

| Plastics | | | | |
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| ZCS VISION | <p>Plastics are a useful part of everyday living from piping fresh clean water to homes, to use in medical packaging and devices and construction sector. Products containing plastic are designed with regard to a circular economy for end of life so that recycled content is maximised, they can be reused, repaired and easily recycled. Single use plastic is eliminated by reusable projects and plastics that cannot be recycled have been phased out. Plastic packaging is limited to uses where alternative biodegradable materials or lower carbon impacts are not appropriate, so as to preserve durability and health and safety of product contents. Recycling collections are improved by standardised kerbside and commercial waste collections, widely available on-the-go collections and deposit return schemes. Consumers understand the materials in packaging they are purchasing and the plastics in products and if they can be reused or recycled or if there is an environmentally and lower carbon or equivalent alternative. Initiatives, such as the WRAP UK Plastics Pact has encouraged and enabled businesses to understand this and design products and packaging to fit with circular economy principles.</p> | | | |
| | Sourcing/Production | Distribution/Retail | Consumption | Post Consumption |
| CURRENT PRACTICE (summary) | <p>In the main products/ packaging is not designed for end of life processing, mixtures of polymers used which makes final material not recyclable, many of which can only be processed through high temperature incineration. Many of the "biodegradable" bags can only be home composted if it states it, most need very high temperatures to decompose.</p> <p>You may also see some bags labelled Bioplastic, these are ones that are made from renewable raw materials derived from maize, potatoes, seaweed and so on. For more information see Wikipedia.</p> <p>Manufacturers need to engage with support programmes to prevent losses of pellets during processing. Businesses using polymers need to understand</p> | | <p>There is limited knowledge and awareness of what the different plastics are, understanding of recycling categories is not always understood.</p> <p>Mixed materials render even recyclable plastic useless because it can contaminate the batch.</p> <p>Black plastic is another problem, as even though chemically it may be recyclable, the black colour renders it invisible to the sensors used in waste sorting centres.</p> | <p>A belief that businesses and local authorities are not being diligent on what happens to waste (i.e. whether it is recycled, sent abroad, sitting in warehouses, incinerated or sent to landfill) leads to people not engaging with recycling.</p> <p>Shropshire household plastics are collected with cans and glass as part of the fortnightly kerbside collection service. This mixed material is delivered to one of 5 transfer stations in the Shropshire Council area from which it is transported by articulated lorries to the Four Ashes Material Recycling Facility (MRF). The plastics suitable for recycling are separated at the MRF from the other materials as described in the Veolia YouTube video Magpie plastic sorting</p> |

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| | <p>if they change design/material to use alternative materials that can be fully recycled.</p> | | | <p>technology as part of the recycling process The bales of material are then sent for further processing to produce a suitable plastic feedstock for production of new goods, including the method described in the Veolia YouTube video Recycling Plastic Waste Plastics not readily recyclable such as plastic film are sent for energy recovery i.e. incineration. Energy Recovery from plastic waste generates carbon emissions and other carcinogenic pollutants, and so is not a sustainable answer to the problem.</p> |
| <p>BASELINE CARBON-FOOTPRINT (estimate)</p> | <p>This is a study that needs to be carried for the business sector - how much plastic waste is generated (Shropshire and Telford & Wrekin) and where it is processed. The Environment Agency has figures for waste sites on allowed permitted quantities of material. However, it is not known how much plastic waste material from Shropshire and Telford & Wrekin businesses goes for processing, incineration, or landfill, or is shipped abroad or illegally stored.</p> <p>Veolia has figures for residential waste</p> | | | <p>By their very nature plastics are light in weight. However, Annual Shropshire Council municipal tonnage (excluding plastics not readily recyclable that are sent for energy recovery) for 2019 was still 2,042.51 tonnes.</p> |

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| <p>Key STRATEGIES to achieve ZCS vision</p> | <p>Businesses to engage with support programmes, for example:</p> <ol style="list-style-type: none"> 1. The Plastics netWork for businesses across the plastics supply chain (manufacturers, processors, packaging, products, waste) to communicate, meet and learn. Areas covered include: <ul style="list-style-type: none"> • legislation, support programmes (i.e. Operation Clean Sweep, low energy plastics processing; • environmental issues, auditing, plastic chemical design and material integrity, use of post-consumer plastic in materials; • sharing best practice and innovation and Circular Economy (UK Circular Plastics Network). 2. BEEP - Business Energy Efficiency Programme. Free energy and resource efficiency reviews and grants up to £20,000. Small businesses are faced with high and fluctuating energy costs; the Business Energy Efficiency Programme will help local businesses to manage and reduce these costs, while improving their environmental impact. <ul style="list-style-type: none"> • The Business Energy Efficiency Programme helped over 300 businesses to manage and reduce these costs, while improving their environmental impact. (April 2019). • The Business Energy Efficiency Programme is part funded by the European Regional Development Fund, and is administered by Worcestershire County Council, in partnership with Herefordshire Council, Telford and Wrekin Council, Worcestershire Councils, Herefordshire and Worcestershire Chamber of Commerce and Shropshire Chamber of Commerce. • The programme is available to businesses throughout Worcestershire, Herefordshire, Telford & Wrekin and Shropshire. • To apply for an assessment and grant through the Business Energy Efficiency Programme, email sustainability@worcestershire.gov.uk or call Business Central on 01905 677888. 3. LOCOP – Covers Shropshire; support grants for low carbon innovation – grants available to help bring new products to market or new processes that will reduce carbon usage. 4. CREST - including ARLI, ATETA. ERDF Business support in environmental sector including innovation, alternative materials, biomaterials, energy, resource usage, life cycle assessment, supply chains, circular economy 5. Plastic Free Communities SAS - Both Bridgnorth and Bishops Castle have plastic free status. 6. The Recoup website aims to: <ul style="list-style-type: none"> * Lead and inform the continued development of plastics recycling and resource management * Be the UK's plastic value chain co-ordinators and the independent voice of reason * Educate the public and businesses on the recycling of plastics to protect the environment. 7. Shropshire Against Pointless plastic 8. Shrewsbury Cup 9. Green Options Zero Waste Shop (Darwin Centre, Shrewsbury) & Bridgnorth Green Shop <p>Info and support also available from: Ludlow 21, Transition Telford, Green Shropshire Exchange, Herefordshire Green Network</p> | | | |

