



OxFutures

Interim Evaluation Report

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European Union
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OXFORD
evaluations

EXECUTIVE SUMMARY

OxFutures is a project which aims to boost low carbon economic development in Oxfordshire. Funded in part by the European Regional Development Fund (ERDF), some elements of Oxfutures will now be extended to March 2023. The project is led by the Low Carbon Hub CIC, with partners Bioregional, Cherwell District Council, Oxford City Council, Oxford Brookes University and Oxford University.

This interim evaluation report focuses on the major components of the OxFutures project: the new business membership network Oxfordshire Greentech; grants offered under the Greenfund Innovation Programme; and SME energy efficiency audits and grants. We also offer some recommendations for the final Summative Assessment, due in December 2022.

SUMMARY OF PROJECT PROGRESS

OxFutures has made good progress towards meeting targets set by its government funders. 136 Oxfordshire SMEs have received energy audits, and 6 businesses have been supported to create a new product or service against a target of 4. One target has been affected by COVID-19, meaning that only 26 SMEs received 12 hours of support against a target of 29. Avoided greenhouse gas emissions have so far been lower than anticipated, although this is set to increase with time.

Overall expenditure to date is £3.136m, 92% of which is revenue. Match is balanced against ERDF expenditure at exactly 50%.

OXFORDSHIRE GREENTECH

Our survey of members suggests a high level of satisfaction with the network. Two-thirds (67%) of members were either very satisfied (36%) or satisfied (30%) with their membership, citing the opportunity to meet other businesses, attend workshops and events, and be part of a wider movement as the main benefits of joining.

The membership of Oxfordshire Greentech (OG) spans a range of sectors and is evenly distributed geographically, with a significant proportion (31%) of members based outside Oxfordshire. Several of the most well-known and innovative organisations in Oxfordshire's sustainability community are members of

OG. The current membership is committed to sustainability. After 'growing revenue', achieving 'environmental sustainability' and 'social impact' were reported as the top business priorities by members.

As the network grows, there remains an opportunity to have more representation from trades, including those in the retrofit supply chain. It is suggested that attracting some high profile organisations from the public sector, including universities and hospitals, could help boost the profile, while the county's major business parks may be a useful source of new members.

Although there is a wide range of business networks in Oxfordshire, most members and other stakeholders agree that OG fills an important gap and will become increasingly relevant as the sustainability agenda enters the mainstream. The OG team have consulted widely to ensure complementarity with other networks.

Achieving financial sustainability without support from OxFutures is the network's highest priority. While growing membership is crucial, fees are likely to be insufficient alone. Leaders of other business networks strongly recommended that OG positions itself to apply for public sources of funding, either to deliver direct business support in the form of workshops and events, or to administer and distribute funding.

GREENFUND INNOVATION PROGRAMME

Thirteen SMEs have received feasibility grants to test and develop innovative products and services, with some going on to receive implementation grants. SMEs were positive about the support received from the Low Carbon Hub team, who guided them through the application and claims process. A majority (86%) reported having reduced CO₂ emissions and improving business performance as a result of the grant.

Overall satisfaction with the programme was relatively high (72%). However, beneficiaries expressed concern for the paperwork and strict eligibility requirements associated with claiming their grants. Several SMEs were informed of new stipulations and limitations on project expenditure after receiving grants, forcing them to adapt their plans, and in some cases invest more of their own money.

The time taken to claim the grant after expenditure was incurred was a significant concern for many beneficiaries. One explained that 'start-ups live or die on cashflow', and several suggested a need for an urgent solution for the next tranche of grants.

ENERGY EFFICIENCY AUDITS AND GRANTS

136 SME received energy audits from Oxford Brookes' Environmental Information Exchange (EiE) team. A total of 907 recommended measures were provided to beneficiaries, amounting to an average annual energy saving of over £2,500, if implemented in full. EiE estimate that over 1/3rd (33.6%) of these potential savings have so far been realised by SME beneficiaries.

Recommendations can be divided into 8 categories, with 82% of measures classified as either insulation and draught proofing, energy management, heating or lighting.

22 of the 136 SMEs receiving energy audits have so far been awarded a grant by the OxFutures Greenfund, contributing up to 25% of total project costs. £64,864 was awarded in support of projects totalling £265,617, which equates to an average value of £2,948 of grant subsidy per SME.

Results from surveys of SMEs receiving audits only, and those receiving audits *and* grants, indicate that grant funding was effective in increasing the likelihood that

recommended measures would be fully completed. However, audits alone were also effective in encouraging SMEs to take action to reduce energy consumption:

- Those receiving grants reported that 30% of the recommended measures had been **completed**. This compares with only 17% for those receiving audits only.
- SMEs receiving audits only were more likely to report that measures were **partially complete** (21%), compared with those receiving grants (8%).

RECOMMENDATIONS FOR FINAL EVALUATION

The OxFutures team is collecting the majority of data needed for the Summative Assessment as it implements the project. However, the final summative assessment will need to evaluate additionality and value for money, and there is scope for further use of counter-factual analysis to demonstrate how OxFutures has addressed market failure when it comes to SME energy efficiency and eco-innovation. We recommend that a small cohort of SMEs who have *not* engaged with OxFutures is surveyed or interviewed.

Additional data, such as SME building size, type and tenancy status will strengthen the evaluation, allowing comparisons to be made between OxFutures beneficiaries and the broader business population.

GreenUnit manufactures modular eco-buildings in Oxfordshire using Passivhaus principles and low impact materials



INTRODUCTION

OxFutures is a project which aims to boost low carbon economic development in Oxfordshire. Supported with nearly £1.6m by the European Regional Development Fund (ERDF) from Apr 2017 to Mar 2020, the project is led by the Low Carbon Hub CIC, with partners Bioregional, Cherwell District Council, Oxford City Council, Oxford Brookes University and Oxford University. The project has had confirmation of further funding which will extend some work packages for a further three years.

In January 2020, the OxFutures consortium commissioned Sam Hampton and Alex Money of Oxford Evaluations to conduct an interim evaluation of the project. Sam is a researcher at the Environmental Change Institute, Oxford University and a freelance consultant, specialising in sustainability and SMEs. Alex is a project evaluator with experience of evaluating ERDF eco-innovation projects.

This report is divided into four main sections. The first focuses on Oxfordshire Greentech, a business support network set up through the OxFutures project and led by Bioregional. The second evaluates the Greenfund Innovation Programme, which has provided grants to 14 SMEs to develop sustainable innovations. While the Greenfund is expected to be awarded further ERDF

funding, the Greentech network will not be included in any extension of OxFutures. The third section provides some preliminary analysis of the impacts of energy efficiency audits and grants provided to SMEs, and the final section provides some recommendations for the final summative assessment.

METHODS

This evaluation draws on a variety of sources of information. Primary data gathered for this study include a survey of Oxfordshire Greentech members (n=33), a survey of Greenfund beneficiaries (n=7/13), data from energy audit reports and energy monitoring data provided by SME grant beneficiaries.

Interviews were conducted with seven members of Oxfordshire Greentech. This sample was chosen in discussion with Bioregional in order to capture breadth of sector, and to identify influential individuals within the sustainability community. Twelve interviews were also conducted with stakeholders involved in promoting business growth, innovation and sustainability in Oxfordshire. This includes representation from both Universities, OxLEP, the Growth Board and experienced business advisors. Four Greenfund beneficiaries were interviewed, as well as individuals from the Low Carbon Hub.

SUMMARY OF PROJECT PROGRESS

OxFutures is working towards several targets set by its government funders. Progress towards meeting these targets, called indicators, is summarised in the table (right).

Indicator C1f was impacted by the cancellation of a major event due to COVID-19, while it has been agreed that data for C34f will be reported on at the end of the project in 2023, due to the long-term nature of the investments in **environmental**

COVID-19 has also led some SMEs to delay claiming their grants. In Q1 2020, nearly £60,000 less was claimed than predicted, meaning that just under £215,000 has been committed but not yet claimed.

Overall expenditure to date is £3.136m, 92% of which is revenue. Match is balanced against ERDF expenditure at exactly 50%.

Indicator	Progress against target		
	Actual	Target	%
SMEs supported with energy audits (C1)	136	136	100%
SMEs receiving 12 hours of support (C1f)	26	29	90%
New enterprises created as a result of support (C5)	4	5	80%
SMEs supported to create new product or service	6	4	150%
CO ₂ e savings from efficiency audits and grants (C34b)	403	665	61%
CO ₂ e savings from Greenfund Innovation grants (C34f)	0	375	0%

PART 1 – OXFORDSHIRE GREENTECH



Oxfordshire Greentech (OG) is a business network aiming to support and represent the interests of low-carbon businesses across Oxfordshire. Launched in February 2019, it now has more than 90 members. Its main activities include hosting events and workshops across a range of sustainability themes, providing one-to-one business support and information brokerage, funding and grant alerts, a regular newsletter and a jobs board.

Our evaluation first focuses on the performance of the network in its first year, using data from a member survey, member interviews, analysis of membership base, and interviews with other stakeholders in Oxfordshire’s greentech sector. It then looks to the future, reporting on suggestions and observations made in the survey and interviews for how the network can meet the needs of its members, grow its membership and establish financial sustainability going forward.

THE FIRST YEAR

The team behind Oxfordshire Greentech, at Bioregional and Cherwell District Council, should be credited for their extensive efforts to consult stakeholders across the business community in Oxfordshire. Recognising the existence of a range of business networks, and sources of support available, they held meetings with key individuals from OxLEP, Councils and both universities to understand the needs of businesses in the sustainability and innovation sectors, and to design their offering to minimise duplication.

Recognising their own limited experience of running a business network, Bioregional developed a relationship

with Cambridge Cleantech, a well-established, financially sustainable network with 350 members. The financial model, marketing approach and services offered to Oxfordshire Greentech members has been informed by this relationship.

