council for better recycling outcomes. Service delivery changes could also reduce wind-blown litter from presented waste and reduce the moisture content of paper and cardboard. Operational services also need to be designed to allow them to be responsive to future changes in legislation and local needs.

6.4.2 Financially Sustainable Service Provision

At a time when Local Authorities face substantial and long term financial pressures, it is essential to ensure value for money in current contracts. Both WRAP (Waste & Resource Action Programme) and Defra's Waste Infrastructure Delivery Programme (WIDP) have demonstrated that efficiencies as well as service improvements can be made through greater joint working between authorities. There is also evidence from other sources such as the Environmental Services Association that show collaboration and joint working can deliver significant savings. Better sharing of assets for handling household and commercial waste would drive down disposal costs.

NELC is committed to working closely with neighbouring authorities, in particular North Lincolnshire Council, to jointly achieve better value waste disposal solutions. The aspiration is for this partnership to continue for the duration of the current waste disposal contract and form part of future commissioning of new disposal arrangements, to achieve economies of scale and best value.

6.5 Improving Education and Community Engagement

An integral part of NELC's waste strategy is to be education focused. To do this, community involvement and engagement will be paramount. Community engagement is undertaken using a variety of methods including:

- Education campaigns undertaken in schools;
- Local community waste events such as NELC's SKIP IT;
- Local community campaigns throughout the borough;
- Engagement with the community by publishing online information on waste and recycling;
- Supporting and advocating national recycling week.

Experiences in other authorities show that a suitable education and community engagement campaign could be used to:

- Increase the number of households that recycle
- Increase the amount of materials separated for recycling in households
- Reduce the level of contamination in the collected materials.

This type of campaign could also be used to educate households about the need to reduce the amount of waste that they produce, which would support any plans for meeting waste minimisation targets. Experience gained from other campaigns indicates that these need to be long-term (minimum of five years) to have a noticeable impact. NELC recognises the need to assess the cost-effectiveness of any potential education campaign.



7. Achieving the Strategy

In order to deliver the aims and objectives to which NELC aspires it is essential that work undertaken is focussed on actions which will further the objectives set out in this strategy.

This chapter describes how we plan to implement our proposed waste strategy. It:

- Identifies key responsibilities
- Discusses possible partnerships with neighbouring authorities
- Outlines NELC's activities for developing waste minimisation and recycling initiatives
- Assesses the impact of the strategy on our carbon footprint.

7.1 Roles and Responsibilities within North East Lincolnshire

There are a number of groups that will have a role to play in implementing North East Lincolnshire's waste strategy:

- National Government – Provide publicity/education programmes through Waste and Resources Action Programme (WRAP) and introduce the new Environment Bill which provides new laws and targets for waste management.
- Regulators – Ensure that facilities for processing dry recyclables, composting organic material and treating residual waste, meet all environmental requirements on emissions to air, water and land.
- NELC – Arrange for the provision of facilities for delivering, regular collections of household waste and managing Municipal Solid Waste (MSW).
- Newlincs (Waste management company) – Operate recycling and composting services, the CHP facility which treats NEL's residual waste and provide capacity for any landfilled waste.
- Voluntary and third sector groups – Provide facilities which enable items such as washing machines to be re-used, and provide and/or support additional recycling services.
- Commerce and Industry – Reduce waste arising's by, for example, reducing the amount of packaging required for products and increasing the amount of recycled material.
- Our local communities and residents – Participate in waste reduction and recycling activities.

7.2 Developing Partnerships and Co-Operation

7.2.1 Developing Partnerships

Any local authority is stronger when it learns from and, where appropriate, seeks to work with other stakeholders. To deliver the priorities identified in this waste strategy NELC will develop stronger links with the community and other stakeholders within the area. We will also aim to strengthen relationships outside the authority by developing a positive and aspirational working relationship with North Lincolnshire: ensuring environmentally beneficial and cost effective waste management.

7.2.2 Engaging with the Commercial Sector

It is important that we engage with businesses in order to:

- Seek new opportunities to improve our services
- Seek ways in which we could benefit by being more commercially focussed
- Be more aware of the value of the waste which we collect

