

Joint Municipal Waste Management Strategy for Lincolnshire



This draft document sets out how the organisations which form the Lincolnshire Waste Partnership (LWP) will work together to deliver waste management services which protect the environment and provide value for money.

Feedback is invited from anyone with an interest in our waste services, and will be considered in finalising the Strategy before it is adopted by each LWP authority at the end of the process.

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1 Summary

This Joint Municipal Waste Management Strategy (JMWMS) for Lincolnshire sets out how the eight local authorities of Lincolnshire and the Environment Agency will work in partnership to protect the environment by delivering sustainable waste management services and to establish best value waste management practices.

1.1 This version of the Strategy

This draft version of the Strategy has been prepared and revised in discussion with the members of the Lincolnshire Waste Partnership (LWP).

Whilst this remains a draft document, open to change in response to further feedback, it is presented in this full form (rather than simply a summary or introduction) so that it is possible to understand both what the LWP are seeking to achieve and how we propose to go about doing so. This may mean that, in places, the text refers to things in the past tense to things which we are anticipating to have happened by the time the final Strategy is published.

Feedback is welcomed from anyone with an interest in our waste services, including the public, and will be considered in finalising the Strategy before it is adopted by each LWP authority at the end of the process.

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.

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;
- 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.

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

The Lincolnshire Waste Partnership 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.”

In order to work towards this vision, the Partnership has also 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 consider moving towards a common set of recycling materials.
Objective 3.	To consider the introduction of separate food waste collections.
Objective 4.	To explore new opportunities of using all waste as a resource in accordance with the waste hierarchy.
Objective 5.	To contribute to the UK recycling target of 50% by 2020.
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 whether further residual waste recovery/disposal capacity is required and, if necessary, seek to 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 will be accompanied by a separate Action Plan 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 need to be reflected in the action plan:

- **Seeing the wider picture**
 - Developing links with other local authorities
 - Engaging with the commercial sector
 - Addressing any waste processing capacity gaps
- **Balancing economic and environmental benefits**
 - Ensuring value for money
 - Caring for the environment
- **Reviewing what we collect and how**
- **Getting our messages across**
 - To the Lincolnshire public – e.g. What to put in which bin
 - To the national government – We need to try to influence national strategy & policy to tie in with our own
 - To other stakeholders – Parish Councils, Environment Agency, etc.

- To the commercial sector – To waste producers as well as waste businesses

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

- **Monitoring the strategy** – Measuring our performance both in existing ways (such as recycling percentage) and in new ways which better reflect how we are doing compared to our strategic objectives.
- **Implementing the strategy** – 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** – 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.

1.6 What happens now?

At this stage, it is important to us that we understand what others think about what we are proposing in this Strategy. In view of that, we are now asking for views from:

- Lincolnshire residents;
- Councillors at Parish/Town, District and County level;
- Waste management businesses;
- Neighbouring local authorities; and
- Anyone else with an interest in waste management in Lincolnshire.

This consultation process will last from April to June 2018. During that time, we will be doing our best to make sure we publicise it as widely as possible but, if you know someone who might be interested, please let them know.

In line with our vision for this JMWMS, to choose the "best environmental option" and "give value for money", we believe that it would not be appropriate to print thousands of pages of paper when many people will prefer to read and respond online. Please be assured, however, that we are happy to provide paper copies for anyone who wants them.

1.6.1 Reading and Responding Online

For most people, the easiest way to view and to comment on the Strategy is via our dedicated page at the Recycle for Lincolnshire website:

<https://www.lincolnshire.gov.uk/recycle-for-lincolnshire/waste-strategy-for-lincolnshire/>In addition to the main Strategy document itself, you will also find there further information about the JMWMS

process, and a number of related documents including the draft Environmental Report for the accompanying Strategic Environmental Assessment (SEA).

Your comments are welcomed via the online survey which is also available at the same web address.

1.6.2 Reading and Responding In Other Ways

If you would prefer to read a paper copy of the documents, you can view them:

- By visiting the main office of any of the eight LWP Councils; or
- At your local library.

If you would like your own paper copy of any or all of the documents, you can get hold of them:

- By printing them off from our website – Although please be aware that the full set of documents is quite large; or
- By post, email or telephone – Please either contact any LWP Council using their usual details, or contact the County Council as follows.

Post:	Waste Strategy Lincolnshire County Council Lancaster House 36 Orchard Street Lincoln LN1 1XX
Email:	wastestrategy@lincolnshire.gov.uk
Telephone:	01522 782070

1.6.3 Reviewing Your Comments

Once all comments have been received and the consultation process has finished, from July we will consider what final changes need to be made to the Strategy, and each LWP member authority will then adopt it through its own formal processes.

Of course, that is only the first part of the story, as we'll then need to move ahead with working to achieve our objectives.

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 will produce:

- 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 produce an updated Action Plan annually for the lifetime of this Strategy.

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.

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.

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 some of 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.
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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 "Brexit".
- 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) – Particularly as this can result in 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 environmental legislation and guidance in relation to the management of waste. Whilst, in the longer term, Brexit is likely to see the UK diverge from EU waste policy and legislation, the UK Government have indicated a desire to continue to comply 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 fuller list can be found in Appendix A, but the main EU drivers for the LWP's strategic thinking are:

