Ribble Valley Borough Council Climate Change Strategy

2021- 2030

Ribble Valley Borough Council

www.ribblevalley.gov.uk

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CONTENTS

FOREWORD

Our planet is changing, Ribble Valley must prepare for this change and together we must all take action to reduce our contribution to climate change. Like many global problems action at a local level, no matter how small, is vitally important. Individuals and organisations together can have a great influence. Combating climate change is recognised as a major issue for all of us as it will continue to have effects on people, places, economies, society and the environment.

Climate change inaction has been a subject of protest and controversies and various policies have been developed to mitigate its effects. Successive governments have continued to implement the UK Climate Change Act 2008 which made the 80% CO_2 emissions reduction target by 2050 legally binding. The government has a commitment to reduce greenhouse gas emissions by the United Kingdom by 50% on 1990 levels by 2025 and by 100% on 1990 levels by 2050. In May 2019, Parliament declared a 'climate change emergency', however this does not legally compel the government to act. In December 2020, Boris Johnson declared that the UK will set a target of 68% reduction in greenhouse gas emissions by the year 2030 and include this target in its commitments in the Paris agreement.

To deliver on this commitment the importance of local authority climate change work will only increase from now and in to the future.

The purpose of this strategy is to raise awareness of the issues surrounding climate change and explain how Ribble Valley Borough Council can reduce its carbon footprint, setting out how we will achieve this through working closely in partnership with other local organisations, businesses, active communities and other regional bodies.

By taking action to both address and adapt to the expected impacts of climate change we not only contribute to national and global targets, but our communities can also benefit from an improved environment.

Ribble Valley Borough Council has shown its commitment to tackle climate change by agreeing a corporate objective of ‘to aspire to be a carbon neutral borough by 2030’ in the 2019-2023 Corporate Strategy.

This strategy summarises the global, national and local needs for such action and what the Council will be doing during the next decade to deliver on this pledge.

In order to be responsive to changing policy this Strategy will be reviewed annually to ensure that action on climate change will benefit every individual who lives, works and visits the Borough.

INTRODUCTION

What is Climate Change?

Ribble Valley Borough Council recognises that climate change is a long term threat which will bring challenges and opportunities. Action is needed now, both to reduce emissions of greenhouse gases in order to help reduce more serious changes in the future (often referred to as mitigation), and to help us to prepare for those impacts of climate change that are already unavoidable (adaptation).

The term 'Climate' refers to the average weather experienced over a long period (typically 30 years). Natural and human factors both have affected and are affecting global climate change. Natural causes include interactions between oceans and the atmosphere, changes in the Earth's orbit and volcanic eruptions. Human influences on climate change are releasing greenhouse gases – like Carbon Dioxide (CO_2) and Methane. These gases absorb energy radiated from the Earth's surface, altering the atmosphere and changing global temperatures. DEFRA (Department for Environment, Food and Rural Affairs) state that the Earth has warmed by 0.74°C over the last hundred years, with around 0.4°C of this warming occurring since the 1970's.

The warming up of the UK will be accompanied by wetter winters and drier summers, along with drier springs and autumns, which will lead to a reduction in average annual rainfall of between 10 and 20%.

Why do we need to reduce our emissions?

The accepted conclusion among scientists is that unless considerable reductions are made in greenhouse gas emissions soon, this could limit how effectively the impacts of climate change can be managed, and whether global warming can be controlled. Significant warming with substantial impact is already unavoidable. It is important to prevent global warming reaching the "tipping point". This is when polar ice caps, and frozen tundra melt, fundamentally changing ocean currents and releasing additional greenhouse gases into the atmosphere that will dangerously accelerate warming.

Global Impact

Globally, climate change will impact on sea levels, possibly leaving an additional 72 million people at risk from storm surges. Crops and productivity will alter with those in the most marginal farming areas being the most vulnerable to drought. Crop production will be altered depending on how climate change alters soil and growing conditions in particular regions.

Diseases associated with the tropics, such as malaria could increase by 45-50% if the temperature rises by 3-5 degrees celsius.

Asthma and other respiratory diseases would become more acute and prevalent. The elderly and children would also be more vulnerable to extreme heat.

Ecosystems will be affected. Mountain glaciers will retreat, forest cover decline and desert conditions become more extreme.

National Context

Successive governments have continued to implement the UK Climate Change Act 2008 which made the 80% CO2 emissions reduction target by 2050 legally binding. It should be noted that this is the settled national policy, a UK Act of Parliament, not a European Union Directive so it will not be affected by the withdrawal of the UK from the EU.

The government has a commitment to reduce greenhouse gas emissions by the United Kingdom by 50% on 1990 levels by 2025 and by 100% on 1990 levels by 2050. In May 2019, Parliament declared a 'climate change emergency'. In December 2020, Boris Johnson declared that the UK will set a target of

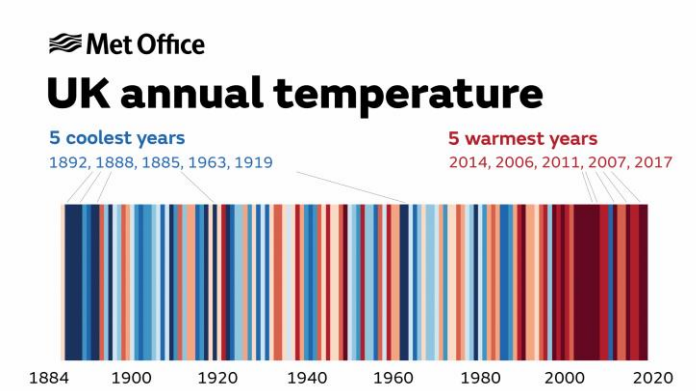
68% reduction in greenhouse gas emissions by the year 2030 and include this target in its commitments in the Paris agreement - the UK has signed and ratified the United Nations Paris Agreement that commits signatories to reduce carbon emissions sufficiently to limit global temperature increases to no more 2°C by the end of the century (considered a "safe level" of temperature increase), and ideally to limit the rise to 1.5°C.

Following the 2018 publication of the UN's special report into the impact of a 1.5°C temperature rise, and with fresh advice from the UK's Committee of Climate Change in 2019, Parliament has strengthened the Climate Change Act – the ultimate target is to achieve net-zero emissions by 2050.

However, despite these actions, the UK is already being affected by rising temperatures. The most recent decade (2008-2017) has been on average 0.8 °C warmer than the1961- 1990 average. All ten of the warmest years in the UK have occurred since 1990 with the nine warmest occurring since 2002.

The image below, produced by the Met Office, provides a very clear representation of the changing temperatures within the UK.

Figure 1 - changing UK temperatures - Met Office



Local Context - Ribble Valley

Data is not readily available at a local council level.

The table below shows possible climate change scenarios within the North West. This will have impacts on agriculture; businesses including local councils; householders and the physical environment. For example, the loss of trees in storms and damage to the landscape and buildings as a result of floods.

Figure 2: Climate Change in the North West of England

	2011 - 2040	2041 - 2070	2071 - 2100
Change in average annual temperature	0-1 c	1-2 c	1-4 c
Change in maximum summer temperature	0-1 c	1-3 c	2-6 c
Change in summer rainfall	5-15% decrease	10-30% decrease	15-30% decrease
Change in winter rainfall	5-10% increase	10-20% increase	15-30% increase
Change in winter snowfall	20-25% decrease	30-60% decrease	40-100% decrease
Change in summer and autumn soil moisture content	0-10% decrease	10-25% decrease	20-40% decrease
Change in sea level	Not available	7-36cm increase	7-67cm increase
Source: Climate Change and Visitor Economy Challenges and Opportunities for England's North West			

In the context of Ribble Valley, the most significant effects could be:

- Greater flooding risk associated with increased surface water runoff and pressure on drainage systems
- Fluctuations in rainfall and temperatures mean that agriculture and biodiversity may also be badly affected
- Wetter weather and temperature fluctuations may mean more failed crops as well as damaged habitats such as washing out of bird nests
- An increase in pest and disease spread
- The potential for more exotic species
- Increased vulnerability of upland livestock is likely to occur over the next 50 years and new land management practices may be required to adapt to climate change, changing the type of farming and the landscape it produces
- Increased summer temperatures and drier soil conditions could lead to increases in primary and secondary fires in the district and subsidence
- Climate change could cause damage to infrastructure by melting rural roads (leading to inaccessible rural areas)
- Increased demand on water resources
- Increased local tourism leading to congestion on small rural road networks
- The effect on mental and physical health due to the increasing temperatures

Although much guidance focuses on the negative impact of climate change, the borough could benefit from a longer growing season, increased crop yields, agricultural diversification and increased tourism. This is by no means certain so mitigation and adaptation should be addressed first before taking advantage of any opportunities that may arise as a result of climate change.

