

Mineral resources				
ZCS VISION	Switching to more sustainable building materials such as wood rather than concrete, and a reduction of road building has led to less demand for the sands, gravels and aggregates that are used in Shropshire, or exported to other areas. Some quarries are no longer needed, and plans are in hand to turn them into nature reserves, to increase habitat and biodiversity. Those that still operate ensure that the machinery they use is powered by renewable energy wherever they can.			
	Sourcing/Production	Distribution/Retail	Consumption	Post Consumption
CURRENT PRACTICE (summary)	<p>Aggregates represent the most significant mineral produced in Shropshire. National policy guidance requires Shropshire to maintain an adequate and steady supply of aggregates during the current Plan period to 2026. This Local Aggregate Assessment takes into account the supply and demand of aggregates for Shropshire including the area administered by Telford &amp; Wrekin Council. The majority of aggregate production takes place in the area administered by Shropshire Council. There is currently no sand and gravel working, but crushed rock from a single site in Telford &amp; Wrekin contributes about a quarter of the annual sales. Both areas contain facilities where construction, demolition and excavation waste is recycled to produce aggregates. <a href="https://shropshire.gov.uk/planning-policy/monitoring-and-site-assessment/local-aggregates-assessment/">https://shropshire.gov.uk/planning-policy/monitoring-and-site-assessment/local-aggregates-assessment/</a></p>			<p>The Battlefield Energy Recovery Facility (ERF) incinerator bottom ash (IBA) that is produced from the treatment of waste at the Battlefield Energy Recovery Facility is sent offsite and processed. Any separated metals are recycled and the remaining inert material is processed, graded and used. An example of use would be as an Incinerator Bottom Ash Aggregate (IBAA) sub base for roads such as the material used in the M1/M6 Catthorpe junction construction. <a href="#">M1/M6 Catthorpe Junction IBAA use</a></p>
BASELINE CARBON-FOOTPRINT (estimate)	<p><a href="#">Authority's Monitoring Report (AMR)</a></p>	<p>In the monitoring report there is no mention of the Carbon emissions released through these activities. All data is measured in million tonnes excavated.</p> <p><a href="#">Shropshire Local Aggregates Assessment 2016-17</a>: the graph on p5 indicates that up to 2036 there is a downward trend to aggregate excavation in Shropshire</p>		<p>The <a href="#">Mineral Products Association Report 2020</a> gives UK figures for 2018. Between 1990 and 2016 carbon emissions had reduced by 46% but in 2018 still represented 6m tonnes of carbon.</p>

	Sourcing/Production	Distribution/Retail	Consumption	Post Consumption
<b>Key STRATEGIES to achieve ZCS vision</b>	Work with industry and regulators			
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<b>EXAMPLES of good practice or innovation</b>	<a href="#">Carbon Neutral Business Zone (CaNeBuZo)</a>	<a href="https://www.aggregate.com/news-and-resources/case-studies/canebuzo-lincolnshire">https://www.aggregate.com/news-and-resources/case-studies/canebuzo-lincolnshire</a>		Aggregate Industries also embeds Circular Economy principles into its business model.
	New cements and concretes that have a lower carbon footprint. <a href="#">Ecopact</a>			

**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>	Increased use of demolition and waste materials used to replace extracted raw materials	Switching to renewable energy sources for equipment and reducing transport. Developing more sustainable materials for the construction industry such as low carbon cements and concretes.		Using sites as locations for <a href="#">wind and solar farms</a> . Developing <a href="#">Carbon Capture and Storage</a> facilities on redundant sites. Increasing biodiversity by <a href="#">creating wildlife parks</a> on former workings.
	<b>CARBON-SAVINGS</b> (CO2e tonnes)	Section 6.3 of the <a href="#">MPA report</a> gives UK baseline figures			
	<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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		Sourcing/Production	Distribution/Retail	Consumption	Post Consumption
<b>policy/action #2</b>	<b>Recommended policy/action</b>	Work with mineral operators, highway contractors and the construction industry to identify and apply good practice in emissions reduction.			
	<b>CARBON-SAVINGS</b> (CO2e tonnes)	Need baseline performance data			
	<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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		Sourcing/Production	Distribution/Retail	Consumption	Post Consumption
<b>policy/action #3</b>	<b>Recommended policy/action</b>	Encourage Central and Local Government to introduce carbon performance as a key consideration in policy, procurement strategies and tender specifications			
	<b>CARBON-SAVINGS</b> (CO2e tonnes)	Need baseline performance data			
	<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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