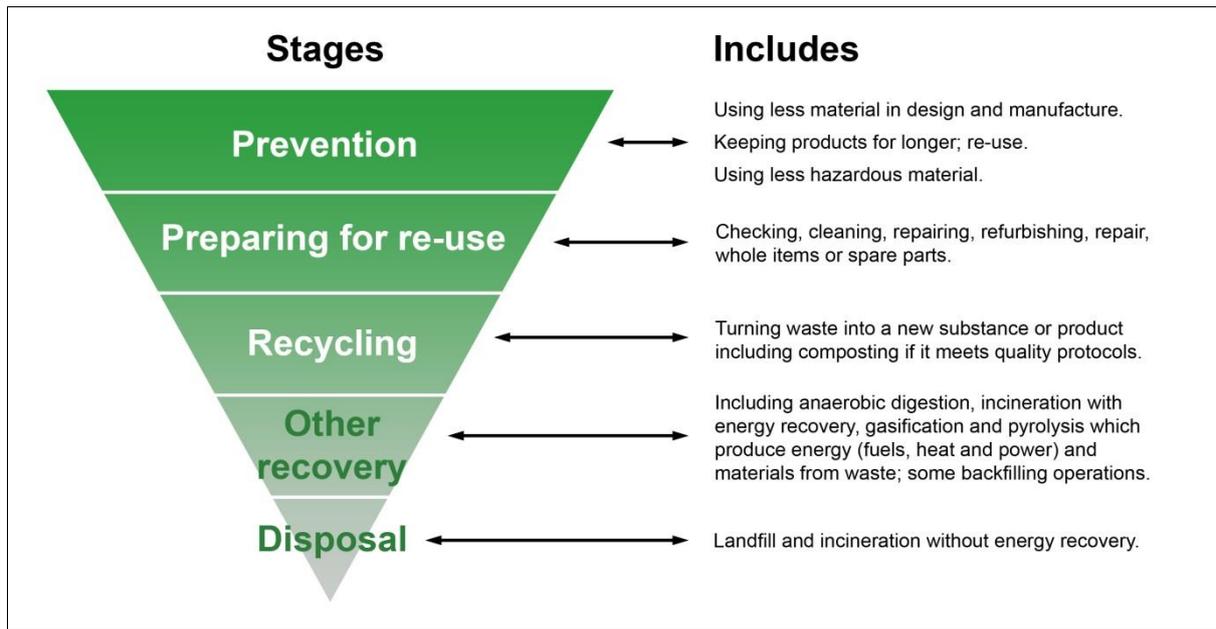
- Revised Waste Framework Directive (2008/98/EC)
- Landfill Directive (1999/31/EC)
- Circular Economy Package (upcoming)

3.1.1 Waste Framework Directive

The main area of European legislation that this waste strategy has to consider is the revised Waste Framework Directive. This Directive establishes the fundamental principles for waste management in Europe, which must be reflected in National, Regional and Local Strategies. The key principles include:

- **50% recycling by 2020** – The UK government is committed to meeting this target for the recycling of "waste from households". However, it should be noted that the definition of this differs from that of the former headline 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. Further information regarding this can be found in section 5.5 of this Strategy.
- **Separate collections of recyclables** – Authorities are required to have 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 Waste Hierarchy** – This provides a framework of how sustainability in waste management can be increased progressively. The aim is to move up the waste hierarchy by significantly reducing reliance on landfill, ideally through waste reduction, but also through increased recycling, reuse, composting and recovery.

Figure 3-1 The Waste Hierarchy



3.1.2 Landfill Directive

The Landfill Directive aims to prevent, or minimise, the negative effects on both the environment and human health caused by landfilling of wastes. It set targets for reductions in the tonnage of Biodegradable Municipal Waste sent to landfill.

The UK Government responded 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. Whilst the LWP's development, under its previous Waste Strategy, of an energy from waste facility brought us well within our LATS targets, the reduction of our Landfill Tax bill through minimised landfilling remains a key driver.

3.1.3 Circular Economy Package

As stated on the European Commission website¹:

The European Commission has adopted an ambitious new Circular Economy Package to help European businesses and consumers to make the transition to a stronger and more circular economy where resources are used in a more sustainable way.

The proposed actions will contribute to "closing the loop" of product lifecycles through greater recycling and re-use, and bring benefits for both the environment and the economy. The plans will extract the maximum value and use from all raw materials, products and waste, fostering energy savings and reducing Green House Gas emissions.

Whilst the CEP has yet to be passed into EU law, and Brexit makes it uncertain whether it will be enforced in the UK, the current proposal is for a number of challenging targets including recycling of

¹ https://ec.europa.eu/commission/priorities/jobs-growth-and-investment/towards-circular-economy_en

55% of municipal waste by 2025, 60% by 2030 and 65% by 2035. In developing our future strategy it is important to consider the implications should the UK government decide to adopt such targets.

Information on the other relevant EU legislation that the Strategy has to consider can be found in Appendix A.

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 have 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 after the adoption of this Lincolnshire Strategy.

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 Plan² 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:

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

- *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 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, sets out the Government's overarching 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 including 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 commercial, industrial, construction and demolition 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

The implementation of this strategy, particularly in the development 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 will be specifically writing to each of those authorities 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. Their responses will be listed in Appendix A of our finalised JMWMS.

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 recent government 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.

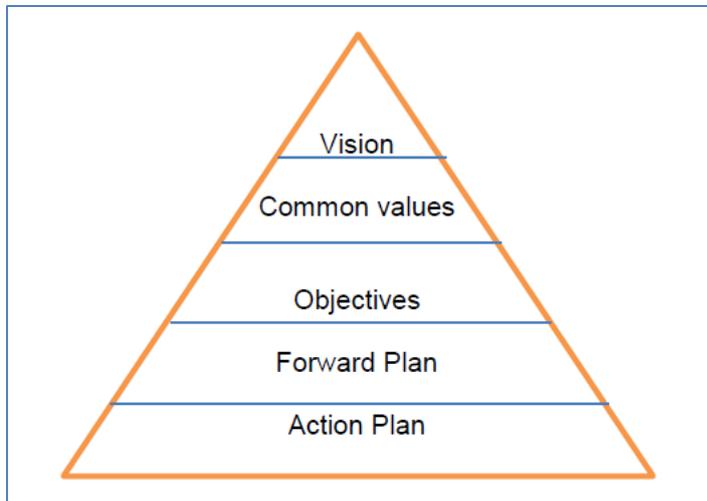
4.4.1 LWP Authorities

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 B.

