

Aerobic composting to reduce greenhouse gas emissions

The case for composting

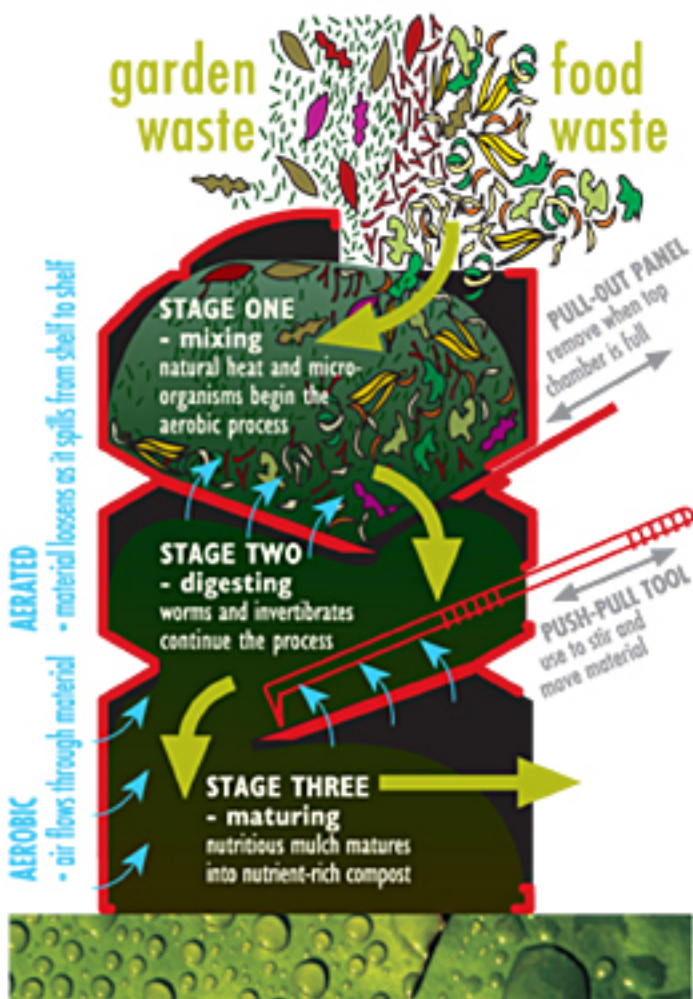
Composting is widely seen as an environmentally responsible alternative to burying organic waste in landfills where it generates methane and leachate.

The case for home composting

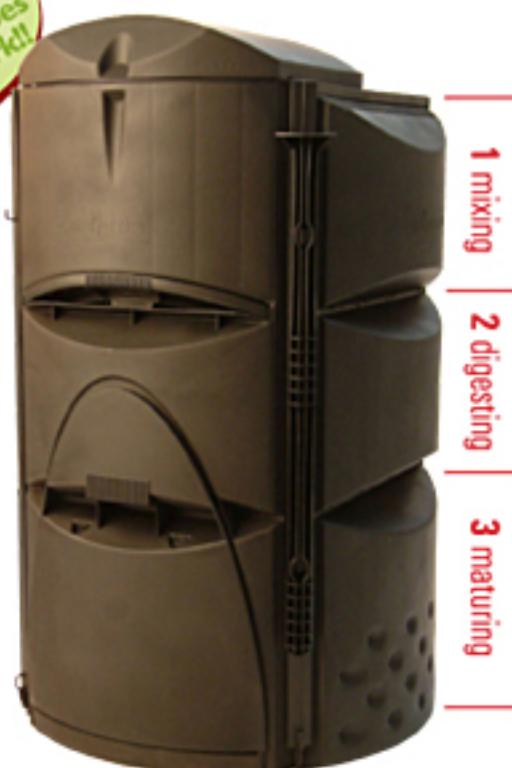
Home composting neither consumes the energy nor generates the carbon emissions required to transport and process material at a centralised site.

But is it as good as it's made out to be?

Home composting in cheap single bins only works if the material is regularly lifted and turned to allow oxygen into the mix. Many households don't do this because it takes time and effort, and it mixes old and new material. Material sits in a pile on the ground where it rots and becomes smelly. This means material is decomposing anaerobically – thus producing methane and leachate.



3 BIN PROCESS
gravity does the work!



The case for aerobic composting

Composting makes most sense when it's aerobic – when oxygen is allowed to aerate the food and garden waste.

The case for Earthmaker

The New Zealand invented Earthmaker was designed as an efficient means of disposing of domestic organic waste – "traditional three-bin composting, but gravity does the hard work!" This patented 'continuous cycle composting' process makes it easy to add new waste at the top while removing mature compost at the bottom. This is achieved by holding material above the ground during the mixing and digesting stages. Heat generated by the decomposition process draws air up through the holes on the shelves under the material. Material loosens as it spills from shelf to shelf.

The right tools change behaviour

Education has a role, but the most effective way to change behaviour is to supply equipment that meets needs and suits lifestyles. Wheelie bins changed behaviour – people filled them up! Recycling bins are changing behaviour now. The right tool is needed to enable aerobic composting 'inside the gate'. The Earthmaker is that tool. Wheelie bins and recycling bins have been supplied to households to initiate preferred behaviour. It should be possible to supply aerobic composters to households that can make good use of them.