

To: Cabinet
Date: 15 December 2021
Report of: Head of Corporate Strategy
Title of Report: Oxford City Council: Achieving Net Zero

Summary and recommendations	
Purpose of report:	To seek approval to amend the Council's emissions reduction target for its estate and operations and to establish a Net Zero Transition Fund, reflecting advice from the Council's Scientific Advisor.
Key decision:	Yes
Cabinet Member:	Councillor Tom Hayes, Deputy Leader and Cabinet Member for Green Transport and Zero Carbon Oxford
Corporate Priority:	Zero Carbon Oxford
Policy Framework:	Council Strategy 2020-24
Recommendations: That Cabinet resolves to:	
<ol style="list-style-type: none"> 1. Approve the amendment to Oxford City Council's greenhouse gas emissions reduction target for its estate and operations to focus solely on achieving net zero carbon by 2030, thereby changing the Council's use of terminology to reflect advice from the Council's Scientific Advisor and to align with the emerging definition of net zero; 2. Approve the Council's continued commitment to net zero, with the same planned absolute reduction in carbon emissions by 2030; 3. Approve the diversion of funds already allocated in the 2021/22 and 2022/23 budgets for green gas purchase and offsetting to be used instead to create a 'Net Zero Transition Fund', which will direct resources towards additional emissions reduction actions; 4. Note that these amendments will be incorporated into the Council's 4th Carbon Management Plan to reflect new best practice and advice from the Council's Scientific Advisor and help to settle the evolving consensus on the emerging definition of net zero; and 5. Note the Council's commitment in the Carbon Management Plan to develop a greater understanding of ways to reduce Scope 3 emissions and develop a Scope 3 emissions reduction plan. This work will commence in 2022/23. 	

Appendices	
Appendix 1	Statement from Professor Nick Eyre, Scientific Advisor to Oxford City Council.
Appendix 2	Cost of achieving “net zero” with green gas and offsetting in 2021
Appendix 3	Insetting background details
Appendix 4	Risk register

Introduction and background

1. Oxford City Council declared a climate emergency in January 2019. In its response to the Citizens’ Assembly on Climate Change, the Council committed to becoming net zero carbon in 2021¹ to drive down emissions as quickly as possible while developing detailed plans “for further projects to accelerate the reduction in the Council’s underlying emissions to achieve a Zero Carbon Council by 2030 or sooner”².
2. In February 2021, Oxford City Council coordinated the Zero Carbon Oxford Summit, chaired by the Leader, which established the Zero Carbon Oxford Partnership (ZCOP), whose membership includes leaders from the city’s universities, institutions, and large businesses. The ZCOP is chaired by the Cabinet Member and committed to support achieving net zero carbon emissions as a city by 2040, guided by the specially commissioned Roadmap to Net Zero, which outlines the actions required to achieve this goal.
3. The 4th Carbon Management Plan outlines the Council’s approach to achieving the 2030 Zero Carbon Council target, with progress currently on track – driven primarily by the delivery of the Public Sector Decarbonisation Scheme (PSDS) across four of the Council’s leisure centres. Upon completion in March 2022, it is estimated that the PSDS programme will have reduced total emissions from the Council’s estate and operations by 21% in a single year. This will be on top of the 40% reduction in the Council’s carbon footprint already achieved over the past decade.
4. It was intended that the delivery of Net Zero by 2021 would be achieved primarily by green gas purchase and offsetting, for which a budget of £71,000 in 2021/22, increasing to £132,000 in 2022/23 (recurring thereafter) has been allocated. To date a total of £27,598 of this has been spent over two years - starting from 1 October 2020 - procuring 10% of the Council’s gas from green supplies.³
5. In October 2020, Professor Nick Eyre was appointed as the Council’s first Scientific Advisor, to provide independent advice regarding the Council’s carbon reduction

¹ Amended from 2020 due to the delay caused by the pandemic

² Oxford City Council Initial Response to the Citizens Assembly on Climate Change: <https://mycouncil.oxford.gov.uk/ielssueDetails.aspx?IId=23214&Opt=3>

³ The purchase of Renewable Gas Guarantees of Origin via LASER

plans. In response to a request by the City Council to consider the key principles underpinning net zero policies and the best current evidence available, Professor Eyre advises that the Council:

- a. Amends its carbon reduction targets for its estate and operations to focus on achieving *Net Zero Carbon by 2030*, abandoning its 2021 net zero target.
- b. Diverts funding for green gas and offsetting to a “Net Zero Transition Fund” which will prioritise expenditure according to the following hierarchy:
 - i. ‘Additional’ emissions reduction by the Council from its own activities
 - ii. Insetting (i.e. support for emissions reduction by others in Oxford). See appendix 3.
 - iii. Offsetting actions outside the City, including the purchase of green gas credits

