

# WHERE DO THE TRUCKS TAKE OUR RUBBISH

## WHAT ARE THE OPTIONS?

### AMAZING FACTS

#### for Home and School



### World Wide Waste...it's just astounding what we can do with it all....

When you wave good bye to your rubbish as it disappears down the road in a big truck, do you ever wonder where it goes and what happens to it next?

- Let's face it... humans produce billions of tonnes of rubbish and waste. Some towns are even named in "honour" of this. *Mucking* in Essex, England is home to 15% of London's landfill.
- Nowadays, most rubbish ends up in a **landfill**. Yes, humans are still chucking their muck down a big hole. However, nowadays, in most countries only certain types of rubbish are sent to landfill. Solid waste, such as household waste, construction debris, and sludge from the sewage treatment plants are the main ingredients of a landfill.
- To reduce smells, vermin, and other health hazards, a layer of soil is often spread over each layer of garbage, usually at the end of each operating day. This is called the daily cover.
- Modern, well-run landfills are also lined with plastic or bentonite clay to prevent toxic liquids, leaking thorough and entering the groundwater. Large landfills often have gas wells to safely extract landfill gas, which consists mostly of methane.
- Water and oxygen are required to feed the microbes and bacteria that can break down garbage. But water and oxygen are in short supply deep in a landfill, so decomposition takes place very slowly. When scientists cored down into a landfill in the U.S.A, they discovered newspapers over 30 years old that they could still read.
- With more and more people producing more and more waste, landfills are filling up faster than new sites can be found for them.

Another way of destroying waste material is by burning it. This is called

**incineration**. Incineration is carried out both on a small scale by individuals and on a large scale by industry. It is recognised as a practical method of disposing of hazardous waste materials (such as biological medical waste).

- Though still widely used in many areas (especially developing countries), incineration as a waste management tool is becoming controversial for several reasons:
  - First, it may be a poor use of many waste materials because it destroys not only the raw material, but also all of the energy, water, and other natural resources used to produce it.
  - Some energy can be reclaimed as electricity by using the combustion to create steam to drive an electrical generator, but even the best incinerator can only recover a fraction of the caloric value of fuel materials.
  - Burning garbage also produces acid gases, carbon dioxide and toxic chemicals that must be treated with expensive air pollution control equipment to avoid contributing to acid rain, ozone depletion and air pollution.





## Zero waste today ...that's what we say.

You will probably agree that chucking your muck down a hole, or burning it are not the most environmentally friendly ways of getting rid of your rubbish.

Nowadays recent times, some clever humans have brain-stormed some new ways to reduce the amount of world wide waste and are trying to ensure that the natural resources of our planet don't run out. Instead of getting rid of waste by burying it or burning it ...they believe that there are many different ways to re-use the waste – it's just a matter of re-designing products so that they have a 2<sup>nd</sup> and 3<sup>rd</sup> life. Following this argument and you can see that getting rid of rubbish is not the end of the road but rather, just another step in the continuous life cycle of the product.

Zero Waste is a philosophy and a design principle for the 21st Century. It includes 'recycling' but goes beyond recycling by taking a 'whole system' approach to the vast flow of resources and waste through human society.

The idea of **“Zero Waste”** is to maximizes recycling, minimizes waste, reduces consumption and ensures that products are made to be reused, repaired or recycled back into nature or the marketplace

Our use of resources, from oil, gas, wood, and minerals to air and water, has escalated dramatically over the last hundred years.

If we continue to degrade or over-use our environmental resources (natural capital) we will leave future generations with a serious and increasing environmental debt. In the past natural capital has been treated as superabundant whereas today the remaining natural capital appears to be both scarce and complementary and therefore limiting.

By disposing waste to landfill we bury many useful resources preventing ongoing use of the material(s) in one form or another. Although these materials can be remade, this requires large amounts of energy, and the consumption of more resources.

The disposal of waste to landfill removes the potential to derive a higher resource value from the waste materials through re-use, recycling and resource recovery.

## Open your mouth wide...say “Ahh”

Recycling is just one way to reduce wastes. To be really effective, we have to incorporate the **4Rs Reduce, Reuse, Recycle and Recover into our daily routine.**

Reducing the amount of waste we produce is by far the most effective way to battle the flow of garbage into the landfill. **Packaging makes up about half our garbage by volume, one-third by weight.**

### When you shop, try to find products that have little or no packaging.

What we cannot **Reduce** we should try to **Reuse.**

- repair you old radio rather than buying a new one.
- use jars, tins, and plastic containers to store leftovers, bulk foods and household items.
- buy durable, good quality products that will last.



Materials and packaging that cannot be reused should be **recycled** at home, work and school. You can contribute to recycling by purchasing recycled and recyclable products.

### Ask yourself these questions:

- Can this product or its packaging be reused or recycled?
- Was it produced from recycled materials?

Whenever possible, choose products that meet these criteria.

Finally, **Recover energy from wastes** that cannot be used for something else. This fourth **R** is difficult to put into practice by individuals, and is geared more toward industry.