

Waste Strategy for Lincolnshire

Lincolnshire Waste Partnership

Adopted January 2019



Table of contents

	<u>Page</u>
Foreword – By Chair and Vice Chair of the Lincolnshire Waste Partnership	4
1 Summary	5
2 Introduction	9
3 What are the key legislative drivers?	12
4 How has the strategy been developed?	18
5 Where are we today?	21
6 What are we aiming for?	47
7 How will we get there? – Our "Forward Plan"	51
8 The next steps: Monitoring, implementing and reviewing the strategy	57

Appendices

	<u>Page</u>
Appendix A – Development of Vision & Objectives	i
Appendix B – Consultation Results	ix
Appendix C – Neighbouring Authorities	xxiv
Appendix D – Initial Action Plan	xxviii
Appendix E – Glossary of Terms & Abbreviations	xxxviii

Foreword

By Chair and Vice Chair on behalf of the Lincolnshire Waste Partnership

Welcome and thank you for your interest in Lincolnshire Waste Partnership's waste management strategy for Lincolnshire.

It is clear the cost of waste collection and disposal in the county will increase over the coming years, a fact that led all eight partner agencies to come together and work towards a sustainable strategy for today and for the future.

The LWP consulted the public on the strategy and it has now been formally adopted. It is aimed at keeping those expected cost increases to a minimum, while safeguarding our environment and making the best use of the resources available to us.

However, it is not just local action that is needed to make a difference. The strategy includes plans to lobby for changes to current legislation, particularly around food packaging.

Where we can't reduce waste or recycle it, we need to use it as a resource in itself – to create energy – and the waste partnership will work with other organisations to make sure we can do this as efficiently and economically as possible.

The joint strategy has been put together with the help and hard work of councillors and officers from the partner councils and with input from the public.

But this is just the beginning of our work. It is a plan of action for the LWP to follow, but with the flexibility required to make it possible for all of us to improve and develop our waste reduction, recycling and disposal efforts.

1 Summary

This Joint Municipal Waste Management Strategy (JMWMS) for Lincolnshire sets out how the members of the Lincolnshire Waste Partnership (LWP) will work in partnership to protect the environment by delivering sustainable waste management services and to establish best value waste management practices for the benefit of Lincolnshire.

The Lincolnshire Waste Partnership's vision for this Strategy is:

“To seek the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire.”

1.1 This version of the Strategy

This final version of the Strategy has been prepared and revised in discussion with the members of the Lincolnshire Waste Partnership (LWP). It takes into account feedback received during a period of public consultation undertaken between April and July 2018.

In addition to the endorsement of the LWP as a body, each partner council has adopted this JMWMS through its own formal processes.

1.2 Layout of the document

In addition to this summary, the Strategy includes the following chapters.

- 2. Introduction**
Gives more detailed background information about why we need a new Strategy.
- 3. What are the key legislative drivers?**
Background information which has been taken into account in shaping the Strategy.
- 4. How has the strategy been developed?**
Details of the process followed to develop this Strategy.
- 5. Where are we today?**
An assessment of the Partnership's current services and future needs.
- 6. What are we aiming for?**
Our vision and objectives for what we want to achieve.
- 7. How will we get there?**
Sets out the types of action identified to fulfil our objectives – These will be expanded upon in further detail in a separate Action Plan to be updated annually.
- 8. The next steps: Monitoring, implementing and reviewing the strategy**
How we will check that we are fulfilling our objectives.

This document also includes a number of appendices which give further explanatory details to support the main text. One of these, Appendix D, is the initial Action Plan setting out the work which the LWP will undertake to move forwards with the objectives of this Strategy. As stated elsewhere, the Action Plan will be reviewed annually to ensure that it remains up to date.

1.3 Where are we today? (see Chapter 5)

In order to consider what we would like to achieve and how we might do so, it is important to establish where we are starting from. Chapter 5 sets out detailed information, including:

- An analysis of the nature and performance of existing services;
- The impact of any service changes already firmly planned (if any);
- Projections of future waste quantities; and
- The impact of changes in waste quantities on overall performance if no changes, other than those already firmly planned, are introduced.

This information makes it clear that, whilst we have achieved a lot in recent years, we now face a number of challenges, such as:

- A growing population producing more waste each year;
- Funding from central government decreasing each year;
- A falling recycling rate locally and a stalled rate nationally, whilst the national government is committing to higher targets set by the EU;
- Waste going into the wrong bin – A quarter of what we receive in our recycling collections is not recyclable, whilst a quarter of what we receive in our general waste collections is actually recyclable; and
- Volatile markets for recyclable materials.

1.4 What are we aiming for? (see Chapter 6)

In order to work towards our vision, the Partnership has developed and agreed a set of high-level objectives, which are key drivers for the delivery of this strategy. In line with the vision, each of these objectives is to be considered in the light of the Partnership's shared values that:

All Objectives should ensure that services provided under the Strategy represent the best possible environmental option which gives value for money for Lincolnshire residents.

The ten objectives are as follows:

Objective 1.	To improve the quality and therefore commercial value of our recycling stream.
Objective 2.	To move towards a common set of recycling materials.

Objective 3.	To consider the introduction of separate food waste collections where technically, environmentally and economically practicable.
Objective 4.	To explore new opportunities of promoting waste minimisation and of using all waste as a resource in accordance with the waste hierarchy.
Objective 5.	To contribute to the UK recycling targets of 50% by 2020 and 55% by 2025.
Objective 6.	To find the most appropriate ways to measure our environmental performance, and set appropriate targets.
Objective 7.	To seek to reduce our carbon footprint.
Objective 8.	To make an objective assessment of what further waste processing/disposal capacity is required and, as necessary, secure appropriate capacity.
Objective 9.	To regularly review the LWP governance model in order to provide the best opportunity to bring closer integration and the implementation of the objectives set by the strategy.
Objective 10.	To consider appropriate innovative solutions in the delivery of our waste management services.

1.5 How will we get there? (see Chapters 7 & 8)

In order to achieve these objectives, this Strategy is accompanied by a separate Action Plan, the initial version of which is attached as Appendix D, detailing what will be done when and by whom. The Action Plan will be reviewed and revised annually to ensure that it remains up to date and addresses any new challenges arising during the lifetime of the Strategy.

Chapter 7 sets out some of the themes which are reflected in the action plan:

- **Seeing the wider picture** (see section 7.1)
 - Developing links with other local authorities
 - Engaging with the commercial sector
 - Addressing any waste processing capacity gaps
- **Balancing economic and environmental benefits** (see section 7.2)
 - Ensuring value for money
 - Caring for the environment
 - Finding the balance in practice
- **Reviewing what we collect and how** (see section 7.3)
- **Getting our messages across** (see section 7.4)
 - To those living in Lincolnshire – e.g. What to put in which bin
 - To the national government – Influencing national strategy and policy to tie in with our own
 - To other stakeholders – Parish Councils, Environment Agency, etc.
 - To the commercial sector – To waste producers and waste businesses

Chapter 7 also summarises (see section 7.5) each of the key workstreams which are included in the Action Plan.

We will also (as detailed in Chapter 8) ensure that we keep working to achieve our objectives throughout the lifetime of this Strategy. This will include:

- **Monitoring the strategy** (see section 8.1) – Measuring our performance both in existing ways (such as recycling percentages) and in new ways which better reflect how we are doing compared to our strategic objectives.
- **Implementing the strategy** (see section 8.2) – Ensuring that our work is:
 - Appropriately funded,
 - Done in partnership across the members of the LWP, and
 - Properly focussed through the use of an action plan.
- **Reviewing the strategy** (see section 8.3) – This will, in line with government guidance, happen at least every five years, and will also need to react to changing circumstances such as the UK's departure from the European Union.

2 Introduction

2.1 Background

The Lincolnshire Waste Partnership (LWP) brings together the public bodies within Lincolnshire responsible for collection and disposal of waste, including:

- Seven Waste Collection Authorities (WCA's) – Boston Borough Council, City of Lincoln Council, East Lindsey District Council, North Kesteven District Council, South Holland District Council, South Kesteven District Council and West Lindsey District Council;
- One Waste Disposal Authority (WDA) – Lincolnshire County Council; and
- One Waste Regulatory Authority – The Environment Agency.

This Joint Municipal Waste Management Strategy (JMWMS) provides a strategic framework through which the partners of the LWP can express their shared vision and strategic objectives for the handling of municipal waste. Furthermore, it meets the requirements of the Waste and Emissions Trading Act 2003 to have such a joint strategy.

The LWP's previous Strategy was adopted in 2008, necessitating this review. This new Strategy has been developed as a joint venture between the WDA and the WCA's, with significant commitment from all members of the LWP in order to arrive at a genuinely shared vision and future strategy.

In addition to this main Strategy document, the JMWMS process has produced:

- A Strategic Environmental Assessment (SEA), as required under the Environmental Assessment of Plans and Programmes Regulations 2004. The SEA provides a thorough environmental assessment of a number of scenarios which can deliver the objectives set by the strategy. In accordance with Government guidance, the SEA process, including the preparation of an Environmental Report, has been conducted at the same time as developing the Strategy; and
- An Action Plan of work to be undertaken to move towards the objectives identified in the Strategy. The intention is to update the Action Plan annually for the lifetime of this Strategy.

The initial Action Plan is attached as Appendix D to this document. The SEA Environmental Report is available from the JMWMS web page¹.

2.2 Scope and context

In developing this Strategy, a balance has been sought between reducing costs and "doing the right thing" environmentally. "Doing the right thing" (ideally the "best" thing) involves reference to a number of key documents.

¹ <https://www.lincolnshire.gov.uk/recycle-for-lincolnshire/waste-strategy-for-lincolnshire/>

2.2.1 The Waste Hierarchy

Article 4 of the revised EU Waste Framework Directive lays down a five-step hierarchy of waste management options which must be applied by Member States in this priority order. In order of preference, these options are shown below in Figure 2-1.

Figure 2-1 The Waste Hierarchy



The Waste Hierarchy helps to encourage a change in thinking so that waste is considered as a resource to be made use of, with disposal being the last resort.

Regulation 12 of the Waste (England and Wales) Regulations 2012 asserts the need for us to consider the Waste Hierarchy in choosing how to handle all our waste streams, so this directs the principles under which our Strategy must be written.

It should also be noted that the most preferred options are to prevent things from becoming waste in the first place, or to make it possible to reuse them. This is reflected in our Objective 4 which has now, as described in Section 6.1, been expanded to specifically mention waste minimisation.

2.2.2 UK Policy and Legislation on Waste

This includes the following, further details of which are given in section 3.2 of this Strategy:

- Waste Management Plan for England (2013)
- 25 Year Environment Plan (January 2018)
- Resources and Waste Strategy (due during 2018)

2.2.3 Lincolnshire's Previous Waste Strategy (2008)

Lincolnshire's previous Waste Strategy identified 10 key objectives. Considerable progress has been made on these over the last decade, including:

Objective 5	To increase progressively the recovery and diversion of biodegradable waste from landfill, to meet and exceed the Landfill Directive diversion targets.
Objective 6	To ensure that residual waste treatment supports energy recovery and other practices higher up the waste hierarchy.

Through the building of the new Energy from Waste (EfW) facility in Hykeham, which began receiving waste in 2013, we now send less than 5% of our waste to landfill. This reduced our landfill tonnage so much that we achieved our 2020 Landfill Directive diversion target as soon as the EfW was in full operation, and we have continued to achieve that target in every year since then.



Our EfW facility also ensures that our residual waste is treated higher up the waste hierarchy than landfill.

Objective 7	To deliver best value for money waste management services, addressed on a countywide basis.
-------------	---

The lifetime of our 2008 Strategy has coincided with a period of unprecedented cuts to the funding which local authorities receive from national government. The LWP authorities have achieved large budget savings during this time, but have continued to provide a high level of service to the public.

Whilst our previous objectives were considered in developing this new Strategy, it is important to note that:

- Some of those objectives have already met – e.g. Objective 5 as described above.
- The new Strategy needs to reflect the changing political landscape – e.g. Financial austerity and the UK's exit from the European Union.
- Changing the focus may help to renew the impetus and impact which have been lost as the previous Strategy has aged.

2.3 What does the waste strategy cover?

This Strategy is intended to fulfil the duty, under the Waste and Emissions Trading Act (2003) that:

"The waste authorities for a two-tier area must... have for the area a joint strategy for the management of... waste from households, and... other waste that, because of its nature or composition, is similar to waste from households"

In preparing this Strategy, in order to ensure a holistic approach and to identify possible synergies, the process also needs to take into account links between:

- The Waste Strategy as a whole and the LWP partner authorities' strategic approach to other related matters, including (but not limited to):
 - Other environmental matters (e.g. Natural Environment Strategy)
 - Public health
 - Economic growth (e.g. Development Plans) and the consequential effects on waste growth.
- Our Waste Strategy and those of neighbouring local authorities, and
- Each individual Objective and all other Objectives within the Strategy.

3 What are the key legislative drivers?

This chapter outlines the main legal requirements for waste management that the Partnership has either already met or will need to meet as new legislation and requirements are introduced. It then considers the legislation regarding planning for any new waste management facilities and services that may be required to enable the Partnership to meet its future targets.

3.1 European waste policy and legislation

The European Union is currently the major source of the UK's environmental legislation and guidance in relation to the management of waste. Whilst, in the longer term, the UK's exit from the European Union may see the UK diverge from EU waste policy and legislation, the UK Government have indicated their intention to continue to comply with EU legislation for the foreseeable future.

A number of European Directives have been introduced which aim to increase levels of recycling and recovery, and thus reduce the amount of waste which is landfilled. A number of these have recently been amended as part of the EU's Circular Economy Package (CEP) which came into force on 4th July 2018. In particular, the CEP includes changes to the Waste Framework Directive and Landfill Directive, both of which are key drivers for the LWP's strategic thinking.

Full details of the CEP are available online, for example on the website of the Council of the EU², but they are summarised below under the following headlines:

- Waste Hierarchy
- Recycling/reuse targets
- Separate collections of specific materials
- Landfill targets

3.1.1 Waste Hierarchy

This provides a framework of how sustainability in waste management can be increased progressively. It is described in detail in Section 2.2.1 of this JMWMS.

3.1.2 Recycling/reuse targets

The UK government is committed to meeting the EU targets for the recycling of "municipal waste" (Table 3-1). However, it should be noted that the definition of this differs from that of the former headline UK recycling rate (National Indicator 192). Indeed, different EU member states measure this in a variety of ways, and the LWP has joined others in lobbying the UK government to consider including the recycling of Incinerator Bottom Ash (IBA) which would considerably boost the LWP's reported recycling rate. Indeed, the reported rate for the UK as a whole already includes the recycling of metals extracted from IBA, whereas the official rate for individual councils does not. Further information regarding this can be found in section 5.5 of this Strategy.

² <http://www.consilium.europa.eu/en/press/press-releases/2018/05/22/waste-management-and-recycling-council-adopts-new-rules/>

Table 3-1 EU recycling/reuse targets

	By 2020	By 2025	By 2030	By 2035
Total reuse and recycling of municipal waste	50%	55%	60%	65%

3.1.3 Separate collections of specific materials

Before the introduction of the CEP there was already a requirement, transposed into UK law, for separate collections of paper, metal, plastic and glass:

- "Where necessary... to ensure that waste undergoes recovery operations... and to facilitate or improve recovery"; and
- "if technically, environmentally and economically practicable" (or "TEEP" for short).

The CEP supplements this with the requirement, subject to the same "TEEP" caveat, for separate collections of:

- "Bio-waste" (including food waste) by 31st December 2023; and
- Textiles and hazardous waste by 1st January 2025.

It remains to be seen how these requirements will be reflected in the new UK Resources and Waste Strategy or transposed into UK law, particularly in the light of the "TEEP" caveat. This should become clearer with the publication of Defra's new Resources and Waste Strategy due towards the end of 2018.

3.1.4 Landfill targets

The UK Government responded to the original EU Landfill Directive both by setting equivalent targets (under the Landfill Allowance Trading Scheme, LATS) for each local authority, and by increasing the cost of landfill through an escalating rate of Landfill Tax, and the UK has achieved the 2020 target well ahead of time. Whilst the LWP's development, under its previous Waste Strategy, of an energy from waste facility brought us well within our LATS targets, the minimisation of our Landfill Tax bill, particularly in the face of predicted population and waste growth, remains a key driver.

3.2 National waste policy and legislation

Much of the UK's waste legislation transposes the above EU legislation. It is currently unclear how Brexit will affect UK legislation in the future, but the UK Government has expressed a desire initially to retain EU-related waste legislation.

Another element of uncertainty surrounds the UK Government's long-anticipated 25 Year Environment Plan which was published in January 2018. Whilst the Plan contains, as described below, some pledges on waste, the promised new Resources and Waste Strategy is anticipated to arrive around the same time as the adoption of this Lincolnshire Strategy. This JMWMS is intended

to be flexible enough to react to any significant changes resulting from that new national strategy, particularly through the commitment to an annual review of the accompanying Action Plan.

3.2.1 Waste Management Plan for England

The 2013 Waste Management Plan for England sets out a number of strategic priorities which need to be taken into account in this Strategy for Lincolnshire. These include:

- Implementing the Waste Hierarchy.
- Measures to promote high quality recycling.
 - The Waste (England and Wales) Regulations 2011, transposing the revised EU Waste Framework Directive, require the separate collection of waste paper, metal, plastic and glass from 2015 onwards wherever separate collection is necessary to get high quality recycling, and is practicable.
 - The Waste and Resources Action Programme (WRAP), will advise local authorities and others, including on best practice in collections.
 - The introduction of Regulations relating to Material Recovery Facilities (MRFs), including mandatory sampling weights and frequencies for inputs and outputs.
- Separate collection of biowaste.
 - The Government has identified anaerobic digestion as the best technology currently available for treating food waste.

3.2.2 UK 25 Year Environment Plan

The government's 25 Year Environment Plan³ was published in January 2018. On the subject of waste it included, on page 29, the following commitment.

We will minimise waste, reuse materials as much as we can and manage materials at the end of their life to minimise the impact on the environment. We will do this by:

- *Working towards our ambition of zero avoidable waste by 2050*
- *Working to a target of eliminating avoidable plastic waste by end of 2042.*
- *Meeting all existing waste targets – including those on landfill, reuse and recycling – and developing ambitious new future targets and milestones.*
- *Seeking to eliminate waste crime and illegal waste sites over the lifetime of this Plan, prioritising those of highest risk. Delivering a substantial reduction in litter and littering behaviour.*
- *Significantly reducing and where possible preventing all kinds of marine plastic pollution – in particular material that came originally from land.*

The Plan includes a statement (page 85) that Defra will be:

Publishing a new Resources and Waste strategy in 2018 aimed at making the UK a world leader in resource efficiency. It will set out our approach to reducing waste, promoting

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

markets for secondary materials, incentivising producers to design better products and how we can better manage materials at the end of life by targeting environmental impacts.

It is currently anticipated that this Resources and Waste strategy will be released in October 2018. Our Strategy Action Plans for future years will need to take this new national strategy into account, particularly with regard to any specific targets which are set.

3.2.3 National Planning Policy

The National Planning Policy Framework (NPPF), introduced in March 2012 and revised in July 2018, sets out the Government's national planning policies for England. This is supported by online Planning Practice Guidance. The overarching aim of the NPPF is to achieve sustainable development by ensuring economic, social and environmental gains are sought jointly and simultaneously through the planning system. At the centre of this is a presumption in favour of sustainable development. The NPPF must be taken into account in the preparation of development plan documents, and is a material consideration in planning decisions. However, whilst the NPPF includes both general policies and specific policies, the specific policies do not extend to waste. Instead, these are set out in the National Planning Policy for Waste (NPPW) (October 2014).

The NPPW sits alongside the National Waste Management Plan (December 2013) and sets out the national framework for planning for waste management. It outlines the planning system's key roles in delivering the new facilities that are essential for implementing sustainable waste management and protecting the environment and human health. The emphasis is on delivering sustainable development, driving waste up the hierarchy, seeing waste as a resource and disposal as the last option.

3.2.4 Other National Strategies

The UK Government has set out several other Strategies which include elements relating to waste management.

- The Industrial Strategy sets out plans:
 - For "moving towards a regenerative circular economy";
 - To "take further measures to strengthen the markets for secondary materials"; and
 - To further develop the "Midlands Engine".
- The Clean Growth Strategy – Includes, under the heading "Enhancing the Benefits and Value of Our Natural Resources", proposals to:
 - "Work towards our ambition for zero avoidable waste by 2050, maximising the value we extract from our resources, and minimising the negative environmental and carbon impacts associated with their extraction, use and disposal";
 - "Publish a new Resources and Waste Strategy";
 - "Explore new and innovative ways to manage emissions from landfill"; and
 - "Invest £99 million in innovative technology and research for agri-tech, land use, greenhouse gas removal technologies, waste and resource efficiency".

