



**West Lancashire Borough Council**  
**Climate Change Strategy and Action Plan**  
**2020 – 2030**

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## **1.0 Introduction**

The need to reduce the impact that human activity is having on the environment is not a new concept. The impact greenhouse gas emissions are having on our climate and the risks this presents have been well documented for over thirty years. However, a report released by the Intergovernmental Panel on Climate Change (IPCC) in late 2018 highlighted that efforts already undertaken to reduce these impacts are not enough.

More ambitious goals are required if we are to dramatically reduce greenhouse gases and cap further temperature rises at 1.5°C, an identified threshold for dangerous climate change. This has been strongly supported by the Governments advisory Committee on Climate Change (CCC) who subsequently recommended an ambitious target to reduce UK greenhouse gas emissions to zero by 2050.

This target is considered achievable with considerable retro-fitting, known renewable technologies and behavioural change and is considered deliverable within the economic cost originally accepted with the Climate Change Act in 2008.

There are numerous additional benefits associated with achieving a low carbon future, for example, improved health and wellbeing, improved air quality, tackling fuel poverty, changes in land use and reduced noise. The advances in low carbon technologies, energy storage and low carbon vehicles also offer significant opportunities for our economy and employment sector.

This is a crucial time in the global effort to reduce climate change, but greater action must start locally and it must start immediately, if we are to achieve the target to reduce UK greenhouse gas emissions to zero by 2050. As a Local Authority, service provider and estate manager, we should be leading the way in achieving carbon reductions and reducing our impact on the environment.

### **1.1 A Local Focus on a Global Problem**

The vision of the Council is 'West Lancashire together: the place of choice to live, work, visit and invest'. To achieve this, the Council has identified seven priorities, one of which is to become a greener West Lancashire. The Councils wants:

- To become a Carbon Neutral Council by 2030
- Local business and citizens to embrace the green agenda
- Council housing stock to meet high standards of efficiency - insulation, design, technology
- To minimise waste disposal and improve recycling services to meet national targets
- To embed green infrastructure into our thinking and planning for West Lancashire's future development and regeneration
- To safeguard the natural landscape and maintain our green environment

To achieve this, the Council will:

- Be a role model and lead good practice; develop a Climate Change strategy and action plan
- Ensure all council buildings are operating to highest efficiency standards – insulation, design, and technology
- Encourage local businesses and service providers to set their own targets for becoming carbon neutral and promote their achievements

- Commit to maximising Council energy requirements from renewable sources
- Maximise the use of solar panels on Council owned buildings and housing stock
- Increase the use of environmentally friendly products
- Optimise the development of solar/wind farm investment
- Use the supply chain to maximise energy efficiency, design out waste and reduce our carbon footprint
- Optimise the Council fleet; increase route efficiency and maximise low emissions
- Enhance green spaces promoting diverse leisure uses and explore the option of developing an Eco park
- Support the development of green transport
- Use green credentials to form part of our procurement selection criteria
- Reduce waste and improve recycling, implement a Waste strategy with a focus on sustainable solutions
- Develop a Local Plan policy encouraging green developments – green space, energy efficiency, sustainable supply chains

It is recognised that tackling climate change isn't a stand-alone issue delivering a low carbon future should not only be embedded in every part of the Councils vision, it should also be a key delivery vehicle to achieving it:

- Low carbon goods and services are a rapidly growing market and provide significant growth opportunities for a low carbon economy.
- Supporting the development and take up of new technologies and innovation will promote sustainable economic growth.
- New, skilled job opportunities will come from renewable energy and energy efficiency retrofitting markets.
- Businesses will need to meet increasing customer expectations on their sustainability credentials to thrive.
- Investment in local energy networks and renewable energy improves energy security.
- Community energy projects will engage and empower our local communities.
- Good air quality will come from decarbonising transport and utilising greener travel choices.
- Good quality, energy efficient housing will increase affordable warmth and reduce fuel poverty.
- Improved health and well-being will come from less people living in cold and damp housing.
- Good access to green spaces will encourage more sustainable travel and healthier lifestyles.
- Tree planting delivers excellent biodiversity and habitat benefits, as well as being excellent carbon stores and providing protection from climate change impacts such as flooding and heatwaves.

## **1.2 Climate Change Emergency Declaration**

In July 2019, West Lancashire Borough Council joined many other Councils in acknowledging the IPCC report findings and declaring a Climate Emergency.

In signing up to this declaration, the Council pledged to:

- Have a vision of, and aspire to be a carbon neutral Council by 2030, at the latest.
- Continue to call on Westminster to provide the necessary powers and resources to make local action on climate change easier.
- Work to explore the expansion of community energy to keep the benefits of local energy generation in our local economy.
- Continue to work with partners anchored in West Lancashire to deliver carbon reductions and grow the local economy.
- Encourage local Councillors to take action in their communities, with a view to establishing a citizen's assembly.
- Encourage climate change action through new Local Plan policies, including both domestic and commercial new build requirements and additional planting of woodlands.
- Consider initiating a multi-year programme of insulation and other energy efficiency measures to the Councils housing stock.

## **1.3 Single-Use Plastics**

A further motion was also passed in December 2019 in relation to the elimination of Single Use Plastics (SUPs) and inclusion of the following actions:

- The development of a robust Strategy to make West Lancashire Borough Council a 'single-use plastic free' authority by the end of 2020, including an end to the purchase and procurement of SUPs through the Council supply chain and a transition to the use of compostable bags for litter collection by the Councils Clean and Green teams.
- End the provision of SUP products such as cups and cutlery in Council buildings and at Council run events.
- Work with tenants and operators in commercial properties owned by the Council, to encourage the phasing out of SUP cups, bottles, cutlery and straws.
- Encourage the Boroughs businesses, organisations and residents to go SUP free, working with best practise partners to provide business support, practical guidelines and advice to help local businesses transition from SUPs to sustainable alternatives.

## **2.0 Action on Climate Change**

Whilst declaring a climate emergency is an important first step in demonstrating our commitment to the challenge ahead, the really crucial part is the action that follows. The Council recognises that action is required now and that we need to provide leadership in this climate crisis. This will fall into two main areas:

### **1. Reducing the Carbon Footprint of Council Operations**

Reducing the impact the Councils operations have on the environment is a crucial starting point to tackling the climate crisis. Whilst it is appreciated that, in comparison to the carbon footprint of the Borough, emissions from Council operations are relatively small, we also recognise the importance of getting our own house in order prior to adopting a leadership role to others.

The Councils carbon footprint is quantifiable and we have an emissions baseline which is within our control and we can work to reduce. Achieving a carbon neutral status for the Council is therefore identified as our first challenge. Notwithstanding this, the importance of community and borough-wide action is recognised and will be progressed.

### **2. The Carbon Footprint of the Boroughs Operations**

Identifying carbon targets and delivering quantifiable reductions for the Borough is by far a bigger challenge. Whilst the Council already support some work in this area, and will continue to do so, we recognise more work is required to have a greater understanding of how best to use Council resources to have the biggest impact on greenhouse gas emissions across the Borough. Work in this area will continue to develop and be incorporated into the Climate Change Strategy as it evolves and develops over coming years.

It is also recognised that any zero/ low carbon targets proposed will need to be adopted by all who live, work and visit the borough to make any real impact. The Council will look to engage with our local communities to identify areas and projects they would like to see delivered across West Lancashire.

## **2.1 A Green Recovery to the Covid-19 Pandemic**

Recovery from the recent Coronavirus pandemic will no doubt be challenging, but it's imperative that the climate change emergency isn't forgotten and that we couple coronavirus recovery plans with climate action. There are financial, environmental and social benefits to ensuring a low carbon and climate resilient recovery, taking effective and lasting climate action which will build sustainable and resilient communities.

Coronavirus recovery plans offer a window of opportunity to retain and build on the environmental benefits we have witnessed during the period of lockdown across the Country. Lifestyles have no doubt become greener and Coronavirus related travel restrictions have seen traffic levels fall dramatically, cutting harmful air quality pollutants and CO<sub>2</sub> emissions significantly. Less commuting and increased video-conferencing and working from home will reduce transport emissions. More people walking and cycling will have benefits to both the environment and people's health and wellbeing. More people enjoying local green spaces, with reduced noise levels and increased biodiversity all have many environmental benefits.

However, there has been many warnings to not assume this drop in pollution levels will lead to any significant and sustained climate action progress. Avoiding warming of more than 1.5°C above the pre-industrial temperatures will require an unrelenting reduction year on year for the next decade.

The International Renewable Energy Agency has encouraged Councils to accelerate investment in renewable energy to generate economic benefits and tackle the climate crisis. Energy efficiency and retrofit work is also an area that has been highlighted in Government proposals to rescue the post-Coronavirus economy. Leading economists have highlighted green measures as amongst the highest rated Coronavirus recovery policies for factors such as speed of implementation, long term economic benefit and climate impact.

Recommended actions for Councils, that need to be considered and prioritised within this plan include:

- Improve and maintain cycle and walking routes around the Borough and look to increase provisions where possible, to help make it easier for residents to make active and sustainable travel choices.
- Capitalise on the momentum and support for active travel and the appreciation for parks and green spaces and consider how these can be enhanced for environmental and social benefit.
- Maintain our green space provisions and invest in more tree planting schemes.
- Identify investment opportunities from renewable energy that could generate huge economic benefits while helping to tackle the climate crisis.
- Enable staff to work from home where possible and investigate the potential changes in office accommodation this could facilitate.
- Focus on energy efficiency across the corporate building estate to meet climate targets.

It is recognised that time is of the essence and these actions will be investigated and built into the relevant action plans.

### 3.0 Achievements to Date

This chapter reflects on our achievements over the last decade to reduce the impact our operations have on the environment.

