



South Lakeland
**CLIMATE
ACTION**

South Lakeland District Council

Climate Change Action Plan



June 2020

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Flood

Cumbria has suffered from major flooding events in recent years



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South Lakeland District Council's Climate Change Action Plan

Climate change poses one of the greatest threats to humanity and we are already seeing some of its very severe impacts around the world. An increase in global temperatures has led to more forest fires, extreme droughts, flooding, and storm events that are all threatening human lives and livelihoods across the globe and contributing to a biodiversity crisis. Since the millennium we have had 20 of the 22 hottest years on record.

Figure 1 shows how the average temperatures have changed since records began in 1884.

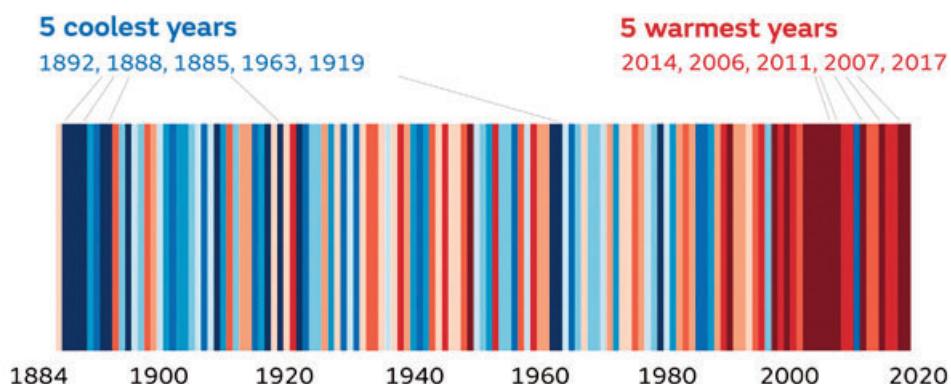


Figure 1: Graph showing warmer years in red and cooler years in blue. (Metoffice, 2018)

Cumbria too in recent years has had to deal with the impacts of a changing climate. Three flooding events in 10 years, including Storm Desmond, caused damage and disruption across Cumbria highlighting the vulnerability of our area. These storms statistically were expected to be one in a 100-year flood events, but were predictable with climate change trends: which highlight that we should expect more frequent flooding in the future. We can expect hotter, drier summers, rising sea levels and more frequent extreme weather events. April 2020 has been the driest April on record with Levens, Kendal having 11.6mm of rainfall compared to the average of 65.7mm and the summer looks set to be one of the hottest and driest on record (UK Metoffice 2020).

These weather events threaten people's lives, properties and health but also have a longer-term impact on people's physical, emotional and financial livelihoods.

This is a global issue that has been caused by an increase in greenhouse gas emissions; South Lakeland must work with the rest of the world to address our emissions and mitigate the impacts of climate change. The International Panel on Climate Change (2018 report) recommended we must limit global warming to 1.5°C to limit the negative impacts on humanity. This would entail a global reduction in carbon emission of 45% by 2030, and becoming carbon-neutral by 2050. South Lakeland (and Cumbria) are embracing these targets, and looking to go further and faster. As this is a global issue - we must all do what we can to reduce our carbon footprint and lead by example showing that a low carbon world is not only possible, but essential and desirable.

South Lakeland District Council Climate Change Action Plan

Figure 2 shows the UK's plan to be carbon-neutral by 2050 and why it is so important that we act now.

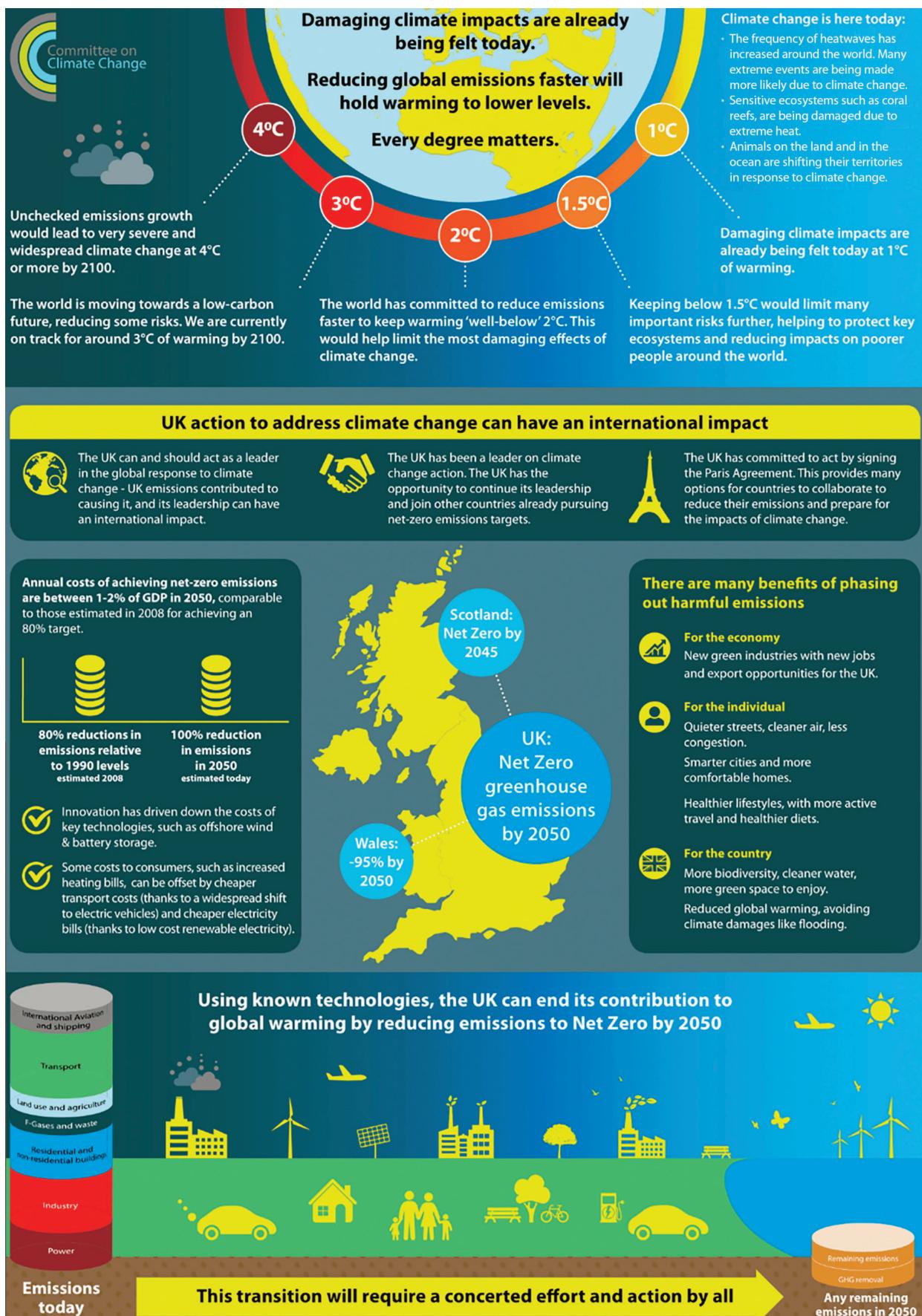


Figure 2: Infographic from the Committee on Climate Change (2019)

South Lakeland and Cumbria have an opportunity to lead a new low carbon future, which is beneficial to all - giving us a more beautiful, cleaner Cumbria, where the economy thrives with the growth of green industries, sustainable tourism appreciating the natural beauty and local cultures of the area, and residents take pride in their local area, buying local produce and helping meet our sustainable goals.

South Lakeland District Council's role

In February 2019 South Lakeland District Council (SLDC) declared a climate emergency - its Council Plan committing the council to "working to achieve a carbon-neutral South Lakeland". Our 2019 climate change policy acknowledges that climate change is occurring, that man-made greenhouse gas emissions are a primary cause and that climate change will continue to have far-reaching effects on people and places, the economy, society and environment in the district, across the UK and the world.

The council seeks to maximise the social, economic and environmental benefits which come from combating, and developing resilience to climate change and developing a sustainable economy.

South Lakeland District Council's ambition is to be a "carbon-neutral" council by 2030.

