

Peterborough City Council  
CARBON MANAGEMENT ACTION PLAN  
(Council-CMAP)

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## Foreword from Gillian Beasley & Councillor John Holdich

On the 24<sup>th</sup> of July 2019, at a meeting of Peterborough City Council's Full Council, members unanimously declared a climate emergency and agreed to make the Council's activities net-zero carbon by 2030. The motion commits the Council to achieving 100 per cent clean energy across its buildings and services by 2030 and ensuring that all strategic decisions, budgets and approaches to planning decisions are in line with a shift to zero carbon across the entire city by 2030. Leader of the Council, Councillor John Holdich, who put forward the motion, said:

"This motion is not about Peterborough. It's not about politics. It's about doing the right thing. The right thing for people, for places, for nature.

This motion is about being honest. Being honest that humans are causing damage to the very planet that sustains us. Being honest that resources are being wasted. Being honest that biodiversity is in decline, and temperatures are climbing.

We cannot go on in ignorance of the fact that our climate is changing. We cannot go on knowing the harm we are causing but then not alter our ways. We cannot go on, saying it is someone else's problem to deal with. We, in this room, are elected to represent our constituents. We are elected to show leadership. We are elected to make decisions for the greater good. And there is no greater good than helping to save the planet we live on.

This Council has a good record at promoting and delivering on environment matters. In 1992 we were declared one of four Environment Cities. In 2014 we adopted targets to set us on a course to 'one planet' living. We have done numerous positive actions. But we can do more. We must do more.

I am in no doubt, that we have entered a worldwide climate emergency. And I am in no doubt that action taken locally can make a difference. A local contribution to the global problem may be small, but it helps. But it also sends a message. A message that Peterborough acknowledges that humans must change their ways. We must declare a climate emergency, and we must all take action now to address it."

This Carbon Management Action Plan is the first major step we are taking to deliver our commitment to achieving net-zero carbon emissions across the Council's operations. This plan details where the Council's current emissions come from, existing plans we've got to reduce emissions and the areas we will focus on to achieve reductions over the next two years.

This plan is the first step, but we are committed to working with the whole city to reduce emissions. Through implementing this plan we commit to working at a local level to demonstrate leadership to the business and residential community and directly support the UK Government's delivery of its commitments within the Climate Change Act<sup>1</sup>.

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<sup>1</sup> Climate Change Act 2008. The world's first long term legally binding framework to tackle the dangers of climate change. The Climate Change Bill was introduced into Parliament on 14 November 2007 and became law on 26th November 2008.

## Executive Summary

This is the Council's new City Council Carbon Management Action Plan (Council-CMAP) setting out how we intend to cut our Carbon Emissions. It was adopted on 4 March 2020, and is intended to be refreshed every year.

In celebration of preparing this Action Plan, the 4<sup>th</sup> March this year and every future year is also to be designated as 'climate action day' – please look out for specific actions and events for that day.

### 20 Commitments for 2020:

Of the many actions in the main part of this document, the following forms a summary of the top 20 commitments we aim to achieve over the next 12 months.

Over the next 12 months, the Council will play its part to help mitigate climate change by:

1. Continuing to **rationalise office floorspace**, thereby reducing energy demands. For example, excess floorspace at the Town Hall will be leased.
2. Continuing to **plant new trees** on its own land (and encourage others to do likewise), thus capturing (or 'sequestering') carbon from the atmosphere. The Council will also work with Peterborough Environment City Trust (PECT) to determine whether a local carbon off-setting programme can be put in place, to fully take account of the carbon savings from tree planting.
3. Reviewing its entire **electricity and gas contracts**, and, where practical to do so, will seek to amend to 100% renewable electricity tariffs and 100% carbon off-set gas tariffs as soon as possible.
4. Appraising the impact (carbon savings, financial savings and public opinion) of the **streetlight dimming** programme commenced in winter 2019/2020, to determine whether further dimming is practicable.
5. Replacing, by January 2021, the **Mayor's car** with an Ultra-Low Emissions Vehicle.
6. Undertaking a thorough appraisal of the carbon emissions arising from our **Farm Estate land**, and develop options and proposals to reduce such emissions and, potentially, use of such land to generate renewable energy and/or peat restoration to act as a regenerating carbon sink.
7. Rolling out further guidance and training for staff in relation to the recently introduced '**Carbon Impact Assessment**' procedure – a new assessment which requires all Council decisions to be assessed for the carbon implications of the decision being made.
8. Including, as a new and important role for the Council's '**change champions**' network of staff (60 employees), a responsibility to help educate wider staff on how they can help reduce their carbon impact, and consider whether all **annual individual staff performance targets** can include a carbon related task.
9. Further developing the cross-party **Climate Change Member Working Group**, so that each political party of the Council can both champion carbon savings, scrutinise decision making and steer further carbon savings initiatives and ideas.
10. Working with Aragon, the Council's wholly owned company responsible for matters such waste collection and maintaining public open spaces, conclude a review into alternative options for its **vehicle fleet**, and set out a programme of how its vehicle fleet will become less carbon intensive.
11. Working with Skanska, the Council's highways partner, to trial a '**zero carbon**' compound for one of its major highway schemes, through the use of renewable energy initiatives.
12. Completing an energy opportunity assessment for **Sand Martin House** to identify measures that can be taken to reduce consumption and/or generate renewable energy and deliver at least one of these.
13. Completing an energy opportunity assessment for **Regional Swimming Pool** to identify measures that can be taken to reduce consumption and/or generate renewable energy and deliver at least one of these.

14. Completing an energy opportunity assessment for **Hampton Premier Leisure & Fitness Centre** to identify measures that can be taken to reduce consumption and/or generate renewable energy and deliver at least one of these.
15. Completing an energy opportunity assessment for **Bushfield Sports Centre** to identify measures that can be taken to reduce consumption and/or generate renewable energy and deliver at least one of these.
16. Completing an energy opportunity assessment for **Clare Lodge** to identify measures that can be taken to reduce consumption and/or generate renewable energy and deliver at least one of these.
17. Preparing a bespoke Action Plan for schools ('**School-CMAP**') by summer 2020, setting out how schools can cut their carbon emissions.
18. Putting in place arrangements, by March 2021 (including a city wide partnership forum), to facilitate the preparation of a district wide Action Plan ('**District-CMAP**'). This Action Plan, which is prepared in partnership with a wide range of stakeholders, will set out how we can cut our carbon emissions collectively across the Peterborough area.
19. Working with a willing Parish Council, to prepare a template parish based Action Plan ('**Parish-CMAP**'), and subsequently encouraging all Parish Councils to come up with their own targets and projects.
20. Preparing a **second Council-CMAP** by March 2021, setting out progress over 2020/21, and proposals and targets for 2021/22.

The Council also acknowledges that in recognising there is a climate emergency, the actions needed to be taken are not all about mitigating the impacts, but also adapting to the inevitable changes of climate change. As such, the Council also commits to commence preparation of a Climate Adaptation Plan over the next 12 months.

# 1 Introduction

Peterborough has the potential to be a truly sustainable city. A city which has a thriving local economy, strong communities and a sustainable way of life. A city where our residents are healthy, happy and prosperous.

To achieve this we will need to do things differently. If everyone on Earth lived as the average Peterborian, British or European citizen does, we would need nearly three planets' worth of resources to sustain us<sup>2</sup>. This means, on average, each of us is using too much of the world's resources to produce the food we eat, treat the waste we produce, and generate the energy we use.

Peterborough City Council has committed to take action to reverse the trend of increasing consumption of natural resources, and instead put Peterborough on the road to becoming that truly sustainable city.

We already have two Environment Action Plans; a City Wide plan covering Peterborough and a Council Wide plan covering our own activities (PCC, 2017). These plans provide a clear vision and set of targets for how we want to shape our environment, minimise our resource use, and make our great city and surrounding rural area prosperous, healthy and happy.

But since these plans were adopted in 2017, it has become clear that there is now an urgency to address one aspect of these targets with even more vigour: climate change. The climate science has become unequivocal. There is recognition that the impacts of climate breakdown are already causing serious damage around the world. The Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C, describes the enormous harm that a 2°C average rise in global temperatures is likely to cause compared with a 1.5°C rise (IPCC, 2018). And we can see the local evidence of rising temperatures ourselves. In July 2019, Cambridgeshire was the hottest place in the UK reaching an all-time high temperature of 38.1 C<sup>3</sup>. The latest UK climate projections (UKCP18) suggest that the UK climate will continue to warm over the rest of this century, and on average, will result in hotter and drier summers, warmer and wetter winters with more extreme weather events expected, though individual years may not conform to this pattern (Environment Agency, 2018).

In response Peterborough City Council declared a 'climate emergency' on 24<sup>th</sup> July 2019 (PCC, 2019). In doing so the Council joins a global movement which worldwide has seen, to date, 1,261 jurisdictions in 25 countries declare a climate emergency, and within this 400 local authorities in the UK<sup>4</sup>.

In making this declaration the Council committed to a wide range of comprehensive actions, including, in summary:

- Make the Council's activities and the city's net-zero carbon by 2030 with a baseline, action plan and budget by 31st March 2020.
- Ensure political and chief officer leadership to embed this priority into work, ensuring all decisions are in line with net-zero carbon by 2030.
- Set up a Climate Change Partnership group proactively involving young people and convene a citizen's assembly.
- Review 2020/21 budget proposals and ascertain environmental impact.
- Use planning powers to deliver net carbon new developments and communities and increase tree planting.
- Achieve 100% clean energy across the Council's full range of functions by 2030 and explore renewable generation and storage.