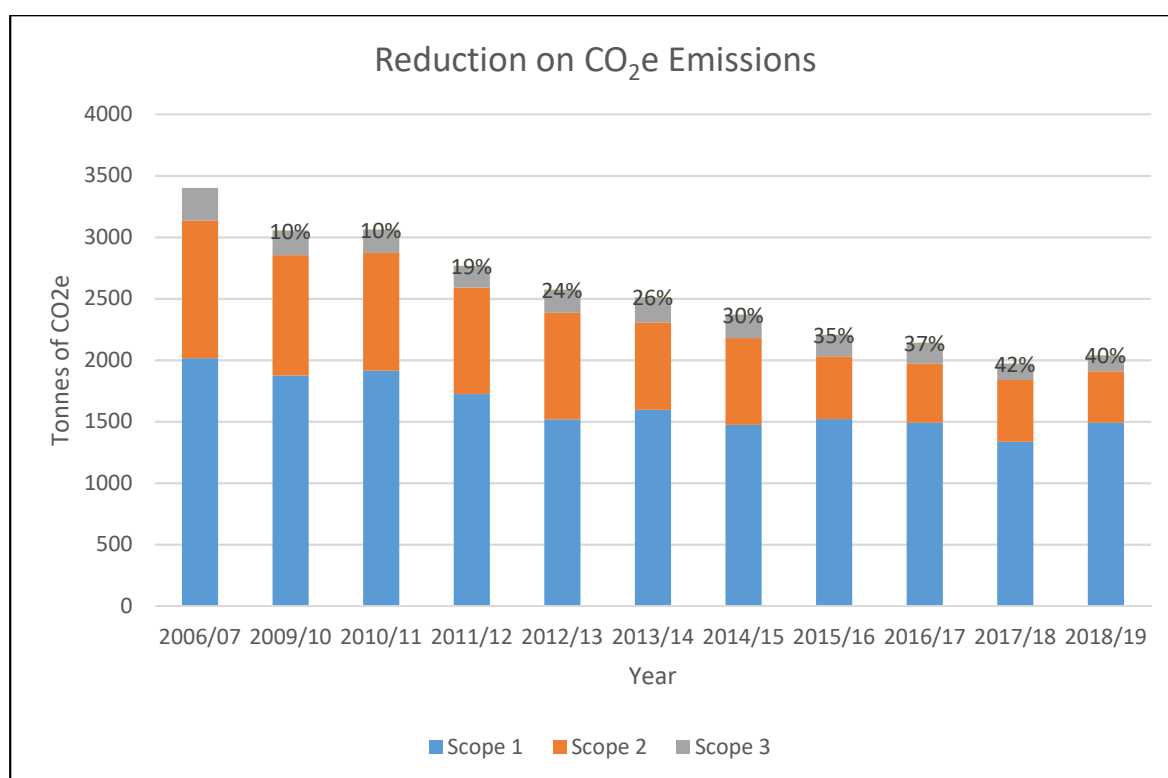
#### 3.1 Climate Change Strategy and Action Plan 2008 - 2020

The Council adopted a [Climate Change Strategy and Action Plan](#) back in 2008. This Strategy aimed to reduce greenhouse gases, whilst maintaining and improving the quality of services provided. The Strategy set a target to reduce emissions of greenhouse gases directly associated with Council operations by at least 25% by 2020, against a 2006/07 baseline.

The baseline carbon footprint included gas consumption in corporate buildings and fleet transport (scope 1 emissions), electricity consumption in corporate buildings (scope 2 emissions), electricity transmission and distribution and staff/Member business travel (scope 3 emissions). It was calculated and reported annually in line with [DEFRA guidance on how to measure and report greenhouse gas emissions](#).

The Council achieved year on year reductions in emissions, reaching a 26% reduction in emissions and achieving the Strategy target in 2013/14. Further work over more recent years continued to build on this achievement, with the Council reporting a 40% reduction in our 2018/19 carbon footprint, against the 2006/07 baseline.

A full breakdown of our annual achievements can be seen in Graph 2.1 below.



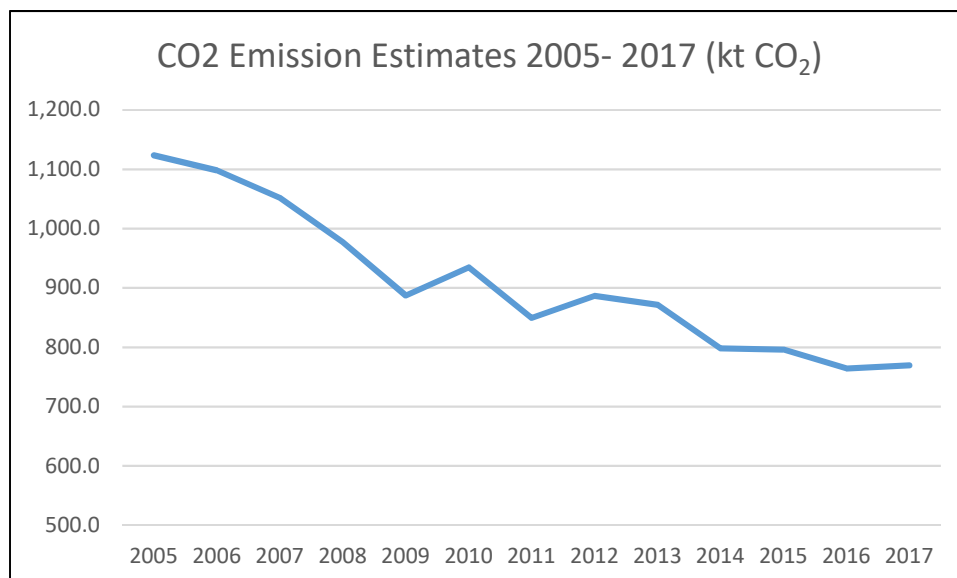
**Graph 3.1: Annual Reduction in WLBC Corporate Carbon Footprint**

This Strategy aims to build on the success of work completed to date and will supersede the Climate Change Strategy 2008 – 2020 and the Sustainable Energy Strategy 2012- 2020.



### 3.2 West Lancashire Local Authority Area Emissions

The Department of Business, Energy and Industrial Strategy (BEIS) publishes UK local authority and regional estimates of CO<sub>2</sub> emissions on a yearly basis. With the most recent data detailing emissions from 2017, this data is a few years behind but is the best currently available.



**Figure 2.3: UK Local Authority CO<sub>2</sub> Emissions for West Lancashire**

Source: BEIS data, National Statistics

Emissions across the West Lancashire area have fallen by 354ktCO<sub>2</sub> (31%) between 2005 and 2017. This is a good start but far more needs to be done if we are to contribute towards meeting UK emissions targets by 2050.

### 3.3 Improving the energy efficiency of our Housing Stock

Over recent years, the Council have significantly invested in making its homes more energy efficient, delivering basic measures including:

- Loft and cavity wall insulation programmes
- Annual A-rated gas boiler replacement programme
- Window and external door replacement programmes
- External wall insulation projects

We have also invested in various renewable energy installations to benefit our tenants, help reduce their energy bills, deliver affordable warmth, reduce fuel poverty and improve the EPC ratings of our homes.

Installation of these technologies has also led to significant savings for the Council. By maximising opportunities from external funding pots such as Carbon Emissions Reduction Target (CERT), Community Energy Saving Programme (CESP) Green Deal, and (Energy Company Obligations (ECO) over recent years, as well as generating new income streams for the future from Feed-in tariffs (FITs) and Renewable Heat Incentives (RHI).

These measures include:

- Installation of Air Source Heat Pump (ASHP) heating systems in over 150 properties, providing a reliable, efficient and low carbon source of heating and hot water to homes located off the gas-grid. These installations also receive Domestic Renewable Heat Incentive (RHI) payments which achieve a return on investment in around 7 years.
- A communal biomass pellet boiler which supplies a sheltered housing scheme with low carbon heating and hot water for 42 dwellings. This system also receives payments from the non-domestic RHI scheme.
- A large-scale domestic solar photovoltaics (PV) project installing solar panels on 588 properties. This provides free electricity for the tenant, reducing energy bills and helping reduce fuel poverty. The systems also generate income for the Council from the FIT scheme over a 20 year period from the date of installation.
- A Combined Heat and Power (CHP) system on a sheltered housing scheme containing over 40 dwellings. This boiler generates renewable electricity from the gas boiler, resulting in savings on the landlord energy bills.
- Plus, eight corporate solar PV schemes generating renewable electricity for two office buildings, the Investment Centre and five sheltered housing schemes, along with a solar thermal system generating hot water at another sheltered housing scheme.

## 4.0 Carbon Emission Baselines

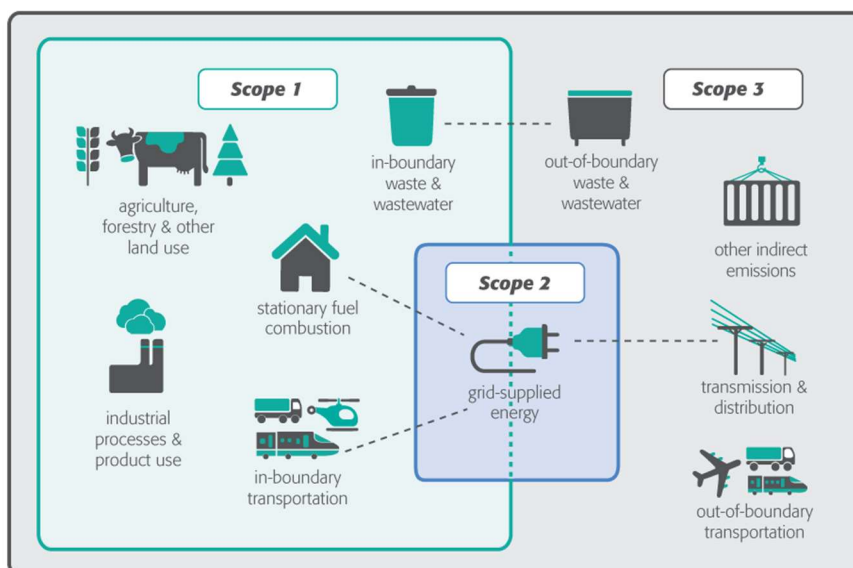
The monitoring and reporting of carbon emissions in West Lancashire, both corporately by the Council and nationally by relevant Government bodies, has been happening for well over a decade, so progress to this point is largely well documented.

Following the climate emergency declaration, new baseline data is required to:

1. Set out the current position.
2. Identify the largest sources of emissions and identify priority areas to tackle.
3. Act as a new marker which all future progress will be measured against.
4. Evidence the achievements and accomplishments in the future.

In accordance with the Greenhouse Gas (GHG) Protocol Corporate Standard, emissions have been calculated under three scopes, as illustrated in Figure 4.0 below. These include direct emissions, indirect emissions and other indirect emissions:

- **Scope 1** (direct) emissions are those occurring from sources owned or controlled by the Council (e.g. fleet fuel and gas consumption) or located within the boundary of West Lancashire.
- **Scope 2** (indirect) emissions are those released into the atmosphere as a result of the consumption of purchased grid electricity, heat, steam and cooling. These indirect emissions are a consequence of both the Councils and Boroughs energy use, but occur at sources not owned or controlled within the Borough.
- **Scope 3** (other indirect) emissions are all other greenhouse gases that occur at sources not owned or controlled and not classed as Scope 2 emissions e.g. waste and water disposal, materials consumption and business travel that occur outside the Council or the Borough boundary.



**Figure 4.0: Definition of Scope 1, 2 and 3 Emissions**

#### 4.1 West Lancashire Borough Council 2018-19 Carbon Footprint

West Lancashire Borough Councils 2008 carbon footprint utilised a 2006/07 baseline, specifically related to corporate buildings. The footprint excluded energy consumed through landlord supplies in other Council run buildings such as community sports pavilions, public toilets and sheltered and communal housing. It was also a footprint solely based on energy consumption in corporate buildings and didn't extend to emissions from other sources such as water consumption, waste and paper usage. However, it is recognised that if the Council is to achieve complete carbon neutrality, it will need to include emissions from all possible aspects of our operations.

In March 2020 the Council partnered with One Carbon World to undertake new a baseline carbon footprint of the Council's estate and operations. One Carbon World is a not for profit, carbon neutral organisation and global resource partner of the United Nations Climate Neutral Now initiative. They are recognised for offering advice and support on measuring and reducing greenhouse gas emissions around the world.

One Carbon World have provided an externally verified carbon footprint measurement for the 2018/19 financial year, utilising approved DEFRA GHG emissions conversion factors. The footprint boundary incorporates all activities under the Councils operational control (where possible) covered under Scopes 1, 2 and 3 of the Greenhouse Gas (GHG) Protocol Corporate Standard and is compatible with international standards ISO 14064 and PASA 2060.