SLDC has also signed up to the Cumbria Joint Public Health Strategy: To become a "carbon-neutral" County and to mitigate the likely impact of existing climate change. SLDC have confirmed a target date for South Lakeland of 2037. To achieve this, over the next decade, we need to rethink how we live, work and invest in the District.

The council believes that becoming carbon-neutral will improve our quality of life in South Lakeland and help to build new green, clean growth opportunities for our economy.

Our ambitions:

**To be a 'Carbon-Neutral' Council by 2030 and a
'Carbon-Neutral' district by 2037.**

Co-benefits of addressing the climate emergency

The council's approach will be through collaboration and seeking co-benefits and positive outcomes. An example of a co-benefit is that moving towards more active travel to tackle air-quality also has benefits for physical health and mental wellbeing, as well as reducing carbon emissions, helping to make towns more attractive and safer places to be. Sustainability, economic growth, alleviating poverty and tackling climate change can all be complementary and interlinked.

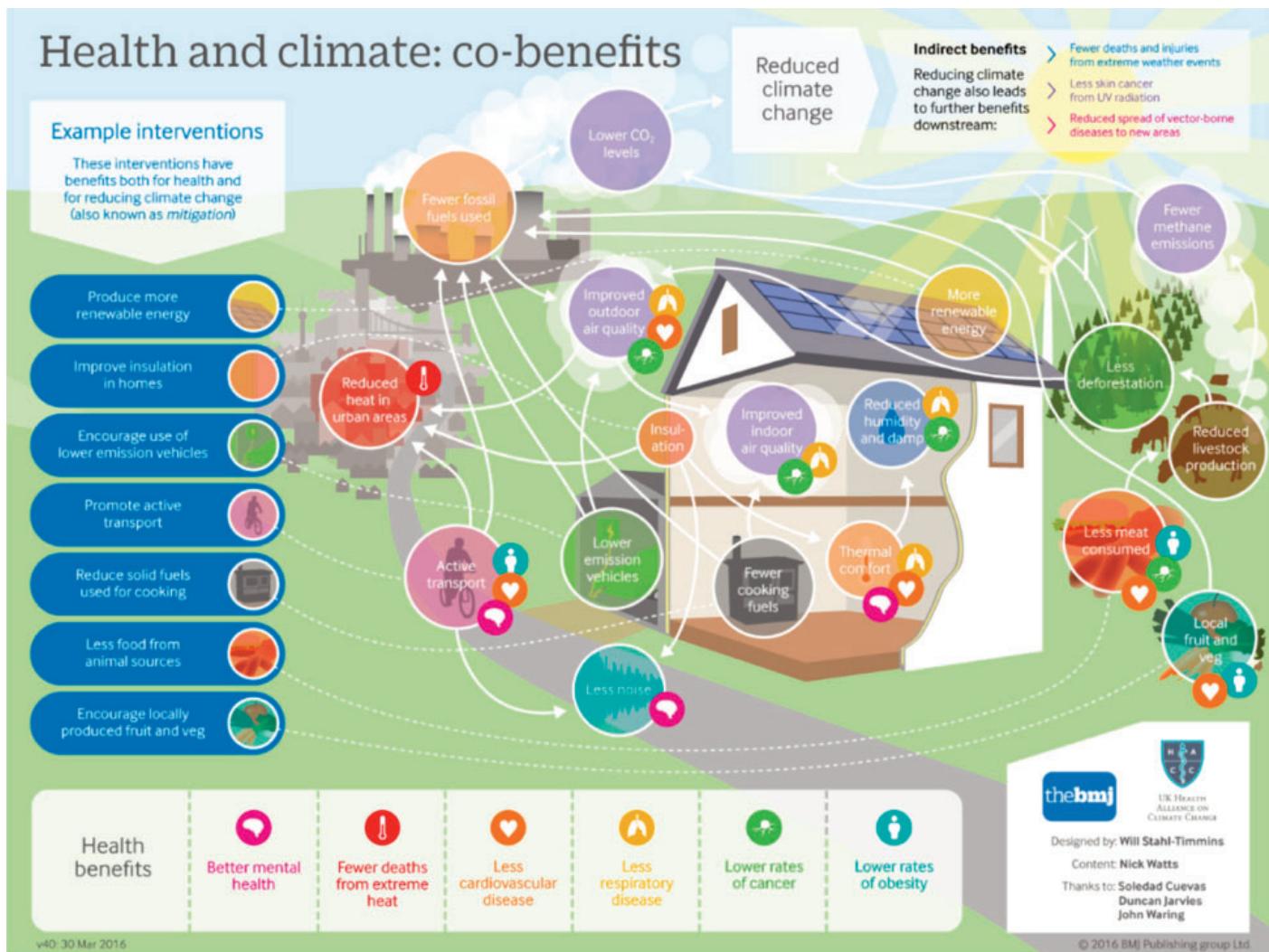


Figure 3: An example of the co-benefits with health (the BMJ, 2016)

South Lakeland District Council's Carbon Footprint

The carbon footprint measures greenhouse gas emissions that are under the council's direct control. This includes the emissions from the council's buildings, fleet vehicles and outsourced services. SLDC currently emits around 2600 tonnes of greenhouse gases (GHG) annually – this is largely from transport (waste and recycling and business transport), and our utilities (including contractors such as Leisure Centres).

Figure 4 shows our energy usage broken down by sector as a percentage of the total emissions.

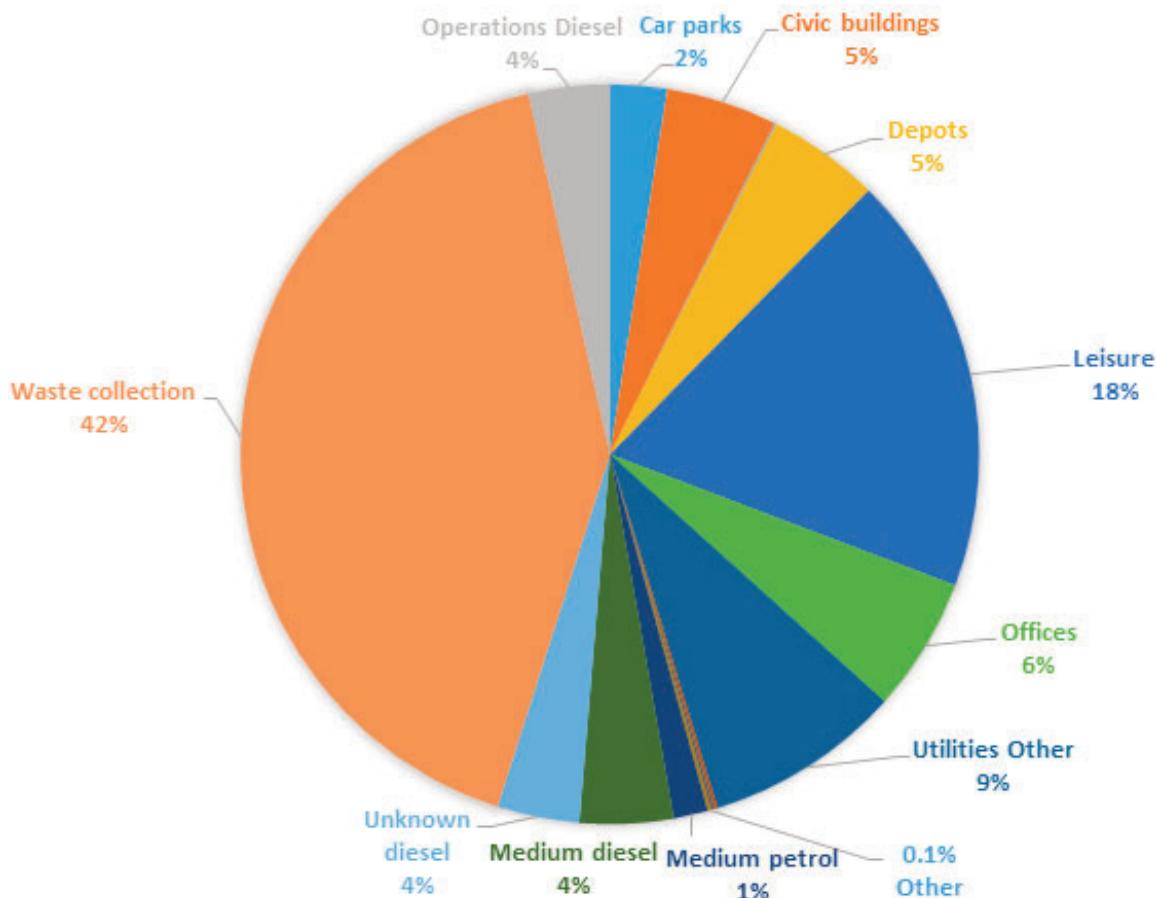


Figure 4: SLDC's Carbon Footprint 2018/19 (see appendix 1 for the actual CO₂ emissions by sector).

