

Title of Report: **Climate Emergency Action Plan**

Report to: **Cabinet**

Date: **18 December 2019**

Portfolio Holder: **Councillor Roy Galley, Economic Development, Waste Management and HR**

Purpose of Report

To consider and approve the proposed action plan to tackle the 'Climate Emergency' and work towards net-zero carbon emissions for the Council and the District by 2050, or sooner.

Recommendations

Cabinet is recommended:

- a. To acknowledge the work already undertaken (and being undertaken) by the Council to reduce carbon emissions, as summarised in Appendix A;
- b. To endorse the outcomes of the carbon emissions baseline modelling and future trend emissions projections for both the Council and the District;
- c. To agree the proposed action plan (contained within the report at Appendix B, pages 40-62) to help achieve net-zero carbon emissions for the Council and the District by 2050, or sooner;
- d. To agree the proposed prioritised actions outlined in the analysis of this report;
- e. To agree a monitoring process to review and report progress against prioritised actions every six months and assess and report on emissions annually in order to better understand the impacts of the work undertaken and make any appropriate adjustments to the plan.

Reasons

This report presents the results of carbon emissions modelling undertaken for the Council's own activities and for the Wealden District as a whole and identifies the steps that need to be taken to achieve a target of net-zero carbon emissions by 2050 (or sooner), and address the climate emergency. It also identifies priorities for action in years 1 and 2 and a monitor and manage mechanism for future reporting.

Introduction

1. On 24 July 2019, the Council declared a 'Climate Emergency' and committed to:
 - a. Work toward net-zero CO₂ by 2050 for both the Council and the Wealden District area, and pursue efforts to achieve net-zero CO₂ emissions even earlier;

- b. Work with Government departments to ensure the necessary policies (such as tighter building regulations), powers and funding are put in place to achieve a net-zero CO₂ target;
 - c. Request that the Economic and Waste Cabinet Advisory Group investigate the opportunities available and report back to Cabinet;
 - d. Develop a clear action plan that sets out a costed suite of practical actions which demonstrate the Council's initial phase of delivery toward net-zero CO₂ emissions and which define its leadership role in promoting community-wide action;
 - e. Build on work to identify opportunities for low carbon and renewable energy sources and storage, and the acceleration of electric vehicles take-up within the District;
 - f. Work with, influence and inspire partners across the county and region (including ESCC and the other District and Borough Councils in East Sussex) via existing forums to deliver this goal through all relevant strategies and plans;
 - g. Implement a plan-led approach to development that minimises and mitigates against emissions from new development; and,
 - h. Investigate all potential sources of funding to support these commitments.
2. The Council has already undertaken a number of actions in order to lower emissions, as briefly summarised in Appendix A. However, it was acknowledged that further work was required to understand the steps that need to be taken to achieve the new decarbonisation target. Consultants were therefore engaged to provide a better understanding of current (and projected future) emissions and identify further actions to reduce carbon emissions. The consultants' report is attached at Appendix B.

Analysis

3. The carbon emissions baselines presented in Appendix B are reported in two separate ways. The first is District-wide emissions and the second is the Council's own emissions. District emissions are based on 2017 figures (the most recent year available) provided by the Department of Business, Energy and Industrial Strategy (BEIS). They cover all main sectors in the District (e.g. domestic, non-domestic, and transport) by fuel type. Council emissions, which are included as part of the overall District's emissions figures, are identified separately to enable the Council to assess and measure progress within its own operations.
4. Emissions are categorised, using the industry standard for reporting greenhouse gases (the Greenhouse Gas Protocol), as Scope 1 (direct emissions from the combustion of gas, oil, petrol, wood etc.), Scope 2 (indirect emissions from the generation of purchased electricity) and Scope 3 (other indirect emissions that are occur in an organisation's value chain). For the Council, Scope 1 and 2 emissions are those from sources controlled by the Council and for which the Council pays the energy/fuel bill. Scope 3 emissions are those which result from services and functions related to the Council, but over which the Council does not have full control and does not pay the bill. These are identified and reported separately within Appendix B.
5. For the purposes of the action plan, the Council will monitor its own emissions against its 2018-19 Scope 1 and 2 emissions and some of its key Scope 3