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 will continue throughout the Strategy process, including with the formal scrutiny and adoption of the documents at the end.

4.4.2 Public Consultation

This version of the Strategy has been prepared as a "consultation draft" to be shared with the public and other stakeholders. This allows them to comment upon the draft versions of the Strategy and its accompanying Strategic Environmental Assessment (SEA) and Action Plan. The final version of each of those documents will reflect the feedback received from this consultation process.

Further details of the results of the consultation process will be added as Appendix C in the final 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:

- 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 website³.

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, however, estimates indicate that Lincolnshire's population only grew by a further 4.3% between 2011 and 2016, just below the national rate for England. Most of our WCA's saw growth between 4.6% and 5.1% (i.e. above the national average) during that same period, but it should be noted that population growth in East Lindsey was significantly lower.

³ <http://www.research-lincs.org.uk/Population.aspx>

Table 5-1 Population estimates

Area	2011 Census	2016 Mid Year Estimate	Growth
Boston BC	64,637	67,600	4.6%
City of Lincoln	93,541	97,800	4.6%
East Lindsey DC	136,401	138,400	1.5%
North Kesteven DC	107,766	113,300	5.1%
South Holland DC	88,270	92,400	4.7%
South Kesteven DC	133,788	140,200	4.8%
West Lindsey DC	89,250	93,700	5.0%
Lincolnshire	713,653	743,400	4.2%
England	53,012,456	55,268,100	4.3%

Forecasts are that population growth for Lincolnshire going forwards (12% higher in 2039 than in 2016) 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"⁴ (published December 2016) included the following key points regarding the national situation:

- UK generation of commercial and industrial (C&I) waste was 27.7 million tonnes. This has fallen from 32.8 million tonnes in 2012.
- The UK generated 202.8 million tonnes of total waste in 2014. Over half of this (59.4 per cent) was generated by construction, demolition and excavation, with households responsible for a further 13.7 per cent.

Clearly, household waste is only a relatively small proportion of overall waste, and needs to be considered 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

⁴ <https://www.gov.uk/government/statistics/uk-waste-data>

Waste Local Plan (Site Locations Document)⁵, 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 2003⁶ 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.

Thus, in being prepared by the local authorities of the Lincolnshire Waste Partnership this Strategy, by definition, focuses on Local Authority Collected Waste (LACW), which can include waste from the following sources (as defined in the Controlled Waste Regulations):

- 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 355,849 tonnes arising in 2016/17 of which around 97% is household waste.

Table 5-2 Summary of Local Authority Collected Waste (LACW) in Lincolnshire 2016/17

Sources: Collection (purple) = County Council Waste Data Management System; Disposal (orange) = Wastedataflow⁷

Waste Stream	2016/17 (Tonnes)	% of Total Waste Stream
Local Authority Collected Waste	368,777	
Waste collected at kerbside by WCA's	281,456	76.3% of LACW
Other waste collected by WCA's ⁱ	17,158	4.7% of LACW
Waste collected at HWRC's	69,511	18.8% of LACW
Other LACW ⁱⁱ	652	0.2% of LACW
Total Household Waste collected ⁱⁱⁱ	355,191	96.3% of LACW
Total Household Waste disposed of ⁱⁱⁱ	355,403	
Household Waste reused, recycled or composted	165,228	46.5% ^{iv} of Household Waste Disposal
Household Waste sent for energy recovery	175,350	49.3% of Household Waste Disposal
Household Waste landfilled	14,825	4.2% 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.

iv – Differs slightly from our official recycling rate of 46.7% due to a small difference in calculation method.

⁵ 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

⁶ <http://www.legislation.gov.uk/ukpga/2003/33/contents>

⁷ <http://www.wastedataflow.org/>

Figure 5-1 Sources of LACW in 2016/17

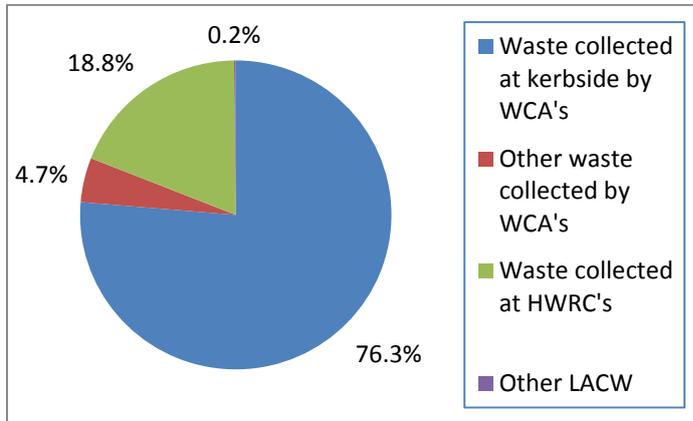
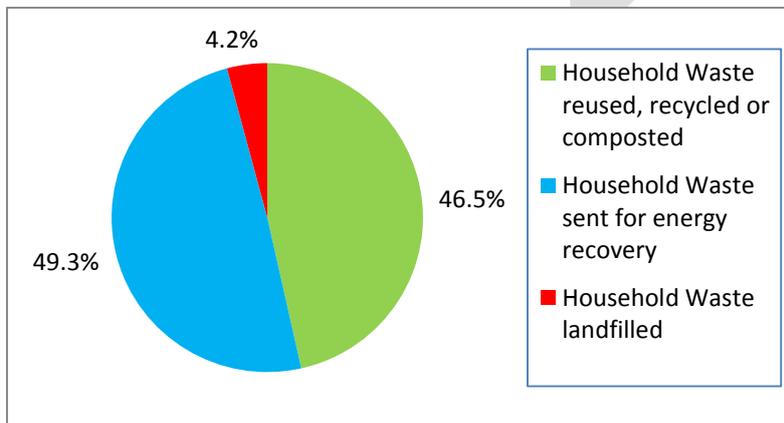


Figure 5-2 Destinations of Household Waste in 2016/17



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 from 322,715 to 365,537, an increase of over 13%. Table 5-3 below, however, shows that between 2007/08 and 2015/16 there was little overall change in either total LACW or in Household Waste, although there appears to have been a significant rise in 2016/17. It should also be noted that there can be significant variation between successive years.

