

Gloucester City Council

Meeting:	Cabinet	Date:	11 March 2020
Subject:	Tackling Climate Change Road Map		
Report Of:	Cabinet Member for Environment		
Wards Affected:	All		
Key Decision:	No	Budget/Policy Framework:	No
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Appendices:	1. Quick Wins and Potential Longer-Term Projects		

FOR GENERAL RELEASE

1.0 Purpose of Report

- 1.1 This report sets out the actions the City Council, their partners and Gloucester citizens can take to achieve the objectives of the Climate Change Emergency resolution as adopted in July 2019. This committed the Council to becoming carbon neutral by 2030 and the City as whole by 2050. This is not a detailed strategy but a road map of broadly how we can achieve our ambitions, as a great deal of work still needs to be done baselining the emissions of the Council/City and planning how to then address the shortfall.

2.0 Recommendations

- 2.1 Cabinet is asked to **RESOLVE** that:

- (1) the report is noted as a roadmap to achieving a carbon net zero Council by 2030 and net zero city by 2050, and that officers continue the work outlined in this report to develop a Climate Change Strategy and bring this back to Cabinet for approval later in the year.
- (2) it supports investigating the projects contained in the 'quick win' section of the appendix, subject to Council agreeing to dedicate funds towards such environmental, carbon reduction or adaptation projects at its meeting on 27 February.
- (3) a cross-Party working group, along the lines of the Planning Policy Sub-Group, is set up to support and advise the lead Cabinet Member in the development of this strategy and to review the investigations of the various projects set out in the appendix.

3.0 Background and Key Issues

- 3.1 Gloucester City Council has long recognised the importance of Climate Change and the need to reduce emissions as well as adapt to a changing climate. Back in 2001 it

adopted the Nottingham Declaration on Climate Change and later that year it adopted its own Agenda 21 (Sustainable Development Strategy). This was a project-based document and was rolled forward on an annual basis. Moving into the new century, the City Council put forward an annual Energy Management strategy and from 2007 to 2010 it adopted a Climate Change Strategy. This too was a rolling programme with an annually updated series of projects. Some noticeable items in the original 2007 document that have been successfully implemented include:

- the Combined Heat and Power plant at GL1
- An energy efficient new depot at Eastern Avenue
- A Car Club for Gloucester City residents
- A turbine on Alney island and
- the free tree scheme.

3.2 Following the adoption of the 2010 update of the strategy, some of the later projects were not implemented, in large part because markets, subsidies and technologies rapidly changed, resulting in some projects no longer being judged as value for money.

International, National and Regional Context

3.3 Climate Change has been at the forefront of the international stage since at least the United Nations Convention on Climate change in 1992, whose findings were signed off later that year at the UN Rio Conference (the Earth Summit). The Summit's objective was to stabilise greenhouse gas emissions that would prevent dangerous man-made interference with climate systems. Since then the parties to the convention have met as the 'Conference of the Parties' (COP) to assess progress and make further recommendations. In 1997 the Kyoto protocol established legally binding obligations and in Mexico in 2010 it was agreed that warming should be kept within 2 degrees centigrade of pre-industrial levels. The Paris agreement of 2015 extended the period beyond 2020 and had an ambition of keeping global warming within no more than 1.5 degrees centigrade. The Intergovernmental Panel on Climate Change (IPCC) runs in parallel with the Convention, and as a scientific community will reach consensus on climate science to input into the process.

3.4 The UK government has responded to these conventions and agreements with a number of policy initiatives and targets. Indeed by 2018 the UK had reduced its carbon output by 44% compared to 1990 levels and is on target to meet its next carbon budget to 2023. Beyond that, with the recent amendment to the Climate Change Act, the UK was the first major economy to have a target of reducing carbon dioxide emissions to net zero by 2050.

3.5 More locally, by 2019 all Gloucestershire Local Authorities had adopted a Climate Emergency Resolution in some shape or form. For Gloucester, this recognised the science of climate change and noted relevant international agreements. Importantly it committed the City Council to being net Zero by 2030 and similarly the City as a whole to be carbon net neutral by 2050. It also required a carbon audit to inform City Council action on climate change. There were a number of other actions associated with the resolution, though the starting point is clearly to conduct a carbon audit.