emissions. The extent of Scope 3 emissions is currently limited to the available data and includes emissions from the Council’s leisure centre sites and employee (private vehicle) business mileage. However, further scope 3 emissions will be identified and incorporated into future reporting. This will include, for example, vehicle emissions arising from delivery of the Council’s waste contract, emissions associated with water consumption and those associated with business travel on public transport. As a result, the Council’s overall carbon emissions are likely to increase in future reporting as more and better quality data becomes available.

6. The total Scope 1 and 2 emissions for the District for 2017 were 636 ktCO₂e. Figure 1 shows that the main sources of emissions in the District at this time were transport (47.2%) and the domestic housing stock (34.7%), with non-domestic buildings accounting for 15.2% and fuels used for agriculture accounting for 3%.

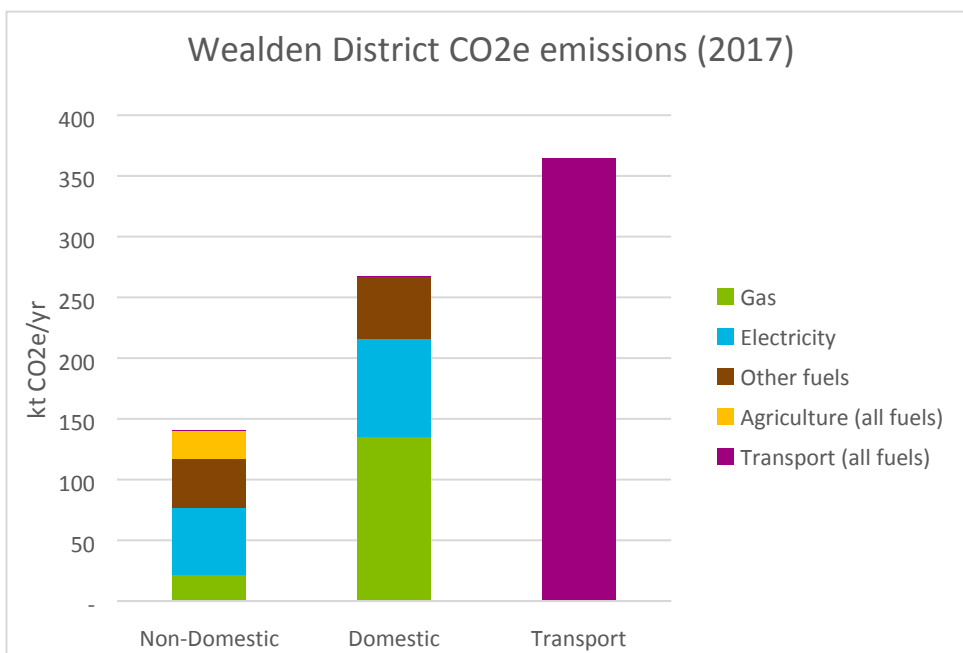


Figure 1: Wealden District carbon emissions by sector and fuel type (2017)

7. For the Council, total scope 1 and 2 emissions for the year 2018-19 were 1,424 tCO₂e, equating to roughly 0.2% of the 2017 District emissions. Figure 2 illustrates the relative contribution from different fuels, building use categories and fleet vehicles that make up the Council’s Scope 1 and 2 emissions. This shows that most of the Council’s emissions (82%) are from energy used within the retirement living housing stock, and in particular gas consumption.