MEMBERSHIP MIX

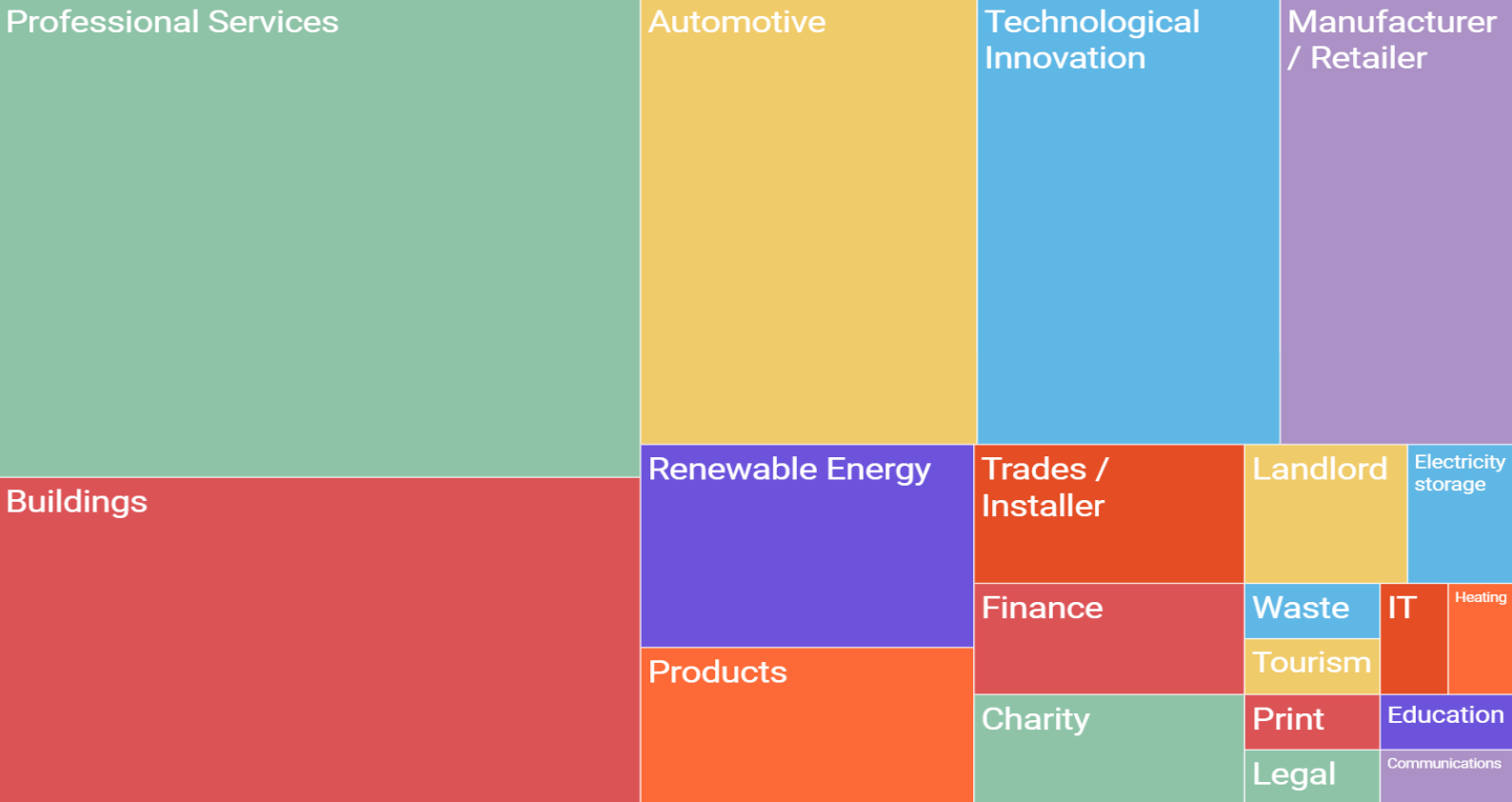
Since its launch at a well-attended event at the Said Business School in February 2019, Oxfordshire Greentech has been successful in signing up a large number of SMEs in its first 12 months. Membership in March 2020 stands at 90.

Whereas Cambridge Cleantech primarily focuses on technological innovation, Oxfordshire Greentech aims to appeal to a broader set of businesses, including charities and non-profits. When interviewed for this study, Martin Garrett, CEO of Cambridge Cleantech, explained that they aimed to balance their membership between larger corporations including investors; professional services companies seeking to work with the cleantech sector; and smaller technological innovators including university spin-outs and start-ups.

The graphic overleaf illustrates the current make-up of the Oxfordshire Greentech membership. This is based on a classification of business activity and sector for each member conducted for this study. Some members have been classified as operating across multiple sectors. Joju Solar, for example, provide renewable energy generation and electric vehicle chargers, while Brill Power are innovators in battery storage technology.



OxWash is a startup providing laundry services using zero carbon transport



A Treemap representing Oxfordshire Greentech's membership based on classification of sector and activity

The current membership appears to reflect the breadth of the Greentech sector, with a sizeable cohort focusing on the electro-mobility transition and another concerned with improving the efficiency of buildings. Professional services offered by members are also broad, with a large number of sustainability consultants, and representation from accountants, architects, communications agencies and law firms.

The Bioregional team has outlined an intention to have greater representation from trades and installers. Tim Lunel of Retrofit Works explained that this is a difficult challenge, however, as the best contractors are able to pick and choose jobs, found via word of mouth. These traders, often micro businesses with few spare hours for attending events, may not see the benefits of membership.

So far, Oxfordshire Greentech has managed to achieve the balance in membership that Cambridge has strived for. However, there is potential for greater representation of smaller firms in the technological innovation sector. Focusing recruitment here will, in turn, attract corporates, investors and professional service providers. Future recruitment is discussed in detail later in this report.

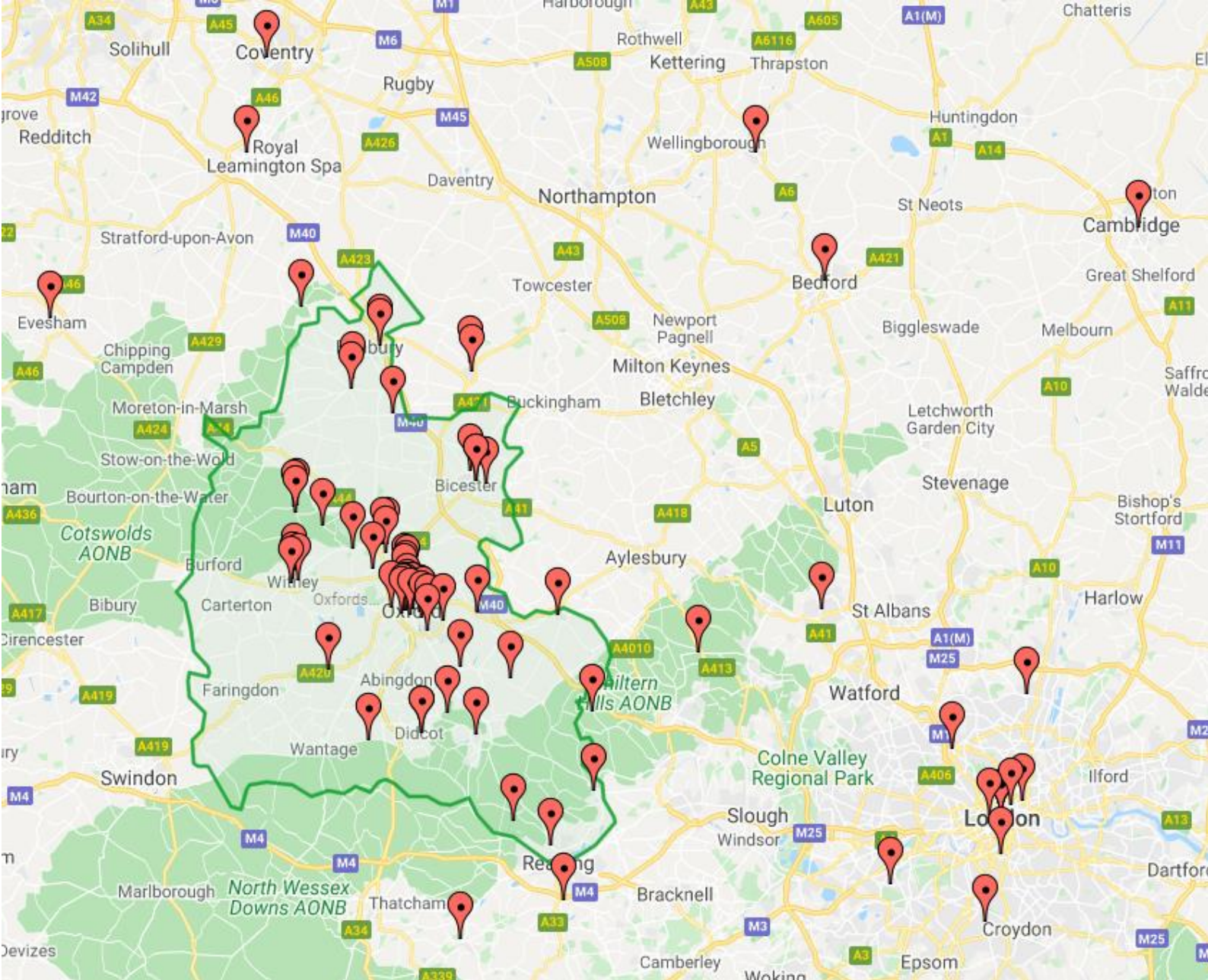
GEOGRAPHICAL DISTRIBUTION

Although addresses are not held by the Oxfordshire Greentech administrators, for this study we attempted to find postcodes for all members using online searches and Companies House. Where possible, the address of the main trading office was identified, but in some cases, postcodes outside Oxfordshire may represent an accountant's address.

Postcodes for 81 members were collected using these methods. Of these, 56 (69%) were based in Oxfordshire, and 25 (31%) outside the county.

While 23 (28%) members are based in Oxford City, membership is well distributed around the County, with several businesses based in the main market towns of Banbury, Bicester, Witney and Kidlington.

Most businesses located outside of Oxfordshire had a special interest in the region. For instance, Pivot Power is based in London, but is leading the major [Energy Superhub Oxford](#) project, and Urbanelectro, an e-bike retailer based in Northamptonshire, have identified a strong market in Oxfordshire.



Map of Oxfordshire Greentech members, with outline of Oxfordshire

Geographical analysis suggests that Oxfordshire Greentech has not yet succeeded in attracting members from the major business and science parks around the county. Focusing recruitment efforts on businesses located at Harwell, Oxford Science Park, Milton Park and Begbroke may be fruitful. Most business parks have internal newsletters or even networking organisations which could be used to reach businesses. Harwell, for example, has a Green Club which holds sustainability related events.

REASONS FOR JOINING AND BENEFITS OF MEMBERSHIP

Members were asked in our survey to indicate the main reasons why they had chosen to join Oxfordshire Greentech. Unsurprisingly, nearly all (97%) cited the

opportunity to network and collaborate with other sustainable businesses. 70% of members said they have used networking within OG to identify potential partners and collaborators, and 27% said that this had already led to new business. A promising result from just 12 months of network activity.

