

# Proposal for a Cambridgeshire Carbon Advisory Service and Strategic Business Case for a Cambridgeshire Decarbonisation Fund: Executive Summary

COMMUNICATION | EDITORIAL | **SPECIAL FEATURE** | PERSPECTIVE | REPORT | REVIEW

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**Keywords** Carbon · Decarbonisation · Emissions reduction · Net-zero

The imperative and urgency to reach net-zero has never been clearer. Decarbonising our local environment and practices is a momentous task; however, Cambridgeshire County Council and its various public sector partners and stakeholders together are uniquely placed to collaborate positively and holistically towards tackling the climate crisis at a local level. Thus, the Cambridgeshire local system has an exciting and critical opportunity to drive the achievement of a net-zero Cambridgeshire by 2045 and serve as a model for other local areas across the country and elsewhere. This report recommends the establishment of a Carbon Advisory Service, which will support local businesses to decarbonise. In conjunction, this report sets out the strategic business case for a Cambridgeshire Decarbonisation Fund, which will offset residual ‘hard to

reduce’ emissions and support investment in local community infrastructure and nature-based projects which will avoid, reduce, or sequester carbon.

There are two main principles which should guide decarbonisation efforts across Cambridgeshire. Firstly, carbon-saving projects should be prioritised in the order ‘avoid, reduce, sequester’ to maximise long-term impact of interventions. Secondly, alongside providing a platform to offset current carbon emissions, there must be robust and verifiable plans to decarbonise all scopes of emissions in the long term. Towards this second principle, the establishment of a Carbon Advisory Service to run alongside and in collaboration with the Cambridgeshire Decarbonisation Fund is proposed. The Carbon Advisory Service will provide businesses, particularly small and medium sized

enterprises (SMEs), with assistance in calculating their emissions, and a tailored framework for reducing these emissions. Participating businesses will then be invited to offset any residual 'hard to reduce' emissions through the Decarbonisation Fund.

In the introduction, the motivation for the formation of a Carbon Advisory Service is shown, as well as context around what a Decarbonisation Fund is and the aims and essential components of such a fund, and how these two services could be highly complementary. The remainder of the report is divided into two main sections. The first provides a detailed justification for establishment of a Carbon Advisory Service, including how it will improve upon existing resources available to local businesses, using a case study of services available in Suffolk and Norfolk. The section concludes with some specific recommendations. The rest of the report is concerned with the Cambridgeshire Decarbonisation Fund, which covers i) the strategic business case for the establishment of the fund, ii) how decarbonisation projects will be verified and validated, including two case studies, and iii) the financial structure of the fund. The report concludes with a brief summary and a list of recommendations for the setting up of a Carbon Advisory Service and Decarbonisation Fund for Cambridgeshire; these recommendations are included below.

## *Recommendations*

1. The establishment of a local Carbon Advisory Service to support small and medium sized businesses in Cambridgeshire to decarbonise, through the provision of the following services:
  - (a) Free tailored advice, and signposting relevant external resources and services.
  - (b) Assistance with carbon accounting and the creation of action plans.
  - (c) Energy audits and business-specific recommendations.
  - (d) Assistance with the purchase of carbon credits from the Cambridgeshire Decarbonisation Fund, where appropriate.
  - (e) Assistance with procurement and accessing financial support for carbon-reduction projects.
  - (f) An accreditation service with tiered certification.
  - (g) Training and networking opportunities and regular updates on funding, technology and environmental legislation.
  - (h) Support with publicity and follow-up on businesses' progression towards set targets.
2. The Carbon Advisory Service should act as a gateway to the Decarbonisation Fund, ensuring that businesses reduce their emissions as far as possible before offsetting any residual 'hard to reduce' emissions through the purchase of carbon credits.
3. The Decarbonisation Fund should support emissions-reduction projects that would otherwise not be financially viable (i.e., would not produce revenue or financial savings which outweigh the cost of the project). Projects which do not require the sale of carbon credits to be financially viable should be performed separately to the running of this Fund.
4. The Decarbonisation Fund should set a single carbon price through a portfolio approach, where more carbon-expensive projects (with high social/environmental value) are supported by projects with a lower project cost per tonne of CO<sub>2</sub>.
5. The Decarbonisation Fund should organise and perform the necessary assessments, measurements and predictions required for validation and verification of the decarbonisation projects in the decarbonisation fund portfolio.
6. The Decarbonisation Fund should register projects with established certification organisations where relevant and cost-effective, and otherwise use/adapt relevant publicly available methodologies from such organisations for validation and verification.
7. The initial funding provided for the establishment of the Decarbonisation Fund

