

# Report of the Climate Change Mitigation Task and Finish Group

**Making Warwickshire Sustainable for Future Generations**



## **Recommendations**

That Cabinet:

**1**

Provides clear direction through the Council Plan 2020-2025 to work alongside our partners to reduce the Council's carbon impact and that appropriate resources are dedicated to this work.

**2**

Makes climate change considerations a requirement for all council decisions, including capital investments, projects and commissioning exercises.

**3**

Develops improved baseline data and metrics so that we can make decisions and prioritise based on a continually improving understanding of our own carbon emissions and the wider impacts of Warwickshire.

**4**

Establishes a cross party group chaired by the Portfolio Holder for Environment and Heritage & Culture, to steer work on both climate change mitigation and adaptation.

**5**

Works with all partners including Parish and Town Councils, District and Borough Councils, Government, other authorities and the resident and business communities of Warwickshire to achieve real progress on climate change.

**6**

In principle, adopts the targets and actions set out in the report and in particular Appendix 5, and develops detailed and costed action plans for these, to be agreed and managed as part of the Council's business management processes.

## **Executive Summary**

The Climate Change Mitigation Task and Finish Group (The Group) began its work in September 2019 in response to Warwickshire County Council's (WCC's) declaration of a climate emergency in July 2019. The declaration committed the Council to reporting back to cabinet within 6 months with an initial action plan. This work has run alongside the climate change adaptation work.

The Group first carried out an exercise to establish the scope of its initial work. It decided that the early work should be targeted at improving the Council's own carbon impact, in order that the organisation can demonstrate and lead improvements across Warwickshire. A desktop study was used to gain an insight into the main areas where the Council's activities emit carbon, the relative amounts, what degrees of control and influence we have, and what the data trends are.

**Evidence shows that, across areas of the Council's direct emissions a 53% reduction of carbon emissions has been achieved between 2013/14 and 2018/19, a period of only 5 years. In addition, the Council is purchasing pure green electricity for all corporate buildings, meaning an effective reduction in carbon emissions over the 5 years of 82%.**

There is still much more that needs to be done. The Council's impacts have been categorised into three main areas of: buildings and energy; travel and transport; and resources. Some impacts are due to fossil fuels being used by our own assets: for heating our buildings and fuelling our vehicle fleet. Also, many carbon emissions arise from the contracts we let; our staff traveling in the course of work and commuting and in all the things that we buy. Having established mechanisms for monitoring and reducing the Council's own emissions, the Council will be able to support partners and Warwickshire businesses and communities to reduce their own impacts.

The Group gathered evidence from officers from across the Council. At a workshop held in November 2019 attendees were asked to highlight mitigation work already being done, planned further work and longer-term work. From this, the detailed summaries within the main report were produced and have influenced the broad and area-specific recommendations, targets and actions.

The Group has produced cross-cutting recommendations that ask Cabinet to take a strategic approach to mitigation, drawing together opportunities identified across the organisation. In addition, there is an action plan of short to medium term projects and investments that will trigger the next phase of carbon reduction activity.

Reducing our carbon impact will involve all parts of the Council's activity and all members of staff. Only by putting carbon reduction at the centre of our planning and

decision-making processes will we be able to achieve and lead a drive toward a low carbon county and improve Warwickshire's sustainability.

## **Warwickshire County Council declares a climate emergency**

At Full Council on Thursday 25 July 2019, Warwickshire County Council unanimously declared a climate change emergency. As part of the declaration, the Council committed to establishing a cross party Climate Change Task and Finish Working Group (The Group) to report back to Cabinet with an action plan in six months. As part of this work the Council committed to work in collaboration to review and update transport plans for each District and Borough Council.

All the district and borough councils in Warwickshire have declared a Climate Emergency along with the West Midlands Combined Authority. Full details of the Council's declaration are given in Appendix 1.

This report details the work that The Group has undertaken to establish high-level baseline data, put forward some cross-cutting recommendations and lay out an action plan for initial projects and investments that will continue the downward trend of emissions from the Council's activities. Details of The Group and the activities are given in Appendix 2.

The Climate Change Adaptation Task and Finish Group has produced a separate report and recommendations.

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### *Mitigation and Adaptation*

There are two main policy responses to climate change: **mitigation** and **adaptation**. Mitigation addresses the root causes, for example by reducing greenhouse gas emission, while adaptation seeks to lower the risks posed by the consequences of climate change.

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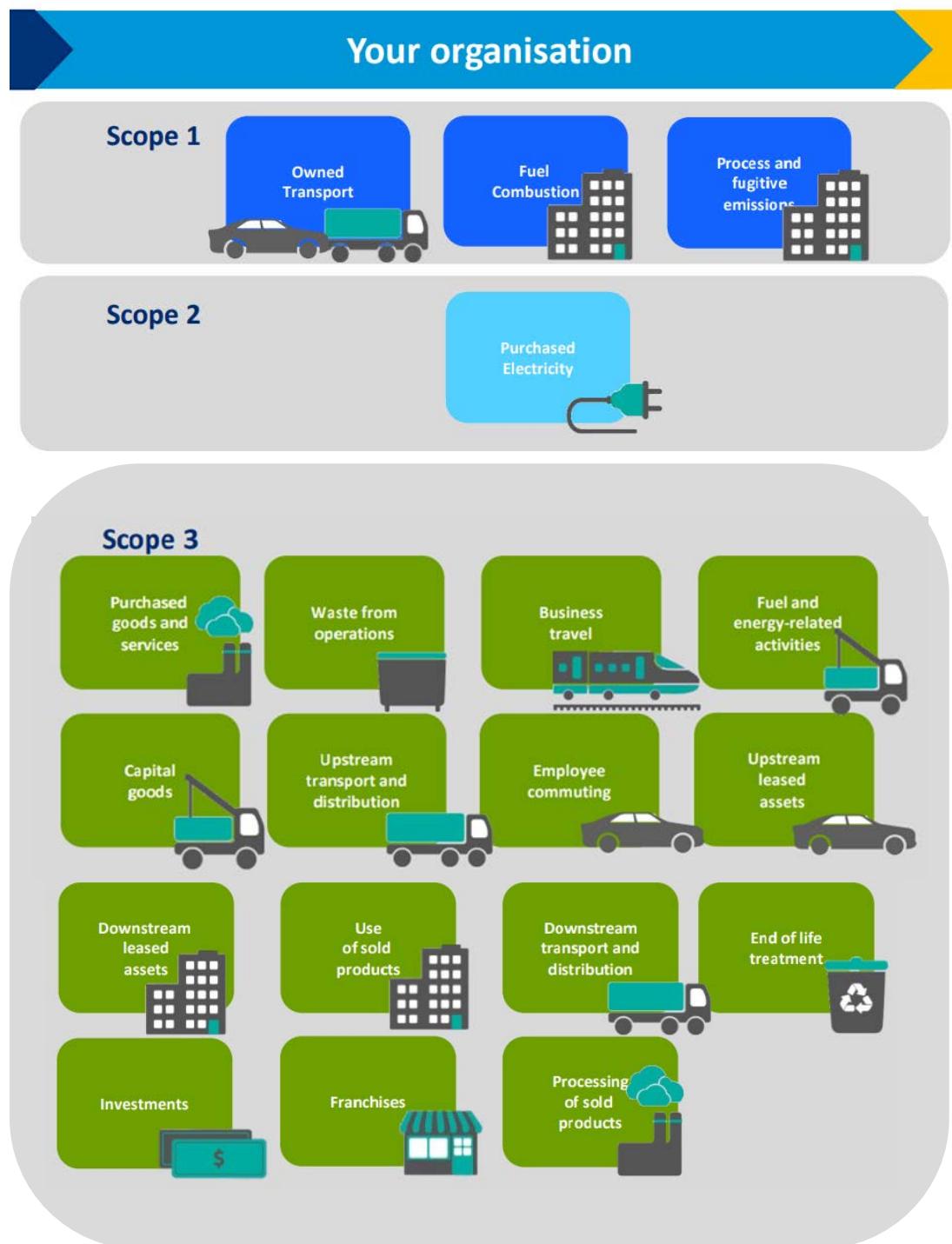
## **Scope of the Task and Finish group**

The Group were tasked by Full Council to develop and bring proposals to Cabinet showing how WCC will move towards carbon neutrality. Greenhouse gas emissions, measured as carbon dioxide equivalents, are categorised as Scope 1- direct emissions, Scope 2 - indirect emissions from electricity production and Scope 3 - indirect emissions from the Council's purchased goods and services.

The Group decided that the review should focus on Scopes 1,2 and 3.

The Council has direct control of decisions regarding emissions from scopes 1 and 2. Scope 3 emissions can be indirectly controlled through policy, service design, commissioning, contract management and behaviour change.

**Diagram 1:** Pictorial representation of Scopes 1, 2 and 3



Climate change adaptation and air quality have been the subject of their own reviews; however, there are strong linkages that are recognised, and very close collaboration is required and planned.

The group determined to initially focus on areas where the County Council can have significant direct impact on its own emissions to maintain a manageable scope especially considering the tight timescale. Positive, early progress within our own operations will demonstrate to the wider Warwickshire communities, including business communities, that the County Council is leading on this important agenda.

### **Baseline Data**

The authority has a fully certified ISO14001 Environmental Management System (EMS) that monitors and manages our environmental policy commitments of estate management, energy efficiency and resource efficiency. This EMS has been in place for over 10 years and produces regular management reports which drive continual improvement.

Data for scope 1 and 2 is has been collated and published over the past 5 years, both for the Council's obligations under building energy consumption reporting and for our EMS. This data is robust; however, it is also acknowledged that the science, technology and measurement of climate change mitigation needs further work, both nationally and locally. As we progress, the way we measure and benchmark our work will develop and align with emerging nationally agreed measurements.

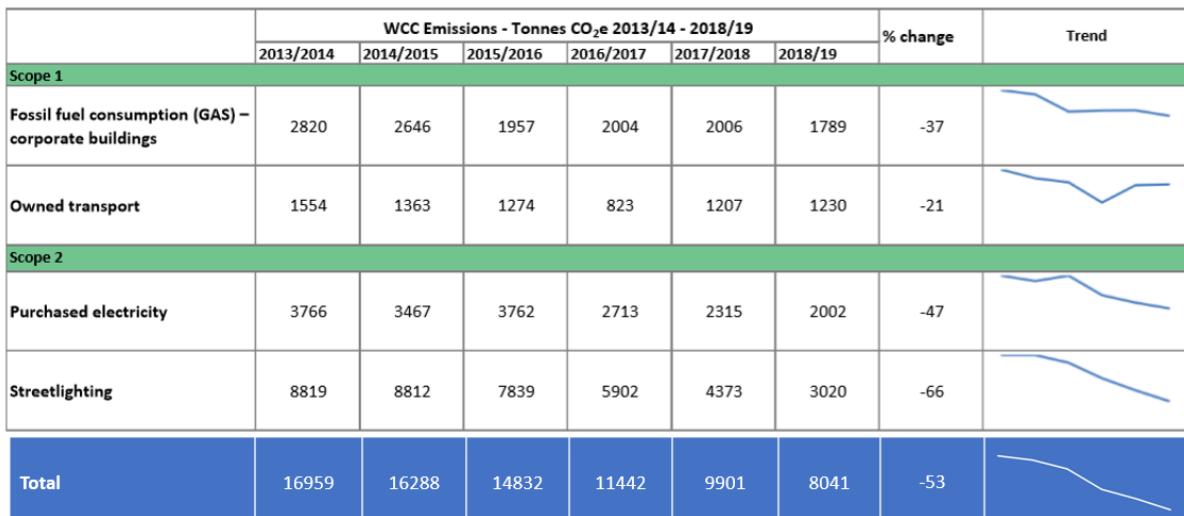
WCC monitors the use of energy across our estate, including: offices, fire stations, libraries, museums, depots, household waste recycling centres, and country parks. An energy reporting system is used to quantify and report on energy use and carbon emissions from our properties. The database covers gas and electricity that we use in our buildings for space heating, hot water, cooling and ventilation, lighting, catering and office equipment.

The building energy reporting system currently does not include: schools, rural estates buildings, non-office country parks buildings, energy associated with water consumption or heating oil.

