



# Staffordshire Moorlands District Council Climate Change Annual Report

July 2023

**This is the second Climate Change Annual Report following Staffordshire Moorlands District Council declaring a [Climate Emergency](#) in July 2019.**

An interim report was previously presented at six months to Health and Communities Overview and Scrutiny Committee. Reports on the delivery of specific projects may have been received by other committees if delivery falls within their remit.

## Context

In 2018, emissions from Staffordshire Moorlands as a district totalled 905 ktCO<sub>2</sub>e. The majority resulted from buildings (61%), on-road transport (19%) and livestock (22%).

Although emissions are reducing in Staffordshire Moorlands, the rate of reduction needs to increase to avoid breaching the limits of the carbon budget as aligned to the [2015 Paris Agreement](#).

Local authorities across the UK are thought to have a combined 3% contribution to overall UK emissions. In addition it is thought that local authorities can influence up to 33% of emissions in their areas.

## Corporate Plan 2019

The Council approved a new corporate plan (2019-23) on 16 October 2019 that included an aim to: *“Protect and improve the environment and respond to the climate emergency”*. The Council’s corporate plan has previously included aims around improving the environment, but this is the first time that climate change has been specifically named it as a key aim, demonstrating the Council’s commitment to putting climate change at the heart of its activities. A new corporate plan will be published in late summer.

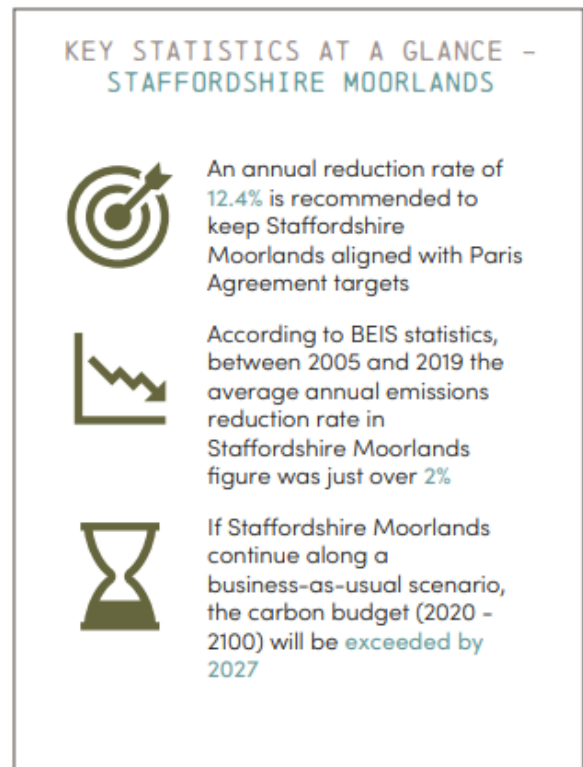


Figure 1 snap shot

## Climate Change Plan Part 1 2021/22

This plan sets out how the Council will tackle emissions from its own operations. It was approved in June 2021. [The plan can be found here.](#)

The aims have been combined with the Part 2 Plan to address district-wide emissions.

### Operational Carbon Footprint

The council is now able to report on annual operational carbon emissions through setting up reporting and collating mechanisms. Using the baseline of 2019 to 2020, there has been an overall reduction in emissions by 22%\*. This includes the provision of leisure services and councillor travel.

A breakdown of this and other performance indicators is set out later in this report.

\*Note – the figure for fleet in orange is to be thoroughly verified.

Below tables the tonnes of Carbon Dioxide equivalent emitted through the council's operations in the listed functions.

Operational Footprint	Year	2019-20	2020-21	2021-22	2022-23	Compared to baseline tCO <sub>2</sub> e	%age reduction
Energy in Buildings	tCO <sub>2</sub> e	421	341	311	335	-86	20%
Business Travel	tCO <sub>2</sub> e	35	11	12	20	-15	42%
Fleet	tCO <sub>2</sub> e	420	444	366	166	-254	60%
Leisure	tCO <sub>2</sub> e	798	405	677	778	-20	2%
<b>Total</b>	<b>tCO<sub>2</sub>e</b>	<b>1,674</b>	<b>1,201</b>	<b>1,366</b>	<b>1,300</b>	<b>-375</b>	<b>22%</b>

Table 1 Operational Footprint

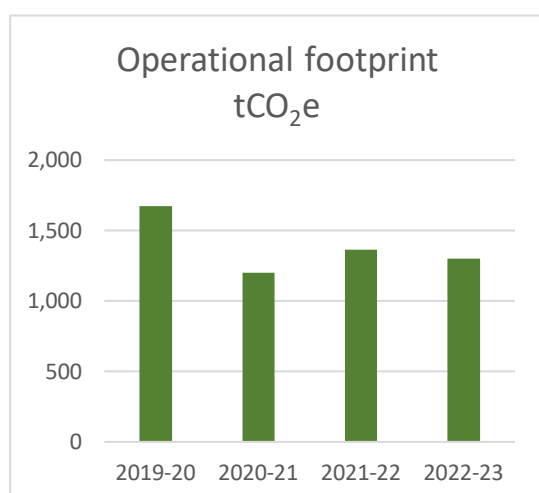
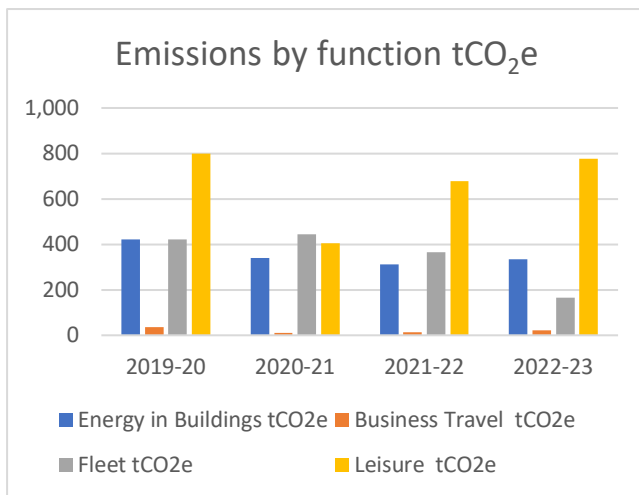


Figure 2 Operational Footprint total by year

The emissions footprint are calculated using the Local Government Association tool.