<sup>2</sup> WWF states that if everybody in the world lived as the average EU resident, we would have exhausted nature's budget for 2019 by 10 May 2019, and would need 2.8 planets to sustain us. (WWF, 2019)

<sup>3</sup> "The UK has seen its hottest July day ever as the temperature reached 38.1C in Cambridge. The new record outstripped the previous high for the month of 36.7C, set at Heathrow in July 2015." (New Scientist, 2019)

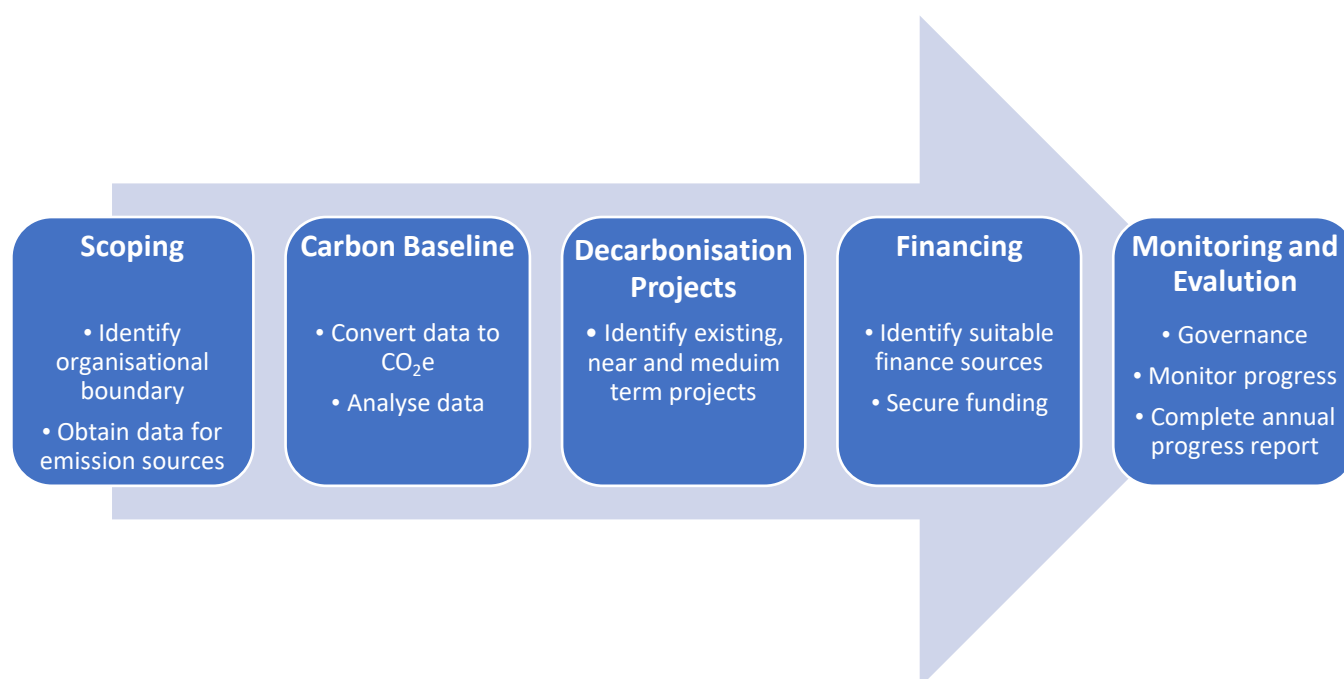
<sup>4</sup> Figures correct as of December 2019 (The Climate Emergency Declarations and Mobilisation, 2019)

- Replace all Council vehicles with electric or hybrids including the mayor's car, provide electric vehicle infrastructure and encourage alternatives to private car use across the city.
- Increase the efficiency of buildings, in particular to address fuel poverty.
- Coordinate events to raise awareness and share best practice and keep everyone updated.
- Call on the UK Government to provide the powers, resources and help with funding to make this possible and ask local MPs to do likewise.

Many of the above actions are directly or indirectly related to reducing our carbon emissions, with the headline being to hit the net zero target by 2030 for the Council's activities. This document meets the commitment described in point one to prepare an action plan by March 2020. In doing so, this Action Plan also sets out real commitments to help deliver on all the points described above.

In simple terms, this document:

- Sets out what our current 'baseline' carbon emissions are (or 'carbon footprint'), so we know where we are starting from and can set meaningful targets and milestones.
- Sets out a set of projects we intend to deliver, to start to reduce our emissions.
- Puts forward potential future projects, or ideas requiring further investigation before being committed to.
- A series of options for how different projects may be funded.
- The process by which this will be managed.



**Figure 1: Carbon Management Process**

The intention is for this Action Plan to be refreshed every year. The intention is to also prepare two further similar Action Plans:

- **Schools Action Plan:** Our second plan, closely following this one (due for late summer 2020), will be a special Action Plan focussing just on schools (both City Council controlled and Academies). As such, schools are excluded from this first Action Plan.

- **City Wide Action Plan:** This third plan is intended to be 'Peterborough wide', looking at a programme of actions to combat emissions across the whole area, including business, homeowners and visitors. Such a plan will need to be prepared in collaboration with a wide range of people, and we intend to help set up that collaboration in the coming months (before summer 2020) and complete the plan by March 2021.

In addition to these Action Plans we will also prepare a strategy detailing how Peterborough will adapt to climate change over the next 12 months.



## 2 Our Carbon Footprint

Before we decide what we should do differently, to reduce our emissions, we need to properly understand what our current activities are emitting. This is sometimes known as working out our 'carbon footprint' which, in technical terms, is a measure of the greenhouse gases (GHGs)<sup>5</sup> emitted into the atmosphere from sources in a specified area or organisation. It usually includes all relevant greenhouse gases, the most common of which is carbon dioxide (CO<sub>2</sub>). Emissions of other GHGs such as methane (CH<sub>4</sub>) or nitrous oxide (N<sub>2</sub>O), are measured in 'carbon dioxide equivalent' (CO<sub>2</sub>e)<sup>6</sup>.

Nationwide, emissions of CO<sub>2</sub> make up 81% of GHG emissions, with the remainder from methane (11%), nitrous oxide (4%) and fluorinated gases (3%), when weighted by Global Warming Potential (GWP)<sup>7</sup>. The biggest source of greenhouse gas emissions in the UK is transport, closely followed by energy supply.

To help set the wider context, this Action Plan examines both the carbon footprint of the geographical area of Peterborough as a whole, and that of Peterborough City Council as an organisation.

### 2.1 Peterborough's Carbon Footprint

The carbon footprint for the geographical area of Peterborough should comprise all GHG emissions that occur in the unitary area – this includes commercial and industrial sources, domestic homes, transport, agriculture, waste and land use.

There is no perfect, simple, 100% accurate way of calculating a carbon footprint, as it relies on a number of assumptions. The Government Department for Business, Energy and Industrial Strategy (BEIS) annually publishes detailed local authority level CO<sub>2</sub> emissions data, however does not provide data on the other recognised Kyoto Protocol GHGs emissions, collectively known as CO<sub>2</sub>e emissions. As such, this data 'misses' 19% of all GHGs.

The data is published with a 2 year lag (year x-2), and therefore 2017 is the most recent data available. From this it is evident the trend in Peterborough is reflective of the national trend: CO<sub>2</sub> emissions slowly and steadily declining over the last few years, due mainly to the decarbonisation<sup>8</sup> of the electricity grid. See figure 2. Emissions from agriculture, waste and peatlands are not included in these figures because they primarily produce methane rather than CO<sub>2</sub>, therefore are missed from these calculations (BEIS, 2019).

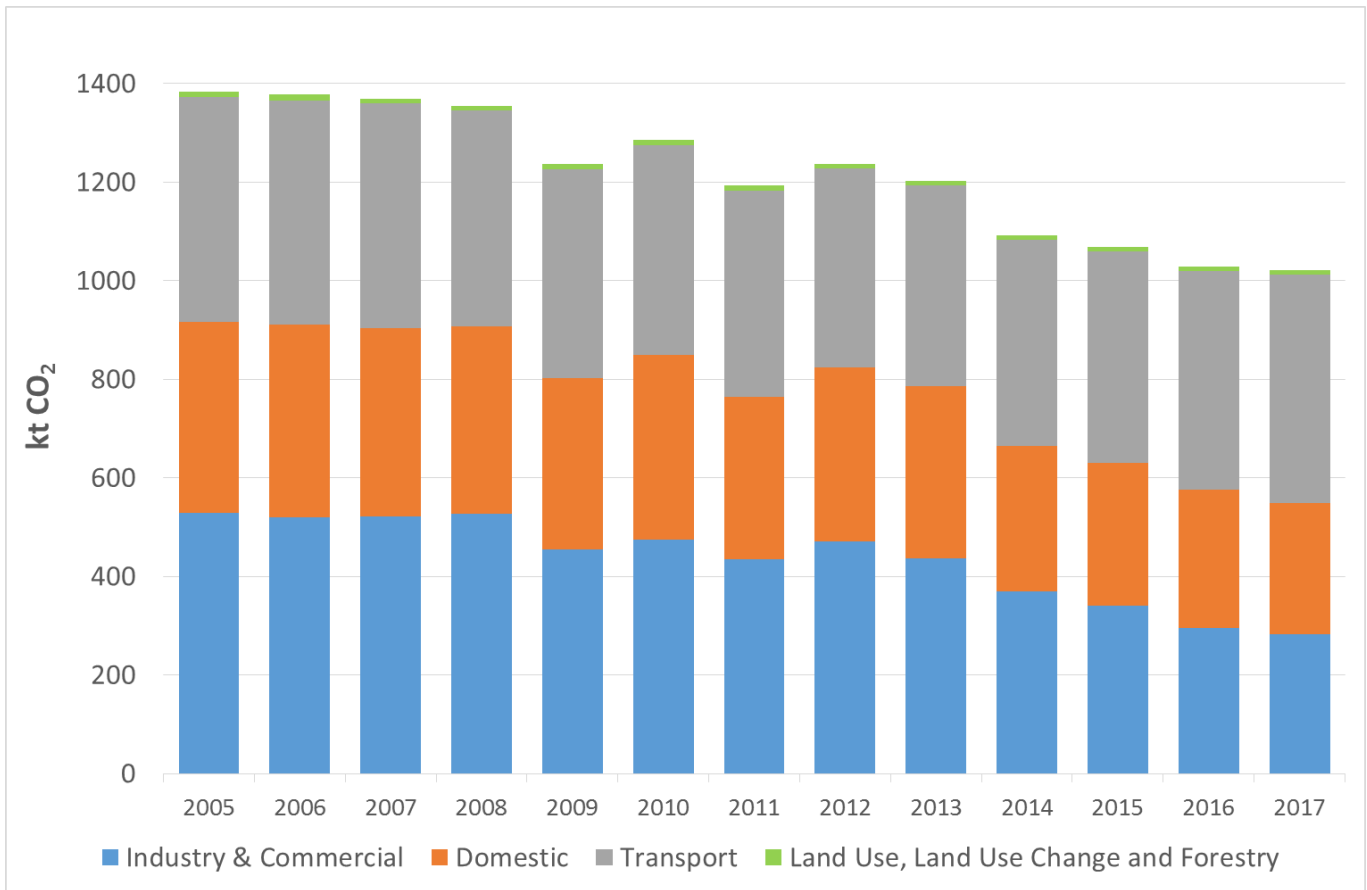
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<sup>5</sup> The main GHGs are: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>) and Nitrogen Trifluoride (NF<sub>3</sub>). The Kyoto Protocol – the international agreement addressing climate change - covers these seven main GHGs. The last four are fluorinated gases ("F-gases") which are a range of man-made compounds (including HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>) used in a variety of industries including refrigeration, air-conditioning and the manufacture of cosmetics, pharmaceuticals, electronics and aluminium. F-gases are extremely potent greenhouse gases with some having GWPs of several thousand or more (BEIS, 2019a). The greenhouse gases covered by the Kyoto Protocol account for over 99% of global greenhouse gas emissions.