It is also recognised that sequestration or carbon offsetting has an important role to play in reducing our carbon impact and achieving zero net carbon. The Council maintains significant records detailing the county's habitats and biodiversity and also owns and maintains much grassland and woodland inc highway verges that absorb and store carbon. Carbon sequestration will be considered as part of our work on carbon emissions.

In the past 5 years, the Council's energy use across scopes 1 and 2 has reduced in total by 53% calculated in accordance with government guidelines. However, as we are purchasing pure green electricity, the carbon emissions are now effectively 82% less overall in 2019 than they were in 2013. This is good performance and we need to continue to reduce these emissions further in order to achieve net zero emissions and demonstrate strong leadership in managing our own operations.

**Diagram 2:** Scope 1 and 2 use of fuel and electricity in Warwickshire County Council



The carbon impact of the Council's onward supply chain for goods and services (Scope 3) is not known, because we do not yet have the baseline data or modelling expertise to calculate this, and further work is required to develop this.

Information on the carbon impact of the whole of Warwickshire is available on the gov.uk website and this shows that the whole county has a carbon impact of approximately 5.5 million tonnes every year. This mainly comes from business and domestic use of petrol, diesel, gas and electricity.

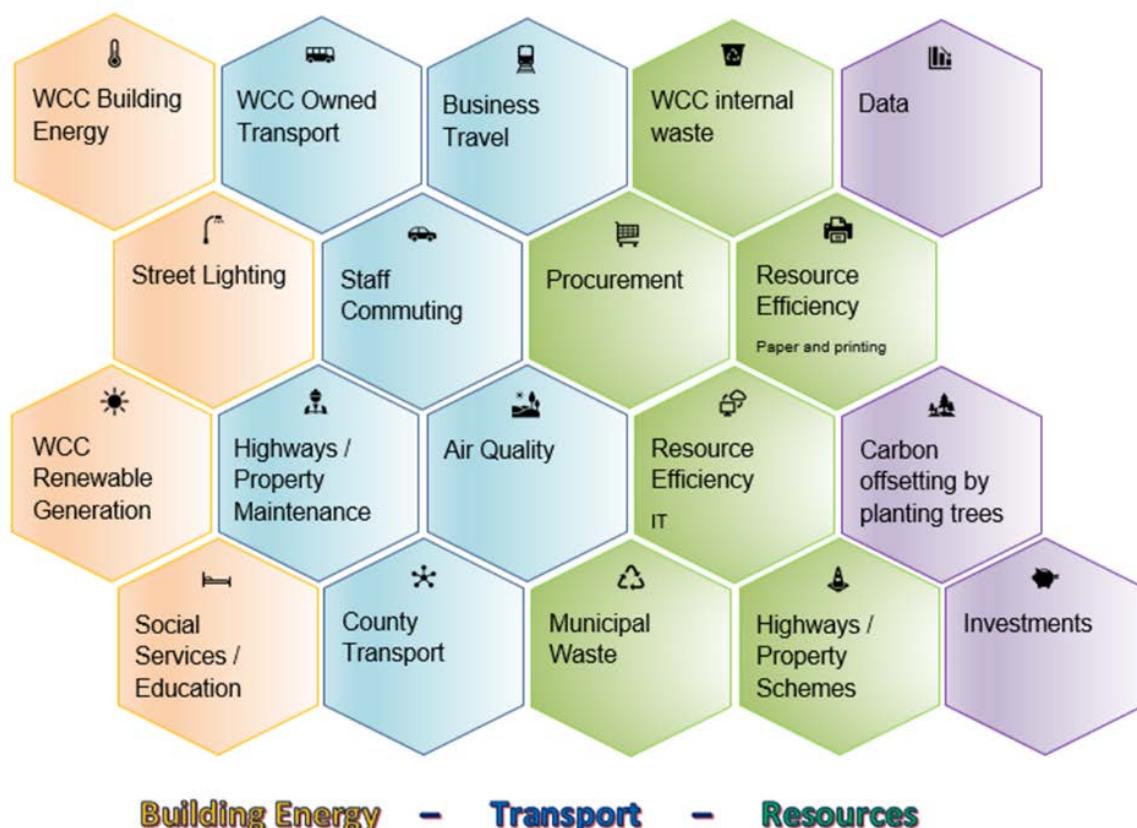
Further detailed baseline data can be found in Appendix 3.

## Workshop findings

The Group held a workshop with officers in November 2019 to consider the many functions within Warwickshire County Council which have a marked influence on the Council's climate change impact. The attendees were drawn from across the Council, representing; Strategic Asset Management, Highways Engineering, Transport Planning and Operations, Ecology, Procurement, IT and Waste Management. Diagram 3 below shows the main topics the workshop focused on which are the key areas of the Council's carbon impact, both positive and negative.

Diagram 3:

Map of key areas



Councillors and officers discussed our current performance and forecasted future priorities in the areas of Energy and Buildings; Travel and Transport; Resources. The workshop highlighted the good practice already undertaken across the Council and identified further opportunities. The ideas put forward are summarised in the detailed tables in Appendix 4.

It was clear from the baseline data and the workshop discussions that teams across the Council are already working to reduce energy use and make our processes and activities more efficient. WCC officers have expertise, enthusiasm and innovative approaches that can form the basis of further work to reduce our carbon impact. However, increased resources are required to adopt a whole-system approach to ensure carbon reduction is proactively planned and managed in order to move with pace on this important issue.

### Potential Targets and Actions

Following the workshop, potential actions and targets were summarised and sent back to The Group for discussion and agreement. This work covers the Council's scope 1,2 and 3

carbon emissions (direct and indirect emissions) and also the emissions across the whole of Warwickshire. The detailed potential targets and actions are set out in Appendix 5.

## **Transport Plans**

Part d) of the Council's climate change declaration refers to reviewing and updating transport plans for each of the District and Borough Councils in Warwickshire, to support them in building sustainable transport systems in recognition of the goal of moving towards carbon neutrality.

The County Council is currently reviewing the Area Transport Strategies which are broadly based on the geography of the five Warwickshire District/Boroughs. These will inform and ultimately become part of the Local Transport Plan (LTP), which itself is also in the process of being reviewed. Along with a number of economic and social objectives, the LTP will have environmental outcomes at its heart, including climate change, carbon reduction and improving air quality.

A number of the Area Transport Strategy reviews have either been completed or are underway. It is envisaged that approval of the remaining strategies will be subsumed into the wider LTP process, which is expected to conclude in Summer 2021.

## **Governance**

The Group recognised the importance of this issue and the fact that it will impact everyone who lives, works or visits Warwickshire. Whilst central government has a pivotal part to play, the Council recognises its responsibilities to make local improvements to its own services and the influence we can have on the householders and businesses of the county.

To make real progress, strong and comprehensive governance is required and to lead this it is recommended that a cross-party standing group of members is established to cover both climate change adaptation and mitigation. Carbon reduction needs to be the responsibility of everyone in the Council and will be integrated into everything the Council does and all the decisions it makes. Embedding climate change into the Council Plan and making it an integral part of our plans, policies and strategies will be needed to ensure we achieve our ambitions in this area.

Climate change has many linkages across the work of the Council and strong coordination between different service areas will be required to ensure resources are effectively and efficiently deployed.

Resources will be required to manage, coordinate and deliver any adopted targets and actions. Coordination and joint working with partners, including Parish and Town Councils, District and Borough Councils, Government, other authorities as well as residents and business communities of Warwickshire, will be needed to achieve coordinated progress on climate change. A joint meeting with the District and Borough Council was held in December 2019 to discuss collaboration on climate change and more meetings are planned.

The Council has a certificated environmental management system and whilst this forms a good basis, we do need to improve our baseline data and metrics so we can prioritise based on a continually improving understanding of our carbon emissions.

Potential targets and actions for governance are included in Appendix 5.

### **Financial Implications**

There are very significant costs to the Council and the County for failing to act on climate change and investment now is likely to mitigate future revenue costs; however, the cost benefit of this in some cases is very difficult to quantify. Some of the actions and targets being proposed are already planned and funded through the Council's business planning and budgetary processes, others are likely to be supported by "invest to save" business cases, subject to capital funding being available. However, some schemes will not be self-financing but offer other benefits and where this is the case this will need to be clearly stated and evaluated.

Resources will be required to manage, coordinate and deliver the programme of projects on climate change and officers will need to decide how this is best organised. Detailed and costed action plans will need to be developed for any actions and targets adopted and these will be agreed and managed as part of the Council's business management processes.

### **Conclusions**

Climate change is a pressing issue for the Council and the whole of Warwickshire. The Council should push ahead with this important agenda but needs to ensure its ambitions are deliverable and made using sound business thinking. Showing clear action on climate change will help the Council to show leadership and move other organisations to action too.

## **Recommendations**

That Cabinet:

1. Provides clear direction through the Council Plan 2020-2025 to work alongside our partners to reduce the Council's carbon impact and that appropriate resources are dedicated to this work.
2. Makes climate change considerations a requirement for all council decisions, including capital investments, projects and commissioning exercises.
3. Develops improved baseline data and metrics so that we can make decisions and prioritise based on a continually improving understanding of our own carbon emissions and the wider impacts of Warwickshire.
4. Establishes a cross party group chaired by the Portfolio Holder for Environment and Heritage & Culture, to steer work on both climate change mitigation and adaptation.
5. Works with all partners including Parish and Town Councils, District and Borough Councils, Government, other authorities and the resident and business communities of Warwickshire to achieve real progress on climate change.
6. In principle, adopts the targets and actions set out in the report and in particular Appendix 5, and develops detailed and costed action plans for these which are agreed and managed as part of the Council's business management processes.

## **Appendices**

- 1 – The Council’s climate change declaration**
- 2 - Task and Finish Group Membership and Activities**
- 3 - Detailed baseline data**
- 4 - Detailed findings from the climate change workshop**
- 5 - Potential Targets and Actions**

## **Appendix 1 – The Council’s climate change declaration**

### Warwickshire County Council Declaration

The United Nations Intergovernmental Panel on Climate Change has warned that we have 12 years to make the necessary changes to limit a rise in global temperatures to 1.5°C. Failure to act will see a marked increase in sea levels and flooding, extreme and abrupt changes to weather patterns, crop failures, extinctions of plant, insect and animal species and global economic disruption and crisis.

In response, this Council,

- a) declares a ‘Climate Emergency’;
- b) establishes a cross party Climate Change Task and Finish Working Group to respond to the challenge and to report to Cabinet in six months with an action plan, including targets to consider.
- c) works in collaboration with our District and Borough partners to develop targeted and resourced proposals for a carbon neutral action plan for Warwickshire County Council to be considered by Cabinet.
- d) reviews and updates transport plans for each of the District and Borough Councils in Warwickshire, to support them in building sustainable transport systems in recognition of the goal of moving towards carbon neutrality;
- e) calls on the Government to provide the resources and powers so that Warwickshire County Council can make its contribution to the UK’s Carbon Reduction targets.

## **Appendix 2 –Task and Finish Group Membership and Activities**

*Composition of the group:*

**Councillors** - Helen Adkins, Jonathan Chilvers, Daniel Gissane, Anne Parry, Dominic Skinner, Heather Timms and Adrian Warwick, with Councillors - Judy Falp and Andy Sargeant.

**Supporting officers** – Julie Burton, Ruth Dixon, Jacky Lawrence, Tom McColgan, John Cole, Andrew Pau, Sue Robinson

*Meeting dates:*

September 2019 – setting the scope

October 2019 – baseline data

November 2019 – action plan workshop

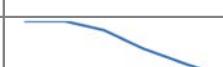
Additional Contributing Officers – Max Usen, Angeline Murungu, Shail Chohan, Margaret Smith, Richard Sweeney, Katey Stoneman, Caroline Faulkner, Paul White, Jonathan Simkins, Mike Cooke Jones, David Lowe, Dale Partridge.

