

Recyclable, biodegradable and compostable plastics

Plastics are sometimes referred to as either recyclable, biodegradable or compostable which can lead to confusion.

Recyclable plastics are usually made from petrochemicals and fossil fuels. Not all plastics made from petrochemicals and fossil fuels can be recycled.

Compostable plastics claim to be derived from renewable materials like corn, potato, and tapioca starches, cellulose, soy protein, and lactic acid. They also claim to be non-toxic and decompose back into carbon dioxide, water, and biomass when composted. However, this does not mean that putting a compostable drinks bottle or cup in your home compost bin or in garden waste that is then composted by your local council will mean it will decompose. The reality is it won't. Virtually all such plastic products that claim to be compostable will only fully decompose in a compost facility that is dedicated to such materials. Over time compostable plastics may well decompose in landfill but there is currently very little evidence on this whole subject of compostable plastics and the environmental impacts.

The right conditions must exist for compostable plastic to biodegrade and some home composting systems simply do not reach a high enough temperature to biodegrade the compostable plastics so need to go to an industrial composting facility. There are currently insufficient facilities available should the UK make a large-scale switch to biodegradable plastics.

It should also be noted that some plastics are labelled as compostable but do contain plastic from a petrochemical source – even if only a tiny amount. As such they cannot be composted. Any suggestions that a product is compostable (within the recycling facilities currently available) needs, therefore, to be verified. Onus should be placed on the supplier to provide evidence of this and must be agreed as achievable by the Council.