

Why can't

I

recycle all

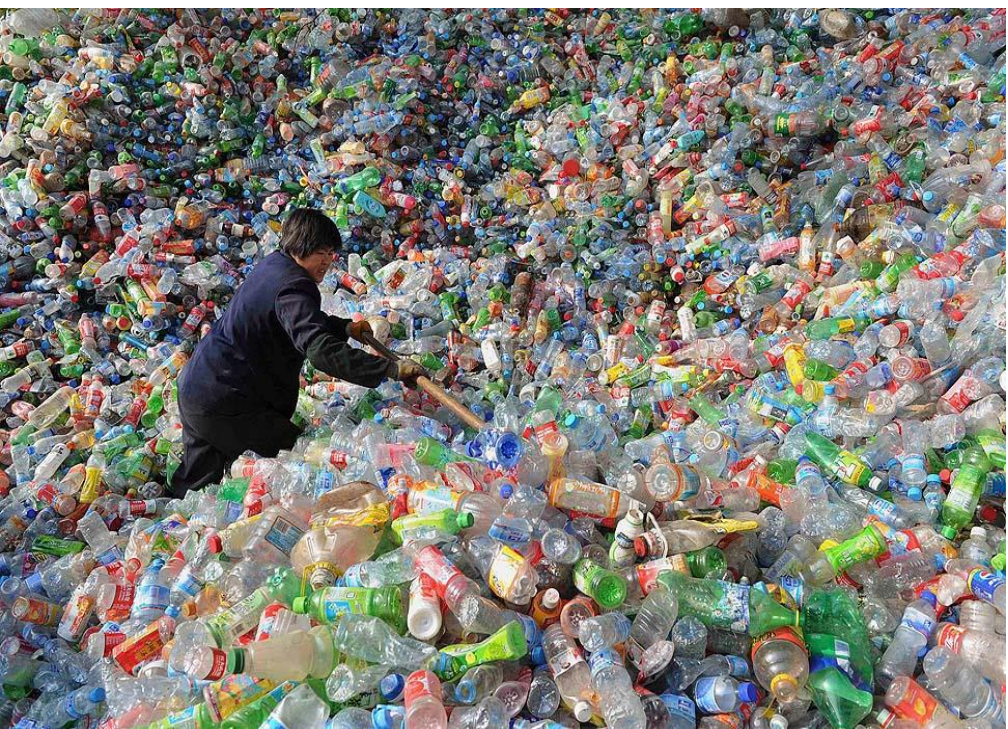
plastics?

Why can't I recycle all plastics?



Presented by
**Prof Mark
Miodownik**
Materials
scientist

1. Mountains of plastic



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Every year we buy around 3.7 million tonnes of plastic products in the UK. Much of this plastic is packaging, with only 842,000 tonnes being recycled.

Much of the plastic we use ends up in landfill. This is either because it is currently not possible to recycle, individuals don't take it to be recycled or local authorities don't accept it.

Find out which types of plastic are currently not possible to recycle - and why - and which could be recycled if we wanted to.

Which is not possible to recycle?

Which one of these plastic items is currently not possible to recycle because of its chemical structure?