December 2019 – establishing recommendations, targets and actions

## Appendix 3 – Detailed baseline data

### ***Summary Scope 1 and 2 Emissions***

**Table 1**

	WCC Emissions - Tonnes CO <sub>2</sub> e 2013/14 - 2018/19						% change	Trend
	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/19		
<b>Scope 1</b>								
Fossil fuel consumption (GAS) – corporate buildings	2820	2646	1957	2004	2006	1789	-37	
Owned transport	1554	1363	1274	823	1207	1230	-21	
<b>Scope 2</b>								
Purchased electricity	3766	3467	3762	2713	2315	2002	-47	
Streetlighting	8819	8812	7839	5902	4373	3020	-66	

Source: <https://www.warwickshire.gov.uk/environmentalreporting>

### ***Scope 1***

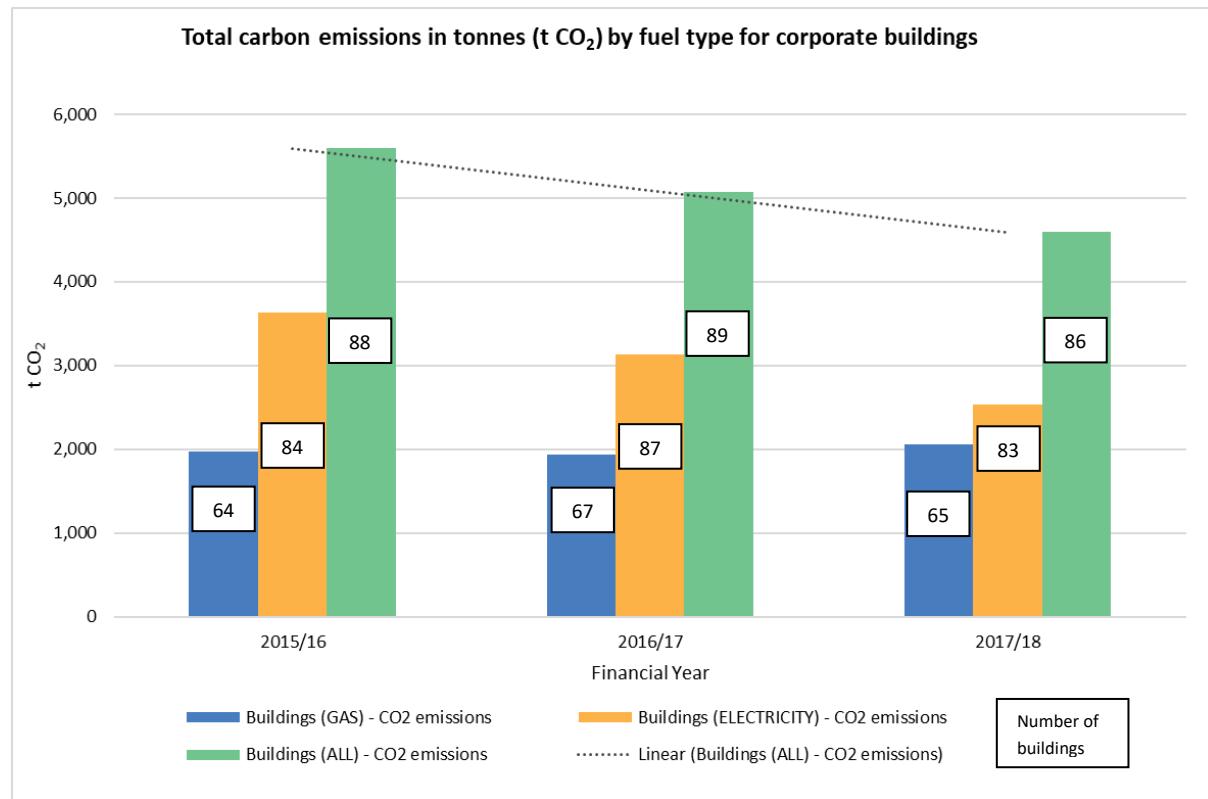
#### Building energy

Warwickshire County Council's energy team monitors the use of energy across the estate including offices, fire stations, libraries, museums, depots, household waste recycling centres, business unit communal areas and country parks (<https://www.warwickshire.gov.uk/buildingenergyperformance>). A building energy consumption review is published each year. This excludes schools, rural estates buildings (agricultural buildings / farmhouses), country parks buildings (except for WCC offices) and buildings where a landlord other than WCC pays the energy bill. The report also excludes energy associated with water consumption and heating oil where data is insufficiently robust.

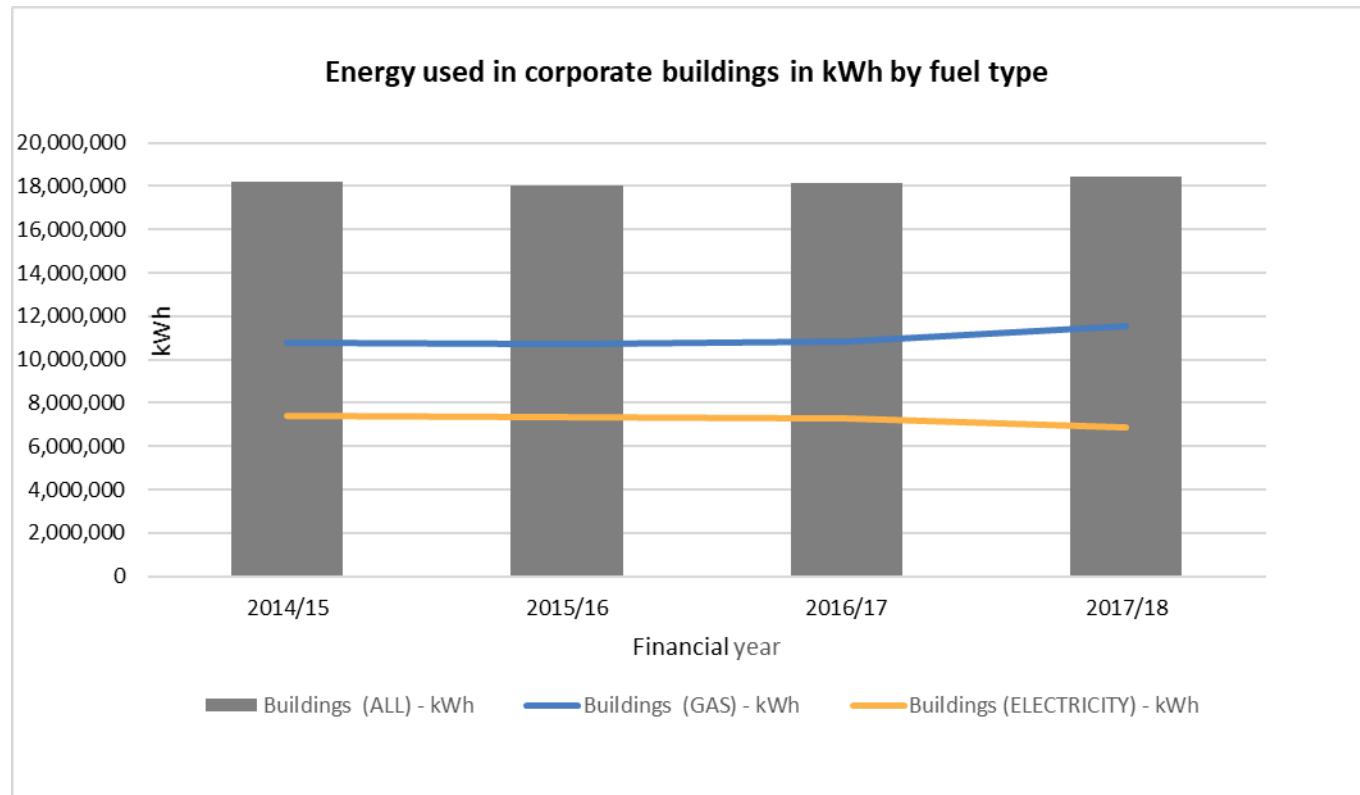
Figure 1 shows the total carbon emissions in tonnes (tCO<sub>2</sub>) by energy type for corporate buildings. In the three years for which data is available tCO<sub>2</sub> has reduced by 18% when considering both fossil fuel (gas) and electricity. According to the building energy consumption and emissions review, per building carbon emissions have reduced from an average of 63.7 tCO<sub>2</sub> in 2015/2016 to 53.5 tCO<sub>2</sub> in 2017/18 a reduction of 16%. The majority of this reduction has come from reduced electricity consumption (Figure 2) – carbon emissions from electricity reduced by 30.3% but increased from gas by 4.8%. The corporate building that was the highest emitter of CO<sub>2</sub> in 2017/18 was the Shire Hall complex, emitting 761 tCO<sub>2</sub>.

A commonly used reporting metric is tonnes of carbon per £million pounds of gross revenue expenditure. On this metric the lower the CO<sub>2</sub>/£million value, the better the performance. For corporate buildings in Warwickshire, this has reduced from 9.6tCO<sub>2</sub>/£ million gross expenditure in 15/16 to 7.5tCO<sub>2</sub>/£ million gross expenditure in 17/18.

**Figure 1**



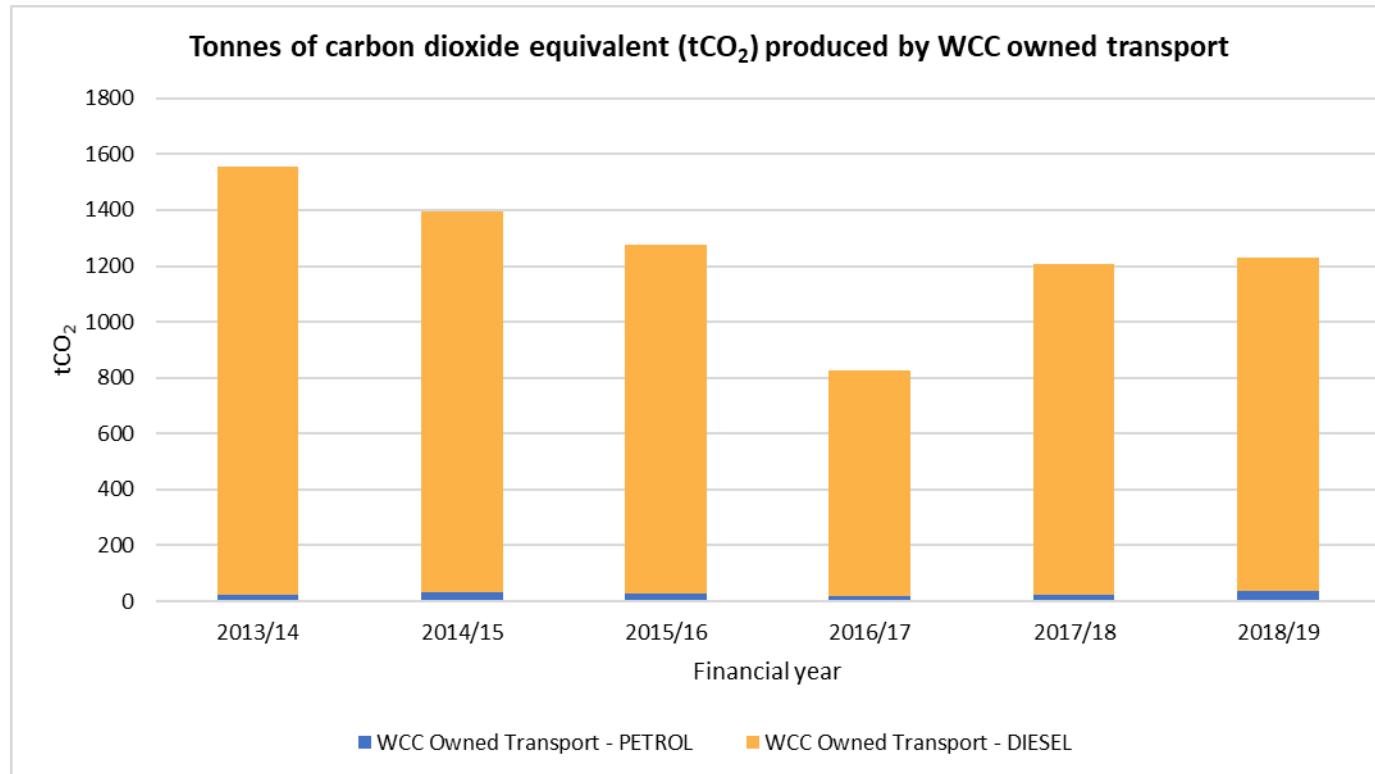
**Figure 2**



### WCC Owned Transport

Figure 3 shows the tonnes of carbon (tCO<sub>2</sub>) produced by WCC owned transport. This has decreased by 20.9% since 2013/14 mainly due to a reduction in the amount of diesel used; a decrease from 588,818 litres of diesel in 2013/14 to 454,639 litres in 2018/19 has resulted in a 22% reduction in tCO<sub>2</sub> produced by diesel engines. Conversely, petrol usage has increased by 54.9% from 10,322 litres in 2013/14 to 15,933 litres in 2018/19 resulting in a 52.2% increase in tCO<sub>2</sub> produced by petrol engines. The marked decrease in emissions in 2016/17 is believed to be due to data quality issues.

