

Report to Cabinet

24 September 2020

Member for Environment, Recycling and Waste



DECISION REQUIRED

Not Exempt

Organisational Carbon Reduction – Target and Action Plan

Executive Summary

In October 2019, the Carbon Trust calculated the Council's baseline carbon footprint for 2018/19. A new consultant, Anthesis, have used this as a basis for analysing different methodologies for setting a carbon neutral target. They suggest that the most appropriate for the Council is known as an **Absolute Target**. This target is one that refers to the total amount of emissions being emitted in a straight line to a target date, with the same reduction in emissions each year. This type of target is straightforward, easy to monitor and allows some emissions to be offset.

Anthesis recommended two targets:

Scope	Control	Suggested carbon neutral target date	Council's response
1 and 2	Direct control e.g. Council vehicle emissions	2030	Accept as an aspirational target. This reflects the many uncertainties with reaching this target, such as changing technology and the need for detailed costs for some of the actions required to reach carbon neutrality, such as retrofitting buildings
3	Indirect control e.g. contracts	2050	Accept this target which reflects the challenges of reducing carbon from sources that are not within the Councils direct control. The target date mirrors the UK target for becoming net zero carbon

They also used four themes (transport, buildings, procurement and parks and countryside) to set out some possible actions that the Council could consider. These were prioritised and included high level cost estimates as well as an indication of the level of staff resource

that would be required. In response to this, a short term action plan (to March 2022) is proposed. This will help ensure that immediate action is taken and that there are some early successes. It will also lay the foundations for future carbon reduction projects. Progress against the action plan will be reviewed annually.

It is important to note that as a result of national and local actions in relation to Covid 19, the Council faces a significant budget deficit and the need for major decisions on how it will be able fund its services going forward. Adoption of the 2030 target and the actions to achieve it will considerably worsen that financial position. Financing the medium and longer terms actions to reduce carbon will, therefore, be considered as part of the annual budget setting process.

Recommendations

That the Cabinet is recommended:

- i) To approve an aspirational target for the Council's direct emissions to be carbon neutral by 2030
- ii) To approve an additional target for the emissions that are not directly within the Council's control to be carbon neutral by 2050
- iii) To approve a short term action plan for carbon reduction measures to run until March 2022

Reasons for Recommendations

- i) and ii) To implement the priorities of the Corporate Plan for Horsham District Council to become carbon neutral
- iii) To commence the work required to reach the approved targets

Background Papers

Horsham District Council's Carbon Footprint – Report to Cabinet on 28 November 2019
Horsham District Council Carbon Footprint Report – 2018/19 by the Carbon Trust (October 2019)

Wards affected: All

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Background Information

1 Introduction and Background

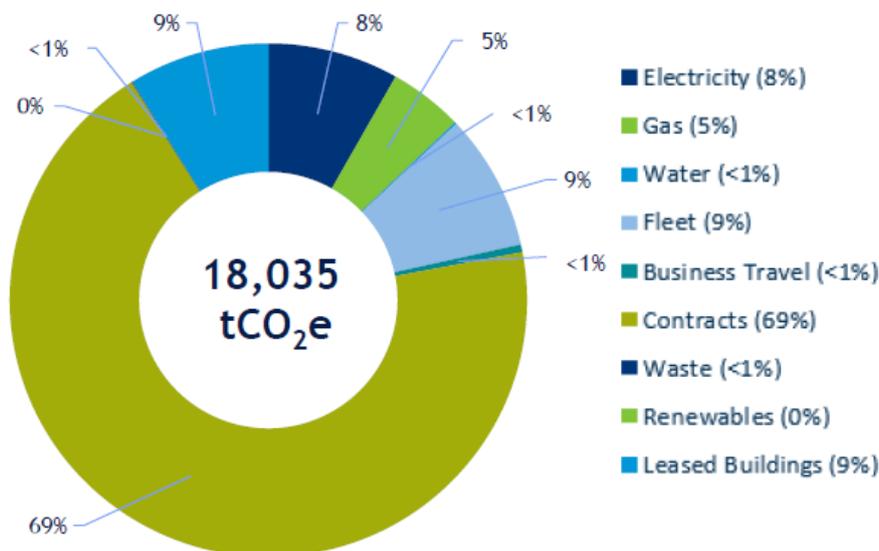
1.1 In June 2019 the Council acknowledged concerns relating to various environmental issues; including climate change. The Notice of Motion stated that: -
“We agree that there is growing public concern in the face of recent dire warnings from the World Scientific community that we are facing a wide range of environmental issues including a climate emergency. These concerns include matters such as pollution of the oceans, climate change, single-use plastics, disposal of waste, air pollution, deforestation and biodiversity loss and we support action to tackle these matters.