We have been measuring our GHG emissions in detail since 2010 and SLDC organisational carbon emissions have seen a 50% decrease falling from 5259 tonnes in 2010 to 2612 tonnes in 2018/19 (see figure 5).

SLDC's CO₂e Emissions by sector over time

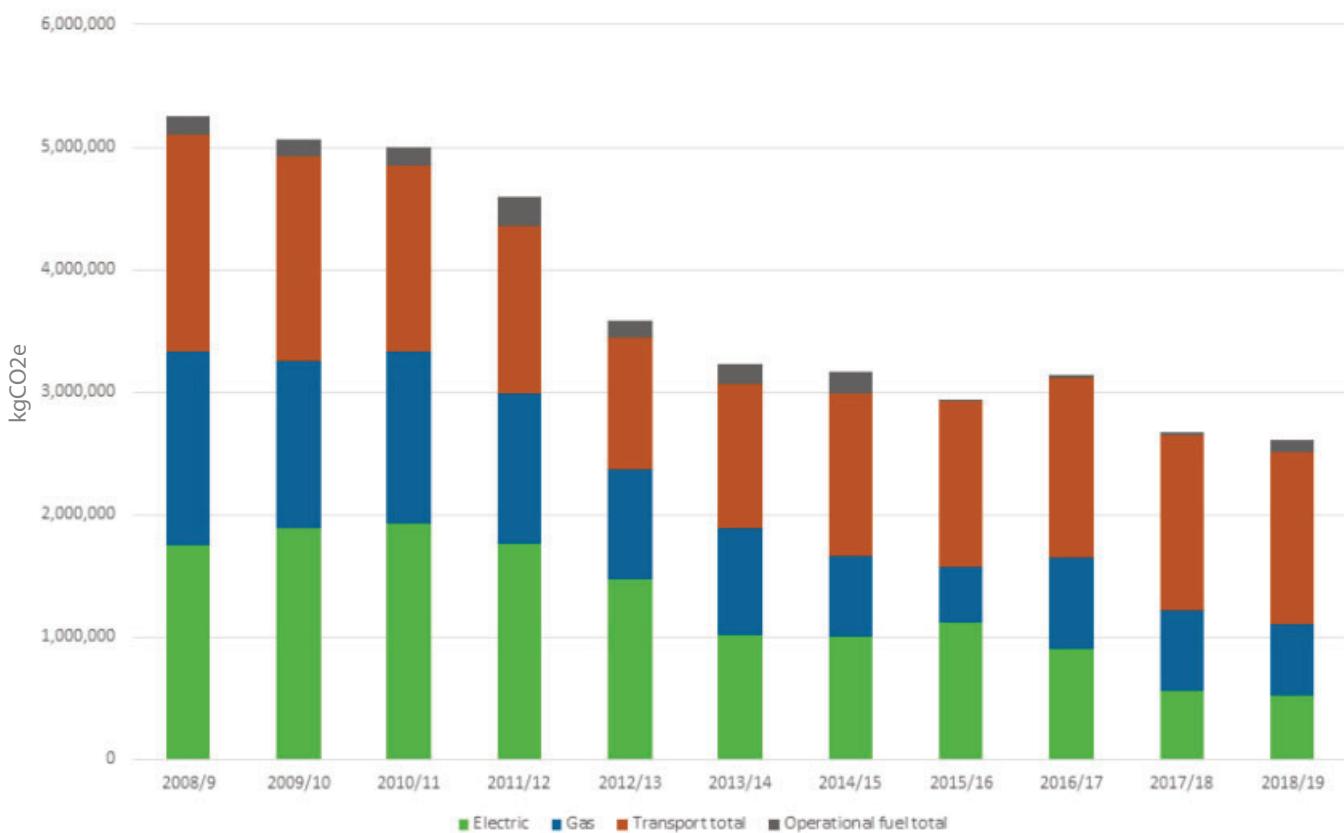


Figure 5: SLDC Carbon emissions by sector over the last 10 years

This drop has come partly from increased efficiency throughout our estate, but also it must be noted that for electricity the carbon factor used has reduced by nearly 40% in the UK due to an increase in renewable energy in the energy mix of electricity UK wide (2016: 0.41205 kgCO₂e per KWh and 2019: 0.2556 kgCO₂e per KWh). Additionally the council has sold some properties so the size of the council's estate has reduced. Therefore, while the council has made significant progress on reducing emissions through mitigation actions, the greening of the national grid and organisational changes have also had significant impacts.

What is the council measuring when it calculates its carbon emissions?

Government guidelines categorise emissions as:

- **Scope 1:** Direct emissions (such as council-owned vehicles or buildings)
- **Scope 2:** Energy indirect emissions (such as bought-in electricity)
- **Scope 3:** Other indirect (such as purchased materials)

Scopes 1 and 2 are recommended to be included in reporting; emissions falling under Scope 3 are optional. Needless to say, the more components that are considered 'in scope', the higher the total emissions will be, as it will be closer to a realistic figure. The figures are best estimates as we are trying to 'measure the unmeasurable' as best as possible.

At SLDC we are measuring:

Scope 1: Emissions by authority owned vehicles and emissions from gas and oil boilers, the energy used for operational work such as maintaining the parks

Scope 2: Grid electricity usage across the estate

Scope 3: Business travel, leased assets such as leisure centres and the emissions from some contractor companies. In the future we are hoping to include water consumption and emissions from other smaller contractors.