The Council has pledged to publish this footprint annually as part of the membership with Staffordshire Sustainability Board and the partnership with Staffordshire County Council and all boroughs and districts in the area.



The council includes leisure and waste services in the emissions total as these are core services, despite having third party management organisations. The council works closely with these organisations to support emissions reductions initiatives.

Figure 3 Operational Footprint totals by year and function

## Climate Change Plan Part 2 - 7 Ways to Net Zero

The [Climate Plan for the district emissions](#) was approved in December 2021 and has ambitious targets to meet net zero across the district by 2030.

The plans and targets are to be reviewed and presented to Full Cabinet in September 2023 with a view to realigning with countywide partners using improved data on projections of scenarios.

This report uses extracts from a scenario forecasting exercise to demonstrate the scale of delivery to achieve the ambitious targets. The forecast was created by Anthesis for the Council in 2022.

The plan is set out in 7 broad themes as noted on the table on the following page.

Table 2 Action Plan themes

1 The Way We	2 The Way We	3 The Way We	4 The Way We	5 The Way We	6 The Way We	7 The Way We Can
Live	Travel	Work	Make Energy	Look After Our Environment	Manage Waste	Help Change to Occur
Actions						
Support new buildings to be energy efficient and minimise emissions	Reduce emissions from Council vehicles	Reduce emissions from Council buildings	Look at generating green energy for Council buildings	Increase tree cover and improve nature	Reduce carbon emissions from our waste and recycling service	Consider Climate Change in all Council decisions and policies
Tackle fuel poverty and reduce emissions from homes	Support sustainable travel and development	Switch to green energy	Promote the use of renewable energy	Protect and extend the existing green infrastructure	Encourage recycling and the green initiatives	Provide Councillors and staff members with appropriate skills and training
	Support the increased use of EV vehicles	Buy low carbon products and services		Reduce the risk from flooding	Support community initiatives designed to reduce, recycle and repurpose waste	Promote climate change projects
	Encourage people to make journeys by walking or cycling	Support the green economy		Work in partnership with our communities, including the most vulnerable		Encourage community climate change and nature projects
		Support the development of a circular economy				Work with Parish Councils
		Help businesses to get advice and support				Involve and engage our communities and create a more inclusive society
		Encourage Council staff to adopt energy saving/low carbon				Lobby for change

## The Way We Live

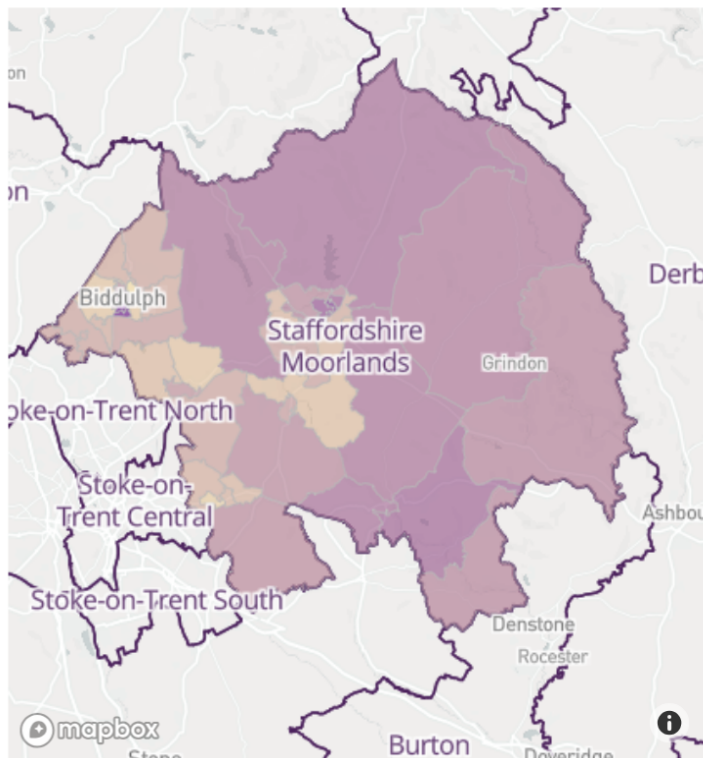
This theme looks at domestic energy use in our homes.

The first aim is to improve new buildings to minimise emissions. A new planning tool in the Developer Contributions Supplementary Planning Document has been put through consultation and, if approved, will be published in Autumn 2023. This will enable contributions to contribute to climate change.

In addition, the Alliance with High Peak Borough Council and involvement with Vision Derbyshire enables us to utilise their Climate Change and Sustainable Design Supplementary Planning Document and adapt it for use Staffordshire Moorlands. This includes a toolkit to help developers make better choices when considering a planning application and design.




The second aim of this theme is to tackle fuel poverty and climate emissions in existing homes. Whilst there are several complex funding streams for domestic energy efficiency and small scale renewables, these are targeted at low income households with poor energy performance. It is assumed that those groups would be termed as living in fuel poverty. The latest data suggests 16% (7,089) households are living with fuel poverty. A map below shows the areas worse and least affected.

### Fuel poverty map by small area, 2021



The small areas are "Lower Layer Super Output Areas (LSOAs), geographical units defined by the Office for National Statistics (ONS).

#### Key

-  Lowest % of households in fuel poverty in constituency
-  Highest % of households in fuel poverty in constituency
-  Constituency names and boundaries

#### Tips

Click and drag to move around the map. Scroll or pinch to zoom.

Figure 4 Fuel poverty map

The Energy Performance of 44% of all houses has been rated in the last 10 years. Of these, 14,274 have ratings of D to G which are the lowest bands. If this is indicative of houses needing improvement, then the numbers are around 32,440. Bearing in mind, this improves the energy performance, making the house warmer, healthier and hopefully cheaper to run and reduce emissions, it will not take the household to net zero.

The Council is a partner in the Staffordshire Warmer Homes partnership which successfully secured Green Homes Grant Local GHG LAD (round 1 funding) and delivered the Council's allocation of over £600,000 GHG LAD round 2 funding in Staffordshire Moorlands. For LAD3 and HUG1 the figures up to March 2023 are below. LAD3 targets households with mains gas and HUG2 households without. HUG1 ended in May 2023 and LAD3 ends in September 2023.

HUG2 begins in June 2023, targeting off mains gas properties.

The partnership is managed through Staffordshire County Council has also continued to deliver energy saving measures through other schemes. The Council continues to fund Beat the Cold as our key local partner in affordable warmth/fuel poverty advise and to refer to grant schemes.