**Figure 3**

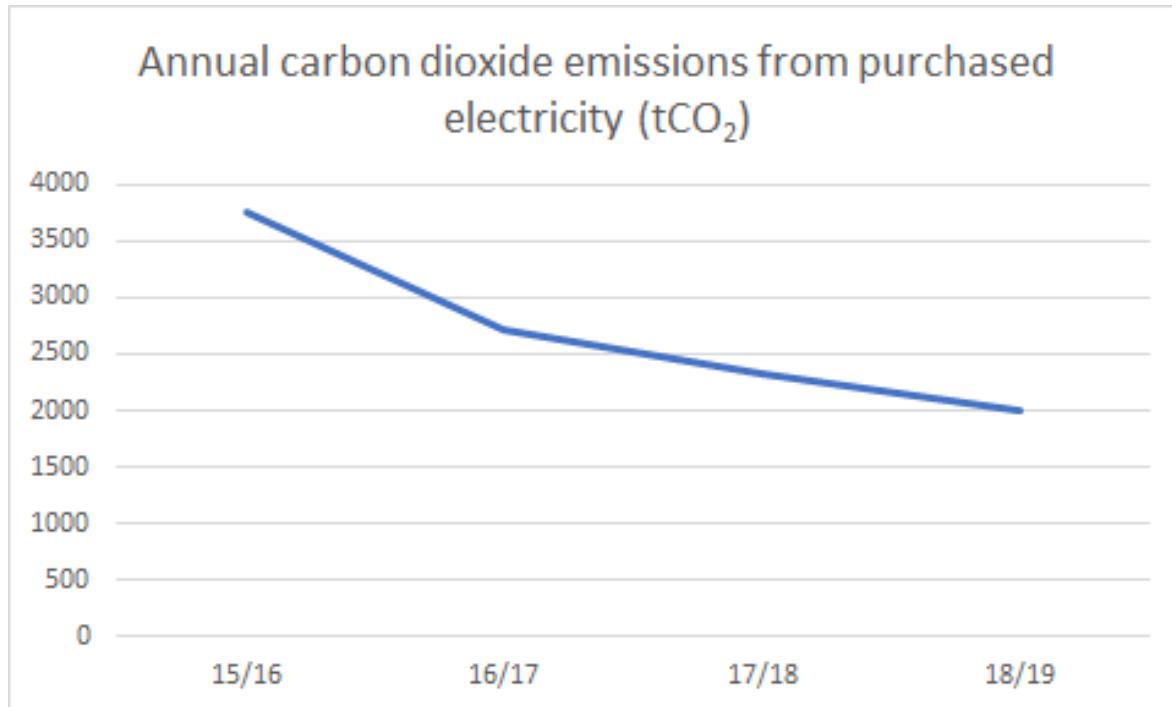


### **Scope 2**

#### Purchased Electricity

Carbon emissions from purchased electricity have reduced by 46.8% over the four-year period 2015/16 to 2018/19 from 3,762 to 2,002 tonnes of carbon. From 1<sup>st</sup> October 2016 Warwickshire County Council has purchased Green Tariff electricity. Figure 4 shows tCO<sub>2</sub> emissions from purchased electricity for typical UK grid electricity mix, as this is how we currently report officially. Under the Greenhouse Gas Emissions Protocol WCC should be able to report zero emissions for purchased electricity and street lighting as it can be matched to Renewable Energy Guarantees of Origin (REGOs) for wind, solar and hydro/wave power.

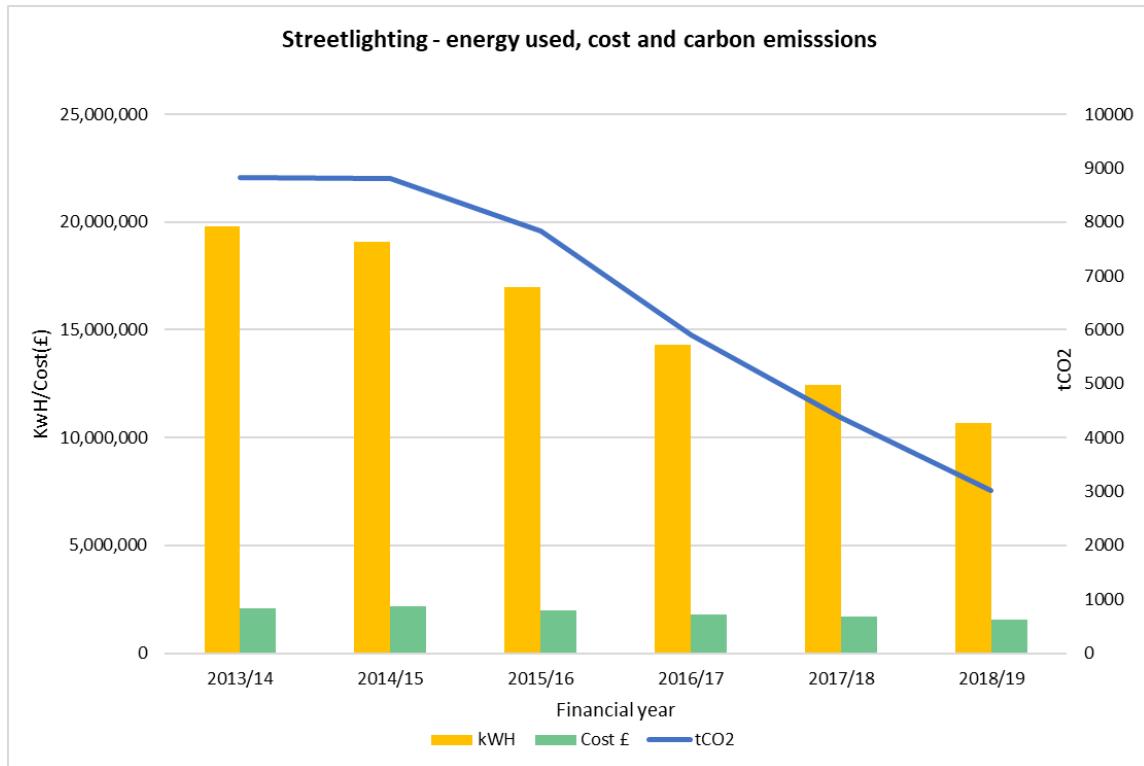
**Figure 4**



#### Streetlighting

Figure 5 shows a reduction in carbon emissions (65.8%), energy consumed (46.0%) and costs (25.1%) associated with streetlighting in Warwickshire between 2013/14 and 2018/19. This is due to a programme converting streetlighting to LED (73% currently converted) and the introduction of part-night lighting in Warwickshire from December 2012. Some street lights are switched off between the hours of midnight and 5.30am during the week and 1.00am and 6.30am at the weekend. In 2013/14 electricity used for streetlighting cost £2.09M whereas in 2018/19 it cost £1.57M this is despite increasing housing developments in the county.

**Figure 5**

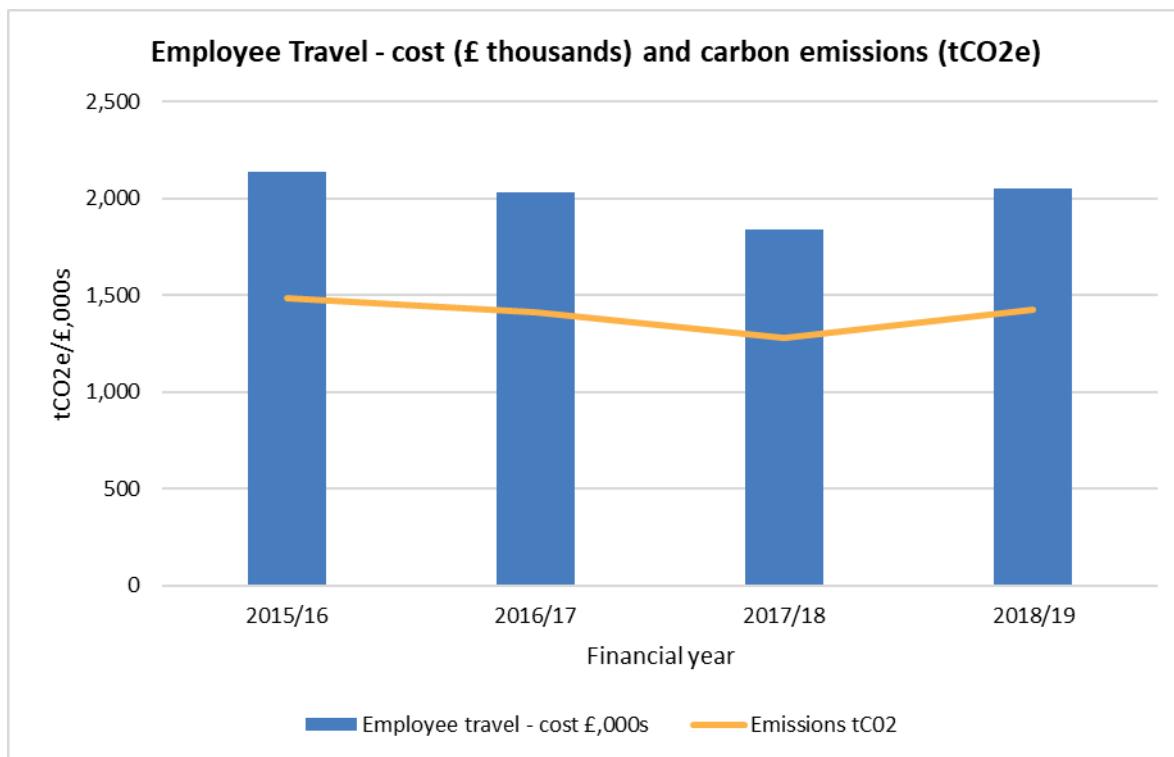


**Scope 3**

Employee business travel (Grey Fleet)

Despite a reduction in carbon emissions from grey fleet between 2015/16 and 2017/18 there was an increase in 2018/19 almost back to 2015/16 levels resulting in only a 4.1% reduction over the 4-year period. A fuller analysis is required but it is known that the most mileage is carried out by Education Services and Social Work.