Figure 6: SLDC's total emissions and forecasts

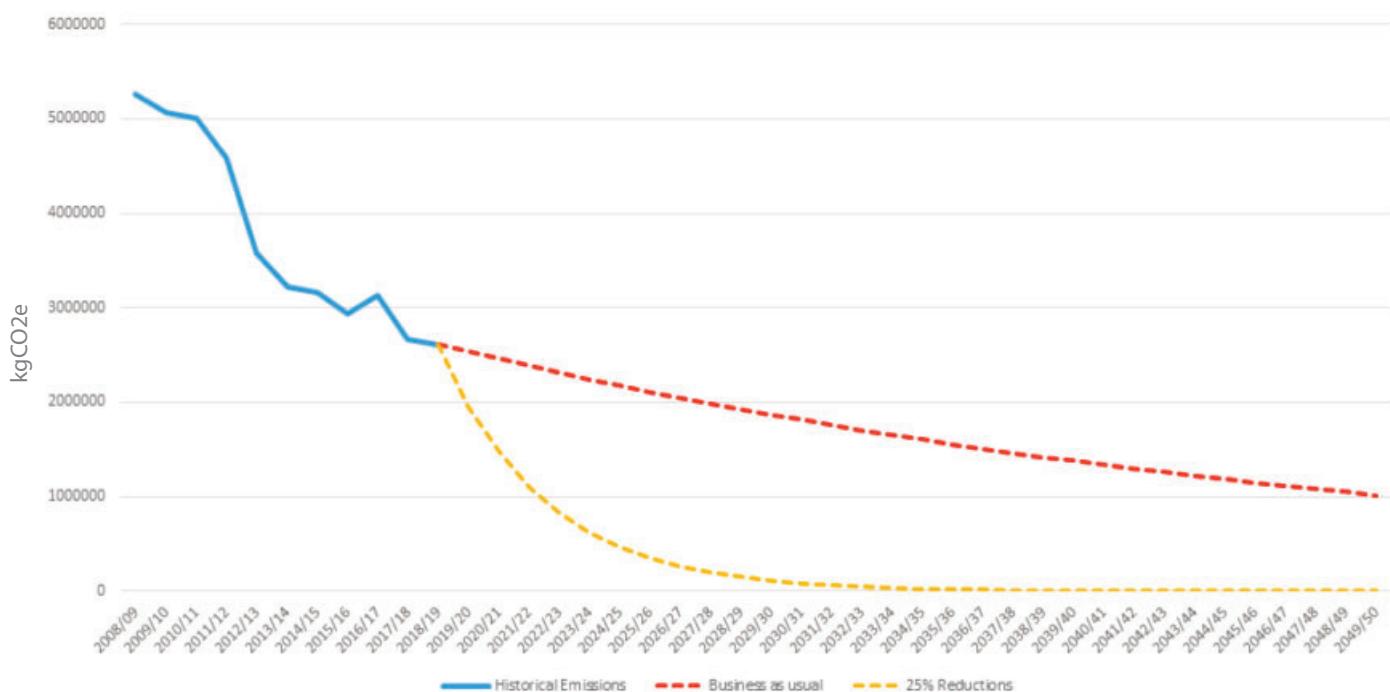


Figure 6: SLDC's target of 2030

SLDC have already reduced their carbon emissions by 50% since 2008 but would need to accelerate that reduction to reach the target of net-zero carbon by 2030. The red dotted line shows that business as usual is not enough for reaching this target. With offsetting and a more ambitious decrease of around 25% per annum we can reach our target of net-zero (orange dotted line), although the actual year on year reductions may look very different as it will depend on the impacts of unknown national policy and technological change.



*Transport is one of the highest
greenhouse gas emitters*

The whole of South Lakeland District's emissions

However, the council must go further than just its own operations to reduce emissions and will support the District and the local community to lower its carbon footprint. We all play our part in preventing the catastrophes associated with a warmer planet.

Cumbria as a whole have used Small World Consultancy to analyse our carbon footprint by production and consumption so that it is clearer where and when we are producing greenhouse gases (GHGs). They have concluded that if we are to achieve the Paris target of 1.5°C of warming Cumbria should aim to be carbon-neutral by 2037, which is what the South Lakeland District are setting out to do.

Small World Consultancy produced one possible vision of a low-carbon Cumbria:

A vision for low-carbon Cumbria

The targets and recommendations that follow are intended as part of wider roadmap to a better future for Cumbria. We imagine them to be implemented in ways that maximise co-benefits, especially in terms of health, community and economy. We now sketch out that vision from the perspective of residents, visitors and businesses.

For residents

Although there are more visitors, it feels less crowded. People are spending less time on the roads and have more freedom to take more exercise. The diets are improved, nutritionally balanced and sustainably sourced. Homes are more comfortable to live in; warmer, safer, and cheaper to run and more resilient to the climate crisis. Residents stay for longer, as there is no need to move on for better pastures. Communities are more integrated thanks to greater co-operation between residents, businesses and local government to improve people's lives.

For visitors

Cumbria is more beautiful, quieter and cleaner. It's exciting to visit because you can feel the sustainability transition taking place here. It is easier than ever to leave the car behind. Bikes (electric and conventional) are everywhere. There are fewer cars, and all are electric. The roads in towns and countryside are cleaner, quieter and calmer. You can get any and every kind of food you desire, but delicious, healthy, plant-based options are everywhere. People come to Cumbria for a glimpse of a better future; tourism is thriving.

The stunning landscape looks all the more beautiful with more wildlife, more trees, less erosion and no pollution in our lakes and rivers.

For businesses

The economy thrives with more jobs, especially in tourism, land management, and green energy. Emphasis on the green economy sectors shows that Cumbria is leading the way toward Net Zero, and this is a major attraction for young, educated workers to take up the job opportunities the county has to offer in both new and traditional industries. The quality of the environment is recognised as the best in England. Plenty of leisure time provides opportunities for employees to live active healthy outdoor lives, and this is a major draw for inward investment.

cont.

Farming thrives, maintaining a strong link with our cultural heritage whilst taking a leading role in its response to the emerging science on sustainable agriculture. Farming still produces some high-quality meat as well as grazing for improved biodiversity, as well as an increase in crop production where appropriate. Cumbria has an even stronger reputation for high quality agricultural produce that commands a high price and is increasingly exported.

Figure 7: A vision of a Low Carbon Cumbria – Small World Consulting 2019.

The Small World Consulting Report has taken a broad look at the emissions in Cumbria from three different perspectives - extraction, production and consumption-based emissions - allowing for analysis that prioritises industry and individuals. Because South Lakeland does not have any planned extraction-based emissions we do not need to include that section here.

Production-based emissions

Production-based emissions are the net emissions that are actually released in the South Lakeland area, for example, those released in the burning of fossil fuels, or those released from the production of electricity. The UK Government department BEIS (Department for Business, Energy & Industrial Strategy) annually release each summer local authority carbon dioxide emissions (no other GHGs). We are using data from 2017.

South Lakeland District (the geographical area) produces 665 Kilotonnes of carbon per year, split quite evenly between industrial and commercial fuel use, domestic energy and transport. We have also taken into account our potential for offsetting some essential carbon produced through Land Use, Land Use Change and Forestry (LULUCF) which has the potential of saving around 80 ktCO₂e (Kilotonnes of Carbon Dioxide Equivalent).

Figure 8 shows South Lakeland's production-based CO₂ emissions compared to the rest of Cumbria and figure 9 divides that by the total population to give a per capita figure:

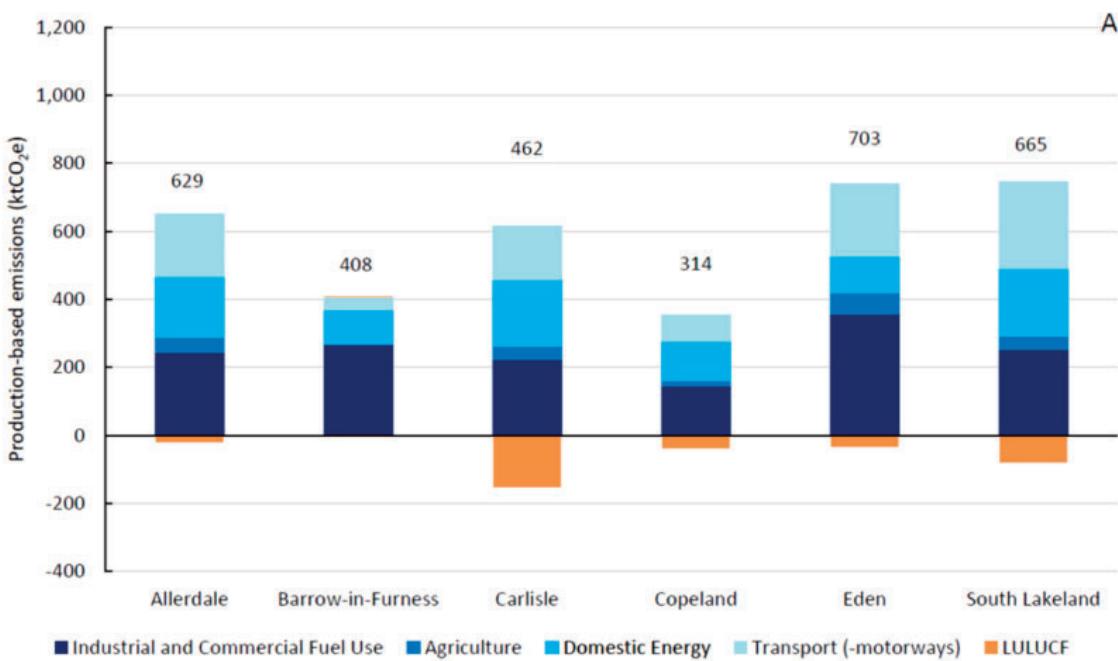


Figure 8: Total production-based CO₂ emissions by sector, broken down by Cumbrian local authorities (from A Carbon Baseline for Cumbria, A report by Small World Consulting Ltd, 2019)