Oxford City Council’s carbon reduction targets

6. The proposed changes to the Council’s carbon reduction targets are driven by a new, emerging consensus on the definition of net zero. Whereas ‘carbon neutral’ has been clearly defined since 2009, the interpretation of net zero has been varied and inconsistent.⁴ There is no globally agreed definition of net zero, however, the emerging consensus is that net zero can be achieved by reducing emissions as far to zero as possible, with any remaining hard-to-decarbonise emissions compensated with greenhouse gas removals.⁵
7. In the context of this emerging definition, the Council is taking the proactive decision to toughen our use of the term “net zero”. This is to shape and help define the evolving debate and support the adoption of a more rigorous application nationally and internationally.
8. The proposed change to the Council’s end goal of “zero carbon” to “net zero carbon” represents a more accurate description of existing plans, rather than a change to the current level of ambition. The Council will continue to focus its efforts on the same absolute emissions cuts each year (i.e. 526tCO₂) by replacing gas boilers and decarbonising fleet vehicles, whilst continuing to scope opportunities to support local renewable projects and those associated with ‘high quality’ (traceable, renewable sourced, additional) Renewable Electricity Guarantees of Origin (REGOs)). Making this change will simply provide consistency of terminology with emerging consensus around net zero.
9. In light of this evolving consensus, the Council regards its ‘Net Zero by 2021’ target, which would be achieved primarily by green gas purchase and offsetting, as out of step with the emerging definition. While the continued implementation of these measures would have positive impacts by supporting society’s transition to net zero (for example, by helping to create a market for green gas), it is less clear that they would have the most useful role in mitigating Oxford City Council’s impacts on the

⁴ Science Based Targets Initiative: <https://sciencebasedtargets.org/blog/what-is-good-net-zero>

⁵ Zero Carbon Oxford 2040 Net Zero Action Plan, 2021 page 7

climate. It is important for the Council to be able to credibly speak on climate issues and the continued implementation of these measures would make it challenging for the Council to credibly achieve 'net zero' in 2021.

10. Net Zero by 2030 – rather than Zero Carbon (or absolute zero) by 2030 - is recommended because at the end of the decade it is very likely that there will be residual emissions requiring offsetting until the electricity grid is fully decarbonised.⁶
11. Currently, the Council discounts its electricity-related emissions from its forecast pathway to net zero by 2030, on the basis that it procures 'green' electricity.⁷ However, new advice (published March 2021) from the UK Green Building Council (UK GBC) advises that green tariffs should only count towards net zero if they can demonstrate additionality (i.e., that an increase in renewables capacity has resulted from the purchase of REGOs).⁸ This is possible with 'high quality' REGOs, such as the Council's investment in the Ray Valley Solar Farm, but it is not currently possible with most 'standard' green electricity tariffs. Therefore, depending on national progress towards the decarbonisation of the electricity grid, the availability of "high quality" green tariffs at the end of the decade, and the Council's investments in local renewable schemes, some level of offsetting will likely be required in 2030, requiring a "net zero" target.

The role of green gas and offsetting

12. Currently, Oxford City Council procures green gas for 10% of its supply. However, new advice from the UK GBC states that the current maturity of the green gas market makes demonstrating additionality difficult (i.e. that more green gas has been directly produced as a result of a green gas certificate being purchased).⁹ Although UK GBC suggests that some organisations might consider procuring green gas to stimulate market growth – the premiums¹⁰ are high and the impact in terms of Oxford City Council's emissions is questionable. Therefore, it is recommended that the Council's ongoing green gas funding is diverted to a 'Net Zero Transition Fund', which would prioritise measures that will deliver additional carbon emissions reduction, only considering green gas purchase if all other emissions reduction options have been exhausted.
13. The emerging consensus on net zero prioritises emissions cuts over offsetting, which should only be considered as a last resort to deal with residual emissions.

⁶ The Government is committed to achieve a fully decarbonised power sector by 2035. The National Grid's Future Energy Scenarios (FES) 2021 modelling projects that the power sector will get to net negative emissions in 2032 – 2034 in all scenarios consistent with the UK achieving Net Zero by 2050. <https://www.nationalgrideso.com/future-energy/future-energy-scenarios/fes-2021/scenarios-net-zero>

⁷ In 2017/18 Oxford City Council committed to buying certified green electricity for all of its electricity supplies, through Renewable Energy Guarantee of Origin (REGO) certified supplies

⁸ Renewable Energy Procurement and Carbon Offsetting, UK Green Building Council, March 2021

⁹ There is no guarantee that the green gas hasn't been produced as a result of another subsidy mechanism e.g. the Renewable Heat Incentive.

¹⁰ At the time of writing premium is 0.75p/kWh which currently translates to an annual £13,779 uplift on estimated annual spend of £48.3k for c.10% of supplies.

Unlike many carbon reduction measures, the purchase of offset credits do not offer a financial return on investment– with limited or no local co-benefits (such as improved supply chains/ lower energy bills) - so it also makes commercial sense to undertake this only as a last priority. Therefore, it is recommended that the Council’s ongoing offsetting funding is diverted to the Net Zero Transition Fund, with offsetting only considered as a last resort (alongside green gas purchase).