**Figure 6**

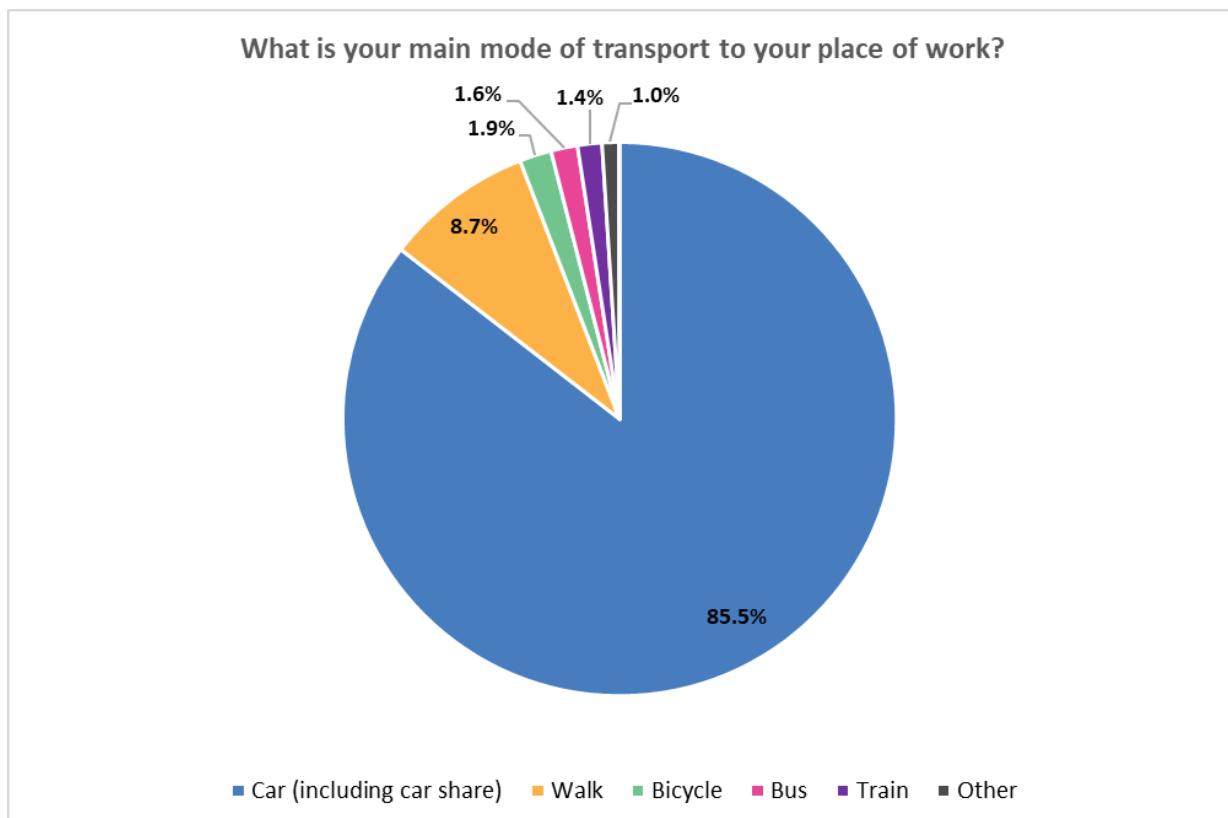


### Staff commuting

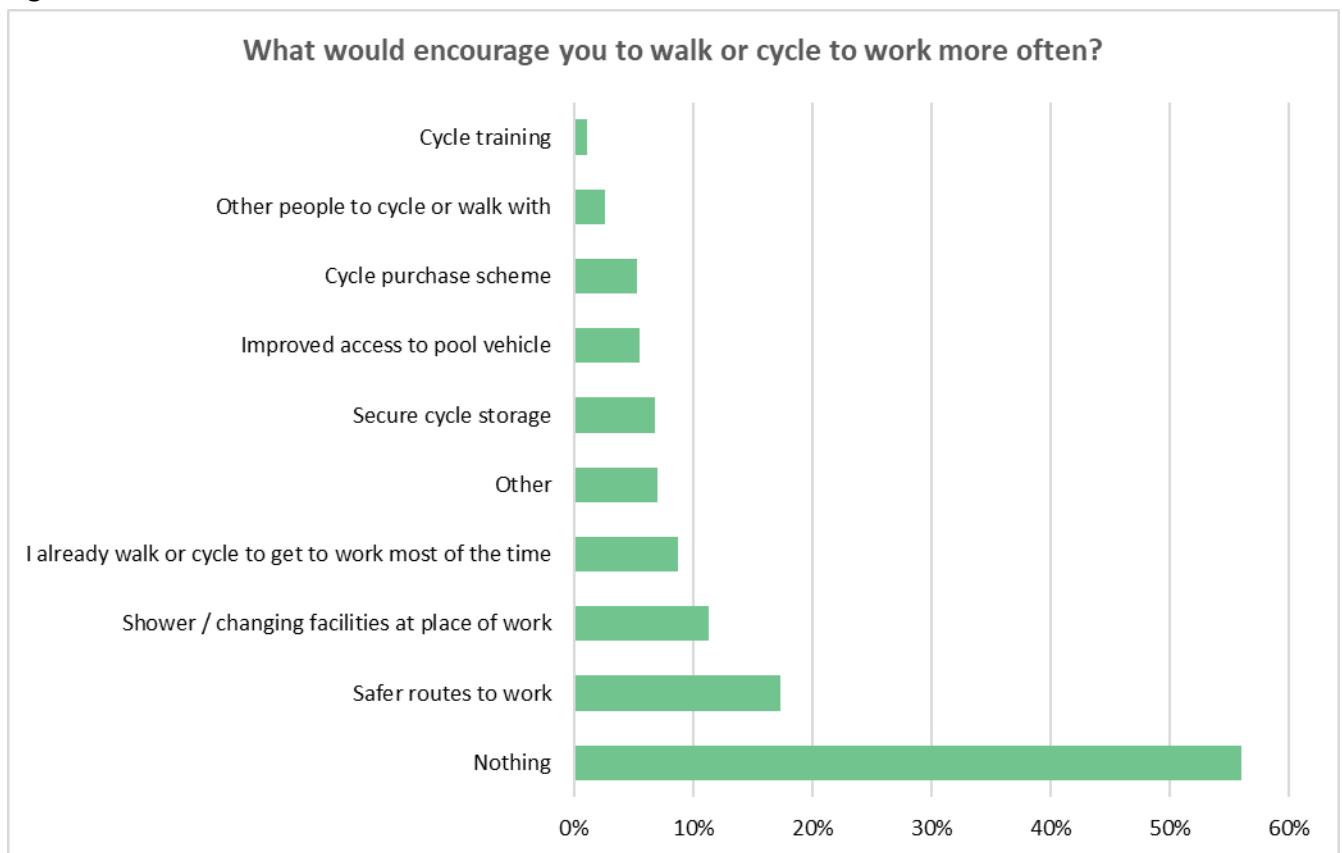
There is no comprehensive data on how staff travel to and from work. However the staff Your Say survey carried out in June/July 2019 asked staff responding what was the main mode of transport to their place of work. Of 2,254 staff (around 50% of the workforce) responding, 85.5% travelled to work in a car (Figure 7). More than half of 'Other' responses (55%) were employees who use a combination of modes of travel (e.g. bus then walk) or vary their mode of travel during the week itself (e.g. walk 2 days a week and cycle 3 days a week).

Responses also gave an indication of initiatives that could encourage more staff to travel by alternative means in the future. Of these safer routes to work was the most common response (Figure 8). Of those who said nothing, 1,169 respondents gave a reason. Almost half (45%) stated they lived too far away from their work site/base to be able to walk or cycle and 20% stated that their car was essential to their role (e.g. travelling to customers). In terms of respondents who answered 'Other', almost half suggested being able to work at locations closer to their home would encourage them to walk or cycle.

**Figure 7**



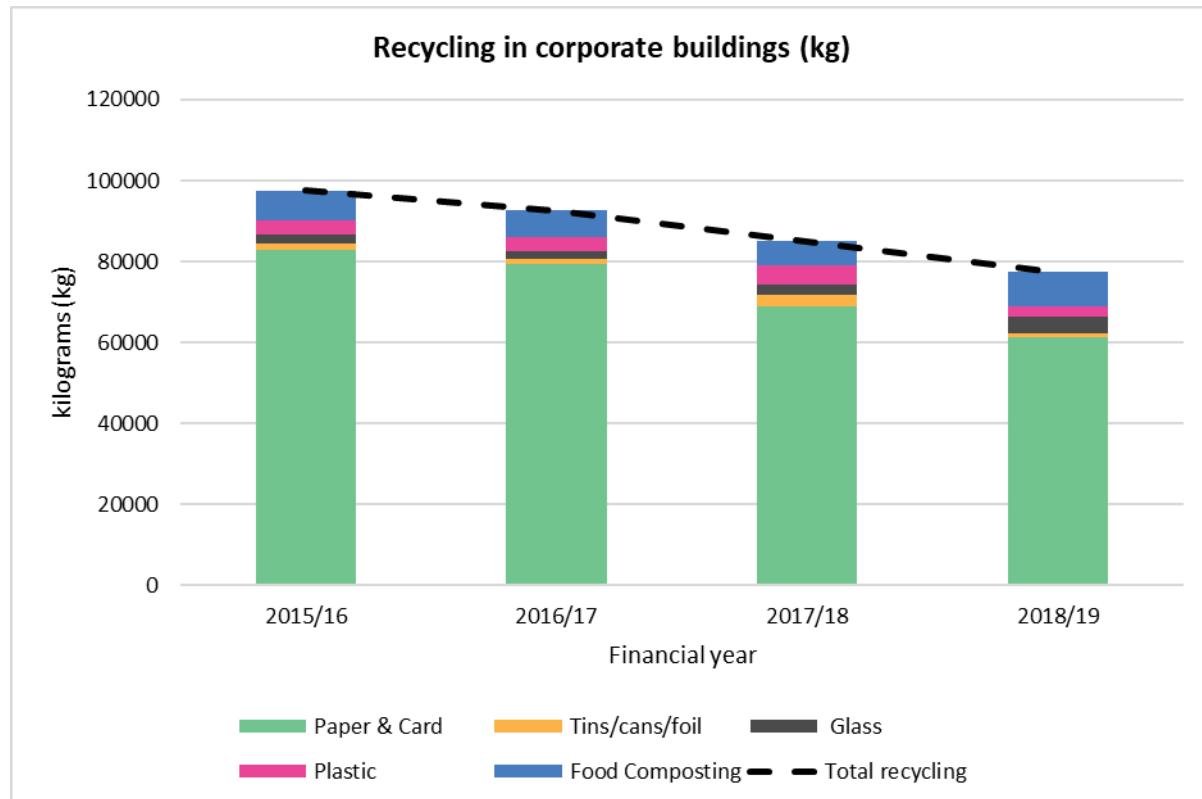
**Figure 8**



### Recycling in corporate buildings

Recycling in corporate buildings has reduced by 20.6% between 2015/16 and 2018/19 (Figure 9). This has mainly been due to a decrease in paper & card recycling (-26.4%) and plastic recycling (-24.2%). There has been increases in the amount of glass recycled (65.0%) and food composted (16.7%). Further work is needed to establish carbon emissions resultant from corporate waste disposal and carbon saved through our recycling and waste reduction efforts.

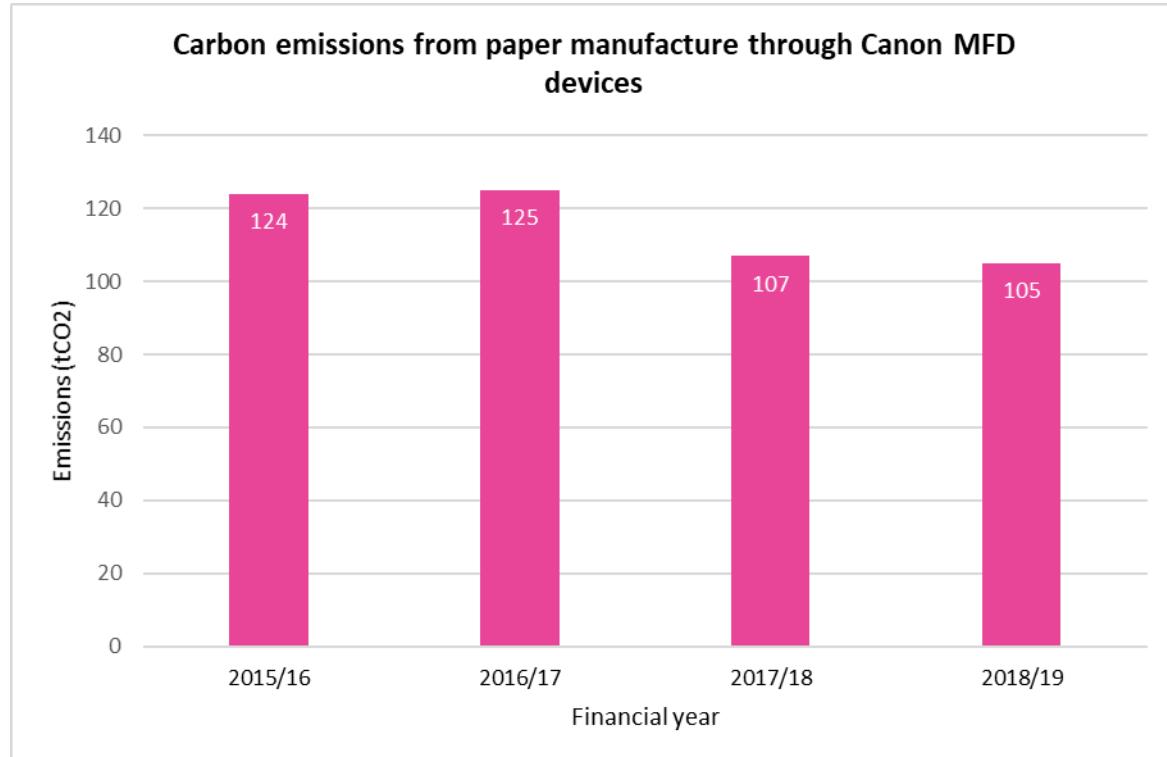
**Figure 9**



### Paper used in Canon MFD devices

Almost 12 million sheets were printed from the networked printers (Canon MFD devices) in WCC centralised offices in 2018/19. This cost the council nearly £188,000 in printing alone, not including the paper. The paper used would have taken 1,432 trees and almost 3 million litres of water to produce and resulted in 35 tonnes of waste. Carbon emissions from paper manufacture for use in the printers are outlined in Figure 10. There has been a reduction of 15.3% in tCO<sub>2</sub>e since 2015/16.

