

# Agenda Item 8



**LINCOLNSHIRE WASTE PARTNERSHIP**

**5 MARCH 2020**

<b>SUBJECT :</b>	<b>WASTE AND RECYCLING INFRASTRUCTURE</b>
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## **BACKGROUND INFORMATION**

The Joint Municipal Waste Management Strategy (JMWMS) for Lincolnshire adopted by the Lincolnshire Waste Partnership in January 2019 has a number of objectives identifying how the partnership will protect the environment by delivering sustainable waste management services through best value practices for the benefit of Lincolnshire.

Objective 8 requires an objective assessment of what future waste processing/disposal capacity is required and, where necessary, to secure such appropriate capacity.

The legal duty to make provision for treating waste and recycling and for any disposal capacity is with the County Council but the whole system impact is considered by all members of the partnership.

## **DISCUSSIONS**

There are other objectives that will have an impact on the infrastructure we require to process the waste and recycling we collect.

Objectives 1 and 2 are concerned with the quality of the dry recycling we collect. We agreed to develop a standard mix of recyclable materials across Lincolnshire and implemented the change in September 2019. We are now publicising the changes in our communications and our engagement with residents.

In three member council areas (Boston, North Kesteven and South Holland) we have begun trials of separated paper and cardboard collections. These remove paper and card from the standard mix of recyclable materials to be collected separately. This

reduces the volume of mixed recycling we have to deal with as this stream will only contain plastics, metals and glass. These remaining materials are easily sorted into good quality recycling material streams and are not affected by any food or liquid contamination, unlike paper and cardboard which are best sent directly to a reprocessor as a separated material stream.

Out of the approximate 66,000 tonnes of recycling we collect about one third is paper and card, one third is plastics, metals and glass and one third is contamination. We could end up with only 22,000 tonnes of mixed material that will have to be sorted if contamination is removed and paper and card collected separately. This sorting is usually done at a materials reclamation/recovery facility (MRF) through mechanical methods and the County Council procure contracts for this. The current tender allows for increasing volumes of paper and card to be removed from the mixed recycling material stream over the duration of the contract through increased separate collection.

In their Resources and Waste Strategy (RAWS) published at the end of 2018, the Government announced their intention to require separated weekly collections of food waste from 2023. This will remove food waste from the residual waste delivered to the energy from waste facility (EfW). Under objective 3 South Kesteven District Council have been trialling separate food waste collections since June 2018 to provide evidence and insight into food waste collections in Lincolnshire.

Food waste is better dealt with through a process that maximises the benefits of the biogas released through the decomposition process of aerobic (composting) or anaerobic digestion. As food waste could be anywhere from 25% to 40% of the waste collected from households, this means that potentially 25,297 to 40,981 of the 145,803 tonnes of residual waste collected from households will need to be treated by a different process.

RAWS does not appear to allow for garden and food waste to be collected together. Collecting them together will be the most economic and least environmentally damaging solution with the minimal disruption to current operations. It is noted that the best performing council in the country for recycling collects food and garden waste together on a fortnightly frequency. Further consultations from the Government on the implementation of the proposals in the strategy are expected towards the end of this year and the partnership may want to support having the choice to collect food waste comingled with garden waste if that is in the best interests of Lincolnshire.

Alongside the kerbside collections from households, residents can also dispose of waste and recycling through the network of household waste recycling centres (HWRC) across Lincolnshire. Two sites are scheduled for relocation (Skegness and Kirkby-on-Bain) and work is underway to identify new site locations for planning applications to be made and then construction programmes to be agreed. Future provision will need to reflect where housing development will happen with another 70,000 homes that are planned to be built by 2036.

The current level of infrastructure provision in and around Lincoln and the planned housing growth to the south west in North Kesteven will mean that eventually additional facilities will have to be provided. The HWRC at Great Northern Terrace will not be able to cope with increasing levels of usage when the new housing developments are completed. There is an industrial unit in South Hykeham used as a waste transfer station (WTS) for the mixed recycling collections which will need significant investment if it is to continue as a long term facility. Taken together, a new HWRC and WTS development could provide a better level of service for residents by avoiding more car journeys into the centre of Lincoln and provide more robust contingency arrangements in the event of disruption at Great Northern Terrace or the surrounding road network.

## **OPTIONS**

The treatment and disposal infrastructure we need to support our waste and recycling collection systems will have to adapt to meet local or national policy changes. The proposals in RAWs are the first in fifteen years to place new statutory duties on English councils regarding what must be collected from households and will thereby create new material streams for treatment/processing. The strategy and subsequent announcements from Government all confirm that these changes will be fully funded although what will be available for treatment and disposal infrastructure has yet to be confirmed.

The change in volumes between the mixed dry recycling and source separated paper and card material streams will affect our deliberations as to whether a dedicated MRF inside Lincolnshire is more preferential than relying upon the market and suppliers having sufficient capacity to deal with our mixed stream, including the contamination fraction. This could reduce from the current 66,000 tonnes down to 44,000 tonnes with all the paper and card removed and eventually down to 22,000 tonnes with the contamination out. The recycling contract currently being tendered by the County Council is for 5 to 7 years and through its contract mechanisms allows for the paper/card and contamination fractions to reduce over this period. The contract was structured this way to enable the partnership to respond to the policy changes in RAWs and consider the best way to collect dry recycling in Lincolnshire. This will allow time for a final decision to be taken on whether to procure a MRF for Lincolnshire.

The volume of food waste that will need to be collected under the proposed policy change is difficult to establish precisely. On a percentage basis, from compositional analysis of the household residual waste stream, it could be from 25,297 to 40,981 tonnes. Using models provided by WRAP with a collection rate of 1.5kgs/household/week it could be 26,600 tonnes. This amount of variation makes decisions on infrastructure more difficult to consider, particularly if we want to include 70,428 tonnes of garden waste which is very susceptible to climatic and seasonal changes. We need to choose a treatment technology that can deal with this ever changing volume and composition of a "wet" recycling stream. To guarantee a

consistent volume of material we can either have infrastructure capacity at the lower level of annual tonnages and send the surplus material to commercial operators; or accept that we will have to secure additional tonnage on a commercial basis to top the facilities up to their operational capacity. The current technology preferred by the County Council is anaerobic digestion (AD) as there are cashable benefits from the heat, power and renewable transport fuel that the process can produce. Work is in hand to model how food waste collections can be undertaken across Lincolnshire and where the treatment infrastructure is best located to be of the greatest environmental and economic benefit.

All considerations of future asset needs are being coordinated through the One Public Estate (OPE) programme. This is an established national programme delivered in partnership by the LGA and the Office of Government Property (OGP) within the Cabinet Office. One Public Estate began in 2013 with just twelve areas, but today is working with more than 300 councils on projects transforming local communities and public services right across the country. Within the partnership OPE is looking at making best use of our current assets of all partnership members and seeking to maximise the benefits of any future developments by collocating assets together where possible.

## **RECOMMENDATIONS**

The Lincolnshire Waste Partnership to note the actions being taken with regards to infrastructure assets required to support the objectives of the JMWMS:

1. The relocation of Skegness and Kirkby-on-Bain HWRC sites;
2. Identification of potential sites for future AD facilities;
3. Identification of a potential site to the south of Lincoln for a new HWRC and WTS (and AD facility if appropriate);
4. Involvement of partnership members in the OPE programme;
5. On-going liaison with Defra as part of the consultations for RAWs to assist with planning for future infrastructure assets in Lincolnshire;