Activities and emissions included in the footprint include all fuel use, materials use, bioenergy use, UK electricity use, business travel (land), waste disposal, water supply and treatment. This includes a well-to-tank (WTT) emissions factor, to capture the average indirect emissions released into the atmosphere from the production, processing and delivery of a fuel or energy.

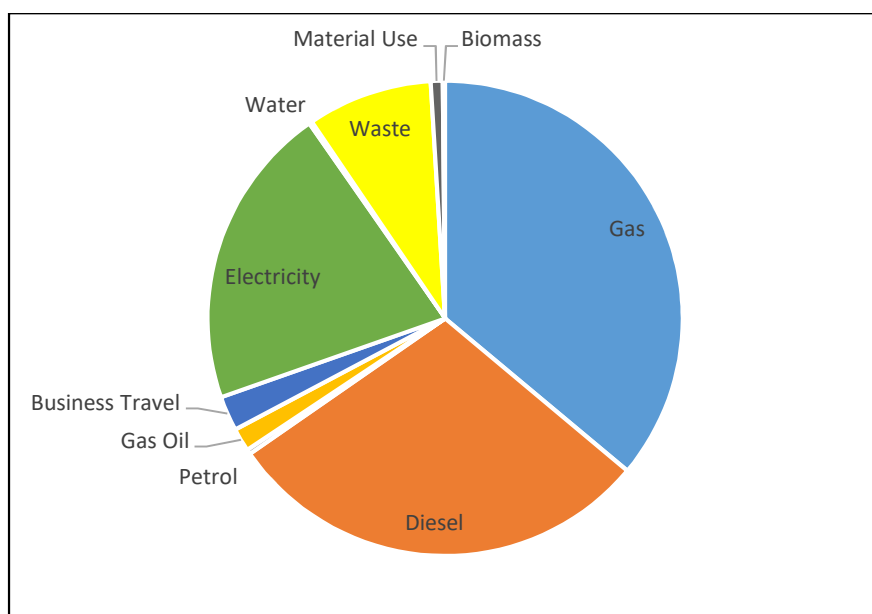
There have been some omissions, due to data availability and the Council will look to put measures in place to start collating this data for inclusion going forward. Emissions currently not included in our carbon footprint include those from:

- Air conditioning units
- Business travel by train
- Overnight hotel stays
- Water use within sheltered housing schemes (currently unmetered)
- Waste from all other buildings except corporate offices
- Total ink cartridge consumption (data only partially complete)
- Staff commuting to work

***The total carbon footprint of West Lancashire Borough Council activities in 2018/19 is:  
5,102.89 tonnes CO<sub>2</sub>e.***

This equates to 10.39 tonnes CO<sub>2</sub>e per member of staff per year.

A breakdown of the carbon footprint by sector can be found in Figure 4.1 overleaf.



**Figure 4.1: WLBC Carbon Footprint by Emission Type**

The report concludes that the most significant sources of CO<sub>2</sub>e emissions originate from:

- Gas consumption in buildings
- Diesel consumption from Council fleet

### 4.3 West Lancashire Borough Carbon Footprint

There are a number of resources available to Local Authorities to help establish our current position and the action required to tackle the climate crisis.

To establish a carbon footprint for the Borough as a whole, we have utilised the newly developed SCATTER tool, funded and endorsed by The Department for Business, Energy and Industrial Strategy (BEIS). Setting City Area Targets and Trajectories for Emission Reduction (SCATTER) is a local authority focussed emissions tool, built to help create low carbon local authorities. Utilising a range of national and public datasets, it can generate a quantified greenhouse gas emissions inventory, following the Global Protocol for City-Wide Greenhouse Gas Emissions, for West Lancashire.

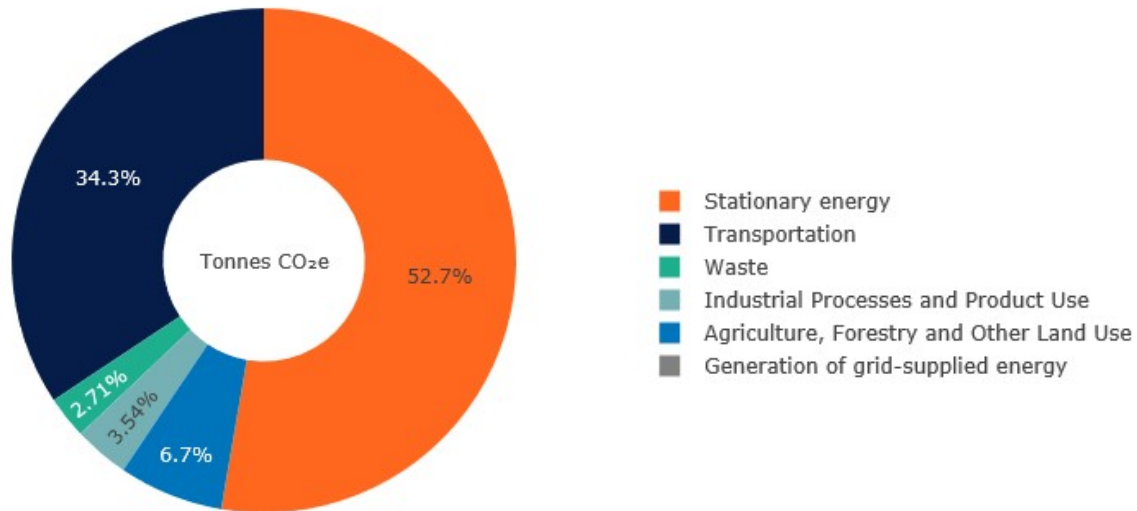
The GHG inventory tool provides the most recent, freely available emissions data, currently presenting 2017 greenhouse gas emissions data within the local authority boundary, calculated in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) which includes gases CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>, reported in CO<sub>2</sub>-equivalent.

**SCATTER data indicates that West Lancashire's carbon footprint for 2017 amounts to a total of 949,954 tonnes of CO<sub>2</sub>e.**

A full breakdown of this figure, by scope, sector and subsector, can be found in Appendix B.

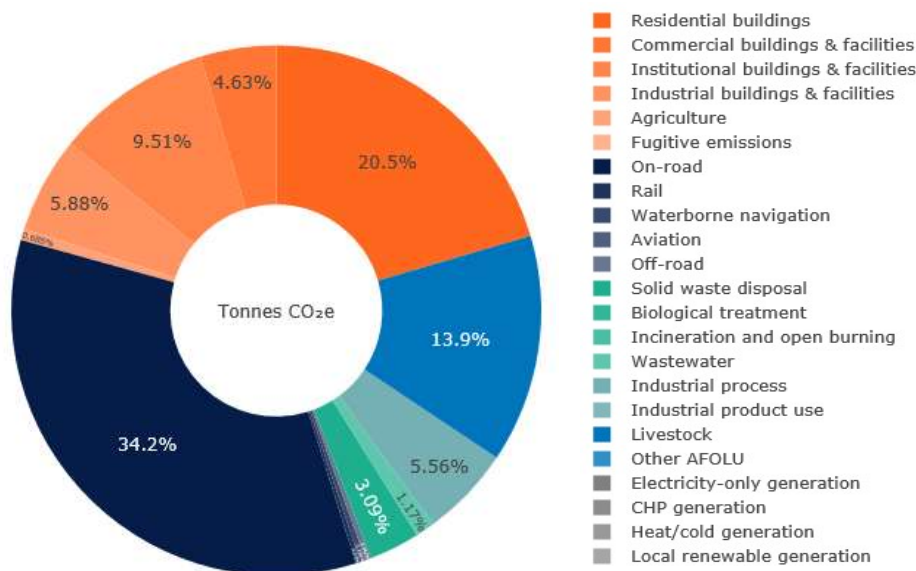
SCATTER can be utilised to break down these figures further, by subsector and scope to help us identify the key priority areas to tackle.

Figures 4.3.1 overleaf provides a breakdown of the total GHG emissions in West Lancashire across all scopes. It highlights that over 50% of West Lancashire's total greenhouse gas emissions originate from stationary energy in buildings, followed by transport accounting for 34% of emissions.



**Figure 4.3.1: Total Greenhouse Gas Emissions for West Lancashire in 2017 by Sector**

Figure 4.3.2 below breaks this down even further and illustrates Scope 1 Emissions (direct emissions from within West Lancs) by subsector.



**Figure 4.3.2: Direct Emissions (Scope 1) Greenhouse Gas Emissions for West Lancashire by Subsector**

This SCATTER baseline shows that the two largest sources of emissions in West Lancashire originate from:

- Stationary energy in buildings, primarily from:
  - residential dwellings
  - industrial and institutional buildings and facilities
- Transport, primarily from:
  - road transport

Action to reduce emissions from these sources will be paramount if we are to reduce the impact our Borough is having on climate change.

## 5.0 Carbon Reduction Targets

In June 2019 the UK amended the 2008 Climate Change Act, requiring the reduction of all greenhouse gas emissions to net zero by 2050. This is an increase in the level of emissions reduction required relative to the previous target of an 80% reduction by 2050, as a result of the IPCC report published in 2018.

### 5.1 West Lancashire Borough Council Carbon Reduction Target

A carbon reduction target for West Lancashire Borough Council was included within the climate emergency declaration agreed in 2019.

**To reduce greenhouse gas emissions directly associated with the operations of West Lancashire Borough Council, to achieve carbon neutrality by 2030.**

The One Carbon World report identified the most significant sources of CO<sub>2</sub>e emissions are arising from fuel use, primarily gas and diesel.

To reduce these emissions, One Carbon World recommend that we consider the following actions:

- The amount of natural gas used is reviewed and if possible reduced. As natural gas is primarily used for heating purposes, there could be some very quick wins with a thorough audit of the system. On the back of the audit and identification of energy use over time, there could be better/more efficient methods to insulate buildings, improve heating systems, or supply alternative/renewable energy sources for heating e.g. infrared panel heaters, air source heat pumps (ASHPs) ground source heat pumps (GSHPs), solar thermal, solar PV plus others.
- The amount of diesel used in West Lancashire Borough Council fleet is reviewed and if possible reduced. The number of employee journeys can be reduced through better planning and/or alternative modes of transport for journeys can be found. The number of journeys can be reduced through encouraging car sharing or home working/flexitime schemes for example. Alternative modes of transport such as public transport, hybrid or electric vehicles, or bicycles, can be used that have lower or no emissions. Also, where possible, technology should be employed to reduce/remove the need for business, for example using Skype, FaceTime etc. for meetings.

These actions will be built into the relevant action plans and progressed as soon as possible.

### 5.2 West Lancashire Borough Carbon Targets

The Tyndall Centre for Climate Change Research has produced a report for each Local Authority area, informed by the latest science on climate change and carbon setting. The report uses the SCATTER methodology with revised global carbon budgets and updated CO<sub>2</sub> emissions datasets, to downscale global carbon budgets. The UK budget is then split between subnational areas using different allocation regimes.

