

ZCS Progress Report 2022-3

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Email address: www.geofftaylorphotography.com.

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EXECUTIVE SUMMARY

We have made substantive progress in most of our priority areas since we wrote the Zero Carbon Shropshire plan at the end of 2020.

- We have developed greater capacity for action on the climate and ecological emergencies through supporting the formation of new climate action groups around the county. This has also entailed setting up a lobbying network which can be used to share campaigns and influence local decision makers in a coordinated fashion.
- Several local town and parish councils have now written climate action plans. Collaborative action with South Shropshire Climate Action has allowed us to exploit synergies and avoid duplication of effort. We have also promoted the Carbon Literacy training offered by Save Our Shropshire to councillors and residents.
- With respect to business, the Cool Shropshire and Telford platform launched last year is proving a useful source of advice and support. We have continued to expand county-wide business sustainability networks through our Enterprise Engagement group.
- Thanks in part to the development of our toolkits, knowledge sharing, and promotional activities, more people in Shropshire are now able to take advantage of local Repair Cafés to fix household items. This avoids waste and reduces overall consumption. We now have at least nine local repair centres across the county with further growth planned.
- In 2021, we mapped the county for renewable energy potential, and we're now mapping Shropshire for land use, carbon sequestration and biodiversity. This will provide significant opportunities for inward investment through environmental land management schemes, carbon offsetting and biodiversity net gain projects.
- The Future Ready Homes project, first envisaged by our Buildings Group, was launched by the Marches Energy Agency last year led by a number of professional members of ZCS. This project will help local people understand how they can lower carbon in their homes while saving on their energy bills. It will provide exemplars of retrofit that can be used by others.
- We have also helped establish some outstanding initiatives to improve the natural environment in the county, including the Shropshire Love Nature Festival which connects people with nature. This expanded significantly in 2022 with over 70 events. In addition, the Shropshire Good Food Partnership continues to develop promoting local food, local markets and regenerative farming.
- Working with the University Centre in Shrewsbury, we successfully engaged five students in 2022 to complete focussed research projects
- In 2022, we re-branded our website and all our materials to promote a more professional and engaging image. We have continued to communicate our activities and progress through a successful monthly newsletter.

Key Challenges

Despite the above successes, we recognise that the County is not on track to achieve Net Zero and the restoration of biodiversity by 2030, though we have no means of measuring progress in real time.

- The data analysis that underpins the carbon reporting tools (Council baselines, Impact tool, BEIS reports, etc) has a lag of two years, and is calculated top-down. We have data up to and including 2021 only. In addition, we have not been successful in measuring the carbon benefits

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of our project interventions and lack the resources to do so. This limits our ability to measure our impact to date.

- While ZCS has been instrumental in building capacity for climate action across the county, we have not succeeded in putting ZCS itself onto a sustainable footing. Last year, we identified the requirement to recruit a small number of staff to support communications and project coordination, but despite valiant efforts we have not succeeded in attracting operational funding. We remain overly reliant on a small pool of volunteers, and this limits our scope of action.
- Our working groups, originally formed to write the ZCS plan, are in decline. Our Buildings group is no longer meeting (though several members of the team are now employed on the Future Ready Homes project) the Transport group has struggled with meeting attendance, and our youth arm, Generation Zero Carbon, has temporarily folded. We have had to pull out of some public events owing to lack of available volunteers, though our close collaboration with SSCA has helped ensure that events in South Shropshire are better supported.
- Steering group attendance has also been in decline, with a lack of engagement from key partners such as the NHS, Environment Agency, and Telford & Wrekin Council. While we have an excellent working relationship with Shropshire Council with weekly meetings, this is not currently replicated with Telford & Wrekin.

Focus areas moving forwards:

It is clear that we need to accelerate progress towards net zero and biodiversity restoration for Shropshire, while adopting more realistic expectations as to what we can achieve. This will entail:

- Seeking advice from local decision makers, experts and our supporters on how we can accelerate action in Shropshire.
- Identifying our critical stakeholders, holding the 20% of organisations that have 80% of the carbon impact in Shropshire to account for their progress.
- Improving our links with key partners, and building our capacity for advocacy.
- Continuing to build capacity for action and behavioural change in local communities and community interest groups, moving beyond the converted environmentalists (“green bubble”). It would be useful to re-engage young people through re-launching a young activists group for Shropshire.
- Putting ZCS onto a sustainable footing to ensure that the focus areas identified for our key themes: Transport, Energy, Buildings, Land use and Biodiversity, Consumption, and Communications can be adequately funded, resourced and progressed.

