Crawley Borough Submission Local Plan 2024 Topic Paper 6:

Climate Change

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Contents

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1. Introduction

1.1

potential is recognised in the overall framework set in adopted Policy SD1, as well as the inclusion of Policy CH4 in the adopted Local Plan. In this context, the adopted Plan's transport relat

2.3.2 The Planning and Compulsory Purchase Act 2004 (as amended):

- Section 19(1A) of the Act requires that a local authority's development plan documents must '(taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change.'
- Section 33A of the Act places local planning authorities under a duty to cooperate with other local planning authorities in preparing Local Plans, where strategic matters have impacts across administrative boundaries.

2.3.3 The Climate Change Act 2008 sets a framework for climate change mitigation and adaptation, including a binding carbon target, carbon budgets, and the establishment of the Committee on Climate Change (now renamed the Climate Change Committee) as an independent advisory body. The Act was amended in 2019 to include target of net zero greenhouse gas emissions by 2050.

2.3.4 The Planning & Energy Act 2008 made provision to allow local plans to impose reasonable requirements for:

- A proportion of energy used in development in their area to be energy from renewable sources in the locality of the development;
- A proportion of energy used in development in their area to be low carbon energy from sources in the locality of the development;
- Development in their area to comply with energy efficiency standards that exceed the energy requirements of building regulations.

The Deregulation Act 2015 included a provision removing the third of these capabilities, subject to a further statutory instrument. No such statutory instrument has as yet been made and all of these powers remain in force.

2.3.5 The Environmental Assessment of Plans and Programmes Regulations 2004 transposed into UK law the Strategic Environmental Assessment Directive of the European Union, setting out requirements for how plans and programmes falling within the scope of the Regulations should assess their impact on the environment, including climate change mitigation and adaptation.

2.3.6 The Building Regulations and associated Approved Documents set technical standards for building work, including aspects of environmental performance. These

terms of 'Sustainable Development', which is comprised in three 'overarching objectives, which are interdependent and need to be pursued in mutually supporting ways':

- an economic objective
- a social objective
- an environmental objective

National Policies relevant to climate change mitigation and adaptation are set out throughout the NPPF, including notably in chapters 9: Promoting sustainable transport; 11: Making effective use of land; 14: Meeting the challenge of climate change, flooding and coastal change; and 15: Conserving and enhancing the natural environment.

2.4.2 Planning Practice Guidance is a web-based resource containing Government guidance regarding compliance with national planning policy and legislation. It is periodically updated. Sections of particular relevance to climate change include:

- Air Quality
- Climate Change
- Effective Use of Land
- Environmental Impact Assessment
- Flood Risk and Coastal Change
- Housing: optional and technical standards
- Renewable and low carbon energy
- Strategic environmental assessment and sustainability appraisal
- Transport evidence bases in plan making and decision taking
- Travel Plans, Transport Assessments and Statements
- Waste
- Water supply, wastewater and water quality

2.4.3 Various current or recent government strategies, statements and consultations are also relevant to this topic, including (in date order):

- The UK's Industrial Strategy, Department for Business, Energy and Industrial Strategy (2017)
- Industrial Strategy: The Grand Challenges, Department for Business, Energy and Industrial Strategy (2017, as updated)
- The Clean Growth Strategy: Leading the way to a low carbon future, Department for Business, Energy and Industrial Strategy (2017)
- The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, Department for Transport (2018)
- A Green Future: Our 25 Year Plan to Improve the Environment, Department for the Environment, Food, and Rural Affairs (2018)
- Spring Statement 2019: Written Ministerial Statement, HM Treasury (2019)
- Consultation on Electric vehicle chargepoints in residential and non-residential buildings, Department for Transport (2019)
- The Future Homes Standard: 2019 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building

- to progress a review of the ethical investment policy in the Treasury Management Strategy with a view to incorporating the council's Climate Emergency Declaration.

2.5.5 In December 2021, the council amended the Climate Emergency Declaration commitments so as 'to pledge to reduce emissions by at least 50%, and as close to net zero as possible by 2030, and to reach net zero by 2040 at the very latest.'

2.5.6 In pursuit of these commitments, the council's Climate Emergency Action Plan was adopted in November 2021. Implementation of the Plan is overseen by a Climate Emergency Board.

2.5.7 In the area of sustainable transport and the enabling of active travel the council consulted on and adopted New Directions for Crawley: Transport and Access for the 21st Century, a Transport Strategy Issues and Options Document. Crawley's Local Cycling and Walking Infrastructure Plan was also adopted in 2021 following public consultation.