Aspects of the Council's work that may be directly affected by climate change

- Emergency Planning - for example, increases in one off events requiring use of resources and community buildings for emergency accommodation as the result of flooding.
- Spatial Planning - designing in climate mitigation and adaptation matters. Considering shortage of water in summers and excess water in the winter.
- Built environment - risks of subsidence – will need to ensure that foundations are "future proofed" to deal with extremes of ground moisture levels. Increase in dangerous buildings and trees, through storm, flooding and weakened foundations. Increases in retro fitting of buildings to deal with extremes of temperatures. Wet weather leading to increases in dampness and adverse living conditions.
- Public Buildings - may require retro fitting to deal with extreme heat, increase effectiveness of water management i.e. rainfall, surface water, damp issues.
- Public Car Parks - increased flooding in winter and requirement for shading in the summers.
- Grounds maintenance - increased growing season requiring revised grass mowing patterns. Drought conditions in summer require change in planting. Wetter winters require different winter planting. Planned water management. Parkland - impact on native trees.
- Environmental Health - increases in food poisoning due to warmer conditions. Increases in dust conditions requiring hosing down of areas, increase in flooding with public health impacts.
- Community Safety - hot summers likely to result in large groups of people being outside in the summer evenings with possible neighbourhood nuisance issues.

- Waste services - collections of waste to offset public health issue of decaying waste.
- Business support - encourage businesses to adapt to new markets.
- Tourism - greater opportunity for tourism.
- Other incidental impacts will require changes to the Council's activities.

CARBON FOOTPRINT

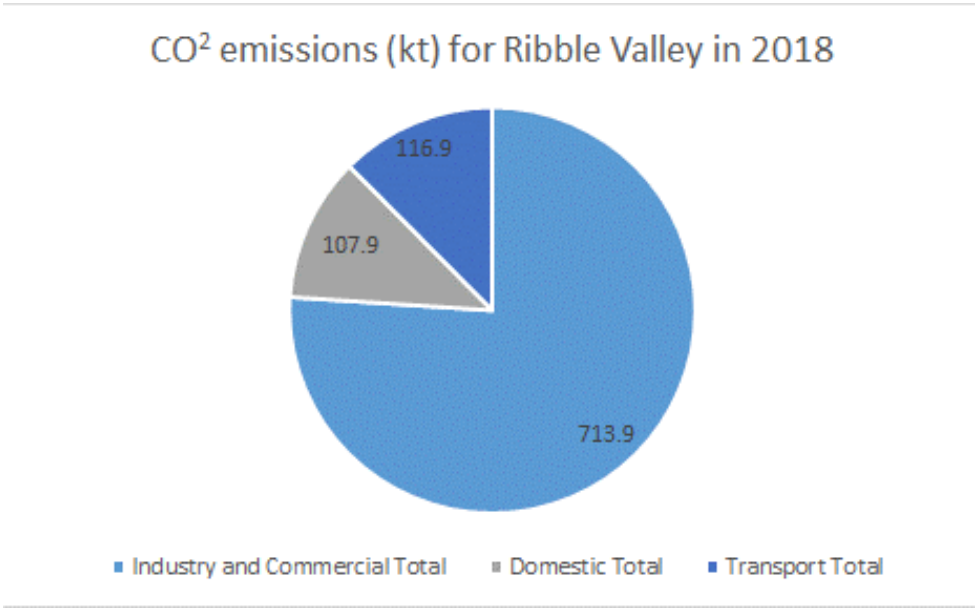
Ribble Valley's Carbon Footprint – emissions in the borough area

A carbon footprint is a measure of the impact that an individuals, organisations or areas activities have on the environment, and in particular climate change. It relates to the amount of greenhouse gases produced in our day-to-day lives, for example burning fossil fuels for electricity, heating and transportation.

The Department for Business, Energy and Industrial Strategy publishes CO^2 emissions on an annual basis. The data published in June 2020 relates to 2018 (see Appendix A).

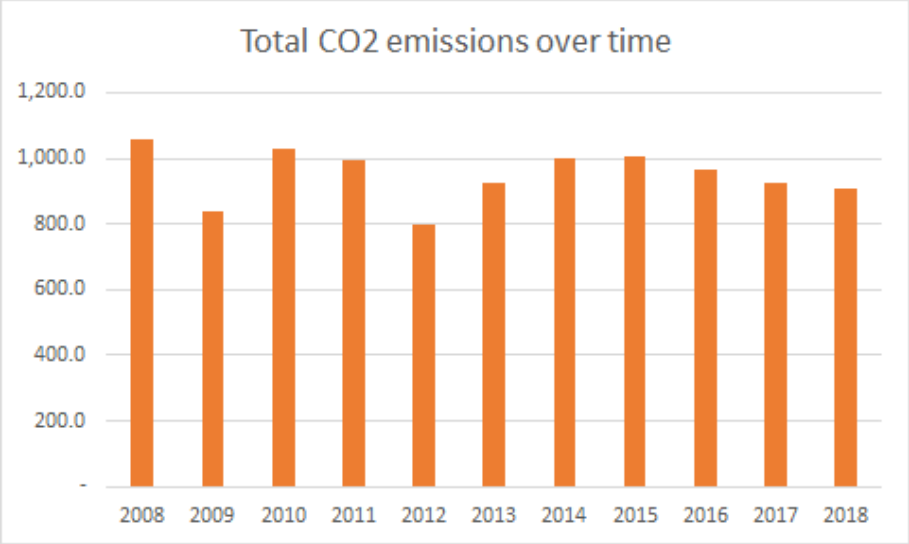
Analysis shows that the tonnes of CO^2 emissions from Industry and Commercial accounted for nearly three quarters of the total tonnage of CO^2 emissions for the borough area in 2018.

Figure 3: Department for Business, Energy and Industrial Strategy 2018 breakdown of CO^2 emissions for Ribble Valley



CO^2 emissions have fluctuated between 2008 and 2018 but hover between 800 and 1000 kt per annum.

Figure 4: Department for Business, Energy and Industrial Strategy changes in CO^2 emissions for Ribble Valley over time



This equated to 15.2t of CO^2 emissions per head of capita in 2018 and 1.6t per km^2.

