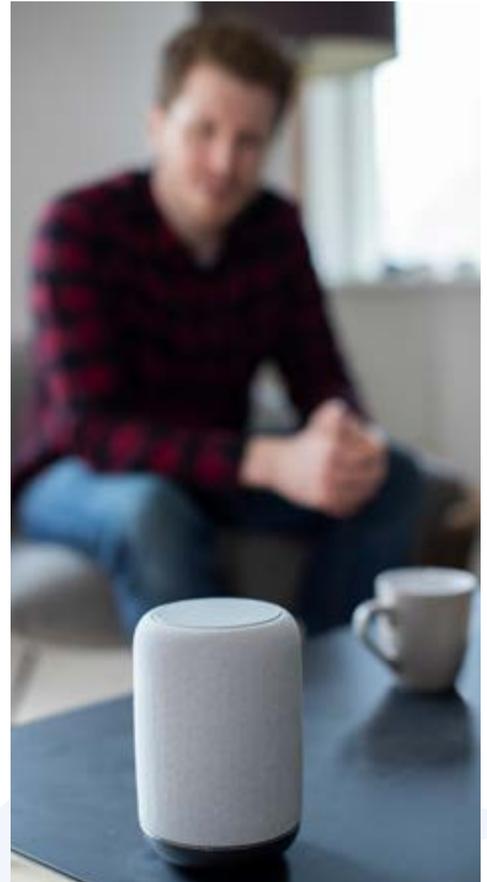


What are "Plastics"?

We talk about "Plastics" as if it were a single material, but that is not the case. In the same way that we know that there are different types of metals with different properties, plastics are also an extensive family of different materials. Each plastic is designed with specific characteristics that make it ideal for the application to which it is intended, providing us with very resource-efficient solutions.

Plastic materials can be produced from different sources. Its raw materials can be of fossil origin (crude oil, gas, etc) or renewable (sugar cane, starch, vegetable oils, etc) or even mineral base (salt). Regardless of the nature of their raw materials, certain plastics are also biodegradable. This means that provided they are properly collected and treated together with organic waste, they can biodegrade and become compost.

Whatever their origin, at the end of their service life, plastic materials are important resources that we can use either in the form of new materials or as an alternative energy source once used in energy recovery facilities.





Thermoplastics

are a family of plastics that can be melted when heated and hardened when cooled. These characteristics, which lend the material its name, are reversible. That is, it can be reheated, reshaped and frozen repeatedly.

Polyethylene (PE)	Polycarbonate (PC)
Polypropylene (PP)	Poly methyl methacrylate (PMMA)
Polyvinyl-chloride (PVC)	Thermoplastic elastomers (TPE)
Polyethylene Terephthalate (PET)	Polyarylsulfone (PSU)
Polystyrene (PS)	Fluoropolymers
Expanded polystyrene (EPS)	PEEK
ABS	POM
SAN	PBT
Polyamides (PA)	EVOH
	Etc.



Thermosets

are a family of plastics that undergo a chemical change when heated, creating a three dimensional network. After they are heated and formed these plastics cannot be re-melted and reformed.

Polyurethane (PUR)	Silicone
Unsaturated polyesters	Phenol - formaldehyde resins
Epoxy resins	Urea - formaldehyde resins
Melamine resin	Phenolic resins
Vinyl esters	Acrylic resins
	Etc.

Discovering the wide family of plastics

The plastics' family is composed of a wide variety of materials designed to meet the very different performance requirements of thousands of end products.