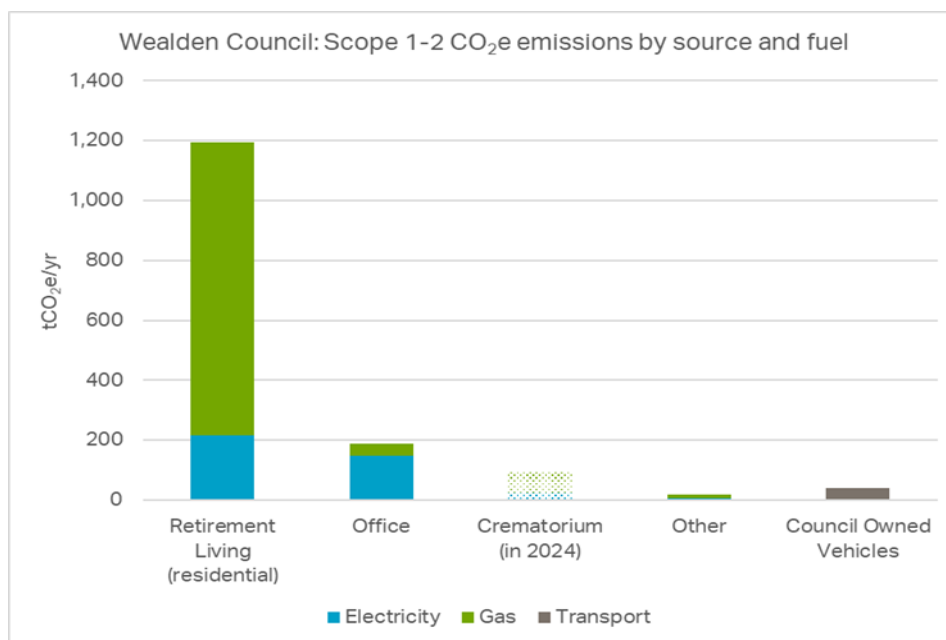


Figure 2: Council scope 1 and 2 emissions by source and fuel type (2018-19)

Routes to Net-Zero

8. In order to achieve a net-zero carbon target by 2050 (for both the District and the Council), substantial changes will be required at a national level and across all sectors. The changes required nationally are largely reflected in the local picture and fall into a number of broad categories:
 - a. National grid decarbonisation
 - b. Demand reduction (energy efficiency measures & behaviour change)
 - c. Switch to electric heating
 - d. Switch to zero emission transport
 - e. Carbon offsetting through renewable energy generation
 - f. Carbon offsetting through sequestration
9. Figures 3 and 4 provide projected emissions to 2050 for both the District and Council, taking account of committed and planned national interventions. Given that these interventions are subject to political and market forces, a 'do-nothing more, business as usual' projection is also included within both.
10. Due to the differences in the major sources of emissions between the Council and the District as a whole, these interventions have different levels of impact on projections to 2050. For example, the Council has a relatively small fleet of Council-owned vehicles; the direct impact of the switch to zero carbon transport is therefore low compared with the impact that this intervention would have on the District-wide emissions.
11. The impacts of interventions such as switching to electric heating systems and electric vehicles are magnified by the decarbonisation of the grid. Grid decarbonisation is the progressive move away from coal-generated electricity to renewable energy (and nuclear power) and the trajectories here reflect the ambitions set by Government. Grid decarbonisation is therefore among the most important factors affecting whether the net-zero target is achieved.

12. Grid decarbonisation is also largely responsible for the decrease in historical emissions shown in the District projections within Figure 3. Under a 'business as usual' scenario (i.e. without interventions), emissions will increase slightly as a result of forecast growth.

