

# WHY RECYCLE ?



## RECYCLING CONSERVES RESOURCES

When we recycle, used materials are converted into new products, reducing the need to consume natural resources. If used materials are not recycled, new products are made by extracting fresh, raw material from the Earth, through mining and forestry.

## RECYCLING SAVES ENERGY

Using recycled materials in the manufacturing process uses considerably less energy than that required for producing new products from raw materials – even when comparing all associated costs, like transport.

## RECYCLING HELPS PROTECT THE ENVIRONMENT

Recycling reduces the need for extracting (mining, quarrying and logging), refining and processing raw materials all of which create substantial air and water pollution.

## RECYCLING REDUCES LANDFILL

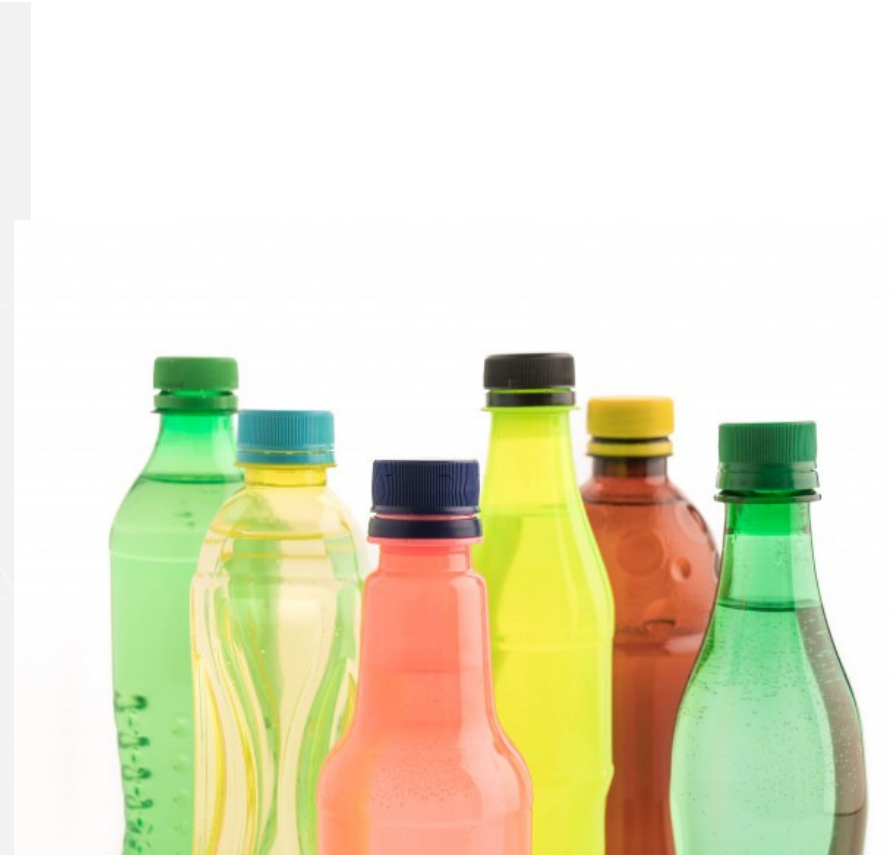
When we recycle, recyclable materials are reprocessed into new products, and as a result the amount of rubbish sent to landfill sites reduces.

# Plastics

Plastics are an important material in our economy, and modern daily life is unthinkable without them. At the same time however, they can have serious downsides on the environment and health. Plastics were found to be persistent pollutants of many environmental niches, from Mount Everest to the bottom of the sea. Whether being mistaken for food by animals, flooding low-lying areas by clogging drainage systems, or simply causing significant aesthetic blight, plastics have attracted increasing attention as a large-scale pollutant.

## How Is Plastics Recycled?

Try and select items that come in non-plastic recycled and recyclable packaging, to do your best to properly handle items that can't be reused. Check everything before you put it in the trash, as more and more items are able to be recycled these days. Remember that because plastic doesn't break down easily (if ever), recycling plastic means that it is still plastic, just being used for a different purpose. Therefore, you're not actually reducing plastic amounts or exposure, even in the recycling process.



i.e. PET bottles for soft drinks.