should be maximised, as this will enable the biggest environmental impact and largest financial returns in the long term.

8. A diverse portfolio of initial funding should be sought for the establishment of the Decarbonisation Fund, combining both public and private sources to ensure that the Fund is resilient.

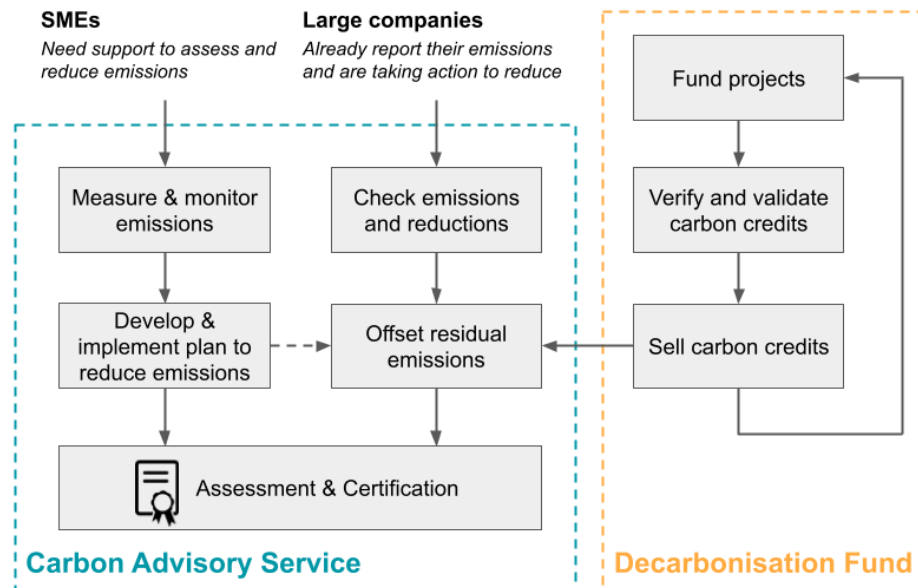


Figure 1: Proposed outline for Carbon Advisory Service and its role as a gateway to the Cambridgeshire Decarbonisation Fund

## Acknowledgements

We would like to thank Cambridgeshire County Council and CUSPE for the opportunity to take part in such an interesting and important project. We have all learned a lot through the process, and very much hope that our work will lead to appreciable benefit for Cambridgeshire residents, businesses and the climate more generally. Over the course of this project, we have received assistance from a wide range of people who we would like to thank. Very many thanks to Sheryl French, Chloe Rickard and Emily Boulton for your input and expertise at our regular meetings - you have been enormously helpful and supportive. Thanks to Daniel Quantrill for his support and guidance. Thanks to Ellie Todd and Matthew Rathbone for their insight into how the council's finances are run, and the implications of this upon the proposed Fund. Thanks to Matthew Rathbone and Kim Kent-Augustin for useful discussions of

the finances of the Swaffham Prior Community Heat Network and the Fund. Thanks to Ned Harrison at Suffolk County Council for sharing his wealth of experience of how businesses can be supported in implementing emissions reductions measures and his helpful insights into how BEE Anglia and the Carbon Charter are run. Thanks to William Moody from the University of Cambridge for insights into The Carbon Literacy Project. Thanks to David Lowe from the Warwickshire County Council for insight on how the Woodland Carbon Code (WCC) can be applied to local decarbonisation and biodiversity projects.