The recommended West Lancashire carbon targets to be adopted include:

- 1. Stay within a maximum cumulative carbon dioxide emissions budget of 4.0 million tonnes (MtCO<sub>2</sub>) for the period of 2020 to 2100.**
- 2. Initiate an immediate programme of CO<sub>2</sub> mitigation to deliver cuts in emissions averaging a minimum of -14.0% per year.**
- 3. Reach a zero or near zero carbon Borough no later than 2040.**

The recommended energy only CO<sub>2</sub> carbon budget for the West Lancashire area for the period of 2020 to 2100 is 4.0 MtCO<sub>2</sub>. To put this in perspective, at 2017 CO<sub>2</sub> emission levels, West Lancashire would use this entire budget within 6 years from 2020, hence the requirement for immediate action.

The carbon budgets presented apply to CO<sub>2</sub> emissions from the energy system only. Although all greenhouse gas (GHG) emissions, such as methane and other forcing agents, such as aircraft contrails, affect the rate of climate change, long term warming is mainly driven by CO<sub>2</sub> emissions.

To translate this into near to long term commitments a CO<sub>2</sub> reduction pathway within the 4.0 MtCO<sub>2</sub> is proposed. A consistent emissions reduction rate of -14.0% out to the end of the century is applied. In 2040 95% of the recommended carbon budget is emitted and low level CO<sub>2</sub> emissions continue at a diminishing level to 2100.

Table 5.2 below presents the West Lancashire energy CO<sub>2</sub> only budget in the format of the 5-year carbon budget periods in the UK Climate Change Act. To align the 2020 to 2100 carbon budget with the budget periods in the Climate Change Act, estimated CO<sub>2</sub> emissions for West Lancashire for 2018 and 2019 have been included, based on BEIS provisional national emissions data for 2018 and assuming the same year on year reduction rate applied to 2019. The combined carbon budget for 2018 to 2100 is therefore 5.3 MtCO<sub>2</sub>.

<b>Year</b>	<b>Reduction In Annual Emissions</b>	<b>Carbon Budget Period</b>	<b>Recommended Carbon Budget (Mt/CO<sub>2</sub>)</b>
2020	21.0%	2018 - 2022	2.7
2025	62.8%	2023 - 2027	1.3
2030	82.5%	2028 - 2032	0.6
2035	91.8%	2033 - 2037	0.3
2040	96.1%	2038 - 2042	0.1
2045	98.2%	2043 - 2047	0.1
2050	99.1%	2048 - 2100	0.1

**Table 5.2 – West Lancashire's Percentage Reduction in Annual Emissions and Recommended 5-Year Carbon Budgets**



## 6.0 Climate Change Strategy and Action Plan 2030

### 6.1 Aims and Key Priorities

This document aims to act as a route map to achieving the climate emergency declaration commitments and carbon reduction targets.

Utilising the information we have to date on our current position and the identified key contributors of GHG emissions both from Council operations and Borough-wide activities, seven key priorities have been identified.



**Figure 6.1: The Seven Key Priority Areas for Carbon Reduction**

One area of importance that will play a significant part in delivering many of the priorities is development of the new Local Plan. This overarching document will be a key part to ensuring climate change mitigation and adaptation policies are embedded in all future development to deliver a climate resilient and low carbon West Lancashire, whether this is the sustainability credentials of new build developments, the creation of cycle-ways or the protection of green space.

### 6.2 Action Plans

The action plans within this Strategy are intended to be continually evolving documents and will be updated and published annually, or more frequently if required, as our work progresses. We recognise that we don't have all the answers or solutions and that combating climate change needs system wide change that involves communities, business, individuals and stakeholders across all sectors of the Borough.

Effective development and implementation of continually evolving action plans will be crucial and will act a route map to identifying and delivering achievable short, medium and long term projects. They are intended to be a live documents that will continually evolve on our journey to achieving a low carbon future, as we identify, investigate and implement new projects.

Initially some projects on the action plans will require various feasibility and exploratory investigations. This will put us in a good position to utilise funding pots and pilot expected advances in emerging technologies, as and when they become available, delivering long term economic and environmental benefits.

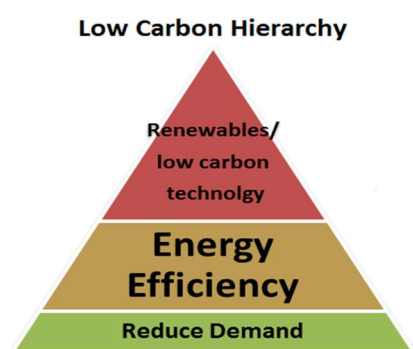
## 7.0 PRIORITY 1: Delivering a Carbon Neutral Council

### 7.1 Background

By definition, becoming a carbon neutral Council requires the organisation to achieve net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered, or offset.

This can be achieved in three ways;

- Reduce energy consumption as far as possible across the corporate estate
- Generate renewable energy equal to what is consumed
- Offset carbon emissions utilising green energy tariffs, or other means.



Good energy management, in keeping with the energy hierarchy, is key to delivering a carbon neutral estate. This needs to be embedded in all relevant decision making processes and service provisions across the Council.

By facing the risks relating to both the supply and demand for energy and investigating ways in which we can remove our reliance on fossil fuels, we can identify the environmental, economic and social benefits offered by smarter, local, green energy.

### 7.2 Objectives

The key objectives of this priority are as follows:

- To achieve a sustainable and energy efficient corporate estate.
- To integrate energy management across all relevant decision making processes, by applying the energy hierarchy to all areas of energy consumption.
- To investigate and utilise renewable energy opportunities, on both buildings and Council- owned land, where feasible.

### 7.3 Considerations

Decarbonising the Council will require significant investment in energy efficiency and renewable energy projects, which will require thorough investigation of the business case, to demonstrate value for money and explore the return on investment. With regards to energy efficiency measures that significantly reduce energy consumption, this is often an easy decision. Financing future renewable energy generation schemes may be more challenging and potential new income streams and finance options will need to be investigated.

Additional considerations that should be given significant weight in the decision making process when considering energy efficiency and renewable energy projects include:

- Energy security and affordability - Generating green energy from local renewable technologies will provide protection against increasing costs of energy from the grid. Prices of grid energy have continually increased over recent years and the trend is forecast to continue in the future. Renewable energy can provide a local, reliable supply of affordable energy.
- Carbon taxes – Carbon intensive fuels will also see increased taxes, adding to rising energy prices. The increased cost and volatility of energy prices will increase the costs

of delivering Council services. Generation or procurement of low carbon energy will become increasingly important.

- Demand side response (DSR) opportunities – Financial incentives to help balance demand on the grid can be investigated. Investigating the best use of various income opportunities will be a priority.
- Energy storage – Battery technology will play an important part in future energy supplies but it is currently in its infancy, adding an element of risk to any investment.
- Decarbonised heat – decarbonising the gas grid will be crucial in action to tackle climate change. Investing in local renewable heating now, utilising the renewable heat incentive payments is an urgent action.

The outcome of an accommodation review currently being undertaken, to investigate the best use of office space for Council staff in future years, is expected imminently. Once complete this will identify buildings to focus on when considering energy reduction projects in corporate buildings. At the time of writing, the Covid-19 outbreak has also presented further considerations and options with regards to utilising remote and home working in the future, but this will take some time to consider.

The Council is currently at early feasibility stages of investigating the suitability of Council owned land for a solar farm development. We are keen to investigate the commercial and environmental opportunities that investment in this area could provide, in terms of long term income generation that supports the Councils financial stability and low carbon aspirations. Investigations into grid connection, financial return on investments and planning considerations will all need to be investigated to establish the feasibility of the project.

Initial investigations indicate an identified area of Council land could accommodate a 7MW solar PV installation. This would have the potential to generate over 6.1million KWh of renewable electricity per year, giving annual savings of 1,462 tonnes of CO<sub>2</sub>e. This would be a significant investment for the Council which could deliver many benefits:

- Community leadership
- Energy security
- Carbon reduction, tackling climate change
- Income generation
- Local economic benefits
- Encourage a green recovery from Covid-19 Pandemic

Should the Council decide to go ahead with this project, it would be a significant undertaking, demonstrating commitment and leadership to tackling climate change and preparing for a low carbon future.

The Council also recognises that decarbonisation of the Councils fleet will play a large part in achieving our carbon neutrality aspirations. Initial actions towards achieving this are set out in Priority 3: Reducing Emissions from Transport.

#### 7.4 PRIORITY 1: Delivering a Carbon Neutral Council - Action Plan 2021-2022

Action	Lead responsibility	Partners	Resources/ Conditional Upon	Milestone Progress	Overall Anticipated Outcomes	Funding/ Income Generation Opportunities	Timescale
Energy Monitoring and Management	Environmental Strategy Officer		<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Regular analysis of energy consumption patterns.</li> <li>Regularly investigate spikes and unusual consumption</li> </ul>	<ul style="list-style-type: none"> <li>Reduced energy consumption</li> <li>Reduced energy bills</li> </ul>		Biannually (April and October)
Energy Communications Plan	Environmental Strategy Officer		<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Develop template Communications Plan</li> <li>Deliver regular communications to budget holders and building managers.</li> </ul>	<ul style="list-style-type: none"> <li>Improved knowledge and awareness of energy usage by budget holders and building managers.</li> </ul>		Biannually (April and October)
Corporate Buildings Operational Energy Policy	Environmental Strategy Officer	Facilities Manager	<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Approval of the Corporate Buildings Operational Energy Policy (Appendix C)</li> <li>Actions implemented</li> <li>Behaviour change campaign delivered to Council staff.</li> </ul>	<ul style="list-style-type: none"> <li>Buildings running more efficiently through implementation of good practise.</li> <li>Increased staff awareness of energy efficiency in buildings</li> </ul>		March 2022
Building Energy Audits	Environmental Strategy Officer	Facilities Manager	<ul style="list-style-type: none"> <li>Officer time</li> <li>Accommodation review</li> </ul>	<ul style="list-style-type: none"> <li>Undertake energy audits in corporate buildings.</li> <li>Investigate installation of</li> </ul>	<ul style="list-style-type: none"> <li>Energy reduction across corporate estate.</li> <li>Decarbonisation of heating and</li> </ul>	<ul style="list-style-type: none"> <li>Renewable energy incentive schemes</li> </ul>	March 2022

			<ul style="list-style-type: none"> <li>• Business case of identified measures</li> </ul>	energy efficiency measures <ul style="list-style-type: none"> <li>• Audit all heating systems with a view to decarbonising heating to all buildings.</li> </ul>	reduced gas consumption		
Planned Maintenance Programmes	Facilities Manager	Environmental Strategy Officer	<ul style="list-style-type: none"> <li>• Feasibility investigations</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure energy and carbon reduction are considered a priority when undertaking planned maintenance and refurbishment works.</li> </ul>	<ul style="list-style-type: none"> <li>• All works deliver the most sustainable option from procurement to installation.</li> </ul>	<ul style="list-style-type: none"> <li>• Dependant on technology installed.</li> </ul>	March 2022 - ongoing
Renewable energy opportunities	Environmental Strategy Officer		<ul style="list-style-type: none"> <li>• Feasibility investigations</li> </ul>	<ul style="list-style-type: none"> <li>• Consider/ review the feasibility of renewable energy alternatives (both electricity and heat) and investigate battery storage opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>• Low carbon renewable technologies utilised where viable.</li> </ul>	Dependant on technology installed.	March 2022
Water Efficiency	Environmental Strategy Officer	Facilities Manager	<ul style="list-style-type: none"> <li>• Officer time</li> <li>• Feasibility investigations</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate the use of water efficiency measures, including feasibility of rainwater harvesting and leak detection analysis.</li> </ul>	<ul style="list-style-type: none"> <li>• Measures implemented to save water and associated costs.</li> </ul>		March 2022
Renewable energy tariffs	Environmental Strategy Officer	Procurement and Contracts Manager		<ul style="list-style-type: none"> <li>• Investigate sourcing the Councils electricity supply from renewable energy sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Council energy contract supplied from 100% renewable energy</li> </ul>		April 2021