3.3 The Lincolnshire Minerals and Waste Local Plan (MWLP)

The County Council has produced the Lincolnshire Minerals and Waste Local Plan under its statutory duties as the Mineral and Waste Planning Authority for the County. Planning law requires that all applications for planning permission for waste development must be determined in accordance with this plan unless material considerations indicate otherwise. This plan is comprised of two parts, each forming a development plan document:

- the Core Strategy and Development Management Policies (CSDMP) document (adopted on 1 June 2016) – which sets out the key principles to guide the future extraction of minerals and the form of waste management development in the County up to 2031, together with the development management policies against which applications for those types of development will be assessed; and
- the Site Locations document (adopted on 15 December 2017), which includes specific proposals and policies for the provision of land for mineral and waste development.

The Strategic Objectives of the plan include:

- protecting the environment and local communities from the negative impacts of waste development, reducing residual impacts and delivering improvements where possible, and ensuring new facilities include high standards of design and layout, sustainable construction methods, good working practices and environmental protection measures;
- through prioritising the movement of waste up the waste hierarchy, minimising greenhouse gas emissions by reducing reliance on landfill, maximising opportunities for the re-use and recycling of waste, facilitating new technologies to maximise the renewable energy potential of waste as a resource, and promoting the use of carbon capture technology; and
- delivering adequate capacity for managing waste more sustainably when it is needed; and ensuring waste is managed as near as possible to where it is produced.

In relation to waste, the plan is based on directing new waste facilities, including extensions, to areas in and around the County's main settlements (Lincoln, Boston, Grantham, Spalding, Bourne, Gainsborough, Louth, Skegness, Sleaford and Stamford) where the highest levels of waste are expected to be generated. The strategy does, however, recognise that some developments are likely to be developed outside these areas, including biological treatment of waste such as anaerobic digestion and open-air windrow composting.

The plan identifies, through the Site Locations document, locations for a range of new or extended waste management facilities to meet the predicted capacity gaps for waste arisings in the County for the period up to and including 2031. This will involve the building of waste management facilities for recycling and an energy from waste facility mainly for the management of Local Authority Collected Waste, and commercial & industrial waste. The plan identifies that facilities for the management of the county's Local Authority Collected Waste are already in place, with any future needs relating to replacement facilities. There is no requirement for further landfill facilities. The need for specialised thermal treatment and hazardous landfill would continue to be met by national facilities outside the county. The plan also safeguards waste management facilities from redevelopment to non-waste uses or from the encroachment of incompatible development.

The plan makes provision to meet the requirement for waste facilities through one site specifically allocated and safeguarded for waste development, and 16 areas (industrial areas) where waste uses are considered acceptable alongside other industrial and employment uses (providing flexibility and choice).

To sum up, the Lincolnshire MWLP provides the spatial context and locational criteria for new waste facilities covering all waste streams. Whilst it sets out the predicted requirement for new facilities, this is only indicative and is used to ensure that sufficient land is available for new waste facilities to meet the capacity gaps. In practise, the LMWLP has allocated far more land for future waste management than will be required in order to allow flexibility. The LWP will therefore need, particularly in considering the need for the development of new waste management facilities, to refer to the Lincolnshire MWLP.

3.4 Relationship with Neighbouring Authorities

Whilst each neighbouring authority was specifically contacted during our Public Consultation on this JMWMS, only a limited number of responses were received. These are shown in Appendix C.

Strong working relationships are required with our neighbouring authorities and, as highlighted by the response from North Lincolnshire Council, we will look for opportunities for joint infrastructure developments where this is mutually beneficial. In developing and implementing our Action Plan, we will seek to identify such opportunities.

We will also seek to continue dialogue with our neighbours once as the UK Government's transposition of the EU Circular Economy package becomes clearer, particularly through Defra's new Resources and Waste Strategy.

4 How has the strategy been developed?

4.1 Background

The previous Joint Municipal Waste Management Strategy for Lincolnshire was published in June 2008.

That Strategy was compiled by following Government guidance on waste management strategies and assessed in accordance with the ODPM guidance 'A Practical Guide to the Strategic Environmental Assessment Directive' (2005).

The Lincolnshire Waste Partnership has identified that a new joint waste strategy and a SEA are required.

4.2 Development of a new waste strategy

The development of this new strategy has also made use of the 2005 guidance from the Office of the Deputy Prime Minister (ODPM). Although this is no longer available online, it is still generally considered to be the most relevant national guidance on the subject.

The guidance sets out three questions which should be answered in developing a Waste Strategy. We have addressed each of these questions as described below.

4.2.1 "Where are we today?"

Chapter 5 summarises the services currently provided by each of the LWP authorities. It also includes an analysis of the quantities of each waste stream and material being handled, and a forecast of future waste quantities.

4.2.2 "Where do we want to get to and when?"

The ODPM guidance describes this as "*the objectives for how waste will be managed more sustainably in the future*". Chapter 6 sets out the LWP's shared objectives, developed and agreed through a series of workshops and meetings early in the Strategy process. Chapter 6 also addresses the main challenges facing the LWP during the period covered by this Strategy.

4.2.3 "What do we need to do to get there?"

Chapter 7 gives an overview of the actions identified by the Partnership as being needed to achieve the objectives of this Strategy. It essentially sets out a 'route map' showing how those objectives will be achieved.

The necessary actions have been set out in more detail in an Action Plan for the first year of the life of this Strategy. This includes details of:

- who will need to do what? and
- by when?

In order to ensure that the Action Plan continues to deliver in future years, a revised version will be produced annually. This will respond to any changes in the ongoing quantity and composition of waste, as well as to any other necessary factors.

4.3 Strategic Environmental Assessment

The Department for Environment, Food & Rural Affairs' (Defra) "Guidance on Municipal Waste Management Strategies" states that "*as a minimum the Strategy should undergo a Strategic Environmental Assessment (SEA).*"

In general, SEA permits analysis of all draft Strategy provisions against a series of environmental objectives. The aim is to ensure the effects of the Strategy are positive with regard to the County's environmental features. Any significant adverse effects identified must be avoided, remedied or mitigated.

In view of this an SEA has been undertaken in parallel with the Strategy process, with both documents feeding into each other as appropriate. The SEA was completed in line with:

- Environmental Assessment of Plans and Programmes Regulations' (SI 2004/1633) 'SEA Regulations'
- Government Guidance on SEA and SA: <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal>

This will include several stages of consultation, initially with statutory consultees (Natural England, Historic England and the Environment Agency) and then alongside public consultation on this Waste Strategy.

4.4 Stakeholder Engagement

In addition to the statutory consultation for the SEA, the Defra guidance on Waste Strategies makes it clear that engaging with various stakeholders is vital to the development of an effective Strategy. Our Strategy process has involved this in a number of ways including the following.

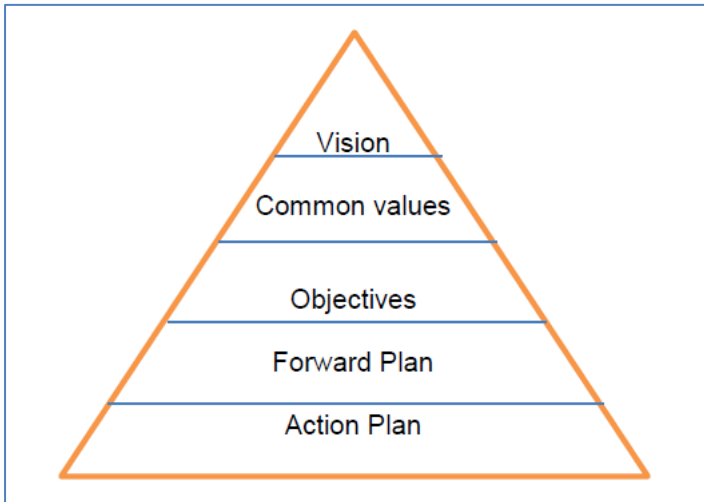
4.4.1 LWP Authorities

The overall objectives and initial proposals for a way to work towards them were developed jointly by the eight authorities of the LWP. This was achieved by holding two workshop sessions in July 2017. Those sessions were facilitated by an independent chair in order to ensure that the views of all partners were captured and given an equal footing.

Full details of the workshops and their outputs can be seen in Appendix A.

Amongst other things, the workshops established an overall framework for how the format of the strategy would lead from the overarching "Vision" to specific practical actions in an "Action Plan".

Figure 4-1 Overall structure of the Waste Strategy



Further engagement with all LWP partners has continued throughout the Strategy process, including through regular LWP meetings, with many partners using formal scrutiny processes to assist in its development, and through formal adoption of the documents at the end.

4.4.2 Public Consultation

A draft version of the JMWMS was made available for a period of 90 days of public consultation between April and July 2018. This final version of the Strategy, and its accompanying Action Plan, reflect the feedback received from the consultation.

Full details of the results of the consultation process are shown in Appendix B of this Strategy.

5 Where are we today?

Before deciding what we want to achieve in the future, and of how we are going to do so, it is essential that we have a proper understanding of our current services and of what waste we are likely to need to deal with during the period covered by this Strategy.

This chapter provides a summary of the necessary baseline information including, as prescribed in Defra's 2005 JMWMS Practice Guide:

- An analysis of the nature and performance of existing services;
- The impact of any service changes already firmly planned (if any);
- Projections of future waste quantities; and
- The impact of changes in waste quantities on overall performance if no changes, other than those already firmly planned, are introduced.

5.1 Demographics

Within the East Midlands Region, Lincolnshire is the largest county covering 592,075 hectares, and the fourth largest in England covering 5% of England.

The following information on the population of Lincolnshire all comes from the Lincolnshire Research Observatory website⁴.

As at the 2011 Census:

- Lincolnshire is a large and sparsely populated county. In England 18% of the population live in rural areas, that is in towns of less than 10,000 people, in villages, hamlets or isolated dwellings. In Lincolnshire the figure is 48%.
- Lincolnshire is home to 306,971 households. The average household is made up of 2.32 persons, similar to the figure of 2.27 for England as a whole.
- Lincolnshire has an ageing population with nearly 21% of its population being over 65 years of age compared to the England figure of just over 16%, with East Lindsey having the highest proportion at 26%.

The population of Lincolnshire grew by over 10% between 2001 and 2011, which is faster than the figure for England of just under 8%. As can be seen in Table 5-1, estimates indicate that Lincolnshire's population continues to grow faster than the national rate for England, by a further 5.3% between 2011 and 2017. Most of our WCA's saw growth between 5.2% and 6.0% (above the national average of 4.9%) during that same period, but it should be noted that population growth in East Lindsey was significantly lower (at 2.4%) and in North Kesteven was significantly higher (at 6.9%).

⁴ <http://www.research-lincs.org.uk/Population.aspx>

Table 5-1 Population estimates

Area	2011 Census	2017 Mid Year Estimate	Growth
Boston BC	64,637	68,500	6.0%
City of Lincoln	93,541	98,400	5.2%
East Lindsey DC	136,401	139,700	2.4%
North Kesteven DC	107,766	115,200	6.9%
South Holland DC	88,270	93,300	5.7%
South Kesteven DC	133,788	141,700	5.9%
West Lindsey DC	89,250	94,300	5.7%
Lincolnshire	713,653	751,200	5.3%
England	53,012,456	55,619,400	4.9%

Forecasts are that population growth for Lincolnshire going forwards (10% higher in 2041 than in 2017) will continue to be a little lower than the average for England. It should be noted, however, that this official estimate doesn't take into account specific housing developments, and the expectation is that the population will grow by more than this. Either way, these extra people are likely to produce a significant amount of additional waste which the LWP will need to collect and dispose of.

5.2 Waste arisings

5.2.1 UK arisings summary

Defra's report "UK Statistics on Waste"⁵ (published February 2018 included the following key points regarding the national situation in 2014:

- The UK generated 202.8 million tonnes of total waste in 2014.
- Over half of this (59%) was generated by construction, demolition and excavation.
- UK generation of commercial and industrial waste in 2014 was 41.9 million tonnes.
- Only 26.8 million tonnes, around 13% of the total, was "waste from households".

Clearly, household waste is a relatively small proportion of overall waste, and needs to be considered in the light of the wider picture.

5.2.2 Current Local Authority Collected Waste (LACW)

As a predominantly rural county, the largest waste stream in Lincolnshire comes from agricultural services which, according to the Waste Needs Assessment produce for the Lincolnshire Minerals and

⁵ <https://www.gov.uk/government/statistics/uk-waste-data>

Waste Strategy for Lincolnshire

Waste Local Plan (Site Locations Document)⁶, represents some half of the total waste stream. In comparison, LACW represents around 10% of the total waste arisings in the county.

It should be noted that whilst the County Council is required to consider all waste streams in the development of its Minerals and Waste Local Plan, agricultural waste is largely dealt with at source rather than requiring the County Council's attention in its role as Waste Planning Authority. Furthermore, the Waste and Emissions Trading Act 2003⁷ states in Section 32(1), in defining the duty to have a Joint Municipal Waste Management Strategy, that this Strategy should only cover the management of:

- (a) waste from households, and
- (b) other waste that, because of its nature or composition, is similar to waste from households.

Therefore this Strategy focuses on LACW, which can include waste from the following sources (as defined in the Controlled Waste Regulations 2012):

- Waste from households – This makes up the vast majority of LACW;
- Other "household waste" – e.g. From schools and hospitals;
- **Some** waste from commercial premises (such as shops, offices and restaurants); and
- **Some** waste from construction and demolition (C&D) activities.

Table 5-2 shows the breakdown of LACW across Lincolnshire, with 360,701 tonnes arising in 2017/18 of which around 96% is household waste.

Table 5-2 Summary of Local Authority Collected Waste (LACW) in Lincolnshire 2017/18

Sources: Collection (purple) = County Council Waste Data Management System; Disposal (orange) = Wastedataflow⁸

Waste Stream	2017/18 (Tonnes)	% of Total Waste Stream
Local Authority Collected Waste	360,701	
Waste collected at kerbside by WCA's	274,180	76% of LACW
Other waste collected by WCA's ⁱ	16,289	5% of LACW
Waste collected at HWRC's	69,500	19% of LACW
Other LACW ⁱⁱ	731	<1% of LACW
Total Household Waste collected ⁱⁱⁱ	346,777	96% of LACW
Total Household Waste disposed of ⁱⁱⁱ	346,329	
Household Waste reused, recycled or composted	150,553	44% of Household Waste Disposal
Household Waste sent for energy recovery	179,976	52% of Household Waste Disposal
Household Waste landfilled	13,151	4% of Household Waste Disposal

i – Includes street sweepings, litter, bring banks, trade waste, etc.

ii – Largely consists of waste from charities for which the WDA provides disposal.

iii – Totals collected and disposed of differ due to changes in stock levels at Waste Transfer Stations.

⁶ http://uk.sitestat.com/lincolnshire/lincolnshire/s?Home.residents.environment-and-planning.planning-and-development.minerals-and-waste.site-locations-examination.131110.articleDownload.106584&ns_type=pdf&ns_url=https://www.lincolnshire.gov.uk//Download/106584

⁷ <http://www.legislation.gov.uk/ukpga/2003/33/contents>

⁸ <http://www.wastedataflow.org/>

Figure 5-1 Sources of LACW in 2017/18

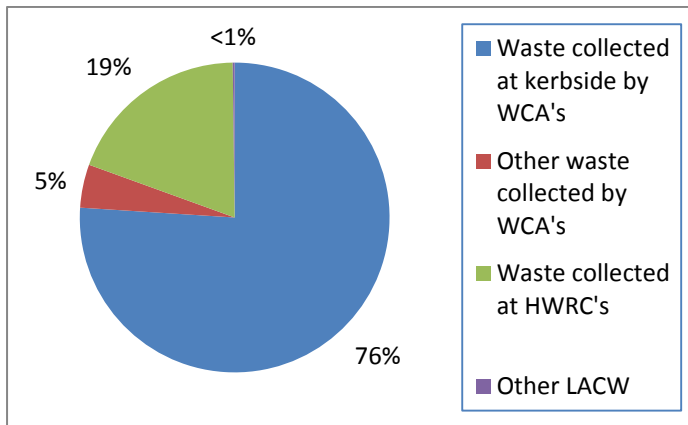
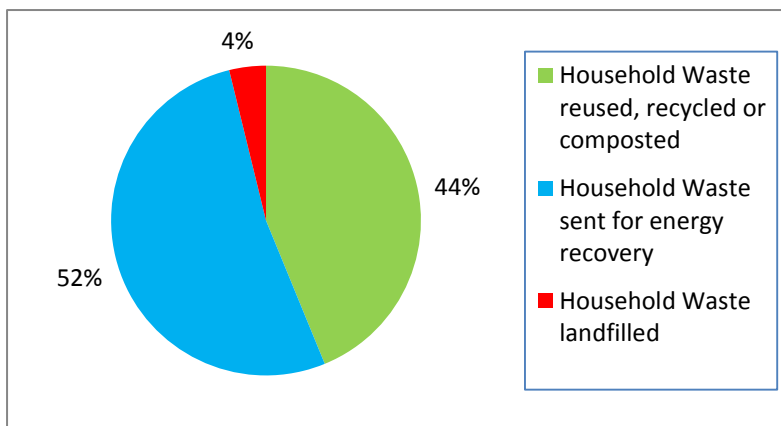


Figure 5-2 Destinations of Household Waste in 2017/18



5.2.3 Waste growth

As was reported in the LWP's previous Waste Strategy, between 2000/01 and 2006/07 the total tonnage of Local Authority Collected Waste (LACW) in Lincolnshire rose by over 13%. Table 5-3 and Figure 5-3 below, however, show that we actually saw a fall in waste thereafter, with only one subsequent year (2016/17) seeing more waste generated than 2006/07.

Table 5-3 Waste growth trends in Lincolnshire between 2007 and 2018

Source: Wastedataflow⁹

Year	Municipal Waste (Tonnes)	% Change	Household Waste	% Change
2006/07	365,537		349,663	
2007/08	352,123	-3.67%	338,676	-3.14%
2008/09	359,798	+2.18%	348,280	+2.84%
2009/10	349,784	-2.78%	336,893	-3.27%
2010/11	355,209	+1.55%	341,886	+1.48%
2011/12	349,736	-1.54%	336,073	-1.70%
2012/13	345,232	-1.29%	335,028	-0.31%

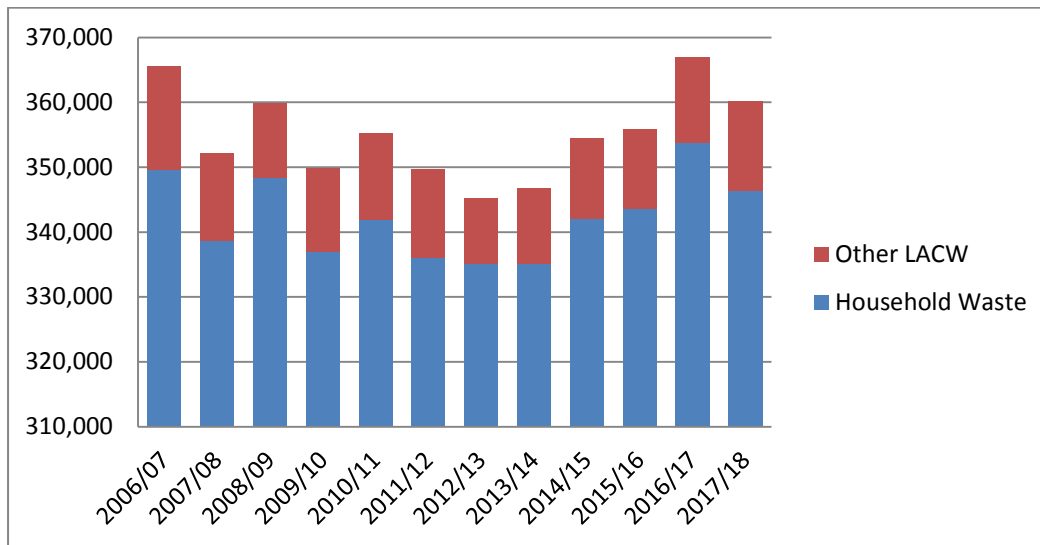
⁹ <http://www.wastedataflow.org/>

Waste Strategy for Lincolnshire

Year	Municipal Waste (Tonnes)	% Change	Household Waste	% Change
2013/14	346,795	+0.45%	335,216	+0.06%
2014/15	354,503	+2.22%	342,132	+2.06%
2015/16	355,849	+0.38%	343,574	+0.42%
2016/17	366,947	+3.12%	353,819	+2.98%
2017/18	360,155 ⁱ	-1.85%	346,329	-2.12%
Overall Change (since 2006/07)		-1.47%		-0.95%

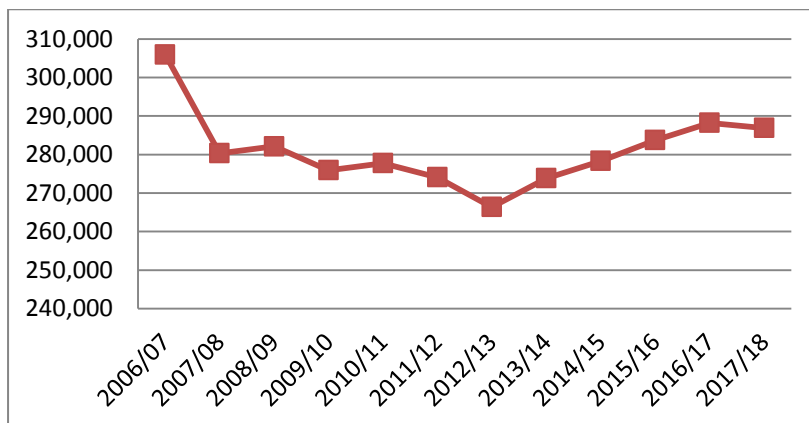
i – The definition of Municipal Waste differs slightly from LACW, so this total is different to that in Table 5-2.