Figure 5: Department for Business, Energy and Industrial Strategy per Capita emissions of CO^2 for Ribble Valley over time

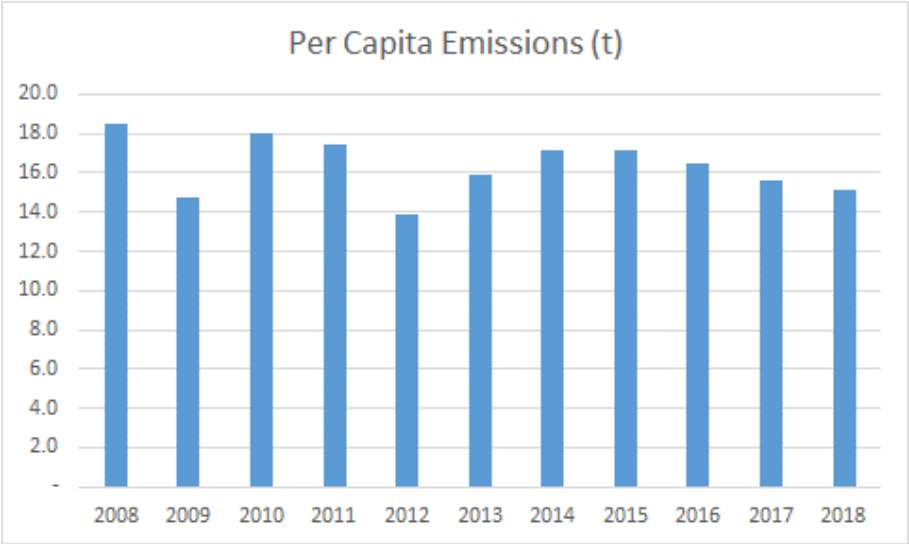
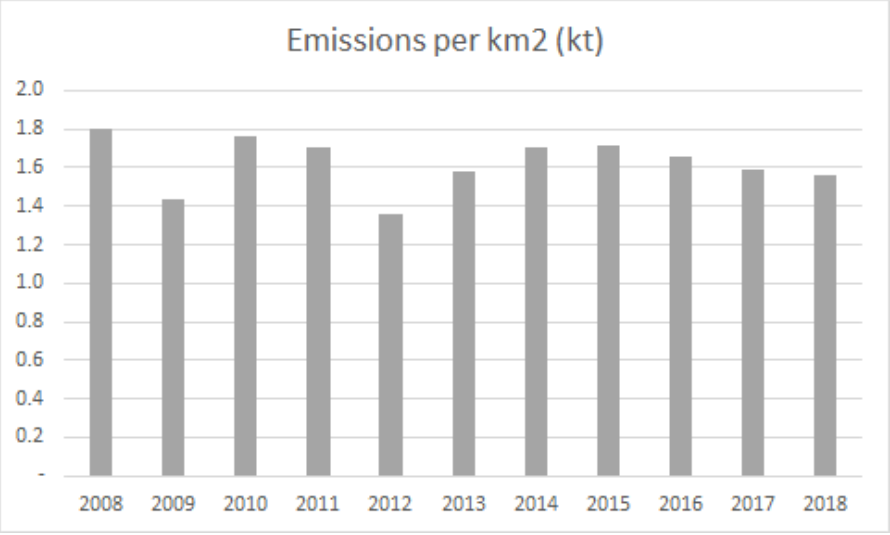


Figure 6: Department for Business, Energy and Industrial Strategy CO^2 emissions (kt) per km^2 for Ribble Valley over time



As a comparison the figures for England and the North West are –

	Total emissions (Mt CO^2)	Per km^2 (t CO^2)
England	280	2.1
North West	38	2.6

Ribble Valley Borough Council's Carbon Footprint - emissions from our own operations

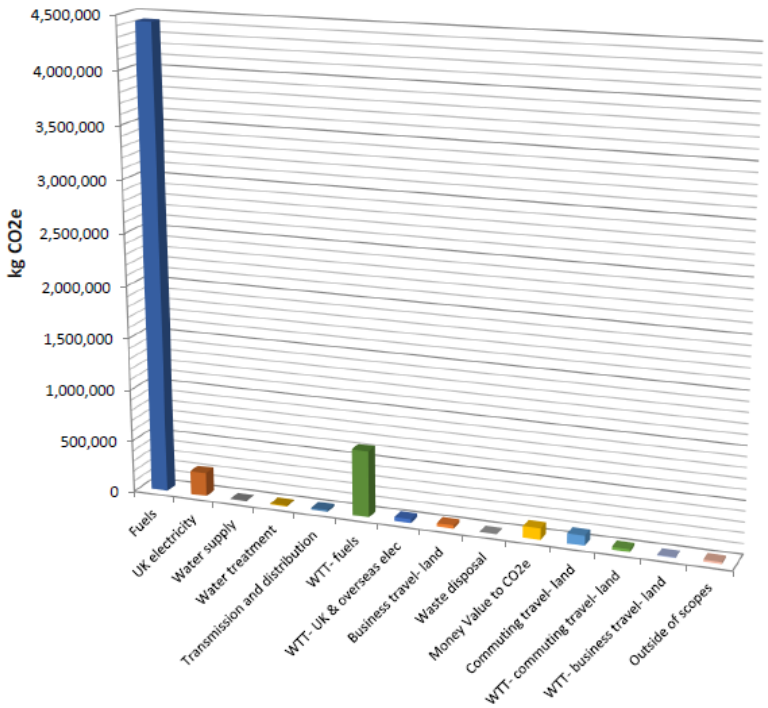
Ribble Valley Borough Council's carbon footprint was calculated in 2008 to be 1,523 tonnes of CO_2. In 2009 we undertook an assessment of the Council's CO_2 emissions. This included the gas and electricity used in our buildings, and in addition the use of vehicles associated with refuse collection, as well as staff business mileage.

According to the report from One Carbon World the Council's carbon footprint for 2019-2020 was 5,655.06 tonnes CO^2e (see full report). This was a more in depth calculation than that carried out in 2008.

The total emissions from this assessment will be used as a baseline against which future performance can be measured. It will allow the Council to work towards continuous improvement in order to reduce our carbon footprint and meet our Corporate Objective in the 2019-2023 Corporate Strategy - 'to aspire to be a carbon neutral borough by 2030'.

Analysis shows that by far the biggest contributors to the authority's emissions is 'Fuels' and 'WTT Fuels'[1].

Figure 7: One Carbon World – sources of CO^2e by emission activity



[1] **TTW (Tank-to-Wheel)** describes the use of fuel in the vehicle and emissions during driving
WTT (Well-to-Tank) describes the subrange of fuel supply – from production of the energy source (petrol, diesel, electricity, natural gas) to fuel supply (transport to the charging point or fuel pump).

Figure 8: One Carbon World – sources of CO^2e by emission energy and fuel use

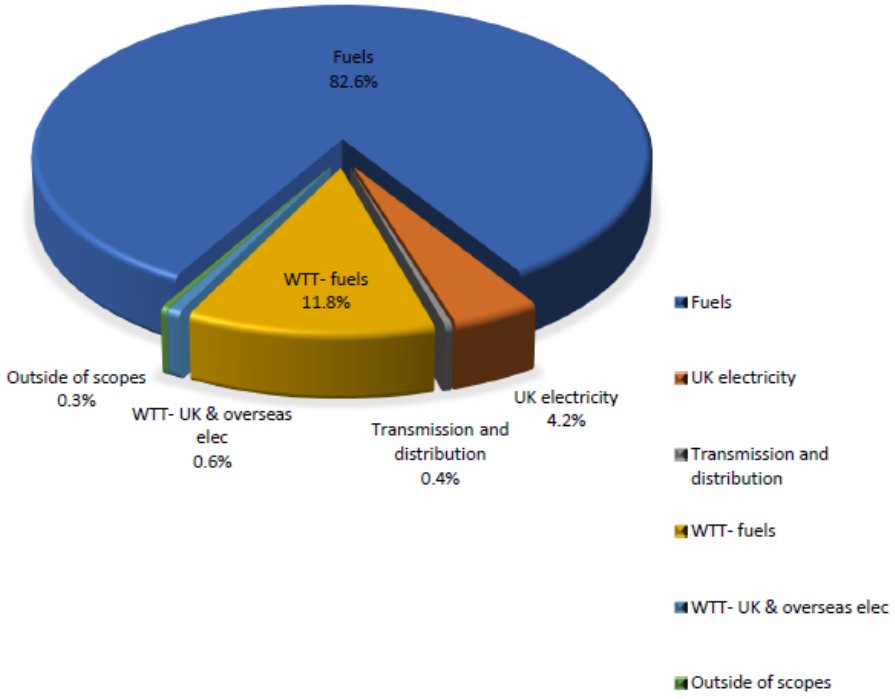
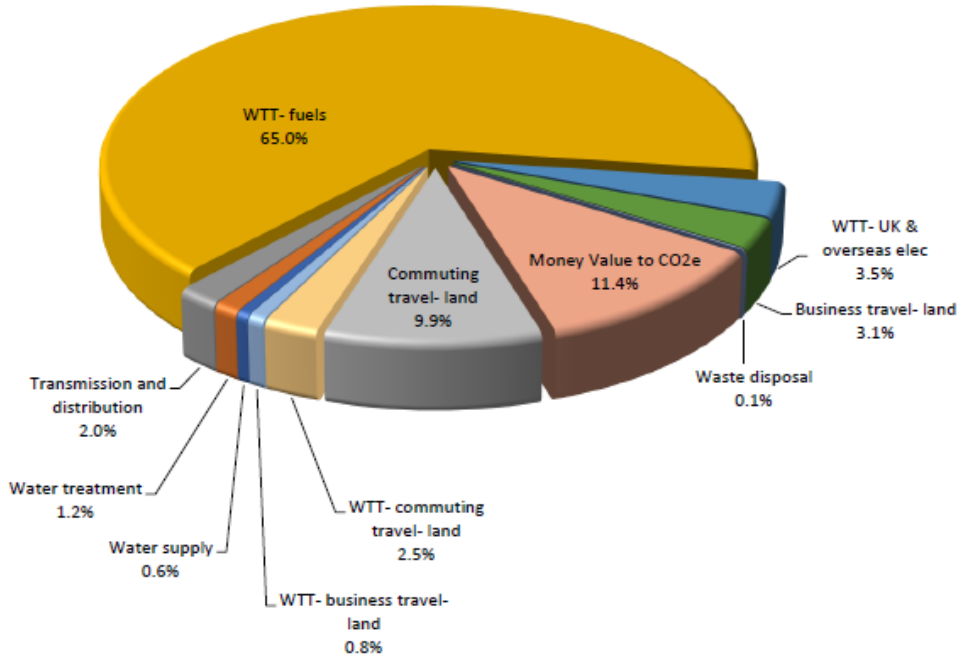