This Council has an excellent record of dealing with environmental matters, particularly in the area of waste, recycling and biodiversity and we shall be developing and auditing the Council’s activities to see what further practical changes we can implement in the form of a plan to reflect best environmental practice and work towards a net zero carbon target.”

1.2 This report seeks Cabinet approval for target dates for when the Council hopes to become carbon neutral and a short term action plan to start this process. It is worth noting that carbon neutral and net zero carbon mean the same thing. Carbon dioxide is the most significant greenhouse gas by volume and also stays in the atmosphere for hundreds of years. Most targets, therefore, focus on reducing carbon dioxide emissions but it is only one of many gases that are emitted which contribute to enhanced in global warming. These terms relate to the need to reduce new carbon dioxide emissions and that any ongoing emissions are balanced by absorbing the equivalent amount from the atmosphere. This can be through natural processes or by engineering solutions, such as carbon capture and storage.

1.3 The recommended target and the associated action plan are based on the Council’s carbon footprint for 2018/19 which was **18,035 tCO₂e**. However, this total is likely to change as errors in the calculations by the consultant have been identified. An updated figure for 2019 /20 will be produced.

1.4 The main sources of carbon emissions by category are shown below.



- 1.5 The previous diagram illustrates that the largest source of emissions is from the Council's supply chain via its contracts to procure goods and services and from the buildings that it leases out. These are less easy to reduce as the emissions generated from these activities are not within the direct control of the Council. Furthermore, the data for these emissions was collated using proxy indicators, making them less accurate. The emissions from the use of electricity, gas, water and waste relate to buildings that the Council owns and operates, and the emissions from the fleet are from the petrol and diesel used in its operational vehicles.
- 1.6 A consultant was appointed to recommend a target for the Council to become carbon neutral and to compile an associated action plan to reach the target. The Executive Summary from the consultant's report forms appendix one to this report. The full report is on the Council's website (<https://www.horsham.gov.uk/climate-and-environment/carbon-reduction-action-plan>). Several methodologies were analysed before one was chosen for the recommended target. The consultant's action plan does not include detailed costs but gives high level estimates for expenditure and savings. Further work will be undertaken to give accurate costs, savings and benefits; particularly in relation to retrofitting buildings to reduce their use of energy and to switch to renewable/low carbon sources of energy.

2 Relevant Council policy

- 2.1 The 2019 – 2023 Corporate Plan includes the theme a Cared for Environment which prioritises the "protection of our environment as we move to a low carbon future". This includes the following activities: -
- Undertake a carbon audit to understand the Council's current footprint
 - Produce an action plan to move towards a carbon neutral organisation.
- 2.2 The first action listed above has been completed, as the carbon footprint for 2018/19 was noted by Cabinet at its meeting on 28th November 2019. This report relates to the second bullet point in paragraph 2.1.

3 Details

International and national targets

- 3.1 In 2015 the Paris Agreement (within the United Nations Framework Convention on Climate Change) set an ambitious international target relating to tackling climate change. Nations that signed the agreement committed to reduce their greenhouse gas emissions to a level that would keep global temperatures to below 2 degrees Celsius above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 degrees Celsius. These temperature limits were chosen because exceeding these limits will have a serious impact on all life on earth. It should be noted that global temperatures have already risen by 1 degree Celsius from pre-industrial levels.

- 3.2 In order to keep within these temperature rises each country has set a limit on the amount of greenhouse gases that they will emit. As carbon dioxide is the largest (by volume) greenhouse gas and because it stays in the atmosphere for 100's of years most countries and organisations quote carbon to set their targets. The UK Government amended the Climate Change Act 2008 in June 2019 to set a legally binding target for the country to become net zero carbon by 2050. In order to achieve the target, it sets five yearly carbon budgets. Progress against these is monitored by the Committee for Climate Change.