Figure 5-3 Annual Tonnage of LACW in Lincolnshire



It should be noted that the total tonnage has been very erratic, making it difficult to predict any given year. However, closer analysis reveals that much of the variation is due to weather conditions on the quantity of green waste received for composting – e.g. Snow in March 2018 restricted early-Spring growth. Figure 5-4 shows the total tonnage excluding green waste.

Figure 5-4 Annual Tonnage excluding Green Waste



This shows a clearer trend from which conclusions can be drawn:

- Total tonnage fell for several years up to 2012/13, possibly due to the economic downturn making the public less likely to throw things away.
- There has been an upturn in recent years, possibly as the economy picks up again.

In view of the most recent upward trend, and ongoing population growth, it is forecast that LACW arisings will continue to grow. This is in line with the forecasts in the Waste Needs Assessment that accompanies the Lincolnshire Minerals and Waste Local Plan¹⁰ which suggests that LACW tonnages will grow as shown in Table 5-4.

The forecasts consist of a two part assumption:

- 1) That the population will grow by 0.66% per annum; and
- 2) That each person will produce more waste each year.

Whilst the second part may seem a pessimistic assumption, particularly given the fall in waste in 2017/18, over the preceding four years (to 2016/17) waste growth *per person* was around 0.7% per annum.

Table 5-4 LACW growth scenario from Lincolnshire Minerals and Waste Local Plan

	2016 to 2020	2021 to 2031
Population growth	0.66% per annum	0.66% per annum
Waste per head growth	0.5% per annum	0.25% per annum
Total Growth	1.16% per annum	0.91% per annum

These increases are small for any given year, but would represent an increase of over 15% (around 50,000 tonnes of extra household waste) **in** 2031.

5.3 Waste composition

In order to assess the effectiveness of our current waste management services, it is crucial to identify the total quantities collected of each type of waste. Whilst this is relatively simple for separately-collected waste types (e.g. paper in bring banks), the full picture can only be seen by assessing the composition of streams of mixed waste including all of those listed below in Table 5-5.

Ideally, the composition of each of these streams should be identified through detailed analysis of representative samples of real waste which has been collected. However, to do this for all streams would be impractical, so their composition has been measured as shown in Table 5-5.

¹⁰ http://uk.sitestat.com/lincolnshire/lincolnshire/s?Home.residents.environment-and-planning.planning-and-development.minerals-and-waste.site-locations-examination.131110.articleDownload.106584&ns_type=pdf&ns_url=https://www.lincolnshire.gov.uk//Download/106584

Table 5-5 Method of assessing composition of each mixed waste stream

Waste stream	Composition assessed by
Kerbside-collected mixed dry recyclables	Regular sampling and analysis in line with Materials Recycling Facility (MRF) Code of Practice
Kerbside-collected residual/general waste	One-off sampling and analysis undertaken in September 2017
HWRC-collected residual/general waste	Use of Defra-compiled national average figures for HWRC residual waste (most recent available is for 2010/11)
Other streams of mixed waste (e.g. flytipping)	Use of Defra-compiled national average figures for the most appropriate category listed (most recent available is for 2010/11)
Separately-collected (e.g. paper in bring banks)	Composition is known as there is usually only one type of waste in each collection

5.3.1 Kerbside-collected mixed dry recyclables (MDR)

The composition of this waste stream is well known as the Materials Recycling Facility (MRF) Code of Practice requires our MRF contractor to undertake regular sampling and analysis of the material both going into and coming out of their sorting processes.

Figure 5-5 Composition of MDR in 2017/18

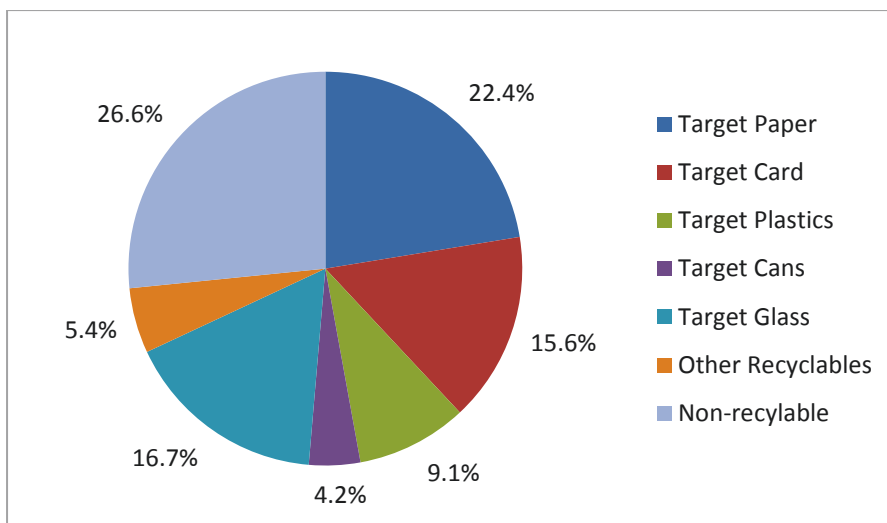


Figure 5-5 summarises the sampling data for 2017/18 and shows that of the total tonnage collected:

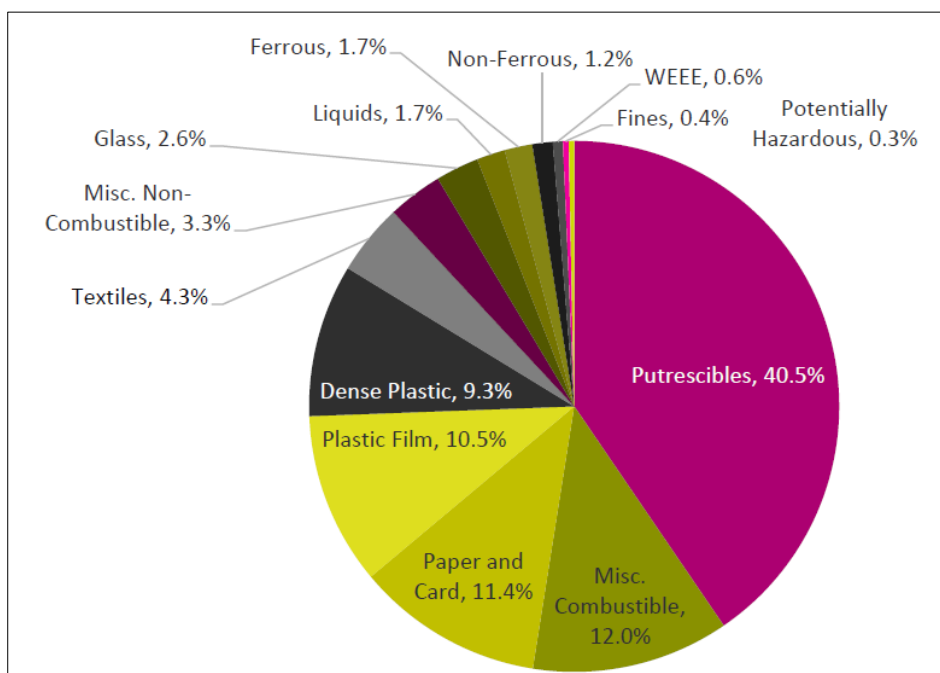
- Around 68% was "target" recyclables – This is what the LWP has asked the public to put into the kerbside recycling collections.
- Around 5% was other recyclables – Whilst not on the specified list, our current MRF contractor is able to recycle these as well. However, this may not be recyclable at all MRF's.
- Nearly 27% was not recyclable – This should not be in these collections, and is addressed in this Strategy.

5.3.2 Kerbside-collected residual/general waste

Since this one waste stream makes up around 40% of the total waste collected by the LWP, a sampling exercise was undertaken in September 2017 to establish what materials are contained in it. This involved using socio-economic data to identify an individual round in each WCA area which represented, as closely as possible, that Council's area as a whole. A random sample of waste from each of those seven rounds was then analysed.

Figure 5-6 shows collated data for the county as a whole. The percentages were calculated by multiplying the figures for each WCA by the total tonnage they collected in 2016/17 since those collecting a higher tonnage collect a higher proportion of the overall waste stream.

Figure 5-6 Composition of Residual Waste in 2016/17



Many of the categories listed are self-explanatory but the largest two are:

- "Putrescibles" = Mostly food waste
- "Misc. Combustible" = Mostly nappies and sanitary products

More detailed headlines from the sampling exercise were that the overall composition includes:

- Around 15% home-compostable food – e.g. Vegetable peelings;
- Around 13% other food – e.g. cooked food, meat and dairy products; and
- Nearly 20% materials which the LWP already collect at kerbside either for recycling or composting.

5.3.3 Overall composition

Combining data from all these individual waste streams, Table 5-6 summarises the calculated overall composition of the waste collected by each of the main methods during 2017/18. Table 5-6 also

shows the overall composition of all LACW in 2017/18, calculated by adding all the mixed-stream totals to the quantities of each waste type collected separately (e.g. from bring banks). For consistency, the waste type groups listed are those used in the 2017 kerbside residual waste sampling exercise.

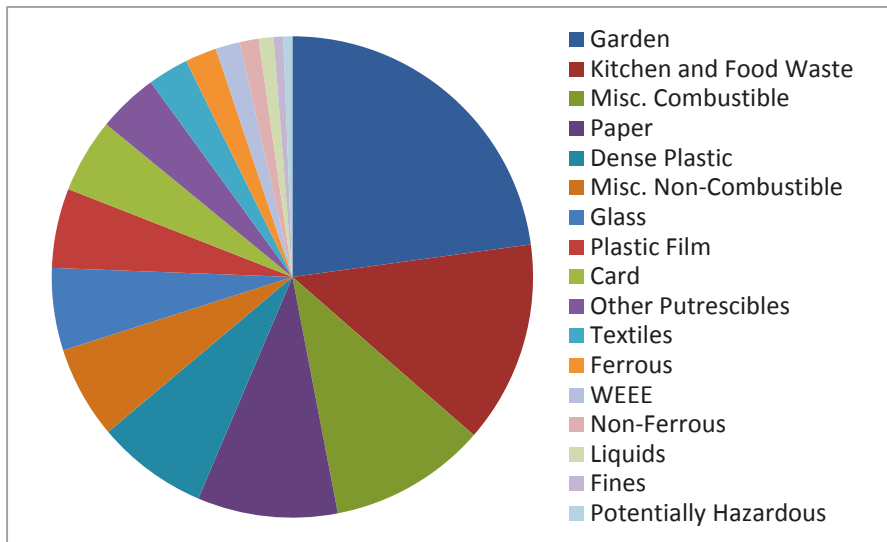
Table 5-6 Tonnage of each waste type collected by each method in 2017/18

	Kerbside Collections ⁱ	Household Waste Recycling Centres	Other Local Authority Collected Waste	TOTAL Local Authority Collected Waste	% of Local Authority Collected Waste
Card	15,276	2,103	574	17,953	5.0%
Paper	31,713	1,252	933	33,898	9.4%
Plastic Film	18,155	727	358	19,240	5.3%
Dense Plastic	22,636	3,790	504	26,930	7.5%
Textiles	7,299	1,946	602	9,847	2.7%
Glass	16,010	875	3,036	19,921	5.5%
Ferrous	4,993	2,444	189	7,626	2.1%
Non-Ferrous	3,468	1,009	148	4,624	1.3%
Misc. Combustible	19,999	17,197	831	38,028	10.6%
WEEE	1,034	4,707	114	5,856	1.6%
Potentially Hazardous	527	1,544	110	2,181	0.6%
Misc. Non-Combustible	5,621	13,416	3,279	22,316	6.2%
Kitchen and Food Waste	47,119	586	1,145	48,851	13.6%
Garden Waste	62,498	17,308	2,424	82,230	22.8%
Other Putrescibles	14,086	369	158	14,613	4.1%
Fines	598	226	1,473	2,298	0.6%
Liquids	2,903	0	691	3,593	1.0%
TOTALS	273,934	69,500	16,570	360,005	

i – Includes collections of residual, recyclables and garden waste.

Figure 5-7 shows the overall composition of LACW from 2017/18 with the waste types ordered from highest to lowest percentage.

Figure 5-7 Overall composition of LACW in 2017/18



Points to note regarding all the above data include that:

- Between them, kerbside collections and HWRC's account for around 95% of our LACW, so the composition of other streams hasn't been examined in detail.
- The largest waste type which is not currently collected for recycling or composting is kitchen and food waste. Details of the proportion of the total for each waste type (including what is collected mixed in with general waste) is currently recycled or composted is shown in Section 5.5.

5.4 Current Waste Management

The current waste management infrastructure needs to be reviewed to provide a baseline on which to develop the Waste Strategy. This review focuses on:

- Waste collection services
- Waste transfer and logistics
- Recycling and composting arrangements
- Treatment and disposal of residual waste
- Existing contracts for all of the above
- Service performance measures
- Current waste management costs

5.4.1 Waste Collection Services

Within Lincolnshire it is the district, borough and city councils (as WCA's) that have the responsibility to collect waste from households, and the County Council (the WDA) that has the responsibility to dispose of it, as well as to operate HWRCs.

Kerbside collections – collections by/for WCAs

Table 5-7 below provides a summary of the current kerbside collection services offered by each WCA.

All authorities that are using wheelie bins for their residual waste collection have a “no side waste policy” in place. This means that, apart from specific exceptions (e.g. just after Christmas), residents are not allowed to place other wastes (e.g. sacks) alongside their wheelie bins. South Holland operates a sack collection system and will collect side waste.

It should be noted that, as part of Defra's consistency agenda, WRAP are seeking to establish whether a national standard set of bin colours would help to make things clearer for the public and thus increase recycling rates¹¹. In view of this, any consideration of a more standardised approach for Lincolnshire should take account of the feedback from that work. However, in the absence of any additional government funding, it is unlikely that bins will be replaced sooner than at the end of their natural lifetime.

¹¹ <https://www.letsrecycle.com/news/latest-news/wrap-consults-on-national-colour-scheme-for-bins/>

Table 5-7 Kerbside collection services offered by each Waste Collection Authority (WCA)

The following indicates the service provided to the majority of households by each WCA. Colour shading shows the colour of bin provided for each service.

Unless otherwise stated, collections are provided using a wheelie bin and fortnightly/alternate weekly collections (AWC).

Waste Collection Authority	Residual Waste	Mixed Dry Recyclables	Green Waste
Boston Borough Council	AWC in 240 litre bins	AWC in 240 litre bins	AWC in 240 litre bins Charged service No service in Winter
City of Lincoln Council ⁱ	AWC in 240 litre bins	AWC in 240 litre bins	AWC in 240 litre bins Charged service
East Lindsey District Council	AWC in 180 litre bins (240 litre for larger families)	AWC in 240 litre bins	AWC in 240 litre bins Charged service Reduced service in Winter
North Kesteven District Council ⁱⁱ	AWC in 240 litre bins	AWC in 240 litre bins ⁱⁱⁱ	AWC in 240 litre bins Charged service
South Holland District Council	Weekly collection in sacks	Weekly collection in sacks	AWC in 240 litre bins Charged service
South Kesteven District Council	AWC in 240 litre bins	AWC in 240 litre bins	AWC in 240 litre bins Charged service
West Lindsey District Council	AWC in 180 litre bins ^{iv} (240 litre for larger families)	AWC in 240 litre bins ^{iv}	AWC in 240 litre bins Charged service No service in Winter

i – City of Lincoln have alternative arrangements for higher-density inner city areas, using 140 litre bins, communal bins or sacks as appropriate, some of which (mainly residual waste) are collected weekly.

ii – North Kesteven – Since 2009 new builds receive, as standard, a 180 litre bin for residual waste and a 360 litre bin for MDR.

iii – Black wheelie bin with green lid

iv – Around 2,000 WLDC terraced properties receive a weekly sack collection instead of wheelie bins

Table 5-8 Current Collection Contract Arrangements

WCA	How collections are provided
Boston BC	Service provided in-house
City of Lincoln	Contract with Biffa
East Lindsey DC	Service provided in-house
North Kesteven DC	Service provided in-house
South Holland DC	Service provided in-house
South Kesteven DC	Service provided in-house
West Lindsey DC	Service provided in-house

Every household in every WCA area receives a residual waste collection. Table 5-9 summarises the number of households in each WCA area that are currently provided with kerbside recycling and green waste collections.

Table 5-9 Households receiving recycling/green waste kerbside collection in 2017/18

	Boston	East Lindsey	Lincoln	North Kesteven	South Holland	South Kesteven	West Lindsey
Dwelling Stock	29,360	68,060	45,220	50,270	40,070	63,050	42,660
Number of HH – dry recyclables	ALL	ALL	44,300	ALL	ALL	ALL	ALL
Number of HH – green waste ⁱ	7,648	29,053	16,355	30,800	3,155	28,324	39,660

i – Green waste collection numbers are lower because they are a charged-for, opt-in service.

Bring banks for recyclables – collections by/for WCAs

Many of our WCAs currently operate a network of bring banks placed in various locations to receive recyclable material. The County Council either arranges and pays for the recycling of this material, or pays Recycling Credits to each WCA for it.

Bulky household waste – collections by/for WCAs

Bulky waste falls outside the scope of the regular WCA kerbside collection service as these items are generally too large or too difficult to be handled by the normal means. The WCAs across the Partnership offer bulky waste collection on demand for item such as furniture, mattresses and large household appliances. Each district has its own policy on charging for these collections.

Commercial waste – collections by/for WCAs

Currently Boston Borough Council, South Kesteven District Council and West Lindsey District Council operate collections of commercial waste from business premises, and other WCAs are considering doing so. The Strategy, through its ongoing Action Plans, should consider whether it would be appropriate to have a common policy.

Street cleansing – collections by/for WCAs

Each WCA provides a regular service across their area. Busy places, such as shopping precincts and high streets usually have permanent cleaning staff or daily cleansing regimes. General waste such as litter is handled in the same way as other residual waste, but road grit from street sweepers is kept separate as the County Council has separate arrangements in place for the recycling of it.

Abandoned and end of life vehicles – collections by/for WCAs

Abandoned vehicles that are on public land are removed in accordance with the relevant legislation by each district within its area, and then the County Council arranges for disposal where necessary.

Fly tipped waste – collections by/for WCAs

Fly tipping is a serious national problem. As well as being unsightly, it can lead to serious pollution of the environment and harm to human health, and is costly to remove and dispose of correctly. Most fly tipped waste is handled in the same way as residual waste, and all WCAs have enforcement polices which inform the process by which offenders will be investigated and prosecuted.

Clinical waste – collections by/for WDA

The Controlled Waste Regulations 2012 define this type of waste:

“clinical waste” means waste from a healthcare activity (including veterinary healthcare) that—

(a) contains viable micro-organisms or their toxins which are known or reliably believed to cause disease in humans or other living organisms,

(b) contains or is contaminated with a medicine that contains a biologically active pharmaceutical agent, or

(c) is a sharp, or a body fluid or other biological material (including human and animal tissue) containing or contaminated with a dangerous substance within the meaning of Council Directive 67/548/EEC on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances(b),

and waste of a similar nature from a non-healthcare activity.

The WDA arranges for both the collection and disposal of waste in categories (a) and (b) above. The WCAs collect items in category c.

Household Waste Recycling Centres – collections by/for WDA

The County Council operates 11 HWRCs across the county to which residents can bring their household waste. Tables 5-10 and 5-11 below summarises respectively:

- Table 5-10 – The location of and contractual arrangements for each HWRC; and
- Table 5-11 – The facilities provided at each HWRC.

Table 5-10 HWRC Contractual and Operational Arrangements

Unless stated otherwise, opening hours are standardised as 09:00hrs to 16:00hrs Friday, Saturday, Sunday and Monday (closed Tuesday, Wednesday and Thursday).

NB – All sites are closed on 25th and 26th December and 1st January every year.