Homeworking	Human Resources Manager	Council-wide		<ul style="list-style-type: none"> <li>Consider increased home working and technology use i.e. Skype to reduce travel.</li> </ul>	<ul style="list-style-type: none"> <li>Increased home working and use of E-meetings.</li> <li>Reduced business travel and commuting.</li> </ul>		December 2020
Single-use Plastics	Environmental Strategy Officer	Procurement and Contracts Manager Council-wide	<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Remove the procurement and use of Single-use plastics across the Council.</li> </ul>	<ul style="list-style-type: none"> <li>Achieve single-use plastic free status.</li> </ul>		December 2020
Solar Farm	Estates and Valuation Manager	Environmental Strategy Officer	<ul style="list-style-type: none"> <li>Outcome of feasibility study</li> <li>Financial business case</li> </ul>	<ul style="list-style-type: none"> <li>Feasibility study into Council solar farm installation with battery storage.</li> </ul>	<ul style="list-style-type: none"> <li>Council investment in solar farm installation</li> </ul>	<ul style="list-style-type: none"> <li>PPAs</li> <li>Sleeving/arrangements</li> <li>Private wire opportunities</li> <li>Demand-side Response</li> </ul>	December 2020
Formation of a Climate Change Officers Working Group	Environmental Strategy Officer	Key Officers within each priority area.	<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Officers have bimonthly meetings to progress action plans.</li> </ul>	<ul style="list-style-type: none"> <li>Climate action remains an ongoing priority</li> </ul>		December 2020

## **8.0 PRIORITY 2: Sustainable Procurement**

### **8.1 Background**

There are two main strands to sustainable procurement for the Council; to make sure the goods and services we procure are as sustainable as possible and that we encourage our supply chains to do the same.

Good procurement practices not only ensure value for money and compliance with relevant legislation, they can also offer an opportunity to encourage and facilitate the achievement of social and environmental benefits for the area.

The Council recognises that an organisation also can't be fully carbon neutral if it imports goods from supply chains that are carbon intensive. We have a vital role to play in furthering sustainable development through our procurement of buildings, goods and services.

The Councils procurement decisions can have major environmental implications, both locally and nationally. We should therefore be committed to ensuring that all goods and services procured are manufactured, delivered, used and disposed of in an environmentally responsible manner. We will look to adopt an approach that will ensure natural resources are used wisely and that there is effective protection of the environment, whilst ensuring value for money.

### **8.2 Objectives**

The main objectives of sustainable procurement are as follows:

- To ensure due consideration is given to the environmental impacts and carbon intensity of the products being purchased; the materials they are made of, how they are produced/ manufactured, life expectancy and disposal at end of life.
- To ensure that the transportation and installation of goods is as sustainable as possible.
- To ensure sustainability within procurement is embedded across the organisation and reflected in all relevant procurement documentation.
- To ensure that suppliers and contractors working on behalf of the Council are actively working to reduce the carbon footprint of their organisation.

### **8.3 Considerations**

In essence, every procurement action that sources and implements the most sustainable option is likely to result in greater carbon savings than an option that may have been taken without due consideration to the resulting impacts on the environment, however this would be nearly impossible to quantify.

Development of a 'Guide to Sustainable Procurement for Council staff, found in Appendix D, will raise awareness and give due consideration to this area when tendering for goods and services. This could result in carbon savings being achieved through every project we deliver and throughout the life of the goods or services procured.

The Councils forthcoming Housing and Inclusion Asset Management Strategy 2019-2024 considers the social value that contractors and suppliers can deliver when awarding contracts. This will include, but not be limited to, items such as local investment, use of local supply chains, where possible, and utilising local labour. This is a key opportunity to introduce energy, carbon reduction and other environmental considerations into the Councils procurement processes.



#### 8.4 PRIORITY 2: Sustainable Procurement- Action Plan 2021-2022

Action	Lead responsibility	Partners	Resources/ Conditional Upon	Milestone Progress	Targets/ Anticipated Outcomes	Funding/ Income Generation Opportunities	Timescale
A Guide to Sustainable Procurement.	Environmental Strategy Officer	Procurement and Contracts Manager	<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Adopt the Guide to Sustainable Procurement in Appendix D.</li> <li>Circulate and raise awareness to staff.</li> </ul>	<ul style="list-style-type: none"> <li>Staff become more aware and consider environmental sustainability of good and services being procured.</li> </ul>		December 2021
Sustainable Procurement Processes	Procurement and Contracts Manager  Environmental Strategy Officer	Council-wide	<ul style="list-style-type: none"> <li>Officer education and time</li> </ul>	<ul style="list-style-type: none"> <li>Embed sustainability considerations throughout the procurement cycle, including specifications, PQQ's and award processes etc.</li> <li>Monitor delivery through contract management.</li> </ul>	<ul style="list-style-type: none"> <li>Carbon savings from all procurement exercises undertaken.</li> <li>Sustainability is embedded in procurement across the organisation.</li> </ul>		December 2021-ongoing
Member Training	Environmental Strategy Officer  Procurement and Contracts Manager		Officer time	<ul style="list-style-type: none"> <li>Deliver Member training to educate on environmental sustainability considerations when deliberating Cabinet reports for project approval.</li> </ul>	<ul style="list-style-type: none"> <li>Members give significant weight to environmental considerations of projects prior to approval.</li> </ul>		December 2021

## **9.0 Priority 3: Reducing GHG Emissions from Transport and Travel**

### **9.1 Background**

Emissions from fleet transport make up the largest sector of the Councils carbon footprint. 29% of West Lancashire Councils GHG emissions originate from fleet fuel consumption. At the current time, the Councils fleet of vehicles is primarily made up of diesel engines. Decarbonisation of our fleet will therefore be a key area for the Council to focus on to reduce our carbon footprint as far as possible. Mileage done by Council staff in private cars contributes a far smaller 2% of the Councils carbon footprint but will also be an area to tackle when possible.

On-road emissions from transport make up 34% of greenhouse gas emissions across West Lancashire and this is the single largest source of total emissions across the Borough. Reducing emissions from this source is therefore paramount if our fight to reduce our carbon footprint and tackle climate change.

### **9.2 Objectives**

The key objectives of this priority are as follows:

- To decarbonise the Councils fleet and increase the number of electric vehicles being utilised.
- To install electric vehicle charging infrastructure to enable the electrification of Council fleet vehicles.
- To investigate alternative, low carbon fuels compatible with Council fleet vehicles.
- To expand the electric vehicle charging infrastructure across the Borough, utilising local planning policy to support EV charge points in all new developments.
- To encourage, enable and promote active travel choices such as walking and cycling.

### **9.3 Considerations**

The actions within the below action plan are primarily Council focussed as we prioritise getting our own house in order and look to provide leadership in low carbon travel. This doesn't take away from the importance of reducing road transport emissions across the Borough and work in this area is also underway.

The Council installed two electric vehicle charge points in Ormskirk and Burscough back in 2015. Use of these charge points has increased in more recent years, as the shift to electric vehicles increases. Further charge points have also been installed by various other organisations in the Borough but we recognise this infrastructure will need further roll out in the future as demand continues to rise.

It is recognised that actions to increase the use of public transport and walking and cycling will also play a part in reducing emission from this sector. This is a cross-cutting theme that will link with actions already embedded within other Council plans including the Councils Local Plan, Health and Wellbeing Strategy and Air Quality Action Plans.

#### 9.4 PRIORITY 3: Transport and Travel - Action Plan 2021-2022

Action	Lead responsibility	Partners	Resources/ Conditional Upon	Milestone Progress	Targets/ Anticipated Outcomes	Funding/ Income Generation Opportunities	Timescale
Council Fleet Review	Fleet Services Manager	Environmental Strategy Officer	<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Participate in the Energy Saving Trusts Fleet Review</li> </ul>	<ul style="list-style-type: none"> <li>Receipt of professional advice on the decarbonisation of Council fleet</li> </ul>		December 2021
Corporate Electric Vehicle (EV) Charging Network	Environmental Strategy Officer	Fleet Services Manager	<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Install EV charging infrastructure at all Council offices, including the Robert Hodge Centre for fleet use.</li> </ul>	<ul style="list-style-type: none"> <li>Electric vehicle charging infrastructure encourages staff to explore the electric vehicle market.</li> </ul>	<ul style="list-style-type: none"> <li>OLEV Grant Funding available</li> </ul>	March 2021
Electric Vehicle Trials	Fleet Services Manager		<ul style="list-style-type: none"> <li>Feasibility investigations</li> <li>Pilot trials</li> </ul>	<ul style="list-style-type: none"> <li>Trial various electric vehicles within the Council fleet to gain confidence in their abilities.</li> </ul>	<ul style="list-style-type: none"> <li>Alternative low carbon vehicles and fuels introduced into Council fleet</li> </ul>		March 2021-ongoing
Alternative Fuels	Fleet Services Manager		<ul style="list-style-type: none"> <li>Feasibility investigations</li> <li>Pilot trials</li> </ul>	<ul style="list-style-type: none"> <li>Investigate alternative low carbon vehicles/ fuels e.g. hydrogen vehicles and hydro-treated vegetable oil fuel.</li> </ul>	<ul style="list-style-type: none"> <li>Decarbonisation of Council fleet</li> </ul>		March 2021
Fleet fuel consumption and Route Optimisation	Fleet Services Manager		<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Review outcomes from the 2019 route optimisation works</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in fleet mileage and associated fuel consumption</li> </ul>		December 2021

Cycle to Work Scheme	Human Resources Business Partner		<ul style="list-style-type: none"> <li>• Officer time</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to deliver the Cycle to Work salary sacrifice scheme for Council staff</li> </ul>	<ul style="list-style-type: none"> <li>• Increased take up of the scheme and reduced car journeys.</li> </ul>		Ongoing
Electric Vehicle (EV) Lease Scheme	Human Resources Manager		<ul style="list-style-type: none"> <li>• Officer time</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate implementation of a Council salary sacrifice lease scheme for electric and hybrid vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Staff encouraged and supported in transition to electric vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>• OLEV funding contributions towards EV installations</li> </ul>	March 2021
Corporate Electric Vehicle Charging Infrastructure	Environmental Strategy Officer	Property Services Manager		<ul style="list-style-type: none"> <li>• Provision of electric vehicle charging points at Councils corporate sites.</li> </ul>	<ul style="list-style-type: none"> <li>• Staff able to charge electric vehicles at the workplace</li> </ul>		March 2021
Borough Electric Vehicle Charging Infrastructure	Environmental Strategy Officer	Strategic Planning, Regeneration and Implementation Manager	<ul style="list-style-type: none"> <li>• Budgets</li> <li>• Officer time</li> </ul>	<ul style="list-style-type: none"> <li>• Consider further roll out of electric vehicle charging infrastructure at Council car parks and other locations.</li> </ul>	<ul style="list-style-type: none"> <li>• Support for the movement towards decarbonised travel.</li> </ul>	ORCS Funding	December 2021
Local Planning Policies	Strategic Planning, Regeneration and Implementation Manager			<ul style="list-style-type: none"> <li>• Enable sustainable travel choices with accessible cycle and walk ways.</li> <li>• Support EVCPs infrastructure.</li> <li>• Use car park standards to encourage sustainable transport choices.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced car travel in the Borough.</li> <li>• Facilitate electric vehicle usage.</li> </ul>		March 2021 - ongoing

## **10.0 PRIORITY 4: Reducing GHG Emissions from the Residential Sector**

### **10.1 Background**

Residential buildings account for approximately 20% of greenhouse gas emissions both nationally and locally. Not only do inefficient homes enlarge our carbon footprint, they have a negative effect on quality of life. Fuel poverty and the negative health impacts of living in a cold home are also major considerations that need to be addressed.