<sup>6</sup> By using CO<sub>2</sub>e as a measuring tool means that the different global warming potential (GWP) of different gases are taken into account. Quantities of GHGs are multiplied by their GWP to give results in units of carbon dioxide equivalent (CO<sub>2</sub>e)

<sup>7</sup> Global warming potential. A factor describing the radiative force impact (degree of harm to the atmosphere) of one unit of a given GHG relative to one unit of CO<sub>2</sub>.

<sup>8</sup> Decarbonisation means reducing the carbon intensity of energy in the national grid, this is achieved by reducing the proportion of fossil fuels and increasing the proportion of renewable energy sources such as solar and wind.



**Figure 2: Peterborough’s CO<sub>2</sub> emissions by end-user sector, 2005 – 2017 (BEIS, 2019c)**

As one of the fastest growing cities in the UK it is also useful to look at this data on a per capita basis. This shows that each resident in Peterborough is responsible for emissions amounting to 5.1 tCO<sub>2</sub> annually, illustrated in figure 3. In addition to this BEIS also refine this data to consider emissions which are deemed to be within a local authority’s scope of influence, this reduces emissions to 5.0 tCO<sub>2</sub> per capita in Peterborough.

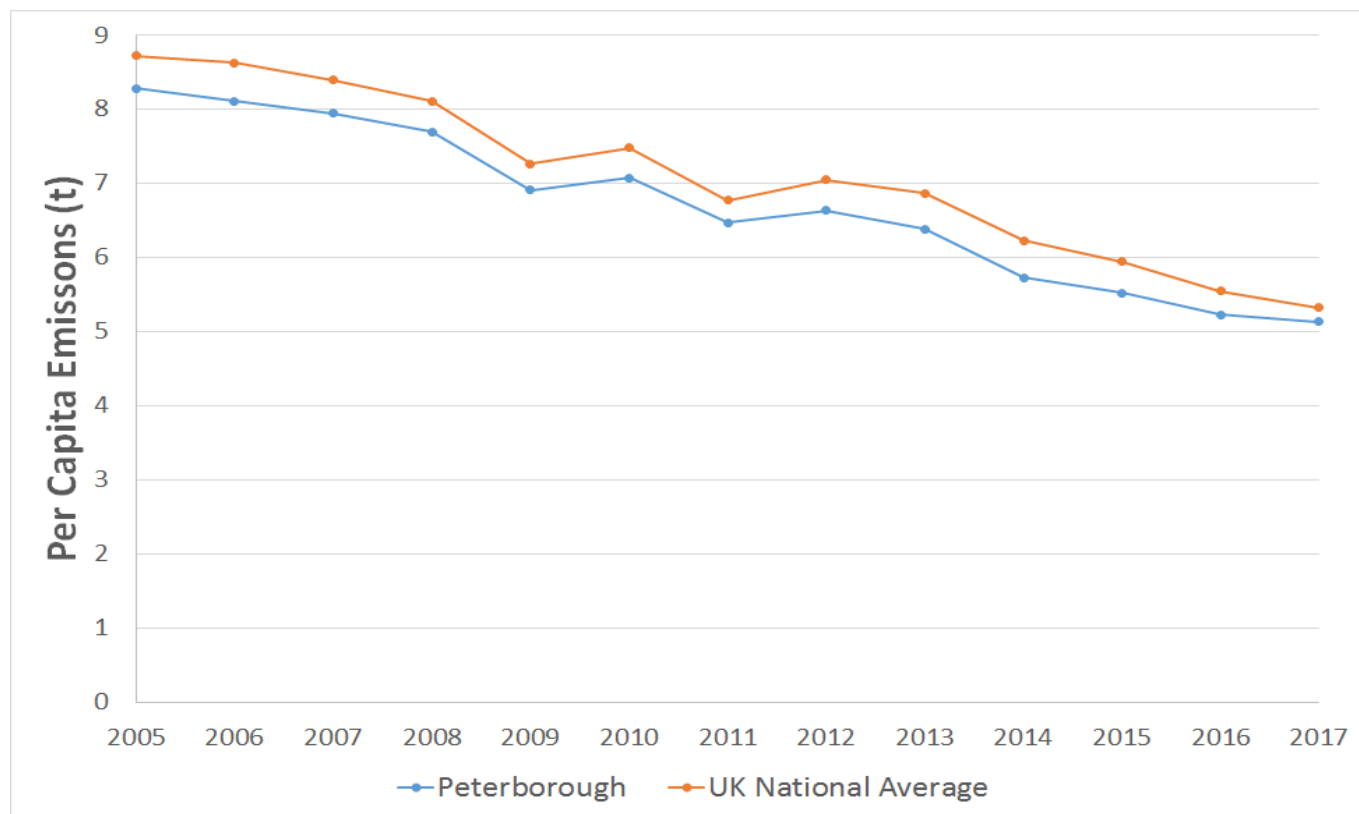


Figure 3: Per capita emissions for Peterborough and UK National Average, 2005 – 2017 (BEIS, 2019c)

## 2.2 Peterborough City Council’s Carbon Footprint

The carbon footprint of Peterborough City Council (as an organisation) comprises emissions that occur as a result of the Council’s own operations.

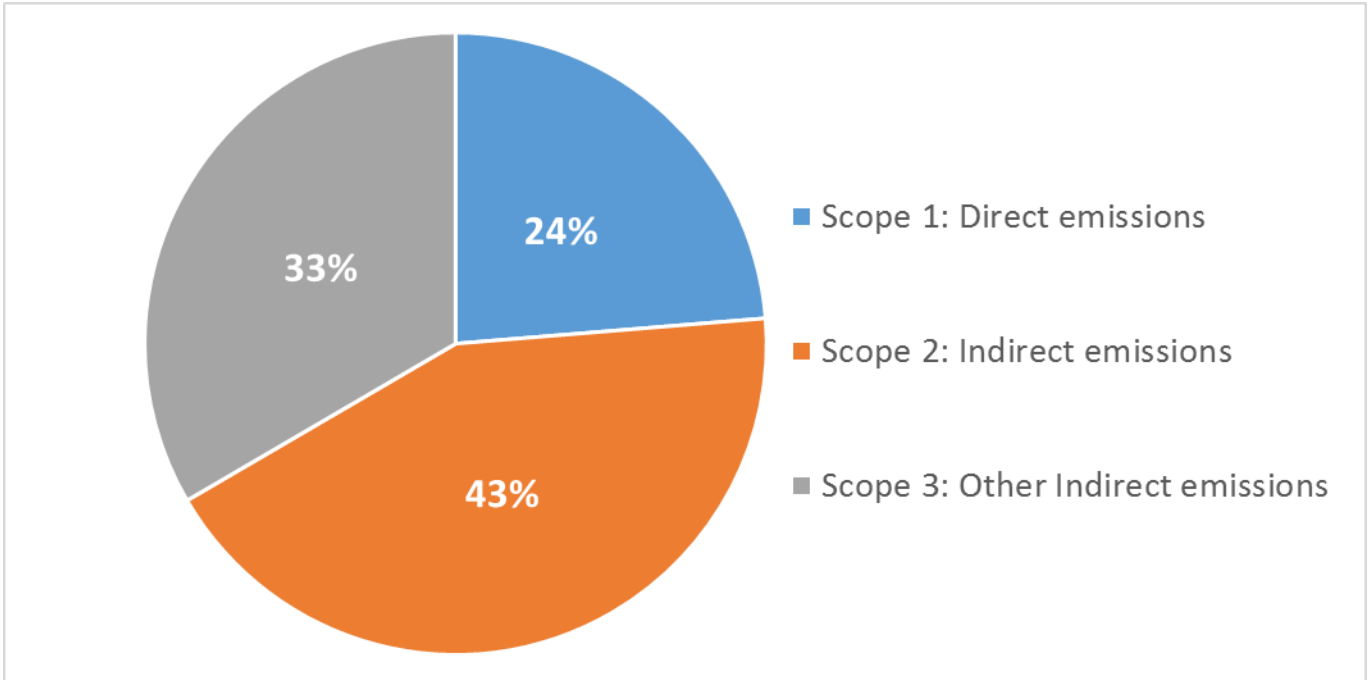
We have calculated the carbon footprint of the Council’s own operations in line with the UK Government’s Environmental Reporting Guidelines for Voluntary Greenhouse Gas Reporting<sup>9</sup>. The footprint is calculated using data for the financial year 1 April 2018 to 31 March 2019.