Figure 9: One Carbon World – sources of CO^2e by indirect emissions (scope 3)



RIBBLE VALLEY IN CONTEXT

Ribble Valley is the largest district in Lancashire in terms of area, but the smallest in population - around 60,057[2]. It covers over 244 square miles, most of which are within the Forest of Bowland Area of Outstanding Natural Beauty. Ribble Valley has three urban centres in Clitheroe, Longridge and Whalley. Many of these villages have changed very little over the years and bring a unique set of transport issues with them.

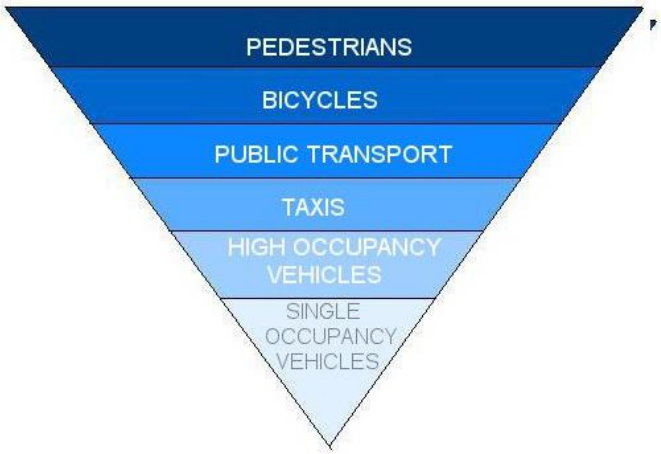
The Borough can claim one of the lowest levels of unemployment in the country and boasts one of the best standards of living in the North. Not surprisingly in such a prosperous and rural district, car ownership is the highest in Lancashire.

Transport

Emissions from vehicles account for a significant proportion of CO_2 equivalent emissions (116.9kt in Ribble Valley in 2018), but emerging Government strategies and new technologies should enable us to tackle this issue and make transport greener.

Nationally and locally the transport sector is the most difficult area to address in terms of climate change. This is because mobility is so central to present lifestyles. Initiatives such as increased (continued) home working and promotion of public transport will need consideration.

Figure 10: Transport hierarchy



Ribble Valley faces the issues associated with its rural nature, namely poor accessibility, high dependence on the private car and a meagre public transport network. Traffic congestion is not a widespread problem, but there is conflict between pedestrians and traffic in shopping centres.

Public transport plays a vital role in many parts of the dispersed community. Despite the high level of car ownership, 13% of households do not possess a car. Great care is required to identify and meet the travel needs of the people who have neither a car nor access to conventional bus services, and services in such a rural area are costly to operate.

[2] ONS Mid-year population estimates 2018

Figure 11: Car Ownership in Households (2011 Census)

	No Car	One Car	Two Cars	Three plus Cars	Cars/Household
Ribble Valley	13%	41.2%	34.4%	8.3%	1.49
Lancashire	22.9%	43.5%	26.3%	5.6%	1.2
North West	28%	42.5%	23.5%	4.6%	1.10
England	25.8%	42.2%	24.7%	5.5%	1.16

In all but two of the Lancashire districts, the proportion of people travelling less than 5km to work is well above the national average. However, in Fylde and Ribble Valley, Lancashire's two most prosperous districts, the proportion falls to 35% and 34% respectively. Ribble Valley has a long history as a commuter dormitory, but also has a particularly high proportion, 13%, of people working at or from home. Nevertheless, 23% of journeys to work are under 2km and 34% are under 5km. Many more of these could be transferred to foot and bicycle.

Figure 12: Journey to Work by Mode % (2011 Census)

	Working from home	Metro ,light rail or tram	Train	Bus or coach	Motor cycle	Car/ van driver	Pass enger	Taxi	Bicycle	On foot	Other
Ribble Valley	10.1%	0.1%	0.7%	1.4%	0.4%	46.1%	3.1%	0.1%	0.9%	6.4%	0.2%
Lancashire	6.6%	0.0%	0.9%	3.5%	0.4%	39.9%	3.9%	0.4%	1.3%	6.4%	0.3%
North West	5.9%	0.4%	1.7%	5.0%	0.4%	36.8%	3.7%	0.5%	1.3%	6.3%	0.3%
England	6.9%	2.6%	3.3%	4.7%	0.5%	34.8%	3.2%	0.3%	1.8%	6.3%	0.3%

Peak Oil

Peak oil is defined, as the moment at which global oil production will meet its maximum level, and then go into sustained decline. Estimates of when peak oil will occur vary, but the common consensus among experts is that this tipping point will be sometime between now and 2040's.

As a rural district, Ribble Valley could potentially be at great risk from increasing oil prices (due to increased oil demand), as residents of the borough rely heavily on private transportation to enable them to go about their lives and many rely on oil as their main source of energy. Implications for the borough council are significant if prices for diesel, petrol, gas and electricity soar.

Renewable Energy

In Ribble Valley there are limitations for siting renewables within designated areas. With two thirds of the borough being an Area of Outstanding Natural Beauty, sites for renewables need to be investigated comprehensively. The borough can contribute to the renewable energy targets through small-scale renewable energy installations such as hydro-power.

Water Management

The average household in England and Wales uses 150 litres/person/day (enough water for more than 500 cups of tea). Every day United Utilities collects, treats, stores and distributes around 2,000 million litres of drinking water to supply the needs of nearly seven million people and 200,000 business customers in the North West.

The provision and removal of water to domestic and non-domestic properties uses a significant amount of energy. About 2% of total energy used in the UK is used to treat water. This highlights how much we are dependent upon energy and this level of use is not sustainable in the long-term. The Government target for consumption of water is 130 litres/ person/day by 2030. Reduced consumption can be achieved easily through behavioural change and by adopting the following measures within homes and businesses.

Flooding

The historic town of Clitheroe and the villages of Whalley and Ribchester are situated on the River Ribble/Calder system. Localised flooding has occurred within Ribble Valley and the likelihood is, that events like the Boxing Day flood following storm Desmond may become more frequent and possibly more severe.

