



To : Scrutiny Co-ordination Committee

Date:17th July 2019

Subject: Climate Change in Coventry

1 Purpose of the Note

- 1.1 To inform Scrutiny Co-ordination Committee of the current position of climate change in Coventry

2 Recommendations

- 2.1 Scrutiny Co-ordination Committee is recommended to:
- 1) Consider the steps being taken in Coventry to address climate change
 - 2) Identify any further recommendations for the appropriate Cabinet Member
 - 3) Identify any further work programme items for scrutiny, if required

3 Climate Change in Coventry

- 3.1 Key drivers - 2015 Paris Agreement and Climate Change Act 2008
- 3.2 The 2015 Paris Agreement, ratified by 185 parties including the UK, aspires to keep global warming between 1.5°C and 2°C. Meeting these commitments will require action from all signatories.
- 3.3 The UK's approach to tackling and responding to climate change is the Climate Change Act 2008, which set legally binding targets (five-year carbon budgets) on the UK to reduce greenhouse gas emissions by at least 34% by 2020 and to be net zero by 2050. The first three carbon budgets are on track – but off track to meet the fourth budget which runs from 2023 to 2027.
- 3.4 **1.5°C vs 2°C**
- 3.5 A global average temperature increase of 2°C is what many scientists consider the threshold for avoiding the worst of the impacts that climate change will bring about, but 1.5°C is a much safer level. Both the global and national impacts for these different temperature scenarios are given in the tables below. (see appendix1)

4 What will Climate Change mean for Coventry?

- 4.1 Coventry will not be exempt from the effects of climate change. Climate models suggest the likely outcome is that our summers will become warmer and drier, while our winters will become warmer and wetter. Weather extremes, like we saw in 2018 with the 'beast from the east' extreme cold snap followed by a hot, dry summer that broke temperature records, will also become more frequent, perhaps as often as every two years.

4.2 Weather conditions like this will likely make the working population, vulnerable groups and the elderly more susceptible to heat stress. There will be an increased risk of flooding. Across the West Midlands there are more than 300 power and gas stations at risk of flooding, which could leave homes and businesses without electricity and water. However, there will also be opportunities. For businesses, this will be through the provision of new weather proofing technologies and products for buildings. For residents, this will mean cheaper energy bills, reduced fuel poverty and less winter deaths. These are just a few of the many impact's climate change will have.

5 Coventry's carbon emissions

- 5.1 Coventry's Climate Change Strategy published in 2012 set a target to reduce carbon dioxide emissions by 27.5% by the year 2020. Coventry achieved this in 2014 (six years early).
- 5.2 In 2016 the City's emissions were 1.3 million tonnes CO₂e, the equivalent to 383,651 homes' energy use for one year. This is a 35.45% reduction from 2005.
- 5.3 To ensure Coventry contributes to the 2016 Paris Agreement the city has a carbon budget of 8.4 million tonnes CO₂ for 2020-2100. If the city continues to use 1.3 million tonnes CO₂ per year, we will have used our entire carbon budget by 2027 and we will not be able to contribute to the UK's commitment to meet the aspirations set out in the Paris Agreement, or indeed the UK's own target to be net zero by 2050.

6 Key players in Coventry

Educational

- Coventry University*
- University of Warwick*
- Schools and Colleges

Utilities

- Severn Trent*
- E-On

Power

- Western Power*
- Cadent*
- Engie
- National Grid

Transport

- National Express
- Virgin

Automotive Manufacturing

- Jaguar Land Rover*
- LEVC

Infrastructure

- CSWDP
- BIC

Housing

- Orbit
- SHAP

- Whitefriars
- Housing developers

Health

- UHCW*
- Public Health England
- Coventry and Warwickshire Partnership NHS Trust

Industry

- Amazon
- McDonalds Distribution Centre
- Sainsbury's Ansty

Community

- Community Groups
- Third Sector – charities
- Residents
- Businesses

Regeneration and Culture

- Historic Coventry
- City of Culture 2021
- WWT

**Indicates major stakeholders who will be integral to the success of addressing climate change in Coventry.*

7 What is Coventry City Council's role?

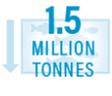
- 7.1 Coventry City Council is well placed to make a real difference on the ground within our own operations and within our sphere of influence.
- 7.2 We must provide leadership and set an example by reducing carbon in our own assets and operations as well as implementing low carbon procurement policies. We will facilitate stakeholder engagement through raising awareness and stimulating carbon reduction action in developing a new climate change strategy. We will set planning policy and land-use development conditions so that emissions from the built environment are reduced. We will also act as central resource portal, providing climate change guidance, education, and funding for project implementation, where available. Above all else though, we must be accountable and transparent.
- 7.3 How are we going to tackle Climate Change?
- 7.4 Coventry's current Climate Change Strategy expires at the end of 2020 and work is already underway to ensure the new strategy reflects the ambition and urgency that is needed to achieve net zero emissions. Developing this new strategy will be split into two phases. New strategy will be split into two phases
- 1) The new Climate Change Strategy (6 months)
 - Including new internal policies and revised carbon management plan
 - 2) The development of a city-wide Climate Change Action plan (0 - 2 years)
- 7.5 The Strategy will cover the following themes:
1. Domestic – includes improving the thermal efficiency of homes, reducing fuel poverty and encouraging innovation.

2. Transport – includes improvements to public transport and walking/cycling infrastructure.
 3. Industry – includes improving the efficiency of buildings/processes, better carbon management in schools and a carbon trading platform for businesses.
 4. Environment – includes sustainable procurement, enhanced biodiversity, sustainable food and driving behaviour change.
 5. Education & Skills - upskilling, STEM subjects
 6. Energy – includes the development of an Energy innovation Zone, increased use of renewables and feasibility studies for new solutions e.g. mine water for heating/cooling.
- 7.6 Although Environment, Energy and Education & Skills are a themes on their own, they will underpin the entire strategy. For example, sustainable procurement and behaviour change can be applied across all the themes. We hope to have the detailed action plan ready in 2021.

Appendix 1

HALF A DEGREE OF WARMING MAKES A BIG DIFFERENCE:

EXPLAINING IPCC'S 1.5°C SPECIAL REPORT

	1.5°C	2°C	2°C IMPACTS
EXTREME HEAT Global population exposed to severe heat at least once every five years	 14%	 37%	2.6x WORSE
SEA-ICE-FREE ARCTIC Number of ice-free summers	 AT LEAST 1 EVERY 100 YEARS	 AT LEAST 1 EVERY 10 YEARS	10x WORSE
SEA LEVEL RISE Amount of sea level rise by 2100	 0.40 METERS	 0.46 METERS	.06M MORE
SPECIES LOSS: VERTEBRATES Vertebrates that lose at least half of their range	 4%	 8%	2x WORSE
SPECIES LOSS: PLANTS Plants that lose at least half of their range	 8%	 16%	2x WORSE
SPECIES LOSS: INSECTS Insects that lose at least half of their range	 6%	 18%	3x WORSE
ECOSYSTEMS Amount of Earth's land area where ecosystems will shift to a new biome	 7%	 13%	1.86x WORSE
PERMAFROST Amount of Arctic permafrost that will thaw	 4.8 MILLION KM²	 6.6 MILLION KM²	38% WORSE
CROP YIELDS Reduction in maize harvests in tropics	 3%	 7%	2.3x WORSE
CORAL REEFS Further decline in coral reefs	 70-90%	 99%	UP TO 29% WORSE
FISHERIES Decline in marine fisheries	 1.5 MILLION TONNES	 3 MILLION TONNES	2x WORSE