

Cambridge University Science and Policy Exchange 2021: A Cambridgeshire Decarbonisation Fund (Part 2)

To: Environment and Green Investment Committee

Meeting Date: 20 January 2022

From: Steve Cox, Executive Director, Place and Economy

Electoral division(s): All

Key decision: No

Forward Plan ref: N/A

Outcome: To speed up carbon emissions reductions in Cambridgeshire by (i) collaborating with public sector partners and businesses on a Decarbonisation Fund and Business Advisory Service for SMEs and (ii) accrediting Swaffham Prior Community Heat Project for carbon credits for businesses to purchase for 'hard to treat' carbon emissions.

Recommendation: Members are asked to:

- a) Note the Cambridgeshire University Science and Policy Exchange (CUSPE) 2021 research report on a Cambridgeshire Decarbonisation Fund attached as Appendix A;
- b) Agree next steps as set out in paragraph 2.8

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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 In 2020, CUSPE researchers identified the development of a Cambridgeshire Decarbonisation Fund as an opportunity to deliver carbon reductions more swiftly across Cambridgeshire. However, more detailed development work was needed to understand how the Decarbonisation Fund could work for businesses; how projects could 'sell' carbon credits and what the funding model looks like.
- 1.3 This year again, researchers have shown strong interest in projects relating to climate change. For 2021 two streams of research have been delivered, with the first focused on the Cambridgeshire Decarbonisation Fund and the second on Heat Zoning as part of Local Area Energy Planning and which is subject to a separate report.
- 1.4 During the last year, the local context for climate change and its ambitions for net-zero have changed. The Cambridgeshire and Peterborough Independent Commission published their Final Report highlighting that emissions in our area are almost 25% higher per person than the UK average. This decade is now critical for reducing carbon emissions and businesses need to step up and prioritise action towards achieving net zero.
- 1.5 The outcomes of this report are to speed up carbon emissions reductions by (i) collaborating with public sector partners and businesses on a Decarbonisation Fund and Carbon Advisory Service for SMEs and (ii) accrediting Swaffham Prior Community Heat Project for carbon credits sales for businesses for 'hard to treat' carbon emissions.

2 Main Issues

2.1 Supporting businesses.

The mission of the UK British Business Bank is to enable the transition to a net zero economy, by improving access to finance for smaller businesses. It has conducted an in-depth examination of the crucial role smaller businesses can play in driving changes, estimating that in aggregate, smaller businesses account for around half of industrial emissions in the UK, about the same as larger businesses. In 2021, approximately 5.58 million SME's existed in the UK and the East of England has the third highest SME numbers. While individual businesses have relatively small carbon footprints, their collective footprint is significant. Unlike larger businesses they rarely have an in-house sustainability advisor, lack capital to invest in decarbonisation measures, and are not obliged to report emissions under schemes like the Energy Savings Opportunity

Scheme (ESOS). There is a clear opportunity to achieve significant emissions reductions by helping local businesses decarbonise. However, SMEs have generally not taken steps to reduce their emissions with little evidence of decarbonisation strategies or measurement of carbon footprints. This is largely down to lack of knowledge and information and capital cost.

- 2.2 The research proposes setting up a Carbon Advisory Service to support SME's to develop decarbonisation plans to reduce carbon emissions and where 'hard to treat' emissions remain, direct SMEs to the Cambridgeshire Decarbonisation Fund to offset these 'hard to treat' emissions only. The benefits of this approach are emissions that can be reduced are reduced and for those which can't right now be reduced, carbon credits from local projects can be purchased. Please look at Appendix A, figures 2 and 3 on pages 16 and 17 of the report for how this can work. The research also proposes that SMEs could receive local accreditation as a carbon friendly business and this is an option for further discussion.

2.3 Carbon credits - Third party verification

The proposal for a Cambridgeshire Decarbonisation Fund assumes that businesses will contribute to this fund to offset their hard-to-reduce emissions in the short to medium term by purchasing carbon credits. For businesses to want to buy the carbon credits, they need to trust that the corresponding amount of carbon has actually been saved and they want visibility of their company's money going into local projects that benefit local communities. Otherwise, businesses could decide to buy potentially cheaper carbon credits elsewhere to offset their emissions.

- 2.4 High-quality carbon credits are generally considered to have the following six 'quality objectives' as set out below:

- Robust determination of the greenhouse gas emissions impact of the mitigation activity
- Avoiding double counting of emission reductions of removals
- Addressing the risk of non-permanent removal
- Facilitating the transition towards net zero emissions
- Transparency and oversight of the crediting process and project methodologies
- Social and environmental co-benefits and an absence of a negative impact

2.5 Project developers can have their projects validated and verified using a certification organisation. These organisations provide a framework for carrying out decarbonisation projects including methodologies for different types of projects and reviewing specified documents. Three certification organisations are Gold Standard, Plan Vivo, and Verified Carbon Standard. These provide accrediting validation/verification services and can issue carbon credits via a registry that is either owned by the organisation or is managed by an external company. To understand and test this process, the intention is to progress the Swaffham Prior Community Heat Project through validation and verification with an accrediting body to sell its carbon credits.

2.6 Fund Structure

A financial model was constructed by the researchers to estimate the financial and environmental return over a 40-year period. The largest fund modelled provides the most benefits to the environment and the local communities. It also has the potential to reduce 25% of Cambridgeshire's annual emissions within 25 years. This means that a Cambridgeshire Decarbonisation Fund could be an important tool for phasing out the county's 'hard to remove' emissions. However, more specialist inputs are needed on the fund model to verify if the level of emissions reductions could be achieved or not and to scope further options for upfront investment.