2.6 Other Initiatives

2.6.1 Re-Energise Manor Royal is a separate initiative which is being coordinated by West Sussex County Council and the Manor Royal Business Improvement District in Crawley, with CBC's involvement, and with the support of funding from the EU BISEPS (Business Clusters Integrated Sustainable Energy Packages) initiative. The project is seeking to develop more secure, more sustainable and more locally generated forms of energy supply to serve local businesses, while reducing the Business District's carbon footprint. At the time of writing the project is exploring the feasibility of detailed schemes for low-carbon district energy and laying the foundations of a Local Energy Community within the District.

2.6.2 The Crawley Growth Programme is a collaboration between a range of organisations and funders, including the Coast to Capital LEP, West Sussex County Council, Gatwick Airport, Manor Royal Business District, and Metrobus alongside Crawley Borough Council to coordinate the investment of over £30 million in sustainable economic growth in Crawley. This includes investments in sustainable transport infrastructure and the delivery of new homes in Crawley Town Centre.

2.6.3 In its

2.6.4 Various commitments, including in relation to climate change, air quality, surface access, and water, waste and energy management are also set out in Gatwick Airport's Action Plans and monitored annually by the councils as part of their Obligations under the S106 Agreement.

2.7 Evidence

2.7.1 National Greenhouse Gas emissions are assessed against a series of legally set 5-year 'Carbon Budgets'. As of March 2023, six carbon budgets, covering the period 2008 to 2037, have been incorporated into UK legislation. The sixth carbon budget, for the period 2033-37, is the first set in relation to the Government's 'net zero' 2050 target (introduced into law in 2019).

2.7.2 The 2022 Progress Report of the Climate Change Committee identified that the 'UK Government now has a solid Net Zero strategy in place, but important policy gaps remain', and that 'progress is lagging the policy ambition'. Key indicators for transport, buildings, manufacturing and construction and agriculture were identified as being off track.

2.7.3 Local greenhouse gas emissions estimates are produced by the Department of Business, Energy and Industrial Strategy. Figures 2.1 and 2.2 below are derived from the most recent release of this data (which excludes emissions not capable of being ascribed to individual authorities, such as aviation and shipping), and compare per capita emissions in Crawley to those of West Sussex, the wider South East, and England as a whole. Figure 2.1 extends over the period 2014-20 but excludes emissions from agriculture and waste management, which are only included in the Local Authority-level statistics from 2018 onwards. Figure 2.2 covers the period 2018-20 and includes agricultural and waste management emissions.

Figure 2.1: Annual per capita CO2e emissions trend in Crawley, West Sussex, the South East, and England 2014-20, excluding agricultural and waste management emissions (UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2020, BEIS, 2022)