Members identified the following other benefits from joining (in order of popularity):

- Access to workshops and talks
- Keeping up to date with news and funding opportunities
- Opportunity to sell to other members
- Boosting brand reputation
- Finding contract opportunities

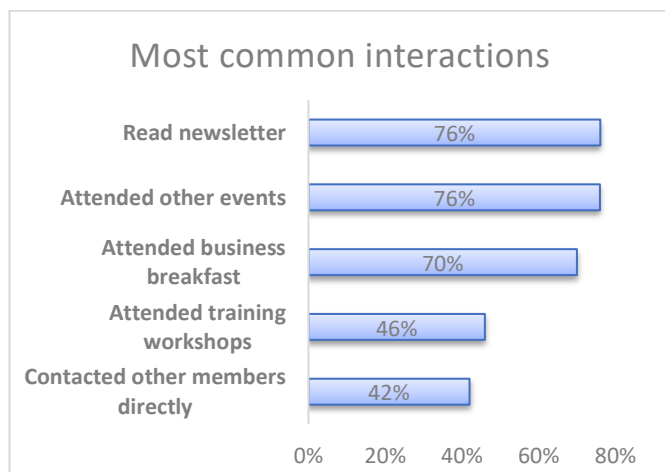


The launch of Oxfordshire Greentech in February 2019 was held at the Said Business School and was well attended.

Several members described how their businesses were embarking on a sustainability 'journey'. For many, joining Oxfordshire Greentech was a key milestone, on the path towards becoming a more sustainable business, but also becoming part of a bigger movement. This is reflected in the large number of businesses (73%) mentioning that a key reason for joining was to 'support the low carbon sector in Oxfordshire'. 57% of members also said they had gained new knowledge and awareness as a result of joining.

INTERACTION WITH OXFORDSHIRE GREENTECH

Oxfordshire Greentech offers a number of opportunities for members to get involved. The most common interactions with the network by members are shown below:



n=33

The newsletter has clearly proved popular with members, alongside business breakfasts, other member

events and training workshops. Some of the other interactions listed included:

- 1-to-1 meetings with the Oxfordshire Greentech team (36%);
- Applied for grant funding to OxFutures (18%);
- Attended Meet the Buyer events (18%);
- Received an energy audit (15%).

SUSTAINABILITY CHALLENGES

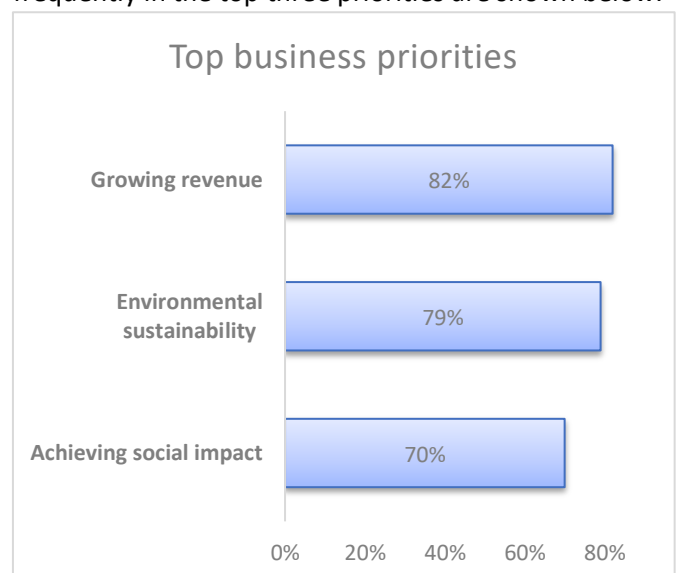
When asked what particular sustainability challenges their company was trying to solve, members came up with a wide range of responses, reflecting the diversity of sectors and expertise. A major theme related to the difficulties of reducing organisational carbon emissions, both for themselves and their clients. As most members are SMEs, many explained that their challenge was to help contribute to a more sustainable economy but with limited resources. Therefore, they recognise the need to encourage others to embrace sustainability so, besides the technical innovations members are pursuing, communications is a major challenge.

Other issues listed included:

- Delivering sustainability with inclusivity;
- Complying with legislation;
- Setting, and hitting, specific sustainability targets.

TOP BUSINESS PRIORITIES

Members were asked to choose from a list their top three business priorities. Those that appeared most frequently in the top three priorities are shown below.



n=33

As might be expected, the most popular choice was growing revenue, which was selected as number one priority by 52% of members.

However, it was also clear from the survey that environmental sustainability and achieving social impact have become key issues for members. This sets the OG membership apart from more generic business networks and demonstrates a strong ethical mission within the network.

Other issues rated as among some members' top priorities were:

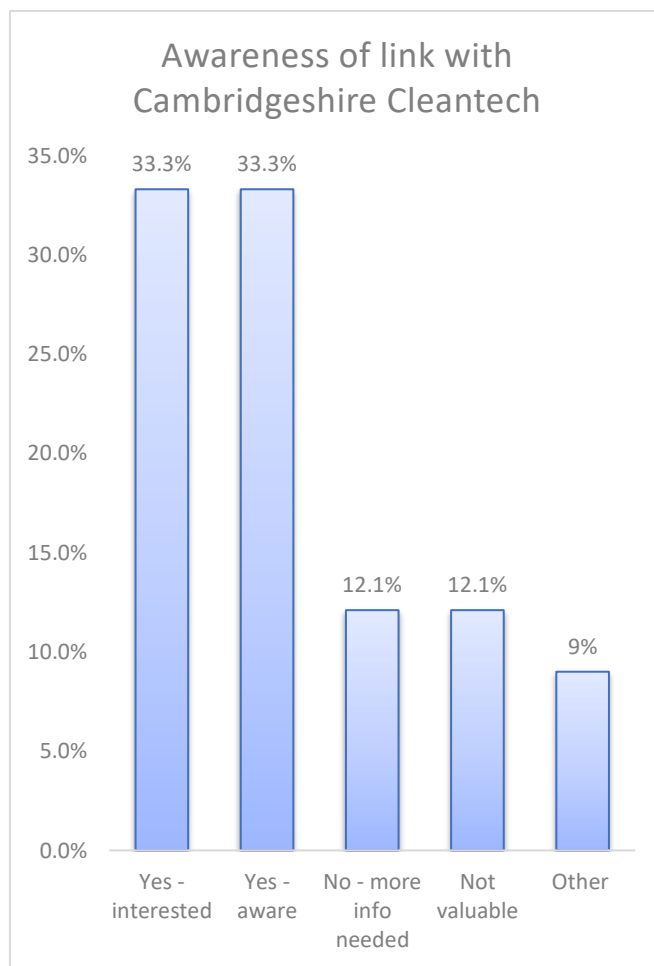
- Improving efficiency;
- Increasing resilience;
- Retaining and recruiting staff.

SATISFACTION WITH OXFORDSHIRE GREENTECH MEMBERSHIP

Overall, Greentech members report high levels of satisfaction with the network.

Two-thirds (67%) of members were either very satisfied (36%) or satisfied (30%) with their membership of Oxfordshire Greentech. Some members reported being neither satisfied nor dissatisfied (24%); only 9% were dissatisfied/very dissatisfied. We interpret these results positively. Business networks are unlikely to be able to satisfy all their members, all the time, and the phrase 'you get out what you put in' applies in this context. Based on our conversations and interviews, we find that those members achieving the most benefit from membership are those who invest significant time and resource in attending events and workshops, reading and following up on newsletters, and reaching out to other members.

The majority of members (62%) said that they would renew their membership, although some admitted they had had doubts. Among those who were unsure about renewal (16%), some felt that membership had not generated the level of business they had hoped. A further 12% said that their decision to renew was dependent on the cost of membership; some had previously enjoyed free or discounted membership. Only 6% said that they would definitely not renew their membership.



n=33

PARTNERSHIP WITH CAMBRIDGE CLEANTECH

Members were asked about their awareness of Oxfordshire Greentech's partnership with Cambridge Cleantech (CC) and the benefits of it. The chart below illustrates their responses.

Exactly two-thirds (67%) of members said they were aware of the partnership and its benefits; half of this group said that they were interested in meeting with Cambridge Cleantech members.

Other key points to emerge were:

- Some members who were unaware of the partnership and said that they were interested and wanted more information (12%);
- 12% of members said they did not see the partnership as valuable to their business;
- Other comments from members included being aware but not knowing the benefits, and in another case having tried to 'reach out several times without any luck'.

FEEDBACK FOR THE TEAM

All members and stakeholders interviewed were asked to give feedback on the service provided by the network administrators, led by Bioregional.

Feedback was overwhelmingly positive from all those who had directly engaged with the team. Members reported having had very useful face-to-face meetings with Lewis Knight, receiving personalised support including referrals and member-introductions, and discussions of potential grant funding. Several members were flattered to have been invited to speak at events, or even co-host a workshop based on their expertise.

SPECIAL INTEREST GROUPS

Oxfordshire Greentech currently runs five SIGs:

1. Low-Carbon Mobility
2. Circular Economy
3. Access to Finance
4. Social Enterprise
5. Built Environment

Speaking with members and OG staff, it is clear that the SIGs have yet to reach maturity. Yet survey results suggested that there was a strong degree of interest in these, with 48% of members agreeing with the statement 'I would be interested in being more active by spearheading one of our Special Interest Groups'.

Members appear to be happy with the breadth of the 5 SIGs. None of the members interviewed suggested a need for any additional SIGs, and only one survey respondent said they would like a new one to be created. However, they did not specify what issue this should focus on.

Members were impressed by the quality, number and relevance of events. Rob Sullivan from Knights PLC, a law firm, felt that the membership fee was well justified on the basis of the number of activities scheduled in Greentech's first year. 'How many other networks can say they've had that number of events in their first year?' he said.

Several interviewees commented on the quality of the events, and credited this to the hard work of the OG team. Like many of the members consulted for this study, Chris Williams from Jennings of Garsington, a

business park and landlord, described their journey towards being a more sustainable business. For Chris, a pivotal moment in this journey was when attending Oxfordshire Greentech's event at Oxford Town Hall, where he met several inspirational people and began working with a sustainability consultant, a fellow OG member. The opportunity to network with like-minded businesses was highly valued by Chris, and he was impressed with the quality of events held by the network so far.

"I love the energy and positivity of everyone at Oxfordshire Greentech and Bioregional. Lewis is such a bundle of energy I wish he had plug-in points!"

Chris Williams, Jennings of Garsington

Overall, feedback for the Oxfordshire Greentech was very positive. Described by members as 'passionate', 'responsive', 'receptive' and with 'their hearts in the right place', the team deserve to be proud of their performance over the last year.

IS THE NETWORK ACTUALLY NEEDED?

Oxfordshire is widely considered to be a good place to do business, and particularly for companies involved in technological innovation. There is a wide range of support available for new and established businesses of all types, and enterprises can choose from a long list of networks to join. The fact that OxLEP chose not to create a new network, but instead employ 'Network Navigators' to signpost businesses to existing opportunities demonstrates this.

"As the only one of its kind in Oxfordshire, the network is filling a strong demand to bring the sustainable business community together. It has been needed for years."