As you can see from the figures below, the number of measures installed under these schemes and the rate of delivery is low compared to the scale of problem to be addressed . These schemes also do not provide help for non-fuel poor or the willing or able to pay, whose emissions may well be a lot higher.

### LAD3 at March 2023

Table 3 LAD3 delivery on going

STAFFORDSHIRE MOORLANDS					
Measure		Properties	Measure Cost	Total Cost of Measures	Average spend per property
PV		13	£8,711.89	£113,254.57	
PV (with Loft)		13	£12,451.47	£161,869.11	
PV (With Cav)		3	£13,236.93	£39,710.79	
PV (with Loft and Cav)		3	£16,089.48	£48,268.44	
		32		£363,102.91	£11,346.97

## HUG1 at March 2023

STAFFORDSHIRE MOORLANDS				
Measure	Proper ties	Measure Cost	Total Cost of Measures	
PV	6	£8,711.89	£52,271.34	
PV (with Loft)	2	£12,451.47	£24,902.94	
	8		£77,174.28	£9,646.79

Table 4 HUG1 final accounts to be received

## ECO from 2013 to 2023

Table 5 ECO delivery Staffs Moorlands

	Staffordshire Moorlands
Cavity Wall Insulation	1,192
External Wall Insulation	
Internal Wall Insulation	15
Loft Insulation	832
Other Insulation	30
Boiler	845
Air Source Heat Pumps	5
Ground Source Heat Pumps	
Heating Controls	544
Other Heating (excluding Heating Controls)	36
Biomass Boilers	0
Solar PV	7
Windows and Doors	0
Total number of measures	3,512

The scale of the task is hampered by lack of skills across the supply chain from advice to installations. Given the rural and conservation nature of many areas of the Moorlands, along with hard to treat homes, this is a complex market to stimulate and a difficult audience to convince.

The extract based of a future scenario in Figure 4 from the Anthesis report, demonstrates the enormity of what is required.



### 3.1. THE WAY WE LIVE OBJECTIVES MILESTONES

#### Improving energy efficiency

This measure considers changes to the energy demand for heating homes, in both existing properties and newly built homes. Different retrofit options are considered for existing households, as well as the performance of new builds.

The aim of retrofit is to drive down the energy demand for heating and hot water in buildings; typical measures include insulation for floors, windows and ceilings, as well as improved ventilation. Currently household retrofit is led largely by government-supported schemes, such as ECO3 retrofit measures and the Domestic Renewable Heat Incentive (RHI). SCATTER models future energy demand based on the uptake of two “modes” of retrofit:

- Medium - a 66% reduction in annual average energy demand through inner wall insulation.
- Deep - an 83% reduction in annual average energy demand, through inner & external wall insulation.

New builds must also be constructed to extremely high energy performance standards, and this is of great significance to the district given the anticipated increase of around 20,000 households by 2036. The Association for Environmentally Conscious Builders (AECB) deems a “high performance” building as requiring 25% of the average energy demand for heating, Passivhaus standards are typically 10% of average demand.

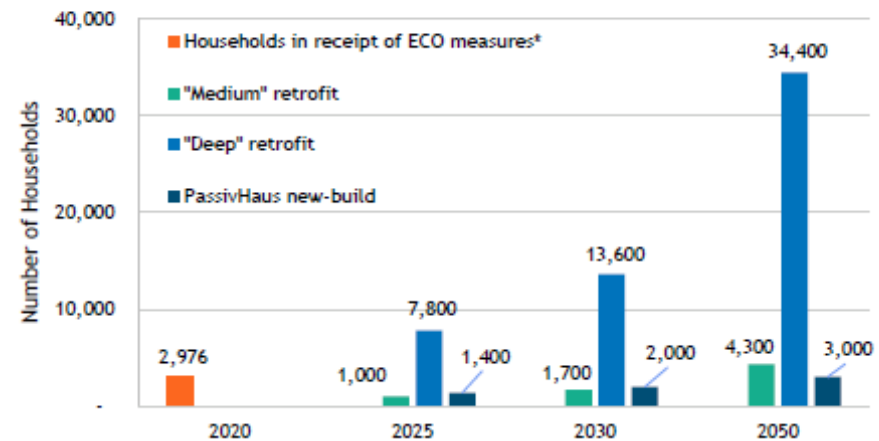


Figure 3.1c: Indicative targets for the improvement of household energy efficiency. \*ECO measures are included as a current context proxy, but resulting improvements to efficiency are much more modest than “medium” retrofit described in SCATTER.

Objectives required to achieve High Ambition Pathway	
Current Context 2021	By 2030
<ul style="list-style-type: none"> <li>• By 2020, 2,976 households in Staffordshire Moorlands have received ECO measures.<sup>1</sup></li> <li>• In 2021, 5,038 (11.4%) of households in Staffordshire Moorlands were classed as fuel poor.<sup>2</sup></li> <li>• In 2021, 64% of EPC-rated domestic properties were rated D or below.<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>• 1,700 houses “medium” retrofit, reducing annual average energy demand by 66%</li> <li>• 13,600 houses “deep” retrofit, reducing annual average energy demand by 83%</li> <li>• 21% reduction in domestic energy demand</li> </ul>

Staffordshire Moorlands District Council

Figure 5 Extract from Anthesis Scenario Mapping

DRAFT <sup>1</sup> Household Energy Statistics <sup>2</sup> Fuel Poverty Data <sup>3</sup> EPC in England and Wales

Anthesis

## Suggested Actions

The Council should consider

- using existing data to better target households which could benefit from existing and emerging schemes.
- improving liaison with Your Housing as the main social housing provider in the Moorlands. Your Housing have a target to have all properties with an Energy Performance Certificate rating of C or above by 2030.
- working with the supply chain to support able and willing to pay households to access good advice, quality installations and finance arrangements and continue working with wider professional networks to learn of and apply good practice and innovative thinking. Officers completed a Local Government Association course on upscaling and delivering retrofit programmes.
- continuing to enforce the Minimum Energy Efficiency Scheme with private landlords.
- setting out a comprehensive housing strategy and leave no one behind.
- continuing to work with regional and national Government to lobby for additional support and funds and a national training programme.