Table 5-3 Waste growth trends in Lincolnshire between 2007 and 2017

Source: Wastedataflow⁸

Year	Municipal Waste (Tonnes)	% Change	Household Waste	% Change
2007/08	352,123		338,676	
2008/09	359,798	2.18%	348,280	2.84%
2009/10	349,784	-2.78%	336,893	-3.27%

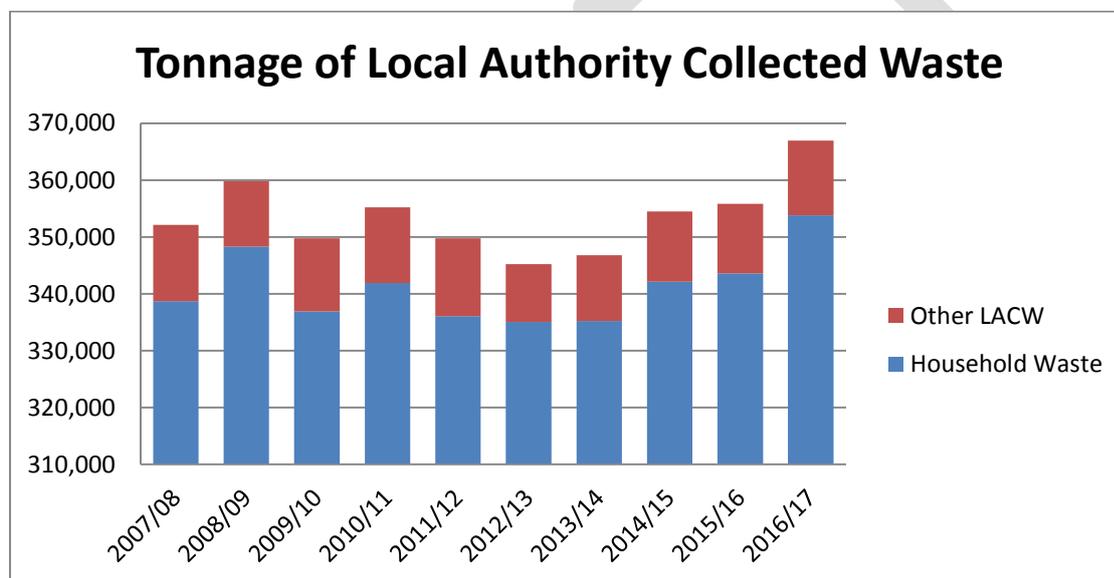
⁸ <http://www.wastedataflow.org/>

Year	Municipal Waste (Tonnes)	% Change	Household Waste	% Change
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%
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 ⁱ	3.12%	353,819 ⁱⁱ	2.98%
Overall Change (since 07/08)		4.21%		4.47%

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

ii – This is the official total, but it is unclear why this differs from the total in Table 5-2 which is the sum of the weights sent to each disposal method.

Figure 5-3 Annual Tonnage of LACW in Lincolnshire



Whilst, as has already been said, the total tonnage has been very erratic from year to year, there are some conclusions which can be drawn:

- Total tonnage fell for several years 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 considered prudent to 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 Plan⁹ which suggests that LACW tonnages will grow as shown in Table 5-4.

⁹ <http://uk.sitestat.com/lincolnshire/lincolnshire/s?Home.residents.environment-and-planning.planning-and-development.minerals-and-waste.site-locations->

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, in 2016/17 the average Lincolnshire household did indeed produce 0.5% more household waste than in the previous year.

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%, or around 50,000 tonnes of extra household waste **each year** by 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 follows.

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

[examination.131110.articleDownload.106584&ns_type=pdf&ns_url=https://www.lincolnshire.gov.uk/Download/106584](https://www.lincolnshire.gov.uk/Download/106584)

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 5-4 Composition of MDR in 2016/17

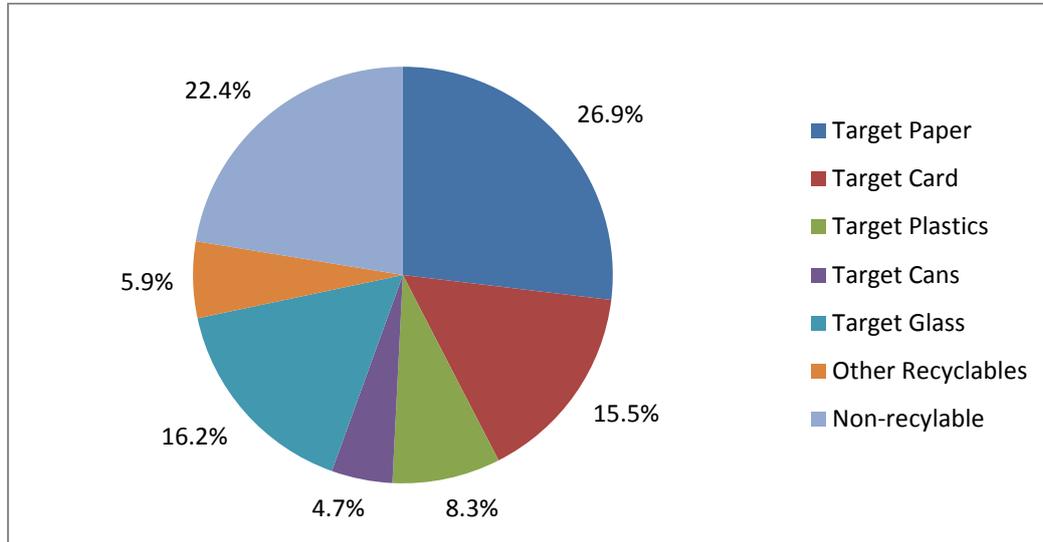


Figure 5-4 summarises the sampling data for 2016/17 and shows that of the total tonnage collected:

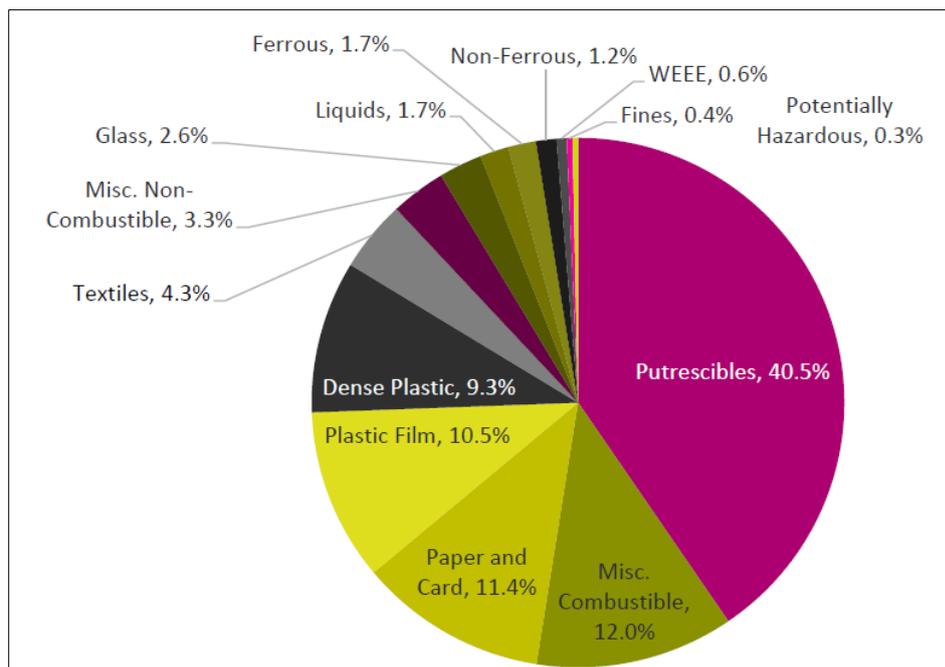
- Around 72% was "target" recyclables – This is what the LWP has asked the public to put into the kerbside recycling collections.
- Around 6% was other recyclables – Whilst not on the specified list, our current MRF contractor is able to recycle these as well. However, this may not be recyclable at all MRF's.
- Over 22% was not recyclable – This should not be in these collections, and needs addressing through 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 5-5 shows the 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 5-5 Composition of Residual Waste in 2016/17



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 2016/17. Table 5-6 also shows the overall composition of all LACW in 2016/17, 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 2016/17

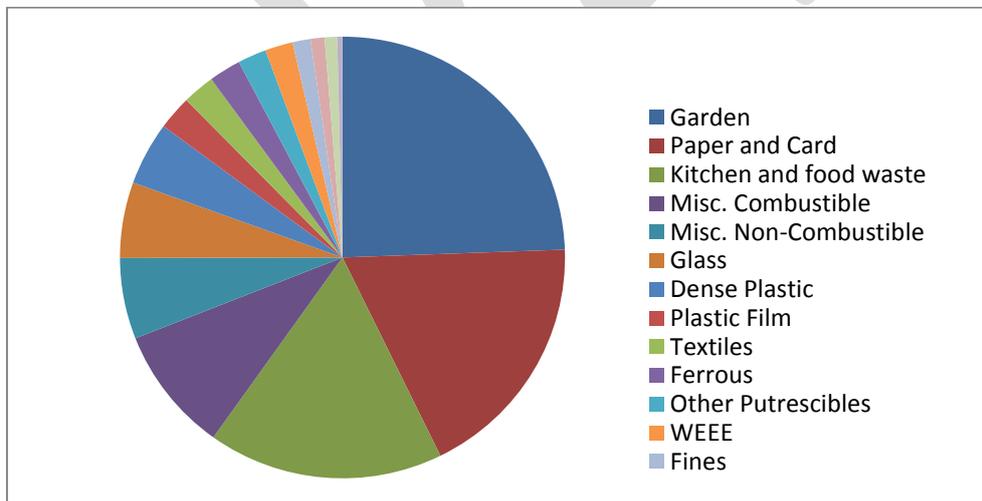
	Kerbside Collections ⁱ	Household Waste Recycling Centres	Other Local Authority Collected Waste	TOTAL Local Authority Collected Waste	% of Local Authority Collected Waste
Card	17,214	2,025	616	19,855	5.4%
Paper	34,022	1,105	899	36,026	9.8%
Plastic Film	17,911	642	335	18,889	5.1%
Dense Plastic	22,174	3,339	476	25,990	7.0%
Textiles	7,202	1,774	619	9,595	2.6%

	Kerbside Collections ⁱ	Household Waste Recycling Centres	Other Local Authority Collected Waste	TOTAL Local Authority Collected Waste	% of Local Authority Collected Waste
Glass	16,003	803	3,227	20,033	5.4%
Ferrous	5,323	2,603	177	8,102	2.2%
Non-Ferrous	3,583	1,074	139	4,796	1.3%
Misc. Combustible	19,730	17,847	785	38,362	10.4%
WEEE	1,025	5,084	115	6,223	1.7%
Potentially Hazardous	521	1,520	118	2,159	0.6%
Misc. Non-Combustible	5,556	12,850	4,999	23,404	6.3%
Kitchen and Food Waste	46,489	506	1,039	48,035	13.0%
Garden Waste	67,356	17,812	1,954	87,123	23.6%
Other Putrescibles	13,913	319	155	14,386	3.9%
Fines	591	195	2,018	2,804	0.8%
Liquids	2,859	0	731	3,590	1.0%
TOTALS	281,472	69,498	18,402	369,372	

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

Figure 5-6 shows the overall composition of LACW from 2016/17 with the waste types ordered from highest to lowest percentage.