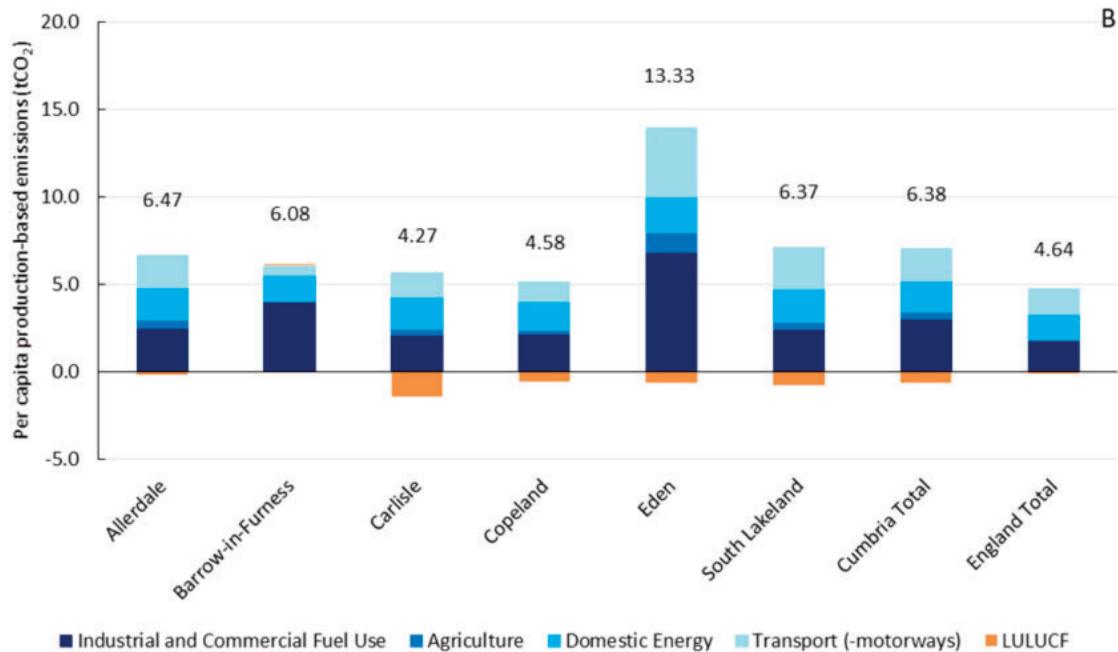


Figure 9: Production-based CO₂ emissions by sector and region, per capita basis (from A Carbon Baseline for Cumbria, A report by Small World Consulting Ltd, 2019)

Production-based emissions do not take into account the production of goods and services that are used in the local area (by residents, visitors or industry) when they are produced elsewhere. This is why it is important to look at the consumption-based emissions as well.

Consumption-based emissions

Using data collected by Small World Consulting Ltd in 2018 we have an estimate of the Greenhouse Gas ‘footprint’ for residents and visitors to Cumbria, this includes transport to and from Cumbria, the food we eat, and the supply chain of everything that is bought or used. For example, the carbon footprint of using a car is not only the fuel used but the carbon cost of manufacturing and decommissioning the car as well. This gives a more complete and realistic view of the impacts of residents, visitors and industries on the climate.

The figures are best estimates as it is nearly impossible to get accurate data for these tests, which include the main greenhouse gases.

Figure 10 shows the importance that tourism plays in our carbon emissions, especially visitors travel to and from Cumbria.

Total consumption-based green house gas emissions in Cumbria

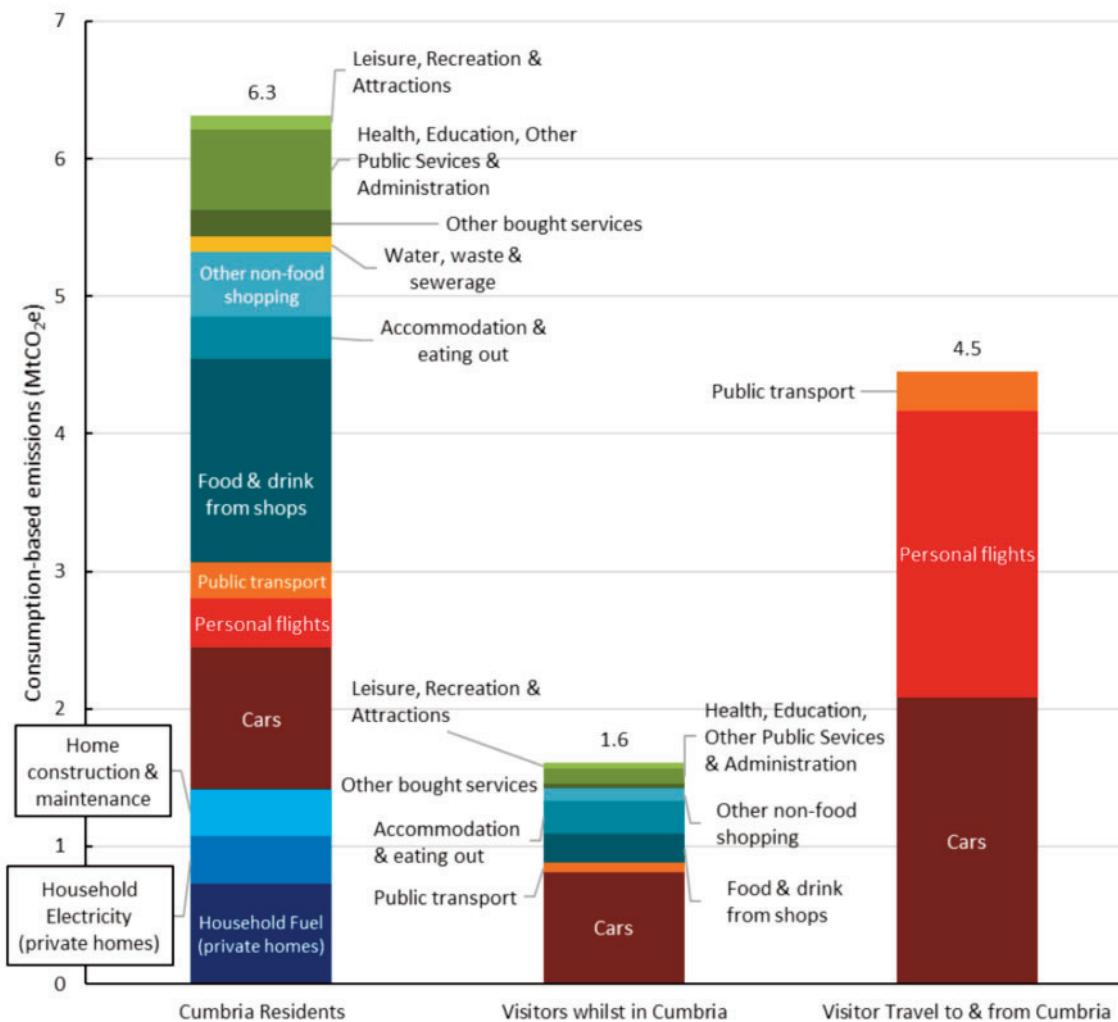


Figure 10: Total consumption-based GHG emissions by category and customer for the whole of Cumbria (Small World Consultancy Ltd).

Figure 11 shows the average carbon footprint for a resident in South Lakeland. This shows that changes across the board are needed to address our emissions. Personal flights were higher here than in other areas of the county.