Location	Site Ownership	Operated by	Opening hours
Lincoln HWRC Great Northern Terrace LN5 8LG	County Council	Carl Drury Ltd.	09:00hrs to 16:00hrs 7 days a week
Boston HWRC Bittern Way PE21 7RQ	County Council	Carl Drury Ltd.	09:00hrs to 16:00hrs 7 days a week
Spalding HWRC West Marsh Rd PE11 2BB	County Council	Carl Drury Ltd.	Summer (1st April to 31st October) 08:00hrs to 16:00hrs 7 days a week. Winter (1st November to 31st March) 08:00hrs to 16:00hrs Friday, Saturday, Sunday and Monday.
Gainsborough HWRC Long Wood Road, Corringham Road Ind Est, Gainsborough, DN21 1QB	County Council	Carl Drury Ltd.	Standard (09:00hrs to 16:00hrs Friday, Saturday, Sunday and Monday)
The Rasens HWRC Gallamore Lane Industrial Estate, Gallamore Lane, Middle Rasen, LN8 3HA	County Council	Carl Drury Ltd.	Standard
Bourne HWRC South Fen Road PE10 0DN	County Council	Recycle It Wright Ltd.	Standard
Grantham HWRC Mowbeck Way NG31 7AS	County Council	Recycle It Wright Ltd.	Standard
Sleaford HWRC Pride Parkway NG34 8GL	County Council	Recycle It Wright Ltd.	Standard
Louth HWRC Bolingbroke Road LN11 0WA	County Council	Sid Dennis & Sons Ltd.	Standard
Skegness HWRC Warth Lane PE25 2JS	County Council	Sid Dennis & Sons Ltd.	Standard
Kirkby on Bain HWRC Tattershall Road LN10 6YN	FCC Environment	FCC Environment	Standard

Table 5-11 – Materials accepted at Household Waste Recycling Centres as of April 2018

HWRC Site	Residual waste	Green	Wood	Plastics	Paper	Cardboard	Mattresses	WEEE	Books & CDs	Textiles	Household Chemicals	Glass bottles/jars	Cooking Oil	Mineral Oil	Lead Acid Batteries	Household batteries	Plasterboard	Soil	Rubble	Pressurised Gas Cylinders ¹	Scrap Metal	Re-use
Bourne	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Boston	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Gainsborough	x	x	x	x	x	x	x	x	x	x	x	x	x	x	ii	x	x	x	x	x ¹	x	x
Grantham	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Kirkby on Bain	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Lincoln	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Louth	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Rasens	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Skegness	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Sleaford	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x
Spalding	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x ¹	x	x

An "x" indicates that the stated waste stream is collected separately at the stated HWRC.

- i) Gas cylinders are accepted where necessary, but should ideally be returned to a gas supplier, particularly as a deposit refund is sometimes available.
- ii) Lead acid batteries are no longer accepted at Gainsborough due to repeated security issues. Residents are recommended to contact a scrap dealer.

5.4.2 Waste Transfer and Logistics

Some waste streams are delivered directly to an appropriate treatment or disposal site. For the majority of waste streams, LCC provides a number of Waste Transfer Stations (WTSs) to receive waste both from WCA collections and from HWRCs, enabling the waste to be bulked up for transportation to centralised destinations.

Some WCAs use more than one WTS depending on where waste is collected and/or what type of waste it is. Likewise, many of these WTSs receive waste from more than one WCA or HWRC.

WTSs operated by Lincolnshire County Council

The WDA directly operates a network of five WTSs around the County. Table 5-12 shows the location of each WTS, as well as the tonnage of each type of waste received at each site.

The WDA lets contracts for the transportation of waste from each WTS to the appropriate destinations.

Table 5-12 Location and 2017/18 tonnage throughput for WDA WTSs

Location	Residual Waste (Tonnes)	Mixed Dry Recyclables (Tonnes)	Road Grit (Tonnes)	Other (Tonnes)	TOTAL (Tonnes)
Boston WTS Slippery Gowt Lane PE21 7AA	42,722	7,423	986		51,131
Gainsborough WTS Marshall Lane DN21 1GD	15,697	8,162	1,652		25,512
Grantham WTS Occupation Road NG32 2BP	28,376	13,086	1,305		42,767
Louth WTS Bolingbroke Road LN11 0WA	31,471	10,982	1,733	Glass = 622Te Mattresses ⁱ = 1Te	44,809
Sleaford WTS Pride Parkway NG34 8GL	14,428	5,652	954	Mattresses ⁱ = 26Te	21,060

i – Mattresses are often delivered in in loads of mixed residual waste. This is the weight of mattresses which were delivered (and weighed) separately.

Other WTSs used by the Lincolnshire Waste Partnership

Arrangements are in place for the use of several other WTSs owned and operated by third parties. Details are shown in Table 5-13.

Table 5-13 Location and 2017/18 tonnage throughput for third party WTSs

Location	Operator	Arranged by	Mixed Dry Recyclables (Tonnes)	Green Waste (Tonnes)
Hykeham	Mid UK Recycling	Lincs CC	13,600	
Market Deeping	Mid UK Recycling	Lincs CC	10,500	2,600
Boston	Mick George	Boston BC		4,200

5.4.3 Recycling and composting arrangements

Green waste

There is generally no need for the use of WTSs for green waste as, both from kerbside collections and from HWRCs, it is sent directly to a network of composting facilities across the county under contracts operated by the County Council. In 2017/18 72,619 tonnes of green waste was sent to these facilities, which are identified in Table 5-14.

Table 5-14 Current Composting Facilities

Composting operator	Location(s)
Clarkeson Recycling	Riby
Greenaway	Alford
Land Network (Gainsborough)	Sturgate
Land Network (Melton)	Melton Mowbray
Land Network (N.E.Lincs)	South Elkington
Material Change	Crowland
MEC Recycling	Swinderby / Saxilby
Mid UK Recycling	Caythorpe / Colsterworth

Mixed dry recycling

All the WCAs operate a kerbside collection of mixed dry recyclables (MDR) which includes a wide range of materials. Historically each WCA has accepted a different mix of materials but the Partnership has identified that it would like to move towards a more standardised recyclable stream where possible. The benefits of such standardised collections include:

- Making the service easier to understand and thus, in line with our strategic vision, more "customer friendly"; and
- Acting in line with the government's "consistency" agenda which seeks to reduce the number of different recycling systems in place across the UK.

As part of the implementation of this JMWMS, the LWP will be working together towards this aim. At the time of writing, discussions are progressing well towards agreement on a common recycling mix. Once agreed, any changes will be publicised through a unified communications campaign using a wide range of methods and media.

In September 2018 the LWP agreed to focus on those materials which should not be deposited in recycling collections. These materials will never be part of the recycling mix, and thus can be the

subject of communications regardless of any future changes to that mix. Figure 5-7 shows the publicity to be used, in most areas as stickers to go onto recycling bins.

Figure 5-7 "No Thanks" bin sticker



The County Council has a contract for the processing of this MDR at Materials Recycling Facilities (MRF's) located in the county. Once collected, each WCA delivers their MDR either to one or more of the WTS's provided by the County Council, or directly to the MRF contractor.

Other dry recycling

Separately-collected recyclables from WCA bring banks and from HWRC's go to a number of different destinations under a variety of different arrangements.

5.4.4 Treatment and disposal of residual waste

The LWP's 2008 Waste Strategy included two Objectives which focussed on residual waste:

Objective 5 – To increase progressively the recovery and diversion of biodegradable waste from landfill, to meet and exceed the Landfill Directive diversion targets.

Objective 6 – To ensure that residual waste treatment supports energy recovery and other practices higher up the waste hierarchy.

In line with these objectives we have, during the lifetime of that Strategy, moved almost entirely from sending residual waste to landfill to using the new Energy from Waste facility at Hykeham. Indeed, we have done this so successfully that the majority of landfill sites in Lincolnshire either have already closed or are likely to close in the near future. Further information regarding this is shown in Table 5-15.

Table 5-15 Residual Waste Contracts 2017

Site Type	Site	Operator	2016/17 Input by LWP (Tonnes)	Contract Details
Energy from Waste	Hykeham	FCC Environment	162,716	Ends 2039
Landfill	Colsterworth	FCC Environment	6,738	Closing 2018
Landfill	Kirkby on Bain	FCC Environment	5,511 ⁱ	Final cell, and will close once filled
Landfill	Leadenham	FCC Environment	0	Site mothballed Reopening in 2018
Landfill	Whisby	FCC Environment	0	Site mothballed Future use to be determined

i – Includes around 1,400 tonnes of rubble from HWRCs.

Given the limited future availability of landfill, the high cost of landfill tax, and that landfill sits at the bottom of the Waste Hierarchy, it seems sensible that the LWP aspires in the long term to send zero waste to landfill.

This aspiration, and the fact that the Hykeham EfW does not have the capacity to process the forecasted quantities of residual waste, are reflected in one of our key objectives:

Objective 8.	To make an objective assessment of what further waste processing/disposal capacity is required and, as necessary, seek to secure appropriate capacity.
---------------------	--

5.5 Service performance measures

Whilst the statutory reporting of National Indicators was removed in 2011, the percentage of household waste sent for reuse, recycling or composting (former NI 192) remains a generally accepted headline measure of the performance of local authority waste and recycling services.

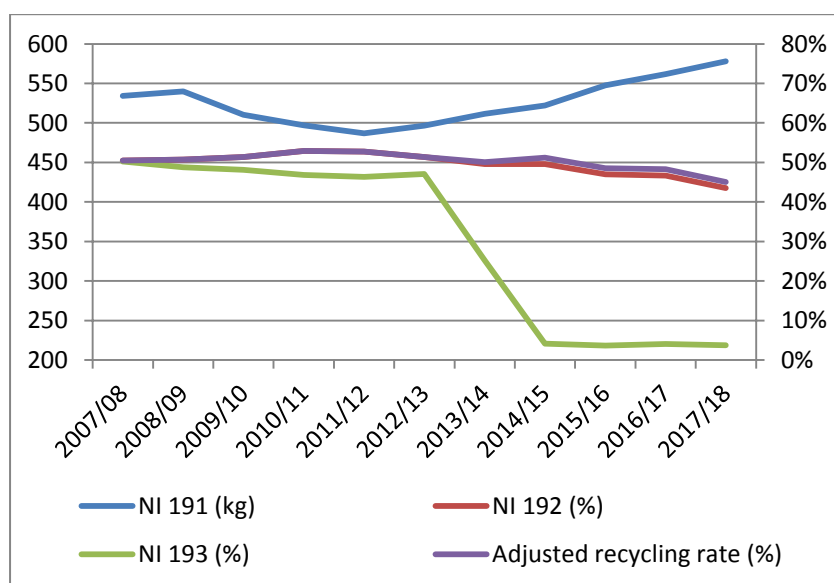
Table 5-16, and the accompanying Figure 5-9, show the County Council's (and thus the LWP's) overall performance against all three of the waste-related former National Indicators:

- NI 191 = Residual Household Waste per Household
- NI 192 = Percentage Household Waste sent for Reuse, Recycling or Composting
- NI 193 = Percentage of Municipal Waste Sent To Landfill

Table 5-16 National Indicator (NI) performance since 2007/08

	2007/08		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
NI191: Residual Household Waste kg per Household	534.1		496.8	486.7	496.7	511.4	522.0	547.6	561.9	578.0
NI192: % HH waste sent for Reuse, Recycling or Composting	50.5		52.9	52.8	51.3	49.6	49.6	47.0	46.7	43.5
NI193: % Municipal Waste Sent To Landfill	50.2		46.8	46.4	47.1	25.2	4.1	3.6	4.0	3.8

Figure 5-9 National Indicator (NI) performance since 2007/08



In addition to the three National Indicators, Figure 5-9 also shows an additional measure for recycling performance. Defra have recently announced that the overall UK recycling rate (as reported to the EU) will be measured in a different way. In line with practice in a number of other EU nations, the national rate will include metals recycled from Incinerator Bottom Ash (IBA) such as that generated at our EfW facility. Since this is the basis on which the UK's performance will be measured against the EU target of 50% recycling by 2020, it seems appropriate to record the LWP's performance on the same basis in addition to the official NI192 rate.

Table 5-17 shows this higher recycling percentage alongside our official performance. It should be noted that our recycling rate on that basis would have been around 1.5% higher each year since our EfW facility opened in 2013.

Table 5-17 Increased recycling performance by inclusion of metals recycled from EfW ash

	2007/08		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
NI192: Percentage HH waste sent for Reuse, Recycling or Composting	50.5%		52.9%	52.8%	51.3%	49.6%	49.6%	47.0%	46.7%	43.5%
Adjusted recycling rate (including metals from EfW ash)	50.5%		52.9%	52.8%	51.3%	50.0%	51.2%	48.5%	48.3%	45.0%

5.5.1 Quantity of residual waste (NI191)

Following the introduction of our 2008 Strategy, the weight of residual (non-recycled) waste produced by each household fell significantly. Indeed, the 486.7kg per household which we achieved in 2011/12 was equivalent to 225.8kg per head, which was well on target for achieving our 2008 Waste Strategy Objective of 225kg per head by 2020.

Unfortunately this downward trend ended at that point and we have seen a steady increase to a level even higher than in 2008, with the present figure of 578kg equating to around 261kg per head of residual waste. Although the fall and subsequent rise may partly be a result of the global economic downturn (people buy less and thus throw away less when times are financially difficult) and the subsequent recovery, this is a trend that needs reversing.

Table 5-18 Residual and total waste vs recycling rate in 2017/18

	Residual household waste per household (NI191)	Total household waste collected per person (BV84)	Household waste reused, recycled or composted (NI192)
Boston BC	597kg	395kg	35.2%
City of Lincoln	507kg	359kg	35.1%
East Lindsey DC	456kg	384kg	42.1%
North Kesteven DC	521kg	405kg	43.9%
South Holland DC	562kg	331kg	27.2%
South Kesteven DC	506kg	381kg	40.9%
West Lindsey DC	514kg	430kg	46.0%
LWP Total (WCA's + HWRC's)ⁱ	578kg	461kg	43.5%
<i>2016/17 LWP Total</i>	<i>562kg</i>	<i>478kg</i>	<i>46.7%</i>

i – The LWP total weight is higher than that for the individual WCA's as each WCA figure doesn't include waste collected from their residents at County Council HWRC's.

It is interesting to note that the two WCA's with the lowest overall recycling rate also have the lowest total waste per person, particularly since the Waste Hierarchy (see section 2.2.1 for details) makes it clear that waste prevention should have a higher priority than recycling.

5.5.2 Recycling performance (NI192)

It is clear from the above data that the LWP's headline recycling rate has been in slow decline since a peak of 52.9% in 2010/11. This fall in recycling has been accompanied by an increase in the quantity of residual waste to be disposed of.

Table 5-19 shows the recycling and composting performance of each Waste Collection Authority and across the HWRC network during 2017/18.

Table 5-19 Recycling and composting performance in 2017/18

	Household waste reused, recycled or composted (NI192)	Household waste recycled (BV82a)	Household waste composted (BV82b)
Boston BC	35.2%	19.6%	15.6%
City of Lincoln	35.1%	19.1%	16.1%
East Lindsey DC	42.1%	20.1%	22.0%
North Kesteven DC	43.9%	19.1%	24.9%
South Holland DC	27.2%	22.0%	5.2%
South Kesteven DC	40.9%	22.4%	18.5%
West Lindsey DC	46.0%	18.1%	27.8%
LWP Total (WCA's + HWRC's)ⁱ	43.5%	22.2%	21.2%
<i>2016/17 LWP Total</i>	<i>46.7%</i>	<i>24.4%</i>	<i>22.3%</i>

i – The overall LWP recycling performance is higher than that for most of the individual WCA's as each WCA figure doesn't include waste recycled by their residents at County Council HWRC's.

The headline figure of 43.5% for the LWP as a whole shows a considerable fall compared to the 2016/17 figure of 46.7%. Two factors have particularly contributed to this fall:

- Composting – Around 5,000 tonnes less garden waste was presented to us. Since we received some 7,000 tonnes less waste in all, it seems possible that weather conditions have generated less garden growth. This is not unprecedented, but the extra composting could have boosted our recycling rate by around 0.8%.
- Recycling – Compositional analysis shows that we continue to see an increased amount of non-recyclable waste presented in our collections of Mixed Dry Recyclables. This is combined with a fall of over 2,500 tonnes in the total quantity presented in those collections.

Whilst the Government no longer sets targets for individual authorities, it should be noted that the UK is currently committed to meeting the EU recycling targets including 50% by 2020 and 65% by 2035. However, there are uncertainties over this as:

- The impact of the UK's exit from the EU is unclear at the time of writing, although it would currently appear that the UK will retain this overall target in some form; and

- Four different calculation methods are available to EU members, and none of these matches exactly with the UK's former NI 192. At least one of the alternatives could significantly improve the headline recycling rate for the LWP as shown in Figure 5-9 and described beneath it.

5.5.3 Landfilling performance (NI193)

The main success story during the period of the previous Waste Strategy has been in the way in which we dispose of residual waste, with the percentage of Municipal Waste sent to landfill (NI 193) falling from over 50% in 2007/08 to under 4% in 2017/18. This has been driven by:

- The LWP's commitment to move waste further up the EU Waste Hierarchy; and
- The need to reduce the County Council's annual spend on Landfill Tax.

This success has been achieved through two major initiatives:

- 1) The opening of the new Energy from Waste facility in Hykeham. This now diverts over 150,000 tonnes per annum from landfill, and thus moves it up the Waste Hierarchy from "disposal" to "recovery". The facility has recently received Planning Permission to increase capacity to 170,000 tonnes per annum.
- 2) The recycling of road grit. This diverts around 4,000 tonnes per annum from "disposal" to "recycling".

5.5.4 Recycling capture rate for each waste type

One way to identify areas in which recycling performance can be improved is to consider the proportion of the total quantity collected of each material (as listed in section 5.3.3, Table 5-6) which is captured for recycling. This is shown below in table 5-20.

Table 5-20 Recycling capture rate for each waste stream in 2017/18

Key

Green = Above 70%

Yellow = Above 50%

Red = Below 20%

	TOTAL Local Authority Collected Waste	Tonnage Reused, Recycled or Composted	Percentage Reused, Recycled or Composted
Card	17,953	12,325	68.7%
Paper	33,898	17,740	52.3%
Plastic Film	19,240	580	3.0%
Dense Plastic	26,930	8,145	30.2%
Textiles	9,847	1,025	10.4%
Glass	19,921	14,528	72.9%
Ferrous	7,626	4,322	56.7%
Non-Ferrous	4,624	2,284	49.4%

Waste Strategy for Lincolnshire

	TOTAL Local Authority Collected Waste	Tonnage Reused, Recycled or Composted	Percentage Reused, Recycled or Composted
Misc. Combustible	38,028	10,220	26.9%
WEEE	5,856	4,419	75.5%
Potentially Hazardous	2,181	1,035	47.5%
Misc. Non-Combustible	22,316	14,419	64.6%
Food	48,851	0	0.0%
Garden	82,230	72,619	88.3%
Other Putrescibles	14,613	0	0.0%
Fines	2,298	0	0.0%
Liquids	3,593	0	0.0%
TOTALS	360,005	163,661	

The capture rate for WEEE (electricals), glass and garden waste exceeds 70%. Several other streams exceed 50% recycling: paper, card, ferrous metals, and "miscellaneous non-combustible" (which includes soil and rubble from HWRC's).

At the other end of the spectrum, for those streams marked in red, the capture rate is less than 20%. Whilst some of these streams are, by definition, unlikely to be recyclable (e.g. "fines" are particles of waste which are too small to be identified), other streams show room for considerable improvement – e.g. food waste and textiles.

5.5.5 Other ways to measure environmental performance

It is important to note that, in developing this Strategy, a key task has been to reassess whether the former National Indicators represent the best way to measure the performance of the LWP. This review will be included in the Action Plan to accompany this Strategy document, and reflects the need to measure our success in meeting the objectives chosen by the Partnership.

5.6 Current waste management costs

In addition to measuring environmental performance, it is essential to measure how well we are meeting the challenges of diminishing budgets.

To enable comparison with historical costs, the costs of waste management in 2017/18 outlined in Table 5-21 are the totals of those formerly reported by each LWP authority as part of the Best Value Performance Indicator regime – BV86 for WCAs and BV87 for WDAs. The table also shows the equivalent 2006/07 cost per household which was included in the 2008 Strategy.

Table 5-21 Costs of waste collection and disposal for 2017/18

	Collection Costs (Total across all LWP WCA's)			Disposal Costs		
	Number of Households	Overall cost of collection	£/ HH	Municipal Waste (Tonnes)	Overall cost of disposal	£/ tonne
2006/07	308,931	£15,718,152	£50.88	365,537	£17,270,000	£47.25
2017/18	338,690	£14,879,176	£43.93	360,155	£18,774,000	£52.13

Despite increases in costs due to inflation and other factors, such as fuel tax, we have managed to achieve sufficient efficiency savings to reduce the overall cost of waste collection.

Disposal costs have risen a little overall, but considerable savings have been achieved compared to where we might have been, particularly had we continued to send large quantities of waste to landfill, for which Landfill Tax has increased significantly from £21 per tonne in 2006/07 to over £86 in 2017/18.

6 What are we aiming for?

The Partnership has made significant strides forwards during the lifetime of the previous Strategy, particularly in the development of an energy from waste facility to divert non-recycled waste away from landfill. This chapter identifies the challenges faced by the Partnership, currently and over the next few years, and the proposed approach to meeting these challenges.