Karen David, Techtribe Oxford

So was there really a need to create a new network for greentech businesses? Interviews with experienced business advisors and influential individuals working to promote business growth and innovation reveal a number of useful insights which may help Oxfordshire Greentech to focus its goals and complement other networks.



Pivot Power, a new OG member, is leading a consortium to install the world's first grid-scale hybrid battery in Oxford (simulation pictured here). The battery combines Lithium-ion with Vanadium flow technologies and is part of Energy Superhub Oxford, a project also installing rapid EV chargers and ground-source heat pumps across the City.

1. The majority of stakeholders agreed that there was a need for the network to be created. Several individuals pointed to the rapid growth of the sustainability agenda amongst the general public, media and business community. Eileen Modral from Oxford Investment Opportunity Network said that whereas 10 years ago it could not be considered a 'sector', Greentech businesses were now attracting significant interest from investors. Similarly, Bev Hindle, Director of the Oxfordshire Growth Board and Oxford to Cambridge Arc Leaders group, thought that we were experiencing a 'fundamental paradigm shift', with climate change becoming a major consideration for businesses. Reflecting this, networks like Greentech were set to become increasingly important and influential.

Only one interviewee, an anonymous contributor with experience of supporting start-ups, felt that the creation of a network was unnecessary. Whereas the majority of respondents observed an increasing interest in greentech businesses amongst investors, this advisor thought the greentech label

had become negative for investors, and that recent interest in sustainability was the latest development in a *cyclical* trend. Whilst this is a minority view amongst those contributing to this study, it demonstrates some disagreement amongst local stakeholders about the state of the sector and the need for a network.

2. Secondly, almost all interviewees agreed that the network complemented existing networks and sources of support. Bev Hindle, Grant Hayward¹ and Phil Shadbolt² each described how complex and confusing it could be for businesses to choose which networks to join. Nonetheless, they, and many others, felt that the open and collaborative approach adopted by the OG team was welcome. They strongly emphasised the importance of communicating and collaborating with other networks, including co-hosting events and cross-referring, to ensure that Oxfordshire Greentech continues to complement other networks and avoids confusion for businesses.

¹Experienced business advisor and board member, Oxfordshire Social Enterprise Partnership

²CEO, Zeta Specialist Lighting; Chairman, Bicester Vision and Chairman of OxLEP Business Support (2012-2019)

“Is it needed? If you’d asked me 18 months ago I would have been sceptical. But now I’ve seen it, I think it’s needed. Especially given what we’ve seen with the rise of climate change in the news”

Grant Hayward, Collaborent

Eileen Modral agreed with this, saying that only a small proportion of SMEs and startups are ‘investment ready’, so that OION are always looking for ways to signpost businesses to other sources of finance and support. She valued the breadth of Oxfordshire Greentech and anticipated that, as they dealt with more and more clean tech companies in future, she would be likely to make more referrals to the network.

3. Most interviewees agreed that, in some ways, businesses in the sustainable sector faced a different set of challenges than the wider business population. For instance, as values-driven enterprises, they had to balance the need to be financially sustainable with maximising their impact. Recognising that impact is best achieved through collaboration, this indicates a real need for the OG network. Some interviewees pointed out that many OG members were early stage businesses developing innovative products or

WHY WOULDN'T YOU JOIN?

As part of this evaluation we were able to speak with 2 influential businesses, both considered leaders in technological innovation for the automotive sector.

The CEO of the first company explained that they would *love* to join, but that they are struggling with major cashflow problems. Despite a strong annual turnover, every spare penny was being reinvested in developing products. For businesses involved in R&D, cashflow can often be a significant hindrance to growth.

The second business is a large and well-established manufacturer who saw little value in joining the network. They claimed to have ‘direct lines of communication with government’, and had recently pulled out of all general and sector-specific networks, to ‘do their own thing’. This feedback may indicate that the network may struggle to appeal to larger firms in Oxfordshire.

services. This made them more likely to face the challenges of raising outside investment, applying for grants and recruiting skilled employees.

Weighing these insights up with analysis of Oxfordshire Greentech’s stated aims, as well as drawing on Sam Hampton’s experience as OxLEP’s low carbon Network Navigator from 2016-2019, we conclude that there has been a clear need for a sustainable business network in Oxfordshire in recent years, and that Oxfordshire Greentech has, to a great extent, fulfilled this need. It has positioned itself to be broad, attracting members from within and beyond the technological innovation sector. As the network gains influence and credibility over time, and as it takes on more members, its contribution to Oxfordshire’s business support will become clearer to members and stakeholders alike.

“Oxfordshire is brilliant at creating networks, so you’ve got to be careful. It’s important to corral everyone in the Greentech sector and get everyone together, otherwise you’ll get splinter groups. It’s important for Oxfordshire Greentech to establish itself as the leading voice, and to answer the question: ‘what makes it the one you’ve got to join’.”

Phil Shadbolt, Zeta Group

LOOKING TO THE FUTURE

Oxfordshire Greentech was set up with the help of funding from ERDF, as part of the OxFutures programme. With ERDF funds ceasing, the network is seeking to become financially sustainable from April 2020.

Growing its membership base will be crucial, not only in order to generate income from annual fees, but also to demonstrate scale and influence in order to attract other sources of revenue.

GROWING THE MEMBERSHIP

While OG has done well to attract nearly 100 members in its first year, there is clear potential to increase numbers. Cambridge Cleantech currently has 350 members, for example, while Bedfordshire’s Green Business Network had over 400 at its height.

Three clear messages emerged from interviews with current members, potential members and other



Beckman Automotive Ltd, supported by Oxford Brookes University, are developing benchmark sustainable vehicles and debuting their technology in a car launching later this year

stakeholders, when asked how OG could retain and attract more members:

1. OG should seek to understand the needs, hopes and expectations of businesses in the sustainability sector;
2. OG needs to continually review its service offering to ensure that it is adding value to members;
3. Communicating its value to businesses is a priority which requires creativity and persistence.

PRACTICAL SUGGESTIONS FOR RECRUITMENT

Members and stakeholders helpfully suggested several practical suggestions for recruiting new members:

- Approach other ‘business representative organisations’ such as business parks and startup incubators in Oxford. These include Oxford Sciences Innovation (OSI), Oxford University Innovation (OUI), Oxford Innovation, and the Oxford Investment Opportunity Network (OION). Other suggested avenues included co-working spaces such as Grant Thornton, Makespace, or Innospace.
- Target specific sectors and locations, such as the thriving automotive industry in the north and west of the county.
- Aim to attract large organisations including those in the public sector such as the NHS Trust, Local Authorities, and Universities. Their sustainability managers could share their learnings with the business community and potentially learn from members’ expertise.
- Host events at members’ premises, to coincide with factory or site tours.

SERVICES SOUGHT BY MEMBERS

Our survey asked members to list services they are currently seeking support with.

61% of members listed **access to grants** in their top 3 services, while 55% sought **access to markets**.

Other services which members mentioned included **sustainability advice** and support with **recruitment**.

These findings show that members would welcome more support for finding funding and sales opportunities, and are promising for professional services members looking to support other members with their expertise.

These messages will come as no surprise to the OG team, who have worked hard to consult members, non-members and other stakeholders in putting together their membership offering. This evaluation will also help to clarify the needs and interests of target businesses. Nonetheless it is useful to note the agreement amongst interviewees about what they see as key priorities for the network.

Some interviewees also strongly expressed a fourth message for the OG team:

4. There is a need for the network to have a clear strategic mission.

These interviewees felt that OG’s mission and objectives had not yet been fully articulated, and that rather than ‘trying to be all things to all people’, the team should take a step back and clarify to themselves and their members what they were looking to achieve, perhaps over a 5 year period. One ambitious suggestion came from Gareth Dinnage, CEO of Seacourt Printing:

“Oxfordshire should be striving to be the ‘most sustainable place on the planet’”

Gareth Dinnage, Seacourt Printing

While this suggestion has some merit, it is also clear that the first priority of the network is to serve its members interests. And as it seeks to attract a wide range of businesses, it needs to ensure it has wide appeal. While broad, the statement of visions and aims displayed on the OG website home page delivers an inclusive, yet purposeful message. We therefore suggest no urgent need to clarify the network’s strategic mission.

POTENTIAL FOR ADDITIONAL OFFERINGS

Oxfordshire Greentech should be commended for the range and diversity of events it has hosted over the last 12 months. These range from several ‘meet the buyer’ events, to briefings on electric vehicles and charging infrastructure, to workshops on energy efficiency in the built environment. When asked in the survey what else they would like to see from the network, the majority of respondents mentioned additional workshops and events. This confirms the fact that these offerings are most valued by members.

CHALLENGES OF RECRUITING TRADES

A large proportion of SMEs in Oxfordshire are traditional trades such as builders, carpenters and plumbers. These businesses play a crucial role in achieving a reduction in greenhouse gas emissions from buildings. For instance, many Greentech innovations, such as energy efficient technologies, require expertise to install and operate.

However, many do not identify as businesses involved in the sustainability transition, and those which seek networking opportunities are more likely to join BNI or B4 Business than specialist networks such as Oxfordshire Greentech. Tim Lunel, founder of Cosy Homes Oxfordshire, explained when interviewed that a further challenge is that highly skilled tradespeople, such as those in the retrofit supply chain, often find ample work opportunities through word of mouth.

Stephen Brown, who holds a joint appointment with Oxford Brookes and OxLEP and has a background in planning, explained that in the construction sector, there have been a number of Greentech innovations which have failed to break through into the market. He suggested that competitive land bidding by housing developers may be partly responsible, while others have documented the fragmented nature of the sector, [lack of skills](#) and necessary to implement advanced construction technologies.

Notwithstanding these multiple challenges, there may be an opportunity for Oxfordshire Greentech to appeal to trades through specialist events with an opportunity to exhibit to their target customers.

In addition to events, several members reported receiving 1-to-1 support from the OG team, and a number of businesses have been given the opportunity through the network to showcase their products and services by offering workshops or giving public talks.

Compared with the more established Cambridge Cleantech (CC), Oxfordshire Greentech has so far provided less support to its members to identify contract opportunities or to coordinate major project or funding proposals amongst its members. However, the breadth of topics covered by its events is comparatively broader, reflecting what Martin Garrett described as a ‘subtle but important difference in emphasis’, where CC’s offer has a strong commercial focus, while OG is seeking to support its members with a more cross-cutting approach.

When asked for ideas for additional offerings, several current members had some useful suggestions.

Rob Sullivan from Knights PLC suggested for instance that OG could host a match-making platform on its website. Each member could write a paragraph of *gifts and wishes*. Not only may this lead to business opportunities and partnerships, it would be a way of recording ‘the conversation’ for external observers such as regulators, councillors and MPs.