Figure 5-6 Overall composition of LACW in 2016/17



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 what proportion of 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 WCAs) 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 rates¹⁰. In view of this, any consideration of a more standardised approach for Lincolnshire should take account of the feedback from that work.

¹⁰ <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 Two year pilot for 2016/17 & 17/18
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 (240 litre for larger families)	AWC in 240 litre bins	AWC in 240 litre bins No charge 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 mixed dry recyclables.

iii – Black wheelie bin with green lid

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 2016/17

	Boston	East Lindsey	Lincoln	North Kesteven	South Holland	South Kesteven	West Lindsey
Dwelling Stock	29,050	67,660	44,710	49,660	39,760	62,460	42,350
Number of HH – dry recyclables	29,050	67,150	44,710	49,660	39,760	62,460	42,350
Number of HH – green waste ⁱ	11,634	33,000	16,661	30,894	3,155	28,565	39,350

i – Green waste collection numbers are lower because they tend to be 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 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, needs to 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 and are dealt by each district within its area.

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.

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.

In some cases, the County Council arranges for both the collection and disposal of this waste. In other cases, the WCA's collect clinical waste and sharps.

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).

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
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
Boston HWRC Slippery Gowt Lane PE21 7AA	FCC Environment	FCC Environment	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 2017

HWRC Site	Residual waste	Green	Wood	Rigid plastics	Plastic Bottles	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 Cylinders	Scrap Metal	Re-use
Bourne	x	x	x	x	<i>i</i>	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Boston	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Gainsborough	x	x	x	x	<i>i</i>	x	x	x	x	x	x	x	x	x	x	<i>ii</i>	x	x	x	x	x	x	x
Grantham	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	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	x	x	x
Lincoln	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Louth	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Rasens	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Skegness	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Sleaford	x	x	x	x	<i>i</i>	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Spalding	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

An "x" indicates that the stated waste stream is collected separately at the stated HWRC. Where there is no "x", the below applies:

- i) Plastic Bottles are still accepted at this HWRC, but must be placed in the residual waste bin.
- 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

LCC directly operates a network of five WTSs around the County. Table 5-12 shows the location of these WTSs, as well as the 2016/17 tonnage of each type of waste received at each site.

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

Table 5-12 Location and 2016/17 tonnage throughput for LCC WTSs

Location	Residual Waste (Tonnes)	Mixed Dry Recyclables (Tonnes)	Road Grit (Tonnes)	Other (Tonnes)	TOTAL (Tonnes)
Boston WTS Slippery Gowt Lane PE21 7AA	42,219	7,630	1,279		51,129
Gainsborough WTS Marshall Lane DN21 1GD	15,537	8,060	1,926		25,524
Grantham WTS Occupation Road NG32 2BP	28,029	13,052	1,147		42,229
Louth WTS Bolingbroke Road LN11 0WA	31,828	11,708	2,048	Glass = 628Te Mattresses = 1Te	46,213
Sleaford WTS Pride Parkway NG34 8GL	14,406	5,851	910	Mattresses = 40Te	21,208

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 2016/17 tonnage throughput for third party WTSs

Location	Operator	Arranged by	Mixed Dry Recyclables (Tonnes)	Green Waste (Tonnes)
Hykeham	Mid UK	Lincs CC	14,000	
Market Deeping	MidUK	Lincs CC	13,000	
Boston	Mick George	Boston BC		5,000

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 2016/17 77,768 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
MEC Recycling	Lincoln
Material Change	Crowland
Mid UK Recycling	Caythorpe
Mid UK Recycling	Honey Pot Lane
Land Network (Sturgate)	Gainsborough
Land Network (South Elkington)	Louth
Land Network (Strubby)	Strubby

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, in the 2008 Waste Strategy, the Partnership 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.

In November 2016 the LWP agreed to publicise a consistent mix, and Figure 5-7 shows that mix. Such publicity will need to be undertaken as part of a wider communications campaign to ensure that the public are aware of the part they can play in improving the LWP's waste management performance and benefitting the environment.

Figure 5-7 Publicity for consistent mix agreed in November 2016



The County Council has a contract for the processing of this MDR at MidUK Recycling's 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 MidUK.

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	158,999 ⁱ	Ends 2039
Landfill	Colsterworth	FCC Environment	6,452	Closing early 2019?
Landfill	Kirkby on Bain	FCC Environment	6,990 ⁱⁱ	Closing 2021?
Landfill	Leadenham	FCC Environment	0	Site mothballed Reopening until 2023?
Landfill	Whisby	FCC Environment	0	Site mothballed Reopening from 2023?

i – Includes 1,000 tonnes which would normally have gone to Hykeham EfW but was diverted to Greatmoor EfW.

ii – Includes around 1,500 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, have come together in one of our key objectives:

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.
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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.