6.1 Strategic objectives

In preparing this JMWMS, the LWP held two workshops to identify their overarching vision and objectives. Details of the process are included in Appendix A.

As a result, and as identified at the beginning of this document, the Partnership has the vision:

“To seek the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire.”

89% of responses to the public consultation either agreed or strongly agreed with this vision, and a number of comments were received in support of the combined focus on value for money, care for the environment and customer-friendly services.

Opinion was divided as to whether the first priority should be money or the environment. In view of that, the LWP have clarified that they will be seeking **the best environmental option which can be afforded**.

In order to work towards this vision, the Partnership have developed and agreed a set of high-level objectives, which are key drivers for the delivery of this strategy. In line with the vision, each of these objectives is to be considered in the light of the Partnership’s shared values that:

All Objectives should ensure that services provided under the JMWMS represent the best possible environmental option which gives value for money for Lincolnshire residents.

The ten objectives, generated at the July 2017 workshops and, where stated, refined through the consultation feedback, are as follows:

Objective 1.	To improve the quality and therefore commercial value of our recycling stream.
This ties in with the EU and UK government commitments to move away from a "make, use, dispose" model towards a more circular economy.	
Objective 2.	To move towards a common set of recycling materials.
The UK government have expressed the view that the large number of different systems cause public confusion, and thus hamper people's ability to put the right things into recycling collections. Consultation: <i>This received considerable support and, in the light of feedback received, it has been strengthened by the removal of the word "consider".</i>	

Objective 3.	To consider the introduction of separate food waste collections where technically, environmentally and economically practicable.
<p>The EU and UK government support food waste collections. Consultation: Responses were divided as to whether this was a good idea. Supporters pointed out the environmental benefits, whilst others raised practical issues. The addition of "where practicable" allows for these concerns to be addressed, including through the undertaking of trial collections.</p>	
Objective 4.	To explore new opportunities of promoting waste minimisation and of using all waste as a resource in accordance with the waste hierarchy.
<p>The waste hierarchy remains a key driver. This "promoting" will include both communicating with the public and lobbying of government and manufacturers for changes to the wider picture. Consultation: In line with responses, specific reference is now made to waste minimisation.</p>	
Objective 5.	To contribute to the UK recycling targets of 50% by 2020 and 55% by 2025.
<p>Whilst it could be argued that recycling rate is not a true reflection of environmental performance, it remains the headline measure both at UK and at EU level. Update: The EU Circular Economy Package has introduced longer-term targets and we will need to respond to how these are featured in Defra's new Resources and Waste Strategy.</p>	
Objective 6.	To find the most appropriate ways to measure our environmental performance, and set appropriate targets.
<p>This will allow us to set targets which address progress towards our objectives rather than just chasing targets for their own sake.</p>	
Objective 7.	To seek to reduce our carbon footprint.
<p>This is a key way to measure the overall environmental impact of the services which we provide. Consultation: This was strongly supported, particularly if it allows us to measure the impact of transportation.</p>	
Objective 8.	To make an objective assessment of what further waste processing/disposal capacity is required and, as necessary, secure appropriate capacity.
<p>Forecasts are that we will continue to see considerable waste growth, and we need to ensure we have sufficient capacity to handle it in the best way possible. Consultation: In line with feedback, this has been expanded to include all waste streams rather than just residual (i.e. non-recycled) waste.</p>	
Objective 9.	To regularly review the LWP governance model in order to provide the best opportunity to bring closer integration and the implementation of the objectives set by the strategy.
<p>Whilst the LWP consists of a number of separate authorities, it is essential that we seek ways to work together to achieve the best outcomes for the people of Lincolnshire as a whole.</p>	
Objective 10.	To consider appropriate innovative solutions in the delivery of our waste management services.
<p>It is important not to be held back by sticking with existing practices where something new could improve things.</p>	

6.2 The challenges we face

Whilst the move from landfill to energy from waste as the main route for disposal of non-recycled waste has largely overcome the largest challenge identified in our previous Strategy, a number of key issues remain.

The landscape is uncertain as it is unclear what direction the Government's Waste and Resources Strategy, and resulting policy, will take as the UK leaves the European Union, but it seems clear that we will need to address falling recycling rates and increasing waste arisings.

6.2.1 Falling recycling rates in Lincolnshire

As indicated in Chapter 5, the Lincolnshire County Council recycling rate (which covers the LWP as a whole) has fallen in recent years from a peak of 52.9% in 2010/11 to 43.7% in 2017/18.

Whilst the overall tonnage collected from kerbside recycling bins has remained relatively stable, we have seen a rise in the percentage of that material which is **not** recyclable. In 2017/18 over a quarter couldn't be recycled, and this continues to rise still further. This includes some recyclables which had been damaged by those non-recyclable wastes – e.g. Paper made wet and dirty by food waste – a situation made worse by more stringent MRF regulation and an increasing emphasis on material quality worldwide.

6.2.2 The national and international picture

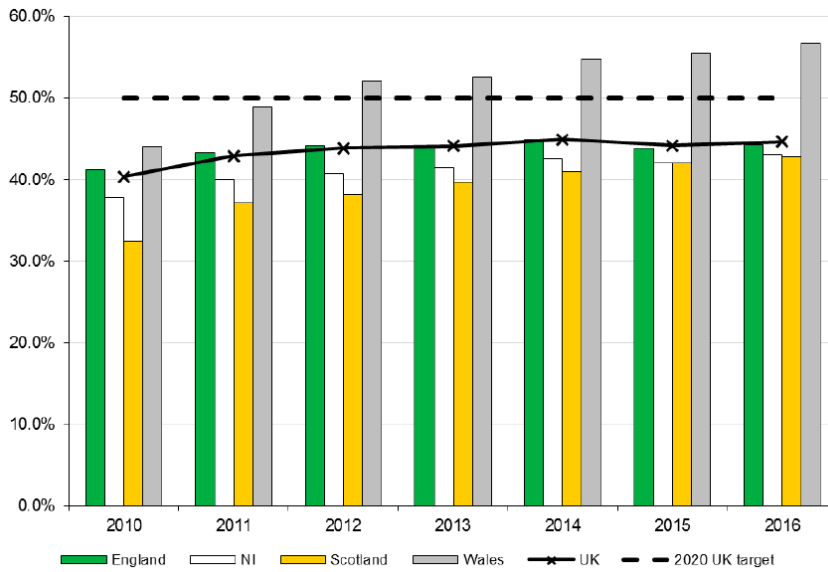
Defra statistics¹² show that the rate of recycling of waste from UK households has stalled. A small rise in 2016 followed a fall in 2015, meaning that the 2016 rate of 45.2% was very similar to that of 44.9% in 2014.

As shown in Figure 6-1, this stalling follows a number of years of growth. It is also interesting to note that the recycling rate for Wales is considerably higher than that in England, and that in Wales things operate very differently, including:

- There is a different method of financing waste management;
- All councils offer separate food waste collections; and
- Some authorities operate three or even four weekly residual waste collections.

¹² <https://www.gov.uk/government/statistics/uk-waste-data>

Figure 6-1 Defra chart showing data on recycling from UK households



This issue is made more complex by uncertainty over what recycling rate we should be seeking to achieve. Our current national target is the EU target of 50% recycling of waste from households by 2020. Beyond that, the EU Circular Economy Package sets targets rising to 65% in 2035. The interim targets are set out in section 3.1.2 of this Strategy.

Following the UK decision to exit the EU, the UK Government seem inclined to retain existing EU-related legislation, but it is unclear whether the 2035 target will apply to the UK. Furthermore, a UK-wide target is not currently binding on individual local authorities.

A further complication is that, as described in section 5.5, the UK's national performance is measured (and reported to the EU) on a different basis to the official recycling rate attributed to individual UK councils and thus to the LWP. Although the LWP has joined in lobbying for this to be rectified, there is no indication that a change is imminent.

6.2.3 Growth in waste arisings

As described in Chapter 5, each year usually sees growth in the tonnage of waste for which the LWP is responsible. There are two reasons for this increase:

- Population growth – Lincolnshire’s population grew by more than 5% between 2011 and 2017. See section 5.1 for further details.
- Weight of waste per person – Whilst this stabilised somewhat during the economic downturn, there is concern that this will now resume its historical upwards trend.

This is a particular concern given that our Energy from Waste facility is already operating at close to full capacity and, without a new processing route, any additional residual waste would have to be sent to landfill.

7 How will we get there? – Our "Forward Plan"

In order to deliver the aims and objectives to which the Partnership aspires (see earlier chapters), it is essential that work undertaken by each partner organisation is focussed on actions which will further the objectives as set out in this Strategy.

This work is summarised in an Action Plan, the initial version of which has been developed alongside the preparation of this main Strategy document and is included herewith as Appendix D. Once adopted, the Action Plan will be reviewed on a regular basis (see Chapter 8) to ensure that it remains up to date for the lifetime of the Strategy, with additional actions added as work programmes are developed.

This chapter summarises the key themes which will shape our work together over the next few years, and these will guide the ongoing development of our Action Plan. In order to ensure that the LWP's efforts are focussed in the right direction, this chapter includes a table showing the links identified between each theme and each of our strategic objectives.

Also included here is information regarding the key workstreams identified for the initial Action Plan.

7.1 Seeing the wider picture

It is crucial that each LWP partner authority is proactive in seeking to consider their actions in as broad a context as possible. This will feature a number of diverse elements including those shown below.

7.1.1 Developing links with other local authorities

Any local authority is stronger when it learns from and, where appropriate, seeks to work with other councils. We will do this by:

- Strengthening relationships within the LWP
- Working with and learning from authorities outside the LWP

7.1.2 Engaging with the commercial sector

Particularly in a time of reducing council budgets, it is important that we engage with businesses working in the waste sector in order to:

- Seek new opportunities to improve our services or save money
- Seek ways in which we could benefit by being more commercially-minded
- Be more aware of the potential value of the waste which we collect
- Help to fill any processing capacity gaps

7.1.3 Addressing any waste processing capacity gaps

We have already identified some waste streams where there may be insufficient capacity at local facilities. The largest and most pressing of these is that forecasts indicate that our growing

population are likely by 2037 to produce 54,000 tonnes per annum of residual waste above and beyond the capacity of our existing EfW facility.

In order to mitigate against this, particularly in the light of expected growth in Lincolnshire's population, we need to ensure that we:

- Make good forecasts of how much of each waste type we are likely to have
- Promote the development of infrastructure for new and existing waste streams

7.2 Balancing economic and environmental benefits

It is essential that every attempt is made to provide services which give value for money to the people of Lincolnshire, particularly due to the need for prudence with the public purse and ongoing annual reductions to Council budgets. However, it is also important where possible to maximise the positive environmental impacts of how we handle our waste.

The importance of both of these aspects is reflected in their inclusion in the Vision which the Partnership has agreed for this Strategy:

“To seek the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire.”

7.2.1 Ensuring value for money

Providing the best overall value for money for the council-taxpayers of Lincolnshire may mean finding innovative ways to fairly distribute costs and savings incurred by different authorities as part of any service change.

7.2.2 Caring for the environment

This will be undertaken in a number of ways, including:

- Following the Waste Hierarchy – This is enshrined in law
- Improving the environmental impact of existing services – e.g. use of heat from the Energy from Waste facility
- Reducing our carbon footprint
- Adopting and promoting “circular economy” thinking
- Considering the use of new and innovative technology

7.2.3 Finding the balance in practice

In the light of consultation responses received, including those from partner authorities, the LWP have agreed to assess the benefits of different options by seeking "the best environmental option which can be afforded".

7.3 Reviewing what we collect and how

A key element of the implementation of this Strategy is our response to the WRAP-sponsored work to assess the various options for how each of the LWP's Waste Collection Authorities operate their collection services. The decision-making process will need to feature a variety of elements such as:

- Evaluating the business case – Do the finances stack up?
- Focusing on streams with the most economic and/or environmental value
- Identifying barriers and how to overcome them – e.g. startup costs of service changes
- Considering the introduction of new collections – e.g. food waste
- The impact on collection rounds and collection vehicles
- The disposal both of the new collections and of other streams affected by the removal of some material

7.4 Getting our messages across

It is essential that we communicate well so that we, as Councils, are not acting in isolation. This means developing plans for how to deliver key messages:

- To the users of our waste services – e.g. What to put in which bin
- To the national Government – Influencing national strategy and policy to tie in with our own
- To other stakeholders – Parish Councils, Environment Agency, etc
- To the commercial sector – To waste producers and waste businesses

Communicating with the public is particularly important, particularly in the event of any changes to services. Indeed, this ties in directly with our strategic vision by making our services more customer-friendly, and by making it as easy as possible for people to help us to protect the environment and to provide value for money.

In communicating these messages it is important that, as well as explaining what we would like the public to do, we also explain why – i.e. how it will help to achieve our strategic objectives.

Table 7-1 Linking themes with strategic objectives

Theme/Project	Obj.1	Obj.2	Obj.3	Obj.4	Obj.5	Obj.6	Obj.7	Obj.8	Obj.9	Obj.10
Seeing the wider picture										
Developing links with other local authorities – Strengthening relationships within the LWP		Y							Y	
Developing links with other local authorities – Working with and learning from authorities outside the LWP						Y		Y	Y	Y
Engaging with the commercial sector – Seek ways in which we could benefit by being more commercially-minded	Y			Y						Y
Engaging with the commercial sector – Be more aware of the potential value of the waste which we collect	Y	Y		Y						
Engaging with the commercial sector – Help to fill any processing capacity gaps			Y	Y				Y		
Addressing any waste processing capacity gaps – Make good forecasts of how much of each waste type we are likely to have	Y		Y					Y		
Addressing any waste processing capacity gaps – Promote the development of infrastructure for new waste streams	Y		Y	Y			Y	Y		
Balancing economic and environmental benefits										
Ensuring value for money	Y		Y	Y						Y
Caring for the environment – Following the Waste Hierarchy				Y			Y			
Caring for the environment – Improving the environmental impact of existing services	Y			Y	Y	Y	Y			
Caring for the environment – Reducing our carbon footprint							Y			
Caring for the environment – Adopting and promoting “circular economy” thinking	Y			Y						Y
Reviewing what we collect and how										
Evaluating the business case			Y	Y						
Focusing on streams with the most economic and/or environmental value	Y	Y		Y						
Identifying barriers and how to overcome them	Y	Y	Y		Y					Y
Considering the introduction of new collections				Y	Y		Y			
Getting our messages across										
To the Lincolnshire public					Y					
To the national government					Y	Y				
To other stakeholders – Parish Councils, Environment Agency, etc			Y		Y	Y				
To the commercial sector – To waste producers as well as waste businesses	Y	Y	Y	Y	Y			Y		Y

7.5 Key workstreams for initial Action Plan

The initial Action Plan has been developed on behalf of the LWP by an Officer Working Group including representatives from each partner council.

Six separate streams of work have been identified to enable us to begin to work towards the objectives identified in this Strategy. In the initial Action Plan, attached as Appendix D, each workstream is listed with one or more specific actions which relate to it.

Further details of each workstream, and how it relates to our objectives, are listed below.

7.5.1 Strategic Review of Kerbside Mixed Dry Recycling Collection and Disposal	
Scope:	To investigate the feasibility of ‘harmonising’ the countywide kerbside MDR mix to find the most effective balance between reducing residual waste, increasing recycling rates, reducing contamination and maximising the value of our recyclate, taking into account household/population growth forecasts. In line with Consultation feedback, this workstream will also include: <ul style="list-style-type: none"> • A communications campaign to ensure that the public are well-informed about the service, and the part they can play in its success; and • A review of Household Waste Recycling Centres and how they tie in with kerbside services.
Supports:	Objectives 1,2,4,5,7,8 and 10

7.5.2 Food Waste Trial	
Scope:	A wide range of operational waste issues are being considered as part of the development of the Joint Municipal Waste Management Strategy. To assist in increasing the capacity at the Energy from Waste facility, one of these proposals is the potential for a countywide food waste collection and recycling service. It has therefore been decided to undertake a food waste trial in selective locations within South Kesteven District Council (SKDC), to cover urban, rural and semi-rural areas, totalling some 4733 properties.
Supports:	Objectives 1,2,3,4,5,7,8 and 10

7.5.3 Strategic Review of Options for Continuous Improvement for Waste Collection and Disposal Arrangements in Lincolnshire	
Scope:	To identify the most efficient and effective collection and disposal methods for managing the County’s municipal waste. This will be a “theoretical” exercise ensuring existing arrangements are NOT taken into account. All collection and disposal methods will be considered.
Supports:	Objectives 7,8,9 and 10

7.5.4 Location of additional processing/disposal sites	
Scope:	To identify high users of energy within Lincolnshire, both current and anticipated through Local Plans and other plans, so consideration can be given to investigate the opportunities for appropriate waste infrastructure and deliver a co-ordinated effective and efficient waste collection/disposal service, including for future growth.

	This will also assist in the consideration of the financial aspects through the local energy produced and ensuring that the infrastructure is environmentally friendly by reducing carbon mileage.
Supports:	Objectives 7,8 and 10

7.5.5 Choosing performance indicators appropriate to measure environmental performance	
Scope:	To identify a suite of performance indicators which give a clear way of measuring our environmental performance, including our carbon footprint. This will allow us to measure our progress towards our strategic objectives.
Supports:	Objectives 6 and 7

8 The next steps: Monitoring, implementing and reviewing the strategy

To help identify the best option for managing our waste in the future, we have begun to:

- Assess options for our waste collections; and
- Consider the disposal implications of those collection options.

However there are further considerations required to ensure the strategy can be implemented successfully to meet our shared strategic objectives.

8.1 Monitoring the strategy

In order to know how well we are meeting our strategic objectives, it is important to establish and report on appropriate measures.

The key measures which are currently reported to the Partnership include:

- Percentage of household waste sent for reuse, recycling or composting (formerly a National Indicator, NI 192) – This is particularly important as it reflects our contribution to the national recycling target.
- Total tonnage of residual (non-recycled) waste – This is important as it reflects how well we are doing in implementing the waste hierarchy, both by recycling and through waste minimisation.

As a result of our new strategic objectives, and in line with Objective 6, new measures will need to be considered in order to monitor key issues such as our combined carbon footprint. The development of a new suite of measures is included in the Action Plan to accompany this Strategy, and will help us to pursue our Vision “to seek the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire.”.

In developing new measures, such as carbon emissions, it is important not to lose sight of the big picture, such as:

- Advances we have made over the last few years – e.g. Compare performance not just with current services but also with where we would be if we landfilled everything.
- Side benefits of our services – e.g. Use of the energy generated at the EfW facility.

Once a suite of performance indicators has been agreed, these will be regularly reported to the LWP, with statistical data accompanied by sufficient commentary that informed decisions can be made on any necessary changes to service provision or to future versions of the Action Plan.

8.2 Implementing the strategy

8.2.1 Funding and support

Due to council budgets reducing, and the need to adopt more sustainable waste management practices, further pressure will be placed on service budgets. While the Partnership has begun to identify ways in which our combined services might be improved, these will need to be considered pragmatically in the light of the available budget. The Partnership will also need to actively seek any funding opportunities, whether from Government or otherwise, which can help us to afford to undertake work in support of the Objectives identified in this Strategy.

8.2.2 Partnership working

To ensure the Partnership continue to improve services and develop efficiencies it is essential to work together to deliver the strategy. Working together enables the collection and disposal requirements to be coordinated to ensure that future collection service provision is provided with adequate treatment and disposal infrastructure.

In accordance with Objective 9, we are committed:

To regularly review the LWP governance model in order to provide the best opportunity to bring closer integration and the implementation of the objectives set by the strategy.

8.2.3 Implementing the strategy

The Partnership has made a commitment to implement this strategy and has recognised that significant changes are required over the next 10 years. To deliver these changes an action plan has been prepared by the Partnership which clarifies the actions and tasks required to meet the objectives as set out in the Strategy.

The delivery of tasks within the action plan will need to be monitored and reviewed annually to ensure the Partnership will deliver the targets it sets itself through this Strategy. Where significant changes occur, the action plan will be updated accordingly.

The action plan establishes how the Strategy will be delivered, considering what will be required by the Partnership in terms of:

- Action required to deliver waste minimisation and further increase recycling and composting;
 - Future changes or improvements to collection services (residual waste, dry recycling, garden waste and potential food waste); and
 - Investments required to deliver future residual waste treatment facilities and additional recycling infrastructure.
-

8.3 Reviewing the strategy

This Strategy will need to be regularly reviewed in order to ensure that our shared objectives remain appropriate, and to change them if necessary. This will, in line with government guidance, happen at least every five years, meaning that the LWP will undertake an initial review by 2023 at the latest.

This will be particularly important in the light of any changes to the operational and legislative landscape, including:

- The UK's departure from the European Union, and any changes in UK waste legislation and policy which arise from that; and
- The level of funding provided to each Authority by the UK Government.

As previously stated, the accompanying Action Plan will also be regularly reviewed to enable us to continue to meet our objectives.

Appendix A – Development of Vision & Objectives

As a joint Strategy, shared by all LWP partner authorities, an important part of the strategy development process was to ensure early involvement from all.

