

Waste & Recycling

Part 3f – Material Fact Sheets

Scrap Metal and White-ware



What is Scrap Metal and White-ware?

Scrap metal is left over from both product manufacturing and consumption. It can include items such as galvanised roofing iron, tyre rims, beams, unwanted pots and pans. Rusted fencing wire is not usually accepted by recyclers, and may go into landfill.

White-ware is also a form of scrap metal and includes unwanted appliances such as washing machines, ovens, fridges, freezers, microwaves and dishwashers.

The more frequently recycled metals are steel, iron, lead, aluminium, copper and stainless steel and there are two main categories of metals, these are ferrous (contain iron, are attracted to magnets) and non-ferrous.

What Happens to Scrap Metal and White-ware ?

Scrap metal and white-ware can be recycled via any transfer station.



Photos: Scrap metal and white-ware at a transfer station awaiting collection.

Steel will be recycled into many everyday items. Examples include:

- Food and pet food cans
- Drink cans, aerosols and paint cans
- Ovens and fridges
- Washing machines, radiators
- Bridges & girders
- Road signs, tools
- Cars and trucks
- Knives and forks

Metal Recycling Facts

- When a magnet sticks to a metal, it is ferrous e.g. mild steel or iron – remember “steel sticks”!
- Non-ferrous metals e.g. copper, aluminum, brass, and stainless steel will not stick to a magnet.

What about Reduction and Re-Use?

- Always stop and think whether the metal items are no longer wanted nor needed, as others may have a use for them, especially if they still work. In Auckland *Resource Rescue* (Entrust Foundation) accepts unwanted white ware and tries to fix them for re-use via social charities. <http://www.resourcerescue.co.nz/>
- Although the metal is no longer wanted for use in its current form, can it be used in any other way e.g. perhaps for building a sculpture to exhibit at school or for display in a garden? Do you know any welders, preferably with artistic flair?
- White ware can have other uses, e.g. farmers often use old chest freezers for storing animal feed to keep it dry and safe from rats and mice.

What to Remember when Recycling Metal and White-ware

- When loading a car or trailer with waste and recycling always try to keep scrap metal separate; this saves time, money and makes it easier once at the transfer station.
- White-ware can be heavy, so remember to ask for help with lifting, and be aware of trailing cables as a trip hazard.

Class Challenges

1. How many everyday items can you think of that could be made from recycled metal such as steel and aluminium? Think about things used at home as well as school.
2. How many different types of metal can you think of and what products are they typically used to make?
3. Interview the school's caretaker to find out whether scrap metal and white-ware from the school is recycled and where it goes?

Further Resources

- **www.recycle.co.nz** provides information and tips on the recycling of scrap metal and white-ware.
- YouTube has many range of videos showing scrap metal recycling
Example: <https://www.youtube.com/watch?v=M-O-0XG3HJw>
- How a materials recovery facility (MRF) works, separating card, paper, plastics, metals and glass - and examples of what can be made from the recycled materials. USA example (13 minutes, with diagrams).
<https://www.youtube.com/watch?v=7nZXyjrBraY>
- Art/upcycling idea pictures <https://www.youtube.com/watch?v=oFjawstfzIU>