Gareth Dinnage asked what the network was currently doing to engage with young people, for instance through schools and colleges. He said:

“We need to be inspiring the next generation. There is a perception out there that businesses aren’t doing anything, and that’s a problem. Young people increasingly want to be doing something valuable and not just going after a big fat salary, so they need to know that there are businesses out there doing good”

Gareth Dinnage, Seacourt Printing

Ahmed Goga from OxLEP and Bev Hindle from the Oxfordshire Growth Board each made a similar point about the importance of engaging with young people. Not only are many young people expressing a wish to work in the environmental sector, but Greentech businesses are struggling to recruit employees with appropriate skills and experience. Ahmed said that there remains a need to ‘clarify and demonstrate the

career pathways into sustainable business'. There is potential for Oxfordshire Greentech to play an important role here.

Finally, several members, including Chris Williams from Jennings and Rupert Wilkinson from Oxford Product Design, emphasised that the main benefit to them of membership was the opportunity to network with other businesses. They suggested that there may be potential for facilitating smaller, less formal meet-up groups, focused for instance on particular challenges like recruitment or reducing reliance on single-use plastics.

ACHIEVING FINANCIAL SUSTAINABILITY

Several interviews were conducted with business network leaders for this evaluation. Contributors included Grant Hayward, who has been instrumental in growing the Oxford Social Enterprise Partnership (OSEP), Martin Garrett from Cambridge Cleantech, Jane Varley from Bedfordshire's Green Business Network (BGBN), and Ahmed Goga, from OxLEP.

The Oxfordshire Greentech team is aware that as it ceases to receive ERDF funding, it cannot solely rely on membership fees as its main source of revenue. While OSEP, Cambridge Cleantech and BGBN each offer consultancy support to generate income, the leaders of each of these networks emphasised that the first priority for Oxfordshire Greentech going forward should be accessing **public sources of funding**.

Whether linked to European funding or direct from national or local government, it is fair to say that in recent years there has been no shortage of investment in the provision of business support for SMEs. While ERDF, which has an explicit fund for sustainability, will cease after 2023, the UK government is likely to replace this funding with similar streams such as the 'Shared Prosperity Fund'. Given the increasing profile of sustainability and climate change on the policy agenda, the OG team can rest assured that there will be opportunities if they are able to position themselves as eligible to receive or even distribute it.

In the recent past, a major challenge to those organisations seeking to administer public funds has been the ability to raise match funds as required by many policy programmes, including ERDF. Bedfordshire GBN, which has been running for 22 years, was previously supported by the East of England

Development Agency and Local Authorities in Bedfordshire and ran several European funded projects. However, when Regional Development Agencies were replaced by Local Enterprise Partnerships (LEPs), they found themselves unable to raise adequate match funds, and have relied in recent years on being sub-contracted by project leaders, or winning small grants of £5,000-£10,000 from councils and community foundations. Jane Varley explained that these small grants were hard won, yet insufficient when it came to long-term financial sustainability. As a result, the long-established network is likely to disband, just as their equivalents in Milton Keynes, Northamptonshire and Hertfordshire have in recent years.

Despite this alarming trend, there are several successful models that the OG team can look to for inspiration. These include Ngage Solutions, who operate the [Low Carbon Workspaces](#) (LCW) project. Unlike many programmes which attract match funding from councils or universities, LCW generates match funding from SME beneficiaries. Awarding grant funding for energy efficiency measures at a ratio of 1/3 or less, SME matched investment helps to balance project funds and justify the salaries and overheads of Ngage Solutions staff.

Ngage also benefits from being a wholly owned subsidiary of Buckinghamshire Business First, the major



Buckinghamshire Business First is a major business network with membership representing nearly 50% of businesses in the county. Ngage Solutions' ability to leverage public funding is due in large part to its access to this network.

business network in the county. This allows them to promote their projects to over 11,500 businesses. The

size of this network is a crucial part of Ngage's success in attracting public funding. The implications for Oxfordshire Greentech are to focus efforts on growing membership and developing strong partnerships with other business support organisations.

Grant Haywood explained that OSEP has recently changed its legal status and governance structures in order to position itself to deliver public programmes of business support. Following several years in which it developed strong relationships with Oxford University and OxLEP, it has now become the main delivery partner on the ERDF programme *Escalate*. A prolific networker who is both admired and respected by the business community, Grant's clear message for the OG team was that developing its reputation for 'service provision' would be key to achieving financial sustainability. This will not be a new insight for Bioregional, who have been successful in recent years in establishing themselves as leaders in Oxfordshire's sustainability community.

Despite working for a charity, the small team of Bicester-based staff have gained a good reputation amongst local business leaders.

Ahmed Goga however, gave a note of caution. He suggested that in a time where local authorities and LEPs are 'revenue poor', they would also be seeking to administer and implement government business support programmes, which themselves may be scarce as the UK recovers from the COVID outbreak and deals with Brexit.

Martin Garrett had one final suggestion as a source of potential income for the network. Whereas Cambridge Cleantech has had some success in attracting donations from large corporations and benefactors, he said that 'Oxfordshire doesn't seem to have quite the same history of donating funds to network organisations'. This source of fundraising may represent an opportunity for Greentech going forward.

Brill Power is a team of battery specialists with expertise in power electronics, battery degradation, and battery modelling. Established in 2016, Brill Power is a spin-out company from the University of Oxford.



PART 2 – GREENFUND INNOVATION PROGRAMME

BACKGROUND

The Greenfund Innovation Programme (GIP) is administered by Low Carbon Hub (LCH), the lead partner in the OxFutures consortium. GIP offers match-funded grants to SMEs developing innovative products and services in support of the sustainability transition.

SMEs can apply for grants in two stages. The first is a **feasibility** grant, offered at 50% up to a total of £25,000. Successful applicants can then apply for an **implementation** grant once they have proven the feasibility of their innovation. With up to £25,000 also available, this grant contributes 25% towards total project costs.

The GIP has awarded grants to 13 SMEs covering a range of projects, from developing an artificial intelligence system to switch off heating in unoccupied rooms (Ecosync), to a digital ‘one-stop-shop’ for electric cars and associated products (EV Car Shop). ERDF funding is due to be extended, allowing additional grants to be offered until 2023.

METHODS AND SCOPE

This evaluation focuses on the experiences of grant beneficiaries to date. It draws on a survey and interviews with four SME innovators. All four have received feasibility grants, and two have successfully applied for implementation grants.

Anticipating that elements of OxFutures - including the GIP and the free energy audits for SMEs - will be extended, we also provide recommendations for the final evaluation and some suggestions for LCH going forward.

EXPERIENCES OF GRANT BENEFICIARIES:

APPLICATION AND CLAIMS PROCESS

This evaluation focused on the experiences of SMEs when applying for and claiming the GIP grant. Of the 7 beneficiaries responding to the survey, 5 (71%) said that the application process was either ‘easy’ or ‘very easy’. 6 SMEs said that the LCH team had supported them in developing a good application, and all of these had found that support useful.

“Alison has been great. For instance, telling us which parts of the form needed to be filled out when, and when the project board would be meeting, so helping us with timeframes.”

Tim Lunel, Hook Norton Low Carbon

Besides providing support to grant applicants, Low Carbon Hub’s experience and expertise proved valuable to Hook Norton Low Carbon. As part of their involvement with OxFutures, Tim Lunel and colleagues set up a Community Land Trust, which he said would not have happened without LCH’s support. He said ‘it would have been difficult to justify putting up £75,000 to set up a new organisation. But with the grant underwriting that, it helped to derisk the communities’ investment’.

Nearly all SMEs responding to our survey and interviews expressed dissatisfaction with the process of *claiming* their grants. In recent years, ERDF funding in England has become more complex and demanding. Partly due to funds being ‘clawed back’ from the UK by the European Commission due to non-compliant procurement activities and other mismanagement, the Ministry for Housing, Communities and Local Government (MHCLG) has stepped up requirements for defrayal evidence and tightened restrictions on what expenditure is eligible for grant support.

“As the application is staged and assisted by Low Carbon hub, there is a good sense of how likely it is the grant will be awarded. This makes the effort in applying more worthwhile compared to some other sources of funding.”

Anonymous SME beneficiary

Several SMEs expressed frustration with the paperwork required in claiming their grant. An anonymous beneficiary said: “It takes about a person-day to process, prepare and submit each claim. This is a snag with grants that cover only external costs. The grant is of course welcome, but the cash lost through admin time is considerable”. Nonetheless, all SMEs were clear in placing blame for this on ERDF requirements rather

than LCH, who they felt had been supportive throughout. Gareth Dinnage from Seacourt Printing, for example, said: “it’s not Low Carbon Hub’s fault. They have my frustrations 100 fold, because they deal with it everyday! It’s just the clunkiness of the system”. As a result, Gareth said that he would not be applying for another grant like this. The paperwork and bureaucracy was ‘just too painful’, and the system was ‘too clunky’.

Steve Drummond from Electrogenic explained how helpful Alison Grunewald from LCH was in supporting him with paperwork requirements. However, he pointed out that for some projects, like his, the claims process could become a major undertaking:

“The requirements of the ERDF grant are really strict. Making our demonstration model, that might involve 200 invoices! LCH were helpful in checking all of these, but the sheer logistics required are enormous. I realise now that it would have been good to have an automated accounting system to support us, but we didn’t know that at the start.”

Steve Drummond, Electrogenic

Steve’s suggestion of an automated accounting system was echoed by Tim Lunel from Hook Norton Low Carbon. He explained that when their grant was received, it was for £200 less than anticipated. It was not the amount that troubled him, but the lack of documentation explaining the reason for the discrepancy. Tim felt that LCH could have communicated this more clearly and suggested that they consider switching from using spreadsheets to a system which could be integrated with their central management accounts software.

IMPACTS AND COUNTER-FACTUAL

Greenfund Innovation grant beneficiaries were asked if the project had had a positive impact on a range of issues in relation to their businesses. The chart overleaf shows the proportion of business who reported impacts under 5 categories.

There was no one clear view from survey respondents as to whether the project outcomes had met the expectations they had when they applied. The largest proportion (42.9%) said that they had, but a significant minority (28.6%) said that the outcomes had fallen short of their expectations. The same proportion said it was too early to make a judgement.

The Osney Mead Hydro project was supported with investment from the Greenfund



ELIGIBILITY OF SALARIES

One issue encountered during the first phase of GIP is the question of whether grants could be used by SMEs to support labour costs. Initially, the team at LCH had interpreted the guidance to mean that salaries *could* be included in grant applications, only to find out from MHCLG staff that this expenditure was ineligible under ERDF. The confusion arose over the use of the term ‘applicant’ in official guidance. For MHCLG, this refers to the project managers, while LCH interpreted this as SME grant applicants.