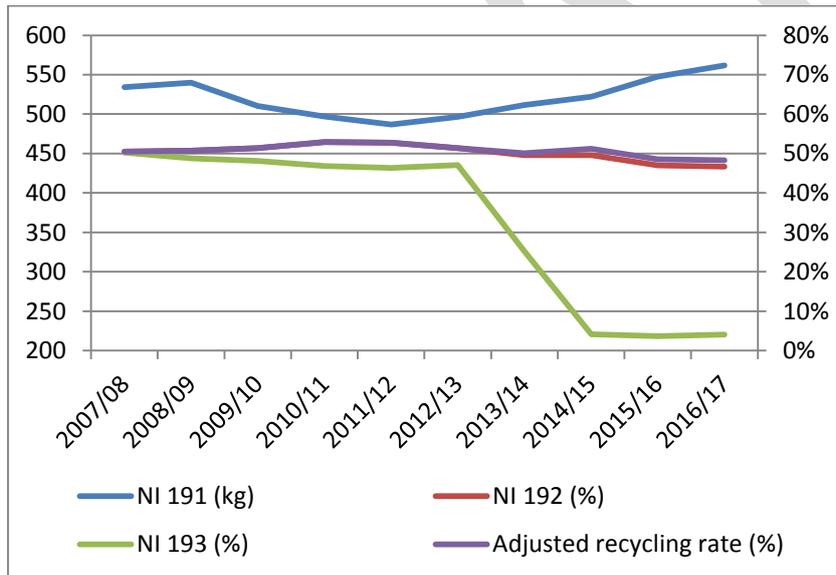
Table 5-16, and the accompanying Figure 5-8, show the County Council's (and thus the LWP's) overall performance against all three of the waste-related former National Indicators:

- 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
NI191: Residual Household Waste kg per Household	534.13		496.83	486.70	496.70	511.43	522.04	547.64	561.87
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%
NI193: Percentage of Municipal Waste Sent To Landfill	50.2%		46.8%	46.4%	47.1%	25.2%	4.1%	3.6%	4.0%

Figure 5-8 National Indicator (NI) performance since 2007/08



In addition to the three National Indicators, Figure 5-8 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
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%
Adjusted recycling rate (including metals from EfW ash)	50.5%		52.9%	52.8%	51.3%	50.0%	51.2%	48.5%	48.3%

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. 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 2016/17

	Residual household waste per household (NI191)	Total household waste collected per person (BV84)	Household waste reused, recycled or composted (NI192)
Boston BC	597kg	415kg	37.6%
City of Lincoln	525kg	379kg	36.2%
East Lindsey DC	462kg	415kg	45.4%
North Kesteven DC	511kg	421kg	46.1%
South Holland DC	561kg	341kg	28.3%
South Kesteven DC	495kg	392kg	43.2%
West Lindsey DC	497kg	443kg	48.9%
LWP Total (WCA's + HWRC's) ⁱ	562kg	478kg	46.7%

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.

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 2016/17.

Table 5-19 Recycling and composting performance in 2016/17

	Household waste reused, recycled or composted (NI192)	Household waste recycled (BV82a)	Household waste composted (BV82b)
Boston BC	37.6%	19.7%	17.9%
City of Lincoln	36.2%	19.3%	16.8%
East Lindsey DC	45.4%	21.2%	24.2%
North Kesteven DC	46.1%	20.6%	25.5%
South Holland DC	28.3%	24.4%	4.0%
South Kesteven DC	43.2%	24.2%	19.1%
West Lindsey DC	48.9%	20.1%	28.8%
LWP Total (WCA's + HWRC's) ⁱ	46.7%	24.4%	22.3%

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.

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

- The impact of Brexit is as yet unclear, 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.

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 well under 5% in 2016/17. 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 170,00 tonnes per annum.
- 2) The introduction of a contract for 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

	TOTAL Local Authority Collected Waste	Tonnage Reused, Recycled or Composted	Percentage Reused, Recycled or Composted
Card	19,855	14,388	72.5%
Paper	36,026	20,263	56.2%
Plastic Film	18,889	612	3.2%
Dense Plastic	25,990	7,840	30.2%
Textiles	9,595	1,073	11.2%
Glass	20,033	14,779	73.8%
Ferrous	8,102	4,884	60.3%
Non-Ferrous	4,796	2,501	52.1%
Misc. Combustible	38,362	11,821	30.8%
WEEE	6,223	4,836	77.7%
Potentially Hazardous	2,159	1,080	50.0%
Misc. Non-Combustible	23,404	15,850	67.7%
Food	48,035	3	<0.1%
Garden	87,123	78,153	89.7%
Other Putrescibles	14,386	0	<0.1%
Fines	2,804	0	<0.1%
Liquids	3,590	0	<0.1%
TOTALS	369,372	178,084	

The capture rate for WEEE (electricals), card, glass and garden waste exceeds 70%. A further two streams exceed 60% recycling: ferrous metals and "misc. 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 2015/16 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 2015/16

	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
2015/16	332,903	£14,786,293	£44.42	355,849	£19,286,000	£54.20

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 £80 in 2015/16.

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 B.

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.”

In order to work towards this vision, the Partnership also 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 are as follows:

Objective 1.	To improve the quality and therefore commercial value of our recycling stream.
Objective 2.	To consider moving towards a common set of recycling materials.
Objective 3.	To consider the introduction of separate food waste collections.
Objective 4.	To explore new opportunities of using all waste as a resource in accordance with the waste hierarchy.
Objective 5.	To contribute to the UK recycling target of 50% by 2020.
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 whether further residual waste recovery/disposal capacity is required and, if necessary, seek to 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.

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 strategy and 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 46.7% in 2016/17.