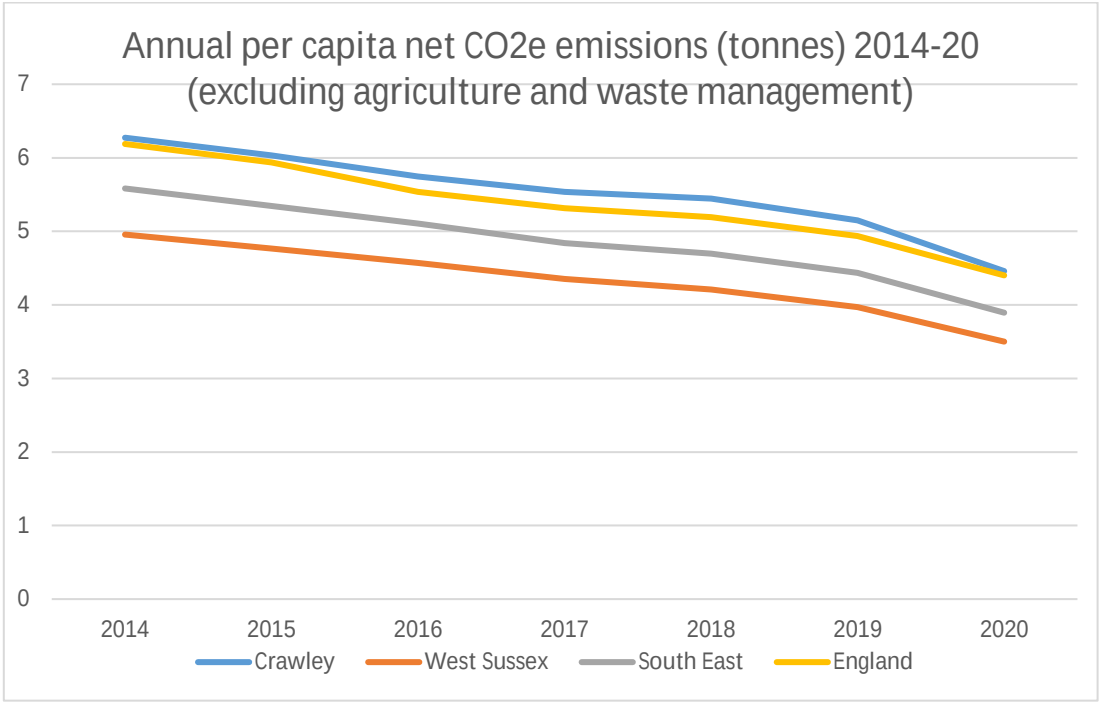

Figure 2.3: Breakdown of annual per capita CO2 emissions in Crawley, West Sussex, the South East, and England over 2014-20, excluding agricultural and waste management emissions (UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2020, BEIS, 2022)

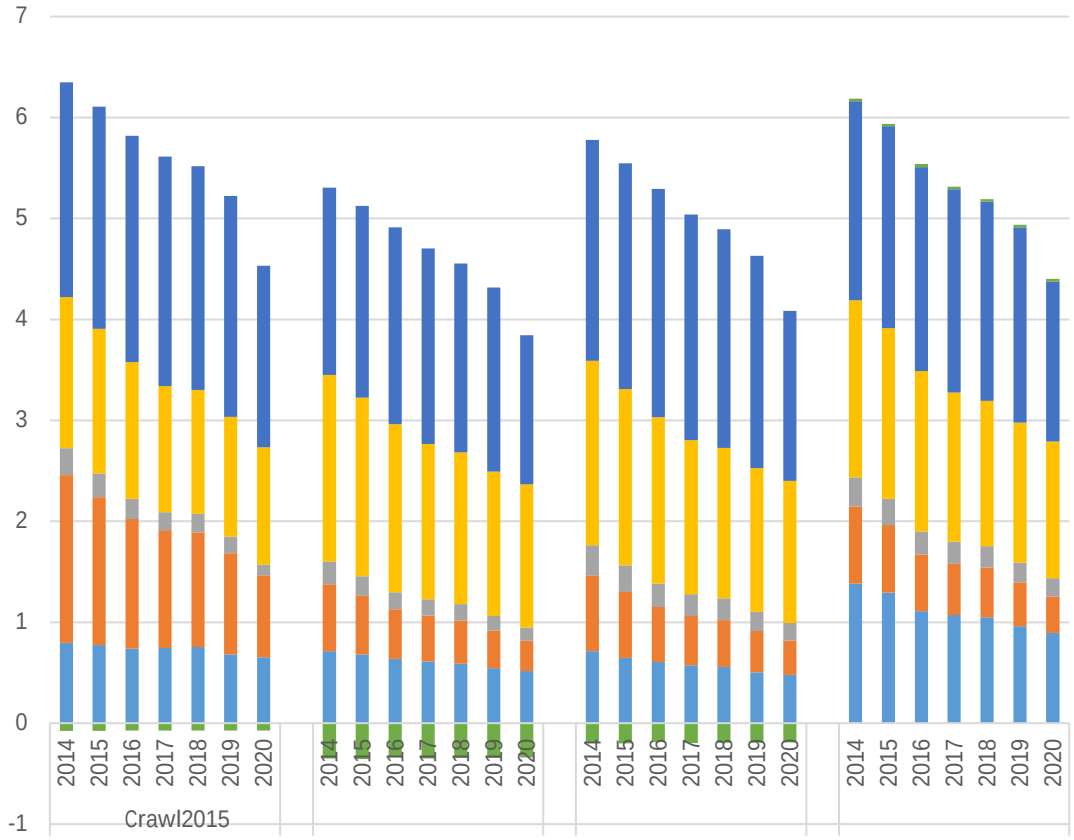

Figure 2.4: Breakdown of annual per capita CO2 emissions in Crawley, West Sussex, the South East, and England over 2018-20 (UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2020, BEIS, 2022)

2.7.5 Figures 2.3 and 2.4 highlight a number of specific features of Crawley's emissions profile, when compared with other areas, for example:

2.7.6 As part of the council's corporate efforts to mitigate its own contribution to climate change and that of the borough as a whole (described in section 2.5 above), the Climate Emergency Support report was commissioned from Anthesis in June 2020. This is partly a tool to assist the council in preparing a detailed action plan for the reduction of its own emissions, and as such covers some material which is not directly related to planning. However, the report includes an assessment of the emissions of the borough as a whole and the most appropriate measures to be taken to reduce these in line with local and national commitments. Different methodologies for quantifying local emissions are compared, and different potential pathways to the achievement of net zero emissions by 2050 are identified. The 'SCATTER Level 4' pathway is then further expressed in terms of energy systems interventions required by 2025, 2030 and 2050.[3] Interventions for 2025 which are particularly relevant to the planning system include:

- New build domestic housing to PassivHaus or equivalent standard;
- 13% of all homes to be fitted with heat pumps, and nearly 1% with district heating;
- 16% reduction in commercial heating and cooling demand;
- 25% reduction in passenger miles travelled by car;
- 6% reduction in car transport share against 2015 levels (with associated increases in public transport, walking and cycling);
- 64% of cars and 88% of buses to be ultra-low emission or hybrid;
- 51% reduction in industrial emissions;
- Rapid scaling up of renewable generation capacity.

2.7.7 Monitoring of policy implementation has been undertaken as part of the council's Authority Monitoring Reports, both in relation to the policies in the 2015 Local Plan which relate to climate change, and in relation to the related indicators set out in the supporting Sustainability Appraisal.

2.7.8 Overall the Local Planning Policies are considered to have been effectively implemented, with achievements having included:

- the consistent achievement of emissions standards in major new residential developments which make significant advances beyond minimum Building Regulations requirements;
- widespread implementation of the BREEAM 'excellent' minimum standards for energy and water in new non-domestic buildings;
- widespread implementation of the 'optional' 110 litres/person/day water efficiency target.

2.7.9 Some areas of partial or inconsistent implementation were identified through the annual monitoring in the years immediately following the adoption of the Local Plan but are now considered to have been addressed, as follows:

- Inconsistency in ensuring that smaller-scale developments which were required

2.7.13 The 2020 Gatwick Sub-Region Water Cycle Study[4] assesses the implications of the L

each of these in terms of: Capacity, Demand, Benefiting Areas and Gaps Prioritisations, Management Zones, Green Infrastructure Assets. These maps are helpfu

Centre and other locations with high frequency public transport links by bus or train, and good access to facilities.

3.1.2 This perspective is reflected in Policies CL3, CL4, ST1, ST2 and ST3 of the draft Local Plan:

- Policy CL3 sets out a general expectation that new developments should seek to exploit and support sustainable transport options and connections, using these to enable a more compact form of development.
- Policy CL4 sets out density-range expectations for residential developments in different areas, subject to character constraints, ranging from a baseline level of 45 dwelling per hectare up to more than 200 dwellings per hectare in highly accessible locations. It provides further detail on how the principle of compact development will be applied in relation to developments of significant scale elsewhere, including requirements for how they will be situated in relation to public transport services.
- Policy ST1 sets out general requirements in respect of the approach to the transport impacts of development, including requirements in respect of Transport Statements/Assessments and Travel Plans/Mobility Strategies, and the consideration of residual highways impacts. Developments generating a significant demand for travel or with other transport implications (i.e. major developments with operational transport needs, as identified in the Reasoned Justification) are expected to make a financial contribution towards off-site sustainable transport infrastructure, including schemes identified in the Local Cycling and Walking Infrastructure Plan, in accordance with the formula set out in the Planning Obligations Annex. The formula factors in distance from transport nodes, so that the financial burden is smaller for better connected developments.
- Policy ST2 applies the Car and Cycle Parking Standards which are set out in the Parking Standards Annex. These are informed by West Sussex County Council guidance on parking in new developments and include requirements in respect of the provision of electric vehicle charging points with new parking spaces. The requirements set out in relation to EV charging infrastructure are identified as be

- Policy ST3 requires that developments or improvements in the vicinity of railway stations within the borough will be expected to enhance the specific roles of those stations, as identified in the policy.

3.2 Energy Standards

3.2.1 Policies SDC1, SDC2 and SDC3 set out the approach for considering the environmental performance of development in terms of climate change mitigation and adaptation. They take account of the framework set by legislation, national policy, guidance, and good practice, while responding to the challenge of climate change, the specific and relatively large profile of the borough's emissions, the opportunities of the Crawley context, the council's Climate Emergency Declaration and the constraints of development viability. They have been prepared against a background of change and some uncertainty regarding national standards, and in the expectation that new national standards will in some respects 11(p)und ofee9E .and adaptation

3.2.5 The 'Be Green' requirement sets an overall energy/carbon performance standard for new buildings, which can be met by any combination of energy efficiency measures, supply efficiencies, and low/zero carbon technologies.

