

Recycling

What Items Can be Recycled

On average every Australian throws out about 800 kilograms of rubbish each year, an amount that adds up to 14 million tonnes nationwide.

- About 16% of household garbage is made up of used packaging that could have been recycled.

Yes:

Plastics

- All plastics codes 1-7
- Ice cream and takeaway containers
- Milk bottles
- Juice & cream containers
- Cordial bottles



Aluminium & Steel

- All empty steel cans
- Aluminium soft drink cans
- Clean aluminium foil & pie trays
- Empty aerosol cans



Paper and Cardboard

- Telephone directories
- Newspapers & magazines
- Cardboard, cereal & food boxes
- Office paper
- Envelopes & office mail



Glass

- All empty glass bottles & jars



Cartons

- Empty milk & juice cartons



No:

Food scraps



Plastic bags



Polystyrene



Nappy



Crockery



Syringe



Ceramics



Cookware



Recycling Hints:

1. Do not place recyclables in plastic bags. Use a tub or basket to transport recyclables from your kitchen to your recycling bin to ensure your recycling efforts are not wasted.
2. In order to conserve water, it is not necessary to rinse out containers but please ensure they are clean of food scraps.
3. It is not necessary to peel labels off containers as they are taken out during the recycling process.

Recycling Helps the Environment by:

Reduces Landfill

Recycling reduces the garbage placed in landfills, which helps the environment by reducing the need for new landfills. Because modern landfills are sealed tightly in an attempt to protect the environment from contamination, they also inhibit degradation of organic waste. Items that consumers purchase because they are biodegradable and therefore, are supposed to decay quickly, are taking decades to decay when sealed off from air and water. Papers, including newspapers, are a major filler of modern landfills. If individuals would recycle all of their newspapers, they could significantly prolong the use of each landfill, not to mention save many trees from being cut down.

Reduces Contamination

Batteries and components used in electronic devices, such as mobile phones, computers and toys are harmful to the environment as they decompose, and therefore should be recycled. Old computer monitors may contain as much as eight lbs. of lead. Flame retardants are used in the manufacture of plastic cases and components as well as cadmium. These are all harmful to the environment and people if they swallow them or breathe in fumes. Of course, that is what can happen around unregulated landfills. The air and water often become contaminated as water passes over these components, leaching the chemicals into the soil and underground water. Eventually the chemicals in the underground water spread, contaminating area wells, streams and rivers, and eventually the fish and other seafood that we eat. Harmful emissions begin to rise into the air surrounding unregulated landfills. Recycling old batteries, computers, and other electronic devices can reduce or eliminate these hazardous chemicals from contaminating our water and food. The old landfills still in use are also fraught with pests such as rats, flies and mosquitoes that spread germs and disease for miles around the landfill.

Saves Precious Resources

Recycling saves our precious resources from being used up. Recycling newspapers, cardboard and junk mail can save trees from being cut down. Of course, the trees provide oxygen for us to breathe and remove harmful carbon dioxide from the air. Remember that the forest also provides homes for animals and plants, some of which are becoming extinct from losing their natural habitat. Recycling plastic products such as bottled water, soda bottles, and milk and juice jugs also reduces the need for new petroleum to make new plastic products.

Recycling Processes and Products

Each of the different products we recycle – paper and cardboard, glass, steel cans, aluminum, plastic and liquidpaperboard – requires a different process to turn it into a new and valuable product.

Paper and cardboard are baled and sent to a factory where they are de-inked and turned into pulp that forms the basis of new paper and cardboard products.

Glass is sorted into three main colours – clear, amber and green – and crushed for transportation to manufacturing plant where it is ground into a sand-like product and used to make new glass bottles.

Steel cans are compacted into bales and sent to BHP to be melted down and used in the construction of new steel products.




Aluminum too is compacted into bales and sent off to KAAL Australia where it is smeltered into aluminum ingots which are then used as the basis of new products made from aluminum.

Code 1 PET and CODE 2 HDPE Plastics are baled according to their colours and material type. For PET there is clear and green, and for HDPE there is clear (milk bottle colour and density) and coloured (shampoo/detergent bottle colour and density). Both are compacted into bales and sent to companies which then flake, and in some cases, pelletise these, ready for use in a diverse range of new plastic products.

Liquidpaperboard (e.g. cardboard milk cartons) is baled and sent off to a paper-manufacturing company where the outside surface is removed and the clean white board component used to make new office paper.



