**Recycling**

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# Why is recycling important?

Recycling is very important because of the negative impact waste has on the natural environment. Damaging gases and chemicals are released from landfills, where they collect in the air and land.

 Recycling helps reduce the damage pollution causes. Deforestation is used as a way to gain raw materials such as wood, but deforestation causes great destruction to the habitats of animals living there, and releases greenhouse gases causing global warming.

Recycling reduces the need for the raw materials so there is no need for major deforestation and more rainforests and species can be preserved. When making products out of raw materials, a lot of energy is needed. Recycling does not require as much energy and so helps to keep natural resources.

 Recycling is important because it prevents us from overfilling our landfills and over-mining or logging the Earth for new raw materials. If you’d like to learn more about green living, contact the Energy Resource Center about what you can do to reduce your home energy consumption.

How does recycling work?

Recycling can take many forms. Any time you find a new use for something old, you're recycling. One example is making old cereal boxes into plant pots.

Recycling becomes more important on larger scales. At this level, used consumer goods are collected, converted back into raw materials and remade into new consumer products. Aluminum cans, office paper, [steel](http://science.howstuffworks.com/iron.htm) from old buildings and plastic containers are all exam­ples of materials commonly recycled in large quantities, often through municipal programs encouraging bulk household collections.

It's rare for a recycled product to be exactly the same as the original material from which it was recycled. Recycled paper, for example, contains ink residue and has shorter fibers than virgin paper (paper made from wood pulp). Because of this, it may be less desirable for some purposes, such as paper used in a copy machine. When a recycled good i­s cheaper or weaker than the original product, it's known as down**-**cycling (or downstream recycling). Eventually, goods move so far down the recycling stream it isn't feasible to recycle them any further. After being recycled a few times, paper is no longer usable. In some cases, goods can be up**-**cycled -- made into something of higher value than the original product. An example of this is a company making furniture pieces out of old [newspapers](http://people.howstuffworks.com/newspaper.htm) and aluminum cans.



What Happens to My Recycling After I Drop It Off?

Whether you drop your recycling off at a common bin and sort it out by glass, paper, cardboard and plastic or you throw it all in one can and roll it to the curb, you probably aren’t exactly sure what happens to it from there. You figure it’s repurposed instead of being buried in landfill somewhere. But how?

Want to know what happens to your recycling after it’s collected? Some people wonder if it’s really recycled. In most cases, if it can be recycled, it probably is.

The materials you throw in the recycling bin have value. They are broken down and turned into raw materials that manufacturers purchase. In some cases, they might cost more than new raw materials, but that’s becoming less and less common as recycling technology advances and as the materials become more readily available. Even if recycled material costs a premium, consumers are often willing to pay the extra few cents for an item made from recycled material these days. So, where does your recycling go?

# From collection

Even when the recycling is pre-sorted at drop-off centers, its first stop is a sorting center, where the reusable material is separated from unwanted extras. It’s bundled together for easier shipping and sent off to product-specific centers in most cases.

# Recyclable Material

# Paper and cardboard

In most cases, paper has to be white paper or newsprint and it can’t be shredded. Most sorting stations don’t have the capacity to deal with those little shards of paper and it’s not easily bundled. Once paper reaches its recycling center, a chemical process removes any ink from the fibers. From there, water and additives turn the paper to pulp and wash it. In some instances, recyclers add wood pulp to strengthen the paper before it’s bleached, strained, drained, squeezed and rolled flat to form brand new paper or newspaper.The process for cardboard is similar, though more wood pulp is added to the mixture to strengthen the board.

# Glass

Glass recycling plants smash glass bottles and use magnets and vacuums to remove unwanted labels and caps before blending the shattered pieces with silica sand, soda ash and limestone. The new mixture is shipped to glass plants where it’s blown into new bottles for beverages. The process can be repeated over and over again for glass. But don’t toss tiny pieces of broken glass in the recycling. It usually can’t be used.

# Plastics

Not all plastics can be recycled by all centers. Those with the symbols 1-7 branded into them can all be recycled somewhere. However, those with the symbols 3, 4 and 5 are the hardest to recycle. These are the poly plastics. No. 3 contains polyvinyl chloride. No. 4 contains polyethylene and No. 5 contains polypropylene. These types of plastics are used in plastic wrap, plastic bags, certain household containers, plastic bottle tops and carpets.

Most recycling centers don’t accept these types of plastics. Those that do take them have a limited market for the materials. Several organizations are working to find ways to recycle more plastics. Those plastics that can be recycled are cleaned, melted and turned into pellets that are sold to manufacturers all over the world. China is the world’s largest importer of recycled plastics.

# Aluminum

Those soda cans are one of the simplest items to recycle. The cans are broken into shards and melted down to form ingots –nuggets – of pure aluminum. They are sold to manufacturers who turn them into soda cans again. Aluminum is one of few recyclable items that can be reused over and over again.

# Why can't we recycle everything?

Some ,materials can’t be recycled because if we recycled them they will cause damage to the environment like for example pollution or global warming for example plastics that are put in landfills that can't be melted can be put into some building material or something like chairs or benches. Same like old Porcelain like toilets sinks, Bricks could be pulverized and mixed with cement to build retaining walls or something like that.

You would think that all plastic, except for the thin material used to wrap packages and cover cloths, could be recycled, but there is something about the different types of plastic which makes some recyclable and some that are not.

The ability to recycle a plastic item rests with many factors, including its material, its usability in new products once it has been broken down into its original components, and whether or not a market is in place that can facilitate transactions of the recycled materials from sellers to buyers."

Melting plastics safely is quite expensive because until above 2500degC, there is releasing of poisonous gases and this can be a problem in getting all plastics recycled

Only some plastics called recyclable plastic can be recycled
since they do not cause any damages (smoke etc.) to the environment
you also get these sought of plastic bags in the market

Another example is food, food cannot be recycled but can be given to animals or pets or if the foods condition is good, we can give it to poor people but not to throw it

Benefits of Recycling

# Recycling saves 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 materials from the earth, through mining and forestry.  Recycling helps conserve important raw materials and protects natural habitats for the future.

Recycling saves energy:

Using recycled materials in the manufacturing process uses considerably less energy than that required for producing new products from raw materials There are also extra energy savings because more energy is required to extract, refine, transport and process raw materials ready for industry, compared with providing industry-ready materials.

# Recycling helps protect the environment:

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

# Recycling reduces incineration:

When we recycle, recyclable materials are reprocessed into new products, and as a result the amount of rubbish sent for incineration reduces.
Burning your rubbish creates ash which is difficult to dispose of and gases which are released into the atmosphere.  ​

**Don’t waste! Create!**