## The Way We Travel

Emissions from vehicles are a significant issue in Staffordshire Moorlands. Being a mainly rural district, there is considerable reliance on private vehicles for personal journeys. There are also several thoroughfares for haulage vehicles.

Separate to the Climate Change Plans is the [Air Quality Assessment](#) which sets out the strategy to improve air quality. The co-benefits of this to climate change mitigation are clear as much of the activity is to encourage either modal shift to active transport methods or improving efficiency of vehicles.

The Air Aware Staffordshire Project is a major campaign to raise awareness of air quality issues across Staffordshire, predominantly: to

- Engage with business to educate on air quality and to develop travel plans;
- Visits to schools to educate children on air quality and deliver an anti-idling campaign to parents;
- Deliver a website "air aware campaign" and information on air quality, including [downloadable information](#);
- Develop a joint Electric Vehicle strategy for the whole of Staffordshire and Stoke on Trent, including district partners and third parties. The Council

are partners in the delivery of the approx. £5 million LEVI fund through Staffordshire County Council.

Through the engagement of Air Aware, several schools and businesses now have travel plans accredited by [ModeShift Stars](#).

[The Local Plan](#) adopted in September 2020 sets out ambitions to reduce the need to travel or make it safer and easier to travel by more sustainable forms of transport. (Spatial Objective SO11)

This approach also reflects the aims of the Council's Sustainable Community Strategy and the Corporate Plan priorities to promote improved health and protect the environment. The Council will aim to ensure as far as possible that development minimises traffic problems and maximises the potential benefits of accessibility and new infrastructure to the wider community through active travel methods.

The fleet and operation partners' fleets has been analysed by the Energy Saving Trust to support a forward plan to systematically improve engine types, efficiencies and fuel use.

The Council's pioneering project to use spent hydrogenated vegetable oil on suitable vehicles, not only reduced CO<sub>2</sub> emissions but also particulates. Unfortunately the 10 fold increase in price for HVO has meant that it is now significantly more expensive to run the fleet compared to traditional diesel. A decision was made to revert to traditional diesel until a cheaper source is found or prices drop.

Move More Staffordshire Moorlands launches in June 2023 with an aim to adopt active travel models for health but also wider environmental benefits.

The figure below demonstrates the scale up electric vehicle uptake to reach 100% by 2050. This assumes that the same number of vehicles would be on the road in 2050. It also assumes that the technologies would be in place for heavy vehicles which have the range needed for a rural, hilly district.

In the second quarter of 2022/23 there were 423 register electric vehicles in the Moorlands.

## 3.2. THE WAY WE TRAVEL

### OBJECTIVES MILESTONES

#### Switch to electric vehicles (EV)

One of the biggest opportunities to reducing transport emissions in Staffordshire Moorlands is the transition to electric vehicles. As with other objectives around electrification, the success of a district-wide switch to EV relies heavily on grid decarbonisation and renewable electricity supply.

This intervention considers switching internal combustion engine vehicles (including buses, private and other vehicles) to electric.

Charge point infrastructure will also need to be implemented in order to support the shift to electric vehicles. Since 2014, 233 charging points have been installed in Staffordshire Moorlands under government grant schemes including the Electric Vehicle Homecharge Scheme (EVHS), the Workplace Charging Scheme (WCS) and the On-Street Residential Chargepoint Scheme (ORCS).<sup>1</sup>

#### Transport glossary

**ICE** - Internal combustion engine (petrol and diesel vehicles)

**HEV** - Hybrid electric vehicle

**ULEV** - Ultra-low emission vehicle (currently defined as a vehicle which emits <75 gCO<sub>2</sub>/km travelled).

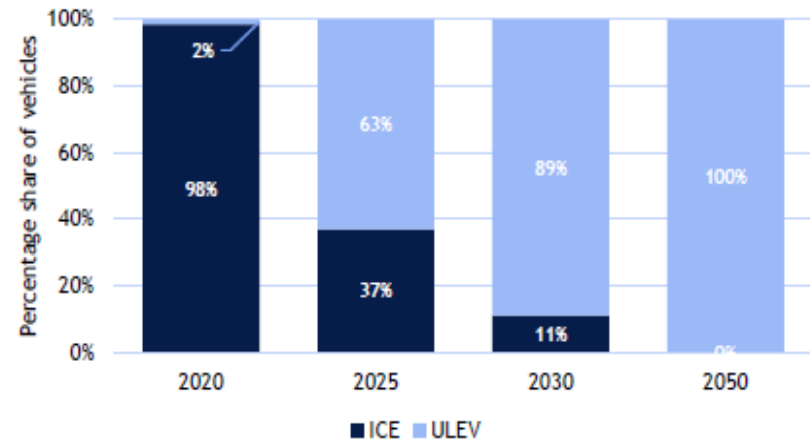


Figure 3.2e: Transitioning away from fossil-fuel powered road vehicles. All rail networks (not shown here) are electrified by 2025.

Objectives required to achieve High Ambition Pathway	
Current Context 2021	By 2030
Data from the <a href="#">DfT and DVLA</a> indicates that in 2020, 268 newly licensed cars across Staffordshire Moorlands were ULEV.	<ul style="list-style-type: none"> <li>89% of cars are EV or HEV</li> <li>100% of buses and trains are electric</li> </ul>

Figure 6 Anthesis Electric Vehicle Scenario

The barriers to adopting electric vehicles are well documented, varying from the environmental and human rights impacts associated with mineral mining for the batteries along with lifespan and disposal of the batteries, cost of the vehicles, range anxiety, access to a private space to charge and more widely the charging infrastructure.

### Suggested Actions

The Council should consider..

- Working with the County Council to deliver the best electric vehicle charging network possible for a pleasant user experience.
- Continuing to monitor technology shifts for the fleet to demonstrate to other businesses and lead by example.
- Continuing to encourage active travel through engagement
- Continuing to raise awareness of air quality
- Developing incentives for staff, councillors and partners to charge on site and access vehicles.

## The Way We Work

Climate Change considerations are embedded across our service delivery and operations. All Council reports have a section that sets out the Climate Change implications to inform decision making. The new Sustainable Procurement Policy supports decision making on environmental considerations when procuring a service or goods. This, not only makes officers more mindful of the impacts but pushes up the supply chain to make the economy greener. Training of all budget holders on the policy is being developed. Climate Change reporting is governed through the Health and Community Overview and Scrutiny Committee.