The resultant baseline for 2018/9 is 11,549 tonnes of CO<sub>2</sub>e. This is summarised as follows:

Total Gross Emissions 2018-19	Tonnes of CO <sub>2</sub> e
for Scope 1 (Direct)	<b>2,735</b>
for Scope 2 (Indirect)	<b>4,950</b>
for significant Scope 3 (Other indirect)	<b>3,863</b>
<b>Grand Total</b>	<b>11,549</b>

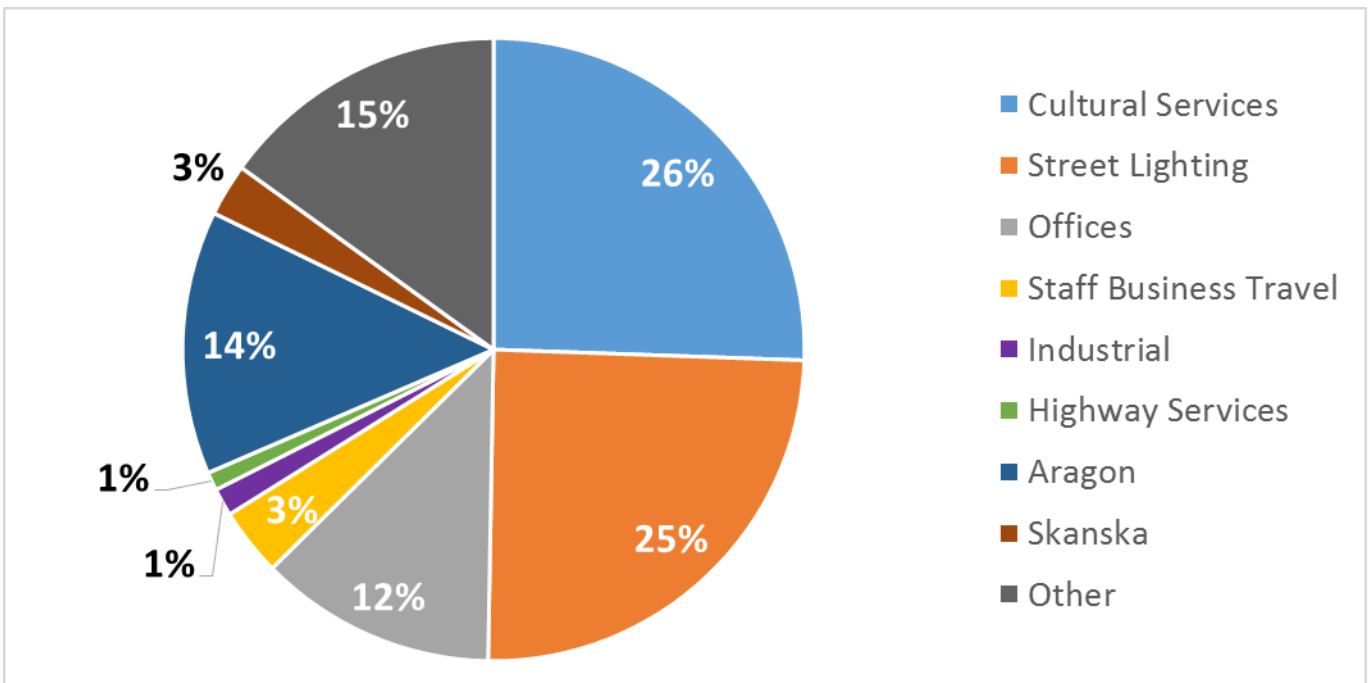
Table 1: Summary GHG emissions (CO<sub>2</sub>e, tonnes)

<sup>9</sup> These reporting guidelines are based on internationally-recognised standards from the World Resources Institute and World Business Council for Sustainable Development: the GHG Protocol Corporate Accounting and Reporting Standard, and the GHG Protocol Scope 3 standard. (BEIS, 2019a)



**Figure 4: Emissions by scope, 2018-19**

Scope 1 (direct) and scope 2 (purchased electricity) emissions amounted to 7,685 tonnes CO<sub>2</sub>e. Scope 1 and 2 includes emissions from gas and oil for heating our buildings, electricity for our buildings and street lighting etc. and emissions from fleet vehicles. Scope 1 and 2 are generally considered to be areas that an organisation has a high degree of control over and can therefore reduce the resultant emissions significantly, if not completely. Scope 3 are considered to be indirect emissions that an organisation cannot directly control and therefore the ability to reduce emissions to net-zero is less realistic.

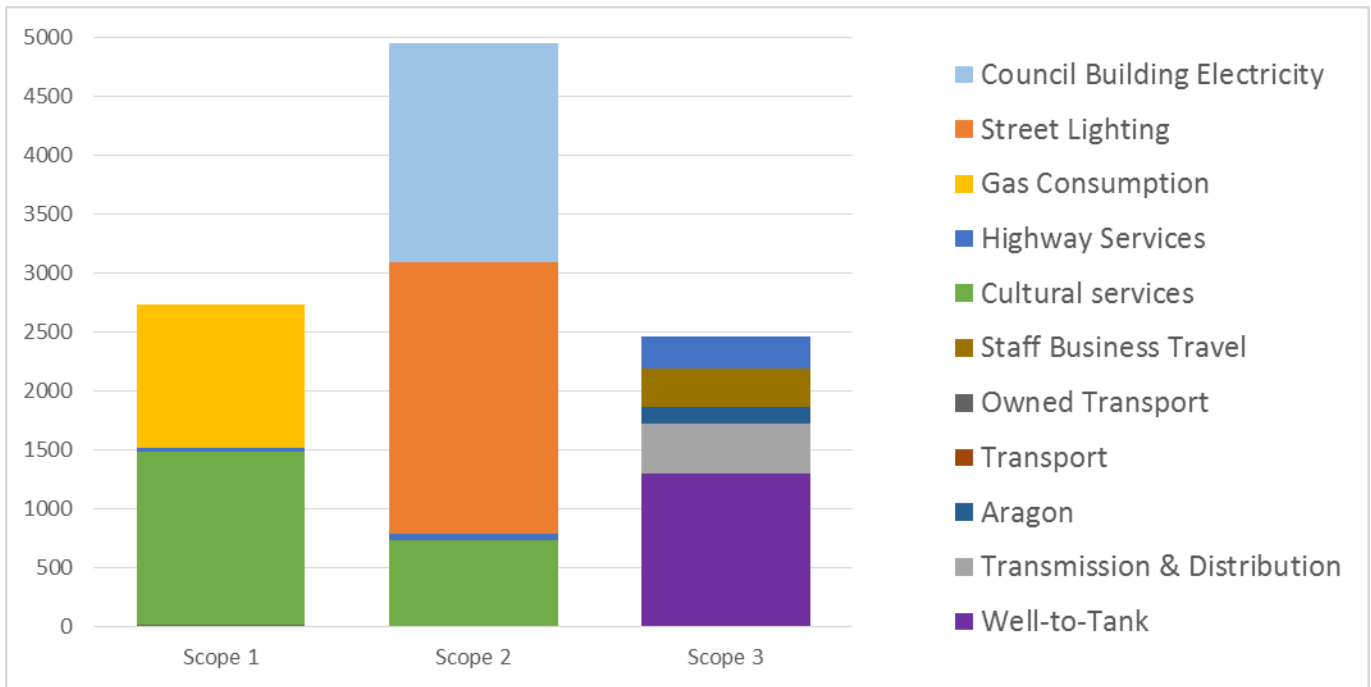


**Figure 5: Emissions by business area, 2018-19**

The largest single contributing area is street lighting which emitted approximately 2,199 tonnes of CO<sub>2</sub>e, closely followed by cultural services at 2,310 tonnes of CO<sub>2</sub>e. The largest single contributing building is the Regional Pool which emitted approximately 774 tonnes of CO<sub>2</sub>e, closely followed by Town Hall at 625 tonnes of CO<sub>2</sub>e.