Review of Progress in Shropshire

The Department for Energy Security & Net Zero released its report on Local Authority greenhouse gas (GHG) emissions on 29th June 2023¹. This new report covers the period from 2005 to 2021. An important change is that the report now includes estimates for methane (CH₄) and nitrous oxide (N₂O).

The combined data for the two unitary authorities, Shropshire and Telford & Wrekin is shown in Figure 1, broken down by sector as defined within the Government report.

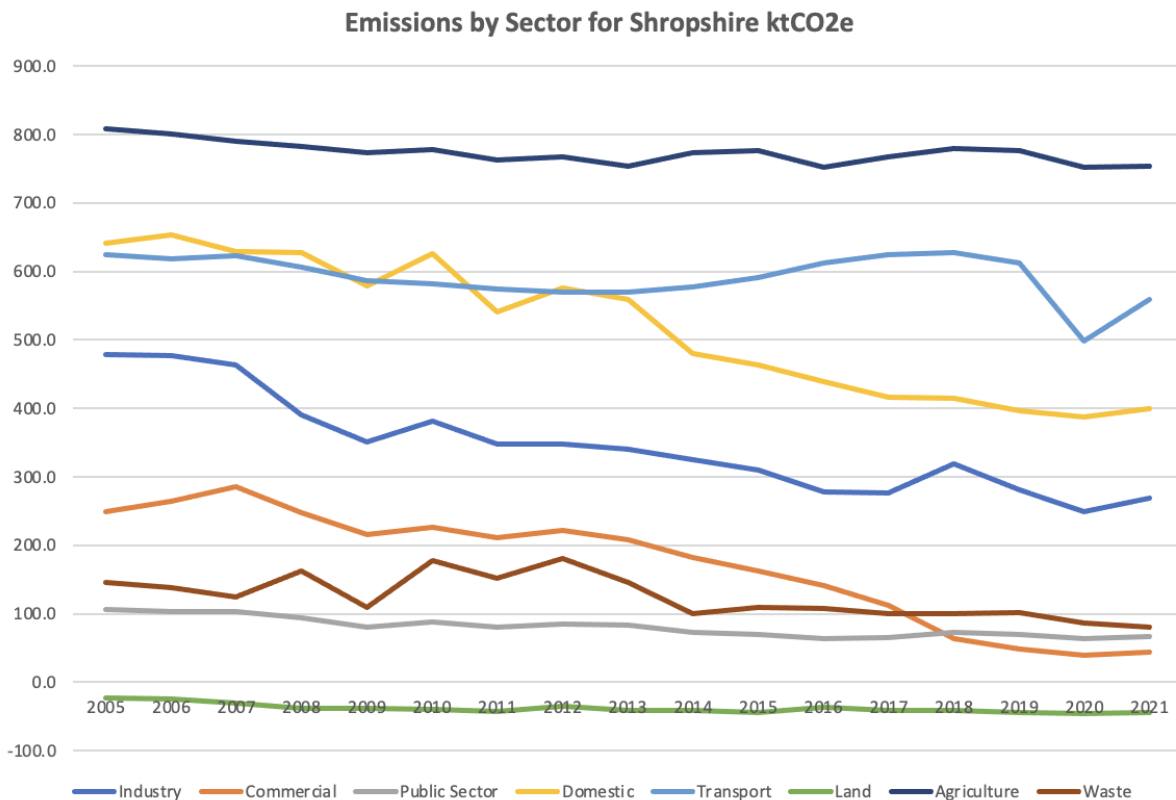


Figure 1 Emissions by sector based on the combined data for Shropshire and Telford & Wrekin

The Government report highlights agriculture as the largest contributor to GHG emissions in the county, followed by transport. This differs from our earlier analyses (for example in the ZCS Plan) and may be explained by the inclusion of methane and nitrous oxide emissions from livestock and soils in the figures for agriculture. This is the first report to include this data from 2005 onwards. Land use change and forestry (LULUCF) is represented by the green line in Figure 1. These figures are negative, showing that Shropshire is acting as an important carbon sink. This is reinforced by the recent work of our Land and Biodiversity group which calculates that Shropshire is holding about 78MtC. Carbon accounting calculates the value of various Shropshire habitats in carbon sequestration, while habitats are also assessed for net gain, and the restoration of biodiversity.