In Ribble Valley, the Environment Agency has undertaken flood risk modelling and has identified 4 Flood Warning Areas which are at a higher risk of flooding from the River Ribble system. The areas are:

- Clitheroe (Low Moor : Map Ref L9)
- Ribchester (Map Ref L5)
- Whalley (Map Ref: L 21) and
- Clitheroe (Mearley Brook : Ref L9)

Events over the past few winters have demonstrated that exceptional storms can cause flooding even on hill slopes, when the drainage system is simply overwhelmed by the amount of water it is expected to carry. In addition, when the ground is saturated even small additional amounts of rainfall will find it difficult to drain away from gardens and enclosed spaces.

Waste Management

Effective waste management has a key role in reducing greenhouse gas emissions. In the UK, around 65% of household waste is sent to landfill sites or incinerators. Once there, all organic waste decomposes, releasing the powerful greenhouse gas Methane into the atmosphere. To minimise the impact of waste on climate change we therefore need to focus on the following areas:

Figure 13: Waste Hierarchy

- Reducing the amount of waste we produce
- Re-using waste
- Maximising our recycling
- Maximising home composting.

Planning

The planning system is the most powerful tool local authorities have for ensuring development will be sustainable in a changing climate. National planning guidance allows local authorities to adopt policies that require developers to reduce the environmental impact from the construction and operation of their projects. The way in which developments are regulated, planned and built and the way in which resources are used to do this, can determine whether or not they are sustainable. Simply by re-evaluating how and where we construct we can reduce emissions and adapt to some of the impacts of climate change.

The Government acknowledges that Planning has a key role to play in helping to tackle Climate Change.

Biodiversity

The changing climate is beginning to have an impact on UK ecosystems and this impact is expected to increase and accelerate in future, threatening the conservation of biodiversity. Nationally 90% of wetlands have been lost, as well as 98% of our wildflower meadows in the last 100 years or so, both of which would act as carbon sinks (and flood alleviation devices in the case of wetlands).

Within England, the following pressures were identified as particularly important in the context of climate change:

- Habitat destruction.
- Change in management practices
- Non-native species
- Air pollution
- Over exploitation

Without plants and animals we would not be able to survive e.g. pollination of crops by bees. The success of each species is essential to the health and well-being of the whole planet. Changes in climatic variability may lead to the loss of rare species that have taken millions of years to evolve.

Ribble Valley is fortunate to have Areas of Outstanding Natural Beauty (AONB) within its boundaries. This unique area of natural beauty needs preserving and protecting from the impacts of climate change in the future and all the organisations that are responsible for protecting this rural landscape need to co-ordinate their activities to optimise their effectiveness in reducing the impacts of climate change.

Thirteen percent of the AONB is designated as a Site of Special Scientific Interest (SSSI) for its habitats and geological features. Within Ribble Valley there are a number of Sites of Special Scientific Interests (SSSI's).

The Government wants to see biodiversity valued, safeguarded and enhanced and local authorities have a key role to play in conserving biodiversity.

WHAT HAVE WE DONE SO FAR?

So far as an organisation we have (this list is not exhaustive):

- Produced a Sustainable Procurement Policy.
- Ensured that the Council's energy usage is a key determinant of IT procurement.
- Ensured we have certificates of safe disposal for all IT equipment.
- Ensured we have certificates for the reuse of print consumables.
- Ensured that all the Council's electricity is sourced from renewable sources (Green Energy).
- Established a baseline of electricity and gas consumption from Council buildings and provided a number of actions to considerably reduce energy usage and make financial savings.
- Implemented an energy management policy to monitor the Council's bills and meter readings.
- In 1997 the Council took the forward-thinking approach of installing motion sensors in the Council Offices to control the lighting in the offices.
- In 2004 we installed mini fluorescent light fittings in the Council office toilets. At the time this again was a forward-thinking approach.
- In 2009 we upgraded all lighting in the Civic suite to LED
- Adopted the policy when replacing redundant lighting to replace with LED.
- Provided free energy saving light bulbs to members of staff during awareness raising sessions.
- Installed new high efficiency boilers in the Council Offices (2004).
- In 1992 we installed a Trend control system on the boilers in the Council offices, the civic centre, the swimming pool, and the museum. We have since (2003) upgraded the Council Offices Trend system so areas are thermostatically controlled resulting in an energy saving.
- Installed high efficiency boilers at Ribblesdale Swimming Pool (2007). The fuel source was also changed from oil to gas leading to greater efficiency.
- Replaced all the windows for double glazed units at the Council Offices and installed solid roof installation (2016).
- Between 2004 and 2009 bagged insulation was installed in a new suspended ceiling system.
- Received a green apple award for our Slaidburn public toilet (2005). The property was judged to be an example of best practice with a low impact on the environment.
- Installed LED microwave sensor lights in the Council offices car park (2020).
- On Council carparks 70% of the light fittings have been converted to LED
- Installed movement sensors to the flushes and wash hand basin taps in the toilets.
- Installed time clocks on the water coolers in the Council offices (2006.)
- Switched our fleet vehicles to run on bio-diesel.
- Recycled the Council's waste paper alongside that of the community.
- Ensured we purchase recycled and FSC paper products.

- Ensured that all unused pre-printed paper is 'recycled' by making it up into scrapbooks.
- Ensured that we use organic horse manure on all flowerbeds.
- Ensured that all weed killer used is environmentally friendly.
- Ensured that any fertiliser that is used is environmentally friendly (used on the Bowling green).
- Provided educational advice on waste minimisation in schools
- Achieved rates for recycling and composting waste.
- Changed doorstep recycling collections to now accept clean pots, tubs and trays.
- Since September 2020, households of more than 4 people can request a larger blue recycling bin.
- Since February 2020 households on a lilac bag collection service have been given the option to change to bin collection - which means they were provided with a general waste and a recycling bin meaning these households are now able to recycle.
- Made larger green waste collection bins available.
- Increased the amount of grants to vulnerable households to improve the energy efficiency of homes
- Encouraged the use of local food produce at the Clitheroe Castle Café through the tender process.
- Reduced the number of committee cycles, which had an unintended consequence of reducing the amount paper used. The newly Committee Admin system has resulted in a further significant reduction in printing costs and also reduced distribution costs
- Committee briefings and Working Group meetings are now conducted via zoom – saving travelling costs.
- Changed the Mayoral car to a more energy efficient hybrid model

Outcomes in the wider community include:

- Invested money in the Pendle Hill project.
- Granted money to The Ribble Rivers Trust's Woodland planting project.
- Installed 14 electric vehicle charging points on our Car Parks

WHAT ARE OUR FUTURE PLANS?

How does the Climate Change Strategy link with the Council's priorities and strategic objectives?

The Climate Change Strategy is an overarching document that should impact on all the Council's activities and services.

Ribble Valley Borough Council has shown its commitment to tackle climate change by agreeing a corporate objective of 'to aspire to be a carbon neutral borough by 2030' in the 2019-2023 Corporate Strategy. The Corporate Strategy includes the following priority actions and measures of success.

Our short-term priority actions:

- To provide an economic, efficient and effective waste collection service
- To develop an action plan to work towards being a carbon neutral borough by 2030 which is based on a better understanding of our current carbon emissions

- To install electric charging points on Council owned car parks
- To eliminate wherever possible single use plastics within the Council and to share good practice and raise awareness around single use plastic usage and avoidance
- To reduce the use of paper wherever possible
- To undertake Landscape Character Assessments to support the Local Plan update and incorporate suitable planning policies in respect of Green Infrastructure
- To support the work of the Forest of Bowland AONB

Our medium-term priority actions:

- To take available opportunities to recycle
- To use energy from renewable sources more efficiently
- To respond to the Government consultation paper on recycling

Our key measures:

- Energy consumption of local authority property/ CO^2 emissions reduction from local authority operations
- Percentage of residents satisfied with the waste and recycling collection services
- Percentage of waste sent for reuse, recycling and composting
- Cost savings of a reduction in paper usage and printing
- Tonnes CO2e per employee

Climate Change Strategy Objectives

This Strategy aims to raise awareness of the issues surrounding climate change and to reduce both Ribble Valley Borough Council's and the areas contribution to global greenhouse gas emissions and its natural resources. It sets out how this will be achieved through working closely in partnership with local organisations, businesses and with active communities.