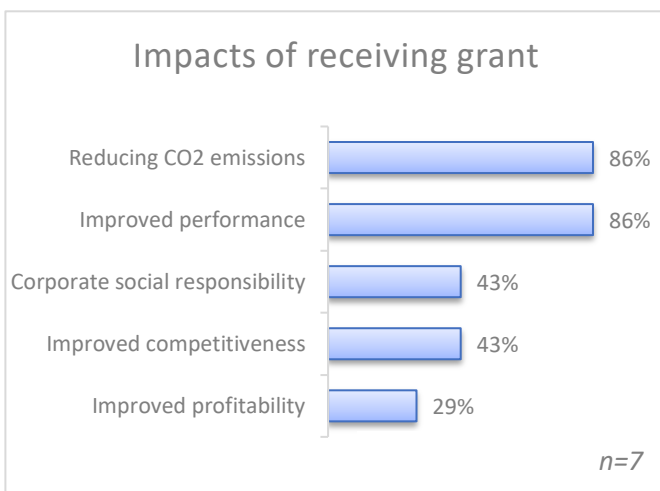
Both Electrogenic and Hook Norton Community Land Trust encountered this setback once their grants had already been approved and their projects were underway. Both emphasised how LCH had been clear in explaining the issue and helping them to find alternative solutions.

Steve Drummond explained that for most businesses, labour represented the biggest cost, so having this ruled out of the grant made it somewhat less attractive. He also pointed out two smaller issues that came to light after his grant had been approved. Firstly, automobiles cannot be sold within 3 years of having been supported by ERDF money, and second, hand-written invoices could not be accepted.

While it is clear LCH must take some responsibility for these mistakes, Alison Grunewald explained how confusing ERDF guidance documentation was, and how requests for clarification from MHCLG contract managers were frequently ignored. This is an issue that has been documented in an [academic paper by Sam Hampton](#) based on experiences of the 2007-2013 ERDF programme, and it is unfortunate to see the issues persist into 2020.

“I still have the feeling there is a risk that MHCLG might just say 'there is not enough evidence that you spent this money on the project' and they refuse to pay at all. If that happens, I will be devastated”

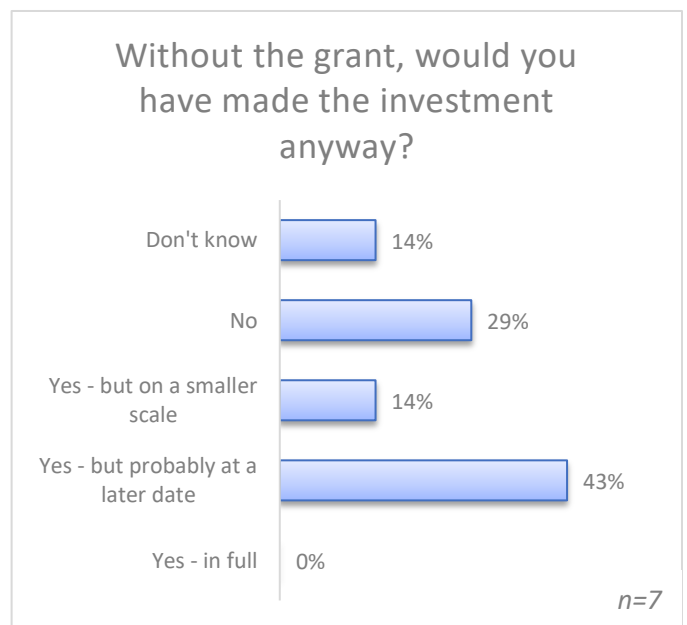
Anonymous SME beneficiary



Our survey asked beneficiaries to comment on whether they would have made the investment in the innovation project if they had not been successful in winning a grant from OxFutures. The most common response (43%) said that they would probably have gone ahead, but at a later date when funds had become available. 1 respondent said that they would have scaled back the project, while 2 beneficiaries indicated that their projects would not have gone ahead at all. These results demonstrate a strong *additionality benefit* from GIP, which has added tangible value and helped to

accelerate sustainable innovation amongst these businesses.

Drawing on expertise from LCH, The Hook Norton Community Land Trust are planning to issue a community share offer to raise funds for their planned housing development. Tim Lunel explained that without grant support, this offer would have involved a significant debt repayment burden and would thus be





Electrogenic, who received a GIP grant, convert classic cars to electric vehicles from their base in Kidlington.

less attractive to investors. With the grant, they have been able to develop a compelling offer to the community.

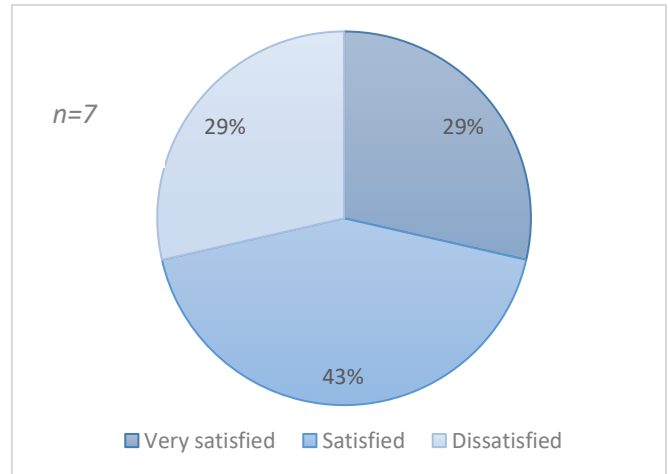
Steve Drummond was clear: without the grant, Electrogenic simply would not have started up. He explained that the support given by OxFutures was *moral* as well as financial:

“Starting this business has involved terrifying amounts of money! The grant provides moral support. You can say: ‘it’s not a totally insane idea because these people think it’s worth supporting’. It wouldn’t have happened without the grant.”

Steve Drummond, Electrogenic

Overall satisfaction levels with the programme expressed by Greenfund Innovation grant beneficiaries are shown below.

5 of the 7 respondents were either very satisfied or satisfied with the Greenfund Innovation Programme. However, 2 SMEs reported being dissatisfied with the programme. This is the same proportion as said that project outcomes had fallen short of their expectations, and that they would be unlikely to consider applying for other grant programmes in future. Given the small sample size, these are likely to be the same two SMEs.



CASHFLOW

ERDF grants are paid to SME beneficiaries in arrears, once evidence is provided that eligible expenditure has been defrayed in accordance with the approved application. This means that those approved for a GIP grant were required to pay for 100% of their project costs before being reimbursed by Low Carbon Hub. In some cases, the time between paying an invoice and receiving the grant took several months.

Several grant beneficiaries expressed concern with the implications for cashflow, which appears to be the main drawback of the programme. Steve Drummond said that startups ‘live or die on cashflow’, and that cashflow, rather than profitability, was the main cause of business closure. He explained:

“The mechanics of the grant are problematic. We’re only allowed to submit one claim per quarter, then the payment is 3 months after that. So it can be up to 6 months before we are reimbursed for something we’ve bought”.

Steve Drummond, Electrogenic

One anonymous survey respondent used the comment section to say that the expectations around cashflow were ‘completely unrealistic’, and that while they would recommend OxFutures to other SMEs, they would ‘warn them that they would be bankrolling the project in its entirety’. Several beneficiaries explained that they had had to borrow money, or Directors had had to go without salaries, in order to complete their projects. The danger is that the current system of payments may

exclude those businesses unable to find such workarounds.

The delay between payment and reimbursement is likely to be longer for GIP beneficiaries than other ERDF projects. Alison Grunewald explained that as an SME themselves, LCH was unable to pay out grants upon receipt of claim paperwork. Instead, it had to wait until MHCLG had paid their quarterly claim before they could release funds to beneficiaries. As LCH is aware, other projects, such as Low Carbon Workspaces run by Ngage Solutions, issue grant payments once the project team has carefully checked claim paperwork.

“To be honest it’s just not acceptable in terms of how to work with any business. Certainly not a small business and certainly not a community social enterprise. That for me is the biggest thing that needs to change going forward.”

Anonymous SME beneficiary

Several SMEs responding to our survey and interviews insisted that this situation needs to change for the GIP extension. One business owner suggested that there should be a maximum of 60 days for payment, and that the match ratio would be a more generous 75%. Another SME who had worked with other grant systems explained that the majority of these ‘pay on milestones’. While such a change is beyond the capability of LCH, they may find it useful to consider the feedback from SMEs when applying for future funding, for instance from the Shared Prosperity Fund which has been proposed by government as a replacement for European funds.

RECOMMENDATIONS FOR THE LCH TEAM

Overall, the evidence from our survey and interviews of beneficiaries indicate that the LCH team administering the Greenfund Innovation Programme grant is doing a good job. The two main concerns raised by SMEs were paperwork and cashflow. While nothing can be done to circumvent ERDF’s strict requirements for evidence, it is clear that the detailed support provided by Alison to SMEs to help them submit eligible claim documentation is very welcome. Nonetheless, there is room for improvement, and the issue of salaries being ineligible is something that LCH will learn from. Other specific

issues, including the fact that automobiles cannot be sold on, or that hand-written invoices cannot be accepted, should be added to a list of lessons learned for the GIP extension.

We recommend that LCH keeps a register of issues and learnings in a ‘living document’. An internal company wiki is an excellent format for this, and more appropriate than text documents. Wikis can be organised like a website, meaning that it can be infinitely large and easily searchable. They are cloud based, can be edited by all staff, and editing rights can be controlled.

A further recommendation relates to the spreadsheets used to log grant applications and status. It was very helpful to have sight of this document for this evaluation; however, we found it somewhat difficult to follow. Interpreting others’ spreadsheets is never easy, but to reduce risk, we suggest that at least one other member of the OxFutures team conducts an ‘audit’ of this spreadsheet to reduce the risk that too much depends on Alison Grunewald. An audit would test whether crucial information can easily be gleaned without further explanation. Questions to guide this process include:

- How many grants have been approved, rejected, or are in process?
- What is the value (ERDF and match) of each project, and what is the current status of claims and payments?
- How much ERDF remains to be awarded, and how much match is needed to balance the overall project expenditure?



The Zeta Group is developing solar roof tiles, supported by a GIP grant.

PART 3 – ENERGY EFFICIENCY AUDITS AND GRANTS

A total of 136 SMEs have so far received expert energy audits through the OxFutures programme. These are provided by specialists at Oxford Brookes' Environmental Information Exchange (EiE). The energy assessment represents at least 12 hours of business support provided to SME beneficiaries, including site visit, analysis of options for energy savings, and report writing.

OXFUTURES AUDIT METHODOLOGY

The OxFutures Business Relationship Manager is the first point of contact for SMEs seeking energy audits. After an eligibility check, details are passed to the auditors.

Prior to a site visit, SMEs are sent a data sheet to complete that includes annual site energy use for fuel types (electricity, gas, other). There are also questions about building age, area, and listed status. Most SMEs provide this in advance of the visit, some during or just after the visit. A few SMEs provided no information.