14. The Net Zero Transition Fund would primarily be used to fund additional carbon reduction actions (i.e. actions that could not realistically be undertaken by the Council or others using other resources) covering the Council’s scope 1, 2 and 3 emissions. Should these actions be exhausted, the Council could then consider whether the fund could be used to support additional carbon reduction actions within the local authority boundary (also known as “Authority Based Insetting”) to support the city’s goal to achieve Net Zero Carbon by 2040. Only when all additional emissions reductions actions have been exhausted would the Council consider green gas purchase and/ or offsetting.

Carbon and environmental considerations

15. The recommended adjustment to terminology used for net zero brings the Council into line with emerging best practice in the field and the proposed hierarchy of measures responds to advice from the Council’s Scientific Advisor.
16. The recommended diversion of funds from offsetting and green gas purchase will support the following plans and strategies:
 - a. The 4th Carbon Management Plan 2021 – 2030 (by releasing funding to support measures that will directly reduce emissions of the Council’s scope 1, 2 and 3 emissions).
 - b. The Net Zero Oxford Action Plan: (by releasing funding to support measures that will contribute to achieving Net Zero as a city by 2040).
 - c. The Council Strategy 2020 – 2024. As above.
 - d. Air Quality Action Plan 2021 – 2025. By supporting measures that will reduce harmful emissions in the city.

Financial implications

17. The delivery of net zero in 2021 would be achieved primarily by green gas purchase and offsetting.
18. The 2021/22 budget allocated £71,000 for green gas and offsetting with a further budget of £61,000 during 2022/23 – totalling £132,000 recurring thereafter. To date a total of £27,598 of this has been spent over two years - starting from 1 October 2020 - procuring 10% of the Council’s gas from green supplies.¹¹ No offset credits have yet been purchased.

¹¹ Via the purchase of Renewable Gas Guarantees of Origin; £6900 in FY 2020/21, £13,799 in FY 21/22 and £6900 in FY 2022/23.

19. The original intention was to purchase 100% green gas and offset remaining emissions (primarily fleet vehicles), but significant increases of the green gas premium since 2019, made this too expensive to achieve (see Appendix 2 below).
20. Achieving “net zero” in 2021 via a combination of green gas purchase and high quality offsetting would cost a minimum of £84k in 2021. If the Council wishes to achieve net zero in all subsequent years to 2030, this would cost a total of £544k - £1.07m (depending on 10% or 100% green gas purchase), assuming emissions reduce by 10% annually as outlined in the Carbon Management Plan, that the Council purchases “high quality” offsets, and that the green gas premium and cost of offsetting remains the same as FY 21 -22.¹²
21. Due to the emerging consensus on the definition of net zero, combined with the need to focus funding on emissions reduction from the Council’s own estate and operations and the city more widely (in support of the 2040 target) it is proposed to divert the ongoing existing funding of £132,000 to a Net Zero Transition fund. This fund will prioritise spending in the following way:
- i. Additional emissions reduction by the Council from its own activities
 - ii. Authority Based Insetting (i.e. support for emissions reduction by others in Oxford)
 - iii. Offsetting actions outside the City, including the purchase of green gas credits
22. To the extent that avoiding the last of these will enable the Council to save money (compared to existing policy), this should be reallocated to the higher priority areas, with care taken to ensure that actions supported by such a fund are genuinely additional (i.e. could not realistically be undertaken by the Council or others using other resources). It is advised that officers draft guidance for use of the fund to ensure it achieves these objectives.

Legal issues

1. There are no legal implications.

Level of risk

2. There is a reputational risk that changing the Council’s net zero target date from 2021 to 2030 is inaccurately interpreted as a weakening of ambition or commitment. This will be mitigated by clearly communicating that the Council’s commitment to net zero remains the same, with the same planned absolute reduction in carbon emissions by 2030. This is a change to the Council’s use of terminology and to its approach to achieving net zero, in order to reflect advice from the Council’s Scientific Advisor and to align with the emerging definition of net zero. The “do

¹² Estimated using FY 21/22 costs for green gas and offsetting: 10% green gas @ c£13.5k plus offsetting in the south east of England @ c.£70k OR 100% green gas @ c£135k plus offsetting in the south east of England @ c.£30k.

nothing” risk is higher, since it would mean the Council is out of step with best practice and scientific advice.

Equalities impact

3. The clear mandate from Oxford’s citizens from the climate change assembly has included representatives from a broad cross-section of groups and ages across the city. There are no adverse impacts on any part of the community; however Oxford City Council is mindful of the important leadership role it plays across its communities. The Council will be mindful of communicating clear messages on the purpose of this programme of carbon emissions reduction.

Report author	Rose Dickinson
Job title	Carbon Reduction Team Manager
Service area or department	Environment Sustainability
Telephone	01865 252994
e-mail	rdickinson@oxford.gov.uk

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