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| | PLASTIC SECTOR SUPPORT/PROGRAMMES: <ul style="list-style-type: none"> • RecyClass • EUCertPlast • Operation Clean Sweep • BSI PAS 510 • New Plastics Economy • Plastics Pact • Viridor • Leeds by Example • Project Lodestar • Zero Waste Scotland • Eunomia reports • Terracycle • Circular Plastics Alliance • Valpak Material Flow Reports • Alliance to end plastic waste | | | |
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| EXAMPLES of good practice or innovation | Sustainable Bridgnorth campaigns - pointless plastics, SAS plastic free status, refill shops - water and food | | | |
| | Shrewsbury Cup | | | |
| | Setting up buying groups/clubs to cut down on packaging. An example of an on-line one is The Good Club https://www.goodclub.co.uk/ | | | |
| | Ricoh toner cartridges HP UK | Ricoh worked with their suppliers of toner cartridges to redesign plastics so they could be reused and fully | | HP Instant Ink is a subscription service that replaces cartridges |

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| | | recycled rather than being incinerated. | | when needed and provides free returns for spent ones. |
| | LiveCoco electric toothbrush heads, recycled and recyclable | | | |
| | Zero waste Scotland | Chemical recycling: oil plastic waste; BASF circular processing. Stop looking at post-consumer plastic as a waste and view it as a resource. | | |
| | The Rubbish Diet campaign | Resource in production | | |
| | Raising awareness amongst businesses and consumers. | The British Plastic Federation , Plastics Europe and Polymer Consultants such as PS Partnerships have a lot of information regarding plastics. Everyday Plastic | | |

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

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| policy/action #1 | Recommended policy/action | The base line data is not available which makes tracking change difficult. However, it is up to all of us to engage with the issue. We need to, as consumers, move away from single use plastic and as manufacturers and retailers think about plastic in packaging. Some businesses need to use plastic packaging, for food safety for example, but for others there are viable alternatives. Behavioural change within businesses is critical along with addressing skills gaps and underpinning knowledge and moving operations away from linear to circular economic principles. | | | |
| | CARBON-SAVINGS (CO2e tonnes) | | | | |
| | Hard-to-quantify impacts on Carbon Footprint | | | | |
| | Other benefits e.g. health/social benefits | | | | |
| | Key STAKEHOLDERS to engage | Consumers to write to retailers/manufacturers to urge them to stop using unnecessary plastic packaging and to ensure that the packaging they use is fully recyclable. | Consumers to write to companies to thank them for using recycled materials. | | |
| | Potential sources of funding | | | | |
| | Obstacles to overcome | | | | |

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| policy/action #2 | Recommended policy/action | Shrewsbury Cup is available across all of Shropshire T&W including tourism attractions i.e. National Trust, Severn Valley railways etc | | | |
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| | Potential sources of funding | | | | |
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| | | Sourcing/Production | Distribution/Retail | Consumption | Post Consumption |
| policy/action #3 | Recommended policy/action | Other Shropshire towns follow/ take on Sustainable Bridgnorth campaigns | | | |
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| | Hard-to-quantify impacts on Carbon Footprint | | | | |
| | Other benefits e.g. health/social benefits | | | | |
| | Key STAKEHOLDERS to engage | | | | |
| | Potential sources of funding | | | | |

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| | Obstacles to overcome | | | | |
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| | | Sourcing/Production | Distribution/Retail | Consumption | Post Consumption |
| policy/action #4 | Recommended policy/action | Businesses in supply chain/manufacturers to be made aware of all support - register for Plastic netWork, Access support for innovation and resource use CREST, BEEP & LOCOP | | | |
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| policy/action #5 | Recommended policy/action | Copy Bishops Castle's Fight The Plastic campaign. Awareness raising for local consumers and businesses. Aim for Plastic Free Status (SAS accreditation) | Involve and lobby local businesses: <ul style="list-style-type: none"> • displaying publicity • stocking alternative products • reducing plastic packaging • offering water bottle refills • lobby head offices | <ul style="list-style-type: none"> • Display and sell plastic-alternative products in stalls at e.g. Farmers Markets • Display product information and benefits • Display plastic reduction measures • Engage shoppers with above plastic reduction measures • Encourage shoppers to lobby businesses | <ul style="list-style-type: none"> • - Display and demonstrate types of plastic and recycling information • Publicise local littering conditions and statistics (litter picking and display of collected waste) |
| | CARBON-SAVINGS (CO2e tonnes) | | | | |
| | Hard-to-quantify impacts on Carbon Footprint | Consumer pressure on producers to remove SUP in wider community | | | |
| | Other benefits e.g. health/social benefits | Reduction of waste in the environment Reduction of waste in the food chain. | | | |
| | Key STAKEHOLDERS to engage | Local businesses All shoppers | | | |
| | Potential sources of funding | Local businesses Sale of alternative products | | | |
| | Obstacles to overcome | | | | |
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