The Council has a housing stock of circa 5,880 properties located across the borough, predominantly in Skelmersdale and Ormskirk. Whilst much work has been done over the last decade to improve the energy efficiency of these homes, there is still far more to be done. Similar to our corporate work, this will be a primary focus for us, to get our own homes in order and lead by example, whilst also supporting home owners and the private rented sector to do the same.

### **10.2 Objectives**

The key objectives of this priority are as follows:

- To deliver energy efficiency in Council owned housing and support housing retro-fit opportunities.
- Decarbonise home heating by supporting local energy and district heating networks, where viable.
- To lead by example and increase renewable energy generation in the housing sector.
- To utilise available funding streams to deliver energy efficiency measures to privately owned and rented housing stock.
- To advocate high standards of design and environmental performance in new build housing developments.

### **10.3 Considerations**

Improvements in home energy efficiency ratings will become more challenging as the easier, low cost, energy efficiency measures have already been completed. Continued delivery of an energy efficiency retrofit programme over future years, informed by a long term (30 year) Asset Management Strategy, will investigate business case options for the Councils housing stock.

A key strand of the strategy is environmental sustainability which will focus on the energy efficiency and performance of the housing stock, recognising that such indicators have direct links to affordable warmth and home comfort levels, health and well-being and fuel poverty indicators, which have a direct impact on property affordability and duration of tenancies. This emerging document also proposes new delivery mechanisms for property maintenance. Longer maintenance and programmed works contract periods will provide an ideal opportunity to strengthen sustainable procurement requirements and develop ongoing sustainable partnerships with suppliers and contractors.

With regards to new build housing, the UK Green Building Council encourages local authorities delivering new homes to act as trailblazers for high standards of energy efficiency, where possible, and this Plan aims to cement our commitment to delivering this aspiration. Sustainable construction and development is key if we are to build for the future and ensure homes are designed to minimise energy demand during the whole life cycle of properties from construction, operation and ultimately disposal through demolition at end of life.

When aspiring to build a zero carbon home, there are two main considerations; the embodied carbon within the materials used to build the home, through production and manufacture, and

the operational carbon emissions that will be released through running the home once occupied.

Whilst it is recognised that the embodied carbon of any new housing is of utmost importance and needs to be kept as low as possible, over the life of a home, the operational carbon emissions have far more environmental impact than the embodied carbon within the material utilised to build it. It is therefore essential that energy consumption during the buildings life cycle is taken into account when evaluating design, construction and internal furnishings of a property. The operational net zero carbon emissions target includes all energy used for heating, cooling, lighting, hot water use and small power/ appliances.

The Council has plans for twelve new build properties, to be built and retained by the Council for rent on an affordable basis. The Council has committed to achieving operational zero carbon status for these properties. This represents a major leap forward and will require a significant concerted effort to achieve but Local Authorities should lead by example and be a flagship to the construction industry.

To achieve this target, the properties will need to be highly energy efficient buildings. Energy demand will need to be reduced as far as practically possible, utilising a fabric first approach. All remaining operational energy demand will need to be provided from renewable energy sources, preferably on-site, to achieve net zero carbon emissions annually. Over time investigations should look to progress this target to include embodied carbon in the future during the whole life cycle of properties.

The Council need to provide leadership in this area, whilst also ensuring others are following closely behind. Building sustainability into emerging Local Plan documents is paramount to a low carbon future. Planning policy requirements on all new build developments, not just housing, need to ensure delivery of climate resilient, low carbon buildings that will play an important part in achieving zero/ low carbon aspirations. Work in this area, to lobby Central Government and respond to relevant consultation documents such as the Future Homes Standard will also continue, to support strong requirements that deliver low carbon developments.

#### 10.4 PRIORITY 4: The Residential Sector - Action Plan 2021-22

Action	Lead responsibility	Partners	Resources/ Conditional Upon	Milestone Progress	Targets/ Anticipated Outcomes	Funding/ Income Generation Opportunities	Timescale
Energy efficiency improvements on Council housing stock	Investment Manager	Environmental Strategy Officer	• Officer time	• Continued delivery of energy efficiency improvements through Programmed Works.	• Achieve year-on-year improvements on the average SAP rating for Council housing stock.		March 2021 - ongoing
Communal Housing	Compliance Manager	Environmental Strategy Officer	• Officer time	• Investigate the installation of energy efficiency measures in sheltered housing schemes and communal stairwells. • Continued roll-out of LED lighting programmes.	• Reduced energy consumption in communal areas of housing.		March 2021 - ongoing
Heat Network Decarbonisation	Investment Manager  Compliance Manager	Environmental Strategy Officer	• Budgets	• Support the phase out of gas heating in communal boilers. • Investigate renewable heating options and undertake feasibility investigations.	• Decarbonisation of heating on communal heat networks.	RHI Funding	December 2021
Renewable Energy	Environmental Strategy Officer	Property Services Manager	• Officer time	• Investigate feasibility of renewable energy opportunities for all suitable housing projects. • Pilot Solar PV with battery storage project on communal blocks delivered.	• Increased renewable energy capacity installed on Council housing stock.		December 2021

Council New Build Housing	Investment Manager	Environmental Strategy Officer		<ul style="list-style-type: none"> <li>• Delivery of twelve new homes that achieve operational zero carbon status.</li> <li>• On-going monitoring to validate performance.</li> <li>• Inclusion of electric vehicle charge points.</li> </ul>	<ul style="list-style-type: none"> <li>• All new build housing delivered by the Council to aspire to achieve operational zero carbon status and be climate resilient.</li> </ul>	• RHI Funding	March 2021 - ongoing
Tawd Valley Developments	Environmental Strategy Officer		• Officer time	<ul style="list-style-type: none"> <li>• Establish a communication link with Tawd Valley Developments Ltd</li> </ul>	<ul style="list-style-type: none"> <li>• Adoption of zero carbon build targets, in line with those adopted by the Council.</li> </ul>		December 2021
Local Planning Policy	Strategic Planning, regeneration and Implementation Manager	Environmental Strategy Officer		<ul style="list-style-type: none"> <li>• Deliver low carbon policy for new build housing developments.</li> <li>• Require new residential developments to adopt low carbon and renewable technologies, and energy and resource efficient design.</li> </ul>	<ul style="list-style-type: none"> <li>• Future housing developments will be low carbon in build and operation.</li> </ul>		December 2021 - ongoing
Cosy Homes in Lancashire (CHiL) scheme.	Private Sector Housing Team Leader	Lancashire Energy Group Environmental Strategy Officer	• Officer time	<ul style="list-style-type: none"> <li>• Continue to participate, contribute and promote the Cosy Homes in Lancashire (CHiL) scheme.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved energy efficiency of privately owned homes in West Lancashire.</li> </ul>	ECO Flex Funding	Ongoing
Energy Tariff Switching	Environmental Strategy Officer		• Officer time	<ul style="list-style-type: none"> <li>• Investigate delivery of a campaign/ scheme to encourage residents to switch energy providers and consider a renewable energy tariff.</li> </ul>	<ul style="list-style-type: none"> <li>• Residents make savings on energy bills and support renewable energy schemes.</li> </ul>		December 2021



External Wall Insulation (EWI) Scheme	Environmental Strategy Officer		<ul style="list-style-type: none"> <li>• Officer time</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate available funding streams to help homeowners invest in external wall insulation (EWI)</li> </ul>	<ul style="list-style-type: none"> <li>• Large-scale delivery of EWI project across Skelmersdale.</li> </ul>	ECO3/ Flex Funding	March 2021-ongoing
Minimum Energy Efficiency Standards (MEES)	Private Sector Housing Team Leader		<ul style="list-style-type: none"> <li>• Officer time</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to enforce the Energy Efficiency (Private Rented Property) Regulations 2015</li> </ul>	<ul style="list-style-type: none"> <li>• All privately rented properties meet a minimum standard of EPC Band E or above.</li> </ul>		Ongoing

## **11.0 PRIORITY 5: Reducing GHG Emissions from Commercial Activities**

### **11.1 Background**

Emissions from commercial sources account for approximately 28% of greenhouse gas emissions in West Lancashire. Emissions data available from BEIS on the SCATTER emissions tool provide a breakdown of these emissions showing 14% originate from institutional buildings and facilities, 9% from industrial building and facilities and 5% from other commercial buildings and facilities.

### **11.2 Objectives**

The key objectives of this priority are as follows:

- To improve the energy efficiency of the Councils commercial properties available to rent.
- To provide support and leadership to West Lancashire's commercial sector, with regards to both energy efficiency and renewable energy generation.
- To pursue alternative funding opportunities to assist the Council to financially support energy saving and renewable energy opportunities i.e. partnerships and shared savings schemes.
- To advocate high standards of design and environmental performance in commercial new build developments.

### **11.3 Considerations**

The Energy Efficiency Regulations have prevented landlords from letting premises with an EPC rating of F or G since 2018. This legislation also requires all rented properties in England and Wales, even where there has been no change in tenancy arrangements, to meet this standard from 1 April 2023 for non-domestic properties, unless the property meets one of the exemptions. This is a challenging target and will require a significant amount of investment from the Council as landlord and co-operation from the tenants.

The Council owns an extensive commercial property portfolio. This includes various types of premises including industrial, warehouses, office and retail units, ranging from 200ft<sup>2</sup> to 27,500ft<sup>2</sup> in size. At present when a Council unit becomes vacant an EPC is commissioned and if the indications show that it will not achieve the required rating, works are commissioned to reduce the rating to an acceptable level e.g. an LED lighting upgrade.

The Council is currently working on plans to create new leisure and wellbeing hubs in Ormskirk and Skelmersdale. Initial proposals for both facilities include swimming pools and will be significant energy consumers. The Council are committed to ensuring that environmental and sustainability considerations are a key element within the design, construction and operation of the new facilities.

The Council are actively investing in renewable energy projects. The most recent installation was completed in February 2020, comprising an 80KWp Solar PV installation installed on the West Lancashire Investment Centre. The system will supply the Centre with around 62,500KWh of renewable energy a year, saving around 28,800kg/CO<sub>2</sub> a year. Expected payback in under eight years.