The average emissions per South Lakeland resident

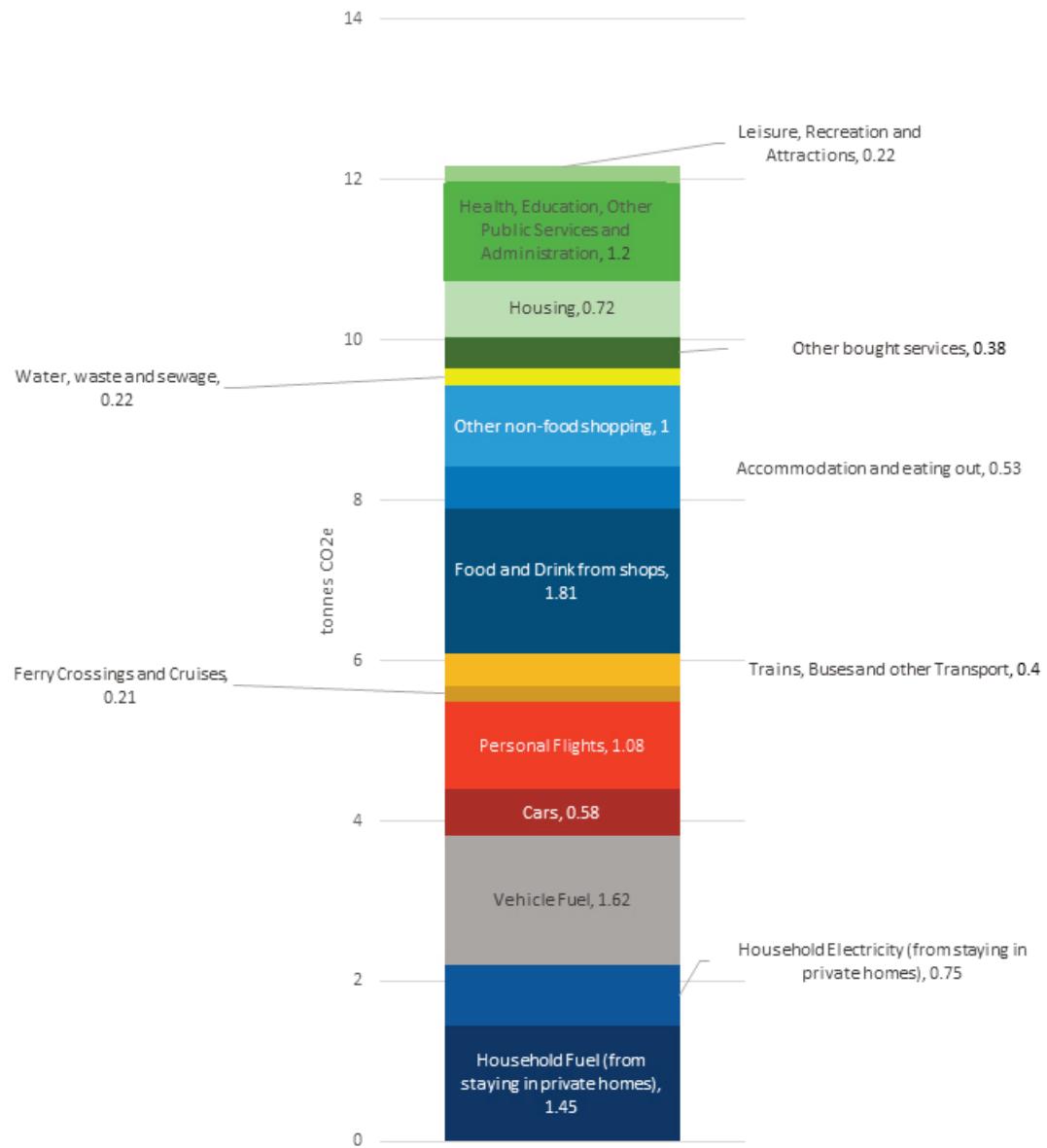


Figure 11: Per capita resident emissions broken down by category in South Lakeland

The scale of the change in **Cumbria** required is shown in the graph below:

Figure 12 shows the change needed in all aspects of our lives to bring about net-zero emissions by 2037 and includes the important role changes in land use will play to be a carbon sink (an absorber of greenhouse gases).

Option 3 - Net Zero by 2037: 13% annual reduction in energy only CO₂ emissions; 5% annual reduction in food and other purchased goods emissions; 10% annual reduction in visitor travel per visitor day emissions; 400% increase in annual LULUCF removals after 15 years.

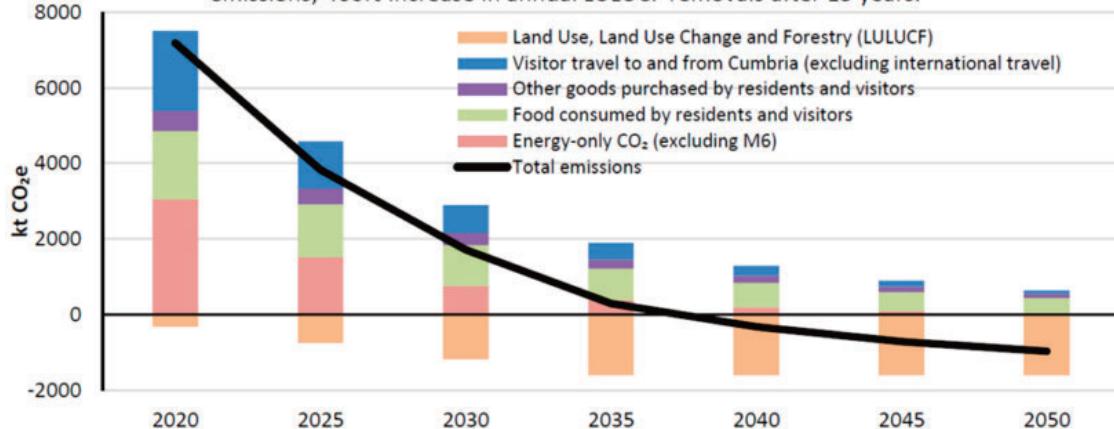


Figure 12: Change needed to reach net-zero emissions by 2037

To achieve this target there are significant changes that must take place in our district, including a 13% cut in CO₂ energy each year and we would need to look at offsetting our carbon, aiming for four-times as much offsetting each year.

As we approach 2030, many of these changes we can start to implement much sooner. Here are some suggestions of what changes will be needed and how they can be brought about:

Reduction in household fuel use – Improving insulation and efficiency within homes can cut emissions and fuel bills: Cumbria Action for Sustainability (CAFoS) can give advice and training with this.

Electricity decarbonisation - For example, switching to a renewable energy provider, installing a heat pump or solar panels instead of an oil system.

Reduction in carbon intensity of driving – For example switching to an electric or hybrid vehicle. Try to prioritise active travel, and only travel when necessary. Switch your next holiday to a local trip.

Reduction in residents driving – For example by using public transport, car share schemes, cycling, and walking where possible.

Cut waste – For example plan meals to eliminate food waste, use up leftovers, be creative with surplus food. Then use a compost bin/ wormery for any raw food waste left.

Make sustainable food choices – Think about the carbon footprint of the food you eat eg. Buying locally, having less imported meat. Extend this to all consumption including clothes, electronics and toiletries.

Cut in air freight - Buy locally grown/produce where possible to reduce the food miles and carbon footprint of food.



Renewable energy such as solar panels provide a solution to reducing carbon emissions from electricity

Reduction in emissions from visitors travelling to and from the area – encouraging visitors to stay longer or reduce their carbon intensity of travelling to our district, using public transport, buses and ferries, cycling and walking. Enjoy the area and see more by travelling in different ways.