3.6 To implement this resolution, there is a need for a new strategy to provide clarity on what the City Council intends to do, and so that it can be judged as to whether or not it has been successful. This will take some time to develop, hence this document

provides a 'road map' as to how the Council can develop that strategy and reduce overall emissions. This roadmap also describes Carbon Accounting before moving on to the broad principles of addressing Climate Change. It sets out a timetable for developing a revised Climate Change strategy. However, acknowledging that time is running out to further reduce carbon emissions, the appendix details a series of quick wins that we intend to investigate and implement over the coming months whilst a strategy is developed, along with some potential longer term projects worthy of investigation at an early stage if funds permit.

Carbon Accounting

- 3.7 Carbon auditing is a science in itself and can be quite complex. It requires other 'Greenhouse gasses' such as methane nitrous oxides and Chlorofluorocarbons to be taken into account, as these man-made gasses also have a significant impact on Climate Change. There is also the question as to what is, and is not, audited. For example, it is clear that City Council office, gas and electricity consumption should be taken into account, similarly car travel for business need, but should it include travel to work emissions? In terms of our estate, clearly the Guildhall consumption should be included, but do we include consumption from the depot (managed by Amey) or the Aspire leisure estate? When we move to measuring emissions for Gloucester City as a whole, there are similarly complex methodological questions requiring consistent assumptions: for instance, does a Gloucester resident driving to Bristol share those emissions across South Gloucestershire, Bristol and Gloucester authority areas, or are they accounted for just within Gloucester's calculations?
- 3.8 These questions are still to a degree in flux and while there is some guidance available, it is not something we are able to conclusively report on now, but will form part of an overall strategy that will be brought before Cabinet later on in the year.

Broad Principles

- 3.9 After Carbon accounting there are a number of general principles that we need to understand and agree before we launch into any actual action. The list is not comprehensive but covers some of the main elements that are likely to form part of a Climate Change strategy.
- 3.10 Reduce emissions/energy efficiency
Clearly the drive and first port of call should be to reduce emissions from our estate, and by the City as a whole. This can be achieved through the use of energy efficient appliances such as LED lights, or ensuring heat in our building is not lost to atmosphere through insulation.
- 3.11 Generate Clean Energy
No energy is entirely carbon free, but clearly renewables such as wind, hydro and solar are very low carbon and the City and Council should be looking to maximise use of such energy sources for its consumption. Ground source heat pumps rely on low carbon electricity to drive them and bio-fuels will vary in their carbon footprint depending on the energy needed to extract and transport them to source. Battery power, while not renewable, is an essential part of low carbon electricity use, as low carbon energy can be stored when not needed to be fed back into the grid at peak time.

3.12 Alternative fuels

Gas does not have to be fossil fuel derived. For example, the food waste from Gloucester is sent to an anaerobic digester where it is made into gas and fertilizer. There are other fuels such as hydrogen that can be made from water or indeed fossil derived gas. As long as the energy used to make them is low carbon, then they are low carbon fuels. Hydrogen is certainly put forward by some as the fuel of the future.

3.13 Adaptation

Even if we stopped carbon emissions tomorrow, the earth would still warm to the point where the climate could become unstable and threaten health and the modern economy. Back in 2003 in France, due to a prolonged heatwave, it is estimated that there were over 30,000 premature deaths. There is much that can be done to mitigate high urban temperatures: from tree planting to the construction of 'Green walls'. Also given the location of Gloucester at the foothills of the Cotswolds escarpment and within the tidal reach of the Severn Estuary, we are going to have to do more to ensure that residents and business manage their flood risk most effectively.

3.14 Transport

Transport accounts for around a third of UK carbon emissions, and this does not even include those arising from aviation. Emissions can be reduced by the use of electric cars, but by far the most efficient means of reduction is by encouraging people to move around on foot, bike or public transport. While transport is a County Council function, there are interventions the city can undertake through the planning system, the promotion of alternatives, the use of its own (and partners') fleet and how all staff/Members conduct e.g. work meetings.

3.15 Community Action

The original earth summit of 1992 recognised the power of community action in delivering sustainable change. Without wider community consent we will not achieve the ambitious goals we have set. As such we will try and support community action to spread the word and to achieve projects on the ground. This will need to include actions around social media and other publicity outlets to ensure that the message is put across to local people in a manner they understand and can support. It will also require the City Council and its partners to raise their game in terms of educating local people as to the nature of the issues we are facing and what they can do in their daily lives to reduce carbon and ensure they are part of a more resilient community.