The Climate Change and Biodiversity Group is chaired by the Head of Communities and Climate Change with all relevant Heads of Service. It meets monthly to review and track progress against the aims. Performance indicators are collated and reported annually as part of this report.

The Council is accredited with the Carbon Literacy Bronze Award and are close to receiving silver through training more staff and members. Members climate training is booked for October 2023, for the new administration and councillors.

All Heads of Service have had training in Carbon Literacy. Each service has nominated a member of staff to become their 'Climate Champion' and to have attended Train the Trainer in Carbon Literacy to disseminate through their service to embed across service and project design and delivery.

Targets under the Council operations include reducing emissions from buildings and switching to green energy.

A new Asset Management Plan is drafted and ready for internal consultation and approval. Once agreed this will set out priorities for Council operational

buildings, depots and leisure facilities including reducing energy use and increasing renewable generation infrastructure.

Carbon emissions generated by Biddulph Valley Leisure Centre are set to fall thanks to a £2.1million project to improve energy efficiency and reduce the building's impact on the environment.

The Council has secured £1,910,000 from the Public Sector Decarbonisation Scheme and is supplementing this with a further £265,000 from Council funds.

The project, which will start this year, will see the conventional gas boilers replaced with state-of-the-art air source heat pumps and solar panels to enhance the building's energy efficiency and reduce its impact on the environment saving around 300 tonnes of CO<sub>2</sub> every year.

Although the Council's building energy consumption has increased, the carbon emissions have decreased. Electricity emissions have reduced by 29%, 23% of which is from a reduction in grid emissions and 6% reduction in kilowatt hour consumption.

From 2024, the electricity contract will change to Renewable Energy Guarantee of Origin certificated. This means for every kilowatt hour used, a kilowatt hour is generated by renewables and assigned to the Council's portfolio. This supports the development of renewable energy nationally and reduces the carbon footprint of the council.

Gas has increased by 4% for both use and emissions. Grid emissions per kilowatt-hour have not changed much as is the case for electricity due to low emissions gas not being readily available. Gas use can be more seasonally effected than electricity and consumption would have been impacted on weather. We do not have the granularity of data to make any correlations to weather events within our management tools.

A performance indicator framework has been established. Baselines and monitoring systems are being set out for each of these aims to be incorporated into the new Corporate Plan and performance framework. Where possible these will be SMART targets using appropriate data streams and frequency of reporting.

The Alliance is members of UK100, APSE and the Local Authority Energy Partnership where we can use peer experience to help build capacity and knowledge.

We are active members of the Sustainability Board for Staffordshire County and sit on other groups with countywide ambitions.

Here is a list of the base pledges which all Staffordshire councils have agreed to along with the Staffordshire Moorlands updates

<p><b>Pledge 1 Baseline Reporting</b> All Councils will prepare and publish an annual baseline analysis of their organisation’s carbon footprint. All Councils will assess and publish progress in reducing their carbon footprint in October each year</p>	
<ul style="list-style-type: none"> <li>• Previous financial years carbon emissions published by October each year.</li> </ul>	<p>UPDATE needed -Included in cabinet report - to be published on website. To add external delivery partners emissions once collated</p> <p>Update 12/06/23 This is due to be included in the annual report due in July Scrutiny. From there it will go through cabinet.</p>
<ul style="list-style-type: none"> <li>• Council carbon reduction achievements published by October each year</li> </ul>	<p>Reductions due to pandemic and restructure will be difficult to differentiate - published as above . UPDATE needed</p> <p>See above. This report will cover all years from 2019 and in future will align to October dates.</p>
<p><b>Pledge 2 Carbon Literacy Training and Awareness</b> All Councillors and Senior Management Teams will undertake carbon literacy training to build corporate awareness of the issue and the Council’s role in securing carbon reduction. All Councils will conduct a community impact assessment for key projects and proposals and include an assessment of Climate Change Implications in all key decision reports</p>	
<ul style="list-style-type: none"> <li>• 100% completion of carbon literacy/general awareness training by Councillors and Senior Management by December 23</li> </ul>	<p>Heads of Service Complete - Bronze award achieved. More training being arranged to meet Silver.</p>
<ul style="list-style-type: none"> <li>• Community Impact Assessment template to include climate change evaluation by June 23</li> </ul>	<p>This has been in place since 2019/20</p>
<ul style="list-style-type: none"> <li>• Cabinet report templates to include climate change evaluation by June 23</li> </ul>	<p>Implications included on all reports. Consultation with officer as part of report process (not fully quantified evaluation at project scoping)</p>
<p><b>Pledge 3 Ambassadors</b> All Councils will encourage members to act as climate change ambassadors, to encourage reduction in organisational carbon footprints and champion this in their own division/ward areas</p>	

<ul style="list-style-type: none"> <li>• Provide a two references each financial year where members have actively supported staff and communities for the reduction of carbon emission</li> </ul>	Supported the carbon bubble ('Bubble and Leek') event on 24 <sup>th</sup> June. Attend Green Network
<b>Pledge 4 Green Travel Planning</b> All Councils will support and facilitate green travel by members, employees, and their communities through promotion of green travel planning. Policy implementation on green transport and ways of working	
<ul style="list-style-type: none"> <li>• Suitable policies and strategies in place for supporting green transport by 2023</li> </ul>	Sustainable Procurement policy, travel incentives in development.
<b>Pledge 5 Communications</b> All Councils will contribute to a countywide communications group who will plan to deliver and manage a countywide Communications Plan, working together to drive our collective net zero visions forward, throughout the County	
<ul style="list-style-type: none"> <li>• Annual communications strategy and plan to be agreed by March 23 - discuss if renewal for next year</li> </ul>	Communications Plan approved by Cabinet Mar 23
<b>Pledge 6 Green Energy</b> All the Councils will commit to procure 100% green energy supplies for their electricity as soon as existing contract commitments allow	
<ul style="list-style-type: none"> <li>• Switch to 100% REGO certified green energy achieved.</li> </ul>	New Electricity contract approved to choose green REGO option. Gas is not REGO certifiable
<b>Pledge 7 Energy Reduction</b> By January 2023, all Councils will have established plans to reduce energy consumption across their estates.	
<ul style="list-style-type: none"> <li>• Plan in place for reducing energy use within estate by January 2023 - NEW PLEDGE NEEDED</li> </ul>	
<b>Pledge 8 Low carbon fuelled fleet vehicles</b> Moving towards an aspirational zero emission operational vehicle fleet, the Councils will by 2025, establish a plan to move to low carbon fuels within their internal fleets by 2030	
<ul style="list-style-type: none"> <li>• Internal fleet low carbon plan completed by December 2025.</li> </ul>	Fleet assessed by Energy Saving Trust. Fleet is operated by external company. Plan in place to phase out fossil fuels.
<b>Pledge 9 Waste and Recycling</b> By 2025 there will be a countywide waste strategy that all authorities will adhere to. This strategy will cover all aspects of the countywide waste operation, to reduce residual waste creation, increase recycling rates, promote composting of food waste at home and establish food waste collections throughout the County	