Is relatively safe. You should not refill PET bottles as the risk of additives leakage increases.



i.e. plastic containers and pipes. Is considered safe and is easy to recycle.



i.e. sewage pipes and synthetic window frames.

Is to be avoided. In the manufacturing process the toxic dioxin is released and softeners are often added.



i.e. soft plastics such as cling film, plastic drycleaner covers, carry bags. Is considered safe.



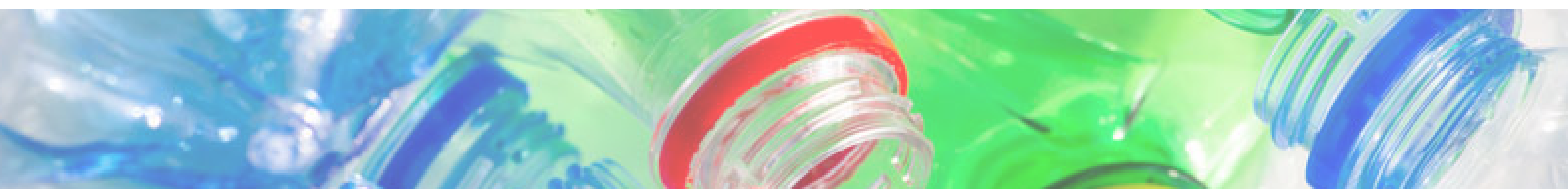
i.e. plastic furniture, jerry cans, car parts, bottle tops. Is considered safe.



i.e. disposable cups, meat trays, packaging for electronics. is to be avoided because of possible leakage of styrene.



Code 7 is a miscellaneous category that nobody can do anything with.





# Glass

Glass containers on the market may contain up to 95% recycled glass. Furthermore, an estimated 80% of all recycled glass becomes a brand-new glass container. Recycling also helps conserve natural resources. For every ton of glass recycled by consumers, more than a ton of raw materials is saved, which includes a thousand pounds of sand and hundreds of pounds of sodium carbonate and limestone.



## Different types of glass include

borosilicate glass - used for heat-resistant cooking equipment like Pyrex  
lead glass - for sparkling decorative glassware  
glass fibre - for insulation and fibre optic cable.

## Environmental impact

The production and use of glass has a number of environmental impacts. New glass is made from four main ingredients: sand, soda ash, limestone and other additives for colour or special treatments. Although there is no shortage of these raw materials as yet, they all have to be quarried, which can damage the landscape, affect the environment and use more energy.

## How Is Glass Recycled?

The glass is taken to a manufacturing or recycling plant where it is broken up into smaller pieces known as "cullet."

The cullet is crushed, sorted, cleaned, and prepared to be mixed with other raw materials.

When glass is produced from virgin materials, it requires high temperatures to melt and combine all the ingredients. Since cullet melts at a lower temperature, the more of it you add to a batch of raw materials, the less energy needed to melt it.

Ceramics such as coffee cups and plates present a problem in the glass-making process because they can weaken the glass. Even a small amount of ceramics can contaminate a whole batch of glass and cost the glassmaker millions of dollars.





# Cans

cans are taken to the processing plants along with residual waste. At the processing plants they are separated from the other waste using magnets (for steel) or eddy currents (for aluminium). They are then smelted and used to produce new steel or aluminium. This is used to manufacture new products. New uses are always found for recycled tin: in bicycles, trains, bridges or as new cans.

## Why Recycled Steel/Tin Cans?

Steel is the most recycled material on Earth. Around 65% of steel/tin cans are recycled, compared to only about 50% of aluminum cans. The amount of energy saved using recycled steel compared to virgin ore is up to 56%. Recycling steel also means saving landfill space. Like aluminum, steel can be recycled over and over again without losing its strength; this means recycled steel has a wide range of reuse from construction to household appliances.



