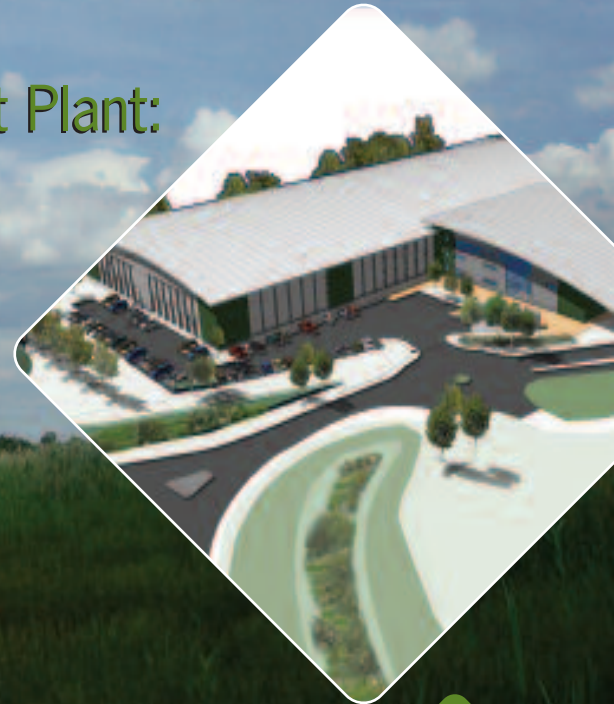


The Mechanical Biological Treatment Plant: Managing Cambridgeshire's Waste Now And In The Future





What is the Mechanical Biological Treatment (MBT) plant?

Cambridgeshire County Council's MBT plant represents a giant leap forward in environmentally-friendly waste management. Run in partnership with local company Donarbon Waste Management Ltd, the plant uses the latest technology to process black bag waste (mixed rubbish) from Cambridgeshire's households – that's waste which previously went to landfill.

A variety of machines extract materials which can be recycled, then the remaining waste is composted.



The MBT plant is **not** an alternative to recycling. It will cut down dramatically on the amount of waste which goes to landfill from black bag waste.

What are its benefits?

The MBT Plant...

- **Reduces Cambridgeshire's greenhouse gas emissions** by composting biodegradable material (waste which rots). Cambridgeshire residents recycle or compost over half their waste, but that still leaves over 140,000 tonnes of black bag waste every year. Much of it is biodegradable and decomposes in landfills to make landfill gas – a potent mix of methane and carbon dioxide. Landfills account for a quarter of the UK's emissions of methane, a greenhouse gas 21 times stronger than carbon dioxide. The MBT plant composts the biodegradable material, so less methane is released than would be the case if the material went straight to landfill.
- **Reduces pollution and saves energy** (and therefore greenhouse gas emissions) by extracting materials for recycling. Black bag waste can contain valuable resources such as metals, glass and plastic bottles which can easily be recycled, although the range of uses of recycling recovered from this waste is much smaller than that for kerbside recycling. By recycling we reduce the need to mine, refine and process raw materials.
- **Saves money** by reducing waste going to landfill. See page seven for more details.

Visit www.recyclenow.com to find out why recycling matters.



How does the MBT plant work?



Water

Some water is captured and mixed with the organic material to aid the composting process

Composting Hall

Giant wheels turn the material (kitchen and garden waste, dust, paper, wood) continuously. In seven weeks it has matured into a compost-like material which is 75% less biodegradable than the original material

Carbon dioxide

Air, including carbon dioxide, is cleaned then released to the atmosphere

Ammonia

Air scrubbers collect ammonia for use as fertilizer

Compost-like material



You can find more information at
www.cambridgeshire.gov.uk/environment/waste



Education Centre

The MBT Education Centre is open to local communities across Cambridgeshire, including schools and colleges, community groups, special interest groups, local businesses and the general public. It provides recycling and other environmental education activities to inspire people of all ages to think about their waste.

A trained teacher delivers curriculum-linked sessions for children and students with practical, fun, hands-on activities. Schools or colleges

who would like to focus on a particular curriculum subject or project theme can arrange this before visiting.

Visitors can also tour the larger waste management park to find out more about waste processing and recycling. Viewing windows and CCTV into the mechanical sorting and composting halls add to the learning experience.

Frequently asked questions

Has this been done before?

MBT is a proven technology in Europe. There were a small number of MBT plants in the UK before the Waterbeach MBT Plant was built. This plant sorts the widest range of materials for recycling from waste, to produce the cleanest compost-like material in the UK.

Why should we continue recycling?

Materials collected through kerbside recycling collections, recycling points and recycling centres are of a much better quality than those collected from the MBT plant. There is a greater variety of uses for them and they can be sold for a higher price, which helps us keep council tax as low as possible. We designed the MBT plant to manage an amount of household waste based on recycling collections continuing. The MBT plant is not a replacement for recycling: it is a great solution for black bag waste.

How much does all this cost?

The cost of landfilling waste is increasing year on year, and Cambridgeshire County Council will be fined by the Government if it exceeds tough landfill targets. The Council signed a Private Finance Initiative (PFI) contract with Donarbon Waste Management Ltd in 2008, in order to help meet this challenge. Our £41.5 million MBT plant is the centrepiece of the £731 million contract, which will ultimately cost us less than the cost we would incur if we continued to dispose of waste in landfill.





Working together to manage Cambridgeshire's waste, now and in the future



If you would like to organise a visit to the MBT Education Centre please contact:

Karen Brenchley
Education Centre Coordinator
Donarbon Ltd
Ely Road
Waterbeach
Cambridgeshire
CB25 9PG

tel: 01223 861010
email: karenbrenchley@donarbon.com

If you would like a copy of the text in this leaflet in large print, Braille, audiotape or another language, please call 01223 715459



Main cover photo: Emma Shepherd,
Wicken Fen Community Warden