Waste Strategy completed by 2025.	
<b>Pledge 10 Innovation and Technology</b> Working collaboratively with research institutions, businesses and partners the Councils will encourage both innovation and technology development, that will assist the delivery of our combined net zero visions.	
Collaborate with 3 organisations each financial year to encourage or progress green innovation/technology	HVO in fleet Procurement strategy.

Table 6 Staffordshire Sustainability Board Pledges

The Agile working policy for staff has enabled suitable roles to use blended working approaches to reduce travel time and resources for both commuting and meetings.

The Council is developing incentives for staff to choose more environmentally friendly means of travel for commuting and business mileage.

The work with the fleet is outlined under travel.

Our newsletter to businesses is used to share information on support available to them for courses, grants and advice on sustainability. Support promotion of the Environmental Quality Mark for Peak District and Staffordshire.

### Suggested Actions

The Council could

- Deliver the new Asset Management Plan, embedding energy use and carbon emissions
- Provide training to support the new sustainable procurement policy and means to monitor the success
- Establish incentives for alternative travel for staff.
- Provide electric vehicle charges at council offices
- Continue to work with County and other partners
- Collaborate on verge and management of green spaces

### The Way We Make Energy

This aim considers generating renewable energy for the Council Buildings and promoting renewable energy more widely.

The new Climate Change and Sustainable Design Supplementary Planning Document will encourage the use of renewables in new and majorly renovated properties.

An initial audit of Council owned buildings has been carried out to assess the feasibility of installing onsite renewables. These are supporting informing the Asset Management Plan and capital investments in renewable energy measures.

The council need to find means to engage with wider renewable energy initiatives, from the larger scale which would feed into a Local Plan, support community energy or the retrofit method by supporting homeowners or businesses get support for renewables.

Figure 6 maps out a proposal for solar photovoltaic generation of electricity with by far the greatest potential of a virtual solar farm collective across many rooftops.

### 3.5. THE WAY WE MAKE ENERGY INTERVENTION MILESTONE

#### Solar PV

BEIS data on renewable energy installations is split into “large-scale” which relates to any sites owned by Major Power Producers, and “small-scale” which relates to any other sites not owned by Major Power Producers, regardless of size. It is worth noting that the location of sites and the balance between large- or small-scale sites is not set in stone by the modelling.

According to the [Energy Saving Trust](#), the typical household array capacity is between 2-4 kW. The current average square meter of solar PV panel provides a capacity in the region of 0.15-0.20 kW of energy. Large scale installations are typically installed and operated by energy providers or larger organisations, which in many cases can be community-led.

Encouraging PV uptake is a means of improving energy security, for both businesses and households. As the future costs of energy remain uncertain, decentralized power generation is an increasingly valuable asset, particularly when coupled with storage technology.

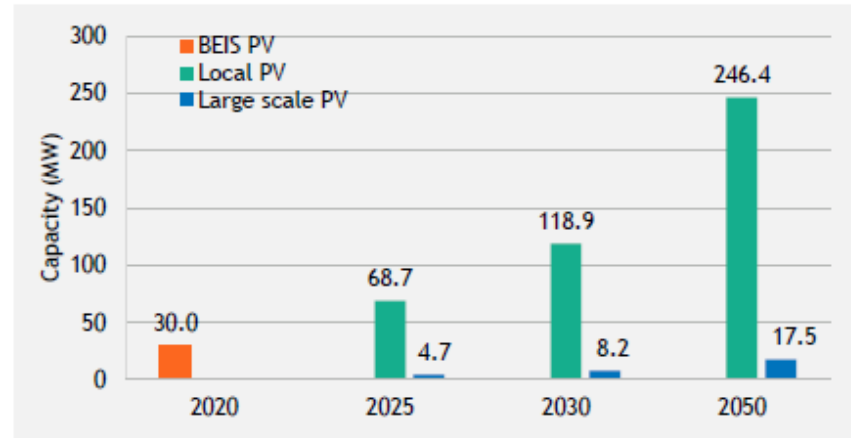


Figure 3.5b: Comparison of SCATTER outputs against recorded installed capacity from BEIS renewable energy statistics for solar PV energy generated in Staffordshire Moorlands in 2020.

Objectives required to achieve High Ambition Pathway	
Current Context 2021	By 2030
In 2020, Staffordshire Moorlands had 1,679 solar PV installations with a capacity of 29.96 MW and 29,285 MWh generation. <sup>1</sup>	<ul style="list-style-type: none"> <li>Local PV: 118.9 MW installed capacity</li> <li>Large scale PV: 8.2 MW installed capacity</li> </ul>

Figure 7 Anthesis Solar Photovoltaic projections

## Suggested Actions

The Council could

- Embed renewables into Asset Management Plan for Council buildings
- Embed renewables in supplementary planning guidance
- Asset and develop schemes for householders and business to encourage uptake.
- Use funding streams in the Way We Live section to target small scale domestic PV at scale

## The Way We Look After Our Environment

The [Council's Green Infrastructure Strategy](#) 2018, aims to develop green corridors for wildlife, enhance and improve important ecological sites and provide better connection to green spaces for people.

To help deliver these objectives, the management of country parks has transferring to Staffordshire Wildlife Trust (SWT). As experts in managing and developing diverse ecologies and encouraging people to engage with nature, they are well placed to maximise the impact of these important spaces.

SWT are also delivering a Plan for Nature. This will incorporate the Council's response to the Biodiversity Net Gain requirements under Part 6 of the Environment Act 2021, which is likely to be mandatory by November 2023 subject to further guidance. It will also incorporate our strategic approach to improve and increase tree cover and deliver the Green Infrastructure Strategy, mitigate against climate change and potentially improve air quality.

