

Executive Report

Ward(s) affected: All

Report of Director of Strategic Services

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Climate Emergency Response: Actions for achieving net-zero carbon

Executive Summary

On 23 July 2019, full Council adopted a motion to declare a Climate Emergency. In line with the commitments set out in this motion, the purpose of this report is to present a high-level Action Plan for working towards net-zero carbon within the Council's operations and playing our part in delivering progressive carbon reductions across the borough.

The Council has already invested in and completed a significant number of carbon and energy-reducing projects (as set out in paragraph 3.7). It has, in response to the above declaration, set up the Climate Change and Innovation Board and Climate Change Fund in order to plan, resource and implement further work and projects.

To progress these initiatives an effective overarching approach is proposed in the form of a high-level draft action plan set out in **Appendix 1** which broadly splits carbon reduction actions into two categories:

- Actions within Council assets and operations
- Actions across the Borough as a whole

The above categories are further divided into three logical development stages, namely:

1. Carbon footprint and emissions reduction trajectory
2. Development of an Energy Delivery Framework
3. Project Delivery

Recommendation to the Executive

To review and adopt the draft Action Plan as set out in Appendix 1.

Is the report (or part of it) exempt from publication? No

1. Purpose of Report

- 1.1 In response to the Council's Climate Emergency Declaration, the purpose of this report is to present a high-level action plan (incorporating the Energy Delivery Framework) for working towards net-zero carbon within the Council's operations and playing our part in delivering more extensive and progressive carbon reductions across the borough.

2. Strategic Priorities

- 2.1 As a result of the Climate Emergency Declaration, climate change has become a strategic priority, building on the Council's previous commitments and strategic aims regarding the protection of our environment.

3. Background

- 3.1 On 23 July 2019, the Council adopted a motion to declare a Climate Emergency.

The text of the motion included the following commitments:

- Working with partners across the Borough to evaluate and determine how and when Guildford Borough could become carbon neutral.
 - Working towards making the Council's activities net-zero carbon by 2030.
 - Establishing the necessary governance structures, investment plans and officer resources in order for the Council to build a strong foundation to deliver progressively ambitious carbon reductions across our operations.
 - Establishing a borough-wide Climate Change Partnership consisting of representatives from all stakeholders across all sectors.
 - Developing, within 12 months, a clear action plan and timescale for being net-zero carbon across our Council operations, starting with a review of what has already been achieved and plans already instigated.
 - Delivering a joint Member-Officer training programme to enable a shared understanding of how to deliver the above, starting in September 2019.
- 3.2 In order to meaningfully address these commitments, the Council set up the Climate Change and Innovation Board and also established the Climate Change Fund in order to ensure the appropriate level of resources were in place.
- 3.3 Addressing the Climate Emergency requires the Council to substantially cut carbon emissions across its estate and housing stock and to show appropriate leadership through low carbon policies and practices. The Council also needs to help drive emissions reductions across the borough more widely through actions and policies that drive reductions in operations outside of Council control.

Switching to low carbon forms of energy is the single most important component of the Council's response.

- 3.4 80% of the carbon dioxide (CO₂) emissions from the Council's own estate are the result of its energy use, whereas around 50% of borough-wide CO₂ emissions that are considered to be within the scope of influence of the Council are the result of domestic and commercial/industrial energy use. The remaining CO₂ emissions are those from road vehicles. As well as encouraging modal shift, the Council recognises that it must play a key role in encouraging the transition to Electric Vehicles (EVs), which again concerns the provision of energy as well as EV charging infrastructure.
- 3.5 Given the above, the Council needs to have a comprehensive delivery mechanism that helps it to achieve this complex and multi-faceted task, hence the proposal of Energy Delivery Framework (EDF) as set out in **Appendix 1**.
- 3.6 At a national level, the UK Government has set a target of achieving net-zero carbon emissions by 2050. This was put forward in response to the growing body of scientific evidence suggesting more urgent action, the conclusions of the Government's Committee on Climate Change and the increasing number of Climate Emergencies being declared at a local level,