Two workshops were held in July 2017 at which partners had a series of discussions through which a shared Vision and Objectives were agreed. Full details of these workshops, and the output from them, are shown in the attached report.

With the addition of a 10th Objective to reflect the LWP's desire to seek innovative solutions, this Vision and Objectives were presented in the Consultation Draft of the JMWMS, and were generally well received. In response to feedback received, the agreed Objectives have been updated, although each one still retains the theme which was set out at the original workshops.



Ricardo
Energy & Environment

Lincolnshire Waste Partnership Joint Municipal Waste Management Strategy Workshops

Report for Lincolnshire Waste Partnership
Lincolnshire Waste Partnership JMWMS

ED 10614 | Issue Number 1 | Date 03/08/2017

Customer:**Lincolnshire Waste Partnership****Customer reference:**

ED10614

Confidentiality, copyright & reproduction:

This report is the Copyright of Ricardo Energy & Environment. It has been prepared by Ricardo Energy & Environment, a trading name of Ricardo-AEA Ltd, under contract to Lincolnshire Waste Partnership dated 03/08/2017. The contents of this report may not be reproduced in whole or in part, nor passed to any organisation or person without the specific prior written permission of Lincolnshire Waste Partnership. Ricardo Energy & Environment and LWP accept no liability whatsoever to any third party for any loss or damage arising from any interpretation or use of the information contained in this report, or reliance on any views expressed therein.

Contact:

John Woodruff
Ricardo Energy & Environment
Gemini Building, Harwell, Didcot, OX11 0QR,
United Kingdom

t: +44 (0) 1235 75 3263**e:** john.woodruff@ricardo.com

Ricardo-AEA Ltd is certificated to ISO9001 and ISO14001

Author:

John Woodruff, Gareth Morton, Helen Sankey

Approved By:

John Woodruff

Date:

03 August 2017

Ricardo Energy & Environment reference:

Ref: ED10614- Issue Number 1

The Lincolnshire Waste Partnership – Joint Municipal Waste Management Strategy Workshops

Introduction

As the Lincolnshire Waste Partnership's (LWP)'s only Waste Disposal Authority (WDA), Lincolnshire County Council (LCC) has taken responsibility for the project management of the review of its current Joint Municipal Waste Management Strategy (JMWMS).

In order to ensure that the JMWMS is jointly owned by all the authorities in the LWP, the WDA arranged two workshop sessions, to which each LWP member authority was invited. These were designed to encourage input from across the LWP in formulating the Visions and Objectives of the Strategy through the capture of a balance of views from across the LWP member authorities.

The Workshops were held at the Hykeham Energy from Waste Visitor Centre.

The first Workshop, on 6th July 2017, was titled "What do we want to achieve?" and aimed to reach agreement on the Vision and broad brush Objectives for the JMWMS.

The second Workshop, on 20th July 2017, was titled "How do we achieve it?" and aimed to develop a framework for the action plan.

The Workshops were Chaired and facilitated by Ricardo Energy & Environment, to provide an independent voice, with the aim of ensuring all attendees were able to voice their opinions, concerns, experience and ambitions. A key aim of the workshops was to ensure that the JMWMS is equally informed by input from all eight LWP authorities.

Over twenty delegates from the eight authorities (Boston Borough Council, City of Lincoln Council, East Lindsey District Council, North Kesteven District Council, South Holland District Council, South Kesteven District Council, West Lindsey District Council, and Lincolnshire County Council) attended each workshop to contribute to the discussion and put forward their views. A list of the attendees at each workshop can be found at Appendix 1.

Workshop Methodology

Each workshop commenced with a briefing from the Chair outlining the overarching process of developing the Strategy, and consideration of legislative and political constraints, opportunities and other influencing factors impacting on the Strategy. Attendees were then invited to contribute to discussions regarding challenges and opportunities and their priorities for the Partnership.

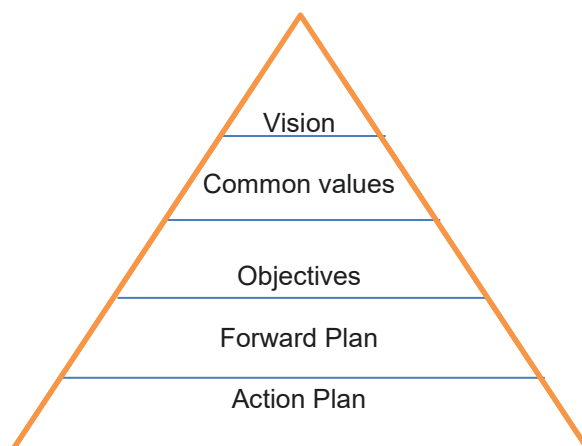
To facilitate discussion, a Scoping Paper had been prepared, setting out the broad Objectives as identified by the County Council. Additionally, information had been compiled to summarise the aims of the current (2008) Strategy, and performance indicators demonstrating performance across the original ambitions.

The Agenda for each Workshop was designed to provide enough time for a thorough analysis of the Scoping Paper, with the option of changing, adding, revising, removing or redesigning each of these elements.

The workshops utilised a combination of group discussions, break-out sessions and summary deliberations to scope the issues, challenges and opportunities, whilst identifying the key priorities for the LWP.

Summary of Outcomes

During the discussions, a general structure of elements of the Strategy began to form: this is illustrated below:



Discussions regarding each of these elements are set out in the following sections.

1. Vision

At the second workshop, the Vision for the Strategy agreed in Workshop 1 was re-presented to the group and agreed:

Vision for the Lincolnshire Joint Municipal Waste Management strategy

“To seek the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire.”

2. Objectives

At the second workshop, attendees considered the revised Strategic Objectives. All comments, considerations, concerns and criticisms from Workshop 1 had been recorded, and these were used to thoroughly revise the Objectives in line with the Workshop’s overall feedback and input. Subsequently, these revised Objectives had been circulated by e-mail for further feedback. Comments were generally positive, but further comments were received, and these had been incorporated into a third iteration of each Objective where necessary. Some Objectives had been combined or removed, as they were considered actions.

Attendees at the second workshop analysed, considered and amended each Objective, until agreement was reached on the final iteration of each one. A summary of the evolution of the Objectives, from Scoping Paper to final iteration, can be found at Appendix 2.

Throughout the review of the list of Objectives, it became clear that two over-riding elements were being repeated, and were in danger of making the Objectives unnecessarily wordy and repetitive. It was thus agreed that these two over-riding values should be applied when considering any of the other Objectives.

A hierarchy was thus agreed whereby the LWP will have its vision, underneath which are the elements which describe the values which inform each of the Objectives.

All Objectives should ensure that services provided under the JMWMS represent the best possible environmental option which gives value for money for Lincolnshire residents.

The agreed Objectives will thus all be subject to these overarching approaches, which clearly tie in with the "value for money" and "environmental" aspects of the Vision.

The discussions around the common values developed a preference for ordering the Objectives to reflect the priority order of: value for money; environmental outcomes; and other Objectives.

In the light of the comments from attendees, to reflect this approach, the financial Objectives move to the top of the list, whilst the environmental Objectives follow, ordered by their position in the Waste Hierarchy. This leaves the LWP governance review as the final Objective, recognising that it is currently less of a priority as a review was done in 2016.

The revised list of Objectives in the Summary reflects the revised ordering agreed.

The draft agreed Objectives:

- 1. To improve the quality and therefore commercial value of our recycling stream**
- 2. To consider moving towards a common set of recycling materials.**
- 3. To consider the introduction of separate food waste collections**
- 4. To explore new opportunities of using all waste as a resource in accordance with the waste hierarchy.**
- 5. To contribute to the UK recycling target of 50% by 2020.**
- 6. To find the most appropriate ways to measure our environmental performance, and set appropriate targets.**
- 7. To seek to reduce our carbon footprint.**
- 8. To make an objective assessment of whether further residual waste recovery/disposal capacity is required and, if necessary, seek to secure appropriate capacity.**
- 9. To regularly review the LWP governance model in order to provide the best opportunity to bring closer integration and the implementation of the Objectives set by the Strategy.**

It was noted that further editing of the Objectives may be necessary as a result of the Strategic Environmental Assessment (SEA) and Public Consultation processes, as well as any changes in external factors between now and the adoption of the Strategy.

3. Forward Plan

Attendees at the 2nd workshop were briefed on the need to develop a Forward Plan as part of the main JMWMS document. This Plan will summarise the types of strategic action required to fulfil the agreed objectives.

Whilst discussions at both workshops largely only focussed as far down as the objectives, those discussions did identify a number of types of action required to achieve the agreed Objectives.

The list attached as Appendix 3, prepared by the County Council, was intended to be shared at the 2nd workshop, but the planned session to discuss and revise it was superseded by the need to talk about specific and urgent actions regarding one of the objectives – the introduction of food waste collections.

This list will be circulated in a format which allows for further comment and for the addition of other proposed action types for the Forward Plan.

4. Strategic Action Plan

The initial Action Plan will be a separate document developed from the JMWMS Forward Plan. This will differ from the Forward Plan in that it will:

- 1) Be more detailed – i.e. who will do what and by when.
- 2) Contain targets and activities which are "SMART" – i.e. Specific, Measurable, Achievable, Relevant and Time-based.
- 3) Cover only the first year of the Strategy's lifetime – It will be reviewed annually thereafter.

Work on the Action Plan will begin once the Forward Plan has captured the types of action which are required to meet the agreed strategic objectives.

Food Waste Collections

Having said that work on the Action Plan is to begin later, discussions planned to happen at Workshop 2 regarding actions to go into the Forward Plan were postponed in light of the urgent requirement for movement on the assessment of food waste collections, as identified by elected Members meeting together prior to Workshop 2.

Work is underway, including as part of the WRAP-sponsored assessment of collections consistency, to identify and allocate the necessary actions, including:

- Assessment of the costs to introduce collections.
- Assessment of the possible disposal savings.
- Consideration of a pilot project to begin as soon as possible.
- Information-gathering from other authorities who have introduced such collections.
- Visits to see possible vehicles for doing the collections.

This work will need to be monitored, recorded, and included in the JMWMS documentation.



Ricardo
Energy & Environment

The Gemini Building
Fermi Avenue
Harwell
Didcot
Oxfordshire
OX11 0QR
United Kingdom
t: +44 (0)1235 753000
e: enquiry@ricardo.com

ee.ricardo.com

Appendix B – Consultation Feedback

A formal consultation process was undertaken from 4th April to 2nd July 2018. This appendix summarises the results of that consultation and its influence on the final version of the JMWMS.

Summary

The draft strategy was generally well received, and responses to the consultation indicated a high level of support for the overall direction of the JMWMS. Specifically, of the 147 responses to the survey:

- 89% agreed or strongly agreed with the vision we have set out
- 75% agreed or strongly agreed that the proposed objectives can achieve that vision

Many of the comments received tied in with the vision which we have set out, agreeing that the LWP should:

- Ensure value for money;
- Care for the environment; and
- Provide customer-friendly services.

Other comments suggested areas in which the JMWMS could be strengthened or revised. Examples of how these are reflected in the revised version of the JMWMS are shown below.

Feedback received	How revised JMWMS reflects this
Specific actions need to be identified to show how the LWP will work to achieve their objectives.	An initial Action Plan has been produced and is attached as Appendix D. This Action Plan will be reviewed on an annual basis to ensure it remains up to date and effective.
Better publicity is needed to ensure that people know what to put into which collections.	The Action Plan includes: <ul style="list-style-type: none">• A review to try to simplify our collection schemes; and• A communications campaign.
Opinion was divided over whether food waste collections were a good idea.	The Action Plan includes undertaking a trial to assess the effectiveness of food waste collections. This trial, which actually began in June 2018, will enable decisions on possible wider collections to be based on real data.

Consultation process

As part of the waste strategy and SEA process there is a statutory requirement to undertake consultation. Furthermore, consultation enables the LWP to take into account the views of the public and other stakeholders in the final JMWMS.

It is recommended that the consultation period lasts for 90 days, but this is not statutory. The public were consulted on the proposed draft strategy and the draft environmental report, which presents the outcomes of the Strategic Environmental Assessment (SEA).

There are numerous consultation methods available and each authority is free to choose how their consultation is undertaken.

Consultation methods selected

The LWP chose to carry out a formal consultation between 4th April and 2nd July 2018 (90 days). The documents made available during the consultation period were:

- The full draft strategy and appendices
- Summary of the strategy
- Draft environmental report and its appendices

The consultation took the following forms:

- Publicising the consultation
- Web-based consultation documents and questionnaire
- Paper documents and questionnaire (available on request)
- Libraries and LWP council offices
- Face to face briefings for Elected Members at LWP councils

Publicising the consultation

In order to reach as wide an audience as possible, a variety of means were used to publicise the consultation, including:

- Press releases – These were taken up and published by a number of media outlets
- Social media advertisements – Facebook and Twitter
- Direct emails to key groups
 - Statutory SEA consultees (Environment Agency, Natural England & Historic England);
 - Parish Councils in Lincolnshire;
 - A variety of waste-related businesses in Lincolnshire; and
 - Neighbouring councils.

Questionnaire – Web-based approach

In the light of the aims set out in the vision – to protect the environment and provide value for money – it was decided that the focus of the consultation should be online rather than producing large numbers of paper copies.

Local residents and any other interested parties could access all consultation documents through the Recycle for Lincolnshire area of the Lincolnshire County Council website. A web-based questionnaire was provided to invite views on key topics, the benefit being that, as well as receiving comments, it provided statistics giving an indication of overall opinion. Also, a dedicated email account (wastestrategy@lincolnshire.gov.uk) was provided for other feedback and queries.

In total 147 completed questionnaires were completed, including five which were received in paper form and typed in by council staff. The results are summarised later in this appendix.

Questionnaire – Paper copies

Whilst our preferred engagement method was online, the website made it clear that we were happy to send out on request paper copies of any or all of the documents. A number of items were sent out in the post but, unfortunately, only five paper questionnaires were returned.

Questionnaire – Libraries and LWP council offices

Aware that not everyone has access to the internet, and in order to reach as wide an audience as possible, paper copies of key documents were sent out for display in public locations around the county:

- The main office of each of the eight LWP partner councils; and
- All 15 of the County Council's core public libraries.

In addition to a single reference copy of the full JMWMS and a poster advertising the consultation, each location received several copies of the following which could be taken away:

- A brief summary version of the JMWMS document – Essentially Chapter 1, including how to access the full documents and how to respond;
- The consultation response form; and
- A Freepost return envelope.

Face to face briefings for Elected Members at LWP councils

Between them, Councillors are the elected representatives of every member of the public in Lincolnshire. In order to ensure the JMWMS captures the views of the wider Membership of each Council, representatives of the LWP visited each of the eight LWP councils to give a face to face briefing, and to invite them to submit a formal consultation response. These responses are summarised later in this appendix.

Questionnaire results

The questionnaire consisted of 10 questions which, for clarity, are divided below into four sections. Several questions came as a pair with a selection list for the first part (to allow for statistical analysis) and a follow-up question asking for further information.

It was decided not to ask for any personal details so that answers could remain truly anonymous. This also avoids possible issues under Data Protection legislation as it would be difficult to justify that such information was necessary.

The following responses almost all were submitted online. The five paper copies received was typed into the online form by a member of council staff to allow them to be included in the statistical reporting.

Responder details

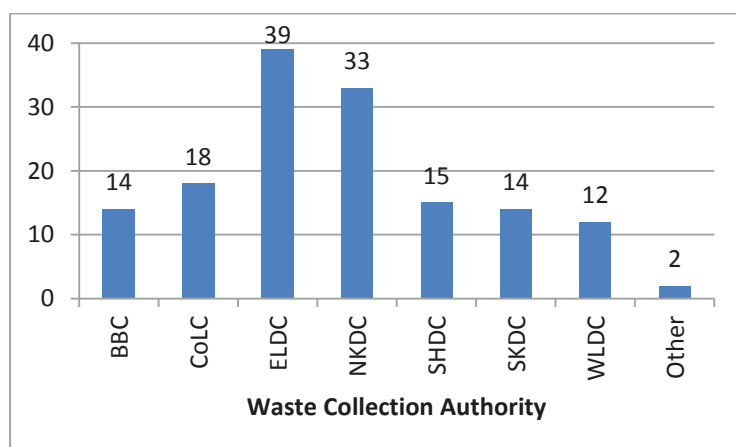
1. In what capacity are you responding to this survey?

We have managed to obtain the views of a significant number of Lincolnshire residents. Unfortunately we have not heard much from other groups.

	Responses	Notes
Lincolnshire Resident	126	Also received seven responses via email
County Councillor	2	The County Council also responded via formal Council submission – see later in this appendix
District Councillor	6	All seven District Councils also responded via formal Council submission – see later in this appendix
Parish/Town Councillor	5	Also received two Parish Council responses via email
Waste business employee/owner	4	Also received two responses via email
Neighbouring authority representative	0	Details sent to all neighbouring authorities. None used the survey, but two responded directly by email.
Other	4	All were formal responses from LWP partner authorities. Also received three "other" responses via email
TOTAL	147	

2. In which area do you live or are you/your organisation based?

Whilst some areas are better represented than others, we have managed to get multiple responses from every area within Lincolnshire. The two "other" responses were people who did not answer this question.

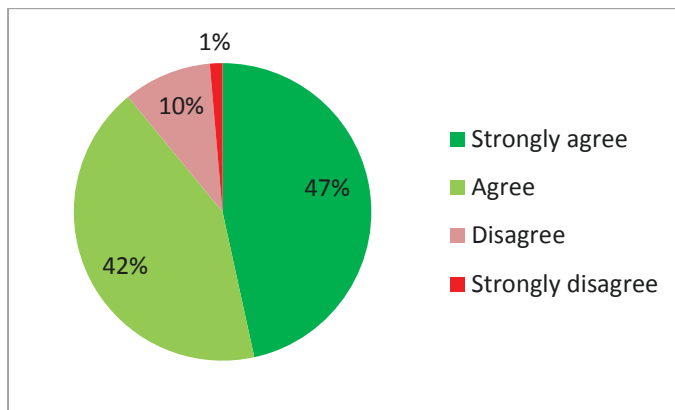


Contents of draft JMWMS

3. Do you agree or disagree with the Lincolnshire Waste Partnership's vision for this Strategy?

89% of responders agree or strongly agree with the vision as set out in the draft JMWMS:

"To seek the best environmental option to provide innovative, customer-friendly waste management solutions that give value for money to Lincolnshire".



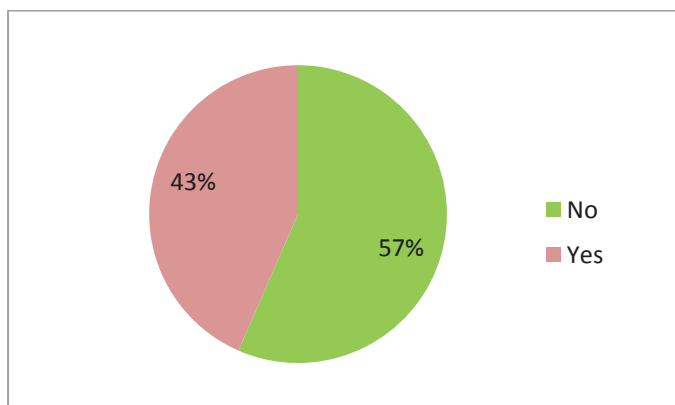
Why have you answered this way?

Concern was expressed that the vision was too long, and that balancing the contrasting elements could be used as an excuse for poor performance – e.g. 'it was innovative but too expensive' or 'it was effective but not customer friendly'. It was also suggested that the vision should mention waste minimisation.

As with other questions, comments not directly related to this question will be included in the list of "comments received" given later in this Appendix.

4. Are there any key issues, other than those we have identified, which should be driving our Waste Strategy?

43% of responders believed other issues should be considered.

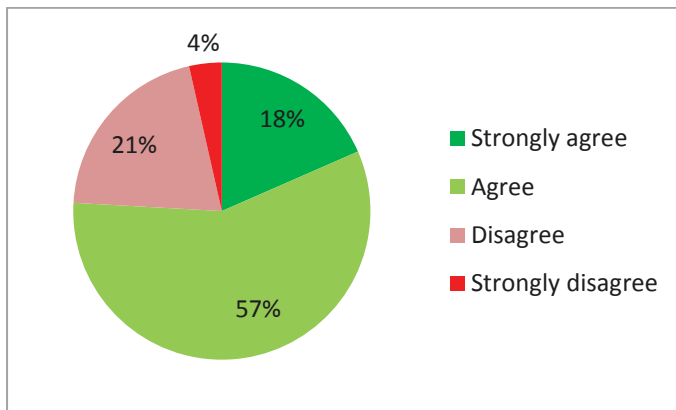


If you answered "no", then what else should we include?

Due to the wide range of suggestions, proposed additions are included in the list of "comments received" given later in this Appendix.

5. Do you agree or disagree that the objectives we have set out will enable us to meet the challenges we face and therefore achieve our vision?

