

FUEL FROM WASTE

Transforming rubbish to resource

RUBBISH

Food Waste

Wood

Natural Fibres

Paper and Card

Garden Clippings

RESOURCE

Fuel

Heat and Power

Briquettes

Useful Chemicals

Building Materials



Rubbish, a resource?

We all throw away heaps of rubbish everyday which ends up on landfill sites and can ultimately add to global warming by producing greenhouse gases as it decays. However, what if we could use this rubbish to produce something valuable that we use everyday? Over sixty percent of rubbish starts life as something biological, such as vegetable peelings, garden waste and even paper and cardboard packaging. All these biological wastes are made up of strings of sugars called cellulose fibres, which can be broken down using enzymes (natural catalysts), this sugar can then be used in turn to make alcohol (ethanol) just like brewing beer. Once this alcohol has been purified, it has multiple uses including being mixed with petrol and used in cars as fuel. Other bi-products can also be used in building materials and for creating heat and power.

Many problems, one solution

The cost of disposing of rubbish to landfill and the cost of crude oil are increasing rapidly, causing all our bills to go up. Also the way Bio-fuels are currently produced, from food crops such as corn and sugar cane, is increasing the costs of everyday products such as bread. This is due to food manufacturers and bio-fuel producers competing against one another for food crops, pushing prices up.

The answer is to use otherwise unwanted waste and turn it into a petrochemical substitute. Therefore reducing costs of waste disposal, preventing competition for food crops and producing inexpensive, clean fuel - many problems, one solution!