Ribble Valley Borough Council is well placed in its three roles as a service provider, community leader and as an organisation to reduce its carbon emissions, and to act as an exemplar of best practice locally for businesses, and the wider community.

It must not only reduce carbon emissions within the Borough, but also ensure that by acting strategically the adverse impacts of climate change are planned for and circumvented wherever possible. Planned investment now will make cost savings in the future.

Some impacts of climate change are already unavoidable. They will influence the Council's activities and have cost implications. Therefore, reductions in emissions and adapting to climate change are central to the Council's role and function.

This Strategy sets out how the Council should reduce carbon emissions in the short term with long-term objectives and also how it should consider the possible impacts of climate change in its service delivery.

The Council is already taking on board some of the climate change messages in some aspects of its work. However, this is often undertaken in a piecemeal fashion often as the result of specific areas of work.

Many of the efficiency savings that the Council is already working towards will reduce carbon dioxide emissions as an unintended consequence. For example, efficiency savings related to the use of the Council's website and contact centre reduce the emissions of the Council (stationery etc…) and of customers (transport emissions).

Ribble Valley is performing well in some aspects of its service delivery. For example, its waste recycling services have improved and it is committed to promoting energy efficiency savings in the domestic sector.

In common with other local authorities and businesses, carbon emissions have not, until recently, been considered a factor in the Council's day-to-day activities and service planning.

It is important to set out a clear framework so that ALL the Council's activities and employees have the reduction of carbon emissions and adaptation to climate change as a key priority.

This Strategy will be regularly reviewed. It will set out a framework for embedding climate change into the Council's decision making, community leader and service functions.

HOW CAN WE BE A CARBON NEUTRAL BOROUGH BY 2030?

The target can be partly met by ensuring that reducing carbon emissions is embedded in all the Council's activities.

The tables below set out a number of existing actions and targets to which the Council is already working or planning to work to, which will impact on carbon emissions.

This Climate Change Action Plan has three interrelated areas:

- Ribble Valley Borough Council as an organisation - climate change is to be embedded in all the Council's internal activities
- Ribble Valley Borough Council as a service provider - climate change is to be embedded in all the Council's external activities
- Ribble Valley Borough Council as a community leader - the Council will continue to provide clear community leadership by leading through example in the fight against climate change, encouraging businesses and residents to address climate change.

Timescales for implementation are as follows:

- Short term: Actions that can start now and aim to complete within the first few years of the plan.
- Medium term: Actions which require further development to be implementable.
- Long term: Actions that have dependencies or require substantial development to be implementable.
- Ongoing: Actions that will need regular review throughout the 10-year plan.

Our Climate Change Action Plans clearly demonstrate the Council's commitment and determination to ensure that the targets set nationally are achieved. These will be revised and monitored annually. Much of the climate change agenda is to ensure that everyone is aware of how they can make a positive contribution to reducing emissions and lessening the impacts of global warming.

The Council as an organisation/ employer

Ribble Valley Borough Council is responsible for a small percentage of the borough's emissions and it employs around 250 people. The Council needs to set its own house in order in relation to carbon emissions and its preparedness for the impacts of climate change.

With a greater understanding of how much energy and water the council uses, the numbers and length of business and commuting journeys made by staff and consideration of the sustainability of its procurement process plans can be put into place to reduce emissions.

Sustainable procurement is a common factor across all three themes and will play a vital role in supporting the Council's Climate Change Action Plan. It is defined as a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits to society and the economy, while minimising damage to the environment. The Council has taken steps to ensure that sustainable procurement principles are embedded in how we conduct our business.

Training and communication are vital to ensure that staff understand how their actions impact on climate change; how the unavoidable impacts will affect Ribble Valley and the work of the Council; and to deal with these impacts in as cost efficient and effective way as possible.

Figure 14: Organisation/Employer Action Plan

Objective: Ensure that resources are in place in order to accomplish our Climate Change objectives		
Action	**Comments**	**Targets**
Ensure that there is sufficient capacity within the organisation for the completion of the actions within this Climate Change Strategy		Short term
Consider the appointment of an officer to take overall responsibility for ensuring actions are completed		Short term

Objective: Achieve carbon neutrality in our buildings		
Action	**Comments**	**Targets**
Commission building by building reports on external and internal measures with recommendations (utilising the energy hierarchy: use less energy, improve your energy efficiency, and create new energy from renewable sources).	To be carried out by a consultant Energy Surveyor. This would help identify subsequent actions to be carried out in our buildings based on informed cost benefit analysis.	Short term
Review the Ribble Valley Energy Performance of Buildings Directive (EPBD) reports (DECs/ EPCs/ TM44) covering the Council's buildings and renew Display Energy Certificates (DEC) to provide a benchmark on energy reduction.	Assess the EPCs and roll out recommendations where appropriate.	Ongoing

Objective: Achieve carbon neutrality in our buildings		
Action	**Comments**	**Targets**
Consider the recommendations made in the commissioned reports and EPCs on a site by site basis which could include: • improvements to the building fabric • higher efficiency heating systems • use of alternative/ renewable energy sources for heating for example Air Source Heat Pumps (ASHPs) Ground Source Heat Pumps (GSHPs), solar thermal, solar PV or additional biomass capacity	Only small improvements can be made to insulation at the council offices and depot. Museum and Platform Gallery are restricted by listed building requirements. Solar panels are a possibility at the depot and Ribblesdale Pool (although other options may be considered for the pool in the longer term). More energy efficient boilers could be considered for the pool.	Medium term
Roll out of high efficiency LED lighting with integrated lighting sensors and controls where appropriate.	Pay back feasible in 3 to 4 years	Medium term
Develop and implement a staff energy and environmental awareness programme: • Hold a SWITCH OFF campaign • Ensure all PCs and ancillary equipment is switched off out of hours where possible • Ensure out of hours energy consumption is minimised where possible	Articles in Backchat Consider introducing a web-based tailored staff awareness training solution	Short term
Implement energy efficient IT equipment, printers, photocopiers etc…	To be carried out as a phased approach as and when required to be replaced.	Ongoing

Objective: Reduce, reuse and recycle			
Action	**Sub-actions**	**Comments**	**Targets**
Reduce, reuse and recycle paper and other materials within council buildings and make best use of new technologies available	Encourage staff to print/photocopy double sided where possible		Ongoing
	Replace remaining existing desk top printers with multi-functional printing devices to reduce the need for small inefficient office printers and enable double sided printing		Ongoing
	Implement a robust paper reduction and recycling target		Short term
Reduce our use of water	Implement a Water Management Policy in order to monitor the Council's bills and monitor usage		Medium term
	Implement equipment to reduce water consumption		
	Consider installing waterless urinals		

Objective: Assess and implement measures to significantly reduce RVBC business travel emissions		
Action	**Comments**	**Targets**
Consider the efficiency of all new fleet vehicle purchases and look for opportunities to introduce EV fleet vehicles. Investigate whether solar charging points can be installed at the depot.	To be considered on a vehicle by vehicle basis at the point each comes up for replacement. This will be dependent on budgets but no further purchases will be made of diesel vehicles where possible. Price equivalents will be sought for hybrids (diesel or petrol) and EV.	Ongoing
Consider implementing a Fuel Management Policy in order to monitor the Council's fuel bills and monitor usage		Short term
Consider operating a pilot of shut off switches on fleet vehicles and exhaust breaks retrofitted on refuse vehicles.	We've already had exhaust breaks fitted on some new vehicles	Medium term
Introduce EV charging points for staff use to facilitate the transition to electrified transport.	This is currently being investigated further	Short term
Encourage members and officers to reduce the impact of car use – • Ensure facilities are available to enable staff to cycle to work, including showers • Electric bicycle charging points • Adequate secure storage facilities		Short term
Encourage and possibly fund 'green driver' training, which can reduce driving fuel consumption through behaviour change such as less aggressive acceleration and braking.		Short term
Investigate the use of EV/Hybrid pool cars for staff use on Council business and prioritise this over use of staff's own vehicles.		Medium term
Consider implementing a hybrid working from home policy and utilise 'Teams' meetings (or Zoom) to reduce mileage and avoid unnecessary journeys. Ensure that all staff know how to use the relevant software, and create a working culture in which it is permissible and acceptable to do so in place of attending in person.	Training for Microsoft Teams is currently being investigated.	Short term

