

# First of the 3rd generation green technology

The fastest, most efficient, low emission production method to maximise energy from bio-mass/household waste and use for cooking and power.



Cooking stove



EfW processor

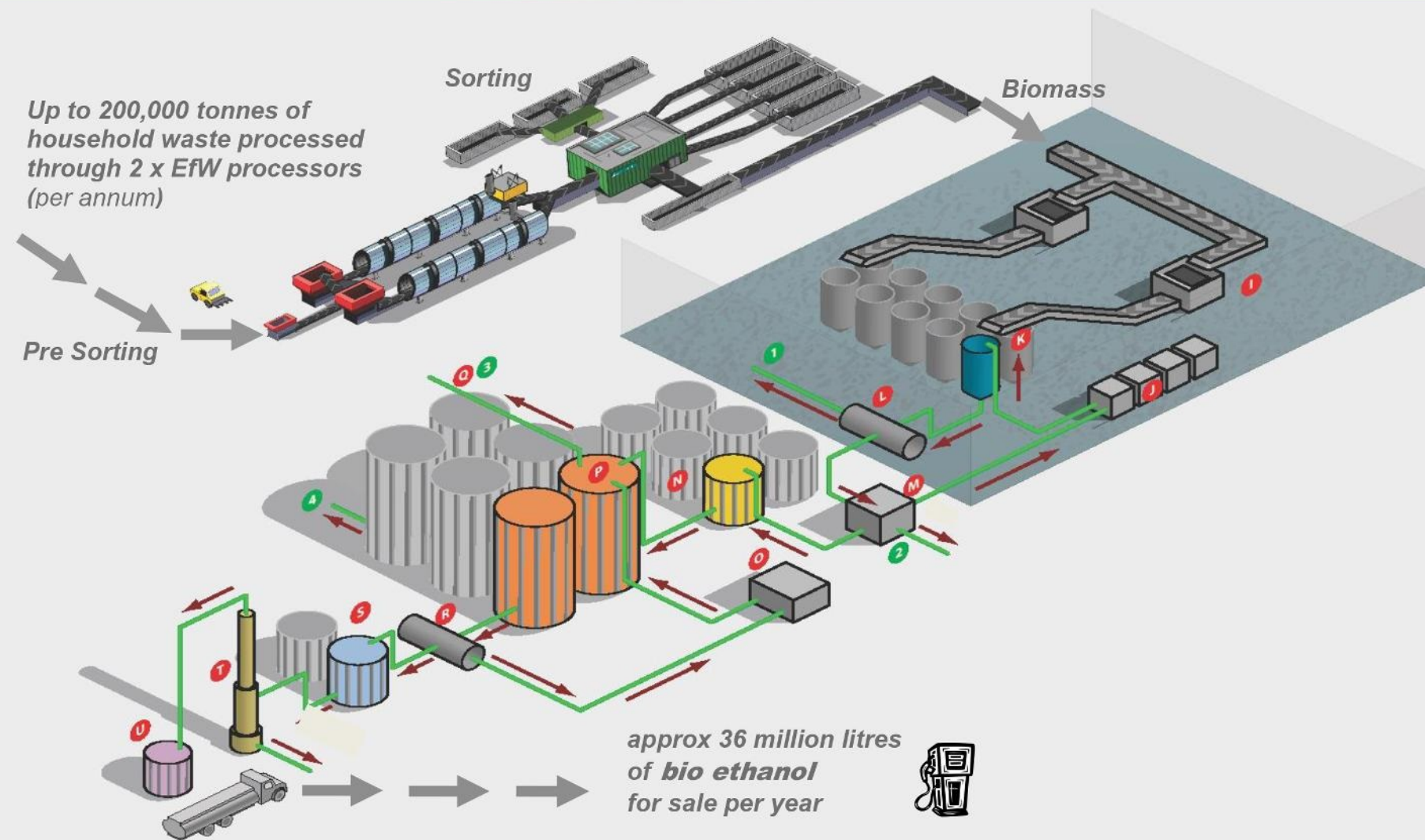
EfW technology provides a solution to the problem of disposal of household waste.

Waste can be sorted by either hand or machine.

The biomass (food/crops etc) is sanitised in the EfW Processor where all the fibres are 'expanded' in preparation for the production of bioethanol by means of hydrolysis fermentation/distillation.

Each EfW Processor will process approximately 10 tonnes of waste per hour (2 x EfW Processors are required to handle a 200,000 tonne per annum plant).

## SCHEMATIC – WASTE TO BIO ETHANOL PROCESSING PLANT



Circa 300 litres of bio ethanol will be produced from each tonne of biomass

- Recycle unsorted household waste
- Create sanitised bio-mass
- Convert bio-mass into bio-ethanol
- Efficient conversion into bio-ethanol or electricity, avoiding landfill
- Achieves EU national target
- Environmentally friendly

### KEY TO BIO ETHANOL PLANT

<b>I:</b> Storage Hopper	<b>J:</b> Acid Storage	<b>K:</b> Hydrolysis	<b>L:</b> Filtration	<b>M:</b> Acid Recycling	<b>N:</b> Sugar Solution	<b>O:</b> Yeast
<b>P:</b> Fermentation	<b>Q:</b> CO2 Storage	<b>R:</b> Centrifuge	<b>S:</b> Bio ethanol 10%	<b>T:</b> Distillation	<b>U:</b> Bioethanol 98%	