#### 11.4 PRIORITY 5: Commercial Activity - Action Plan 2021-22

Action	Lead responsibility	Partners	Resources/ Conditional Upon	Milestone Progress	Targets/ Anticipated Outcomes	Funding/ Income Generation Opportunities	Timescale
Energy efficiency improvements on Councils Commercial stock	Estates and Valuation Manager		<ul style="list-style-type: none"> <li>Budget restrictions</li> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Continued delivery of energy efficiency improvements.</li> <li>Replace all inefficient lighting with LED upgrades.</li> </ul>	<ul style="list-style-type: none"> <li>All vacant stock to have an EPC rating E or better.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	December 2021-ongoing
Refurbishment Projects	Estates and Valuation Manager	Environmental Strategy Officer	<ul style="list-style-type: none"> <li>Officer time</li> </ul>	<ul style="list-style-type: none"> <li>Ensure energy efficiency and renewable energy alternatives are investigated and, where possible integrated, into all suitable refurbishment projects.</li> </ul>	<ul style="list-style-type: none"> <li>Improved energy efficiency of Councils commercial portfolio.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	Ongoing
Local Planning Policy	Strategic Planning, Regeneration and Implementation Manager			<ul style="list-style-type: none"> <li>Deliver low carbon policy for new build commercial developments</li> </ul>	<ul style="list-style-type: none"> <li>Future developments will be low carbon in build and operation.</li> </ul>		December 2021-ongoing
New Build Leisure Centre Project	Head of Leisure and Well-Being		<ul style="list-style-type: none"> <li>Feasibility investigations</li> <li>Development partners</li> </ul>	<ul style="list-style-type: none"> <li>Ensure the design, construction and operation of new leisure centre developments are as sustainable and low carbon as possible.</li> </ul>	<ul style="list-style-type: none"> <li>All new build developments to be low carbon buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Income from renewable energy/heat generation</li> </ul>	December 2021

Low Carbon Businesses	Environmental Strategy Officer  Business Engagement Officer	Digital Communications Manager	• Officer time	• Provide leadership and encourage businesses to measure and actively work to reduce their carbon footprint and improve resilience to climate hazards.	• Increased awareness and action from the commercial sector to reduce emissions from their operations.		December 2021 - ongoing
Signposting	Business Engagement Officer	Environmental Strategy Officer	• Officer time	• Identify and signpost businesses to available climate action support.	• Increased take up of support and action across the Borough.		March 2021 - ongoing
Strengthened Partnership Working	Environmental Strategy Officer		• Officer time	• Participation and active contribution to the new Edge Hill Sustainability Network. • Communication with Skelmersdale Ambassadors Forum.	• Effective partnership working to share knowledge and successful projects		March 2021

## **12.0 Priority 6: Community Action**

### **12.1 Background**

Councils can play an important role to encourage community action and along with our partners, residents and businesses we all need to work together to achieve a low carbon future.

Community energy projects are becoming increasingly successful with groups of people coming together to take action and use local resources to reduce, manage or generate their own energy.

### **12.2 Objectives**

The key objectives for this priority are as follows:

- To identify stakeholders, partners and interested parties.
- Hold a citizens assembly to encourage stakeholder engagement and identify targets and key areas for action.
- Encourage community climate action in our communities.

### **12.3 Considerations**

The involvement of local people that represent the make-up of the Borough, in terms of age, gender, disability, geography, occupation etc. will be crucial to developing a plan that will be relatable to everyone and help to develop recommendations that will contribute to a sustainable future.

By establishing a Citizens Assembly we hope to seek a broadly representative group of local people who will reflect the population, to discuss and make recommendations on how best to address the climate change crisis.

This could involve action in many areas, some already prioritised by this Strategy, and some which the assembly feel are relatable to and achievable for our Borough.

Community energy projects are becoming increasingly common and successful. They involve a group of people coming together, taking action and using local resources to reduce, manage or generate their own energy. They can involve anything from installing solar PV on a public building to running a local energy efficiency awareness campaign. Support for communities to develop such projects is available and links with these delivery experts will be explored to help support community projects across West Lancashire.

Council involvement in this area has been limited to date. We will look to identify already established community energy groups in West Lancashire and provide support where possible. Through establishing a citizen's assembly we hope to gain ideas and identify the types of projects there is an appetite to deliver in West Lancashire.

## 12.4 PRIORITY 6: Community Action - Action Plan 2021-22

Action	Lead responsibility	Partners	Resources/ Conditional Upon	Milestone Progress	Targets/ Anticipated Outcomes	Funding/ Income Generation Opportunities	Timescale
Climate Action Groups	Environmental Strategy Officer	Energy Saving Trust	Officer time	<ul style="list-style-type: none"> <li>Strengthen existing partnerships with local climate action groups.</li> </ul>	<ul style="list-style-type: none"> <li>Strong working relationships and sharing best practise.</li> </ul>		December 2021
Member Involvement	Environmental Strategy Officer	Councillors	Officer time	<ul style="list-style-type: none"> <li>Encourage local Councillors to take action in their communities.</li> </ul>	<ul style="list-style-type: none"> <li>Councillors actively involved in promoting and delivering climate action.</li> </ul>		December 2021
Citizens Assembly	Environmental Strategy Officer	External Support	Officer time	<ul style="list-style-type: none"> <li>Establish a Citizens Assembly and hold an initial workshop.</li> </ul>	<ul style="list-style-type: none"> <li>Establish low carbon targets and actions</li> </ul>		December 2021
Establish a West Lancashire Climate Action Group	Environmental Strategy Officer	Digital Communications Manager	Officer time	<ul style="list-style-type: none"> <li>Identify a diverse range of new partners, stakeholders and interested parties across the Borough.</li> </ul>	<ul style="list-style-type: none"> <li>New climate action group is formed.</li> </ul>		December 2021

## **13.0 Priority 7: Natural Environment**

### **13.1 Background**

West Lancashire Borough Council are committed to preserving, protecting and promoting our natural environment, which we recognise provides a vital route to carbon reduction. The use of green space for walking and cycling helps to encourage more sustainable lifestyles, while tree planting schemes offer carbon offsetting through sequestration and storage, helping to reduce emissions and meet carbon targets. However, it should be stressed that carbon offsetting, through any means, will not be actively promoted above actions to directly reduce carbon.

### **13.2 Objectives**

The key objectives for this priority are as follows:

- Preserve, maintain and promote the use of Council owned green space across the Borough.
- Prioritise the development of a high quality cycling and walking network and associated cycle parking.
- Tree planting schemes, delivering the right trees in the right places.
- Consider the benefits of blue infrastructure (e.g. rivers canals etc.) for delivering renewable technology opportunities, sustainable travel and biodiversity benefits.

### **13.3 Considerations**

Trees and woodlands play a huge role in absorbing and locking up carbon, however they also play an important part in fighting the effects of the changing climate. Trees can also help to prevent flooding, reduce temperatures and provide shade during heatwaves, reduce pollution and help to keep soil nutrient rich.

The Council have recently joined other Lancashire Councils in working in partnership with the Ribble Rivers Trust to deliver the Lancashire Woodland Connect project. This is a decade long campaign to double the area of woodland across Lancashire to fight climate change, improve air quality and reduce flooding. The project will plant more than half a million trees, with a focus on planting the right trees in the right places, removing 100,000 tonnes of CO<sub>2</sub> from the atmosphere. The project is in early phases of development but the Council is committed to participating in the project and aiding planting within West Lancashire.

### 13.4 Carbon Offsetting: Action Plan 2021-22

Action	Lead responsibility	Partners	Resources/ Conditional Upon	Milestone Progress	Targets/ Anticipated Outcomes	Funding/ Income Generation Opportunities	Timescale
Access management to provide high quality walking and cycling routes	Head Ranger			<ul style="list-style-type: none"> <li>Maintain existing routes and investigate expansion/ creation of new routes.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable travel options encourage greener lifestyles.</li> </ul>		December 2021-ongoing
Protect and promote green infrastructure	Head Ranger			<ul style="list-style-type: none"> <li>Community involvement</li> <li>Habitat and wildlife conservation</li> <li>Tree planting schemes</li> </ul>	<ul style="list-style-type: none"> <li>Community parks are well maintained and appreciated/ supported locally.</li> </ul>		March 2021-ongoing
Carbon Offsetting opportunities from Parks and Open Spaces	Environmental Strategy Officer Head Ranger		Officer time	<ul style="list-style-type: none"> <li>Investigate the use of parks and open spaces to offset carbon for individuals and local businesses</li> </ul>	<ul style="list-style-type: none"> <li>Deliver a Carbon Offsetting Fund directly linked to local planting schemes.</li> </ul>		December 2021
Lancashire Woodlands Connect Project	Environmental Strategy Officer Head Ranger	Ribble Rivers Trust		<ul style="list-style-type: none"> <li>Council participation in the Woodland connect project.</li> </ul>	<ul style="list-style-type: none"> <li>Tree planting schemes double the area of woodland across Lancashire.</li> </ul>		December 2021
Investigate the opportunities for an Eco-Park at Beacon Park.	Head of Leisure and Well-Being	Environmental Strategy Officer	Feasibility investigations	Investigate creation of an Eco-park to various green initiatives: renewable energy, recycling, local food allotments, etc.	<ul style="list-style-type: none"> <li>Delivery of an Eco - Park providing education links with schools and communities.</li> </ul>		December 2021
Local Planning Policies	Strategic Planning, Regeneration and			Protect, provide and enhance green and blue infrastructure.	<ul style="list-style-type: none"> <li>Enhanced environment</li> <li>Improved air quality</li> </ul>		March 2021 - ongoing



	Implementation Manager			<p>Protect trees and the natural environment.</p> <p>Protection and improvement of biodiversity and habitats.</p> <p>Protection of parks and natural open spaces.</p>	<ul style="list-style-type: none"> <li>• Reduced GHG emissions</li> <li>• Sustainable travel.</li> </ul>		
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## **14.0 Implementation, Monitoring and Review**

As previously highlighted, the Action Plans within this document aim to be a starting point towards achieving carbon neutrality for the Council as an organisation and kick starting work to reduce emissions across the Borough. They will be a continually evolving, as we identify areas and projects to tackle.

The Climate Change Strategy and Action Plan 2030 will be reviewed and progress reported annually. The action plans will be updated more frequently if required, as new projects are identified and investigated. The reviews will include:

- annual monitoring of energy consumption, savings and generation
- achievements in carbon emission reduction
- updates on progress against priority action plans
- income generation or funding contributions
- technology developments and new opportunities

## **15.0 Conclusions**

It has never been more important than now to take action to mitigate against climate change. There are many opportunities and positive outcomes from delivery of this Plan, with the potential to bring real benefits to the Council and wider communities. We must act now to tackle the climate emergency we all face. A pro-active approach, working with partners and industry leaders, is required to deliver action on the ground and lead by example.