Objective: Sustainable procurement		
Action	**Comments**	**Targets**
Investigate the purchase of eco-friendly cleaning products		Short term

Objective: Sustainable procurement		
Action	**Comments**	**Targets**
Investigate further the purchase of fair trade and local products	Promotion of Taste Lancashire – this is already factored into procurement involving food eg tender for Bowling Green Cafe	Ongoing
Review the Procurement Policy to ensure all environmental issues are considered	A Yes/No question is included on tenders about supporting the Council on our environmental issues eg this was considered for the Edisford catering concession	Ongoing
Introduce the consideration of life costing of products before purchasing		Short term
Pursue opportunities for joint procurement with other districts on environmental products and services	This would be on an as and when required basis	Ongoing

The Council as a service provider

Climate change challenges how the Council will provide its services in the future. All the Council's strategies, projects and policies will need to take into account its future impacts and costs.

How the Council interacts with its service users can influence carbon emissions, for example an interaction via the website not only results in financial savings but also cuts incidental carbon emissions.

The Council's statutory planning function, and its role as a provider of parks, open spaces and public car parking directly influences the Borough's built and natural environment, including the ability to promote energy efficiency, low carbon generation and providing an environment that will be able to withstand and exploit (if possible) the forecast long term changes.

The Council has a role in encouraging energy efficiency in housing and can provide help for businesses to reduce emissions and adapt to climate change.

The Council can also influence the numbers of short journeys taken by car by making walking and cycling more attractive, which links to the wider health agenda.

Our waste services are a high profile service, which have a positive impact on reducing emissions through successful recycling.

Given the wide range of services and activities that the Council is involved in there is a great opportunity to communicate how it is approaching the issues of climate change when promoting itself.

Unfortunately, it is likely that the emergency planning function of the Council will be called on more often as a result of the unavoidable impacts of climate change.

The table below sets out in detail the actions planned.

Figure 15: Service provider action plan

Objective: Protect the environment		
Action	**Comments**	**Targets**
Review the potential for appropriate habitat creation on council assets		Medium term
Review current management regimes on council owned land and implement changes that would benefit biodiversity		Medium term

Objective: Waste management		
Action	**Comments**	**Targets**
Aim, through education and awareness activities and campaigns, to reduce the amount of residual waste produced per household		Ongoing
Promote the Waste Hierarchy	This is being done through PR work	Ongoing
Investigate locations for additional recycling bring banks		Short term

Objective: Save energy		
Action	**Comments**	**Targets**
Promote renewable energy	Proactive outwards facing initiatives to raise profile of grants	Medium term
Ensure that all residents that are eligible for home energy grants are targeted	Proactive outwards facing initiatives to raise profile of grants	Medium term
Work with housing developers to achieve the best possible energy performance for private newbuilds		Medium term
Encourage the best possible standards of energy efficiency in new developments via the Local Plan.		Medium term

Objective: Water management		
Action	**Comments**	**Targets**
Reduce water usage	Encourage the uptake of water meters for domestic properties to enable residents to monitor their own usage and to try to minimise what they use	Medium term
	Promote the use of tap water in an effort to reduce the amount of bottled water consumed each year	Medium term

Objective: Reduce transport emissions		
Action	**Comments**	**Targets**
Conduct a review of cycling provision to identify opportunities for employees and visitors to the borough		Medium term
Investigate preferential parking charges for cleaner and electric vehicles		Medium term
Promote sustainable transport	Education around the transport hierarchy to encourage both staff and residents to make good decisions	Medium term
Use the Local Plan to ensure new developments have good access to public transport infrastructure		Medium term
Use the council's influence to encourage renewable energy and/or other sustainable technology at landmark developments.		Medium term

The Council as a community leader

The Council is identifying the significant environmental risks it faces and developing plans with partners to mitigate and manage them.

The Council must take every opportunity to take a leadership role in supporting the joint objectives of the water, energy, business industries, and community and voluntary organisations as well as the local health authorities to adapt to climate change.

It is important that the Council leads the way in best practice approaches to the management of its environmental impact, particularly as it expects increasing amounts from developers within the planning process.

The table below sets out examples of this role in more detail, in particular in relation to opportunities working with the business sector in improving its practices.

Figure 16: Community leader action plan

Objective: Work with partners, businesses and residents on Climate Change initiatives		
Action	**Comments**	**Targets**
Work proactively with the County Council strategically on new infrastructure to help roll out new technologies eg Hydrogen and EV charging points		
Encourage local large businesses and industrial organisations to carry out carbon footprinting and to adopt science-based or net zero GHG reduction targets if their emissions are material	Care should be taken to avoid burdening small companies, especially those with marginal environmental impacts, with additional reporting requirements. SMEs could be encouraged towards a lighter touch initiative such as Bioregional's One Planet Living toolkit.	Medium term
Facilitate mechanisms and platforms for sharing of environmental and GHG reduction collaboration and best practice.		Medium term

Objective: Work with partners, businesses and residents on Climate Change initiatives		
Action	**Comments**	**Targets**
Identify industries with carbon hotspots, such as cement, and encourage and if possible incentivise adoption of low-carbon methods and technologies (such as use of GGBS, in the case of cement) to lower the overall GHG impact	This has also been identified as a possible action for the County Council in LCC's Net Zero Pathways report – scope for working together.	Medium term
Facilitate increased energy efficiency in owner-occupied homes (for example, by providing guidance and possibly funding on insulation retrofitting, or working with other parties such as the County Council or Housing Associations on technology such as local community heat networks and solar farms).		Medium term
Encourage minimum energy efficiency standards in the private rented sector, and explore mechanisms to incentivise landlords to insulate homes to a higher than minimum EPC level		Medium term
Develop a heating and energy efficiency strategy, including providing skills and training to increase local employment to aid recovery from the COVID-19 pandemic		Medium term

NEXT STEPS

Sequestration

Carbon sequestration is the process of 'locking in' greenhouses gases (primarily carbon dioxide) to temporarily (or occasionally permanently) remove them from the atmosphere, and hence from contributing to climate change. Tree-planting is a typical example, although hedgerows, peat bogs, and some soils can also be used.

Considering tree-planting, RVBC's main landholdings have an estimated theoretical sequestration capacity approximately 1.89 to 11.18 tCO2/ha a year. (A study by Exmoor National Park found that tree-planting typically sequestered around 7.1 tonnes per hectare per year).

There are some caveats. First, quantity: what amount of landholdings are available for tree planting that would be effective in removing RVBC's current emissions. Second, tree-planting can render land unusable for building, grazing, or many most other uses. Third, trees take some time to begin absorbing significant quantities of CO_2: in some cases, they are unlikely to sequester significant amounts of net carbon for up to 15 years (this varies substantially with tree type, location, soil type, and other variables). Finally, when they die, trees release back to atmosphere their embedded CO_2, either through biodegrading or combustion, and would thus require an ongoing management and replacement programme, with associated costs.

In conclusion, we are open to working with partners on sequestration projects but believe that we should not over-rely on the process, and should firstly consider decarbonisation, and shifting to lower energy emissions.

