

Cambridge University Science and Policy Exchange 2020: A Cambridgeshire Decarbonisation Fund

To: Environment and Sustainability Committee

Meeting Date: 14th January 2021

From: Steve Cox, Executive Director, Place and Economy

Electoral division(s): ALL

Forward Plan ref: N/A

Key decision: NO

Outcome: A Cambridgeshire Decarbonisation Fund co-produced with Cambridgeshire businesses, communities and Local Authorities to deliver early investment into carbon reductions in Cambridgeshire.

Recommendation: Members are asked to:

- a) Note the Cambridgeshire University Science and Policy Exchange (CUSPE) 2020 research report proposing a Cambridgeshire Decarbonisation Fund attached as Appendix A.
- b) Agree next steps for the development of a Cambridgeshire Decarbonisation Fund as set out in paragraph 3.1.
- c) Support further work with partners to assess the opportunity for Cambridgeshire to become a carbon 'sink' and quantifying the potential benefits of this approach.

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1. Background

- 1.1 In October 2016, Cambridgeshire County Council initiated an annual collaboration with the Cambridge University Science and Policy Exchange (CUSPE) society, which brings teams of researchers together to explore challenges faced by the County Council.
- 1.2 A successful collaboration in 2019 resulted in the Council adopting the CUSPE research report 'Net Zero Cambridgeshire, What actions must Cambridgeshire County Council take to reach net zero carbon emissions by 2050?'. The Council adopted this as an evidence base which informed the Council's decision in February 2020 to adopt net-zero carbon emissions for Cambridgeshire by 2050 as a corporate objective and the targets adopted in May 2020 as part of the Council's Climate Change and Environment Strategy.
- 1.3 The 'Net Zero Cambridgeshire, What actions must Cambridgeshire County Council take to reach net zero carbon emissions by 2050?' report identified the carbon footprint for Cambridgeshire and Peterborough in 2017 totalled 6.1Mt/CO₂e per annum excluding peatland emissions. Peatland emissions were estimated at up to 5.5Mt/CO₂e subject to further data collection and analysis.
- 1.4 In 2020, CUSPE researchers agreed to collaborate on a research project to 'identify how Cambridgeshire businesses that have set, or are interested in setting, carbon neutral and carbon negative targets could invest in local community projects to reduce carbon emissions and achieve other co-benefits such as fuel poverty'.
- 1.5 The outcome of this report is to work with Cambridgeshire businesses to scope a Cambridgeshire Decarbonisation Fund to bring forward detailed proposals including a business case for approval and implementation if appropriate.

2. Main Issues

- 2.1 The CUSPE 2019 Net Zero Cambridgeshire report identified that to achieve net-zero carbon emissions by 2050, early investment into projects to cut emissions permanently is required across all sectors. The CUSPE 2020 research project builds on the 2019 research to identify ways in which Cambridgeshire businesses can invest locally in community infrastructure and nature-based projects that reduce carbon emissions at their source or actively sequester carbon. This investment will support earlier reductions to carbon emissions than might otherwise occur through regulation and provide added value to the places and people that live and work here, whilst also benefitting businesses as part of their wider carbon emissions, environmental, social and governance (ESG) commitments.
- 2.2 The challenge facing all communities is balancing the cost of reaching the ambition of net-zero by 2050 fairly and equitably. No single government can cover the costs of carbon emission reductions and regulation cannot simply leave future generations, individuals or any one sector with the costs. Finding opportunities that encourage collaboration, innovation and early investment across communities and sectors to cut or sequester carbon are worth exploring and sharing. This research offers a mechanism, a Decarbonisation Fund, for businesses to invest in carbon reductions. The research report covers proposals for a 'Fairtrade model' calculation for valuing 1 tonne of Cambridgeshire carbon emissions and describes the process for measurement and verification.