Our achievements so far

- 3.7 For many years the Council has been proactive in identifying and delivering projects that save energy and CO₂, mostly financed through our dedicated Invest-to-Save sustainable energy fund and our Capital Programme. Approximately £10 million has been invested in the last 10 years on projects that we have delivered on our own estate and in our social housing, for example:
- LED Relighting
 - Air Source Heat Pumps
 - Solar PV installations
 - Building insulation measures
 - Boiler replacements
 - Variable Speed Drives
- 3.8 The above have contributed towards significant CO₂ savings. Provisional figures indicate that we are close to our target of a 43% reduction by 2020 based on 2008/09 levels (final figures will be calculated as part of Action 1.1, **Appendix 1**).
- 3.9 In addition, our Toll House Hydro scheme on the River Wey has been generating clean electricity for nearly 15 years and we have used this and other initiatives to educate the public and support action on climate change locally.

Summary of approach: High-Level Action Plan and Energy Delivery Framework

- 3.10 In line with the commitments set out in the Climate Emergency Declaration, the Council needs to consider two broad categories of action:
- Carbon reductions within Council assets and operations
 - Carbon reductions across the Borough as a whole

3.11 The above categories are further divided into three logical development stages, namely:

1. Carbon footprint and emissions reduction trajectory
2. Development of an Energy Delivery Framework (EDF)
3. Project Delivery

Stage 1: Carbon Footprint and emissions reduction trajectory

3.12 A carbon footprint consists of a statement of the quantity of carbon emissions overall as a result of human activity, and a breakdown of areas responsible for these emissions, for example, electricity usage, road transport etc. Having made an overall assessment of carbon reduction opportunities in each area, an emissions reduction trajectory quantifies in graphical form the potential for reduction of carbon emissions over a given timeframe, with a view to converging on a net-zero figure as early as possible.

3.13 The term 'net-zero' acknowledges that it is not possible to reach 'absolute zero' in terms of carbon reductions, given that even the most environmentally friendly technologies still result in some carbon emissions. Therefore, after all reasonable carbon reduction possibilities have been exhausted, this allows for any remaining emissions to be offset in some way, usually by tree-planting.

3.14 In summary, Stage 1 is an essential step in the process, in order to determine:

- How much progress the Council and borough have already made;
- A baseline from which further progress will be measured;
- Which areas we should be focusing our actions on;
- Carbon reduction potential and the viability of 'net-zero' ambitions.

Stage 2: Developing an Energy Delivery Framework (EDF)

3.15 The Council needs to develop a robust approach that helps to:

- Move both the Council and the borough as a whole towards low carbon energy provision for both new and existing buildings;
- Help deliver a secure and sustainable power generation and supply infrastructure across the borough;
- Provide a focused and realistic way of engaging with key stakeholders and potential partners across all sectors and within the wider community.

3.16 To achieve this complex and multi-faceted task requires a comprehensive delivery mechanism, hence the proposal of Energy Delivery Framework (EDF) as a way to logically structure and organise our work in this area and provide a powerful tool for communication and collaboration with stakeholders both within the Council and across the Borough.

3.17 By developing overarching plans for delivering progressive carbon reductions across our own estate, as well as facilitating low carbon buildings and

infrastructure within the Borough as a whole (actions 2.1 – 2.12 in **Appendix 1**), we can create focal points for dialogue and joint-working that will enable meaningful progress and partnerships in order to realise our commitments as set out in section 3.1 above.