The Council's carbon neutral target

- 3.3 With this international and national backdrop it is important for the Council to set its own targets for reducing its carbon emissions. This demonstrates leadership on this issue and will put the Council's own house in order. Several methodologies are available for setting an organisational carbon neutral target. Three main approaches were explored by the consultant, as well as business as usual where no action is taken to reduce emissions. They concluded that an Absolute Target would be the most applicable for the Council. This is a linear reduction in carbon emissions to a target date, with the same reduction in emissions each year. It does not relate to the scientific evidence for how quickly carbon emissions need to be reduced to stay within the temperature limits set internationally. However, such targets can be equally challenging and have the flexibility of being able to use off-setting to reach net zero carbon.
- 3.4 The recommendation from the consultant is for the emissions that are within the control of the Council to be carbon neutral by 2030. This represents 19% of the total carbon footprint. These are known as scope 1 and 2 emissions and include emissions from the use of gas and electricity to heat and power buildings as well as fuel used in fleet vehicles. This is a challenging target, but it has the advantage of ensuring that actions are taken immediately and at pace. It will require an annual 8% reduction in emissions. Early action demonstrates leadership on this issue and gives longer for financial payback. The disadvantage is that a 2030 date raises concerns over staff capacity and concentrates high expenditure over a shorter time i.e. over a 10 year period as opposed to 20 years if a 2040 target was agreed.
- 3.5 The consultant also recommended a separate target date for the parts of the Council's carbon footprint that are not within its direct control. These are known as scope 3 emissions and include emissions from buildings that are owned by the Council but leased to other organisations, as well as from the contracts that the Council uses to purchase goods and services. The total scope 3 emissions are 81% of the total footprint. The recommended target date for scope 3 emissions to reach carbon neutrality is 2050. The later date for these emissions reflects the challenge in influencing other organisations to act and aligns with the UK target to reach net zero carbon.
- 3.6 The recommendation in this report is to broadly accept the recommendation from the consultant for the methodology used to set the target and a **carbon neutral date of 2050 for the emissions that are not within the Council's direct control. The carbon neutral target for emissions within its control by 2030 should be aspirational.** This reflects the unknowns associated with achieving the target, such as changing technology and the high degree of uncertainty over the implementation costs. Given this uncertainty, annual reviews will take place of the actions and the

potential impact on the budget. This will form part of the annual budget setting process.

Proposed action plan to reach the target

- 3.7 The consultant's report includes an action plan grouped under four themes. These are: -
- Transport
 - Property
 - Procurement
 - Parks and Countryside.
- 3.8 Each theme is subdivided into priority areas, with more detailed information on each action and a high level cost estimate for most actions. The plan covers up to 2030 and, therefore, starts the process for reducing the scope 3 or indirect emissions.
- 3.9 The actions relating to the Council's fleet include reducing distance travelled, using sustainable forms of transport and switching to low emission sources of fuel. For the operational buildings the actions focus on reducing energy demand and retrofitting, such as increased levels of insulation. Overall, these actions have the potential to reduce emissions by 58%. National decarbonisation of the electricity grid will further reduce the Council's emissions by a further 17%.
- 3.10 The remaining emissions will require carbon offsetting, e.g. ensuring that all electric vehicles are supplied by 100% renewable sources and that renewable forms of energy are installed in appropriate Council buildings. The opportunities for nature based solutions will also need to be investigated; such as heathland restoration which can remove and store carbon emissions. Offsetting could also include measures such as investing in renewable forms of technology outside of the Council's buildings and land. The short term action plan includes developing a strategy for offsetting.
- 3.11 A short term action plan has been produced based on the actions recommended by the consultant. This forms appendix two of this report. This action plan (which will run until March 2022) will ensure that immediate action is taken, that there are some early successes and lays the foundations for future projects. For example, carrying out carbon literacy training for staff will help to embed this agenda throughout the organisation.

4 Next Steps

- 4.1 The next step will be to implement the short term action plan. Although the Council already has a good track record on addressing a range of environmental issues, the proposed plan provides a more co-ordinated approach to reducing carbon emissions. It also includes measures to embed the actions throughout the organisations. An annual progress report will be produced for Cabinet.
- 4.2 The short term plan includes completing audits of the main Council buildings to provide detailed costs for retrofitting these buildings. This is required to give an accurate cost for this work and, therefore, greater certainty on the budget implications of reaching the 2030 target.

4.3 Monitoring of the Council’s carbon emissions takes place annually. Future progress reports will include an update of this data to monitor progress on reducing the Councils carbon emissions.