75% of responders agree or strongly agree with this.



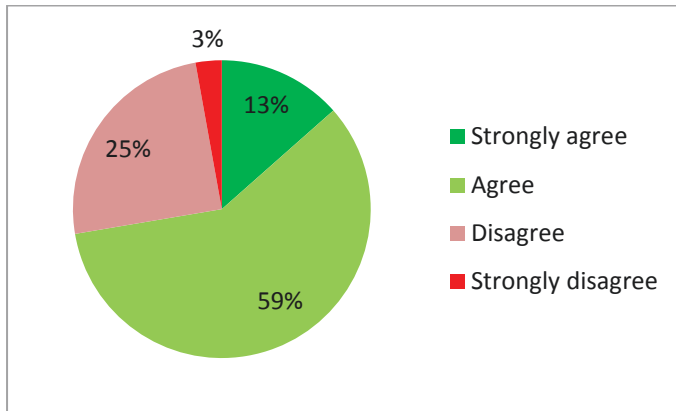
Why have you answered this way?

Those who disagreed expressed a variety of concerns and suggestions, including:

- Funding – Need to lobby central government for more funding
- Commit more – Should say what we'll do, not "consider" or "seek to"
- Food waste collections – Not convinced of the environmental or financial benefits
- Costs – Need to think long-term savings even if it means extra costs now
- Commercial waste – Need to consider this, not just household waste
- Education – Need better communications to educate the public

6. Do you agree or disagree that our Forward Plan, as described in Chapter 7, contains all the actions we need to achieve our objectives?

72% of responders agree or strongly agree with this.



Why have you answered this way?

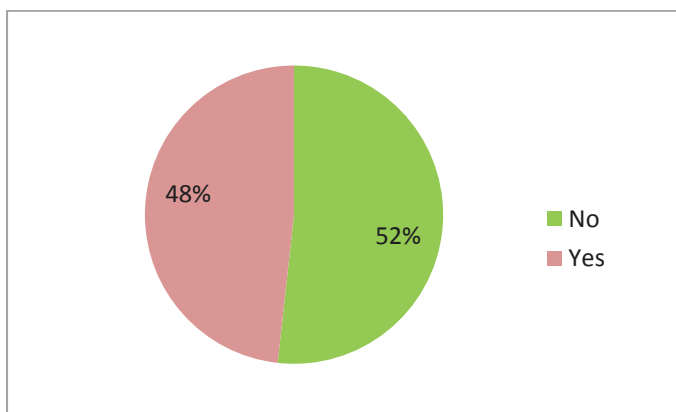
There were multiple responses along similar lines:

- We need to state a more specific list of actions
- We need to communicate better with the public

Other comments have been grouped together and included in the list of "comments received" given later in this Appendix.

7. Do you have any specific concerns about the strategy?

48% of responders have specific concerns.



If you answered "yes", please tell us what concerns you have.

Due to the wide range of concerns expressed, these are included in the list of "comments received" given later in this Appendix.

Equality issues

The Equality Act 2010 places organisations under a duty to ascertain how people with 'protected characteristics' are impacted by an organisation's activity, and how steps may be taken to mitigate or eliminate adverse impact(s).

8. Do you think the draft strategy could have a positive or negative impact on you (or someone you care for or support) due to any of the following?

	Positive Impact	No Impact	Negative Impact	Don't Know
Age	14%	47%	19%	20%
Sex (male/female)	9%	69%	6%	16%
Disability	9%	43%	21%	27%
Sexual orientation	6%	73%	2%	19%
Pregnancy and maternity	9%	55%	13%	22%
Marriage and civil partnership	8%	72%	2%	18%
Race (ethnicity)	5%	72%	4%	19%
Religion or belief	6%	73%	2%	18%
Gender reassignment	5%	73%	2%	20%

There was a general feeling that, for most people groups and particularly for future generations, the impact would be positive. However, there were three categories for which more people identified a negative impact than a positive one:

- Age
- Disability
- Pregnancy and maternity

The opportunity was given to identify other specific groups who could be impacted. The only other group suggested was residents of terraced properties, and the impact suggested has been included in the table below.

Also, some respondents expressed concern that, until the Action Plan identifies specific service changes, it is not possible to identify possible impacts.

If you have identified a potential impact, how would the proposed strategy impact you (or someone you care for or support) and how could any negative impacts be reduced?

The comments made in this section have been added to the Equality Impact Analysis which is being undertaken to accompany the JMWMS. The below summarises the responses received, including suggestion mitigation for negative impacts. These impacts, and appropriate mitigation, will be considered in putting the JMWMS into action.

NB – The impacts listed are those identified in consultation responses and, in some cases, it is not clear what the perceived impact actually is.

Negative Impact	Groups affected				Mitigation
	Age	Disability	Pregnancy and maternity	Other	
Confused by service changes	Y	Y	Y	Race (language)	Focused communications through a variety of methods
Difficulty moving heavy wheelie bins	Y	Y	Y	Sex (did not specify which)	Assisted collections
Repeated emptying of kitchen caddy	Y	Y	Y		Small kitchen caddy with liner
Possible infection from decaying food	Y	Y	Y		Lidded kitchen caddy; exterior bin; weekly collections
HWRC / bring bank access	Y	Y	Y	Sex ("parents with children and single parent families being more likely to be female")	Proactive assistance from site staff
Access to plastic recycling if kerbside service removed due to Deposit Return Scheme		Y			Consideration of alternative service if this happens
Nappies & formula milk produce extra waste			Y		Response suggested: "Promote breast-feeding and reusable nappies"
Lack of space for storing multiple bins				Residents of terraced properties	Consideration of alternative service

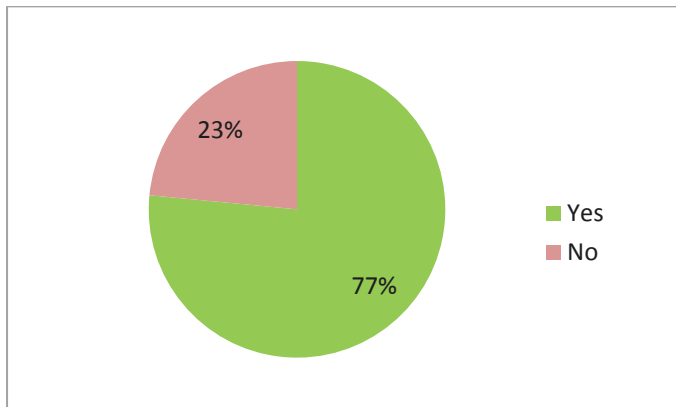
In addition to the specific negative impacts which were identified, it has also been noted that a number of other respondents also expressed, in the text of their answers to other questions, the view that age could be an issue, and that the LWP need to ensure that services are accessible to everyone.

Strategic Environmental Assessment

The remaining questions related to the Environmental Report which accompanies the JMWMS. This was prepared as part of the Strategic Environmental Assessment, a process which we are required to undertake alongside the development of the JMWMS itself.

9. Does the Environmental Report correctly identify the likely significant effects of the draft Joint Municipal Waste Management Strategy?

77% of responders said "yes".



If you answered "no", please tell us what else you think should be included.

Most of those who answered "no" said that the Environmental Report was too long and too complicated to read. Unfortunately the SEA process is prescribed by legislation, and the contents of the Environmental Report reflect that process. We have endeavoured to take the SEA results into account in writing the JMWMS.

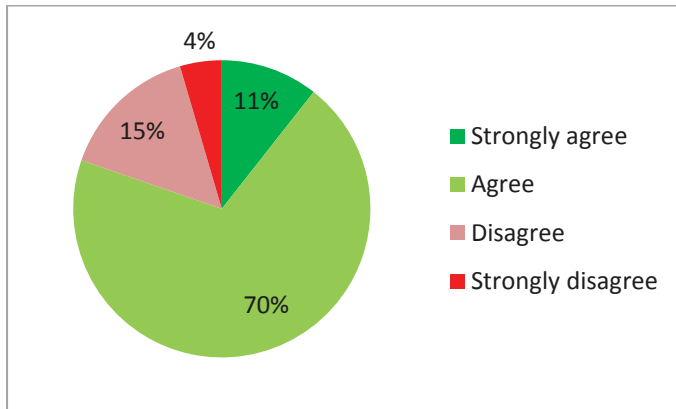
Others said that the SEA is difficult to assess without seeing the Action Plan which will accompany the JMWMS. Potential environmental impacts will indeed be considered in developing the initial and future Action Plans. This will include the location of potential new waste facilities, which was another topic raised.

One responder was concerned that there is not enough focus in the SEA on climate change and carbon emissions. This was raised in other responses with regard to the overall JMWMS, and is reflected in our objective "to seek to reduce our carbon footprint".

Other responses to this question raised concerns about the JMWMS in general, and these are included in the list of "comments received" given later in this Appendix.

10. Do you agree or disagree that the draft JMWMS has sufficiently taken account of the information provided in the Environmental Report?

81% of responders agree or strongly agree with this.



If you disagree, please tell us what else you think should be taken into account.

Those who "strongly disagree" all expressed concern over the length and complexity of the Environmental Report, as did several of those who "disagree". As already stated, this is necessary due to how the SEA process is prescribed by legislation.

Other responses to this question mirror concerns raised in response to earlier questions, and these are included in the list of "comments received" given later in this Appendix.

Comments received

Formal responses from LWP partners

As previously stated, in order to ensure the JMWMS captures the views of the wider Elected Membership of each Council, representatives of the LWP visited each of the eight LWP councils to give a face to face briefing. Each council was invited to submit a formal consultation response.

The following provides a summary of those responses.

Five responses were submitted in the form of the same questionnaire as used by the public. These are included in the statistical results shown above, and are summarised below.

3 – Do you agree or disagree with the Lincolnshire Waste Partnership's vision for this Strategy?
3 x Strongly agree (1 further partner said "strongly agree" in their non-questionnaire response) 1 x Agree 1 x Disagree – "Not specific enough"
4 – Are there any key issues, other than those we have identified, which should be driving our Waste Strategy?
2 x No 3 x Yes – Include: <ul style="list-style-type: none"> • Containing costs/maximising income • Education and regular information to the public • Wider national and global picture and circular economy • Managing expectations of increasing recycling rate whilst budgets are increasingly stretched • Waste minimisation and packaging reduction
5 – Do you agree or disagree that the objectives we have set out will enable us to meet the challenges we face and therefore achieve our vision?
1 x Strongly agree 2 x Agree 2 x Disagree – Need specific actions & targets
6 – Do you agree or disagree that our Forward Plan, as described in Chapter 7, contains all the actions we need to achieve our objectives?
3 x Agree 2 x Disagree – Need specific action plan
7 – Do you have any specific concerns about the strategy?
5 x Yes – We need a specific action plan & targets
8 – Do you think the draft strategy could have a positive or negative impact on you (or someone you care for or support) due to any of the following?
No specific impacts identified
9 – Does the Environmental Report correctly identify the likely significant effects of the draft Joint Municipal Waste Management Strategy?
2 x Yes 3 x No – Need action plan and identification of specific infrastructure first
10 – Do you agree or disagree that the draft JMWMS has sufficiently taken account of the information provided in the Environmental Report?
5 x Agree – Although may need reassessing when Action Plan is developed

Comments made by each partner, including those provided in the form of the questionnaire, are grouped together by theme below.

Overall strategy	
Multiple similar responses	<ul style="list-style-type: none"> • Strategy and actions need to be agile to react to changes • Be customer-friendly / customer satisfaction • Ensure we consider the future, not just the present • Programme in a JMWMS review • Need "circular economy" thinking
Other responses	<ul style="list-style-type: none"> • Seek innovative ideas by looking for new ideas and technologies • Include section on "lessons learned" from previous JMWMS and action plan • Need more detailed review of previous (2008) JMWMS and lessons learned • Include more national and global context • Need to reflect rising costs due to waste growth

Specific sections	
Multiple similar responses	<ul style="list-style-type: none"> • Need a specific action plan with timelines • Objectives to be more committed – "we will" rather than "consider"
Other responses	<ul style="list-style-type: none"> • Vision to say "Lincolnshire people" • Vision not specific enough • Add an objective on waste minimisation • Change Objective 8 from "residual waste" to "all waste"
Recycling collections	
Multiple similar responses	<ul style="list-style-type: none"> • Need harmonising (nationally?) • Simpler collection system/mix • Kerbside collections of batteries and WEEE
Other responses	<ul style="list-style-type: none"> • Collect glass separately • More enforcement against contamination • Consider how to handle textiles
Lobbying	
Multiple similar responses	<ul style="list-style-type: none"> • Manufacturers/government to reduce packaging
Other responses	<ul style="list-style-type: none"> • Use fewer types of plastic • Deposit Return Schemes for plastics are a good thing, so support them
Food waste	
Multiple similar responses	<ul style="list-style-type: none"> • Food waste collections a good thing • Trial data important • Food waste collections need to be backed by education campaign • Needs proper consideration of funding of separate collections
Other responses	<ul style="list-style-type: none"> • Encourage food waste minimisation
Education	
Multiple similar responses	<ul style="list-style-type: none"> • Need better engagement with the public • Promote waste hierarchy, including reduction and reuse • Need simple and consistent messages • Education through schools
Other responses	<ul style="list-style-type: none"> • How to reach "Houses in Multiple Occupation"? • Locally-targeted campaigns • Incentivise residents to recycle more • Add an objective on education • Change public perception of "landfill bin" with a better word than "residual"
Disposal & processing	
Multiple similar responses	<ul style="list-style-type: none"> • Consider using out-of-county facilities
Other responses	<ul style="list-style-type: none"> • Use anaerobic digestion for food waste and garden waste • Use/develop local sites • Consider disposal options to handle population/waste growth • Maximise energy use from new and existing EfW facilities
Funding	
Multiple similar responses	<ul style="list-style-type: none"> • Make clearer that Council funding is reducing and services need to contain costs
Other responses	<ul style="list-style-type: none"> • Ensure value for money to the public • Decide on the balance between costs and "doing the right thing environmentally"

Other	
Multiple similar responses	<ul style="list-style-type: none"> • Better partnership working (including with neighbours?) • Review of HWRC provision (including cross-border arrangements?) • Review LWP governance model • Regular monitoring and reporting of performance
Other responses	<ul style="list-style-type: none"> • Specific data needs reviewing or updating • On-street recycling bins • Healthcare waste should be NHS responsibility • Need to better understand why recycling rates are falling • Need to review equality impacts and SEA when action plan has been developed • Support commercial waste collections • Move away from a specific recycling target

Statutory Consultees

As part of the Strategic Environmental Assessment process, we are required to consult with the Environment Agency, Natural England and Historic England. None of them raised any specific concerns regarding either the draft Environmental Report or the draft JMWMS.

From others

The following summarises the comments which were submitted to the consultation. **Every** comment has been read individually but, due to the varied nature and sometimes personal nature of the individual responses, they are here summarised into themes.

Themes mentioned by 10 or more people included:

Theme	Type(s) of response
Care for the environment	<ul style="list-style-type: none"> • An important thing to include • Not enough mention of climate change and carbon reduction • Seek to recycle more
Value for money	<ul style="list-style-type: none"> • An important thing to include • Councils need to think and act more commercially • Lobby government for more funding rather than raise Council Tax
Balancing environment and cost	Opinion was divided between: <ul style="list-style-type: none"> • Take the cheapest option rather than put up Council Tax • Do the right thing environmentally regardless of cost
Include more direct and ambitious actions	<ul style="list-style-type: none"> • Draft JMWMS doesn't identify enough specific actions • Whole JMWMS needs to be more ambitious • Set clear targets
Improve communications/education	<ul style="list-style-type: none"> • What to put in which collection • Especially important if services change
Waste reduction/packaging	<ul style="list-style-type: none"> • Not enough mention of waste reduction • Lobby national government for new legislation • Take action locally

Theme	Type(s) of response
Food waste collections	Opinion was divided between: <ul style="list-style-type: none"> • They are a good thing – e.g. Better environmentally • They are a bad thing – e.g. Smell; costly to run; inconvenient
Customer friendly services	<ul style="list-style-type: none"> • Simpler recycling system • Need consistent services across the county • Ensure services are accessible to all, especially the elderly and disabled
HWRC improvements	<ul style="list-style-type: none"> • More reuse, especially by "people in need" • Improve site layout • Open more sites and for longer hours to combat flytipping • Accept extra materials – e.g. tyres; asbestos • Allow/arrange use of sites outside of county

Conclusion

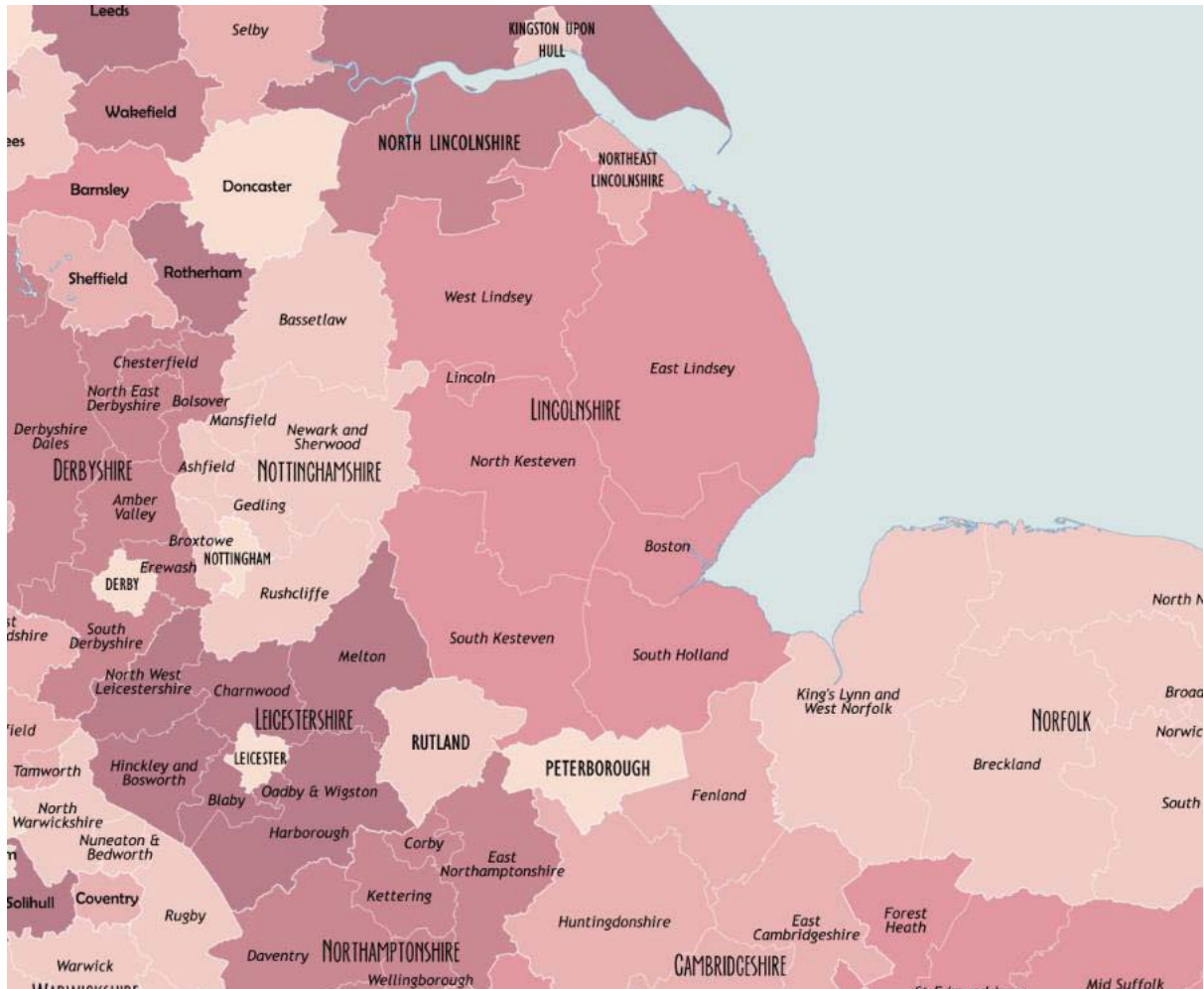
The JMWMS has been reviewed and, where necessary, updated in line with the comments received through the consultation process. The majority of this list matches the above summary of public responses, as these are also broadly in line with responses from LWP partners. Where partners raised additional items, these are added at the foot of this table.