Stage 3: Project Delivery

- 3.18 It is important to note that, as well as work on the above strategic framework being already underway, there are a significant number of projects currently in progress under each of the areas identified, for example with respect to:
- Renewable technologies (e.g. Heat Pumps, Solar PV)
 - Energy efficient lighting
 - Upgrades to mechanical and electrical plant
 - Insulation measures
 - Electric vehicle fleet and infrastructure
 - Strengthening planning policy
- 3.19 As a result of the work undertaken in stages 1 and 2 many more potential projects will emerge and be integrated into our plans, enabling us to take a longer-term view, develop rolling programmes etc. Examples of Borough-wide projects might be the installation of district heating schemes, rooftop solar installations, more extensive electric vehicle charging etc.
- 3.20 An important part of our delivery plans are workshops for both members and officers to facilitate joint working and training to improve 'carbon literacy'. We have been working with APSE Energy on proposals to support delivery under this theme and in other key areas.

4. Consultations

- 4.1 This section will be completed once consultations have been made.

5. Key Risks

- 5.1 There are risks associated with the work proposed in this report, namely it could arise that once each area of work is more thoroughly investigated, the resources required to move onto the next stage could substantially increase and therefore put further progress at risk.
- 5.2 Allied to the above, the Council could overcommit resources to achieve the commitments set out in July 2019. Through careful consideration of what measures and actions are reasonable and most effective for the Council to take recognising officer commitments and resources, a team of relevant officers will be best placed to manage this risk.

6. Financial Implications

- 6.1 There are no immediate financial implications that have not already been covered by the establishing of the Climate Change Fund and the expansion of the Salix

Invest to Save Fund by 140%. For the Climate Change Fund, new capital and revenue budgets were allocated and approved in February as part of the 2020/21 budget cycle, bringing the total amount in the fund to approximately £1.7 million over 3 years. Officers expect that this will be sufficient to cover the costs of Stages 1 and 2 of the Action Plan (**Appendix 1**). There is more uncertainty regarding the costs of Project Delivery (Stage 3), however as and when new project proposals emerge, the costs will be monitored and reported regularly to Councillors.

- 6.2 As well as the securing of additional external match funding from Salix, part of Action 2.8 (**Appendix 1**) will be funded by the Department for Business, Energy and Industrial Strategy's (BEIS) Heat Networks Development Unit (HNDU), including 1 day of dedicated project management resource per week. The Council is also part of the joint bid for EU funding (LOCASE) which may resource a part of the delivery of any actions within 2.12 that relate to local businesses.

7. Legal Implications

- 7.1 Local Authorities do not have a statutory duty to reduce emissions in line with the Climate Change Act 2008 however they do need to produce plans that will influence emissions.
- 7.2 The Legal team is examining the possibility to introduce clauses to legal agreements and contracts on addressing climate change including any legal precedents, best practice and examples from other authorities.

8. Human Resource Implications

- 8.1 Officers with responsibilities that are relevant to the delivery of the action plan will be sourced from existing teams.
- 8.2 In addition, the Asset Management team has authority to recruit a Climate Change Officer who will assist in the delivery of this action plan, which would bring the total available dedicated resource to 1.6 Full Time Equivalent (FTE) staff.

9. Equality and Diversity Implications

- 9.1 This duty has been considered in the context of this report and it has been concluded that there are no equality and diversity implications arising directly from this report.

10. Climate Change/Sustainability Implications

- 10.1 These are amply covered within the main body of the report.

11. Conclusion

- 11.1 The plans presented in this report comprehensively cover the key aspects of delivery under the commitments of the July 2019 Climate Emergency Declaration.
- 11.2 While many initiatives and projects are already under way on Climate Change the proposed strategic Energy Delivery Framework provides a logical basis to organise and systematically act in a thoroughly planned manner over the longer term, while providing an adequate focal point for engaging with stakeholders across the board.
- 11.3 For this reason it is recommended that the Executive endorses this approach and supports its implementation, as well as providing feedback on its contents including requests for inclusions, amendments etc.

12. Background Papers

None

13. Appendices

Appendix 1: Energy and Carbon Reduction: High Level Action Plan DRAFT