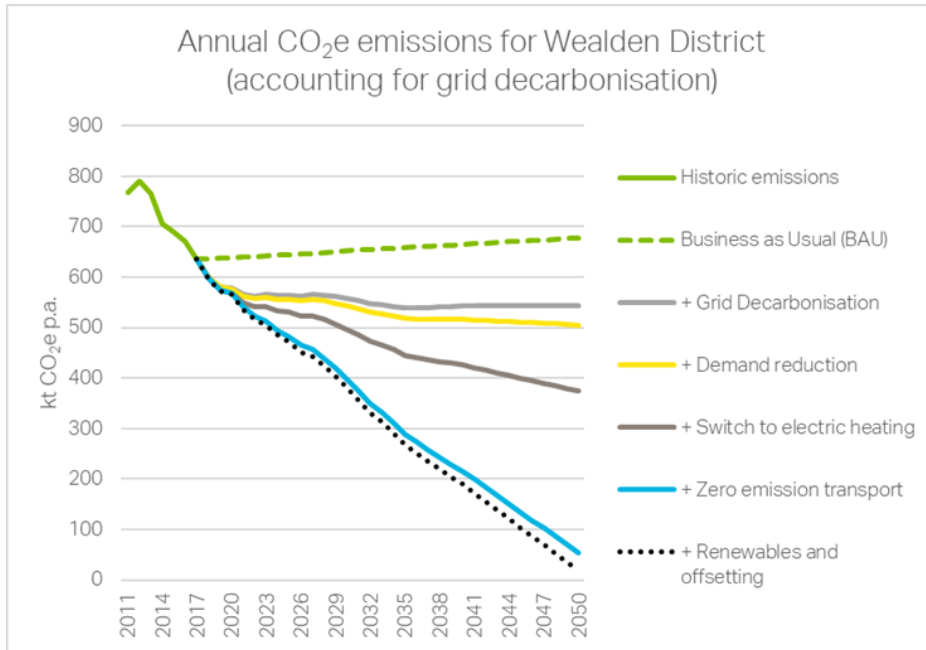


Figure 3: District-wide 'Future Trend' emissions (2011-2050)

13. Figure 4 shows the potential change in the Council's own emissions that would occur under a 'business as usual' scenario. Aside from an increase attributed to the addition of the new crematorium, emissions remain steady. However, this assumes that no additions are made to the Council's building portfolio or the services that it offers.

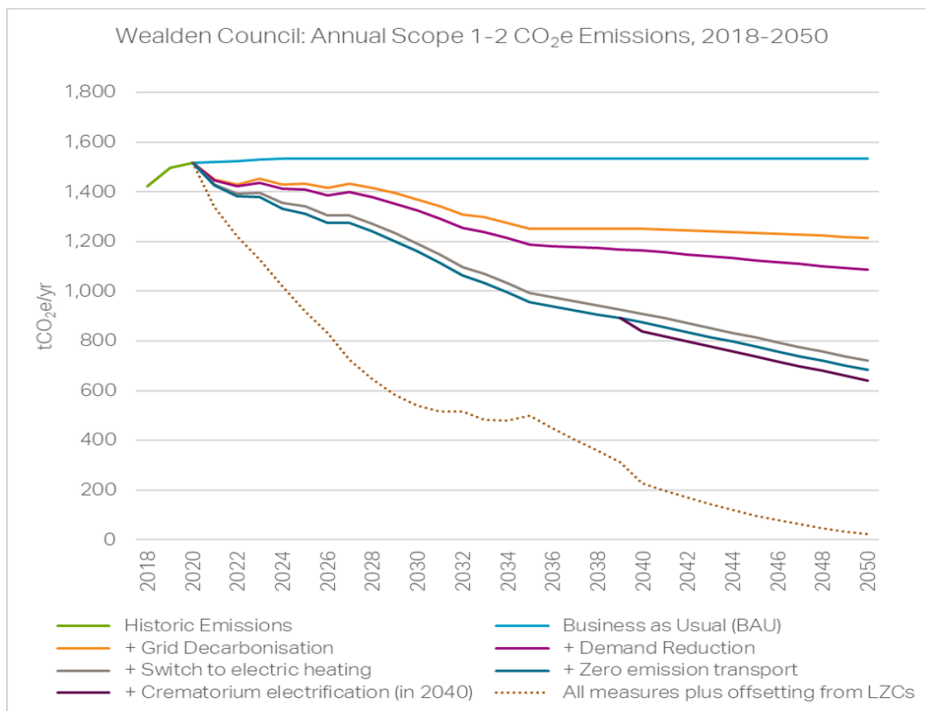


Figure 4: Council annual scope 1 and 2 'Future Trend' emissions (2018-50)

