

Commercial and industrial resources				
<b>ZCS VISION</b>	Commercial and industrial products are designed for longevity of use, repairability and, when reaching end-of-life, ease of material recovery for recycling by minimising use of composite materials and non-recyclable plastic polymers. Many goods are leased rather than purchased so that the producer retains responsibility for maintenance and final disposal/recycling. Production processes will use a higher proportion of recycled material compared with raw materials, all sourced as close to the place of production as practicable. All commercial companies participate in a recycling service. Synergies between industries are developed so that waste materials in one process can be used as input resources for another.			
	<b>Sourcing/Production</b>	<b>Distribution/Retail</b>	<b>Consumption</b>	<b>Post Consumption</b>
<b>CURRENT PRACTICE (summary)</b>	Production processes mainly use raw materials that are not necessarily sourced locally.	Most commercial goods are distributed to retailers for sale direct to customers, who take on responsibility for disposal of packaging and maintenance & disposal of products.	Many goods are designed with short operating life and are difficult or expensive to maintain and repair, and with in-built technical obsolescence. Consumers prefer to buy and own many types of goods that may only be used very rarely and which, therefore, sit in storage unused and, in some cases, becoming technically obsolete.	Commercial and industrial (C&I) waste tonnage is not well recorded in the UK. According to Council data, C&I waste represents 567,000 tonnes/a of Shropshire Waste, (approx. 52%) of which 81% is recycled, 13% is landfilled, and 6% is transferred out of county. Much of this waste will arise from production processes, where recycling is generally good. Waste from commercial businesses, restaurants etc, that is similar to municipal waste is poorly served by recycling collections and is typically disposed to landfill or incineration by a variety of different waste management companies. Because many products are not easily repaired and often contain non-recyclable materials or composite materials they are disposed of to landfill/incineration. Markets for many recycled materials are unstable with limited options for

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				using recovered materials in new industrial processes.
<b>BASELINE CARBON-FOOTPRINT (estimate)</b>	<p>Reduction in waste arisings. Recommend target to reduce Shropshire (i.e. Telford &amp; Wrekin and Shropshire Councils) annual municipal waste arisings (excluding street cleansing, road sweepings, litter and parks green waste)</p> <p>1st April 2019 to 31st March 2020: 244,868 tonnes (1.122 tonnes per household per year).</p> <p>The Shropshire municipal waste carbon footprint 2019/20 was measured as a net negative carbon footprint of -170 kg/tonne of municipal waste avoided carbon emissions. Value calculated using the EA developed WRATE tool on behalf of Shropshire Council and approved methodology based on the Defra 2011 Methodology for Company Reporting for waste management factors on behalf of Telford &amp; Wrekin Council. The net avoided emissions calculated is reflective of the relatively high levels of recycling in the County, energy recovery of the majority of residual waste not recycled and very low landfilled tonnage (less than 2% of all arisings).</p> <p>Municipal Recycling Rates in Shropshire for 2018/19 were 55.5% for Shropshire Council and 44.8% for Telford &amp; Wrekin Council. The 2019/20 Recycling Rates are expected to be published soon with Shropshire Council rate expected to be relatively unchanged and Telford &amp; Wrekin Council rate expected to appreciably rise following the introduction of a dedicated food waste collection service in August 2019.</p>			
<b>Key STRATEGIES to achieve ZCS vision</b>	<b>Government level:</b> Laws put in place to stop <a href="#">built in obsolescence</a> .		Government procurement used to support suppliers following principles of the <a href="#">Circular Economy</a>	<a href="#">Waste Hierarchy</a>
	<b>Regional and Local Level:</b> Regional and Local Economy to apply principles of <a href="#">Circular Economy</a>	Support local markets and specialist producers		
	<b>Individual Level:</b> Think about the carbon implications of the buying choices made. Use consumer pressure to send a message to producers.	Where possible buy locally produced goods and services.	"Buy less, choose better, make it last" Vivienne Westwood <a href="#">Ecotips</a>	
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<b>EXAMPLES of good practice or innovation</b>	<a href="#">Fairphone</a> design for longevity, easy repair, and modular upgrades. Its goal is to make		The production process is designed to incorporate fairer, ethically sourced, recycled, and	<a href="#">Velorim</a> is a business that takes old cycle tyres and innertubes and turns them into a raw

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	the phone's hardware last as long as possible, and to provide the support to keep its software up to date.		responsibly mined materials in its phones – to increase industry and consumer awareness	material for other industries. An excellent example of the Circular Economy in action.
				Click for <a href="#">guides to repair just about anything</a> with a huge support community and online advice

**Recommended POLICIES/ACTIONS and associated carbon savings/impacts & other benefits**

		Sourcing/Production	Distribution/Retail	Consumption	Post Consumption
<b>policy/action #1</b>	<b>Recommended policy/action</b>	<a href="#">Last Object</a> is a company based on reducing single use plastic.			
	<b>CARBON-SAVINGS</b> (CO2e tonnes)				
	<b>Hard-to-quantify impacts</b> on Carbon Footprint				
	<b>Other benefits</b> e.g. health/social benefits				
	<b>Key STAKEHOLDERS</b> to engage				
	<b>Potential sources of funding</b>				
	<b>Obstacles to overcome</b>				

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