**Figure 10**



#### Corporate contracts

An Environmental Risk Assessment is completed for all contracts above the EU financial thresholds and is recommended good practice for all other contracts. Question 4 asks ‘What emissions to air could arise e.g. from product usage, spillage, disposal; or service delivery?’ Question 8 asks ‘What energy use is required?’ The standard pre-qualification questionnaire covers compliance with legislation. There are examples of emissions reporting being included in Key Performance Indicators for Council contracts.

Below are a couple of samples of data from large contractors

#### Dodd Group – Mechanical and Electrical maintenance and minor works

**Table 2 – Utility usage and emissions 2018/19**

Utility	Usage	t CO <sub>2</sub> e
Electricity	15,360kW	4.348
Gas	1944m <sup>3</sup>	3.993
Vehicle Fuel	71,715 litres	192.2

#### Balfour Beatty – Highways Maintenance

In their most recent sustainability report for their contract with WCC, Balfour Beatty reported total CO<sub>2</sub> emissions of 693 tonnes. 54,710 tonnes of construction waste was generated, all of which was recycled.

### Municipal waste contracts

Initial analysis of waste disposal across the county has used a tool developed by Zero Waste Scotland to allocate carbon emissions. Table 3 shows emissions from the disposal and recycling of municipal waste collected from both kerbside sources and recycling centres. Further work will look to separate household waste out so that when authorities seek to gain more work by collecting commercial waste, this won't be detrimental to emissions reporting.

**Table 3 – Carbon emissions (tCO<sub>2</sub>e) from the disposal and recycling of municipal waste**

		Carbon emissions (tCO <sub>2</sub> e)					
Material	Treatment	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Residual</b>	EfW (incineration)	22,453	33,337	36,034	36,366	33,723	35,270
<b>Residual</b>	Landfill	31,263	17,168	16,561	16,343	19,980	18,523
<b>Biowaste</b>	In Vessel Composting (IVC)	-2,647	-3,139	-3,114	-2,707	-2,890	-2,854
<b>HWRC</b>	Recycling	-12,609	-14,087	-16,110	-17,099	-16,143	-16,432
<b>Kerbside</b>	Recycling	-37,530	-36,790	-35,910	-36,245	-35,890	-36,116
	<b>Totals</b>	<b>931</b>	<b>-3,511</b>	<b>-2,539</b>	<b>-3,342</b>	<b>-1,221</b>	<b>-1,609</b>

### Lower Carbon Technologies

#### ***Renewable Energy Generation***

Warwickshire County Council has invested in Renewable Energy Generation to invest to save, to improve our energy security and to reduce environmental impacts. Since 2010/11 WCC has invested in a series of renewable energy technologies at a number of sites, including building integrated photovoltaic solar panels, wind turbine and biomass, generating around 210,000kWh per year (Table 4 shows generation on our centralised buildings). Barrack Street has 200 solar panels on the roof.



**Table 4: Solar on centralised buildings**

Site Name	Generation (kWh)
Barrack Street	43,112
Saltisford 1	16,741
Saltisford 2	35,048
Northgate House	868

### ***LED Street lighting***

The programme to convert street lighting to LED is 73% complete. Further reductions in cost, electricity use and carbon emissions will be seen as street lights continue to be upgraded to LED.



### ***Electric Vehicles***

Four new pool cars for staff use, provided by Enterprise, will be based in Barrack Street car park. The cars include a brand new fully electric Nissan Leaf, a Toyota Yaris hybrid and a Hyundai Ioniq hybrid.



### **Other relevant sources of information**

Clean Air Strategy - <https://www.gov.uk/government/publications/clean-air-strategy-2019>

Active travel in Coventry & Warwickshire - <https://www.warwickshire.gov.uk/activetravel>

Local Transport Plan 2011 – 2026 - <https://apps.warwickshire.gov.uk/api/documents/WCCC-630-116>

LEP Low Carbon Action Plan - <https://gbslep.co.uk/wp-content/uploads/2017/06/GBS-LEP-Low-Carbon-Energy-Plan-Summary-Report.pdf>

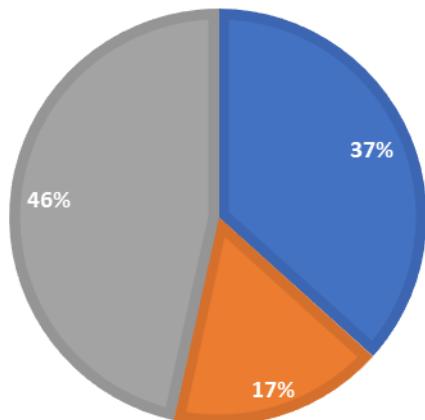
CWLEP Green Business Programme - <https://www.cwlep.com/project/green-business-programme>

## Warwickshire Emissions Dataset 2017

Total for Warwickshire approx. 5.5m tonnes CO<sub>2</sub>E

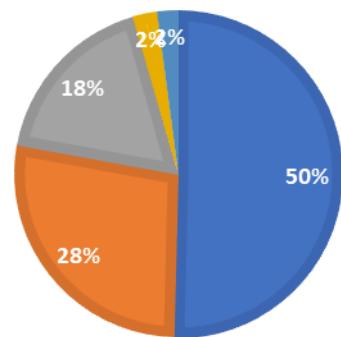
### WARWICKSHIRE KT OF CO<sub>2</sub>E

- Industry and Commercial Total 1980
- Domestic Total 900
- Transport Total 2500

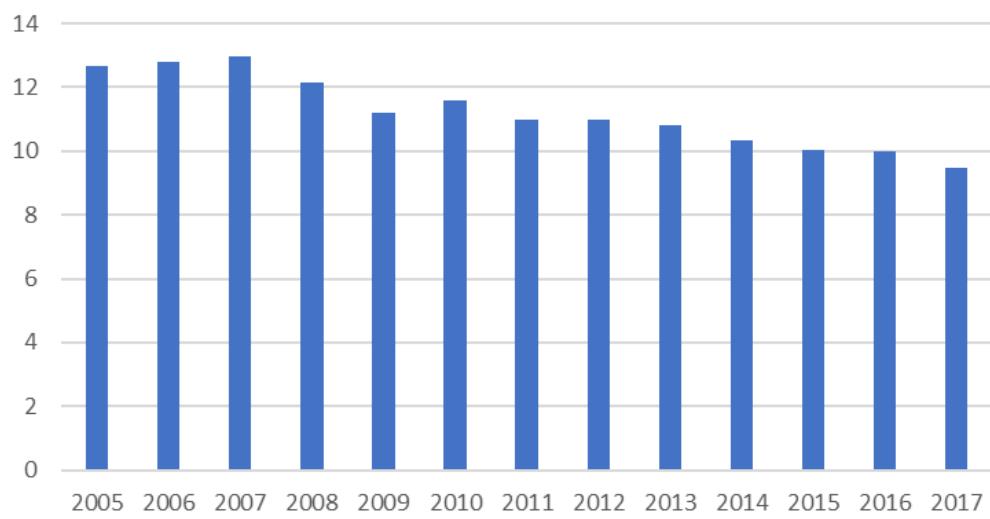


### TRANSPORT KT OF CO<sub>2</sub>E

- Road Transport (Motorways) 1260
- Road Transport (A roads) 670
- Road Transport (Minor roads) 440
- Diesel Railways 60
- Transport Other 50



### Warwickshire per capita emissions in Tonnes



<https://www.gov.uk/government/collections/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics>

## Appendix 4 – Detailed findings from the climate change workshop

Function	Strategic Asset Management and Enabling Services
Main contact	<b>Clare Gibb / Jacky Lawrence</b>
Current work	<p><b>Manage the centralised corporate building portfolio.</b> Carry out assessments of buildings and plan improvements. Manage buildings - energy, water and environmental management, property rationalisation.</p> <p>777 assets are categorised into bands e.g. centralised buildings (183), non-centralised buildings (262), maintained schools (140).</p> <p><b>Building Energy Strategy and Building Energy Reports</b></p> <p><b>Corporate Asset Management Strategy</b> – sustainability and climate change are a fundamental part of this work</p> <p>Display Energy Certificate Advisory Reports and other assessments by the energy team inform property workstreams.</p> <p>New builds and school extensions currently exceed Building Control Standards.</p> <p><b>Procurement of pure green electricity</b></p>
Planned work	<p><b>Implementation of the Corporate Asset Management Strategy</b></p> <p><b>Building Energy Report 2019/20</b> due in new year</p> <p><b>ISO14001 environmental management system audits</b> identify areas for improvement and monitor energy efficiency</p>
Future work	<p><b>Building Energy Strategy</b> – work towards a target of at least an average annual 2.5% reduction in total carbon emission from the corporate property estate per £million gross revenue expenditure.</p> <p>Retrofit to improve controls, energy efficiency standards and install alternative energy systems or heat recovery</p> <p><b>Building Information Management and Modelling</b> – data driven approach creates models of central WCC assets for business case</p> <p>Focus on both easy wins across the estate and bringing up the worst performing buildings</p> <p>New building procurement to include lifecycle carbon impact</p> <p>Investigate Passivhaus or equivalent energy standards for new builds, consider heating and cooling</p> <p>Investigate and where appropriate develop plans and targets to reduce the carbon impact of non-corporate buildings e.g. schools</p>
Measurement	<p>Detailed baseline data since 2013/14 is available in the annual building energy reports. There are DEC ratings for libraries, museums, trading standards and Shire Hall. DEC ratings and advisory reports advise on how to improve ratings through improvements to heating and lighting etc. Building occupancy is not taken into account in DEC ratings.</p>
Leadership	<p>Process and techniques used to identify improvements as well as technical solutions will be broadly applicable to any corporate building in other authorities or for local businesses. Demonstrating our own improvements will also show leadership to householders.</p> <p>Staff behaviour change campaigns will improve habits at work and at home.</p>
Resources needed	<p><b>Appointment of Head of Strategic Asset Management</b>, energy management expertise, technical expertise</p> <p>Investment to improve DEC and EPC ratings and carry out large scale projects</p>
Targets	<p><b>Make corporate buildings carbon neutral by 2030</b></p> <p>Develop and publish a plan for this by end of 2020</p>

	<b>Investigate carbon reductions in non-corporate buildings</b>
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Function	Renewable Generation
Main contact	<b>Angeline Murungu</b>
Current work	<p><b>Management of installations across Warwickshire.</b> 14 installations generate 252MWh per year (50tCO<sub>2</sub>e per year) and benefit from Feed in Tariff.</p> <p><b>Investigation and planning of new opportunities for photovoltaic arrays and other renewable and low/zero carbon technologies</b></p>
Planned work	<b>Business cases for a number of large-scale projects, including one solar farm site which has planning permission.</b>
Future work	<b>Investigate and develop new schemes to establish a programme of energy projects including more building mounted solar PV schemes. This programme may include a number of different technologies, funding sources and locations.</b>
Measurement	<p><b>Detailed baseline data is available for corporate installations. Business cases demonstrate potential costs and savings. The amount of energy produced. Tonnes of carbon emission (tCO<sub>2</sub>e) per £million gross revenue expenditure. MWh of energy secured.</b></p>
Leadership	<p><b>Demonstrate savings, income and resilience that energy schemes can deliver to show leadership across the Council and to businesses, communities and individuals.</b></p> <p><b>Midlands Energy Hub - Warwickshire and Coventry LEP Community Switch partnerships with District and Boroughs, community groups, Act on Energy (energy conservation organisation)</b></p>
Resources needed	<b>Appointment of Head of Strategic Asset Management, and energy management, technical and financial expertise. An investment fund to pay for the projects developed on an invest to save or commercial basis.</b>
Targets	<b>Substantially increase WCC renewable energy generation by 2030. Contribute to all corporate buildings becoming carbon neutral by 2030</b>