<b>GHG Emissions (Tonnes CO<sub>2</sub>e)</b>	<b>Scope 1</b>	<b>Scope 2</b>	<b>Scope 3</b>	<b>Grand Total</b>
<b>Buildings &amp; utilities</b>	<b>2,719</b>	<b>4,950</b>	<b>1,572</b>	<b>9,242</b>
Electricity for Council Buildings	-	1,855	-	<b>1,855</b>
Electricity for Street Lighting	-	2,310	-	<b>2,310</b>
Gas Consumption	1,223	-	-	<b>1,223</b>
Cultural services	1,468	730	-	<b>2,199</b>
Highway services	27	54	16	<b>197</b>
Aragon Direct Services	-	-	9	<b>9</b>
Well-to-tank emissions for fuels used	-	-	1,117	<b>1,117</b>
Electricity Transmission & Distribution	-	-	422	<b>422</b>
<b>Transport</b>	<b>16</b>	<b>0</b>	<b>2,291</b>	<b>2,307</b>
Highway services	-	-	254	<b>254</b>
Aragon Direct Services	-	-	1,265	<b>1,265</b>
Owned Transport	16	-	-	<b>16</b>
Staff Business Travel	-	-	328	<b>328</b>
Well-to-tank emissions for fuels used	-	-	445	<b>445</b>
<b>Waste</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>9</b>
Council Building Waste Disposal	-	-	9	<b>9</b>
<b>Grand Total</b>	<b>2,735</b>	<b>4,950</b>	<b>3,863</b>	<b>11,549</b>

**Table 2: Breakdown of emissions, tonnes of CO<sub>2</sub>e**



**Figure 6: Breakdown of emissions by scope and type, tonnes of CO<sub>2</sub>e**

### 2.2.1 Intensity Ratios

Intensity ratios express the GHG impact per unit of physical activity or unit of economic value. The intensity ratio that is most relevant to the Council’s emissions is tonnes of CO<sub>2</sub>e per full time equivalents. The Council employed 954 FTE in 2018/19 which equates to an intensity measure of 8.06 tCO<sub>2</sub>e/FTE (scope 1 and 2 only).

However, it should be noted that the Council deliver some of its services via 3<sup>rd</sup> party arrangements and the FTE for these services is not included i.e. Aragon. In addition the Council is also delivering a number of services via partnership arrangements with Cambridgeshire County Council which will affect the overall FTE.

## 2.2.2 Defining the Scope

The starting point for carbon management is to accurately establish the emissions baseline. The scope of the baseline includes the required types and sources of emissions over a defined timescale. The baseline is a fixed point against which a reduction target can be set and future performance monitored.

Emissions-releasing activities are classified into three groups known as scopes. These, their relevant associated activities, are defined in the GHG Protocol Corporate Standard as follows:

Scope	Definition / Activity
<b>1 (Direct)</b>	<b>Emissions from sources that are owned or controlled by the organisation</b>
Fuels	Fuel sources combusted at a site or in an asset owned or controlled by the organisation.
Passenger vehicles	Travel in cars and on motorcycles owned or controlled by the organisation.
Delivery vehicles	Travel in vans and heavy goods vehicles that are owned or controlled by the organisation.
<b>2 (Indirect)</b>	<b>Emissions that are a consequence of the organisation's operations, but occur from sources owned or controlled by another company</b>
Electricity (grid)	Electricity used by an organisation at sites owned or controlled by them.
<b>3 (Other Indirect)</b>	<b>Emissions that are a consequence of the organisation's operations, which occur at sources which they do not own or control</b>
Well-to-Tank (WTT): Fuels	Upstream emissions associated with extraction, refining and transportation of the raw fuel sources to an organisation's site (or asset) prior to their combustion.
Transmission and distribution (T&D)	Emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the organisations that purchase it).
Well-to-Tank (WTT): Electricity	Upstream emissions of extraction, refining and transportation of primary fuels before their use in the generation of electricity.
Air business travel	Individuals flying for work purposes.
Well-to-Tank (WTT): Air business travel	Upstream emissions associated with extraction, refining and transportation of the aviation fuel to the plane before take-off.
Land business travel	Travel for business purposes in assets not owned or directly operated by the organisation.
Well-to-Tank (WTT): Passenger vehicles	Upstream emissions associated with extraction, refining and transportation of the raw fuels before they are used to power the transport mode.
Well-to-Tank (WTT): Delivery vehicles	Upstream emissions associated with extraction, refining and transportation of the raw fuels before they are used to power the transport mode.
Well-to-Tank (WTT): Land business travel	Upstream emissions associated with extraction, refining and transportation of the raw fuels before they are used to power the transport mode.
Hotel stays	Overnight hotel stays for work purposes.
Managed assets: Vehicles	Managed assets conversion factors for vehicles should be used to report emissions from vehicles that are used by a reporting organisation, but are not owned by them.

**Table 3: GHG Emission scopes and associated emission releasing activities (BEIS,2019a)**

THE ORGANISATIONAL BOUNDARY

In order to produce this Carbon Management Action Plan it is essential to accurately establish the scope of the operations on which our organisation will report. This process is known as defining the organisational boundary.

This means establishing what activities and functions are counted (or 'in scope') for the purpose of determining the Council's overall emissions, and by default what activities and functions are not counted ('out of scope'). This stage of the process involves reviewing the Council's operations to determine activities that give rise to carbon emissions.

In cases where the organisational structure is straightforward, reporting would include the impacts from everything that is owned and operated by the organisation. However, as a unitary authority with third parties, the Council has a complex organisational structure whereby some entities are only part-owned or part operated. It is therefore not possible for the council to simply apply the financial or the operational control<sup>10</sup> boundaries. Instead the Council has defined its boundary in order to ensure that it captures emissions from the full scope of the services it is responsible for as outlined in figure 4 below.



Figure 7: Peterborough City Council organisational boundary

We have determined that it is appropriate to include the following sources (though as a reminder, we have purposely excluded schools as all schools are going to be covered by their own separate Action Plan due in summer 2020):

<sup>10</sup> Operational Control Boundary. Recognised boundary setting approach as defined in the GHG Protocol reporting guidelines.



Scope	Typical activities for a local authority organisation		Identified Council emission sources
1	Stationary	Production of electricity, heat or steam	<ul style="list-style-type: none"> <li>Gas used in Council Offices and sites <i>i.e. Town Hall, Sand Martin House, Dodson House etc.</i></li> <li>Gas used in buildings operated by Vivacity</li> </ul>
	Mobile	Transportation of raw materials/ waste	<ul style="list-style-type: none"> <li>Travel in vans and heavy goods vehicles operated by the Council</li> <li>Travel in vans and heavy goods vehicles operated by Vivacity</li> </ul>
	Fugitive	Hydrofluorocarbons (HFC) emissions during use of refrigeration and air-conditioning equipment	<b>Excluded (see below)</b>
2	Stationary	Consumption of purchased electricity, heat or steam	<ul style="list-style-type: none"> <li>Electricity used in Council Offices <i>i.e. Town Hall, Sand Martin House, Dodson House etc.</i></li> <li>Renewable energy generated at Council sites</li> <li>Electricity used in street and car park lighting which also includes road signs and illuminated bollards</li> <li>Electricity used in buildings operated by Vivacity</li> <li>Renewable energy generated at Vivacity sites</li> </ul>
3	Stationary	Production emissions from purchased materials	<b>Excluded (see below)</b>
	Process	Process emissions from purchased materials	<b>Excluded (see below)</b>
	Mobile	Transportation of raw materials/ products/ waste, employee business travel, employee commuting	<ul style="list-style-type: none"> <li>Staff business travel and accommodation</li> <li>Employee commuting – <b>Excluded (see below)</b></li> <li>Vivacity, Skanska and Aragon staff business travel and accommodation</li> <li>Buildings and fleet used to deliver services by Skanska and Aragon</li> </ul>

**Table 4: Identified Council related emissions in relation to typical GHG emissions for service sector / office based organisations (WRI/WBCSD, 2004)**

### 2.2.3 Excluded Emissions

In addition to those sources detailed above there are other areas which give rise to emissions that the Council feel should be included but for which, at this time, insufficient detail is held to enable them to be included:

#### SCOPE 1

- **Refrigerants** – Leakage from air-conditioning and refrigeration units can release gases into the atmosphere that have a global warming potential. At present this data is not available, however going forward the Council will look to find methods to record and report this information.

#### SCOPE 3

- **Water supply and treatment** – Whilst the energy used to heat water is included, what is not included is the energy used relating to cold water. Even cold water has an emissions implication through the treatment and pumping process from source (e.g. reservoir) to tap. It was decided that the emissions contribution from water consumption would be too small to justify the extra reporting burden at this first action plan

stage, especially given that there is no existing reporting structure and the relatively limited volume of water consumed by the Council.

- **Waste Disposal** – This plan deliberately excludes emissions arising from waste treatment. The Council currently collects approximately 87,500 tonnes of municipal waste from homes across the city each year and this is treated in a number of different ways dependent on the type of waste. Details on this source of emissions will be included in the Peterborough Wide Carbon Management Action Plan which will be published later in 2020. The rationale for this decision is that this waste is a citywide resource, some of which currently generates enough electricity to power over 16,000 homes through the Energy Recovery Facility, and therefore this opportunity to offset emissions should be accounted for on a citywide level.
- **Waste production** – The Council produces waste as part of the day to day operation of its services i.e. general office waste and through the delivery of some of its services such as highway maintenance. At the time of writing this plan it was not possible to include emissions arising from these sources but this will be calculated and included moving forward.
- **Purchased materials** – By far the biggest ‘exclusion’ relates to the purchasing and use of goods, and the consequential ‘embodied energy’ of such goods. Embodied energy is a complex area, but in simple means the energy used to make and distribute goods, before such goods are actually used. The following text box gives an example to illustrate the point:

### *The CO<sub>2</sub> emissions arising from printing – an example of ‘embodied energy’*

Like most organisations, Peterborough City Council undertakes a large volume of printing. Whilst the Council has made huge strides to reduce such printing over recent years, reducing usage by approximately 20% from 5,694 boxes of paper in 2017 to 4,573 in 2019, there is some printing that must still take place. The electricity used by the printers operated by the Council will be counted in the emissions data described in the table on the previous page. However, what will not be counted will be energy used to manufacture the printing machine in the first place, or the transportation costs of delivering the printer. This energy that has been consumed before the printer has ever been used is known as ‘embodied energy’. Similarly, the paper which is used by the printer is also not counted, despite each sheet of paper having an element of ‘embodied energy’ within it from the manufacturing and distribution process.