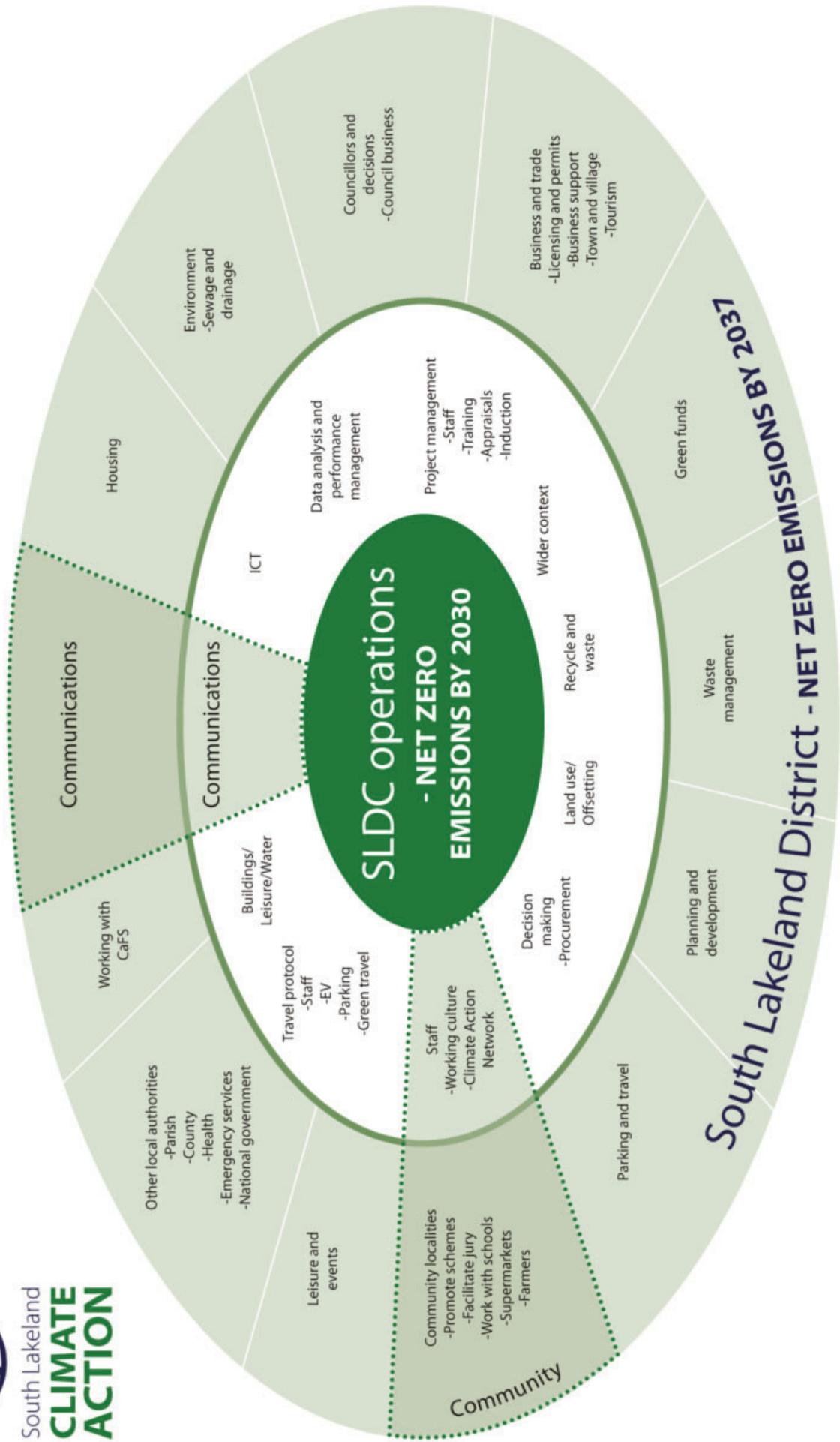
How are we going to achieve net-zero emissions?

The council has created an action plan, both for our own operations and for the wider district to transition to net-zero emissions.



South Lakeland
CLIMATE ACTION

SLDC Carbon Reduction Plan



SOUTH
LAKELAND
DISTRICT
COUNCIL



Wash it

Making South Lakeland the best place to **live, work and explore**



We can all do our bit, reducing the amount of waste we produce and recycling what we can helps to cut our carbon emissions

SLDC's Carbon Reduction Plan

The Carbon Reduction Plan is broken down into three sections:

1. **SLDC's own operations and buildings.**
2. **SLDC's services and collaboration with partners.**
3. **SLDC's influence with stakeholders (including the local community and national government).**

To ensure the action plan remains valid until 2037, it will be reviewed on an annual basis. This will allow the latest research, technologies and regulations to be incorporated over time, as well as learning from previous actions. This flexible approach will allow new partners, collaborators and stakeholders to continually contribute to the plan and its actions. The plan identifies key objectives for achieving net-zero emissions and the steps we can take towards it.

Timescales for implementation are as follows:

1. **Short term:** Actions that can start now and aim to be complete within the first few years of the plan.
2. **Medium term:** Actions which require further development to be implementable.
3. **Long term:** Actions that have dependencies or require substantial development to be implementable.
4. **Ongoing:** Actions that will need regular review throughout.

SLDC Climate Change Action Plan

Objective	Action	Timescale
SLDC's own operations and buildings		Target 2030
Achieve required carbon efficiencies at SLDC	<p>Create a council project team and governance to implement action plan.</p> <p>Create a tailored carbon emissions database to inform systematic reductions.</p> <p>Devise a carbon emissions impact tool to support informed and positive council decision making.</p>	Short term
Achieve net-zero emissions in council buildings	<p>Commission building by building reports on external and internal measures with recommendations (utilising the energy hierarchy: use less energy, improve your energy efficiency, and create new energy from renewable sources).</p> <p>Maximise water efficiency.</p>	Short term
Assess the potential for minimising emissions and improving biodiversity on SLDC owned land and assets	<p>Commission report(s) on enhancing biodiversity of SLDC land and parks, linking with our Green Infrastructure Strategy, Local Nature Recovery Strategy and Nature Recovery Networks.</p> <p>Review streetlights and potential energy-saving technology.</p>	Short term
Assess and implement measures to significantly reduce SLDC business travel emissions	<p>Develop and embed employee green travel protocol</p> <p>Investigate potential for electric vehicle and bike use for employees on council business</p> <p>Encourage councillors to minimise travel.</p>	Short term
Assess and implement measures to significantly reduce carbon emissions from SLDC waste and recycling service	<p>Look at the efficiency of existing waste collection rounds making changes where appropriate.</p> <p>Investigate emerging technologies to support reduced emissions.</p> <p>Investigate enhanced recycling options (e.g. food waste)</p> <p>Encourage community engagement with our recycling service.</p>	Long term
Assess and implement measures to significantly reduce carbon emissions from SLDC contractors	Review procurement to optimise carbon-efficient operations in council contractors.	Short term
Work with partner agencies across Cumbria to share best practice and achieve joint outcomes	Invest and support in partnership working arrangements across Cumbria.	Short term
Develop a productive and positive interaction with communities to stimulate actions	Develop and implement a communications plan and seek to proactively engage with the public.	Short term

Objective	Action	Timescale
SLDC's own operations and buildings (cont.)		Target 2030
Develop and implement a carbon offsetting plan	Assess our offsetting potential and work with local partners to create an offsetting and biodiversity strategy for SLDC.	Medium term
Off-setting: This plan prioritises carbon reduction measures to achieve our targets. However we recognise that it is currently not possible to achieve zero carbon emissions solely through reducing our carbon usage, so we will look to offset our irreducible emissions through working with partners such as the Lake District National Park and the Yorkshire Dales National Park at offsetting measures for example tree planting, biodiversity creation and other options.		
SLDC services and collaboration with partners		Target 2037
Review transport arrangements, improving travel, parking and roads in the district to move to a greener network	Review licensing and permits, encourage electric vehicles and discourage vehicle idling. Encourage cleaner air especially in town centres and near schools. Install Electric Vehicle charge points and look in to discount parking rates for low emission vehicles. Collaborate with Cumbria County Council to improve pedestrian and cycle routes across the district and support a review of public transport. Facilitate cycle hire provision, including electric bikes.	Medium term
Encouraging all festivals and events to be low carbon	Request sustainability plans for our own events and events organised by third parties including travel plans, stalls and sound/lighting systems.	Medium term
Support Businesses to become low carbon organisation	For example helping with green audits, hosting workshops and collaborate with companies on community energy groups.	Short term
Help the tourism industry transition to low carbon	Work with the National Park Authorities to support carbon reduction, better environmental management and increasing transport choices.	Medium term
Encourage cleaner and greener utilities and services	Working with utility companies and services to help neighbourhoods to be energy efficient and reduce waste.	Medium term
Help residents to have more energy-efficient homes	Promoting schemes such as LEAP/ Cold to Cosy and offering grants. Encourage local Registered Housing Providers to implement higher energy-efficient standards.	Short/Medium term
Ensure local planning processes prioritise sustainability and energy efficiency	Consult with communities and stakeholders on policy options for how new development can reduce carbon emissions. Progress work on a local nature recovery and green infrastructure strategy. Deliver climate change training for all Council planning officers.	Long term
Influencing UK wide initiatives	Councillors to lobby national government on low carbon initiatives and relevant policies.	Ongoing

Objective	Action	Timescale
SLDC influence with stakeholders		Target 2037
Working with community groups to encourage wider participation	Promote schemes and programmes that reduce our carbon footprint.	Ongoing
	Facilitate a citizens' jury.	Short term
	Work with schools, local businesses, farmers and landowners.	Ongoing
	Provide a funding pot for community projects.	Ongoing
	Engage with parish councils and other local authorities.	Ongoing
	Work with local organisations and charities such as Cumbria Action for Sustainability (CAfS).	Ongoing
Helping to keep the community up to date with changes on the green agenda and staying transparent and contactable.	Using our website, working with the local press and attending local events we are keen to know and share best practices across our district. Please email Climate.Action@southlakeland.gov.uk with any thoughts or queries.	Ongoing

So far, South Lakeland District Council has:

- Adopted a climate change policy and a biodiversity policy.
- Approved a council plan commitment to reduce our carbon footprint.
- Fitted PV panels to some council owned buildings.
- Commissioned an energy audit of SLDC owned buildings.
- Introduced the Fill-up scheme, offering free water refills.
- Provided financial support to enable the delivery of environmental projects.
- Financed a business leader event around sustainability issues.
- Continued to encourage 'reduce, reuse, and recycle' message around refuse and waste.
- Planted almost 4,000 trees in four years.
- Hired a dedicated sustainability coordinator.
- Continued to promote and support the handyperson scheme, **LEAP (Local Energy Advice Partnership)** and **Cold to Cosy** scheme to help residents improve energy efficiency
- Worked with Cumbria County to commission a Carbon Baseline Report for Cumbria
- Helping to fund an initiative in Ambleside called the A to Z - Ambleside to Zero Carbon by 2030.