WHAT HAPPENS TO MATERIALS WE RECYCLE

Product Being Recycled...		Recycled Into...
Paper and Cardboard Products		Remanufactured into a range of new paper and cardboard products including cardboard boxes, newspaper (40% recycled content), toilet paper, tissues, serviettes, kitty litter, moulded paper products, and recycled paper.
Milk and Juice Cartons		The cardboard component of these products is used to make a high-quality recycled office paper.
Glass Bottles and Jars		The majority of glass recycled in Australia is turned into new glass products, however some recycled glass is used as an abrasive by sandblasters, and in road bases.
Plastics		
 PETE		Soft drink bottles, (multi-layer) detergent bottles, clear film for packaging, carpet fibres, fleecy jackets.
 HDPE		Compost bins, detergent bottles, crates, mobile rubbish bins, agricultural pipes, pallets, kerbside recycling crates.
 V	UPVC	Detergent bottles, tiles, plumbing pipe fittings.
	PPVC	Hose inner core, industrial flooring.
 LDPE		Film for builders, industry packaging and plant nurseries, bags.
 PP		Compost bins, kerbside recycling crates, worm factories.
 PS		Clothes pegs, coat hangers, office accessories, spools, rulers, video/CD boxes.
Steel		All steel that is recycled in Australia is turned into new steel products such as steel cans, building materials and new motor parts.
Aluminum		All aluminum that is recycled in Australia is smeltered into ingots which are then used to make new aluminum products such as drink cans and foil products.

Recycling Organic Waste

By turning food scraps and organic garden waste into compost you can:

- Improve soil quality and garden vitality by releasing the rich nutrients in the compost into the soil of your garden
- Prevent greenhouse gas emissions by encouraging the aerobic breakdown of organic material and reduces the amount of garden and kitchen waste going to Landfill
- Recycle valuable nutrients and reduce the use of artificial fertilisers
- Saves you money

What to add to a Compost Heap	What not to add to a Compost Heap
<ul style="list-style-type: none">• Vegetable and food scraps• Fallen leaves (in layers)• Tea leaves and tea bags• Coffee grounds• Vacuum cleaner dust• Soft stems• Dead flowers• Old potting mix• Used vegetable cooking oil• Egg shells• Old newspapers (wet)• Grass cuttings in layers• Weeds• Sawdust (not from treated timber)• Wood ash	<ul style="list-style-type: none">• Meat and dairy products• Diseased plants• Metals, plastic, glass• Animal manures (especially the droppings of cats and dogs)• Fat• Magazines• Large branches• Weeds that have seeds or underground stems• Bread or cake (may attract mice)• Bones• Sawdust from treated timber

Interesting facts

- About half of what we throw into the garbage bin is food and garden vegetation.
- Compost bins and worm farms are available from some local councils.
- Anything that's sharp or thorny should also be left out, because although the compost heap will destroy the thorns, you're likely to scratch yourself later on, risking a trip for a tetanus injection.
- Did you know that increasingly more and more local councils are introducing organic recycling services to reduce the amount of organic waste going to landfill. Check whether your local council has a scheme and if they don't ask them to introduce one.



The 3Rs – Reduce Reuse Recycle

Garbage is a growing problem for today's society. Each year we recycle more, but we also create more garbage. It is a problem we all help to create, but we can all play a part in reducing the mountain of garbage. With a little more thought, we can all change our habits so that each one of us throws out less garbage. These small, but worthwhile changes may at first seem inconvenient, but soon they will become second nature.

Some of the key benefits of minimising waste are:

1. It conserves valuable resources including:
 - Minerals – used to make many useful materials (e.g. bauxite is used to make aluminium).
 - Energy – used in mining, harvesting, manufacturing and transporting.
 - Native forests – used to make some types of paper and other wood products.
 - Petroleum – used to make plastics.
 - Landfill sites – the life of existing sites is extended.
2. It saves money. Cutting waste can save money in many different ways:
 - If you waste less, you get more out of what you buy and waste disposal costs are reduced.
 - Businesses become more efficient.
 - Household incomes stretch further.
3. It reduces the impact on the environment.
 - Fewer areas need to be affected by resource extraction (e.g. mining), harvesting or solid waste disposal.
 - Less fossil fuel needs to be burnt for energy, thus reducing the release of greenhouse gases and other pollutants.