The Council would like to include emissions arising from such embodied energy, but in practice it cannot (or at least presently it cannot) because the information is simply not available. The Council has no way of knowing what the embodied energy of a new printer is, or the difference between printers when a new one is being purchased.

To put this issue into context, it is estimated that globally around half<sup>11</sup> of all GHG emissions arise from the manufacturing and distribution of goods, with such energy therefore embedded within goods that we all purchase, before we ever use them. The Council accepts that not including such embodied energy within this Action Plan is a considerable flaw in the robustness of what it is trying to achieve. As such, the Council is committed to: pressure government to put in place measures so that manufacturers clearly set out the embodied energy content of the goods that they produce; and collate data detailing the goods and services purchased by the Council to begin to enable this crucial area to be understood.

In the meantime, whilst the Council is not formally monitoring the embodied energy emission implications of the goods it purchases, it has set up a ‘Carbon Impact Assessment’ process, a process which all decisions taken by the Council must go through. Within that process, the embodied energy implications have to be recorded to the best of the ability of the person recommending or making the decision.

- **Employee commuting** – Whilst the emissions relating to employees travelling for the purposes of work, to and from meetings for example, is included within this report, the emissions arising from employees travelling from home to work are not included. This approach is accepted as part of the GHG guidance and these emissions will broadly be captured as part of the District-CMAP.
- **Peatland** – Between 60-80% of wasted peatland in the UK is located within Cambridgeshire with estimated carbon emissions of up to 5.5 MtCO<sub>2e</sub> (5). Peatland degradation is an international challenge and Cambridgeshire is well placed to lead nationally. It can build on the work of The Wildlife Trust at Great Fen, The National Trust at Wicken Fen and collaborate with the Agri-businesses to find solutions of international interest. The Council holds a farm estate of approximately 3,000 acres, a proportion of which is comprised of peatland soils. At this stage there is no data available to include in this plan but the Council is committed to not only understand the emissions arising as a result of its agricultural land but to seek opportunities to reduce emissions both through revised land management practices and development of energy projects, to bring forward local decarbonised heat and power.

<sup>11</sup> Worldwide, 45% of GHG emissions arise from producing the cars, clothes, food, and other products. (Ellen MacArthur Foundation, 2019)

- **Passenger transport** – the Council support a number of passenger transport services including: Call Connect, Community Link, some Stagecoach services, home to school transport and transport for adult social care. The Council has not historically collected sufficient data to enable the carbon emissions arising from these services to be calculated but this will now be collected and included moving forward.
- **3<sup>rd</sup> parties** – emissions relating to some 3<sup>rd</sup> party organisations including NPS Peterborough Limited, Medesham Homes LLP and Limited, Opportunity Peterborough (OP), the Peterborough Investment Partnership LLP (PIP), have not been included in this plan because no data is currently available.

However, for future editions of this Action Plan we intend to make all of these areas ‘in scope’, therefore taking responsibility for the emissions arising from the products we use, our water, waste passenger transport and the Council’s farm estate.

### 2.2.4 Data Collection

The energy data used to calculate the baseline was gathered from different sources including: invoices received by the Council, annual energy statements from utility providers, property services and third party providers (i.e. Aragon and Skanska). Work continues to ensure that this data is robust and systems are in place to ensure ongoing timely and accurate collection of such data.

Energy Type	Source	Data Quality/Estimation techniques
Gas	Energy invoices and Annual Energy Statements from different suppliers.  Collated data from third party providers.	Where estimations have been used records are held with source data.  Methods include: Annualising consumption or average data calculated using bookended data.
Passenger vehicles	Staff mileage claims, fuel purchased and vehicle log books.	Annualising consumption where required
Delivery vehicles	Fuel purchased and vehicle log books	Annualising consumption where required
Electricity	Energy invoices and Annual Energy Statements from different suppliers.  Collated data from third party providers.	Where estimations have been used records are held with source data.  Methods include: Annualising consumption or average data calculated using bookended periods.
Renewable Energy	Online renewable energy portal	N/A
Business travel	Capita data records	N/A

**Table 5: Source of data by energy type**

### 2.2.5 Calculating the Baseline

#### CONVERSION FACTORS

To calculate what your CO<sub>2</sub>e emissions are, it is necessary to convert the ‘raw’ data (such as kWh of electricity used) into CO<sub>2</sub>e emissions. This process is relatively straight forward, using what are known as ‘conversion factors’.

The carbon conversion factors used for this Action Plan are the 2018 UK Government published carbon conversion factors (BEIS, 2019b), except where there is no appropriate emissions factor given, or a more accurate conversion factor is available. Where this is the case it will be stated. The Council will use the most up to date conversion factors each time it updates this plan or produces an annual report.

The key conversion factors used are as follows:

Energy Type	Conversion factor
<b>Fuels</b>	
Natural Gas	0.18396 kg CO <sub>2</sub> e / kWh (Gross CV)
Burning Oil	0.24665 kg CO <sub>2</sub> e / kWh (Gross CV)
Gas oil	0.27652 kg CO <sub>2</sub> e / kWh (Gross CV)
LPG	0.21448 kg CO <sub>2</sub> e / kWh (Gross CV)
<b>Electricity</b>	
Electricity, generated, UK electricity	0.28307 kg CO <sub>2</sub> e / kWh (Gross CV)
<b>Passenger vehicles</b>	
Petrol (average biofuel blend)	2.20307 kg CO <sub>2</sub> e / litre
Diesel (average biofuel blend)	2.62694 kg CO <sub>2</sub> e / litre
Average diesel car	0.17753 kg CO <sub>2</sub> e / km
Average petrol car	0.18368 kg CO <sub>2</sub> e / km
Medium petrol hybrid car	0.11538 kg CO <sub>2</sub> e / km
Large petrol hybrid car	0.16134 kg CO <sub>2</sub> e / km
<b>Business Travel</b>	
Car - Average car, fuel unknown	0.18064 kg CO <sub>2</sub> e / passenger km
Air - Short-haul, to/from UK, average passenger	0.16236 kg CO <sub>2</sub> e / passenger km
Air - Domestic, to/from UK, average passenger	0.29832 kg CO <sub>2</sub> e / passenger km
Rail - National Rail	0.04424 kg CO <sub>2</sub> e / passenger km
Rail - London Underground	0.03760 kg CO <sub>2</sub> e / passenger km
<b>Hotel Stays</b>	
UK	26.4000 kg CO <sub>2</sub> e / room per night
UK (London)	24.7000 kg CO <sub>2</sub> e / room per night

**Table 6: Key GHG conversion factors (BEIS, 2019b)**

## 3 Decarbonisation Projects

The commitment to achieve net-zero carbon emissions across both the city of Peterborough and the Council's operations is a crucial yet momentous task. There is an indefinite list of changes required, many of which are only realistically feasible on a regional or national scale. However, there are realistic and practical actions that can be taken at a local level.

The following section of this report provides a breakdown of projects that the Council will seek to take forward. In order to make decisions on what projects to take forward, the Council has adopted the following key principles:

- Cost of the action proposed in relation to the CO<sub>2</sub>e saved (i.e. high CO<sub>2</sub>e saving per £ spent)
- Ease of implementing (easy / quick actions will make savings sooner)
- Public demonstration (whilst of less importance than other principles, by undertaking highly visual actions could stimulate others to also take action themselves)

### 3.1 Peterborough City Council's Projects

The Council has completed several projects in recent years that will have reduced carbon emissions. This is good news, and demonstrates the long term commitment this Council has to minimise its impact on the environment. However, being a leading Council over the years actually makes the task to reduce of emissions further and quickly harder – many of the 'easy' wins have already been taken. Some examples of what the Council has already implemented are as follows:

- In summer 2018 the Council introduced a policy of agile working. This has supported Council Officers to work remotely, significantly reducing the organisations requirement for office space. To put this into context, 18 months ago the majority of employees were located in either Bayard Place, the Town Hall or Manor Drive which amounted to approximately 21,000sqm. These staff are now predominantly based within 6,000sqm at the Town Hall and 5,000sqm at Sand Martin House, and with a smaller office space comes much reduced demand for heating. Since the initial relocation the Council has also sub-let the second floor of Sand Martin House, further reducing the energy demand of the Council's employees.
- In 2016 the Council commenced a project to convert the remainder of the city's street lanterns to energy efficient LED units. This included the LED conversion of circa 13,751 lighting and sign units along with approximately 3,301 illuminated bollards and lighting columns. It also included the changing of 501 subway lights and 262 wall-mounted lights with new LED fittings. This project was projected to achieve a 73% reduction in carbon emissions over 20 years. The energy used to illuminate the city's street lights will be monitored as part of this plan. The project was completed in autumn 2019 and therefore we anticipate seeing reductions in energy consumption when data for 2019/20 is available.
- Rationalised the number of printers/multi-functional devices that the Council operates by 21 as a result of the office relocation to Sand Martin House and a recent upgrade to the printers used.
- Installed solar PV on 35 operational sites which in 2018/19 collectively produced 847,966 kWh which would have otherwise been purchased from the national grid.
- Introduced technology to allow officers to undertake meetings remotely by joining conference calls, reducing the requirement to travel.
- Undertaken a staff travel survey and as a result provided electric pool bikes for staff at Sand Martin House.
- Aragon Direct Services, the wholly owned company of the Council responsible for waste collection and maintaining our parks and open spaces, has committed to testing alternatively fuelled vehicles and plant equipment and have recently replaced petrol fuelled leaf blowers with electric alternatives.

### 3.1.1 Committed Projects

The Council has already committed to undertaking, prior to preparing this Council-CMAP, a number of projects that will directly reduce carbon emissions. These projects already have funding in place and will happen or have already started to happen.

