

Crawley Borough Council

Climate and Ecological Emergency Action Plan – September 2021

Core Principles for Action

Introduction -The Global Climate Change and Ecological Emergency

Human activity is disrupting our climate and people across the world are suffering the impacts of global heating now. We have all seen media reports this summer of the high temperatures and devastating fires in Greece, North America, Siberia and Australia, and on flooding in China, Germany and even in this country. While unprecedented droughts, fires and floods are leading to broken food supplies and migration of populations in the global south. Although these are reported less prominently they are becoming an increasingly worrying reality.

This is happening at a current 1.1 degree Celsius increase over pre-industrial temperatures. Current and planned activity so far will take the temperature to well over 3-4 degrees this century¹ and condemn most of the planet to become uninhabitable.

Following publication of the recent key 2021 IPCC² report on the science of climate change, the head of the UN has described the world as on 'Code Red for humanity'.

Ecological destruction is related to climate change, but in itself is likely to be just as damaging to humanity. The UK is one of the most ecologically depleted countries in the world³ and its biodiversity is declining. As well as affecting our quality of life and health, nature supports food production, material sourcing and mitigation of extreme weather conditions. Nature also sequesters carbon in its trees and soils. These provide a store which, if destroyed, further releases carbon, adding to global heating.

We are in the decisive decade.

We are now beyond taking small measures while generally carrying on with 'business as usual'. Deep cuts in greenhouse gas emissions are needed quickly to stabilise rising temperatures alongside rethinking agriculture and land use to restore ecosystems. This will impact on all aspects of our lives.

Decisions we make now will determine whether or not we are subject to catastrophic climate and ecological impacts or can transition to a stable and sustainable world. These decisions must be taken at all levels of society, and as a local authority we have a critical lead role to play in driving down carbon emissions at the local level and encouraging others to follow suit.

A. Purpose:

This paper outlines the core principles to underpin action on carbon reduction that will be adopted in developing the Climate Emergency Action Plan. They have been agreed by the Climate Emergency Advisory Group.

B. Our commitment:

Crawley Borough Council (CBC) declared a Climate Emergency in July 2019, and pledged to reduce carbon emissions from our workings and activities by at least 45% by 2030 and to zero before 2050.

C. Action on climate so far:

CBC has been working to reduce its carbon emissions since 2009, most recently through the Carbon and Waste Reduction Strategy 2012 – 2050.

CBC's Scope 1 (on-site direct) and Scope 2 (off-site indirect energy supply) carbon emissions from energy use in buildings and transport have been determined and reported annually since 2009 (apart from 2014 and 2018). The figure below shows the generally downward trend in emissions over the past 10 years.

These carbon reductions were achieved through, for example:

- Crawley Homes - energy efficiency *retrofit* programme (loft, cavity and solid wall insulation, and solar PV installation)

- Crawley Homes - energy efficient *new build* homes including Passiv Haus

- LED lighting upgrades in the Town Hall

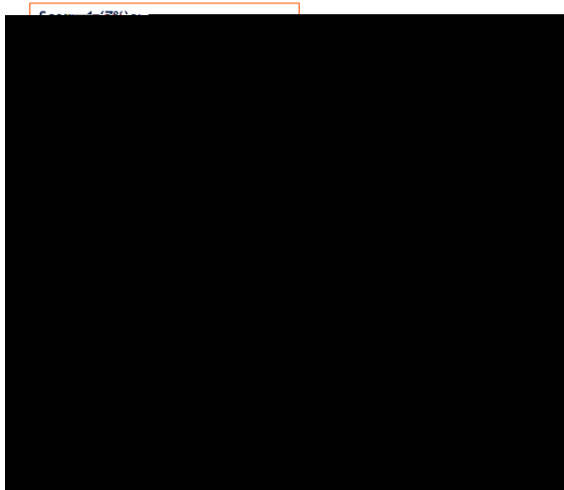
The District Heat Network installation that will contribute 100 tCO₂ towards the borough's carbon reductions from 2022 onwards, with 30% of the reductions associated with the new Town Hall.

Additionally, behaviour change campaigns, particularly tackling transport and waste, have been run periodically, with harder-to-measure impacts.

The carbon emissions from CBC electricity use will additionally have reduced annually in line with the general decarbonisation of the electricity supply through the national grid.

D. New Baseline Audit:

After the declaration of the Climate Emergency, a new baseline audit (Appendix A) was commissioned in early 2020. The declaration asked us to look at the Council's workings and activities, so the audit was extended to cover a wider scope than in previous years. It also included our Scope 3 (indirect, supply chain and transport) emissions to highlight CBC's wider impact through the consumption of goods and services.



