



ENERGY AND RECYCLING: The Recycling Process

Recycling is the process of turning a used, no longer useful product into its raw state so that it can be turned into a new product.

Recycling is not a modern idea; it has been around for hundreds of years. Before industrialisation, people would recycle goods on a daily basis as it was not always easy to replace them.

Recycling became more important during both World Wars through necessity due to the unavailability of goods. Today, recycling in the UK is very common with most homes, businesses and public bodies recycling the waste they no longer need.

The recycling process

The journey of a recycled product varies depending on the type of material, but generally these are the main steps:

1. The items are placed in recycle bins that are collected by local authorities.
2. The items are collected and transported to a recycling plant where they are sorted and cleaned. After this process they are returned to their raw state so that they can be recycled into a new product (e.g. paper is turned into slurry when it is recycled; this slurry is then mixed with other products to produce different quality paper).
3. The new recycled item is bought and reused.

This is a very simplified version of the journey of a recycled product - different materials are recycled in different ways.

In order for the process of recycling to work there needs to be:

- lots of recyclable material
- a system of collecting these materials from homes and buildings
- a local processing centre
- demand for the recycled material by manufacturers and consumers.



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Issues around recycling

Whilst it is universally accepted that recycling is an important and necessary process in our ever-growing world, there is some debate about the ways in which it is done and the consequences of this.

Cost: Recycling is expensive – money has to be spent on collecting and processing materials, as well as costs for transportation and running the recycle plant. There is also some debate about the working conditions and pay of those working in recycle centres.

Energy usage: Recycle plants are predominately run on fossils fuels, which produce carbon emissions. There is debate that some products should be incinerated rather than recycled, due to the environmental cost this incurs.

Demand: Countries like the UK import lots of glass products every year, such as wine and beer bottles. These can be recycled, but there is not always a high demand for the recycled materials by manufacturers and consumers. This leads to it being downcycled or disposed of as waste.

Trade: Some countries trade with others for recyclables; it has been argued that this means the ultimate fate of those items is unknown. Sending processed recyclables abroad is not an environmentally sound practice as the cost of transport and levels of carbon emissions are high. Furthermore, if a country is producing more recyclables than it can manage, there has to be a question mark over the amount of products and packaging being used. Ideally we should not have more waste (whether recyclable or not) than we can manage.

Social costs: In some countries entrepreneurial individuals (often the homeless or unemployed) have made a living from recycling. In Singapore there are individuals known as 'Karung Guni' that make a living from collecting unwanted items from homes and offices. When this process gets taken over by larger corporations and government bodies, these individuals lose their livelihood.

Despite these issues, recycling is certainly a worthwhile and viable method of dealing with unwanted items and reducing the waste going to a landfill. However, before recycling an item it is important to practice the process of reducing and reusing the amount we use, in order to live in a more sustainable way.



Did you know?

Around 16% of the amount you pay for a product in the UK is for the cost of packaging only and nearly all packaging ends up in landfill sites.