The 3Rs

The 3Rs are a simple guide to help each of us minimise waste at work, school and home. Combine the 3Rs with composting and we have a neat package to help us deal with our waste. In minimising waste, remember to first 'reduce', then 'reuse', and finally 'recycle' or 'compost' what is left.



Reduce

Reduce simply means living more carefully so that you have less rubbish to get rid of later on. This could mean:

- Shopping more carefully by looking for products with minimal packaging.
- Making foods at home instead of buying takeaways or convenience foods.
- Making gifts and cards for family and friends, rather than buying them.
- Growing your own vegetables and flowers.
- Maintaining and repairing clothes, toys, tools and appliances rather than replacing them with new ones.
- Looking after items so they last a long time.
- Using disposables carefully so that you do not waste them.
- Hiring, sharing and borrowing things rather than buying new ones where possible.
- If you have a home computer, reduce the amount of paper you use by proof reading your work from the screen before printing a hard copy.

When shopping, try the following ideas to help reduce unwanted garbage:

- Take a bag, basket or box with you when you shop.
- Use a shopping list. Try not to buy things on impulse. Buy only what you really need.
- Avoid goods that have excessive packaging.
- Choose products that come in concentrated form (e.g. kitchen detergent) or that have refills (e.g. certain ballpoint pens, some laundry detergents).
- When you buy packaged goods, choose packaging that is either made from recycled materials or that can be refilled, reused or recycled.
- Buy products made from recycled materials (e.g. paper, compost bins).
- Buy products that are durable and will last you a long time.
- Buy products that will not go out of fashion quickly and that can be repaired.
- Buy fresh foods where possible and compost the scraps.
- If possible, buy some food from bulk stores or markets. Take your own bags to be refilled.
- Where there is a range of sizes available, choose the largest that you can use.



Reuse

Reusing means to use the same item more than once, preferably many times, rather than disposing of it after one use. Reusing saves the energy and resources that would have been used to make a new product and means that the product does not go in the bin and end up in landfill.

There are lots of ways that you can reuse things around the home. Here are a few ideas:

- Reuse empty glass jars for jams and sauces.
- Take a basket or cloth bag with you when shopping.
- Hire, share or borrow items you do not use very often.
- Open envelopes carefully so that they can be reused.
- Use small, empty plastic soft drink bottles as drink bottles for school or outings.
- Buy second-hand books for school and pleasure.
- If you have too much junk around the house, arrange a garage sale and allow others to reuse your junk.
- Save your old margarine and ice-cream containers and egg cartons and donate them to a school or preschool.
- Buy reusable items rather than disposable ones (e.g. cloth hankies instead of paper tissues and rechargeable batteries instead of one-use batteries).
- Reuse sheets of paper that have been used on one side for children's drawings, notepaper by the phone and letters.
- Reuse plastic shopping bags as bin liners or plastic carry bags.
- Give old clothes, toys, furniture and appliances to charity.



Recycle

Recycling means to return a waste product to a factory where it is remade into either the same product or something different. For example, used aluminium cans can be recycled

back into either new drink cans or engine blocks for new vehicles. Recycling saves landfill space and also rescues the resources that were used to make the product in the first place. In some cases, recycling can also save energy.

Materials that can be collected from most homes for recycling include:

- Paper and cardboard
- All glass bottles and jars
- Aluminium cans and foil
- PET plastic soft drink bottles and fruit juice bottles (Code 1 – PET)
- Plastic milk, cream and juice bottles (Code 2 – HDPE)
- Steel cans
- Milk and juice cartons

Some councils also collect plastic juice bottles with Code 3 – Vinyl.

There is some variation from council to council in the materials collected for recycling. Check with your local council for details about which materials are collected for recycling in your area.

You should only place out for kerbside collection those materials that are collected by your council. If the wrong materials are placed out, the recyclables may become contaminated. Contamination threatens viability of the kerbside recycling system by increasing the costs to the collectors, the recyclers and ultimately the community.

Many more items can be recycled including:

- Plastic supermarket bags (collected at some supermarkets)
- Laser cartridges and ribbons
- Wine bottle corks
- Car parts (car bodies, batteries, tyres and motor oil)
- Building materials (timber, concrete, and bricks)
- Metals (lead, steel, copper and brass)
- Fire extinguishers (yellow, halon type).

References

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