14. The modelling work undertaken by the Council's consultants has highlighted that there is considerable uncertainty in the trajectory to 2050 and that the significant challenges of achieving a net-zero target will require concerted effort on a national and regional level. Some of these factors are largely outside of the Council's direct control, relying on shifts in technologies, consumer behaviour and national policy interventions. Indeed, as figures 3 and 4 show, achieving the 2050 target will increasingly be dependent on decarbonisation of the grid. Similarly, future reductions in emissions from new and existing buildings, and the switch to electric forms of heating and electric vehicles, will require a significant change in Government policy and/or the introduction of new incentive schemes.
15. The Council is already using its influence to help drive forward some of these changes, including submitting a response to the current HMCLG Future Homes Standard consultation and highlighting (in a letter to the Transport Secretary) the need for dedicated off-street electric vehicle infrastructure funding. Along with direct control of its own operations, the Council can therefore exert its influence both nationally and locally.
16. On this basis, there are three main approaches (or 'pillars') that the Council will adopt to help deliver the net-zero target:
 - Direct Control; taking a leadership role and adopting best practices in its own operations and policies;
 - Indirect Local Influence; including working with partners to deliver community initiatives, awareness raising and behavioural change; and
 - Indirect National Influence; lobbying central government to bring forward policy and release funding.

Measures

17. Based on the current and projected emissions modelling (and the known interventions required nationally), a number of areas of action have been identified in the consultants' report at Appendix B (pages 40-62). These are grouped into topic areas as follows:
 - a. General actions
 - b. Grid decarbonisation
 - c. Demand reduction
 - d. Low carbon heating systems
 - e. Building integrated renewable energy generation and storage
 - f. Low carbon transport
 - g. Offsetting
 - h. Scope 3 emissions
18. There is a role for the Council to play in helping to facilitate grid decarbonisation, including working with National Grid to ensure that necessary infrastructure is in place and to provide any necessary planning policy to facilitate infrastructure.
19. The Council (and partners) also have a role to play in helping to reduce heat and power demands in the District through the promotion of fabric efficiency improvements and behaviour change. For the Council this includes ensuring the most efficient Council building stock and creating community and business

behaviour change / support programmes. In the longer term, buildings will need to switch from gas / fossil fuels to low and zero carbon heat.

20. Taking a leadership role, the Council can adopt best practices wherever possible within its own building stock, including switching to renewable energy sources and reviewing its long-term boiler replacement programme and options to switch to electric or low carbon sources. Additionally, there is scope for the Council to investigate the potential for low carbon heat networks.
21. Similarly, the Council has a leadership role to play in the transformation of the transport sector. The Council can set an example by adopting electric vehicles within its own fleet and help to facilitate uptake in the District by installing public charging points within its own car parks. For a zero carbon target to be met, this transformation must take place.
22. However, as shown in Figures 3 and 4, even with the implementation of all interventions, it is anticipated that there will still be a need to offset any remaining emissions in order to achieve net-zero. For the Council, this would mean investigating the opportunities to offset either through increasing sequestration (e.g. via the planting and management of new woodland) or through investment in renewable technologies.