Function	<b>Street Lighting</b>
Main contact	<b>Mike Cunningham</b>
Current work	<p><b>Part night lighting programme</b></p> <p><b>Roll out of LED street lighting</b></p> <p><b>Procurement of pure green electricity</b></p>
Planned work	<p><b>Complete roll out of LED lighting</b></p> <p><b>Monitor part night schedule</b></p> <p><b>Maintenance and upgrades</b></p>
Future work	<b>Further roll out of low energy lighting</b>
Measurement	<b>Electricity used and roll out progress</b>
Leadership	<b>Demonstrate money saved and carbon saved from implementing our streetlighting policy</b>
Resources needed	<b>Continued monitoring and management of the implementation programme.</b>
Targets	<b>Make all street lights low energy eg LED by 2030</b>
	<b>Continued procurement of pure green electricity</b>

Function	Social Services
Main contact	<b>Becky Hale</b>
Current work	<p><b>Adults</b>  <b>Residential and Home Care costs of approximately £130m pa</b>  <b>Approximately 2,000 people in care homes</b>  <b>Travel impact for home care for 8,000 people</b></p> <p><b>Children</b>  <b>Budget of £70m pa</b>  <b>Internal and external foster care</b>  <b>50 children cared for in care homes</b>  <b>Approximately 30 in supported accommodation provided by a mix of care providers</b>  <b>14 children's centres managed externally in a mix of WCC owned or leased buildings</b></p>
Planned work	<b>Establish a report that details the carbon impact from social services work.</b>
Future work	<b>Work with care providers to baseline the carbon impact of this service area. Develop plans to reduce the carbon impact of this service area.</b>
Measurement	<b>Establish future carbon measurement reporting</b>
Leadership	<b>Demonstrate good practice to local businesses</b>
Resources needed	<b>Specific resources will be required to establish a baseline and deliver improvements</b>
Targets	<p><b>Develop plans to reduce carbon emissions from our social services contracts.</b></p> <p><b>Establish baseline by 2020/21</b></p> <p><b>Agree a plan to deliver improvements by 2021/22</b></p>

Function	Owned Transport – Vehicle Fleet
Main contact	<b>Richard Sweeney</b>
Current work	<p><b>Investigating more efficient delivery of fleet services including improving the efficiency of fleet vehicles</b>  <b>220 bus and 500 taxi contracts</b>  <b>Operation of a fleet of 30 small vehicles for adult day care</b></p>
Planned work	<p><b>Plan how services will be delivered in the medium term and use this to deliver efficiencies in the use of transport and investment in more modern lower emission vehicles.</b>  <b>Home to school distances have increased through closures and changes in place allocation, need to plan how to reduce resulting increased car travel</b>  <b>Funding our own schemes could be more cost effective than subsidising private providers. Rural areas need public transport that works commercially.</b></p>
Future work	<p><b>Track technological advances to ensure that our fleet is taking advantage of best practice. Develop a plan to ensure all vehicles below 7.5 tonne are low or no emission. Aspire to all vehicles low or no emission at a future date.</b>  <b>Possible future low emissions zones may drive changes</b></p>
Measurement	<b>Number of vehicles, fuel efficiency, fuel usage, distance travelled by vehicles, carbon emissions.</b>
Leadership	<b>Development of new technologies in our own fleet can be promoted.</b>

Resources needed	<b>Moving to alternative vehicle technologies will require investment. Driving efficiencies in the use of our fleet will require expertise. New technologies will require expertise and investment.</b>
Targets	<b>Council fleet to become carbon neutral by 2030.</b>

Function	County Transport
Main contact	<b>Philippa Young</b>
Current work	<p><b>The Local Transport Plan and transport programme of investment ensures that we provide a transport system that enables economic growth, but does so in a way that is greener, safer and improves quality of life in our communities.</b></p> <p><b>Consultation on some Area Transport Strategies will begin in the new year along with modal strategy work.</b></p> <p><b>New infrastructure includes over 1 million trips per year using railway stations that WCC has helped deliver (Warwick Parkway, Coleshill Parkway, Stratford Parkway, Bermuda Park, Kenilworth).</b></p> <p><b>Carrying out a strategic procurement exercise to procure electric vehicle charging points across the county as part of grant funding to place charging points in publicly accessible car parks.</b></p>
Planned work	<p><b>The Local Transport Plan review is an opportunity for greater emphasis on low carbon solutions.</b></p> <p><b>Electric vehicle charging infrastructure</b></p> <p><b>Capital Investment bid for over £10 million in cycle schemes, including K2L</b></p> <p><b>Warwickshire Rail Strategy 2019 - 2034</b></p>
Future work	<p><b>Capital investment and funding</b></p> <p><b>New technology like e-bikes and autonomous vehicles</b></p> <p><b>Low emissions zones, congestion charges, parking restrictions</b></p> <p><b>Increase use of public transport</b></p>
Measurement	<p><b>Current versus future traffic volumes relative to population</b></p> <p><b>Modal shift. Emission reductions.</b></p> <p><b>In 2017 2.5m tonnes of carbon came from transport in Warwickshire. Of this 670,000 was from A road transport and 440,000 from minor roads.</b></p> <p><b>Benchmark - EV charging points per head of population, average commute length, mode share</b></p>
Leadership	<p><b>Support Districts and Boroughs to deliver their local plans, climate action plans and support adaptation work</b></p> <p><b>Share policies and behaviours</b></p> <p><b>Specification of scheme design/contract management</b></p>
Resources needed	<p><b>The County Council is currently reviewing its Area Transport Strategies which are broadly based on the geography of the five Warwickshire District/Boroughs. These will inform and ultimately become part of the Local Transport Plan, which itself is also in the process of being reviewed. Along with a number of economic and social objectives, the LTP will have environmental outcomes at its heart, including climate change, carbon reduction and improving air quality.</b></p> <p><b>A number of the Area Transport Strategy reviews have either been completed or are underway. It is envisaged that approval of the remaining strategies will be subsumed into the wider LTP process, which is expected to conclude in Summer 2021.</b></p> <p><b>The Area Transport Strategies are at varying stages of development, but there will generally be two opportunities to</b></p>

	<p><b>comment - firstly on an Issues document and secondly the draft strategy itself. We had been planning to engage on the issues document for the Rugby and North Warwickshire Area Transport Strategies in the new year.</b></p> <p><b>In terms of the LTP, we are aiming to consult on an Issues document after Easter 2020 and the draft LTP in Autumn/Winter 2020/21.</b></p>
Targets	<p><b>Review and agree the new local transport plan and area transport strategies to encourage healthy lifestyles and more sustainable transport, including cycling.</b></p> <p><b>Develop smart transport targets to reduce carbon and improve air quality, especially in built-up areas.</b></p> <p><b>Let a contract for and provide charging points for electric vehicles.</b></p>

Function	Business Travel
Main contact	<b>Margaret Smith / Julie Burton</b>
Current work	<b>Active travel and 'choose how you move' promotion</b> <b>Corporate policy on making business mile claims</b> <b>Provision of alternative fuel pool cars and pool bikes</b>
Planned work	<b>Development of county travel work within the Air Quality agenda.</b> <b>Extension of pool car offer. Provision of facilities for cyclists and walkers.</b>
Future work	<b>Revision of business mile claim mechanism including establishing who takes responsibility for this.</b> <b>Ensure staff are clear how they contribute to minimising our carbon impact through training and communications.</b>
Measurement	<b>Business mile claims, data of types of vehicle used, journeys made by train and bus</b>
Leadership	<b>Sharing of our business travel policy, promotion of our pool cars</b>
Resources needed	<b>Expertise, funding</b>
Targets	<b>Ensure staff are clear how their travel choices can contribute to minimising our carbon impact through training and communications.</b> <b>Provide zero carbon pool vehicles and encourage their use.</b>

Function	Staff commuting
Main contact	<b>Margaret Smith / Julie Burton</b>
Current work	<b>Active travel and 'choose how you move' promotion</b> <b>Provision of alternative fuel pool cars and pool bikes</b> <b>Lift-share scheme, bike purchasing scheme</b>
Planned work	<b>Development of county travel work within the Air Quality agenda.</b> <b>Extension of pool car offer. Provision of facilities for cyclists and walkers.</b>
Future work	<b>Car parking provision – prioritised roles, permits, out of town park and ride or park and stride sites.</b> <b>Ensure staff are clear how they contribute to minimising our carbon impact through training and communications.</b>
Measurement	<b>Annual surveys, air quality in Warwick</b>
Leadership	<b>Promotion of our pool cars, better public transport provision, better cycling and walking infrastructure</b> <b>Promote the negative impact of car use on air quality and the health benefits of walking and cycling</b>

Resources needed	<b>Resource to promote behaviour change. Expertise and funding</b>
Targets	<p><b>Ensure staff are clear how their travel choices can contribute to minimising our carbon impact through training and communications.</b></p> <p><b>Provide better shower and storage facilities to promote active travel.</b></p>

Function	Highways / Property maintenance contracts
Main contact	<b>Shail Chohan / Jonathan Simkins</b>
Current work	<p><b>Highway maintenance – surfacing, defects, gritting, drainage, patching, verges</b></p> <p><b>Lifecycle planning in projects and maintenance work. Reducing the impacts of processes, e.g. low temperature asphalt or tar recycling</b></p> <p><b>Largest element of Balfour Beatty and Dodds contracts is the transport – travel from job to job. The largest carbon impact of a highways scheme is the impact in use. This may be ease of use, traffic flow, air quality. Design can reduce the in-use carbon as well as the carbon in raw materials, assembly / construction and decommissioning.</b></p> <p><b>New highways schemes along the A46 corridor are including improved cycleways</b></p>
Planned work	<p><b>Contractors are asked for detailed carbon impact reports.</b></p> <p><b>Design in energy efficiency in use as well as carbon reduction in construction. Alternatives to concrete.</b></p>
Future work	<p><b>Develop agreed plans to reduce carbon emissions in both highways and property maintenance.</b></p> <p><b>Highway maintenance - change to domain-based gritting to reduce mileage and look at other maintenance efficiencies including vehicle washing. More lifecycle planning and recycling. Use of the internet of things.</b></p>
Measurement	<b>Reports from contractors. Carbon calculator, vehicle mileage, raw materials used, landfill volumes, recycled volumes</b>
Leadership	<b>Demonstrate to local business a method for monitoring contractors. Greening County Council suppliers</b>
Resources needed	<b>TBA</b>
Targets	<p><b>Develop plans to reduce carbon emissions from our highways contracts.</b></p> <p><b>Establish baseline by 2020/21</b></p> <p><b>Agree a plan to deliver improvements by 2021/22</b></p>

Function	Internal Waste
Main contact	<b>Julie Burton / Colin Jones</b>
Current work	<p><b>Recycling provision in all corporate buildings with clear signage. Communications to help with waste reduction and recycling.</b></p> <p><b>Discussed at corporate waste meetings, at building user group meetings and through the ISO14001 environmental management programme. Already recycling food waste from Warwick buildings through composting equipment installed in Barrack Street and Saltisford. Corporate catering follows the principles of the Green Kitchen Standard which is reducing plastic waste.</b></p>

Planned work	<p><b>The corporate internal waste strategy, launched this year, aims to: reduce general waste, paper use and single-use plastics. Work with current waste disposal contractor to ensure that quality data is collected for planning and decision making. Monitor the development of the national waste strategy – current draft stipulates that business must recycle in a similar way to kerbside offer by 2023. This will include separately collected food waste by 2023.</b></p>
Future work	<p><b>Changes to the nation strategy will change the type and quantity of waste generated in work premises. Producers will be responsible for the cost of packaging disposal which will lead to improvements in recyclability and excess. A likely deposit return scheme for drinks containers will divert this waste away from corporate bins. Attain plastic free status for corporate catering.</b></p> <p><b>The Council will develop required waste behaviour which all office users will be expected to adhere to. This will be communicated widely.</b></p>
Measurement	<p><b>There is good data for waste that is recycled or composted from corporate buildings. Residual waste is estimated based on quantity of bin lifts and density assumptions. We are working with the contractor to improve this data. DEFRA and WRAP are developing a metric for carbon measurement which can be used for corporate waste. Waste from other sites will be measured through the ISO 14001 management system.</b></p>
Leadership	<p><b>The County Council can share with local businesses and partners successes and methods and communications programme.</b></p>
Resources needed	<p><b>Funds to fulfil requirements of the new national waste strategy by 2023. Staff time and the correct equipment to continue food waste recycling and extend provision to all buildings. Infrastructure such as bins and equipment to realise waste reductions and recycling plans.</b></p>
Targets	<p><b>Measure residual waste so that true performance can be baselined, tracked and targeted. Reduce, recycle and compost more of our office waste. Reduce our use of paper and single use plastic. Waste recycling and carbon targets at least in line with national targets. Ensure staff, contractors and visitors are clear how they contribute to minimising our carbon impact through training and communications.</b></p>