A vibrant spring scene in a park. A large field of purple crocuses covers the foreground and middle ground. Interspersed among them are several clusters of yellow daffodils. In the background, there's a mix of green grass, more flowers, and a variety of trees, some bare and some evergreen. The sky is clear and blue.

Many of the solutions to our carbon emissions have multiple benefits such as improving biodiversity and people's wellbeing

Monitoring progress

At the end of each financial year, the review of the action plan will inform an understanding of the anticipated carbon saved. The council will publish a yearly review sheet showing carbon emissions for that year, and how we are performing with this target.

To support this SLDC will:

- Establish a flexible and dedicated internal project team to work across and with all appropriate council services.
- Develop a climate impact assessment tool to consider how everything that is proposed or implemented by the council can be carbon-neutral or contribute to reducing carbon.
- Develop new forms of democratic involvement – including “citizens’ panels”, crowd-sourcing and crowd-funding initiatives.

Working with communities, businesses and organisations

Working effectively with and in South Lakeland’s local communities and neighbourhoods will be vital. Communities, businesses and organisations will be invited to be engaged in the projects’ design and implementation in order to create genuinely sustainable solutions. Improving a community’s green space, for example, can only be sustainable if local citizens feel a sense of ownership, empowerment and for it to realise its benefits long into the future. The greatest impact will come from working together across all sectors.

Governance

Achieving our target to be carbon-neutral by 2030 (and for South Lakeland by 2037) will not work through ‘business-as-usual’ approaches. It will require us to work in different and new ways to ensure we effectively solve and tackle the issues we face. We will all need to focus on how to generate and capture more ideas, actions and resources from across the council, its partners and the district.

Finance

Key to implementing many of the actions to achieve the target will be funding. Building a carbon-neutral economy will create new opportunities for private and public sector investment. SLDC will take the following actions:

- Consider how internal budgets are used effectively to value and support work on carbon reduction.
- Identify appropriate ways to support and incentivise internal carbon reduction or offsetting projects.

Engagement

Effective engagement with organisations, workforces, partner agencies, sectors and all people who live and work in, or visit, the District is vital to making the ambition of being carbon-neutral by 2030 possible.

Innovative and effective ways of doing this that are currently under consideration include:

- Develop a community fund to encourage and support new community carbon reduction ideas.
- Have a more open process on carbon plans, working with key partners and experts across the District.
- Develop collaborative intelligence for wider District/ County carbon work.
- Reach out to community groups and stakeholders, mapping connections across the District and beyond.
- Develop a dialogue with key groups and individuals in the community.
- Engage and involve schools and colleges across the District.
- Develop and deliver local campaigns focused on the climate emergency.

We are keen to have public involved from the start – please email us with any thoughts and ideas: climate.action@southlakeland.gov.uk

SLDC is part of the Cumbria Climate Change Group, and works with many different environmental and sustainability focused community groups. If you would like more information about any of these or you are part of another group that would like to be included please get in touch



Figure 13: Organisations and community groups helping South Lakeland achieve carbon neutrality.

A close-up, low-angle shot of a person's hands watering a young tree. The person is wearing a blue and white plaid shirt and blue jeans. A white plastic watering can is tilted, with water dripping from its spout onto the dark brown soil around the base of a small tree. The tree has a thin trunk and several green leaves with red veins. The background is a soft-focus green field.

Planting
trees helps by
absorbing
 CO_2

Glossary

Carbon emissions: The UN lists six different greenhouse gases (GHGs) - carbon dioxide, methane, nitrous oxides and three fluorinated gases, that are emitted differentially by different processes. Each of these contributes differently to the greenhouse effect in magnitude and timescale, measured by 'global warming potential' (GWP). Although it is possible to report on these individually, general government recommendations are to report on the overall effect of all of these using 'carbon dioxide equivalent' (CO₂e) as the common measure to bring different GWPs onto a common scale.

Carbon-neutral/ Net-zero carbon: Where the carbon emissions caused by an entity (e.g. individual, business, product, etc.) have either been eliminated, or balanced by removals of greenhouse gases (including offsetting). This can sometimes be referred to as net-zero carbon.

For the purposes of this strategy, we have used "carbon-neutral" as shorthand for greenhouse gas emission neutrality.

Consumption-based emissions: We assess the greenhouse gas 'footprint' of residents, visitors and industry, including the supply chains of everything that residents and visitors buy and do whilst in Cumbria. Consumption-based reporting is important for looking at the climate change impacts that people and businesses have through their entire lifestyles, including the food they eat and the things they buy. For example, taking a consumption-based approach, the impact of driving includes not just the exhaust pipe emissions, but also emissions resulting from the manufacture and maintenance of cars and emissions resulting from the extraction, refining and transport of fuels to the pump. - For businesses, it includes the full impact of business practices, including procurement supply chains.

Production-based carbon emissions: These are the net emissions that are physically produced in Cumbria, most notably by the burning of coal, oil and gas, plus those arising from the production of electricity used in the county (wherever that generation takes place).

Carbon offsetting: To counterbalance the carbon produced there is a possibility of taking in more CO₂ for example through planting trees and restoring peat bogs. But these processes take time to absorb so it should be used as a last resort.

Scope for carbon emissions:

Government guidelines categorise emissions as:

- Scope 1: Direct emissions (such as council-owned vehicles or buildings)
- Scope 2: Energy indirect emissions (such as bought-in electricity)
- Scope 3: Other indirect (such as purchased materials)



*Electric cars can help
decarbonise transport*

Appendix 1

South Lakeland District Council Greenhouse Gas Emissions Data for period 1 April 2018 – 31 March 2019 (Tonnes of CO₂e)	
Scope 1	
Gas Consumed	254
Owned Transport Emissions	1,219
Scope 2	
Electricity Consumed	314
Scope 3	
Business travel	179
Contracted out leisure Management – gas	336
Electric	204
Other contractor – Operational	106
Total Gross Emissions	2,612
Total Annual Net Emissions	2,612

References

- Carbon Trust. (2020) – **What are Scope 3 emissions?**
<https://carbontrustmedia.azureedge.net/cache/5/0/5/8/4/d/50584d0640a379b1e9b84174a3e5bb1bed73b2b1.jpg> (Accessed 7th May 2020)
- Committee on Climate Change (2019) Net Zero – **The UK's Contribution to stopping global warming**
www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/ (Accessed 7th May 2020)
- Metoffice (2020) – **What is Climate Change?**
www.metoffice.gov.uk/weather/climate-change/what-is-climate-change
(Accessed 11th May 2020)
- Moss, J. Berners-Lee, M. Freitag, C. and Donaldson, S. (2020) – **A Carbon Baseline for Cumbria. Small World Consulting Ltd**
- Stahl-Timmins, W. and Watts, N. (2016) – **The UK Health Alliance on Climate Change. The British Medical Journal.**
www.bmjjournals.org/lookup/doi/10.1136/bmjjournals.1000031 (Accessed 7th May 2020)
- Tyndall Centre (2019) – **Setting Climate Commitments for South Lakeland.**
<https://carbonbudget.manchester.ac.uk/reports/E07000031/print/>
(Accessed 7th May 2020)



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June 2020