Suggested Prioritised Actions:

23. The consultants have provided a long list of potential actions to be initiated in the short, medium and longer term. Not all actions can be undertaken within the first few years and all have cost implications to the Council. Furthermore, in some instances, actions will require amendment to reflect prevailing circumstances. The Council therefore needs to review and approve the first suite of actions that it will take forward.
24. From the long list of actions, the Council has initially prioritised those shown in Table 1 below. These actions have been selected based on internal practicalities combined with the relative priority ranking set out in the Action Plan at Appendix B, which assesses the actions' potential for carbon reduction and the level of investment/deliverability. Also of consideration is the visibility of the action and its potential to exert influence in the wider community. Actions such as installing public charging points in Council car parks, replacing the Council's own fleet with electric alternatives, and the planting and management of additional areas of woodland are all highly visible measures that the Council would wish to further prioritise and progress in the short to medium term.
25. Where an enabling action is required in order to proceed with a delivery action, the enabling action has been prioritised here. Those actions that relate to the Council's own operations (internal) and those that relate to the District as a whole (external) are also identified.

Ref	Action	Initiate (by end)	Cost estimate*	Internal / external
General actions				
G1	Disseminate the results, conclusions and recommendations of the study within the Council	Jan 2020	O/R	Both
G2	Disseminate the results, conclusions and recommendations of the study to stakeholders within the District	Feb 2020	O/R	External
G3	Identify senior officers/members to champion the programme and key projects	Feb 2020	O/R	Both

G4	Establish a monitoring and reporting mechanism	Jun 2020	O/R	Both
G5	Establish roles of individuals within WDC for delivering the actions and recommendations	Mar 2020	O/R	Both
G6	Work with Government and East Sussex local authorities to identify sources of funding	Feb 2020 & ongoing	O/R	Both
Grid decarbonisation				
D1	Continue to speak to UKPN about future energy infrastructure plans	Sep 2020 & ongoing	O/R	Both
Demand reduction				
R1	Develop a WDC estate carbon management plan	Sep 2020	Audits: £2-5K/site	Internal
R3	Develop and instigate a behavioural change programme across Council properties	Sep 2020	O/R	Internal
R4	Undertake a detailed assessment of existing building stock within the District	Dec 2020	Study: £10-35k	External
R5	Develop business engagement and support, particularly for SMEs	Dec 2020	Budget: TBA	External
R11	Community engagement to support behaviour change - buildings	Sep 2020 & ongoing	O/R & potential budget	External
Low carbon heating systems				
H1	Investigate the potential for a low carbon heat network at Vicarage Field (Hailsham Aspires)	Dec 2020	Hailsham Aspires	Internal
H3	Develop a heating system replacement programme for Council properties to replace all gas boilers	Sep 2020 & ongoing	O/R	Internal
Building integrated renewable energy generation and storage				
E1	Assess the suitability of remaining Council assets for further PV installations	Dec 2020	Study: TBA	Internal
Low carbon transport				
T1	Work with Government and other stakeholders to identify methods to drive private transport decarbonisation	Sep 2020	O/R	External
T3	Review the Council's fleet and replacement plans (zero emission alternatives)	Sep 2020	O/R	Internal
T4	Replace the Council's fleet with zero emission alternatives where feasible	When due for renewal	Budget: TBA	Internal
T5	Work with stakeholders to assess options for increasing the uptake of zero emission vehicles	Aug 2020 – Dec 2021	O/R	External
T6	Install public charging infrastructure in Council's own estate	Dec 2020	O/R & Study: £15-30k	Both
Offsetting				
O1	Identify existing sources of LULUCF and further opportunities for woodland creation	Dec 2020	Study: £15-35k	Both
O2	Undertake an assessment of opportunities for offsetting through investment in renewable energy technologies	Dec 2020	Study: £20-30k	Internal
Scope 3 Emissions				
S1	Work with suppliers to provide better emissions data	Sep 2020	O/R	Both

Table 1: prioritised actions and estimated costings (where available)

**Please note: Costings are based on those presented in the appended consultants' report (appendix B). They are intended as estimates only and will require further analysis/assessment. In some instances, the budget amount required is still to be assessed (indicated by TBA). O/R indicates Officer Resource.*

26. As Table 1 shows, a considerable amount of officer resource ('O/R') will be required to deliver these actions. The final investment required to deliver individual projects will be subject to further detailed studies, and full financial appraisals.