7.2.3 Engaging with the Community

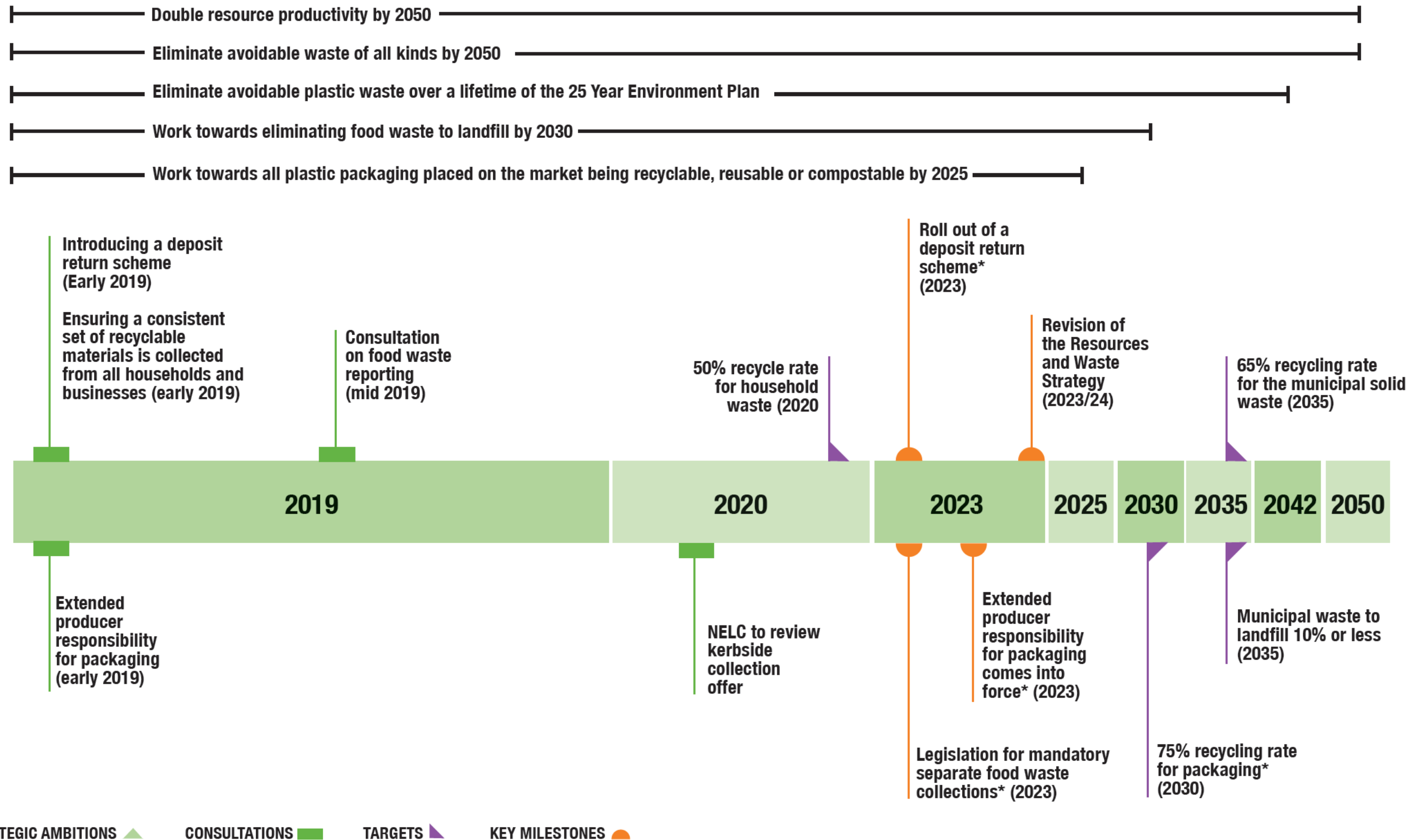
It is important we seek to engage with the community to ensure a more waste aware borough which adds value to our environment through effective waste management. NELC will seek to engage with the community by:

- Continuing community led SKIP IT events;
- Exploring, localising and implementing the 'WasteAware' campaign into NEL;
- Running school campaigns such as 'Wastebuster';
- Engaging with schools in areas which have the lowest recycling rates;
- Running trailer events during national recycling week
- Working with householders to inform them of the importance of good waste management and the need to prevent fly-tipping.

As well as educating people within the borough, NELC understands it also has a duty to ensure employees are informed on waste management and must also look to educate them on how we can be more environmentally responsible. To ensure this NELC has devised a 'lunch and learn' campaign to engage with staff about the items they can recycle.

7.3 Our Timeline

A timeline has been agreed to ensure that NELC delivers on its priorities and meets the national targets that have been set. NELC will look to meet all of the deadlines set in the timeline presented below.



7.4 Continued Monitoring Plan

The progress we have made on our waste strategy priorities and the national targets timeline will be reviewed and reported on annually. Annual reporting on the progress made against this waste strategy will ensure NELC can regularly monitor where adjustments need to be made to ensure targets are met. The annual report will be produced as a separate document and displayed on the NELC website alongside the waste strategy.