5 Views of the Policy Development Advisory Group and Outcome of Consultations

5.1 The Environment, Recycling and Waste Policy Development Advisory Group fully debated the contents of the consultant’s report and the recommendations in this Cabinet report.

5.2 Comments made by the Director of Corporate Resources have been incorporated into the report. The Monitoring Officer approved the content of the report.

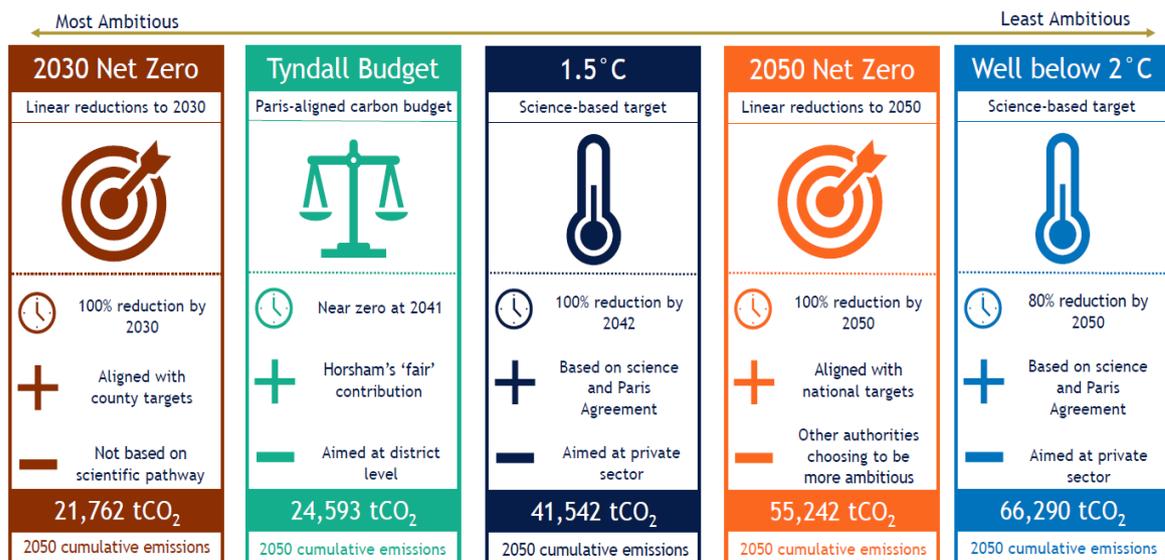
5.3 All Departmental Heads mentioned in the action plan have been consulted and provided comments. Amendments were made to the plan in light of the comments received.

6 Other Courses of Action Considered but Rejected

6.1 The main alternative options related to which methodology to use to set a target for the Council to become carbon neutral. The following methodologies were considered by the consultant: -

- Do nothing – business as usual
- Absolute Target 2030, 2040 or 2050
- Science Based Target
- Tyndall carbon pathway

6.2 The business as usual scenario does result in a reduction of carbon emissions; due to actions at the national level. However, the reduction in emissions would leave a large gap to reach zero carbon; 78% by 2030 and 64% by 2050.



- 6.3 The previous infographic summarises the different methodologies. The Science Based Target is aimed at organisations in the private sector. This is complex to calculate and explain. It does not give the flexibility of being able to offset emissions. The Tyndall Budget is used for calculating an areas fair share of carbon that it can emit based on the targets in the Paris Agreement. It is not as useful for an organisation to use and again is complex to explain and monitor.
- 6.4 The consultant, therefore, concluded that the Absolute Target was the most appropriate for the Council. They then modelled a target date of 2030, 2040 and 2050 for reaching carbon neutrality. The dates of 2040 and 2050 were discounted because these are less ambitious and do not show the necessary level of leadership. A later date means that the Councils overall carbon budget would be larger and could also mean that there was less focus on taking immediate action.

7 Resource Consequences

- 7.1 The consultant produced high level estimates of the costs associated with the actions in their report. These are listed in table 1.