- 2.3 The research proposal recommends setting-up a Cambridgeshire Decarbonisation Fund. The Fund is voluntary and is looking to attract Cambridgeshire businesses that have set net zero carbon ambitions looking to add value locally to the places they live and work. The idea is that the Fund will scope projects with the community, Local Authority and other partners, to identify carbon emission reduction projects that are robust and viable.
- 2.4 Projects designed to affect carbon emissions can differ dramatically in their mode of emissions reduction, timescales for effects to be realised and cost. For example, some projects stop emissions whilst others sequester over 30 years. For this reason, the researchers are proposing a combination of investment projects, categorised into three tiers 1, 2 and 3 which broadly fit into avoiding, reducing or sequestering carbon emissions. The type of projects that fit into these tiers could include:
- Tier 1 (Avoid): replacements of oil boilers with low carbon heating as part of housing retrofit;
 - Tier 2 (Reduce): Electric Vehicle (EV) charging infrastructure or peatland land management to reduce emissions; and
 - Tier 3 (Sequester): Tree planting in the right places to sequester carbon.
- 2.5 The researchers make the argument that investment across all three tiers is required to achieve a balance of: managing the cost of carbon emissions reductions for businesses; recognising the physical limits of Cambridgeshire's natural environment to sequester carbon; and the very real need to stop emissions at source. In general sequestering carbon is the cheapest option whilst stopping carbon emissions at source is more expensive.
- 2.6 The research also describes how businesses benefit from investing in the Fund, including carbon credit certificates and wider benefits to the health and wellbeing of their workforce, future attraction of top candidates to their businesses and other wider marketing opportunities. These co-benefits are highlighted as key to encouraging investment into the Fund.
- 2.7 The CUSPE 2020 research also raises a fundamental question which is outside this report. Does Cambridgeshire want to become a 'sink' or a 'source' for carbon emissions? The answer is not simple and further work this year is required to assess whether Cambridgeshire has the ability to become a carbon sink. The benefits this could offer would be significant. For example, attracting inward investment into low carbon solutions and infrastructure; creation of local jobs and improving productivity. Cambridgeshire has many advantages when considering this ambition including world leading green technology and innovation companies; strong Agri-tech research into farming and food production; two Universities supporting evidence based decision making; opportunities of natural resources including peatlands and tree planting; highly skilled communities and committed Local Authorities wanting to make a difference. Together these offer a strong combination for considering this ambition.

3. Next steps

- 3.1 The CUSPE 2020 research report identifies an opportunity to help build a green recovery and deliver carbon reductions more swiftly across Cambridgeshire through collaboration. However, more detailed development work is needed to understand how the

Decarbonisation Fund can attract investment, the criteria for this investment, the building of a credible project pipeline and develop a business case that is robust. Engagement with businesses, Local Authorities and our communities will be important for their buy-in and collaboration and to identify the governance and management processes that will be required to manage and run a successful Fund.

4. Alignment with corporate priorities

4.1 A good quality of life for everyone

The CUSPE 2020 research report set out in Appendix A itself has no significant implications but if the Council agrees to scope and deliver a Cambridgeshire Decarbonisation Fund this could have significant quality of life benefits. Cutting carbon emissions provides benefits such as improved air quality, better natural environments, greater health and wellbeing and potentially more low carbon jobs locally. Some of these benefits still need further work to identify the scale and associated cost savings on services such as the NHS.

4.2 Thriving places for people to live

As set out in paragraph 3.1 above.

4.3 The best start for Cambridgeshire's children

As set out in paragraph 3.1 above.