## 16.0 Appendix A: Glossary of Terms

Adaptation to climate change	The process of adjustment to actual or expected climate and its effects
ASHP/ GSHP	Air Source Heat Pump/ Ground Source Heat Pump – renewable heating technologies
BEIS	UK government department of Business, Energy and Industrial Strategy
Biodiversity	The variety of animal and plant life on Earth
Carbon budget	The maximum amount of carbon dioxide that can be emitted, to be in line with keeping temperatures well below 2°C and pursue a 1.5°C limit to rising temperatures
Carbon Footprint	The total greenhouse gas emissions caused by an individual, event, organisation, service, or product
Carbon Neutral	Having no net release of carbon dioxide into the atmosphere
Carbon Offsetting	Practices and technologies to neutralise remaining emissions that cannot be removed entirely
CCC	The Committee on Climate Change
CHP	Combined Heat and Power.
Citizens assembly	A representative group of citizens who are selected at random from the population to learn about, deliberate upon, and make recommendations in relation to a particular issue
Climate Emergency	Climate change presents the greatest threat to life: on the economy, social well-being and the natural environment
Climate resilience	The ability to anticipate, absorb, accommodate, or recover from the effects of a hazardous climate related event in a timely and efficient manner
CO <sub>2</sub>	A key greenhouse gas with a long-lifetime in the atmosphere and both natural and human sources
DEFRA	Department of Environment, Farming and Rural Affairs
Demand side response (DSR)	Utilising opportunities to earn revenue by supporting National Grid in times of peak electricity demand or system stress
Emissions conversion factors	A number used to derive GHG emissions from their sources whether it is fuel or energy use (for example electricity, petrol, gas) or non-energy sources (e.g. cattle, deforestation)
Energy Security	The ability to secure sufficient, affordable and consistent energy supplies
EV	Electric Vehicles: a generic term covering all vehicles powered by electricity
Fuel poverty	Defined by the Warm Homes and Energy Conservation Act as: “a person is to be regarded as living “in fuel poverty” if he/she is a member of a household living on a lower income in a home which cannot be kept warm at reasonable cost”
GHG Emissions	Greenhouse Gas Emissions
IPPC	Intergovernmental Panel on Climate Change
KWp	The peak power of a system
Local Plan	Local planning policies which set out the long-term spatial vision for the Borough
Local Energy Network	A renewable energy project involving public, private or community groups, for the benefit of local consumers within a defined area

Mitigation	Actions to limit the magnitude or rate of long-term global warming and its related effects
OLEV	Office for Low Emission Vehicles
Retro-fitting	The addition of new technology or features to an older system/ building
RHI	Renewable Heat Incentive – a government scheme that provides financial incentives for installing renewable heat technologies
ROI	Return on Investment
SCATTER	Setting City Area Targets and Trajectories for Emissions Reduction: A Local authority greenhouse gas reporting and modelling tool
Single-use Plastics	Disposable plastics that are used only once before they are thrown away or recycled
Solar PV	Solar Photovoltaics
Sustainability	Meeting the needs of current generations, without compromising future generations or the natural environment
tCO <sub>2</sub> e	Tonnes of carbon dioxide equivalence; this includes all greenhouse gases (CO <sub>2</sub> , N <sub>2</sub> O and CH <sub>4</sub> ) converted into the equivalent amount of carbon dioxide
WLBC	West Lancashire Borough Council

## 17.0 Appendix B: West Lancashire Carbon Footprint Breakdown

Summary Greenhouse Gas Emissions (tonnes CO <sub>2</sub> e)		Scope 1	Scope 2	Scope 3		
Sector	Sub-sector	Total tCO <sub>2</sub> e	Total tCO <sub>2</sub> e	Total tCO <sub>2</sub> e	Total tCO <sub>2</sub> e	Total tCO <sub>2</sub> e
		DIRECT	INDIRECT	OTHER	TOTAL	By Sector
Stationary energy	Residential buildings	123,787.71	67,370.57	32,118.95	223,277.23	500,753
	Commercial buildings & facilities	28,051.74	12,593.68	7,327.69	47,973.10	
	Institutional buildings & facilities	57,544.57	63,638.49	18,043.33	139,226.40	
	Industrial buildings & facilities	35,609.43	36,890.06	12,636.24	85,135.73	
	Agriculture	4,147.84	2.03	990.87	5,140.73	
	Fugitive emissions	-	n/a	NE	-	
Transportation	On-road	206,736.05	IE	53,419.43	260,155.48	326,218
	Rail	1,670.87	IE	398.39	2,069.26	
	Waterborne navigation	2,044.01	NO	-	2,044.01	
	Aviation	NO	IE	59,882.12	59,882.12	
	Off-road	2,067.36	IE	-	2,067.36	
Waste	Solid waste disposal	18,683.50	n/a	-	18,683.50	25,748
	Biological treatment	-	n/a	NE	-	
	Incineration and open burning	-	n/a	NE	-	
	Wastewater	7,064.55	n/a	NE	7,064.55	
IPPU	Industrial process	33,629.54	n/a	NE	33,629.54	33,630
	Industrial product use	0.00	n/a	NE	0.00	
AFOLU	Livestock	84,245.83	n/a	NE	84,245.83	63,605
	Land use	- 20,641.24	n/a	NE	- 20,641.24	
	Other AFOLU	-	n/a	NE	-	
Generation of grid-supplied energy	Electricity-only generation	NO	n/a	NE	-	
	CHP generation	NO	n/a	NE	-	
	Heat/cold generation	NO	n/a	NE	-	
	Local renewable generation	NE	n/a	NE	-	
						949,954

Total Greenhouse Gas Emissions for West Lancashire in 2017

Source: SCATTER Cities Tool

Notation keys:
Not Occuring
Integrated Elsewhere
Not Estimated
Confidential
Combination of notation keys
N/A
Required
Optional

## 18.0 Appendix C: Corporate Buildings Operational Energy Policy



### Corporate Buildings

#### Operational Energy Policy

West Lancashire Borough Council is committed to responsible energy management and ensuring greenhouse gas emissions arising from our operations are reduced as far as possible. Whilst maintaining operational goals and providing an acceptable working environment for our staff, we aim to minimise our energy and water consumption, and associated costs, to reduce our impact on the environment.

This Policy sets out operating procedures that will ensure buildings and staff adhere to good energy management. It outlines essential energy efficiency measures that will assist in making our buildings run as efficiently as possible.

#### Heating

- 1. Heating or cooling functions within office areas will be operational in line with working hours (7am till 7pm) Monday to Friday, with systems running to achieve optimum temperatures during peak occupancy hours (8am till 5pm), unless otherwise required.**

The heating schedule for non-office areas at Derby Street i.e. the Council Chamber and Registrars department will have optional extended operational hours, available by special arrangement.

- 2. During peak occupancy hours, Council offices will aim to maintain an optimum temperature of 22°C.**

The Workplace (Health, Safety and Welfare) Regulations 1992 place a legal obligation on employers to provide a 'reasonable' temperature and level of thermal comfort in the workplace. In accordance with guidance published by The Carbon Trust, the recommended temperature for offices and sedentary work is 21°C to 23°C.

Buildings will aim to achieve a target temperature of 22°C and will be cooled down when temperatures exceed 24°C, where applicable. Thermostats will be set to achieve such temperatures and locked to remove control from individual staff members.

- 3. Buildings will not be heated during holiday periods and should be programmed within the Boiler Management Systems (BMS), where possible.**

Boilers that are not controlled via BMS should be programmed, where available, or switched off on the last working day prior to the holiday period.

**4. Conflict of mechanical heating and cooling equipment will be reduced as far as practical.**

Utilising more than one heating and/or cooling system within one area will cause conflict between the systems. Ideally such systems should be linked but, where this isn't the case, systems will be programmed not to run simultaneously through the use of 'dead-bands' and ensuring cooling systems are not accessible during the heating season.

**5. Heating control systems will be locked and tamperproof to prevent staff altering pre-set target temperatures.**

Open use and alteration of target temperatures for heating systems by staff should be prevented wherever possible. Allowing staff to increase and decrease office temperatures not only causes conflict in the office but can often result in inefficient overheating.

**6. Windows and outside doors should not be opened when mechanical heating or cooling systems are operational.**

If an office is feeling stuffy, windows should be opened for no longer than 10 minutes, then promptly closed. Also, ensure radiators are not blocked by heat absorbing furniture or files.

**7. All electrical items i.e. PCs, printers, TVs, photocopiers etc. and lighting, where applicable, should be fully switched off at the end of each working day.**

Whilst some items will have sleep mode functions, they still consume unnecessary energy when left on and not in use. It is the responsibility of all staff to switch off electrical items, especially the last person leaving the office each day.

## 19.0 Appendix D: A Guide to Sustainable Procurement



### A Guide to Sustainable Procurement

West Lancashire Borough Council is committed to taking responsibility for its impact on the environment. We recognise that our purchasing of goods and services have environmental implications and we are actively working towards reducing the negative impacts, by embedding the principles of sustainability throughout our procurement activities.

Before undertaking any procurement activity, the environmental aspects of the project should fully considered and viewed as an integral part of the procurement process. This will include specification development, appropriate tender evaluation criteria and negotiated contract conditions that deliver an environmentally sustainable project. This will require a whole-life costings approach, especially for major purchases, to give a clear understanding of the full impact of purchasing decisions.

Working in partnership with our suppliers is key to delivering sustainable procurement. We will encourage them to conduct their operations in line with the Council commitments and work together to achieve a more sustainable borough, whilst ensuring value for money.

#### Key Objectives

West Lancashire Borough Council will take the following into account when purchasing goods and services:

- Apply a ***whole life costing approach*** to major purchases to consider the full impact of procurement decisions.
- Consider the ***products*** used, conserve raw materials and select sustainably sourced products with low embodied energy.
- Consider ***emissions from transportation***, use locally sourced goods where possible and reduce the need to travel.
- Consider the environmental performance of all ***suppliers/ contractors*** and encourage them to operate in a sustainable manner.

#### Sustainable Considerations

The key objectives will be delivered by giving due consideration to the following:

##### Procurement

- Promote the use of E-procurement, to reduce the use of paper in procurement projects.
- Include sustainability questions in Council tender selection processes.
- Require suppliers to demonstrate they are minimising the environmental impacts of their supply chain, choosing more sustainable and high quality products and services
- Encourage contractors to minimise the negative impact of their transport operations.
- Consider a requirement for CO<sub>2</sub> reduction into the specification of contracts, where appropriate.



## **Goods**

- Consider the expected life span and durability of products and how often they will need to be replaced.
- Minimise the use of natural resources.
- Specify products that contain fewer hazardous or toxic materials.
- Maximise the use of recycled products and products derived from reclaimed materials.
- Specify sustainable timber products.
- Encourage reduced use of packaging with a product, utilising recycled and recyclable materials.
- Avoid the use of single use plastics by finding sustainable alternatives.
- Consider the embodied energy of a product (the energy used to extract, process and manufacture materials) and level of pollution through manufacture, usage or disposal.
- Specify energy efficient appliances and utilise renewable/ green energy options, where possible.
- Commission and procure A-rated energy efficient products.
- Consider products which can easily be recycled, repaired or reused and investigate ways in which waste can be diverted from landfill.

## **Services**

- Require suppliers to demonstrate and provide evidence of how they are reducing the impact their operations have on the environment, including transport and travel at local, national and international levels.
- As far as is permissible under EU procurement Regulations, look to specify products which haven't been transported over long distances. Utilise local products and contractors, where possible.

## **Monitoring**

Ensure sustainability related promises from suppliers and contractors are built into contract management and monitoring, to ensure they are delivered upon through the lifetime of the contract.