Project	Scope area	Project Details
Street Light Dimming	Street Lighting	<p>Following the LED street lighting upgrade programme the Council is now able to dim street lights. As part of phase one of the 2020/21 budget setting process a trial was proposed to dim lights in residential areas by 20 per cent between 9.30pm and 5am and on traffic routes by 20 per cent between 9pm and midnight, and by 40 per cent between midnight and 5am.</p> <p>In order to calculate the reduction in carbon emissions arising, officers have undertaken an assessment to quantify the change in energy demand and have converted this to CO<sub>2</sub>e which results in an estimated reduction of 183.7 tCO<sub>2</sub>e.</p>
Behaviour Change	Office and Transport	<p>The Council has an active network of 60 Change Champions representing all of the Council's various service areas. These individuals are responsible for raising awareness of key initiatives and embedding change across the organisation. A key focus for the Champions moving forward will be to develop and deliver a programme of behavioural change activities to result in actions that will directly reduce carbon emissions across the Council's estate. This programme of work commenced in December 2019 and a small budget has been allocated from the current Climate Change revenue budget to support this work.</p> <p>It is very difficult to quantify the emissions reduction that will occur as a result of this work and therefore no data has been included here. However the Carbon Trust estimate that savings of between 5 and 10% are achievable.</p>
Behaviour Change	All	<p>Cross Party Climate Change Working Group – at a meeting of Cabinet on the 18th of November a decision was made to establish a Cross Party Climate Change Working Group. The aim of this group is to aid a greater understanding of the key issues which the Council must consider, and the reasonable options that exist to address those issues, in respect of the climate emergency declaration.</p> <p>It is very difficult to quantify the emissions reduction that will occur as a result of this work and therefore no data has been included here.</p>

### 3.1.2 Near Term Projects

The Council is considering a number of projects that are anticipated to reduce carbon emissions. At this stage the full details of these projects are not yet known and/or budget not secured. The table below details these projects:

Project	Scope area	Project Details
Opportunity assessments	Offices	The Council has commissioned the NPS Group (who deliver the Councils Property Management Services) to undertake energy opportunity assessments for a number of its highest energy consuming sites including Sand Martin House, the Regional Pool and Clare Lodge. The aim of these assessments is to identify ways

		<p>in which emissions can be directly reduced through a range of measures including, for example, heating optimisation and renewable energy generation.</p> <p>At this stage we have not received completed assessments back from NPS so full details of the potential savings cannot be included here.</p>
Land Management	Estate	<p>The Council manages a rural estate of approximately 3,000 acres, much of which is understood to be comprised of rich peat-based soils. It is estimated that 60-80% of wasted peatland in the UK is located within the Cambridgeshire/Peterborough area (i.e. in simple terms, as peat is intensively farmed, it dries, degenerates, shrinks and ultimately emits large volumes of CO<sub>2</sub>e). There is significant potential not only to understand the emissions arising from the Council's farm estate activities but to seek opportunities to reduce emissions both through revised land management practices and the development of energy projects to bring forward local decarbonised heat and power. In time, it is possible for peatland areas to not only reduce their emissions but become 'carbon sinks', pulling CO<sub>2</sub> out of the atmosphere.</p> <p>Subject to securing sufficient funding the Council intends to undertake research to identify the potential opportunities. Until this research is undertaken there is no data available to indicate the potential savings.</p>
Mayors Car	Transport	As part of the Climate Emergency Declaration a commitment was made to consider options for changing the Mayor's car to an electric or hybrid. The current lease agreement expires in January 2021 and therefore alternative options will be considered prior to that date.
Renewable energy tariff	Offices and Street Lighting	As part of the Climate Emergency Declaration a commitment was made to achieve 100% clean energy across the Council's full range of functions by 2030. The Council is currently in the process of procuring a new energy tariff and as part of this process will undertake a cost comparison exercise to ascertain the feasibility of achieving exceeding this timescale. The carbon savings that would be achieved as a result of this will not be known until a suitable energy provider is identified.
Aragon fleet review	Transport	Aragon are in the process of undertaking a fleet review with the aim of moving the entire fleet to alternative fuels. An opportunity assessment is underway to ascertain the feasibility of this which suggests it is unlikely that it will be feasible to convert all vehicles at this stage. At this stage we have not completed the assessment so full details of the potential savings and associated costs cannot be included here.
Identify embodied carbon	Embodied Carbon	Skanska have developed a tool which allows the embodied carbon contained within their materials and processes to be quantified. The aim of this is to enable officers to plan, design and undertake schemes with more knowledge about the environmental impact of the projects they deliver and it is hoped that more sustainable i.e. products with lower levels of embodied carbon can be selected. At this stage no schemes have progressed completely through the process and therefore full details of the potential savings cannot be included here.
Lease out of Town Hall after refurb	Offices	During summer 2018 a significant proportion of Council Officers relocated to a new office at Sand Martin House. Subsequently, a refurbishment programme is taking place at the Town Hall in order to allow areas in both the north and south of the building to be leased out to a 3 <sup>rd</sup> party. The tenants will be directly responsible for their energy consumption and therefore the emissions will no longer be within the Councils scope.



Tree Planting	Estate	<p>The Council is already committed, within its Trees and Woodland Strategy, to: ensure that where a Council owned street tree is removed, it will be replaced on a one for one basis, using established nursery grown standard trees; and to achieve an overall 10% increase in canopy cover within the Council's direct control within the next 10 years the equivalent of a further 49.5ha of additional canopy cover or 4126 trees.</p> <p>As part of the Climate Emergency Declaration a commitment was made to increase tree planting and therefore the Council is committed to working with Peterborough Environment City Trust to determine whether a local carbon off-setting programme can be put in place, to fully take account of the carbon savings from tree planting and dramatically increasing the volume of trees that can be planted.</p>
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### 3.1.3 Medium Term Projects

The Council is committed to identifying further projects that require more research in order to ascertain individual feasibility and contribution to the overall target. At this stage it is not possible to calculate the initial cost of these projects or the timescale within which they will be completed. At this stage this includes the following opportunity areas:

Project	Scope area	Project Details
Renewable energy opportunities	All	Whilst the Council has already installed solar PV across 35 sites generating approximately 847,966 KWh in 2018/19 it acknowledges that in order to achieve the target of net-zero carbon emissions it will be necessary to generate more energy from renewable sources. As such the Council is committed to working with its partners to identify and develop further suitable opportunities. Initially this will include a project supported by BEIS to build upon feasibility work undertaken last year, to develop the design of a low carbon, local heat network.
Skanska bio fuels trial	Transport	Skanska, our highway maintenance partner, is currently undertaking a trial in another part of the country to ascertain the viability of utilising an alternative lower carbon fuel for their vehicle fleets. Estimations suggest that based on average data over a 12 month period if this trial was extended to Peterborough savings in the region of 150tCO <sub>2</sub> e could be realised. However there are currently practical and financial restrictions which prevent this being rolled out in Peterborough and therefore work is required to ascertain whether or not these can be overcome.
Skanska 'zero carbon compound'	Plant equipment	Skanska has committed to trial a new 'zero carbon compound'. This is basically an operational base used as the base location to undertake the construction of a major highways project. This involves the use of renewable energy infrastructure to power the facility and charge associated electrical equipment. Work is currently underway to identify a suitable scheme to undertake this trial in Peterborough.
Skanska fleet	Transport	Skanska has committed to undertake a review of their fleet in year six of their contract which will seek to upgrade all vehicles to Euro 6 classification and/or alternative fuels.

### 3.2 Projected achievement towards target

The projects detailed in this chapter provide an indication of how the Council could progress towards the net-zero target. It is clear however that the majority of these projects are not yet sufficiently quantified in order for the Council to understand the gap that needs to be closed in order to reduce emissions to net-zero. As such effort will focus over the coming months on addressing this gap giving consideration to a number of factors including the degradation factor - some projects with a short lifetime will only realise savings for a short period of time before returning to a business as usual scenario. For example, maintaining carbon reductions from a behavioural change project will require a continuation of momentum.

## 4 Carbon Management Plan Financing

This CMAP details an overall model for carbon management in the City Council. All projects implemented as part of this scheme will go through the Council's approval process, meeting project management controls and receiving expenditure approval in accordance with the budget setting process. It must be noted that these corporate controls are required regardless of eventual funding streams as the Council needs to ensure Value for Money is achieved.

Some schemes identified in Chapter 3 are existing projects and as such approval and funding for the schemes has already been agreed and is, where appropriate, detailed in the city Council's Medium Term Financial Strategy (MTFS). The Council has access to several potential funding streams and the choice of most appropriate funding will depend upon achievement of Value for Money. This will be assessed following the completion of a relevant business cases for individual projects. External funding will always be considered before the use of internal Council funds, and a dedicated team is available to help facilitate and maximise the funds applicable to the Council.

Some of the ways the Council may decide to fund the projects associated with the CMAP are:

- **Invest to Save:** The Council's capital programme contains funding for Invest to Save schemes. This budget is included on the basis that any projects funded via this budget will deliver savings to the Council. Business cases for future proposals are required to demonstrate how the cost of borrowing will be covered and show how the individual scheme is self-financing and so has no overall impact against the Council's financial position. Schemes will also be considered that maintain the medium term financial position (i.e. neither improve nor worsen the position), but contribute towards delivery of service improvements, or contribute to achievement of Council priorities.
- **Grants and Loans:** Some projects may be applicable for external funding, where the terms of the grant are complementary to the outcomes contained within the CMAP. External funding may be sought from existing grants or other climate change/energy efficiency related funds which are created as a result of the Climate Change Act to help encourage the transition to a low carbon economy. One such source is Salix, an independent social enterprise with public funding from the Carbon Trust (below).
- **Match-Funding:** Some grant awarding bodies, and other third-party funders might attach a condition that a proportion of funding of the total costs of a project comes from the Council.
- **Internal Resources:** This includes borrowing for capital schemes and the possible use of the Council's general fund reserve.