Area	Action (summary)	High level cost
Transport	Eco-driver training Encourage green commuting Change fleet to electric vehicles	£7m
Property	Retrofitting buildings Replace lighting and appliances Renewable energy supply	£26m
Parks and Countryside	Relates to offsetting: - Assess sequestration opportunities Offsetting strategy Habitat restoration/tree planting	£0.2m
	TOTAL	£33.2m

Table 1 – summary of the high level cost estimates for the actions in the consultant’s report

- 7.2 The Medium Term Financial Strategy update makes it clear the Council faces significant financial challenges going forward. The full Carbon Reduction Plan commits the Council to a level of financing that will mean, in setting its new Medium Term Financial Strategy, it will have to consider how this fits in with other areas of expenditure/income and which services it continues to provide in order to balance its budget.
- 7.3 Some of the estimated expenditure in table 1 will be spread over time; for example, retrofitting the leased buildings currently estimated to cost approximately £12 million. However, to achieve the 2030 target for direct emissions will require large expenditure over the next 10 years. A review of the actions and potential impact on the budget will take place as part of the annual budget review, alongside any obtainable external funding.
- 7.4 Further research and detailed work will be undertaken to provide accurate costs and savings for some of the actions listed in table 1. Audits will be carried of the

main Council buildings to determine the retrofit costs and potential savings. Low emission refuse vehicles will be trialled to give a more accurate assessment of the running costs for these vehicles and the practicalities of running these in a rural district. Future capital programme years contain indicative amounts to replace cars and vans in the fleet when they reach the end of their lives. The option of electric vehicle replacement will be considered at the appropriate time via a cost-benefit analysis. Further reports will be presented to Cabinet as different elements of the action plan come forward.

- 7.5 As the national carbon reduction agenda gathers pace, there may be opportunities to access Government grants/schemes, such as the Public Sector Decarbonisation Fund as well as external sources of funding; such as Salix finance which provides interest-free Government funding to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills. The Council's aim will be to focus on maximising the reduction of carbon in the most efficient and effective way, offsetting carbon where it is not cost effective to reduce it.
- 7.6 The short term action plan in appendix 2 requires revenue expenditure in the current financial year. The total for these is £130,000 as set out below.

Audits of Council buildings	£100,000
Offsetting strategy	£10,000
Survey of outdoor lighting	£6,000
Carbon literacy training	£5,000
Map carbon sequestration	£5,000
Green commuting incentives	£2,000
Eco driver training	£2,000
TOTAL	£130,000

- 7.7 The budget for 2020/21 does not include this expenditure, so the Transformation Fund Reserve will be used, as the actions will bring about change within the organisation. For example, the climate change programme will require behaviour change, such as business travel and turning off appliances/lighting and climate change considerations will need to be at the heart of decision making. Future expenditure on carbon reduction would then be built into the annual budget.

8 Legal Consequences

- 8.1 The Climate Change Act 2008 is the basis for the UK's approach to tackling and responding to climate change. It imposes obligations on Local Authorities to reduce carbon emissions. The Act was amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019 to change the target for the UK to become net zero carbon by 2050. This is a legally binding target.
- 8.2 Section 111 of the Local Government Act 1972 enables the Council to do anything that is calculated to facilitate, or which is conducive or incidental to, the discharge of their functions.
- 8.3 The main legal implications of the report are when projects stemming from the action plan commence. Any that require securing goods or services will need to

comply with the Public Contract Regulations 2015 and the Councils Contract Standing Orders.

9 Risk Assessment

- 9.1 The full risk assessment forms appendix three to this report. The highest risk to the proposals in this report is the significant costs for delivering a programme to meet the carbon neutral target. The COVID-19 pandemic has already had a significant negative impact on the Council's finances and the full extent of the impact on the UK economy is not yet known. There is a high risk that the budget will not be available to take the actions required to reach carbon neutrality. The mitigation measure for this is to ensure that there is close monitoring of expenditure and that an annual review takes place of the carbon reduction measures that need to be implemented along with cost-benefit analysis for the proposed actions. This will form part of the annual budget review.
- 9.2 The other risks are either high or medium. Another high risk related to staff capacity to implement projects over the medium and longer term. This will require regular monitoring to ensure that projects are being delivered. The final high risk is a lack of inhouse and specialist expertise. This could be mitigated by additional training or the use of consultants/temporary members of staff.

10 Other Considerations

- 10.1 There are no crime and disorder implications from this report. Human Rights and Equality and Diversity implications will be considered when each of the projects contained in the action plan are implemented. The main thrust of the report is progressing the Council's sustainability agenda and building on the organisations good track record on environmental issues to reach the challenging targets set out in the report to make the Council a carbon neutral organisation.