In order to meet our carbon reduction targets of at least 45% reduction by 2030 (working from the new 2019 baseline), we need to reduce our emissions by
1434 tCO₂ total per annum
of which 189 tCO₂ per annum is from buildings energy use and CBC business transport

This carbon reduction trajectory is illustrated in the figure below, showing the significance of Scope 3 emissions.

Crawley Borough Council commissioned consultancy Anthesis to help with the audit and produce a ['Climate Emergency Support'](#) evidence base, which was presented to CMT. This sets out the scale of change needed to meet our own carbon reduction targets as a Council, and models possible carbon emission reduction pathways for the borough as a whole to help us plan our own Climate Emergency response.

Anthesis used the SCATTER tool⁴ to test different packages of interventions. These illustrated the potential to dooheseClgntresont,h w

E. Core Principles for Action:

Our carbon emissions can be grouped into six key areas for action within each of which

strategy for heat is expected this year). Reducing our gas demand and moving to low carbon heating and cooling technologies for our buildings will be key.

- 1.3 Stop investing in technologies now that leave a carbon legacy** – We can only achieve the carbon reductions needed if we recognise and stop pursuing the path that has led us to the climate emergency. We also know that retrofitting to correct old systems will be far more costly in the long run than investing in low carbon technologies now. The legacy of carbon embodied in infrastructure also needs to be recognised which means that durability, selecting lower carbon materials and conserving structures will be important considerations. The sooner we adopt a low carbon culture, the greater will be the carbon savings.
- 1.4 Promote & support innovation in delivery of low and zero carbon energy** – CBC should lead by example to exert wider influence to deliver carbon reductions across the borough. This means adopting low carbon systems in council operations, broadcasting these measures and supporting initiatives to enable transition for businesses and residents. Identifying new skills, training practices and product design through the planned Innovation Centre will support this and skilled jobs.

2. Renewable Energy & Storage

- 2.1. Invest in renewables on our own estate** - moving away from gas for our heating, and also a shift towards electric for our transport will mean an increase in our reliance on electricity. CBC will subscribe to a green, renewables grid tariff. However, although decarbonisation of the national electricity grid has increased rapidly in recent years, with 2019 being the first year that renewable energy sources provided more electricity to UK homes and businesses than fossil fuels, the renewable contribution varies and the electricity grid is not predicted to be 100% by 2030. Generating renewable energy on site will not only help us reach

networks by investing in off-site renewables, ideally within the local area to ensure local resilience and continuity of supply. This may be an investment opportunity.

3. Low Carbon Transport and Equipment

Core Principles:

- 3.1. Reduce total mileage travelled
- 3.2. Necessary travel/transport will be by low carbon modes, always prioritising active and shared travel
- 3.3. Rationalise and decarbonise tools and machinery

- 3.1. **Reduce total mileage travelled** – as with energy for buildings, we first need to reduce the amount of fossil fuels we use by reducing the need for travel and transportation. The aim will be to reduce the number of vehicles required – which represent significant embodied energy as well as cost.
- 3.2. **Necessary travel/transport will be by low carbon modes** prioritising walking, cycling, public transport and using low carbon vehicles only, where necessary. This provides a flexible transport mix that is fit for purpose and has added benefits for staff health and wellbeing and air quality. We will investigate the most appropriate technologies across our fleet. A particular challenge is specialist vehicles, like the waste fleet which contributes a significant proportion of transport emissions.
- 3.3. **Decarbonise tools and machinery** – in line with decarbonising vehicles, we will review options for decarbonising tools and machinery. This will involve seeking mechanical rather than power tool solutions and a review of processes using powered equipment.

4. Waste & Water

Core Principles:

- 4.1. Prioritise minimising resource use, reducing waste creation including reduction in water use
- 4.2.

- 4.1. **Prioritise minimising resource use, reducing waste creation including reduction in water use** – avoiding unnecessary products, especially disposables and packaging and consider durability, longevity and sharing economy. Ensure systems conserve water, noting that water supply and disposal demand significant energy.
- 4.2. **Adopt circular economy principles and follow the waste hierarchy** of resource Reduction and Reuse *before* Recycling, including use of waste water – despite some mainstream recognition of the three 'R's, the focus still tends to be on recycling and disposal. A circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and

Applying principles to develop the action plan:

Alongside these core principles

Appendix 1: Carbon Audit – 2018/19

Emission Source	Activity Data	Unit	tCO ₂ e	% of total emissions
Natural Gas	3,121.0	M	14.3	0.3236
[Redacted]				
[Redacted]				
[Redacted]				
[Redacted]				