The site visit consists of an initial meeting to discuss energy issues and help set the focus of a walkthrough. The walkthrough is a review of key energy-using processes and equipment, as well as an opportunity to have discussions with key staff. The visit

concludes by providing the SME with a summary of potential report recommendations, any requests for outstanding data, and a summary of the next stages.

After the visit a draft report is produced. The report includes basic SME information and site description, a summary of recommendations and estimated savings (kWh, financial, and CO₂e savings) as well costs. The report includes an energy profile summary of annual consumption and a benchmark (per m²) comparing their current consumption, average for the sector (if appropriate), and potential consumption if all recommendations were to be implemented. The report also includes details for each recommendation (rationale and details, actions, and an explanation of costs and savings). In most cases, recommendations are provided alongside a calculation of potential savings and an estimate of the cost of implementation. Energy savings are based on a 12-month period and are converted to financial savings using the rates paid by each SME to their utility suppliers.

Each report includes a resources section detailing funding opportunities and any further information on topics not covered in the recommendations.

The draft report is sent by email to the SME for review. This email explains that to move the report from a draft to a final version, a chat or face to face presentation is needed to ensure the recommendations and potential savings are understood and agreed. SMEs cannot apply for a grant from OxFutures' Greenfund to implement any of the recommended measures without a final energy audit report. If there is no SME response, several communications are attempted to arrange the presentation. If there is still no response from the SME after a reasonable period of time, the draft report becomes final without updates.

MEASURING ENERGY SAVINGS

Regardless of whether SMEs receiving energy audits go on to apply for a grant to implement recommended measures, the EiE team issue online surveys to track energy savings made as a result of their site visit and report.



Thames Cryogenics received an energy audit from the EiE team, then applied for a grant to help upgrade their workshop lighting to LED.

Bespoke surveys are created, listing each recommendation made. SMEs are asked to provide an update on progress against each measure, with options:

- completed
- partially completed
- intending to complete
- not intending to complete.

If a response is 'completed', 100% of the projected savings from that action are recorded as achieved. If a response is 'partially completed' 75% of the savings are recorded. Surveys are issued to SMEs between 8 and 10 months after the final report to allow time to act on the report. During the extended phase of OxFutures, from April 2020 onwards, EiE plan to issue a second survey to SMEs to capture any further energy saving measures.

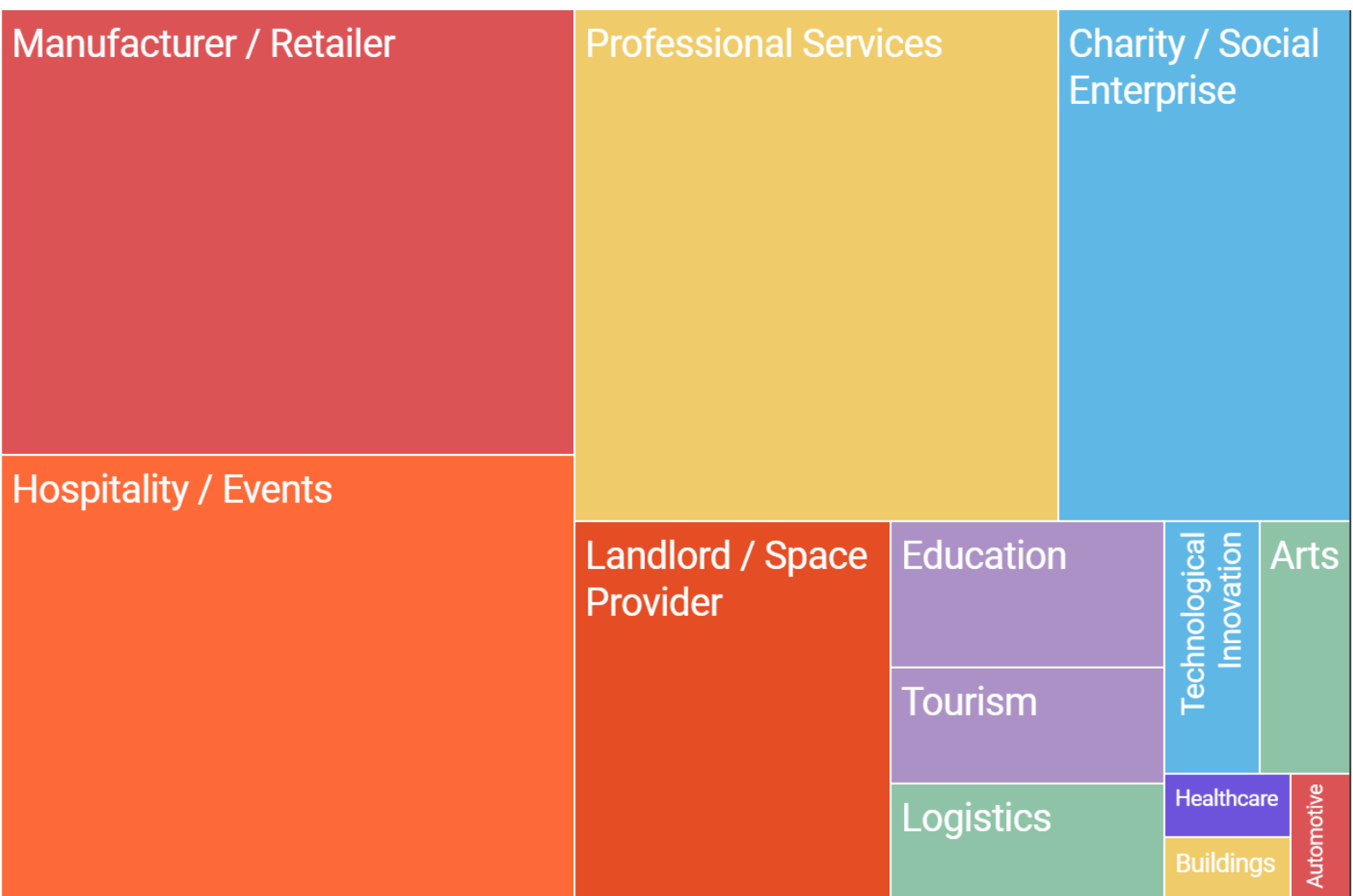
EiE have agreed with MHCLG that where SMEs fail to complete surveys, two other methodologies can be used to estimate savings. Firstly, for SMEs receiving grants for efficiency measures but failing to complete the survey, predicted energy savings are used. The second involves applying a ratio of savings to SMEs which have *not* responded to surveys, based on the percentage uptake of actions from those SMEs who *have* responded. The percentage is applied to every

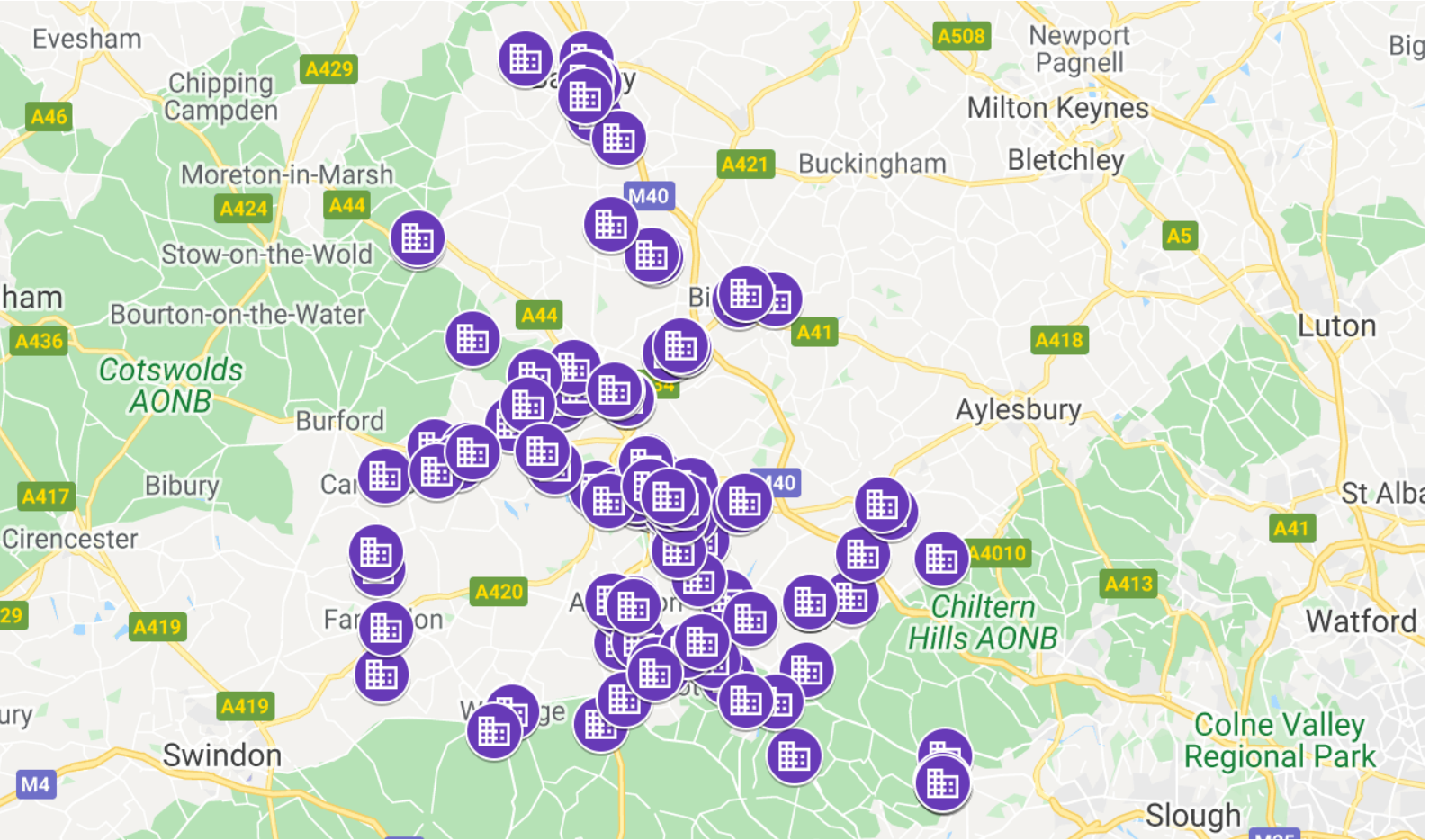
relevant recommendation category. For example, if an SME has one heating recommendation and 39% of respondents have completed heating actions, then 39% of this action is considered completed. If 43% of lighting actions are completed, but the SME has no lighting action, then no savings are recorded for that SME.