¹ See: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021>

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According to the Government report, the significant drop in emissions for Industry and Transport in 2020 (seen across the UK) is explained by a reduction in activity during the pandemic.

Figure 2 describes how GHG emissions have reduced from 2005 to 2021. The calculations suggest that carbon sequestration has increased substantially during this period through changes to forestry and land use (this appears overly optimistic, and may need further investigation for Shropshire).

However, only small improvements have been made in agriculture (7% reduction) and transport (10% reduction). These sectors remain the primary sources of GHG emissions, and this data suggests we may need to focus more efforts on these areas.

Percentage Improvement by Sector in Shropshire, 2005-2021

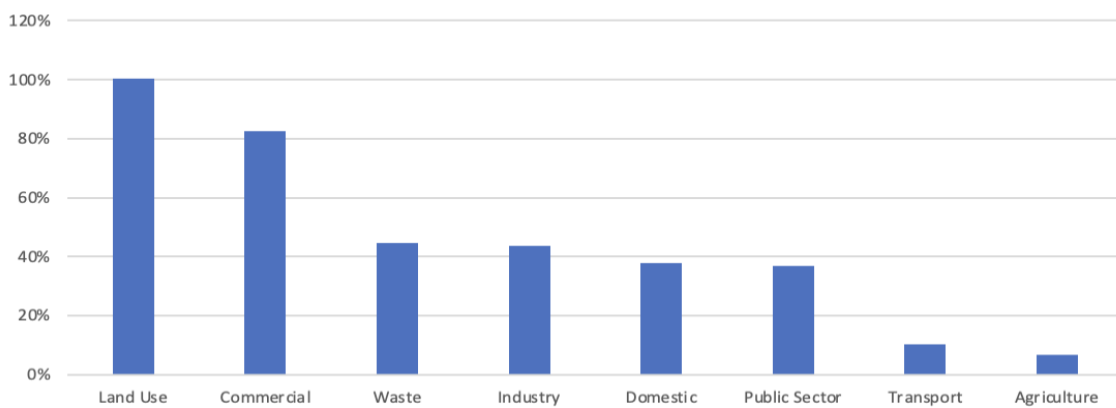


Figure 2 Areas of improvement from 2005-2021

The significant reductions in GHG emissions from Commercial, Industry, Domestic and Public Sector are largely the result of the deployment of renewable energy nationally, notably wind and solar.

Finally, Figure 3 shows the overall reduction in per capita emissions for the two unitary authorities. Note that these figures exclude the consumption of imported goods (these emissions are effectively outsourced to other countries for GHG counting). This point was discussed in the ZCS Plan.

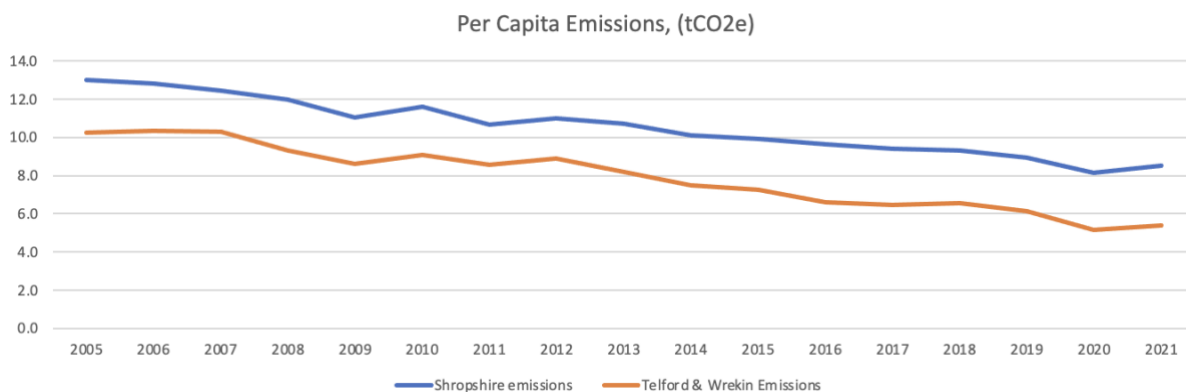


Figure 3 Reduction in Per Capita Emissions for the Unitary Authorities

Transport

Key Achievements for 2022:

- Making contributions to the county Local Cycling Walking Infrastructure Plans (LCWIP) and the Shrewsbury Big Town Plan.
- Promotion of, and providing advice about, e-bikes and e-vehicles.
- Advising Shropshire councillors on appropriate carbon reduction measures in local transport and bringing to their attention measures in neighbouring Wales and Herefordshire which should be replicated in Shropshire and T&W.

Focus areas moving forwards:

- Reducing car dependency for local journeys and carbon emissions thereof (Twenty's Plenty; Local Transport Networks; improved infrastructure for cyclists; car sharing).
- Increasing the EV charging network across Shropshire and Telford & Wrekin.
- Updating the pathways to 2030 sheet.

Energy

Key Achievements for 2022:

- Development of the Big Solar Co-op (Big Solar Co-op – community solar) with a Shropshire node co-ordinator.
- Establishment of Shropshire and Telford Community Energy (Shropshire and Telford Community Energy (stcenergy.org.uk)) as a Community Benefit Society.

Focus areas moving forwards:

- Accelerating the required changes in distribution infrastructure, so that EV charging and renewable generation schemes (for example) become realistic in terms of timescales and costs.
- Improving the efficiency of energy use in the domestic, commercial and public sectors, particularly by working with existing stakeholders.
- Creating a Shropshire/Marches investment culture that can take advantage of the opportunities created by the first two objectives.

Land and Biodiversity

Key Achievements for 2022:

- The establishment of Shropshire Good Food Partnership.
- Identifying a suitable model for carbon accounting that can be used to assess land use.
- Connecting the public to nature through the Shropshire Love Nature festival.

Focus Areas moving forwards:

- Carbon Accounting-Shropshire Habitats - Based on data and analysis of Natural England and Cranfield University statistics refine a carbon baseline with respect of all Shropshire's habitats

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including the farmed landscape. Define the top actions that will enhance this including habitat improvement, net gain and carbon sequestration potential.

- The Farmed Landscape- Shropshire Good Food Partnership (SGFP) - The farmed landscape by area is Shropshire's largest land use. Activity related to it generates significant carbon related impacts. Many innovative measures are ongoing or being developed to mitigate these. Through the medium of SGFP ZCS can encourage positive debate, research and action. This includes the following:
 - Webinar pending looking at future agriculture land use trends.
 - 'Good Food' Trail linked to the Shropshire Love Nature Festival planned.
 - Marches Farming Conference planned for early autumn.
 - Nutrient Density work is a priority at present.
- Marches Land Use (Natural Capital) Survey-Marches Local Enterprise Partnership (MLEP) - ZSC (and the Marches Nature Partnership) with the LEP have appointed contractors (TACP consultants) to draw up a land use proposal and Natural Capital assessment as to what pragmatically is possible with focus on woodland increases, sustainable energy (in particular wind and solar) and water (in particular flood and drought mitigation). The key output is a Nature Based Investment Prospectus for the Marches by May/June 2023.

Enterprise Engagement

Group purpose and remit

To identify and remove barriers for enterprises in Shropshire to engaging with sustainability aligned to our individual interests and areas of expertise. To enable enterprises to get into and / or progress actions by:

- Awareness raising, education, practical advice and signposting to resources, tools and knowledge bases via presenting, events, press and newsletter articles, exhibitions, networks.
- Promoting Cool Shropshire & Telford tool.
- Building networks, partnerships and strategic partnerships across the county to foster collaboration and increase our influence and reach.

Key Achievements for 2022:

- Education, awareness raising, etc
 - Chamber of Commerce Sustainability Conference, Oswestry promoting Cool S&T and carbon literacy
 - Partnered with Shropshire Growth Hub to run Carbon Literacy event and Cool Shropshire, in Shrewsbury with over 30 businesses attending and 15 of those going for Carbon Literacy certification.
 - Carbon Literacy and Cool Shropshire presentation to 70 businesses at local business sustainability event, Oswestry.
 - Supported VCSA events
 - Covered a number of presentations and exhibitions throughout the year.