Offsetting

Offsetting is the final stage of the net zero process. This allows the Council to offset unavoidable emissions by funding (or more commonly part-funding) projects that will lead to equivalent greenhouse gas reductions elsewhere, either locally or globally.

Ensuring that offset projects deliver the promised reductions is not always straightforward, especially when the projects are not geographically proximate, and great care should be taken to identify good-quality offsetting schemes. The respected Stockholm Environment Institute (SEI) has published a useful guide[3] to offsetting and offset projects, which we recommend consulting for further guidance. This recommends that organisations wishing to offset residual emissions ensure that offset projects are:

- Additional (they would not have taken place anyway)
- Not overestimated. Emissions reductions should be assessed conservatively. This has been a persistent problem with offsetting projects in the past
- Permanent, to ensure that greenhouse gas reductions are and remain net reductions, not temporary reductions which are then reversed (or reversible)
- Not claimed by another entity. This is to avoid double-counting carbon reductions, a recurring issue in the offset market
- Not associated with significant social or environmental harms.

[3] *Securing Climate Benefit: A Guide to Using Carbon Offsets* (Stockholm Environment Institute, 2019)

In addition to these points, it is suggested investing in projects that offer maximum transparency around the project goals, means, and achievements.

Offsetting costs vary widely, with better-quality (in accordance with the SEI criteria listed above) and more transparent projects naturally tending to cost more. Current international offset costs are often in the range of €2 – €15 per tCO_2e, although these are expected to rise significantly as more organisations move towards net zero goals. There is usually a significant cost premium for domestic (hence more visible) offsetting schemes, as most easy (hence cheap) greenhouse gas reduction has already taken place.

Offsetting should only be considered as a complement – ideally a final option – for emissions which is it not practical to avoid or eliminate, and not as a primary means of mitigation or a 'quick fix' in place of actual reduction of the Council's direct emissions.

There are several reasons for this. First, no offset scheme, however good quality, can guarantee greenhouse gas reduction as well as a tangible reduction in direct emissions.

Second, offsetting without reducing direct emissions leads to the continuation of high-emitting activities, and may even 'lock in' ongoing future emissions when high-carbon technology is invested in in place of a low-carbon alternative.

Third, offset costs, while currently cheap, are very likely to rise sharply, and will recur annually, while most greenhouse reduction projects are either long-term or permanent, meaning that offsetting as a long-term strategy is not as cost-effective as it currently appears.

Finally, if too many organisations declare themselves carbon neutral on the basis of offset rather than genuinely reduced emissions, this could lead to complacency and an erroneous belief that the issue of global heating has been adequately addressed and that business-as-usual is an acceptable response.

CONCLUSION

The Council is well placed to take a central role in reducing its carbon emissions and influencing others to reduce theirs.

To do this, climate change must be a central aspect of the Council's work. Its members and officers must be fully aware of the threat and given a framework and training which allows decisions to be made that reduces its impact on the environment and prepares it for potential future local and global climate changes.

APPENDIX A

The Department for Business, Energy and Industrial Strategy CO^2 emissions FOR Ribble Valley published in June 2020 for 2018

Year	A. Industry and Commercial Electricity	B. Industry and Commercial Gas	C. Large Industrial Installations	D. Industrial and Commercial Other Fuels	E. Agriculture	**Industry and Commercial Total**	F. Domestic Electricity	G. Domestic Gas	H. Domestic 'Other Fuels'	**Domestic Total**	I. Road Transport (A roads)	J. Road Transport (Motorways)	K. Road Transport (Minor roads)	L. Diesel Railways	M. Transport Other	**Transport Total**	N. LULUCF Net Emissions: Forest	O. LULUCF Net Emissions: Cropland	P. LULUCF Net Emissions: Grassland	Q. LULUCF Net Emissions: Wetlands	R. LULUCF Net Emissions: Settlements	S. LULUCF Net Emissions: Harvested Wood Products	**LULUCF Net Emissions**	**Grand Total**	Population '000s, mid-year estimate)	**Per Capita Emissions (t)**	Area (km^2)	**Emissions per km^2 (kt)**
2008	177.7	44.2	523.9	33.9	19.0	**798.7**	63.4	75.4	23.1	**161.9**	58.5	-	59.5	2.6	0.8	**121.3**	-39.0	10.9	-9.7	-	11.1	-	**-26.7**	**1,055.3**	57.2	**18.5**	584.5	**1.8**
2009	145.0	41.8	364.4	32.5	19.1	**602.8**	57.6	68.1	22.2	**147.9**	55.9	-	57.5	2.7	0.7	**116.8**	-38.7	10.9	-9.7	-	10.8	-	**-26.7**	**840.7**	57.0	**14.7**	584.5	**1.4**
2010	163.4	64.6	501.8	33.4	19.1	**782.3**	59.7	73.9	24.7	**158.3**	55.2	-	56.6	2.7	0.7	**115.2**	-38.8	10.8	-9.8	-	10.7	-	**-27.1**	**1,028.7**	57.2	**18.0**	584.5	**1.8**
2011	153.9	56.8	513.3	28.9	19.5	**772.4**	56.8	61.3	20.4	**138.5**	55.7	-	54.7	2.6	0.7	**113.7**	-38.5	10.7	-9.9	-	10.5	-	**-27.2**	**997.4**	57.3	**17.4**	584.5	**1.7**
2012	152.8	44.7	318.2	29.2	19.7	**564.5**	60.3	66.9	20.2	**147.4**	54.2	-	53.1	2.7	0.7	**110.6**	-36.3	10.6	-10.2	-	10.2	-	**-25.6**	**796.9**	57.6	**13.8**	584.5	**1.4**
2013	153.2	55.1	444.9	25.1	19.1	**697.4**	54.5	68.8	20.3	**143.6**	52.0	-	53.4	2.6	0.7	**108.7**	-36.8	10.5	-10.6	-	9.9	-	**-27.0**	**922.6**	57.9	**15.9**	584.5	**1.6**
2014	137.9	44.7	561.8	27.1	19.6	**791.1**	46.7	57.5	18.4	**122.6**	52.6	-	55.5	2.7	0.7	**111.4**	-37.0	10.4	-10.3	-	9.7	-	**-27.2**	**997.9**	58.1	**17.2**	584.5	**1.7**
2015	118.1	42.3	590.1	28.9	20.2	**799.5**	40.1	60.8	18.5	**119.3**	54.7	-	55.2	2.7	0.6	**113.2**	-36.8	10.4	-11.0	-	9.6	-	**-27.7**	**1,004.3**	58.5	**17.2**	584.5	**1.7**
2016	92.9	44.2	577.8	28.2	21.2	**764.2**	32.1	63.3	18.4	**113.8**	56.3	-	57.1	2.7	0.6	**116.7**	-36.9	10.3	-11.0	-	10.1	-	**-27.4**	**967.3**	58.9	**16.4**	584.5	**1.7**
2017	81.2	44.3	556.0	29.7	21.4	**732.6**	28.5	61.8	18.1	**108.5**	56.0	-	55.7	2.6	0.6	**114.9**	-36.7	10.3	-11.4	-	9.6	-	**-28.2**	**927.8**	59.5	**15.6**	584.5	**1.6**
2018	76.6	45.3	541.4	29.3	21.3	**713.9**	25.6	64.3	18.0	**107.9**	54.2	-	59.6	2.4	0.6	**116.9**	-36.4	10.2	-11.5	-	9.4	-	**-28.3**	**910.5**	60.1	**15.2**	584.5	**1.6**

FURTHER INFORMATION

- Carbon trust - www.carbontrust.co.uk - 0800 085 2005
- Ribble Valley Borough Council – http://www.ribblevalley.gov.uk
- DEFRA - https://www.gov.uk/guidance/climate-change-adaptation-information-for-local-authorities
- Energy Saving Trust - http://www.energysavingtrust.org.uk - 0800 512 012
- United Utilities - www.unitedutilities.com - 0845 746 2200

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CARBON NEUTRAL™ INTERNATIONAL STANDARD

Ribble Valley Borough Council

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