Monitoring and Managing the Plan

27. It is proposed that the Council set up a monitoring and management process to review progress against agreed priority actions and report on emissions as follows:

- a. Six-monthly assessment and report of progress against prioritised actions
- b. Annual assessment and report of emissions reductions, to include the following:
 - i. Annual District carbon emissions
 - ii. Annual Council carbon emission
 - iii. National grid decarbonisation progress
 - iv. Uptake of low carbon heating systems (where data is available)
 - v. Uptake of low carbon vehicles
 - vi. Performance of building stock within the District (where data is available)

This will allow the Council to reappraise existing actions, incorporate any new opportunities and make appropriate adjustments to the plan.

Conclusion

28. The Council has responded swiftly to the declaration of a 'Climate Emergency'. It has investigated both the District's and its own emissions (current and future trends) to gain a better understanding and identify the initial steps needed to achieve the 2050 net-zero.

29. To reach this target will require a national shift in policy and behaviours along with advancements in technology. Action to reduce demand, switch to low carbon energy and transport and offset remaining emissions will apply at both local and national levels.

30. The Council has a leadership role to play in examining its own operations, buildings, fleet and services etc. and identifying best practice measures that it can implement for areas within its control. It also has a role to play in working with partners to facilitate wider change across the District as well as to exert its influence over Government policy.

31. The Climate Emergency Plan and prioritised actions presented here represent the Council's initial plan, enabling it to identify and initiate actions. The plan will continue to be updated as further investigation is undertaken, and to incorporate new opportunities.

Corporate Management Team Advice

32. Cabinet is recommended:

- a) To acknowledge the work already undertaken (and being undertaken) by the Council to reduce carbon emissions, as summarised in Appendix A;

- b) To endorse the outcomes of the carbon emissions baseline modelling and future trend emissions projections for both the Council and the District;
- c) To agree the proposed action plan (contained within the report at Appendix B, pages 40-62) to help achieve net-zero carbon emissions for the Council and the District by 2050, or sooner;
- d) To agree the proposed prioritised actions outlined in the analysis of this report;
- e) To agree a monitoring process to review and report progress against prioritised actions every six months and assess and report on emissions annually in order to better understand the impacts of the work undertaken and make any appropriate adjustments to the plan.

Implications

Financial:

There are financial implications as a direct result of this report.

£200,000 has been allocated to facilitate the climate change agenda. From this, £25,000 has been utilised to provide consultancy support to the Council in developing its Climate Emergency Plan. A new (2-year) Climate Change Officer post (to support existing staff resource) is currently being developed and is estimated to cost approx. £78,000 in total. This resource will be required to carry out enabling tasks.

Prioritised actions T6, O1 and O2 are estimated to cost £80,000. This leaves some £17,000 for audits, data gathering for R1 and R4 as well as material costs for community and business general actions. Any costs incurred for Vicarage Field projects (H1) will come from specific Vicarage Field (Hailsham Aspires) budgets.

Alterations to delivery timescales and/or additions to the actions prioritised would require additional officer resource over and above the new post outlined here.

Legal:

None arising from this report.

Human Resources:

Officer resources would be required to support the development of an action plan and delivery of any resulting actions. Those that are not already identified within current work programmes will need to be considered alongside existing commitments.

Other:

Environmental and Sustainability: environmental and sustainability implications are implicit throughout this report. The outcomes of any identified work streams will have a positive impact.

Risk Management: this report recognises that there are considerable risks associated with ongoing global warming and advocates taking action to reduce these risks.

Contacts/ References:

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Appendices	Appendix A – Summary of Council Activities Appendix B – WDC Climate Emergency Plan (AECOM)
Background Papers	None
Published Reference documents	None
Key Decision	YES
Exempt / Not for Publication	NO