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- Tools
 - Funding and launch of Cool Shropshire and Telford - a free for businesses sustainability on-line action planning tool launched. 130+ businesses signed up since June 2022 and funded again for 2023 by Shropshire and Telford & Wrekin councils.
 - Lobbying Shropshire Council / Tourism to create an integrated plan for sustainable tourism
 - Accessing ERDF funding via Aston University to develop a simple tool for calculating carbon emissions for home office businesses.
 - Accessing ERDF funding working with CREST (Centre for Research into Environmental Science & Technology, Shrewsbury) to develop an infographic to tell the story of getting started with sustainability, carbon reduction, showing it is messy and about experimentation. Developing supporting communications for the graphic.
- Building partnerships and strategic connections
 - Representation within VSCA
 - Lobbying Shropshire council to develop a joined up sustainable tourism plan
 - Sitting on Shropshire Council strategic plan group and business working group to continue advocating for sustainability
 - Sitting on Shrewsbury Town Council sustainability group to provide advice and guidance
 - Representation on Sustainable Newport, Telford & Wrekin Climate Action Partnership; Telford & Wrekin Plastics Free Task Force

Focus areas moving forwards:

Many businesses are still unaware of the need to prepare and adapt for the impact of climate change and nature loss, however, there has been a noticeable increase in engagement over the last 9-months.

The intent is to continue to build partnerships with membership bodies, Universities, Sustainability West Midlands, trade bodies to join up communications and actions, to amplify our efforts.

- Education and Tools
 - Cool Shropshire & Telford platform - Funded for 2023 and extended to Farming; T&W extending support to 121 sessions
 - Complete work with CREST to develop an infographic to tell the story of getting started with sustainability, carbon reduction and nature loss. Development of supporting communications for the graphic.
 - Explore how to best use this to raise awareness and guide enterprises to practical actions.
 - Working out how to promote simple carbon emissions calculation tool for home office businesses. Is there a fit with CS&T platform?
- Building partnerships and strategic connections
 - Representation with VSCA

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- Lobbying Shropshire council to develop a joined up sustainable tourism plan
- Sitting on Shropshire Council strategic plan group and business working group to continue advocating for sustainability
- Sitting on Shrewsbury Town Council sustainability group to provide advice and guidance
- Representation on Sustainable Newport, Telford & Wrekin Climate Action Partnership; Telford & Wrekin Plastics Free Task Force
- Continuing to build our partnership with Shropshire Growth Hub to access funds from SPF - creating a 2-year programme for businesses in Shropshire covering all elements of the sustainability, carbon reduction and nature recovery journey.

Communications

Key Achievements in 2022:

- Professional re-branding, and produced wide range of materials for public events
- Relunched website
- Capacity building for climate action across Shropshire, supporting new groups in Market Drayton, Wem, and developing a lobbying network

Focus areas moving forwards

- Enhance media presence and impact (video, relationships with key press contacts, etc)
- Continue capacity building in the community, including re-launching a group that can speak on behalf of young people, similar to GenZCS
- Engage the 20% of stakeholders that have 80% of the carbon and biodiversity impacts

Buildings

Key achievements

- Launch of Future Ready Homes programme
- Establishment of the Local Authority Delivery (LAD) Scheme for improving home energy efficiency by Telford & Wrekin Council
- Growth in capacity for home energy surveys and advice provision amongst local climate groups

Focus areas moving forwards

- Re-establish the group, with a new group co-ordinator
- Collaborate with the SSCA Buildings Group to build capacity for retrofit in North Shropshire and Telford & Wrekin

Consumption and Resources

Key achievements

- Growth of repair cafes across Shropshire (Oswestry, Pontesbury)

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- Clothes swap events, led by GenZCS
- Focus on reducing food waste, led by GenZCS and partners

Focus areas moving forwards:

- Update the Consumption and Resources toolkit
- Continue the focus on fast fashion and food waste through a new group for young people
- Encourage collaboration between repair cafés to promote circular economy initiatives