

# Allerton Waste Recovery Park update

## Economy & Place Scrutiny Committee

### October 2017



# Background

CYC entered into a Joint Waste Management Agreement (JWMA) with NYCC (December 2010)

This supported NYCC in entering into a contract with AmeyCespa (identified as preferred bidder in 2009) for the provision of a long term Waste management service.

The objective was to deliver a long term sustainable alternative to landfill for the treatment of residual waste

AmeyCespa were required to secure planning (February 2013) for Waste recovery facility (AWRP) at Allerton quarry before confirming final cost to the council (June 2014).

The final cost was presented in 2014 and NYCC agreed to financial close (September 2014) and CYC agreed to enter into the JWMA at the same time.

The contract enables CYC and NYCC to achieve in excess of 50% recycling and composting rate and a minimum of 95% of residual waste diverted from landfill



# Background

Value is recovered from residual waste through

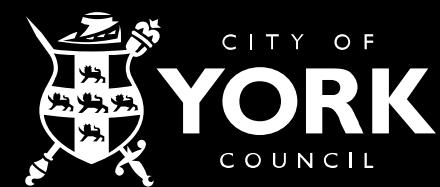
- Additional recycling (target 5%)
- And production of electricity (to power approx. 40,000 homes)
- Recovery of heat (long term objective)

Greenhouse gas benefits (compared to landfill) are equivalent to removing 12,000 cars from the Highway

The Contract effectively fixes much of the council's long term waste management price risk from inflation and increases in landfill tax with long term average price to the Councils for treatment estimated to be below current costs of disposal.

Over £200m to the York and North Yorkshire economy over the lifetime of the contract (new jobs in construction and operation)

The proportion of waste in York and North Yorkshire at commercial close was approximately at a ratio of 79:21. It is assumed that all payments and benefits will be shared consistent with this ratio.

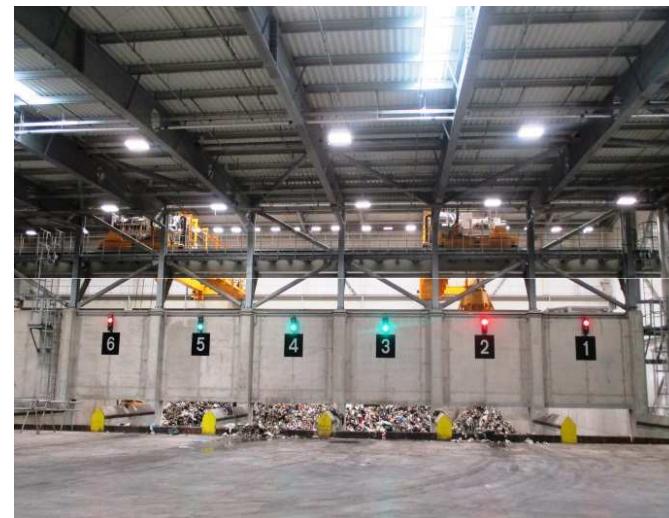


# Technology

AWRP treats waste through a series of processes including mechanical separation of recyclable materials (known as mechanical treatment or MT), anaerobic digestion (AD) and thermal treatment through incineration and generation of electricity (known as Energy from Waste or EfW).

## Tipping hall

The waste is delivered to AWRP into the tipping hall where it is tipped into bunkers. These are for Mechanical treatment or direct to EfW.



# Technology

Cranes then lift the waste from the bunkers to start the Mechanical Treatment process.

## Mechanical Treatment

The Mechanical Treatment plant (MT) separates metals, plastics and paper and is capable of sorting up to 408,000 tonnes per annum (tpa), although the planning consent limits the throughput of AWRP to 320,000 tpa. The MT plant also separates approximately 40,000 tpa of organic waste for treatment through the AD plant.



# Technology

## Anaerobic Digestion

The Anaerobic Digestion (AD) plant uses microbes to break down the organic waste in the absence of air to produce a gas and compost like output known as digestate.

## Energy from Waste (EfW)

Remaining waste will be burnt in the Energy from Waste (EfW) incinerator. The heat from the EfW is used to produce steam and drive a turbine which produces electricity for export to the national grid. The capacity of the EfW is approximately 320,000 tpa.



# Transferring York's waste

## Transfer station

In order to manage the transfer of waste from York and the other collection authorities to AWRP, a strategy around transfer stations has been developed.

This was to ensure that waste was delivered to AWRP in the most efficient way possible.

Currently CYC use the site at Harewood Whin to landfill residual waste. It was agreed that the waste transfer station to service, principally, City of York Council and Selby District council would be located at Harewood Whin

The Harewood Whin waste transfer station, that is managed by YorWaste, opened in the summer (2017) ready for use during the commissioning period.



# **Construction and commissioning**

## **Construction**

Construction is now nearing completion and is on schedule to complete on time for full service commencement at the beginning of February 2018.

## **Commissioning**

The commissioning period started in July 2017. This tests the full operation of the facility over a 6 month period.

A requirement of this is that over the course of the 6 months the volume of waste is built up to the volumes that will be delivered at full service commencement.

During this period there will be interruptions in service as systems are brought on and offline and any equipment failure is resolved.



# Service commencement

Providing the commissioning period is successful, full service will commence at ARWP at the beginning of February 2018.