### 4.1 Salix Finance

The Council is in the process of considering funding from Salix Finance. Salix financing facilitates carbon reduction and loans a proportion of the investment necessary for energy efficiency technologies to be implemented in the sector. They offer two funding options:

#### OPTION 1: RECYCLING FUND

A recycling fund, whereby a public sector body is awarded a match funded interest free loan to fund a number of projects. The energy savings achieved through each project is recycled to fund more projects, always maintaining the value of the fund at a constant level. Money is returned to Salix only when no more suitable projects can be found.

#### OPTION 2: ENERGY EFFICIENCY LOAN SCHEME (SEELS)

The second option allows public sector bodies to apply for an interest free loan to finance up to 100% of a project, however these loans are targeted at specific projects, which when completed repay their costs to Salix from the

energy savings achieved. Repayments are required every 6 months over a period of 5 years. Before such funding is applied for the Council must ensure that Salix's strict criteria are met. Therefore it is not until the projects have been further defined and specific business cases formed that a full evaluation and view of appropriate funding can be taken.

## 5 Monitoring and Evaluation

This section details how the Council-CMAP will be governed, owned and managed. Successful implementation and ongoing delivery requires a robust, transparent governance procedure which will ensure strategic ownership of the Council's carbon reduction aims in line with the climate emergency declaration. This governance process will bring together the diverse range of projects undertaken throughout the Council which contribute to the organisation's overall environmental impact.

### 5.1 Identifying Projects

The Council is committed to identifying opportunities to reduce carbon emissions across all areas of its operations. In order to achieve this the Council has introduced the following:

- A core team of officers, representing key service areas, have been identified. These officers will meet informally on a regular basis in order to discuss their current workloads and forthcoming projects. This will allow early conversations about opportunities to reduce the potential carbon impact to take place.
- Decisions taken by the Council will now be subject to a Carbon Impact Assessment (CIA). This involves lead officers undertaking a review of their project/decision and considering what impact it will have on the Council's target to achieve net-zero carbon emissions. A summary of the CIA will be included in the governing report to enable the relevant decision maker to make an informed decision. The introduction of this process will also help to raise awareness of the challenge amongst officers and will lead to them considering the potential impacts earlier in the decision making process, for example, at the contract specification stage.
- Expanding the role of the Change Champions to ensure that Climate Change is a key activity. This will ensure that officers throughout the organisation have the opportunity to make suggestions for projects that could help to reduce carbon emissions.

### 5.2 Initiating Projects

Before any project gets off the ground the relevant Council Officer will ensure that all of the necessary procurement and governance steps are undertaken. Consideration will also be given, on a case by case basis, to any communication activity that may be required alongside any specific monitoring requirements.

### 5.3 Monitoring Projects

The impact of individual projects will primarily be monitored by collating data for all emissions sources that are within the organisational scope. This will be undertaken in line with the process set out earlier in this document. Where it is possible and feasible to do so individual projects will be monitored more frequently to ensure any deviation from projections are identified and addressed as soon as possible.

### 5.4 Reporting Progress

Each year the Council will produce an annual report detailing the emissions arising from all emissions sources within the organisations operational boundary. The Council will aim to publish this no later than the 31st of March each year.

## 5.5 Baseline Year Recalculation Policy

There may be circumstances under which it becomes necessary to recalculate our baseline year emissions. If significant changes were to occur - either within the Council's organisation or to recognised methodologies - it could challenge the validity of existing data. To mitigate this we have developed the following baseline year recalculation policy which will ensure that any significant changes are identified, measured for a recalculation threshold and processed accordingly:

Change scenario	Baseline year recalculation?
<b>Mergers, Acquisitions, Divestitures</b>	
Acquisition of (or insourcing) a facility that did not exist in the baseline year.	Potentially recalculate baseline year emissions depending on likely impact to be consistent with new approach, or correct errors
Disposal of (or outsourcing) a facility to another company.	Potentially recalculate baseline year emissions depending on likely impact to be consistent with new approach, or correct errors
Transfer of ownership/ control of emissions sources. This includes changes in lease status.	No base year recalculation required
<b>Organic Growth and Decline</b>	
Organic growth	No base year recalculation required
Organic decline	No base year recalculation required
<b>Changes in Quantification Methodologies / Errors</b>	
Changes in emission factors or methodologies (e.g. change in activity data) that reflect real changes in emissions (i.e. changes in fuel type or technology)	No base year recalculation required
Changes in measurement methodologies, improvements in the accuracy of emission factors/ activity data, or discovery of previous errors/ number of cumulative errors	Potentially recalculate baseline year emissions depending on likely impact to be consistent with new approach, or correct errors

**Table 7: Baseline year recalculation policy**

The Council will review the scope on an annual or biennial basis to ensure that data is collected from all relevant sources.

## 6 Stakeholder engagement

It is clear that the Council, working alone, cannot achieve the target of net-zero carbon emissions across both the geographical area of Peterborough and throughout the Council's own operations. Yet, the Council is committed to working in partnership in order to make this ambition a reality. As such the Council plans to work with the following stakeholders:

- **Cross Party Climate Change Working Group:** at a meeting of Cabinet on the 18 November 2019 a decision was made to establish a Cross Party Climate Change Working Group. The aim of this group is to aid a greater understanding of the key issues which the Council must consider, and the reasonable options that exist to address those issues, in respect of the climate emergency declaration.
- **Change Champions:** The Council has an active network of 60 Change Champions representing the Council's various service areas. These individuals are responsible for raising awareness of key initiatives and embedding change. A key focus for the Champions moving forward will be to develop and deliver a programme of behavioural change activities to result in actions that will directly reduce carbon emissions across the Council's estate. This programme of work commenced in December 2019 and a small budget has been allocated from the current Climate Change revenue budget to support this work.
- **Peterborough Climate Change Partnership (PCCP):** work is underway to launch a local climate change partnership meeting. This is likely to involve members of the local business community, residents, young people, Council officers and members. Discussions are underway with the local Leadership Forum to ascertain if their environment sub-group could act as a strong starting point for such a group.
- **Peterborough Youth Council:** this group of young people have agreed that they would like a significant proportion of their work to focus on addressing the climate emergency. As such the Council commits to working in partnership to deliver tangible action. One specific action suggested by the Youth Council may be to coordinate a Schools Conference.
- **Citizen Engagement:** whilst the above will enable certain members of the public to be involved in activities and offer views, the Council wants to set up a mechanism whereby wider citizen engagement can take place. This will commence with a city wide survey designed to gauge local opinion in order to ascertain priorities for local action. This could become an annual survey to gauge change in opinion, priorities and monitor progress. The survey could be followed by an annual seminar where people are able to listen to local, national and international experts, take part in activities, make personal commitments and feedback on progress being made locally. Alongside this the Council will ensure that: its website provides up to date and accurate information about its activities alongside a carbon calculator to allow individuals to quantify the personal impact; issue a regular e-newsletter to subscribers providing information on local citywide activity, and; continue to raise awareness of climate change through the local media.
- **Schools:** the Council sees schools as having a vital role to play in helping to meet our ambitious targets. Schools have a big direct carbon impact themselves (through, for example, their use of electricity, gas and materials consumption), but also a vital education and behavioural change role. As such, we intend to work with all schools (including those not under the direct control of the Council, such as academies) to prepare a bespoke action plan for schools (Schools-CMAP). In addition to this we will consider the possibility of launching a carbon saving competition to encourage schools to reduce their energy consumption.
- **Parish Councils:** similar to schools, the Council sees Parish Councils as having a vital role to play in helping to meet our ambitious targets. Parish Council generally have a relative low carbon impact themselves, but can have a vital role championing change within its local area. As such, we intend to work with a willing Parish Council to prepare a bespoke action plan (Parish-CMAP), that maximises the opportunities Parish Councils have within their statutory powers, with the intention that this will form the template for other Parish Councils to use.

- **Other Local Authorities:** We are working across borders, in particular with Cambridgeshire County Council (CCC), where sharing of resources and expertise is already taking place across a wide range of functions. CCC similarly declared a climate emergency earlier in 2019. The joint Director for Economy and Place, Steve Cox, has been given responsibility to coordinate actions to deliver both climate emergency declarations, thus ensuring a joined-up approach will take place across Cambridgeshire and Peterborough.

As part of the Climate Emergency declaration the Council committed to convene a Citizens Assembly. A citizens' assembly is a group of people who are brought together to discuss an issue or issues and reach a conclusion about what they think should happen. The people who take part are chosen so they reflect, it is intended, the wider population – in terms of demographics (e.g. age, gender, ethnicity, social class) and sometimes relevant attitudes. Citizens' assemblies give members of the public the time and opportunity to learn about and discuss a topic, before reaching conclusions. Assembly Members are asked to make trade-offs and arrive at workable recommendations and as such are expensive events to hold.

The UK Government has announced that a UK wide Citizens Assembly will take place in 2020. The Government wrote to 30,000 households in early November with the aim of selecting a representative sample of 110 people to attend events over four weekends from late January in Birmingham.

The Council has already committed to setting up a Citizens' Assembly, via the People and Communities Directorate, who have Commissioned CitizensUK to hold an assembly in 2021. That Assembly, it is intended, will not be instructed to include climate change as a matter upon which it wants to discuss and come to conclusions. But it might, if it so chooses. Setting up a second Citizens' Assembly in Peterborough, prescribed only to discuss climate change related matters, is possible, but would be expensive, officer time intensive and risk duplication and confusion with the Assembly already committed to be set up. As such the Council has opted to instead await to see if the already committed Citizen Assembly chooses to discuss climate change matters and in the meantime focus efforts on the other public engagement detailed in this chapter.



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