WHAT YOU **CANNOT** PLACE IN YOUR RECYCLING BIN



Plastic bags and soft plastics



Bagged recycling



Batteries



Electrical goods



Polystyrene



Food scraps



Light globes



Clothing

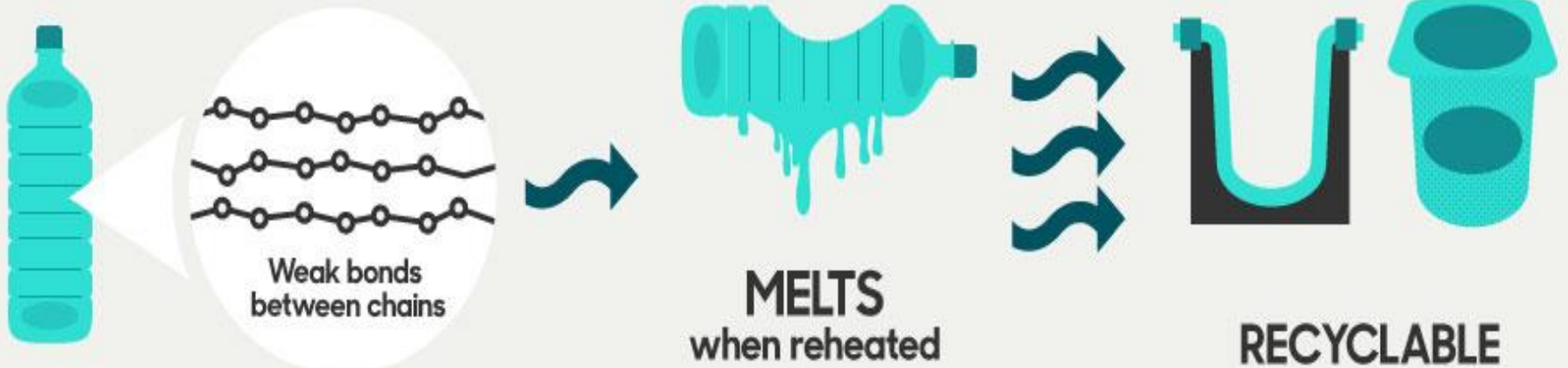


Crockery and glassware

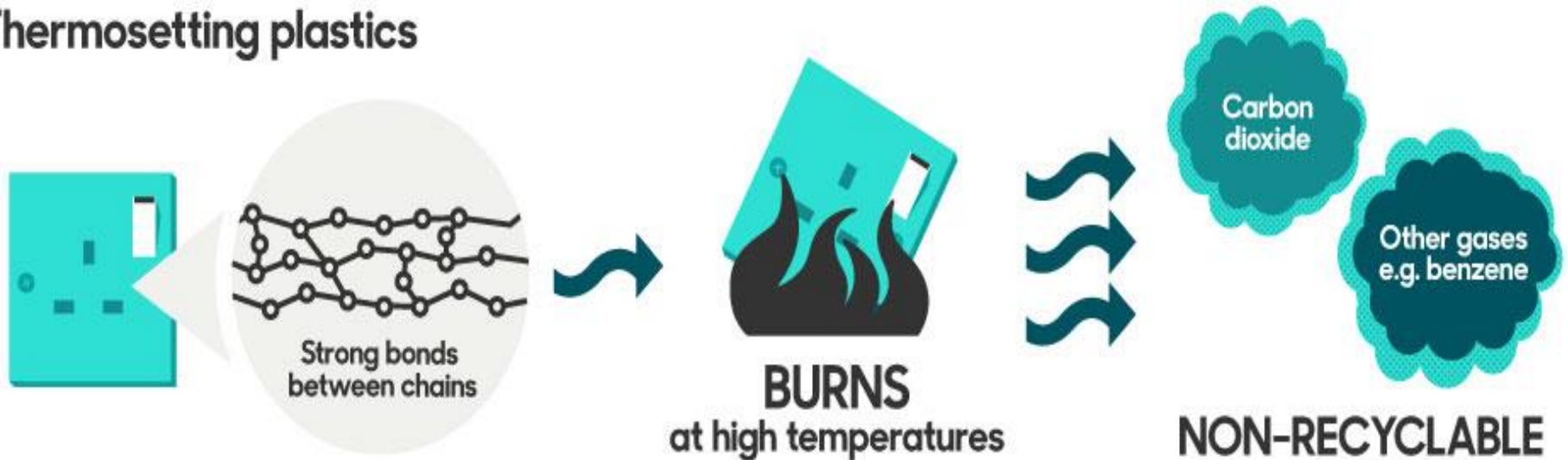


Non-recyclable

Thermoplastics



Thermosetting plastics



Thermosetting plastics cannot be recycled by the normal method of heating because the molecular bonds that bind them together burn instead of melting. There are cutting-edge chemical processes that can be used, but they are a long way off being economically viable.

Logistically difficult

Although all thermoplastics are chemically possible to recycle, some are logistically difficult. Click on the image and labels below to see why some plastics might not be accepted by your local authority.

Aluminum Cans

Become new aluminum cans



Refillable Glass Beer Containers

Can be reused up to 15 times



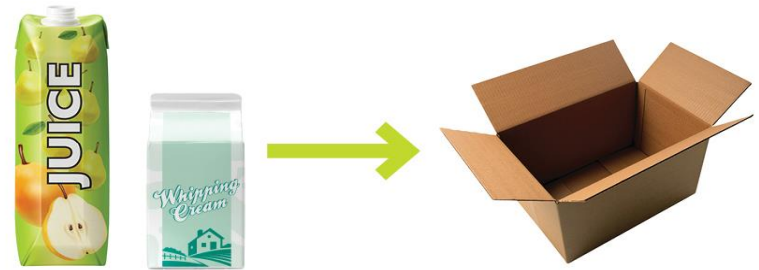
Plastic Containers

Used in the manufacture of new plastic containers or plastic products



Polycoat, Juice and Milk Cartons

Converted to paper pulp and cardboard



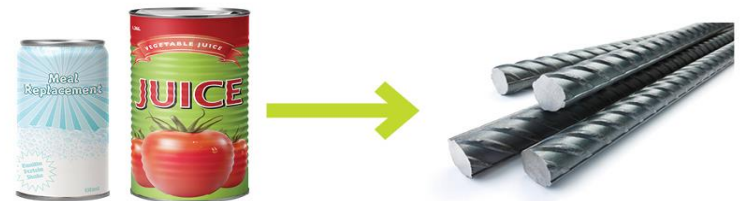
Glass Containers

Used in fibreglass insulation



Bi Metal Containers

Used for scrap metal that becomes construction rebar



Where next?

