

## Processing and Destinations of Kerbside Collected Recycling & Refuse

	Food	Paper & Card	Cans & Plastics		Glass			Residual
Primary Processing	<p><i>Anaerobic Digestion (AD) plant: Bridgend.</i></p> <p>AD process produces:</p> <ul style="list-style-type: none"> <li>- Methane, used as biogas for electricity for National Grid (NG)</li> <li>- Slurry, processed into agricultural fertiliser</li> <li>- Mechanical separation of reject material (large bones, plastic packaging etc.)</li> </ul>	<p><i>Sorting Facility: Deeside, Flintshire</i></p> <p>Separation of paper from cardboard</p>	<p><i>Transfer Station: Brecon</i></p> <p>Separation of steel and aluminium cans from plastics before baling all material for onward haulage</p>		<p><i>Glass reprocessor: Cwmbran, Torfaen; Ellesmere Port, Cheshire</i></p> <ul style="list-style-type: none"> <li>- Magnetic and eddy current separation of metals from glass</li> <li>- Wet process to float paper and plastics 'reject' from glass</li> <li>- Classifying of glass into separate grain sizes</li> <li>- Poorest quality 'fines' fraction of glass graded into 'eco-sand' product for sale as aggregate</li> </ul>			<p><i>MBT Plant: Llanidloes</i></p> <p>Material undergoes 'Mechanical Biological Treatment', including shredding and drying. Reduces overall mass of material buried, and stabilises it to prevent subsidence in closed and capped landfill cells.</p>
Secondary Processing	<p><i>Incinerator: Typically Cardiff / Bristol.</i></p> <ul style="list-style-type: none"> <li>- Reject incinerated for electricity for NG</li> <li>- Incineration produces ash</li> </ul>	<p><i>Paper Mills: Manchester (Cardboard); Kings Lynn, Norfolk (Paper)</i></p> <ul style="list-style-type: none"> <li>- Separation of reject (packaging tape, staples etc.)</li> <li>- Paper/card pulped and recycled</li> <li>- On-site incineration of non-metal reject for electricity to power plant operations</li> </ul>	<p><i>Material Recovery facility (MRF): South Normanton, Derbyshire</i></p> <ul style="list-style-type: none"> <li>- Separation of reject material (fines, paper, non-recyclable plastics etc.)</li> <li>- Optical sorting of plastics into individual polymer streams.</li> </ul>	<p><i>Metal Reprocessor: Port Talbot (Steel Cans); Warrington, Cheshire (Aluminium Cans)</i></p> <p>Recycled into new cans, car parts and other recycled products.</p>	<p><i>Glass reprocessor: Cwmbran, Torfaen</i></p> <p><i>Best grades of glass are used to produce fibreglass insulation for domestic market.</i></p>	<p><i>Metal Reprocessor: Various</i></p> <ul style="list-style-type: none"> <li>- Magnetic and eddy current separation of metals into ferrous and non-ferrous.</li> <li>- Shredding of metals ready for smelting in furnace</li> </ul>	<p><i>Incinerator: Various</i></p> <ul style="list-style-type: none"> <li>- Reject incinerated for electricity for NG</li> <li>- Incineration produces ash</li> </ul>	<p><i>Non-hazardous Landfill: Llanidloes</i></p> <ul style="list-style-type: none"> <li>- Material added to landfill cells for burying and final disposal.</li> <li>- Once cell is capped, methane gas produced by anaerobic digestion within cell is captured and utilised as biogas.</li> </ul>
Tertiary Processing	<p><i>Cement Manufacturer: Various.</i></p> <p>Ashes used as replacement for raw material in cement manufacture.</p>	<p><i>Metal Reprocessor: Various</i></p> <ul style="list-style-type: none"> <li>- Separation of metals into ferrous and non-ferrous.</li> <li>- Metals recycled into new products</li> </ul>	<p><i>Plastics Reprocessors: Various</i></p> <ul style="list-style-type: none"> <li>- Pelletising of plastic polymers</li> <li>- Recycling into new plastic products: bottles, pots, tubs, trays</li> </ul>	<p><i>Incinerator: Various</i></p> <ul style="list-style-type: none"> <li>- Reject (PVC) landfilled as chlorine means it cannot be incinerated.</li> <li>- Reject (non-recyclable material) incinerated in Europe for electricity for their NGs</li> </ul>	<p><i>Cement Manufacturer: Various</i></p> <p>Ashes used as replacement for raw material in cement manufacture.</p>			