3.16 Procurement

The City spends a significant amount of money commissioning goods and services each year. The streetcare contract alone is worth over 5.5 million pounds per annum. Ensuring contracts are climate aware is a powerful way of ensuring emissions are reduced across the City Council and the City generally. The adoption of a Social Value policy requiring environmental commitments from suppliers to the Council tendering for Council contracts, will help embed this.

3.17 Co-operation

Gloucester City Council as a relatively small district council cannot achieve its ambitions alone. It will have to work with other authorities and players in the county and beyond. We will work with other stakeholders to achieve cuts to greenhouse gasses and other climate orientated projects. As a precursor to this work, the City has organised a couple of 'State of the City' seminars over the last two years. These engaged a group of local stakeholders to consider key issues facing the city, and last

year there was a specific discussion around tackling climate change. Common themes raised at the workshop, and which should be considered as part of a climate change strategy, were a call for more tree planting, better co-ordination across organisations and increased community input. Some specifics such as further rolling out of solar panels across the council's estate are included in the list of projects at appendix 1. Some, such as a proposal for a youth climate panel, are being taken forward in association with partners (in this case being delivered by the County Council).

3.18 Regulation

As regulators we can effect change. The obvious area is through planning policy applying to new developments. While new development will only account for a small percentage of buildings that will be around in 2050, their impact is wider as technologies used for new build can often be adapted to upgrade the existing built stock. There are other areas such as licencing where the City Council can 'nudge' the market to take a more climate friendly route. However, as with planning, there are boundaries often set by Government as to what can and cannot be achieved through local regulatory change.

3.19 Co-benefits

There are many ancillary benefits to Climate Change mitigation and adaption projects. Less traffic means better air quality and more pleasant environment. Flood management projects such as SUDS (Sustainable Urban Drainage Systems) will have biodiversity and amenity benefits. This can be key when justifying investment in projects and building public support for projects that may otherwise be controversial. There are numerous cross-overs with the wider housing and health initiatives promoted by the City Council and their partners, some of which are contained within the Gloucestershire Health and Wellbeing strategy. This document and other related policies aims to improve the quality of life for individuals which in some instances will bring carbon benefits. Policies and projects pursued for climate change purposes will have positive outputs for mental wellbeing and physical activity targets. Obvious examples include air quality where efforts to reduce carbon will have air quality benefits and vice versa.

3.20 Existing work

Gloucester City Council has not stopped delivering low carbon and other climate friendly projects and policies since the adoption of the 2010 strategy. They have not however, necessarily been 'badged up' as such. For example: the current iteration of the City Plan contains a suite of policies aimed at reducing carbon and increasing resilience, indeed the vision states that development should 'ensure that development responds, mitigates and minimises its impact on climate change through sustainable design and construction, addressing flood risk and encouraging the use of sustainable forms of transport, making the most of existing infrastructure'. As such it includes policies on: electric charging points, building standards, renewable energy and flood management. Our private sector housing team works with landlords to ensure that properties are well insulated, heated appropriately and are not a detriment to human health, often done through the long standing 'Warm and Well' programme. In terms of the Council's own estate, the move from the Docks complex to Shire Hall will have saved significant carbon, and the continued roll out of LEDs and other efficiencies will have made our building stock more efficient. For the wider Gloucester community, the recently constructed Transport Hub will have made public transport more attractive, and we have enabled the recycling of carbon heavy items

and ensured the Private Hire and Hackney taxi fleet is the most modern and less polluting in the County. We have continued to be very active in the area of adaptation, through tree planting and conservation management (often with community input) and in particular with regard to flood management through the creation and adoption of a number of important flood management schemes.

4.0 Social Value Considerations

4.1 Climate Change will impact on all levels of society; as such we need to do as much as we can by leading by example and reducing our emissions, we also need to ensure that we are prepared for a warmer and more unpredictable climate so people are exposed to as little risk and discomfort as possible. As noted above, the Cabinet are considering the adoption of a Social Value Policy, allowing it to incorporate social value commitments from potential suppliers to the Council through its procurements. These social value commitments include environmental/climate change measures and it is anticipated that the adoption of this social value policy will enable progress with some of those objectives listed in this report.