4.4 Net zero carbon emissions for Cambridgeshire by 2050

Cutting carbon emissions early is important. Forecast global temperature change is dependent on concentrations of CO₂ emissions in the atmosphere. Historical carbon emissions contribute to the concentration levels along with continued emissions produced today and tomorrow. Although the 2020 pandemic has resulted in one of the biggest single drops in modern history in the amount of carbon dioxide humans emit, (the International Energy Agency estimates global emissions will decline by about 8 percent compared to last year, equivalent to about 2.6 billion tons of carbon not added to the atmosphere), concentration levels are cumulative. Explaining this using the analogy of filling a bath with water can help understanding. If a bath is three quarters full and the tap is still running, unless water drains from the plughole faster than is added, the bath will overflow. Historical carbon emissions are already in the atmosphere, each year more carbon emissions are added at a rate that our environment cannot absorb. Cutting and sequestering carbon must increase substantially if we are to stop CO₂ concentration levels rising to levels that bring temperatures rises beyond 1.5 degrees.

5. Significant Implications

5.1 Resource Implications

If the research is adopted and the recommendation to scope the potential for a fund agreed, there are staff resource implications. Scoping a Cambridgeshire Decarbonisation Fund with businesses and communities will require inputs from the Commercial, Transformation,

Property and Climate Change/Energy teams. The level of input is not yet clear, and this could be subject to the submission and agreement of a Transformation Fund bid.

5.2 Procurement/Contractual/Council Contract Procedure Rules Implications

There are no significant implications from the CUSPE 2020 report set out in Appendix A and should a Fund be scoped and developed the procurement and contractual risks will need to be considered as part of the process.

5.3 Statutory, Legal and Risk Implications

There are no significant risks to accepting the CUSPE 2020 research report set out in Appendix A. However, there are a number of risks scoping and setting up a Fund including:

- Changes to Government carbon policy /regulation;
- Level of carbon emissions reductions not delivered by community projects; and
- Perception of carbon credits/off setting as 'greenwash' if not properly communicated and understood.

5.4 Equality and Diversity Implications

There are no significant implications accepting the CUSPE 2020 research report set out in Appendix A. However, if a Fund is progressed, it will need to fully support and implement the Equalities Act as part of its set up and delivery of projects.

5.5 Engagement and Communications Implications

The CUSPE 2020 researchers developed a narrated presentation on the Cambridgeshire Decarbonisation Fund which was widely distributed via the Council's commercial team to a range of different business networks in September/October 2020. A survey was attached to this presentation. Unfortunately, there has been very low response as businesses have been focused on managing their response to the pandemic however this is not thought to be indicative of lack of interest in such a fund.

The Commercial team has set up a small business group including some key local businesses and the Universities which it will look to re-start when businesses can focus once again on the future. It will be important to ensure the development of a Fund is supported and co-produced by businesses, the community and key partners including Local Authorities and nature conservation organisations.

5.6 Localism and Local Member Involvement

Councillors David Jenkins and Joshua Schumann have been engaged in on-line meetings with the CUSPE 2020 researchers to inform the research project.

A presentation for all Members was delivered by the CUSPE 2020 researchers on Monday 14th December 2020 to share key findings and answer questions.

5.7 Public Health Implications

The CUSPE 2020 research report set out in Appendix A has no significant implications, but the implementation of a Fund could offer health benefits as described in paragraph 3.1 above.

Have the resource implications been cleared by Finance?

Yes or No

Name of Financial Officer: Ellie tod

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?

Yes

Name of Officer: Gus Da Silva

Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or LGSS Law?

Yes

Name of Legal Officer: Fiona MacMillan

Have the equality and diversity implications been cleared by your Service Contact? Yes

Name of Officer: Elsa Evans

Have any engagement and communication implications been cleared by Communications?

Yes or No

Name of Officer:

Have any localism and Local Member involvement issues been cleared by your Service Contact?

Yes

Name of Officer: Emma Fitch

Have any Public Health implications been cleared by Public Health?

Yes or No

Name of Officer: Iain Green

Source documents

Documents

- a) [CUSPE 2019 research report 'Net Zero Cambridgeshire, What actions must Cambridgeshire County Council take to reach net zero carbon emissions by 2050?'](#)

b) Narrated presentation and survey for businesses, October 2020, CUSPE 2020 researchers.

See Appendix A: CUSPE 2020 Cambridgeshire Decarbonisation Fund report