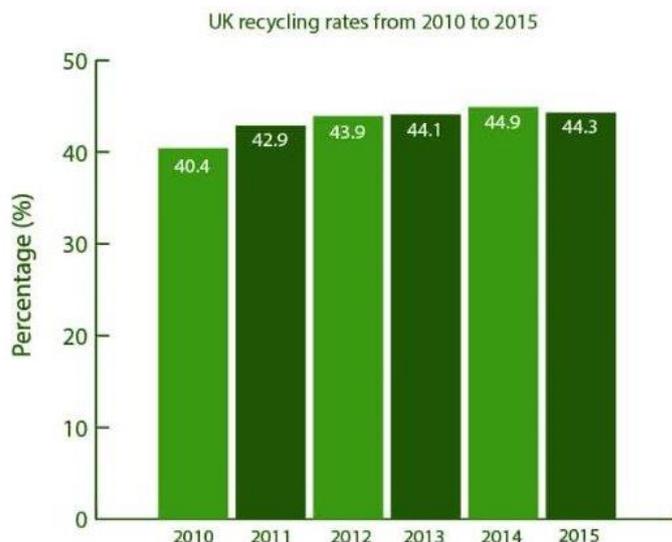
Whilst the overall tonnage collected from kerbside recycling bins has remained relatively stable, we have seen a rise in the percentage of that material which is **not** recyclable. In 2016/17 nearly a quarter couldn't be recycled, including some recyclables which had been damaged by those non-recyclable wastes – e.g. Paper made wet and dirty by food waste.

6.2.2 The national and international picture

In December 2016, Defra announced¹¹ that recycling of waste from UK households had fallen. The combined recycling and composting rate for waste from households stood at 44.3% in 2015 – falling down from the 44.9% rate recorded in 2014.

As shown in Figure 6-1, this fall followed a number of years of growth.

Figure 6-1 Defra data on recycling from UK households



¹¹ <https://www.letsrecycle.com/news/latest-news/defra-reports-falling-uk-recycling-rate/>

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 recycling target for 2030 will be set in their Circular Economy Package, but the debate is still ongoing as to whether this will be 65% or 70%.

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 2030 target, at whatever percentage, will apply to the UK. Furthermore, a UK-wide target is not currently binding on individual local authorities.

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 4% between 2011 and 2016. 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 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?

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 will be summarised in an Action Plan which has been under development alongside the preparation of this main Strategy document. This Strategy summarises the Partnership's shared vision, meaning that the initial Action Plan can be finalised. Once adopted, the Action Plan will then need to be reviewed on a regular basis (see Chapter 8) to ensure that it remains up to date for the lifetime of the Strategy.

In the meantime, this chapter summarises the key themes which will shape our work together over the next few years. In order to ensure that we are focussing our efforts in the right direction, this chapter concludes with a table showing the links identified between each theme and each of our strategic objectives.

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 which we could use 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 we believe that there is 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 UK 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

7.3 Reviewing what we collect and how

A key element of the implementation of this Strategy will be how we respond 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
- Considering 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 we will get our message across:

- To the Lincolnshire public – e.g. What to put in which bin
 - To the national Government – We need to try to influence national strategy & policy to tie in with our own
 - To other stakeholders – Parish Councils, Environment Agency, etc
 - To the commercial sector – To waste producers as well as waste businesses
-

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

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 things such as our combined carbon footprint. The development of a new suite of measures will be included in the Action Plan to accompany this Strategy, and will help us to pursue our Vision of finding "the best possible environmental option".

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.

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 authorities of Lincolnshire continue to improve services and develop efficiencies it is essential that they 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 is being prepared by the Partnership which will break down the actions and tasks required to meet Lincolnshire's 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 will establish 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 facility and additional recycling infrastructures.

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 an initial review will happen by 2023 at the latest.

This will be particularly important in the light of any changes to the landscape in which we find ourselves, 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.

Appendix B – Input from across the LWP

As a joint Strategy, shared by all LWP partner authorities, an important part of the process has been to capture everyone's views at various stages. Partner input has been sought and received throughout the process, but the main specific opportunities provided have included:

- Vision and Objectives – These were agreed at a pair of workshops held in July 2017. Full details are shown in the attached report.
- Action Plan – This is being developed through the regular LWP meetings and in particular by the LWP's Officer Working Group.
- Final draft – Partner comments will be welcomed as part of the main public consultation process.
- Sign-off – Each LWP authority will put the documents through their own scrutiny arrangements, culminating in the official adoption of the Strategy.

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Energy & Environment

Lincolnshire Waste Partnership Joint Municipal Waste Management Strategy Workshops

Report for Lincolnshire Waste Partnership
Lincolnshire Waste Partnership JMWMS

Customer:

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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.

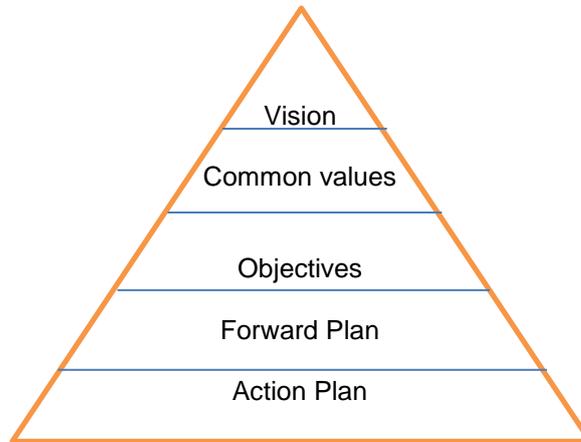
To facilitate discussion, a Scoping Paper had been prepared, setting out the broad Objectives as identified by the County Council. Additionally, information had been compiled to summarise the aims of the current (2008) Strategy, and performance indicators demonstrating performance across the original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



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Appendix C – Public Consultation Results

This appendix will contain the results of the public consultation process, and details of any changes made to the Consultation Draft of the JMWMS in producing the final version for adoption by each LWP authority.

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Appendix D – 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.
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.