3.2.6 For dwellings the 'Be Green' requirement is whichever of the following is most efficient in terms of carbon dioxide emissions:

- a 19% reduction in CO_2 emissions compared with the 2013 Building Regulations;
- a new mandatory national emissions standard, introduced via Building Regulations or otherwise.

3.2.7 The first of these options is equivalent to Level 4 of the Code for Sustainable Homes, and as such is consistent with Planning Practice Guidance. This standard is also considered appropriate in light of the council's Climate Emergency Declaration and the example set by the council on its own housing schemes, which have met this level of performance for a number of years and are increasingly exceeding it.

3.2.8 The second option has been added to provide clarity that the Code Level 4 equivalent standard will be superseded by any more stringent mandatory national standard, including one introduced via the Building Regulations. The 2021 edition of Part L of the Building Regulations includes a more stringent emissions standard than the Code Level 4 equivalent (repr

thresholds for this requirement, which are intended to capture circumstances where significant changes to energy demand and building services would occur, or where requirements for 'consequential improvements' to a building's energy performance are required under the Building Regulations. Some types of development which meet these thresholds are not subject to specific standards in terms of energy performance under the Policy, but are subject to more general requirements to consider appropriate energy and carbon efficiency measures, and describe those which are proposed.

3.3 District Energy Networks

3.3.1 Policy SDC2 promotes the development of District Energy Networks and decentralised energy (involving local generation and distribution at scale of energy in the form of heat, cooling and electricity), with particular requirements applying in respect of major developments, and in respect of other specific forms of development within identified District Energy Network priority areas. Developments meeting the specific thresholds of the policy are required to develop their energy strategy in accordance with a hierarchy of options, depending on the presence of an existing District Energy Network, and the feasibility of other options including site-wide communal energy systems and 'future proofing' by designing with the capability to connect to a future network. Where none of these options are able to be pursued the policy sets a requirement for a minimum proportion of the energy needs of the development (10% or 20%) to be derived from low- or zero-carbon sources located on or near the site. This reserve requirement makes use of powers available under the Planning and Climate Change Act 2008 and referred to in Planning Practice Guidance to impose 'reasonable requirements for a proportion of energy used in development in their area to be energy from renewable sources and/or to be low carbon energy from sources in the locality of the development.' This need not be additional to any use of low- and zero-carbon technology required to meet the standards detailed in Policy SDC1.

3.3.2 The District Energy Network areas identified in the Policy are:

- The Town Centre, where a district heat network has been constructed as part of the Town Hall redevelopment scheme and is now operational;
- The Manor Royal business district, which is the focus of significant demand for process heating and cooling, and where options for decentralised energy are being developed as part of the Re-Energise Manor Royal project;
- The Forge Wood neighbourhood, representing the last location of strategic residential development within the borough's administrative boundary;
- The K2 Leisure Centre and the neighbouring housing allocation at Land Adjacent to Desmond Anderson, where there is scope to base a district energy network on the leisure centre's Combined Heat and Power (CHP) energy supply;
- The Strategic Employment Location allocated at 'Gatwick Green'.

With the exception of the new allocation at Gatwick Green, these areas are identified as potential areas for District Energy Networks in the 2011 Decentralised Energy Study.

3.4 Water Efficiency and Water Neutrality

3.4.1 Policy SDC3 sets out the approach which development, where located outside of the Sussex North Water Resource Zone, is expected to take in addressing the issue of water stress, as established in the Water Cycle Study referred to above. It retains the

- make appropriate provision for surface water drainage to ground, water courses

relocation is provided when Open Spaces are lost and to direct improvements and enhancements to maximise capacity of the borough's existing open spaces and increase opportunities to introduce multi-functionality benefits within them.

3.7.3 Policy GI3: Biodiversity and Net Gain is concerned with the conservation and enhancement of trees and soft landscaping following government guidance to ensure a net gain in relation to biodiversity on site.

3.7.4 Policy DD4 enforces a high replacement standard for trees lost to development, taking into consideration their girth and time to mature. Initially, tree planting is expected on-site. However, off-site contributions can be agreed with the council. The policy recognises that the loss of a tree is likely to increase the requirement of net gain for Policy GI3 and particularly, it is noted that a net loss of biodiversity is likely to be incurred due to the value of mature trees being felled which can lead to a higher number of trees needed on top of the development replacement requirements.

3.7.5 The Green Infrastructure SPD Appendix 6 lists the individual specimens and species of trees and soft landscapes that are appropriate to be planted within Crawley, taking into consideration the proximity of Gatwick Airport and issues related to bird strike. Native species of mixed woodland plants for southern clay soils such as Field Maple, Alder, Common Ash, Wild Cheery, English Oak, Small-