The council have established a Green Network of community groups across the Moorlands to support collaboration and peer to peer learning. The council has partnered with SWT, Green Network members and Keele university in a funding bid to the Lottery Climate Fund. If successful, the project will support a transition to create pocket parks and wildflower reserve verges in partnership with Council operations. The project, over 5 years, will focus on community engagement and citizen science to test the outcomes and benefits in terms of biodiversity, carbon sequestration and possibly air quality.

This group has also used the community climate fund to support local work around nature improvements and engagement.

One group asked the Council to install swift boxes on Moorlands House with a call system to encourage them to nest. These have now been installed and officers are awaiting news of new fledglings.

The Move More Staffordshire Moorlands Programme encourages people to engage and appreciate nature, place a stronger value on it.

The OUTSIDE project uses accessible cultural and art as a means to engage people with, amongst other things, nature and the environment. This programme will increase the consideration for environment through new channels.

The council recognises the role of landowners and farmers to improve the environment and needs to develop better collaboration with those groups.

The Council recognises the value to the environment on our Moorlands and the devastation when they go on fire and the likelihood that instances may increase. We will maintain communications on prevention of wild fires in our protected areas.

### Suggested Actions

The Council could

- Adopt the Plan for Nature
- Set out priorities and actions from the plan and dedicate a resource to deliver it
- Scan for external funding for potential projects with in the plan
- Consider declaring a nature emergency
- Maintain oversight on the development on Biodiversity Net Gain legislation and systems
- Continue to work with external groups and improve collaborative relationships
- Continue communications on impact of wildfires
- Maintain a Public Spaces Protection Order in high wildfire risk areas.

### The Way We Manage Waste

The Council continues to be a high performer achieving a 52.3% recycling rate, which is the high compared to national statistics.

We encourage people and businesses to follow the waste hierarchy. AES has used an engagement vehicle called Dennis and officers to visit schools across the Moorlands.

The officers also attend lots of events to disseminate messages about how to reduce waste and dispose any remaining waste appropriately. We also have proactive campaigns on fly tipping to encourage responsible waste disposal.

We will use our sustainable procurement policy to push up the supply chain to encourage the creation of a circular economy and help suppliers consider cradle to cradle product and systems design.

We recognise several community groups are establishing localised repair cafes. We will offer support to promote these types of initiatives where possible.

## The Way We Can Help Change to Occur

We recognise the importance of working with external agencies, community groups, businesses, parish and town councils, academic communities, landowners and so on to support us deliver this cross-cutting agenda.

The Council is engaged with a number of key agencies to assist with the development of our plans including all the other councils of Staffordshire, The Midlands net Zero Hub, the Energy Saving Trust, Staffordshire Wildlife Trust, Anthesis sustainability consultancy and Keele University.

We sit on several steering and working groups with Staffordshire County Council and our peers in other districts and boroughs and the Peak District National Park.

As part of the Alliance, we are able to benefit from learning from colleagues and projects in Derbyshire and the East Midlands which we can use where applicable.

The Council has joined the UK100 group of local authorities with ambitious climate change targets. This includes access to the Countryside Climate Network. We are also active members of many other peer networks to share learning and support including Climate Matters Staffordshire.

We recognise that we must lead by example to other organisations such as with driving the supply chain with a procurement policy and procedures. Meanwhile we must leverage the collective impact of community groups, parishes and town councils to help each other and be more than the sum of their parts when it comes to taking action to help people to action.

We also recognise our ability to lobby and respond to consultations as a Council and through our networks. An example of [lobbying to urge all Councils to adopt a climate change strategy is minuted here](#) (item 35).

The Council uses existing channels to communicate widely about what it does and why, it has also shared good practice to residents and businesses to engage and inspire.

We are working together with Staffordshire County and all the boroughs and districts on a joint communications plan to embed and enhance messages. Part of this programme was to host the giant carbon bubble representing one tonne of carbon dioxide. Visitors to Leek recently had a bit of a surprise seeing this in the street.

Working with Support Staffordshire we have set up Staffordshire Moorlands Green Network which meets regularly to share good practice and collaborate. The network is made up of active environmental groups and organisations including farmer representatives.

We recognise that young people will have to consider climate change in their future lives and careers. It is important that they are able to confidently discuss and potentially constructively debate around climate and nature themes. Working with Staffordshire Council of Voluntary Youth Services (SCVYS) the pilot [Youth ECO Leaders](#) programme has been established. The programme has three parts along the learn-talk-do model

- Carbon literacy
- Debate in the Council Chamber
- Practical Project or volunteering

Each participant will receive a completion certificate which they could add to their CV or can be used in a personal statement for university or college in the future.

Our [Climate Change Fund](#) is open to community groups who need a little help to get a project started or sustain it. We hope this will help to expand our network of interested groups outside those who we know that already doing what they can to move the agenda forward.



Figure 8 Carbon Bubble in Derby Street, Leek



Figure 9 Youth Eco Leaders flyer

The groups we have supported so far are

Group	Project
Endon & Stanley Action Group	Bat boxes
On the Horizon	Walking
Foxlowe	Heating Controls
Butterton Village w/MCA	Tree planting
Bradnop Village Hall	Roof insulation
Foxt Village Hall	Solar and battery toilet
Stockton Brook Time and Space	nature engagement events. The Big Draw
Whiston Play Area	Wildflower beds as part of play area upgrade
Biddulph Youth Community Zone (BYCZ)	Contribution to LED supply and fit project
Quarnford and Healthy Quarnford memorial Hall	Garden development bee friendly trees
Brown Edge Allotments	Create space for community groups to learn about horticulture
MCA	HUG Arts Festival
Back Dane	Tree Planting event
Swifts of Leek (MCA)	Swift Boxes
OUTSIDE - Biddulph Library	Wellbeing garden - arts
Oakamoor village Group	Orchard establish
Werrington Library	Wellbeing garden - with kids

Table 7 Community Climate Fund Awardees

## Suggested Actions

The Council could

- Maintain the community Climate Fund
- Continue to forge partnerships and collaborate
- Continue to share good practice
- Work better with Parish and Town Councils on climate and nature
- Continue to collaborate with Staffordshire County Council

## Performance Indicators

The performance indicators are aligned to the aims of the Climate Change Plan along with other indicators use in the performance framework of the Council.

The table below collates the most up to date data available on these indicators and shows subsets of the overall operational carbon footprint of the Council.