Function	Municipal Waste
Main contact	<b>Andrew Pau</b>
Current work	<p><b>Work in Partnership with District and Borough councils to reduce waste and recycle more. This is done through easy to access recycling provision and Partnership working. Waste minimisation, reuse and recycling promotion and behaviour change campaigns keep our recycling rate and waste produced steady at a time when nationally waste performance is getting worse.</b></p>
Planned work	<p><b>The National Waste Strategy for England, in consultation phase currently and due to be fully in force by 2023, will strongly influence LA waste management in the short-term future. Waste collection methods will change, in particular, the likely move to weekly separate food waste collections. At the same time, producers will be responsible for the cost of packaging disposal which will lead to</b></p>

	<p>improvements in recyclability and excess. Also, a likely deposit return scheme for drinks containers will drive up national recycling. A communications plan and a HWRC improvement plan are in production for the coming financial year.</p>
Future work	<p>The Warwickshire Waste Partnership are monitoring the national scene and will continue to advance work on smarter partnership working, which will reduce waste and drive up recycling. 4 of the 5 collection authorities are planning to become partners in a MRF in development in Coventry, this will increase recycling and reduce waste haulage distances.</p> <p>The County Council will develop a HWRC strategy and the next Joint Municipal Waste Strategy, in line with national strategies when published.</p>
Measurement	<p>All municipal waste is recorded on the national database Waste Data Flow. The Waste Partnership receives quarterly reports on data and performance which informs decision making. Annual national benchmarking also takes place. Changes in policy and strategy can be traced using this detailed data.</p> <p>DEFRA and WRAP are developing a metric for carbon measurement</p>
Leadership	<p>The County Council and partners seeks to influence householders to reduce waste through a comprehensive communications programme and plan. The county works with district and borough officers on joint communications and sharing best practice. WRAP, LGA, NAWDO and LARAC allow for wider knowledge sharing and partnership working. Voluntary groups, community groups and local businesses are welcomed into broader waste minimisation work</p>
Resources needed	<p>Expertise to support work on the HWRC Strategy and Joint Municipal waste strategy. Infrastructure such as bins and equipment to realise waste reductions and recycling plans.</p>
Targets	<p>Reduce, recycle and compost more of our household waste at least achieving proposed national targets of 55% recycling by 2025, 60% recycling by 2030 and 65% by 2035.</p> <p>Develop a new Joint waste strategy for Warwickshire and implement this meeting any agreed targets.</p>

Function	Procurement, Contract Management and QA
Main contact	<b>Paul White / Olivia Cooper / Chris Kaye</b>
Current work	<p>Centralised procurement and supporting devolved procurement processes.</p> <p>Managing the procurement framework for the authority – policy, strategy, process and rules. Enabling training and collaboration.</p> <p>The move to electronic procurement has reduced paper and printing.</p> <p>About to launch a procurement exercise to procure electric vehicle charging points across the county using external (OLEV) funding.</p>
Planned work	<p>Make climate change a consideration of every procurement exercise.</p> <p>Make necessary amendments to template procurement documents.</p> <p>A new procurement strategy is due to be launched during 2020</p>
Future work	<p>Make climate change an element of all early supplier engagement.</p> <p>Work with Contract Management Service to ensure climate change commitments are delivered by our contracted suppliers.</p>

Measurement	<b>Number of procurement projects where climate change has been part of the criteria for contract award. Contract monitoring</b>
Leadership	<b>Demonstrate good practice to LA partners, potential suppliers and local business.</b>
Resources needed	<b>Specialist resources need to develop how to include climate change in procurements</b>
Targets	<b>Make climate change considerations a requirement for all council decisions including capital investments and procurements by 2020.</b>

Function	IT Enablers
Main contact	<b>Mike Cooke Jones</b>
Current work	<b>IT is introducing a suite of enabling technology which will allow staff to change their working habits and reduce their carbon footprint. The introduction of Microsoft 365 and Teams will reduce file storage requirements and allow staff to work from alternative locations and collaborate without travelling. Building occupancy may reduce, saving of accommodation costs, as well as business travel or commuting impacts.</b>
Planned work	<b>The imminent roll out of a VOIP telephony system and Surface pro devices will further advance opportunities for agile, flexible working and distance collaboration. There should be a reduction in paper use and printing. Any end-of-life equipment will be reused or recycled. Storage requirements will be reduced and cloud based.</b>
Future work	<b>Improved applications will be developed in order to assets staff to work in an agile way, collaborate at a distance and reduce travel and building usage.</b>
Measurement	<b>Number of agile workers, number of remote meetings, reduction in printing, paper use and postage, reduction in data storage, reduction in business mileage claims and owned transport use. Need to ensure that staff working from home carbon impact is not disregarded – it will be a scope 3 impact</b>
Leadership	<b>The Council can demonstrate to LA partners and local business and community groups how travel and energy use can be reduced through IT infrastructure.</b>
Resources needed	<b>Resources needed to embed agile/flexible working</b>
Targets	<b>Embrace and embed better ICT to reduce energy consumption, printing and business travel, including commuting</b>

Function	Natural Capital (related to Carbon Offsetting)
Main contact	<b>David Lowe</b>
Current work	<b>Manages the county's records of habitat and species. Ensure that development delivers a Biodiversity Net Gain in partnership with Local Planning Authorities to compensate for the population, housing and economic growth pressures being placed on Warwickshire's Natural Capital.</b>
Planned work	<b>Deliver Biodiversity Net Gain schemes on public and private land to promote further nature conservation enhancement as Natural Capital supports human life, health and wellbeing. Research demonstrates that as well as trees, other habitats are beneficial for carbon capture, including grassland. Ecology can work with partners to value land owned by the county for carbon storage and other ecosystem services it provides (e.g.</b>

	<b>flood regulation). WCC land holding include roadside verges, ex-waste sites and the rural estate.</b>
<b>Future work</b>	Influencing planning decisions. Further tree planting and ecological sensitive land management. Advice on community schemes, highway schemes and on other county council land.
<b>Measurement</b>	Estimate carbon capture and other ecosystems services that is and can be delivered through the management of WCC land holdings.
<b>Leadership</b>	Work with partner LAs, Towns and Parishes, community groups, schools and local businesses.
<b>Resources needed</b>	More, bigger, better and connected ecologically rich habitat.
<b>Targets</b>	Biodiversity Net Gain in both area and wildlife rich habitat in the county. Partner with the community to plant a tree for every Warwickshire resident by 2030

Function	Investments
Main contact	<b>Chris Norton</b>
Current work	<p><b>Treasury Management</b> – operating cash, short term investments, and capital financing function. ~£300m cash investments in money market funds, loans to other LAs, property funds, etc. Mostly short duration investments (days through to months). Currently no ethical investment policy. Priority (statutory) - security, liquidity &amp; yield in that order. Small pool of institutions with high credit ratings. Also manage £350m of public works loan board debt.</p> <p><b>Pension Fund</b> – manages £2b of assets on behalf of ~200 employers and 50,000 members. The pension fund considers a much longer-term period than treasury management, can take higher risks, and has direct ownership and therefore voting rights on some of its assets. Climate change and responsible investing are a high priority area and the pension fund has more scope to make a difference in this arena than treasury management does. Governance of the Pension Fund is via a Staff and Pensions Committee, an Investment Subcommittee, and a Local Pension Board.</p> <p><b>Climate change</b> – investments need to be strong in the long term. Companies interested in the long term will by their nature be interested in climate change – both in terms of preventing it and in terms of avoiding its effect on their shareholder value. There is increasing interest from investors in climate change and ethical investment.</p>
Planned work	Work with investment funds to address new interest of investors in climate change issues
Future work	Develop a measure to demonstrate carbon impact and exposure to climate change risk.
Measurement	To be developed, however, this area is very complex, and measurement will be difficult
Leadership	It is important for the Council to be seen to be acting in this complex area which receives much public attention.
Resources needed	Capacity and external expertise to assess investment impact and exposure to climate change risk.

Targets	<b>Work with partners to review the carbon impact of our investments.</b>
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Function	Data
Main contact	<b>Sue Robinson</b>
Current work	<b>Business intelligence have supported work on gathering and presenting the baseline data for the task and finish group.</b>
Planned work	<b>The team will support further work to establish detailed baseline data in each area, benchmark against other similar authorities or properties and then propose ongoing measurement and monitoring methods.</b>
Future work	
Leadership	<b>Measurement and benchmarking techniques can be shared across other local authorities as well as local businesses</b>
Resources needed	<b>Support will be needed for the gathering, storing interpreting and reporting of data. New technology may also be required.</b>
Targets	<b>Improve our baseline data and metrics so we can make decisions and prioritise based on a continually improving understanding of our own emissions and the wider impacts of Warwickshire.</b>

## **Appendix 5**

### **Climate Change Mitigation - Task and Finish Group**

#### **Potential Warwickshire County Council Targets and Actions**

Scope 1 and 2 - Emissions the Council has direct control over inc own transport, gas and bought electricity.

By 2030, or sooner, we will: -

1. Ensure staff, contractors and visitors are clear how they contribute to minimising our carbon impact through training and communications
2. Make corporate buildings carbon neutral
3. Reduce our energy consumption by improving the energy efficiency of our buildings
4. Make all street lights low energy, e.g. LED
5. Substantially increase our renewable energy generation
6. Continue to purchase 100% green electricity
7. Make the Council's fleet carbon neutral
8. Partner with the community to plant a tree for every Warwickshire resident

Scope 3 - Emissions the Council has indirect control over ie emissions from purchased goods and services, waste management, business travel, employee commuting and investments.

We will: -

1. Reduce, recycle and compost more of our office and household waste
2. Develop a new Joint waste strategy for Warwickshire and implement this
3. Reduce our use of paper and single use plastic
4. Embrace and embed better ICT to reduce energy consumption, printing and business travel, including commuting
5. Provide zero carbon pool vehicles and encourage their use
6. Provide better shower and storage facilities to promote active travel
7. Develop plans to reduce carbon emissions from our third-party contracts for highways, property and social services
8. Investigate carbon reductions in non-corporate buildings
9. Work with partners to review the carbon impact of our investments

Across Warwickshire – Emissions from all households and businesses inc all burnt fossil fuels and energy used for power, heating and transport. The Council has some influence over these emissions.

By 2030, or sooner, we will: -

1. Review and agree the new local transport plan and area transport strategies to encourage healthy lifestyles and more sustainable transport, including cycling.
2. Develop smart transport targets to reduce carbon and improve air quality, especially in built-up areas.
3. Let a contract for and provide charging points for electric vehicles.

4. Work with local businesses and communities to help them reduce their carbon emissions and become more sustainable
5. Seek to achieve net gain for habitat, benefitting climate change mitigation and adaptation

## Governance

By 2020 we will: -

1. Establish a cross party group, chaired by the Portfolio Holder for Environment and Heritage and Culture, to steer work on climate change including both mitigation and adaptation
2. Embed climate change considerations into everything the Council does and make carbon reduction everyone's responsibility
3. Make climate change considerations a requirement for all council decisions including capital investments and procurements
4. Improve our baseline data and metrics so we can make decisions and prioritise based on a continually improving understanding of our own emissions and the wider impacts of Warwickshire
5. Use best practice to benchmark, set targets, prioritise and plan, based on measures of overall sustainability
6. Consider the officer requirements and resources needed to achieve our climate change ambitions
7. Lobby government to provide guidance and incentives for carbon reduction