2.7 Initial funding will need to be sourced as there is a gap between projects being developed and constructed and the revenue from carbon credit sales. The research suggests this initial funding could come from public sector borrowing and government loans to leverage private sector contributions but other options such as green bonds are also considered. A proposal that was also interesting is potentially not just selling carbon credits from projects but developing projects that could also generate revenues from energy sales as an example.

2.8 Next Steps

- Undertake detailed discussions with public sector partners and businesses on the merits of setting up a Carbon Advisory Service for SME's and whether this should be for Cambridgeshire or linked into Norfolk and Suffolk, who already run these types of services. Consider the inclusion of the Carbon Advisory Service into the action plan currently being developed in response to the CPICC's final report.
- Progress Swaffham Prior Community Heat Project through the carbon credit validation process with an accredited company. This will provide knowledge of the costs and resources required to undertake validation to inform the Decarbonisation Fund and make carbon credits available for selling.
- Work with the CPCA and Local Authority partners on how the Decarbonisation Fund can fit within the CPCA's climate financing recommendations set out by the CPICC in their final report and include the Decarbonisation Fund in its action plan currently under development.

3 Alignment with corporate priorities

3.1 Communities at the heart of everything we do

Setting up a Carbon Advisory Service as set out in paragraph 2.1 will inform a local, community-centred energy transition by supporting small local businesses to decarbonise (with cost savings and potential uplift in business), and channelling carbon offsetting payments towards local schemes, which offer further co-benefits for the area.

3.2 A good quality of life for everyone

The CUSPE 2021 research report attached as Appendix A has no significant implications. If the Council agrees to collaborate with partners and businesses on the set up of a Carbon Advisory Service and a Decarbonisation Fund these could deliver quality of life benefits through cutting carbon emissions; improving air quality and investing in local projects that improve nature that help with health and wellbeing.

3.3 Helping our children learn, develop and live life to the full

No significant implications.

3.4 Cambridgeshire: a well-connected, safe, clean, green environment

If the Carbon Advisory Service is taken forward it will have a positive impact as it will support businesses to improve environmental quality, both locally (e.g., reducing car use in local area for business-related transport, or switching to electric vehicles) and on wider scale by reducing greenhouse gas emissions and associated global heating-related impacts for Cambridgeshire.

3.5 Protecting and caring for those who need us

No significant implications.

Significant Implications

4.1 Resource Implications

If the research is taken forward and a Carbon Advisory Service and Decarbonisation Fund set up, there are financing and staff resourcing implications. However, more specialist consultancy work is needed to inform next steps and wider discussion and collaboration with Local Authority partners, CPCA and the Business Board to identify who and how this work can be taken forward.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

There are no significant implications at this stage.

4.3 Statutory, Legal and Risk Implications

There are no significant implications at this stage.

4.4 Equality and Diversity Implications

There are no significant implications at this stage.

4.5 Engagement and Communications Implications

To progress the report recommendations, businesses and partners must be engaged to identify how and if to take this forward.

4.6 Localism and Local Member Involvement

No significant implications.

4.7 Public Health Implications

No significant implications from the report but there are potential health benefits from setting up a Fund and its investment into carbon emissions reductions. The health benefits would include air quality improvements and improved access to nature.

4.8 Environment and Climate Change Implications on Priority Areas

These have been assessed on the basis of progressing and implementing a Fund.

4.8.1 Implication 1: Energy efficient, low carbon buildings.

Positive/neutral/negative Status:Positive

Explanation: Carbon emissions reductions through switching off fossil fuels and improved energy efficiency

4.8.2 Implication 2: Low carbon transport.

Positive/neutral/negative Status:Positive

Explanation: Investment into EV charging or walking and cycling projects

4.8.3 Implication 3: Green spaces, peatland, afforestation, habitats, and land management.

Positive/neutral/negative Status:Positive

Explanation: Investment into nature improvements and carbon sequestration

4.8.4 Implication 4: Waste Management and Tackling Plastic Pollution.

Positive/neutral/negative Status:Neutral

Explanation: N/A

4.8.5 Implication 5: Water use, availability, and management:

Positive/neutral/negative Status:Positive

Explanation: Investing into nature and trees can help manage rainfall and flood risk by slowing down water

4.8.6 Implication 6: Air Pollution.

Positive/neutral/negative Status: Positive

Explanation: Air quality improvements derived from investment and delivery of projects described in 4.8.1, 4.8.2 and 4.8.3.

4.8.7 Implication 7: Resilience of our services and infrastructure and supporting vulnerable people to cope with climate change.

Positive/neutral/negative Status: Positive

Explanation: The Fund could choose to invest in tree planting or other nature based solutions which can help manage flood risk.

Have the resource implications been cleared by Finance? Yes

Name of Financial Officer: Sarah Heywood

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

Name of Officer: Henry Swan

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

Name of Officer: Amanda Rose

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

Have any Public Health implications been cleared by Public Health? Yes

Name of Officer: Iain Green

If a Key decision, have any Environment and Climate Change implications been cleared by the Climate Change Officer?

Yes

Name of Officer: Emily Bolton

5. Source documents and Location

- [Smaller businesses and the transition to net zero \(british-business-bank.co.uk\)](https://british-business-bank.co.uk)
- [UK SME figures 2021 | Statista](https://www.statista.com)
- [2021 Business population estimates for the UK and the Regions: Statistical Release \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)
- [CUSPE 2020: A Cambridgeshire Decarbonisation Fund](#)