## How Is Can Recycled?

Most steel cans will have a paper label, which does not need to be removed. The paper will be removed during the recycling process, and since it's a low quality of paper, it won't be worth your time to remove and recycle it with other paper.

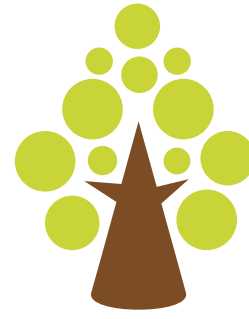
You should rinse your cans to remove any leftover food. This will prevent your recycling bin from smelling and reduce the risk of animals attacking your recycling.

Completely remove the lid (also made of steel) and insert into the can, then pinch the top so it closes. This will also prevent birds or cats from getting their heads stuck in the cans.



# Paper

## Paper comes from Trees...



In today's electronic age, people are starting to consider going paperless. But there's still a long way to go before we lose our dependence on this very important human product.

From our newspapers to our paper wrappings, paper is still everywhere and most of them are ending up in our landfills creating a staggering amount of paper waste. There was a time when paper was a rare and precious commodity. Now it fills our planet. It was initially invented as a tool for communication, but today, paper is used more for packaging. To produce paper takes twice the energy used to produce a plastic bag. Everything takes energy to produce. In the case of paper, it also involves cutting down trees. Deforestation is one of the main environmental problems we're facing in these times. 14% of all global wood harvest is used to make paper

## How Is Paper Recycled?



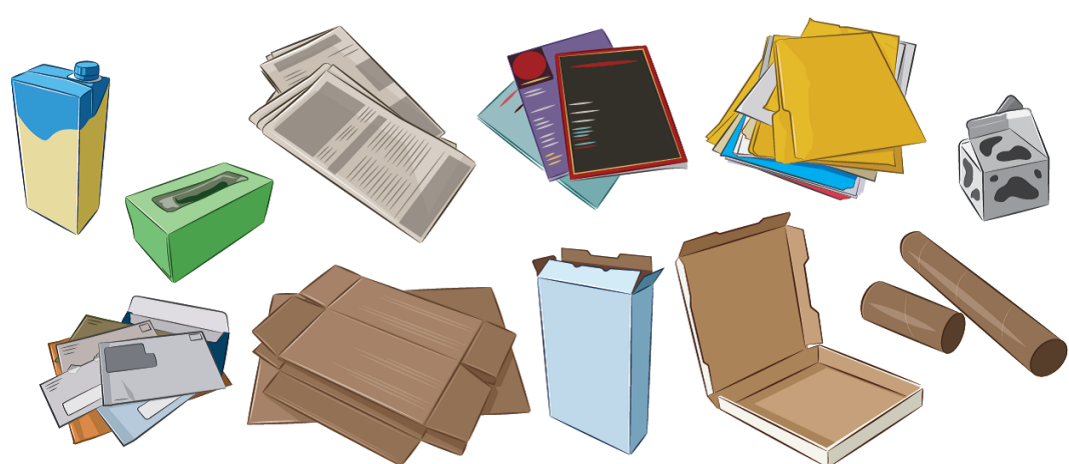
Be sure to remove any lids, straws, or fancy extras that come with your packaging. They go in the garbage.



Only recycle empty cartons. Rinsing isn't required for recycling them, but it does help ensure that the container is empty, as well as help reduce potential odor or pest issues if you plan to store your recyclables.



Flatten your cartons to aid storage and ease of handling. When in doubt, keep it out. This rule of thumb is important with all recycling practices. Rather than risk contaminating your local recycling stream, keep materials that you aren't sure about out.



## Environmental impact

Deforestation is the primary effect of our mindless use of paper. Conservation groups have made an admirable headway in protecting ecologically rich forests and limiting commercial access. This is great progress for mankind! Just imagine how long a tree will grow to its full size. We are only just realizing the wasted use of our trees - trees that give off oxygen and protect the planet from further Global Warming.