Sources range from Government data sets, strategic partner and energy and fuel records and our air quality monitoring systems.

Those highlighted in yellow are either new or the methodology to monitor them has changed or is in development.



The orange cell for fleet has yet to be verified thoroughly as seems to be slightly erroneous. AES have been asked to investigate this and report back. Also we have asked for the waste fleet to be separated out and need to add that to our process.

A new tool has become available for calculation the full emissions of the waste collection process. We are assessing the tool to consider if it would be a useful addition to the performance indicators.

Changes in waste legislation are imminent and may impact future recycling and residual rates.

The Plan for Nature is in development and will provide a framework for nature based targets for the district including a mechanism for canopy cover and other metrics to measure, monitor and target.

AIM	MEASURE	Change	Units	2019/20	2020/21	2021/22	2022/23	TARGET	
								2025	2030
We will support action including retrofitting to reduce fuel poverty, prevent health hazards relating to damp and excess cold. and reduce emissions from homes	Emissions from residential buildings (baseline 2019/2020)		ktCO <sub>2</sub> e	158	155				Net Zero
	10% of households will be living in fuel poverty by 2025 and 0% by 2030. (baseline 2019/2020)		households	16%	18%		14%	10%	0%
	Proportion of properties with an EPC less than 10 years old (baseline 2019/2020)			13%			19,973 (56%)		
	Proportion of properties EPC less than 10 years old with rating D to G (baseline 2019/2020)			72%			14,274 (71%)		
Reduce emissions from Council vehicles and Council related activity	Fleet vehicles - Carbon dioxide equivalent		tCO <sub>2</sub> e	420	444	365	166 TBC		Net Zero
	Officer business miles (grey fleet) Carbon dioxide equivalent		tCO <sub>2</sub> e	34	11	12	20		
	Officer business miles (grey fleet)		miles	307,401	99,109	115,747	157,199		

	Councillor business miles carbon dioxide equivalent		tCO <sub>2</sub> e	0.7			2.4		
We will encourage and support the increased use of EV vehicles	Number of Electric Vehicles		vehicles (commercial/private/car or HGV/LGV/motorbike)	113	173	313	423		
	NEW Indicator Electric vehicle charging points in area - publicly accessible	NEW	Publicly available points per 100k population				10		
We will work in partnership to reduce travel and transport related emissions	Vehicle-related emissions district-wide		ktCO <sub>2</sub> e	184	150				
We will reduce energy use and improve the energy efficiency of Council buildings including Leisure Centres	Emissions from Council buildings - SMDC		tCO <sub>2</sub> e	2,460	1,322	1,227	1,186		
	Emissions from leisure centres - SMDC incl Water Supply		tCO <sub>2</sub> e	798	405	677	778		
We will reduce the number of products purchased by the Council, chose low carbon/carbon neutral products where	Develop monitoring for Sustainable Procurement Policy	CHANGE to POLICY and Procedures	TBC						

possible, and seek to use contractors who are working towards carbon neutrality									
We will increase tree cover, and improve wildlife habitats and biodiversity	There will be 20% urban canopy cover by 2025 and 24% by 2030.	Develop process		17-19%				20%	24%
To reduce the PM 2.5 (highest maximum reading across the district / borough) to 12ugm <sup>3</sup> by 2028 and to 10 ug <sup>m</sup> <sup>3</sup> by 2040	To reduce the PM 2.5 (highest maximum reading across the district / borough) to 12ugm <sup>3</sup> by 2028 and to 10 ug <sup>m</sup> <sup>3</sup> by 2040	Change of monitoring means	ug <sup>m</sup> <sup>3</sup>	7.9* <small>*Based on defra published background data</small>	7.9*	7.9*	10.7** <small>**Based on updated computer model</small>	12ug <sup>m</sup> <sup>3</sup> by 2028	10 ug <sup>m</sup> <sup>3</sup> by 2040
	To reduce NO <sub>2</sub> levels to below current national Air Quality objective (40 ug <sup>m</sup> <sup>3</sup> ) across the district/ borough by 2026 and below 36 ug <sup>m</sup> <sup>3</sup> by 2030	Change of monitoring means	ug <sup>m</sup> <sup>3</sup>	79% < 40 65% < 36	100% < 40 100% < 36	100% < 40 79% < 36	100% < 40 98% < 36	Below 40 ug <sup>m</sup> <sup>3</sup> by 2026	Below 36 ug <sup>m</sup> <sup>3</sup> by 2030
We will implement measures to	Emissions from waste (fleet). Waste emissions	System needed to assess	tCO <sub>2</sub> e	919					Net Zero

reduce carbon emissions from the Council's waste and recycling service									
We will work with Staffordshire County Council and other Staffordshire Councils to encourage recycling and the broader greener agenda	% of waste reused, recycled or composted by 2025.		percentage of all collected waste by weight			54%	52.30%		
	Residual waste per household in 2021/22		kg			418	386.37		

Table 8 Performance Indicators

## Develop Delivery Plans

We aim to review the existing part 1 and 2 plans and create a separate strategy and one comprehensive plan which is more easily navigable. Within the plan we will identify those aims that the council has operational control over and those we can influence.

When we have agreed the Plan for Nature that will include the climate change related actions under The Way we Look after the Environment theme.

The Assets Management Plan will provide a strategy for decarbonising our estate.

Developing a strategic housing strategy to maximise funding opportunities and target using available data, will scale up the uptake of retrofit for energy efficiency and small scale renewables.

Working with Staffordshire County Council, we are facilitating the use of our car parks to improve the electric vehicle charging infrastructure across the borough. This is specifically aimed at residents but can be used by anyone. This will provide a coherent and consistent service across Staffordshire which will improve the end use experience. This is key to encourage people to adopt electric vehicles.

The new Sustainable Procurement Policy is to be embedding into operations through training of budget holders to understand the principles and the mechanisms.

Review the pilot Eco Youth Leader programme to improve and develop.

Sustain and grow the Staffordshire Moorlands Green Network.

## Reports

At present it is planned that an interim report on progress along with proposed revision and collation of the plan will be made available in winter with the Annual report scheduled for summer 2024 through the Health Communities Overview and Scrutiny Committee.

This is dependent on whether a combined Alliance Working Group is established and what reporting mechanisms result.

Project specific reports will go through the relevant scrutiny committees.