

Milton Keynes Waste Recovery Park

Creating greener waste solutions for Milton Keynes

January 2017



1. We've been testing our mechanical treatment technology with waste from Milton Keynes.



2. Waste reception hall - refuse collection vehicles tip waste, which is then loaded on to conveyor belts to go through mechanical treatment.



3. Over 1,300 metres of conveyor belts and clever separating machinery extract recyclables for reuse.



4. Locally recruited employees and agency teams are now in place to hand sort and check some items, ensuring recyclates are extracted correctly.



5. Recyclables extracted by mechanical treatment technology can either be baled or collected loosely for onward transportation to be reprocessed into new items.

Welcoming waste – a new milestone

Milton Keynes Waste Recovery Park has reached a new milestone – with black bag rubbish from local households now being taken into the facility.

The waste travels along over 1,300 metres of conveyor belts and through clever separating machinery to ensure recyclable and organic materials (which are accidentally left in the black bag waste) are extracted for reuse.

The belts and machines are part of the facility's mechanical treatment technology, which is currently undergoing its final testing phases before Milton Keynes Waste Recovery Park (MKWRP) becomes fully operational in 2017.

MKWRP has been constructed by Amey on behalf of Milton Keynes Council and brings together three state-of-the-art technologies – mechanical treatment, anaerobic digestion and advanced thermal treatment – to both recycle and create energy from waste.

Amey's Peter Waller said: "We first started work in 2014 so the testing of the mechanical treatment technology is a major step as we near the final stages of building MKWRP. The technology not only picks out any recyclable items, such as plastic bottles and metal cans, but it takes out food and biodegradable items too.

"The technology includes air knives which separate light items from heavy, as well as ballistic separators which sort flat items from those which roll around – helping it to recognise what type of waste its dealing with.

"It can also identify the difference between different plastics thanks to near infrared sorting technology, which will be able to process waste at up to seven tonnes per hour despite the plastics being dirty."

When MKWRP is fully operational, the mechanical treatment technology will handle between 120,000 and 132,000 tonnes of waste per year and will extract at least 9% of this for recycling.

You can read more about MKWRP's other technologies on site – anaerobic digestion and thermal treatment - on the next page.

Technology update



Testing of the mechanical treatment technology (see page one) is not the only milestone to be reached recently – Amey has undertaken a detailed commissioning of the anaerobic digestion part of the facility, which is now producing electricity. MKWRP's onsite, fully enclosed anaerobic digester processes food and biodegradable items in large fermenters over 28 days to generate renewable energy. It's already successfully producing electricity following its testing phases, as well as creating a compost-like material which will be available for use on brownfield sites.

The final technology on site is advanced thermal treatment, where items which cannot be recycled will be used as a fuel to create renewable electricity. This technology is in the final stages of installation, prior to testing before MKWRP becomes fully operational next year.

Through the anaerobic digestion and advanced thermal treatment technologies, MKWRP will export around 5.8MW of electricity to the National Grid per year - enough to power the equivalent of 11,000 homes.

Launching our education services

Milton Keynes is getting a new education resource – and do you know it will be free for local schools, colleges and community groups to visit!

MKWRP will have a dedicated onsite education centre, which will be able to offer a range of interactive sessions covering a mix of recycling, waste and energy topics.

The centre will open later in 2017 but, from January 2017, we are able to visit schools, colleges and groups directly to lead a variety of assemblies and workshops or give talks.

This outreach programme is also free, as well as being flexible to cover curriculum and timetabling needs.

Please email mk.education@amey.co.uk for more information and booking of outreach visits.



In the news

We opened our doors to BBC Look East recently, giving them a sneak preview of the work going on at MKWRP. Hopefully you managed to catch their update on the evening news. In addition MKWRP has been featured on BBC 3 Counties Radio and in the MK Citizen.

BBC
THREE
COUNTIES
RADIO

BBC
LOOK EAST
RADIO

Citizen Milton Keynes



As part of our continued links with the local community, we recently gave members of Haversham cum Little Linford Parish Council a behind-the-scenes look at MKWRP. The group (pictured) were taken around and shown the works which are taking place by Amey's Principal Operations Manager Phil Jennings and Education Manager Louise Ousley. If your community group or school would like to find out more, Louise can visit you and talk about the waste project. Please contact mk.education@amey.co.uk.

Contact Us

If you have a question, view or comment that you would like to share with the team you can contact us by:

Emailing us at:
mkenquiries@amey.co.uk

Calling us on: 0845 365 6452

Visiting our website:
www.mkwasterecovery.com

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If you would like this information in another language or format such as Braille, large print or audio, please ask us.