Theme	How revised JMWMS reflects this
Care for the environment	<ul style="list-style-type: none"> • Text added to back up the objective on carbon reduction • Action Plan to include assessment of carbon footprint
Value for money	<ul style="list-style-type: none"> • Already a strong focus of the draft JMWMS so no change
Balancing environment and cost	<ul style="list-style-type: none"> • Given the mixed views expressed as to which should take priority, the revised JMWMS clarifies the LWP's intention to choose the best environmental option that we can afford. Any service changes will thus need to reflect this.
Include more direct and ambitious actions	<ul style="list-style-type: none"> • Action Plan produced to accompany JMWMS
Improve communications/education	<ul style="list-style-type: none"> • Included in Action Plan
Waste reduction/packaging	<ul style="list-style-type: none"> • Text added to make more reference to this
Food waste collections	<ul style="list-style-type: none"> • Action Plan includes a trial to get better information for an informed decision
Customer friendly services	<ul style="list-style-type: none"> • Collections under review through Action Plan • Any proposed service changes will consider accessibility to all
HWRC improvements	<ul style="list-style-type: none"> • HWRC services to be reviewed
Additional items raised by LWP partners	
Reporting and review	<ul style="list-style-type: none"> • Chapter 8 has been revised to be more specific on this
Disposal and processing	<ul style="list-style-type: none"> • More information added on future options to be considered

Appendix C – Neighbouring Authorities

As referred to in Section 3.4 of this JMWMS, the implementation of this strategy, particularly in the enactment of the accompanying Action Plan, will need to take into account the waste management actions and strategies of our neighbouring authorities.

In view of this, we specifically wrote to each neighbouring Council and/or Waste Partnership as part of the Public Consultation process, asking them for any information which they think it would be helpful for us to take into account.



We received two consultation responses from neighbours.

North Lincolnshire Council

North Lincolnshire Council submitted a comprehensive response to each of the 10 proposed JMWMS Objectives. These are shown below.

Objective	Lincolnshire County Council (LCC) position	North Lincolnshire Council (NLC) response
Objective 1.	To improve the quality and therefore commercial value of our recycling stream.	NLC agrees that in light of current external pressures from world markets on the quality and value of recyclable materials greater emphasis has to be placed on the whole value chain starting with collections from residents. Consideration needs to be given to the local public sector reliance on third party processors and whether municipal ownership of such facilities is more in the public interest to derive the highest benefit for our residents.
Objective 2.	To consider moving towards a common set of recycling materials.	NLC agrees that a common set of recycling materials will make communications with residents easier, could derive economies of scale for collections and enable standardised reprocessing facilities which will help reduce costs and contamination.
Objective 3.	To consider the introduction of separate food waste collections.	The separate collection of food waste has different financial models for different councils due to their particular mix of urban and rural areas. NLC notes that the requirement for separate biowaste collections by 2023 in the EU Circular Economy Package will be included within the transposition into UK law by each devolved administration and awaits the detail of the legislation and any government guidance.
Objective 4.	To explore new opportunities of using all waste as a resource in accordance with the waste hierarchy.	The transposition of the EU Circular Economy Package should provide a legislative impetus to this and NLC awaits the detail of the legislation and any government guidance.
Objective 5.	To contribute to the UK recycling target of 50% by 2020.	NLC notes the higher targets included within the EU Circular Economy Package of 55% by 2025 which is included within the operational lifetime for this revised strategy. Our own strategy for achieving and increased target will be considered once the legislation transposing the EU Circular Economy Package is published.
Objective 6.	To find the most appropriate ways to measure our environmental performance, and set appropriate targets.	NLC agrees that the current methodology of measuring by weight (tonnage) does promote the collection of some recyclable materials (garden waste) over others that have a greater impact on the environment and resource sustainability (plastics) due to their respective weights. As all comparative measures of performance have to be consistent across the UK and EU it will be informative to see how this debate resolves itself particularly with regard to the higher recycling targets proposed within the EU Circular Economy Package.

Objective 7.	To seek to reduce our carbon footprint.	It is unfortunate that efforts by local councils to reduce the production of greenhouse gases by moving to alternative disposal technologies to replace landfilling were not recognised and accounted for in UK carbon measurement and performance assessment. As such our ability to positively influence our carbon footprint from a waste management perspective is limited to the transport impact of our operations which is not the greatest contributory factor. NLC recognises the difficulty that LCC will face given these issues.
Objective 8.	To make an objective assessment of whether further residual waste recovery/disposal capacity is required and, if necessary, seek to secure appropriate capacity.	NLC recognises the difficulty of making long term waste and recycling tonnage predictions given the impact of sudden events such as the credit crunch, volatile changes on world recycling markets and significant changes in the English legislative position (LATS). Business cases and assumptions that were sound and evidenced in the 2000's have been abandoned in recent years. NLC remains committed to working with LCC in considering and developing joint infrastructure assets where there is mutual benefit and to provide resilience against such events in the future.
Objective 9.	To regularly review the LWP governance model in order to provide the best opportunity to bring closer integration and the implementation of the objectives set by the strategy.	NLC recognises the challenges faced by LCC in a two tier local government structure. NLC remains committed to working with LWP in considering and developing joint infrastructure assets where there is mutual benefit and to provide resilience against such events in the future.
Objective 10.	To consider appropriate innovative solutions in the delivery of our waste management services.	NLC notes the strategic actions identified by LCC in Table 7.1 of the draft strategy and agrees that these are the best choices to underpin this objective.

The LWP notes NLC's general support for this JMWMS and will take into account the points made, particularly:

- Their support for the consideration of municipal ownership of waste facilities, along with their interest in developing joint infrastructure assets;
- Their interest in the concepts of a harmonised recycling mix and alternative measures for environmental performance; and
- The references to the updated contents of the EU Circular Economy Package, which are reflected in this revised JMWMS.

Nottinghamshire County Council

"Nottinghamshire County Council welcomes the vision and aspirations set out within the draft strategy and future opportunities to share best practice and experience amongst local authorities.

The County Council does not have any formal comments to make at this stage but would be grateful to be kept informed of progress with the strategy and the development of specific action plans in support of the strategy."

The LWP notes NCC's general support for this JMWMS. We will indeed continue to liaise with them regarding progress both with our own strategic developments and with theirs.

Appendix D – Initial Action Plan

As described throughout this JMWMS, and as requested in numerous responses to the Public Consultation, this Action Plan sets out the actions which the LWP will undertake to work towards the Objectives which have been set.

This appendix contains the initial Action Plan, including the dates by which each task will be completed. It should be noted that some of the dates listed are before the adoption of the final version of this JMWMS. That is because work is already underway on workstreams which are unlikely to change in the closing stages of the development of the Strategy.

The Action Plan will be reviewed regularly in order to ensure it remains up to date in response to:

- Whether the actions being undertaken are helping us to achieve our Objectives; and
- Any changes in legislation or other strategic drivers.

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
1	Strategic Review of Kerbside Mixed Dry Recycling Collection and Disposal	1,2,4,5,7,8 and 10	<p>12th July 2018 – Initial Feedback to Lincolnshire Waste Partnership.</p> <p>End September 2018 – Initial review completed and reported to Lincolnshire Waste Partnership</p>	<p>Satisfaction with waste/recycling services by council - targets to be continuous improvement on base line performance.</p> <p>Recycling and composting rate by council- target to be agreed, but to reach a minimum of 50% by 2020.</p> <p>Reduction in baseline Mixed Dry Recycling contamination rate (27%).</p> <p>Reduction in carbon footprint from 2017/18.</p>	<p>To have a clear way forward on what is being collected and new contract in place for 2020.</p> <p>A consistent harmonised Mixed Dry Recycling mix across all Waste Collection Authorities.</p> <p>A common message on Mixed Dry Recycling that can be used by all partners and a clear communications campaign.</p> <p>A Mixed Dry Recycling contract in place flexible enough to reward commercial value of reducing contamination rates and non-target materials.</p> <p>Improved recycling rate over current baseline.</p>
1.01	Evaluation of the current volumes/weights of waste going to the Energy from Waste facility and to Materials Recovery Facilities and assessing the impact or difference on the factors above should kerbside collection waste streams be adjusted and/or harmonised.		Complete	<p>Produce a table and analysis for the factors impacting the waste streams.</p> <p>Officer Working Group to recommend to the Lincolnshire Waste Partnership what the mix should be and what is achievable.</p>	Findings to be presented to the Officer Working Group on the 8 th August 2018 with recommendations.

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
1.02	Outline infrastructure and capital costs of implementing these adjustments to the Waste Collection Authorities and Waste Disposal Authority.		Complete	Full costings to be reported to Lincolnshire Waste Partnership with recommendations on the way forward.	
1.03	Assessment of the Materials Recovery Facility/Recycling market for Mixed Dry Recycling through soft market testing and direct market engagement, to identify potential suppliers to handle the Mixed Dry Recycling mix proposed and if so at what cost compared to current arrangements.		Results of soft market testing July 2018. Procurement timeline key for understanding the mix from April 2020.	What the Mixed Dry Recycling mix is going to be needs to be agreed as soon as possible before new contract to commence in 2020.	Officer Working Group to agree the mix and report to the Lincolnshire Chief Executives meeting in September 2018 and Lincolnshire Waste Partnership with the recommendations.

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
1.04	Assessment of the public information and education campaign required to support effective implementation of a revised/harmonised Mixed Dry Recycling mix.		End September/ early Oct 2018 for sticker campaign to go on all bins across Lincolnshire to address the main contaminants.	<p>Satisfaction with waste/recycling services by council - targets to be continuous improvement on base line performance.</p> <p>Recycling and composting rate by council- target to be agreed, but to reach a minimum of 50% by 2020. To be revised periodically to meet national targets.</p> <p>To aid the recycling rate this is key marketing if the Mixed Dry Recycling mix changes.</p> <p>Improved recycling rate, satisfaction levels across the County remain high with residents and the message is clear.</p>	<p>Improved awareness of what can/cannot be recycled, so as to align with the strategy document and agreement on a new Mixed Dry Recycling mix.</p> <p>Greater participation in recycling/composting schemes.</p> <p>Improving satisfaction with Council services.</p> <p>Lincolnshire Waste Partnership agreed short term that stickers should be produced for across the County saying NO to the main contaminants.</p> <p>A communications campaign to go alongside the sticker end Sept to tie in with National Recycling week.</p>
1.05	Feasibility of building a Materials Recovery Facility outline cost estimates.		To be confirmed by Lincolnshire Waste Partnership.	Business case to be completed before being considered by the Lincolnshire Waste Partnership in November 2018.	Decision to be made by Partnership after the business case discussed.
1.06	Feasibility of having a dirty Materials Recovery Facility or more.		20th July 2018.	Business case to be completed before being considered by the Lincolnshire Waste Partnership.	Findings to be presented to the Officer Working Group initially on the 8 th August 2018.
1.07	Proposals for dealing with other recyclables at the kerbside such as textiles, batteries, household electrical items, batteries etc		To be confirmed	To be agreed.	To be agreed.

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
1.08	To tackle contamination in our current recycling stream, between now and when the Mixed Dry Recycling contract is re-let in 2020, develop an effective, simple public communication campaign.		End Sept 2018 all bins in the County to have a sticker on the recycling bin to try and reduce contamination.	<p>To aid the recycling rate by targeting the contamination.</p> <p>The levels of contamination to be monitored monthly to see if there is a decrease following the sticker campaign.</p> <p>Communications plan required around this as also need to join up the message that is being delivered locally and Nationally.</p>	<p>Improved recycling rate, satisfaction levels across the County remain high with residents and the message is clear through communications campaign.</p> <p>Reduction to the 27% contamination rate.</p>

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
1.09	Secure expert input from: <ul style="list-style-type: none"> Waste and Resources Action Programme (WRAP) Communications teams 		Procurement underway, consultants appointed end of August 2018. Inception meeting 5th September 2018. Project timeline amended to final report late 2018.	Further develop the Baseline to include predicted waste growth over 5 and 10 years.	<p>An assessment of the impact of the two stream collection methodology (separate paper/separate food) against the baseline and in 5 and 10 years could this be three stream i.e. Food, Paper / card and Cardboard and others (plastic bottles, glass containers etc).</p> <p>An assessment of the impacts of alternative 'two-tier' cost sharing options on the member authorities of the Lincolnshire Waste Partnership.</p> <p>A high-level assessment of the options available to the Waste Disposal Authority for the provision of residual treatment / disposal facilities over and above those provided by the North Hykeham Energy from Waste facility.</p> <p>A high-level assessment of the service delivery options available to the Waste Disposal Authority with a view to maximising the financial benefit that can be accrued from alternative disposal technologies (e.g anaerobic digestion of separately collected food waste) for an agreed range of household waste streams.</p>
1.10	Research what has worked elsewhere: <ul style="list-style-type: none"> Positive – i.e. What to put in? Negative – i.e. What to leave out? 		Some of this information will come from the soft market testing.		<p>Clearer understanding gained to support the Mixed Dry Recycling mix.</p> <p>Follow-up meetings being held with report to Officer Working Group in Sept 2018.</p>

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
1.11	Review of the Household Waste Recycling Centres		November 2018	Review the existing arrangements across the County and look at the feasibility of more Centres if required.	From the consultation it was a theme that the public want opening hours extended at current Centres and the possibility of more across the County.
2	Food Waste Trial	1,2,3,4,5,7,8 and 10	12th Jul 18 – Initial Feedback to Lincolnshire Waste Partnership. 22nd Nov 18 – Detailed Feedback to Lincolnshire Waste Partnership	Measure number of residents in the trial. Measure the amount of waste collected and reduction in recycling contamination. Access the Mixed Dry Recycling contamination.	Inform decision making about future collection and disposal options by assessing the available options during the trial to ensure momentum is maintained, including the recent Waste and Resources Action Programme (WRAP)work. Determine the service’s impact on households’ waste and recycling habits, especially volumes of food in other waste streams. Assess the impacts of cleaning up the Mixed Dry Recycling contamination.
2.01	Trial commences in South Kesteven area.		4 th June 18	Maximise participation and understand households’ motivations for the trial. Measure the amount of food waste collected and determining if there is any reduction in the recycling contamination or quantity of residual waste presented. Determine the most effective messages and communications channels.	Clearer understanding of food waste on recyclables and weights of residual. Weekly tonnages and composition analyses being undertaken.
2.02	Initial results reported to Lincolnshire Waste Partnership.		12 th July 18	Give an update on the 1st month’s figures from the trial.	Report presented to Lincolnshire Waste Partnership. on the 12 July 2018. Completed task.

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
2.03	Detailed report to Lincolnshire Waste Partnership.		22 nd November 18	Report with all of the measurements for how/if the scheme has been successful including costs and savings.	The Lincolnshire Waste Partnership to receive information regarding the success or not of the trial. If successful, defining the extent of the food waste roll-out.
2.04	Investigate expanding the trial to other areas in South Kesteven or discuss with other Districts a trial and costs for this piece of work.		Early 2019	Fully costed options to look at expanding the food waste trial either into South Kesteven or other Districts.	Meeting to be arranged in September 2018 with Lincolnshire County Council and South Kesteven.
3	Strategic Review of Options for Continuous Improvement for Waste Collection and Disposal Arrangements in Lincolnshire	7,8,9 and 10	Early 2019 – Feedback to Lincolnshire Waste Partnership & Lincolnshire Chief Executives Group	What are the benefits for this theoretically to identify an ideal solution without current restraints.	To show the most effective and financially viable way of collecting and disposal of waste throughout the County.
3.01	Initial analysis by Lincolnshire Waste Partnership and the Officer Working Group using Design Council methodology.		May 18		
3.02	Further analysis by Lincolnshire Waste Partnership and the Officer Working Group using Design Council methodology		21 st September 2018		
3.03	Interim update reported to Lincolnshire Waste Partnership & to Chief Executives Group		October 2018		

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
3.04	Further update reported to Lincolnshire Waste Partnership & to Chief Executives Group		Early 2019		
4	Location of additional processing/disposal sites	7,8 and 10	November 2018 – Feedback to Lincolnshire Waste Partnership & Chief Executives Group	<p>Initial assessment of users within Lincolnshire</p> <p>Provide a map and short report on the main areas</p> <p>Report outputs to Lincolnshire Waste Partnership and obtain direction on what this information will be used for</p>	To support the feasibility of another Energy from Waste plant if required.
4.01	A review of the previous report by Element Energy on the data gathered in the consideration of energy mapping within the Greater Lincoln area.			Draft short brief for Element to look at the wider area and obtain a quote and timeline for this piece of work.	Locations to be ranked for suitable areas for a new Energy from Waste plant.
4.02	Evaluating the Lincolnshire Enterprise Partnership work around utility infrastructure with our expected waste infrastructure work.		Delivery of findings by November 2018	<p>Energy mapping work for Greater Lincolnshire Enterprise Partnership completed.</p> <p>Energy Strategy for the Greater Lincolnshire Enterprise Partnership out for consultation.</p>	Energy Strategy and Local Industrial Strategy Energy Components out for consultation.

Ref	Action	Objectives Supported	Key Dates	KPI/ Targets	Expected Outcome/Update
5	Choosing performance indicators appropriate to measure environmental performance.	7 and 6	Sept 2018	Carbon footprint baseline review. Review of existing Performance Indicators.	The need for this came through in the consultation as a need to understand the Carbon footprint baseline so that it can be monitored effectively. To produce a suite of Performance Indicators that can then be effectively produced and reported to the Lincolnshire Waste Partnership.
5.01	Evaluate the current information around carbon footprint		Sept 2018	Once the baseline has been established this the Officer Working Group can then look at targeting reduction and a communication plan.	Outcomes of the consultation was that this needs to be a priority of the Strategy therefore an understanding of the baseline and targeting reducing this is key.
5.02	Review the existing Key Performance Indicators to ensure fit for monitoring the Strategy outcomes		Sept 2018	Looking at what was previously measured and aligning new targets to the outputs of the Strategy.	Have new Key Performance Indicators that are Specific, Measurable, Attainable, Relevant and Timely.

Appendix E – Glossary of Terms & Abbreviations

Term	Abbrev.	Description
Alternate Weekly Collections	AWC	Typically, the collection of household residual wastes every other week, whilst during the intervening weeks recyclables and/or green wastes are collected.
Anaerobic Digestion	AD	A process by which microorganisms break down biodegradable material in the absence of oxygen.
Biodegradable Municipal Waste	BMW	Those elements of the municipal waste streams that will rot or degrade biologically.
Controlled Waste Regulations	CWR	UK legislation categorising waste by contents and/or source.
Department for Environment, Food & Rural Affairs	Defra	UK government department responsible for waste management (amongst other things).
Energy from Waste	EfW	Any renewable energy technology that recovers energy from waste.
Household Waste	HW	Waste from domestic properties including waste from residual refuse collections, material collected for recycling and composting, plus waste from educational establishments, nursing and residential homes and street cleansing waste.
Household Waste Recycling Centre	HWRC	A place at which the public may deposit their household waste
(Joint) Municipal Waste Management Strategy	(J)MWMS	Also referred to in this document simply as "the Strategy". It is a statutory duty for local authorities in two-tier areas to have a Joint MWMS.
Landfill Allowance Trading Scheme	LATS	An initiative by the UK government to help reduce the amount of BMW sent to landfill. Abolished in 2013.
Lincolnshire Waste Partnership	LWP	Also referred to in this document simply as "the Partnership". Brings together the public bodies within Lincolnshire responsible for collection and disposal of waste.
Local Authority Collected Waste	LACW	Any waste collected by a local authority. Formerly known as "Municipal Waste".
Minerals and Waste Local Plan	MWLP	Sets out: <ul style="list-style-type: none"> the key principles to guide the future winning and working of minerals and the form of waste management in the county; and the criteria against which planning applications for minerals and waste development will be considered.
Municipal Solid Waste	MSW	A waste type consisting of everyday items that are discarded by the public.
National Indicator	NI	One of a list of indicators used to measure local authority performance. Stopped being statutory from April 2011.

Term	Abbrev.	Description
National Planning Policy Framework	NPPF	Introduced in March 2012, sets out the Government's overarching planning policies for England
National Planning Policy for Waste	NPPW	Introduced in December 2013, sets out the national framework for planning for waste management
Office of the Deputy Prime Minister	ODPM	Former UK government department with responsibility for some aspects of waste management (amongst other things).
Putrescible waste		The component of the waste stream liable to become putrid. For example: organic matter that has the potential to decompose with the formation of malodorous substances, usually refers to vegetative, food and animal products.
Recycling Credits		Statutory payments made by the WDA to a WCA which makes its own arrangements for the recycling of waste which it has collected.
Strategic Environmental Assessment	SEA	A formal assessment of the environmental effects of a strategic document.
Technically, environmentally and economically practicable	TEEP	A formal assessment of whether an individual option can reasonably be achieved. Found in several pieces of waste legislation.
Waste Collection Authority	WCA	A local authority with the duty to collect specified wastes (including household waste). There are seven WCA's covering the LWP area: Boston Borough Council, City of Lincoln Council, East Lindsey District Council, North Kesteven District Council, South Holland District Council, South Kesteven District Council and West Lindsey District Council
Waste Disposal Authority	WDA	A local authority with the duty to operate HWRC's and to dispose of waste collected by WCA's in its area. There is one WDA covering the LWP area: Lincolnshire County Council.
Waste Planning Authority	WPA	A local authority with the duty to collect specified wastes (including household waste). There are seven WCA's covering the LWP area.
Waste Regulatory Authority	WRA	Has responsibility for ensuring compliance with waste legislation. In England this is the Environment Agency.
Waste and Resources Action Programme	WRAP	A government-sponsored organisation promoting recycling and other waste issues.