

# Collection and recycling of organic waste:







### How the system operates

#### At the customer's premises

#### Types of waste accepted, without packaging:

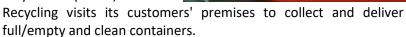
- Kitchen waste, ready meals and leftovers
- Fruit and vegetables
- Meat, bones and fat

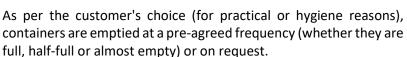
- Bread and confectionery
- Organic waste from food production

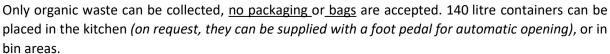
140 litre (1066x512x485 mm) wheelie bins (see photos below) are suppled free of charge to customers by MCA Recycling. These bins are marked "CATEGORIE 3 - Impropre à la consommation humaine — Niet geschikt voor menselijke consumptie" - Unfit for human consumption".



All containers are protected with a plastic liner (made of 100% post-production recycled plastic). MCA







Small (230x225x275 mm), practical and stylish 8 litre containers, with a handle and a lid to keep smells in, can be used on each floor or in offices (e.g. coffee corners) for the collection of organic waste. These will be emptied into the 140 litre containers by the customer's employees.





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#### How the system operates



#### **At MCA Recycling**



When the filled 140 litre containers collected from customers arrive back at the MCA Recycling site, they are taken to a central point and are emptied out (liners included) into MCA Recycling's own 16 tonne sealed organic compactor.

The 140 litre containers are not particularly dirty, as they are protected by the liner which is emptied out along with the organic waste. The containers are cleaned (inside and out) in the washing facility which we already have on our site. Using liners means that we can use less water and cleaning agent when we wash them.

When the containers are dry, a new 100% recycled plastic liner is placed inside ready for delivery to the customer.

#### At the recycling centre

When the organic compactor is full, it is taken to our partner's site - about 70 km from MCA Recycling - to be emptied. When it has been emptied and cleaned (if necessary), the container is taken back to the MCA Recycling site. On average, the organic compactor can hold the contents of approximately three hundred 140 litre containers, which equates to just under 11 tonnes.



All products collected are efficiently converted into raw materials by the biomethanation process (a fermentation process that converts bio-organic products into methane, which is then injected directly into the gas distribution network (ORES). The digestate (dry residue) is used as a soil amendment in agriculture. Only organic waste can be collected, no packaging or bags are accepted.

Only (100% recycled) plastic liners are permitted. These are separated from the organic waste and are made into pellets. That's why it was decided to use 100% recycled plastic liners - compostable or

biodegradable plastic bags have no place and are of no value in this process.

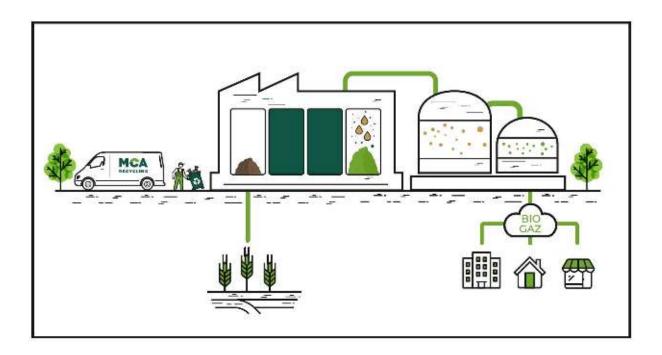




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### Summary of the recycling process:

Waste	Recycling process (steps carried out at MCA)	Secondary raw material	Example of new end product	Processing country
Organic waste (kitchen leftovers)	Transfer to compactor – cleaning (organic separation >< packaging/bags) – biomethanation process (fermentation)	<ul><li>Organic: Biomethane</li><li>+ digestate (dry residue)</li><li>- Packaging waste: pellets</li></ul>	- Mains gas + fertiliser - Pellets	Belgium