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After completing her undergraduate degree in Natural Sciences at the University of Cambridge, Buffy worked for two years in Public Engagement and Science Communication at the MRC Laboratory of Molecular Biology. Now a third year PhD student, she studies intestinal stem cell biology and is also a Bye Fellow in Writing Skills at Downing College, Cambridge. Buffy has a keen interest in issues relating to the climate crisis. Alongside her PhD, she has been working with the East of England NHS Sustainability Network to identify barriers to, and opportunities for, sustainable change and is now working on the second phase of the project, translating initial proposals into tangible outputs to help achieve the NHS's net zero targets. After participating in the CUSPE decarbonisation project, Max, Isobel and Buffy entered their idea for a business advisory service to Cambridge Zero and Carbon 13's 2022 Carbon Challenge where they were awarded runner-up. Corresponding address: ble22@cam.ac.uk



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evolve under operational stressors such as light, temperature and atmospheric changes with the aim of propelling these materials into wide-scale use and reducing our dependence on fossil fuels. A physicist by training, Affan has degrees in physics from King's College London and the University of Warwick. Alongside his research interests, he teaches physics to students from school to master's level. Affan is deeply passionate about sustainability, and alongside his PhD, he leads a working group working on making research labs more sustainable and improving representation in higher education. Corresponding address: ani24@cam.ac.uk

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Amogh's research deals with the study of energy materials with an overarching objective to tackle climate change. His current work at the University of



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Isobel is a zoology PhD student in the Conservation Research Institute at the University of Cambridge, studying aquatic ecology. Her research focuses on freshwater mussels



and their contributions to ecosystem functioning in rivers and lakes. Isobel also studies long-term changes in mussel populations over time and their responses to anthropogenic threats. Alongside this she supervises students on the second-year undergraduate Ecology, Evolution and Conservation course at the University of Cambridge. As an ecologist and conservationist, Isobel believes strongly in the importance of integrating scientific research with policy and practice, and that to achieve a truly sustainable future, sustainable practices must become an integral part of society and its institutions. She found that her experience of working on the CUSPE Policy Challenges programme this year was a fascinating insight into how this can happen at a local and regional scale. Corresponding address: iso21@cam.ac.uk

Robert Pearce-Higgins has recently concluded a PhD in synthetic chemistry under the supervision of Dr Robert Phipps. His research focused on improving the



efficiency of metal catalysed reactions used extensively in the pharmaceutical industry to produce complex molecules, with particular relevance to promising cancer treatments in development. As part of the 2021 CUSPE Policy Challenges, he enjoyed learning about the impact scientists could have in influencing public policy and the importance of detailed analysis in this decision making. Since finishing his PhD studies at the end of 2021, Robert has started working at Element Energy, an environmental consultancy using quantitative analysis to provide strategic advice to both the public and private sector on how to quickly reach the target of net-zero emissions. Corresponding address: robert.pearcehiggins@erm.com

Andrew is a BBSRC-funded PhD student in the Department of Veterinary Medicine and a member of Christ's College at the University of Cambridge. His research focuses on studying gene expression changes in a *Drosophila* model of



prion disease, a type of neurodegenerative disease. Prior to his PhD, he studied Natural Sciences for his undergraduate degree at the University of Cambridge. After taking part in one of the 2021 CUSPE Policy Challenges to outline a strategic business case for a Cambridgeshire Decarbonisation Fund, Andrew is now the 2022 CUSPE Policy Challenges Coordinator, working with officers of the Cambridgeshire County Council to organise this year's Policy Challenges. Corresponding address: aas77@cam.ac.uk

**Conflict of interest** The Authors declare no conflict of interest.