5.0 Environmental Implications

5.1 The Environmental implications and benefits are the driving force of this report. There will be an overwhelming positive impact compared to business as usual.

6.0 Alternative Options Considered

6.1 The do nothing option would result in increased carbon emissions of the Council and the City as a whole. While on a global level this may be judged as insignificant, we have a moral duty to lead by example and it is paramount that at every level carbon emissions are reduced. Doing nothing would also lead Gloucester to become more open to climate change shocks such as flooding and extreme temperatures.

6.2 A 'do more' option would mean we would bring our targets forward beyond those set out in the agreed Council resolution. While this is to be lauded, the current 2030 and 2050 targets are exceedingly ambitious as they are and it would be hard to see how an increase on them could be achieved.

7.0 Reasons for Recommendations

7.1 The City Council through the Climate Resolution of July 2019 has set itself and the City ambitious targets for reducing carbon emissions. This road map and associated projects and proposals are the first step in achieving these targets.

7.2 While the quick wins will be worked on, the longer term projects will need to come back to Cabinet in the Autumn, along with a detailed carbon budget, so we can begin to understand in a detailed manner just what is needed to be done.

8.0 Future Work and Conclusions

8.1 This report sets out a road map as to how we can reduce the carbon footprint of the Council and the City at large. As a road map it will need to be followed by a more

detailed strategy that finesses and puts detail on some of the proposals and charts a course for how the carbon footprint of the Council and the City will be measured. It is estimated therefore that a report will be brought back to Cabinet in the Autumn of 2020 that will detail a carbon measurement methodology, a carbon reduction plan and a timeline showing how we intend to deliver reductions for the 2030 timetable. It will also map out in broader terms some options for measuring and delivering the 2050 City-wide target.

9.0 Financial Implications

- 9.1 The report puts forward the proposal that ‘spend to save’ energy efficiency/renewable projects will be judged on a case by case basis, but to be supported should broadly deliver a simple pay-back period of less than 10 years. Clearly some projects will have more risk than others and this will need to be built into the equation.
- 9.2 There is also a need for some detailed consultant input into what can be a very technical exercise and some up front seed funding for projects that do not have a payback. Council will need to allocate some funding towards some or all of these studies if they are to proceed. Should Council allocate funds, then any spending of such funds would be delegated to the Head of Place in consultation with the Cabinet member for the Environment.

(Financial Services have been consulted in the preparation this report.)

10.0 Legal Implications

- 10.1 When implementing the proposals set out in this report the council will need to comply with relevant procurement legislation and the Council’s Contract Rules

(One Legal have been consulted in the preparation this report.)

11.0 Risk & Opportunity Management Implications

Risk	Impact	Level of impact	Likelihood of impact	Mitigating measures
Carbon accounting too complex/expensive	Unclear as to carbon baseline	2	1	Work with other climate change officers
Projects do not deliver required carbon savings	Cost and lack of carbon savings and loss of credibility	2	2	Rigour over the projects adopted with clear paybacks identified
Partners do not deliver intended outcomes	Loss of carbon savings and credibility	2	3	Expectation management over extent of potential

				outcomes. Work closely with partners
Grants and other support are not available as expected	Loss of Carbon/adaptation and credibility	2	3	Be clear as to expectations and work closely with funders
Opportunities	Impact	Level of Impact	Likelihood of impact	Maximising measures
Co-benefits of Carbon management/adaption projects	Increased amenity and health benefits	3	3	Ensure that co-benefits are integral to projects
Better working with neighbouring authorities/County	Greater aggregate impact	3	2	Potential for a countywide climate co-ordinator to help deliver

12.0 People Impact Assessment (PIA) and Safeguarding:

- 12.1 No safeguarding or related issues were identified during the Screening stage.
- 12.2 The PIA Screening Stage was completed and did not identify any potential or actual negative impact, therefore a full PIA was not required.

13.0 Community Safety Implications

- 13.1 It has been identified that increasingly unstable weather conditions could impact upon broader community safety with regard to flooding and heat stress. The report recognises this and begins to detail measures that will address the issues.

14.0 Staffing & Trade Union Implications

- 14.1 None

Background Documents: None