SME BENEFICIARY ANALYSIS

Between April 2017 and March 2020 136 SMEs received energy audits from the EiE team. Both the Treemap and map overleaf show that beneficiaries were well distributed according to industrial sector and geographical location. All but one of the audits took place in Oxfordshire, and 42 (31%) of these were based in Oxford City. OxFutures staff had been concerned that with extensive networks in the non-profit sector, their reach may be skewed towards village halls and charity-occupied buildings. However, the Treemap indicates that a manufacturers / retailers were most commonly audited, followed by those in the hospitality / events sector. Professional services, including accountants and legal firms, were the third largest group of beneficiaries.

A Treemap of industrial sectors represented by SMEs receiving OxFutures energy audits





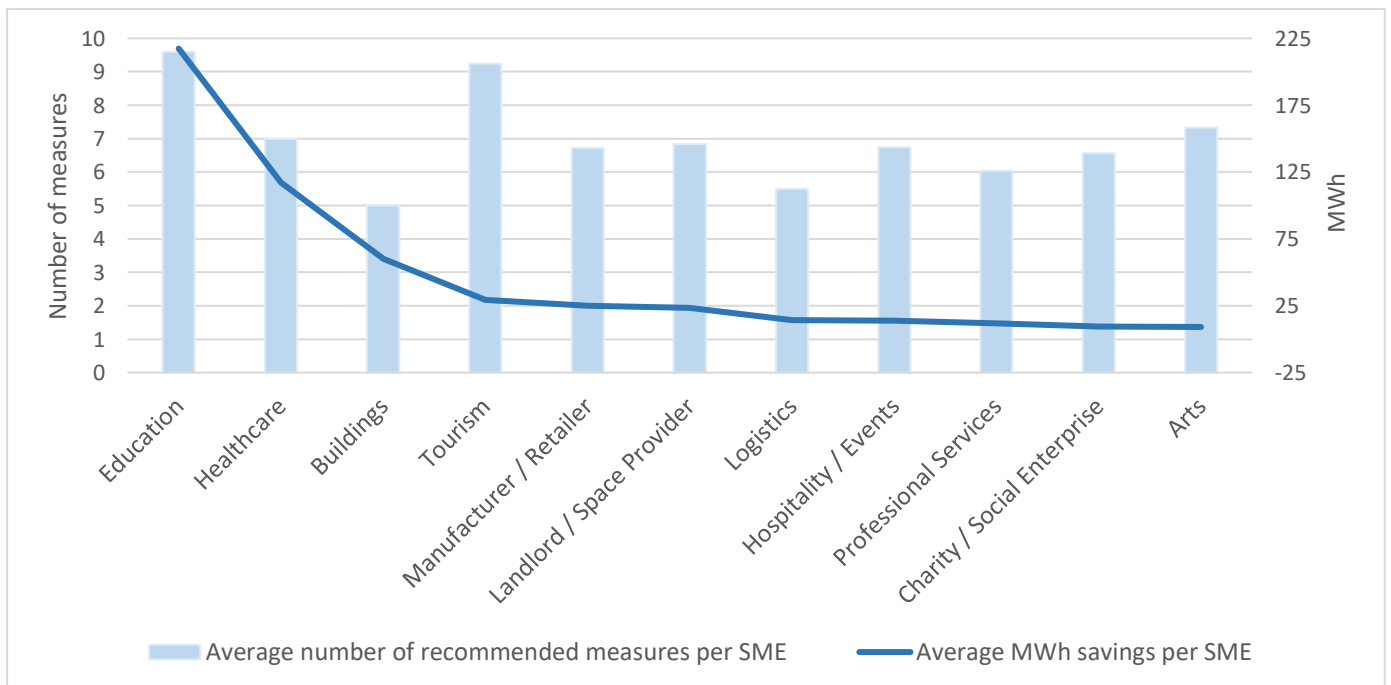
Map showing geographical distribution of SMEs receiving energy audits from EiE

SUMMARY OF RESULTS

A total of 907 recommended measures were provided to beneficiaries, amounting to an average annual energy saving of over £2,500 per SME, if implemented in full. The number of recommendations ranged from 3 to 14 in audit reports, although this was not correlated with projected savings. In some cases, just a few

recommended measures could amount to over 10,000kWh (more than £1500) of savings.

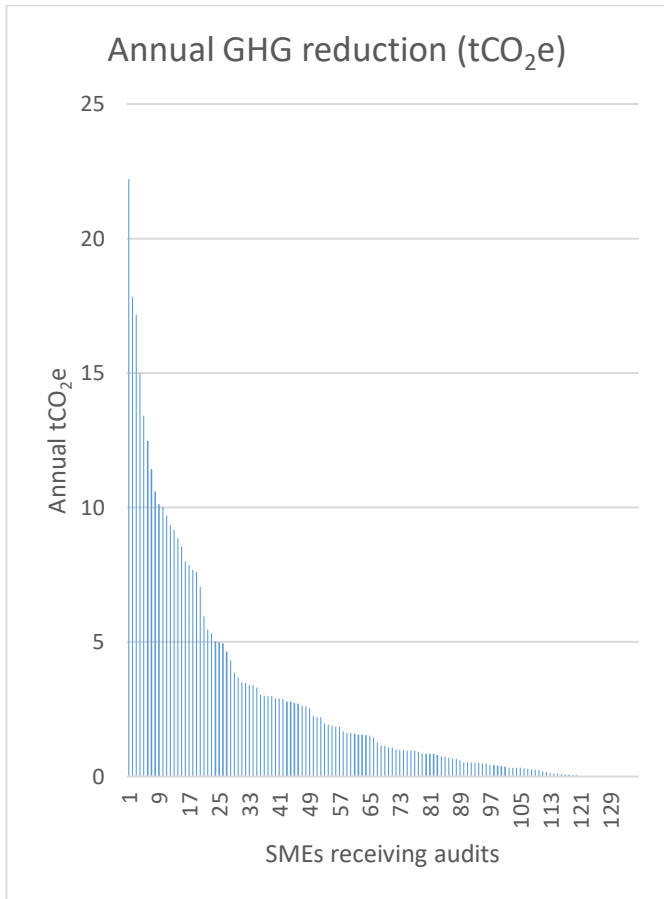
The chart below indicates that the number of recommended measures, and energy saving potential varies according to industrial sector. While SMEs in Education and Tourism received the largest number of recommendations, the greatest potential for savings exists in Education and Healthcare. This is likely to be



due to size of building premises. It is hoped that data on building size and type will be available for the summative assessment, for further analysis.

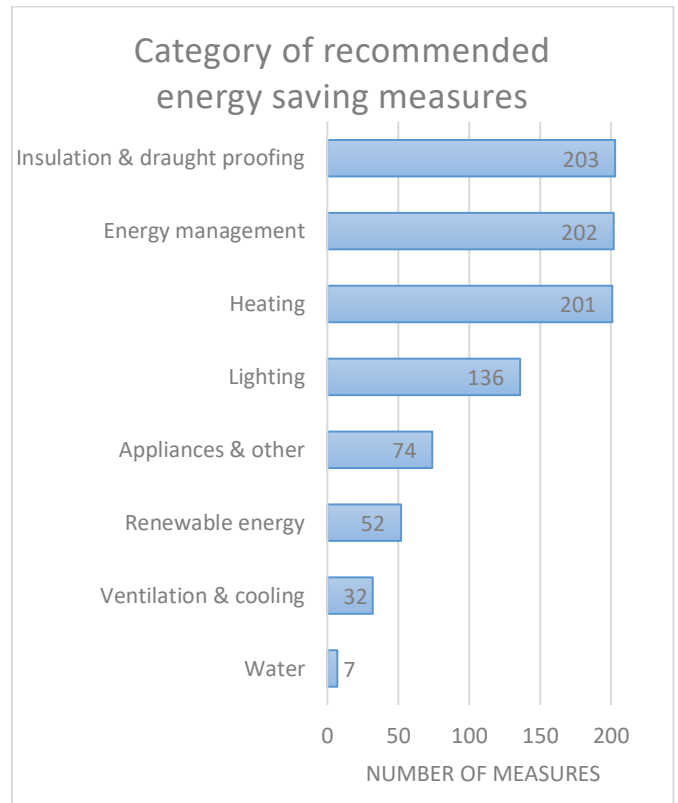
EiE estimates that if *all* measures were to be implemented by businesses receiving audits, more than 3.4 GWh of energy savings could be achieved every year, equating to nearly £340,000 and over 1,000 tonnes of CO₂e. Using the methodology for estimating savings outlined above, EiE estimate that over 1/3rd (38%) of these potential savings have so far been realised by SME beneficiaries. This amounts to an average saving on energy expenditure of £1,046 per SME, per year.

The chart below indicates that the Pareto Principle applies to these results. The 10 SMEs achieving the largest reductions in annual Greenhouse Gas (GHG) emissions represent 36% of the total (140 tCO₂e). 80% of all savings are calculated to have been achieved by just 43 SMEs.



Recommendations can be divided into 8 main categories, with 82% of measures classified as either insulation and draught proofing, energy management,

heating or lighting (see chart below). The costs and potential savings for each of these will vary according to the size and construction of the building in question. Many are likely to involve zero, or minimal capital investment, for example. In their audit reports, EiE provide cost estimates for SMEs to assist implementation planning. In some cases, they also separate materials and labour costs, and for the final summative assessment, the team aim to break-down and analyse the costs associated with the recommended measures.



EFFICACY OF GRANT SUPPORT FOR ENERGY SAVINGS

28 of the 136 SMEs receiving energy audits have so far been awarded a grant by the OxFutures Greenfund, contributing up to 25% of total project costs. £72,116 was awarded in support of projects totalling £294,294, which equates to an average value of £2,576 of grant subsidy per SME.

Of the 136 SMEs receiving energy audits, 48 have so far provided feedback evidence. Of these, 34 received an audit only, and 17 received grants.

For each recommended measure, SMEs were asked to report against progress. Feedback data produced the following results:

- Those receiving grants reported that 30% of the recommended measures had been **completed**. This compares with only 17% for those receiving audits only.
- SMEs receiving audits only were more likely to report that measures were **partially complete** (21%), compared with those receiving grants (8%).
- Grant recipients stated that for 16% of measures, they had taken no action, but *intended to*, and for 7% of measures, they had no plans. By contrast, those with audits only reported an intention to act on 34% of measures, but had ruled out 21%.
- Grant recipients were much more likely to provide **no response** against specific measures. No data was provided for 39% of the measures recommended to

grant recipients. Those receiving audits only failed to report against only 8% of measures.

These results indicate that grant funding was effective in increasing the likelihood that recommended measures would be fully completed. However, audits alone were effective in encouraging SMEs to take action to reduce energy consumption.

The high proportion of non-responses by grant recipients to certain measures is somewhat concerning. One explanation could be that grant recipients had focused their efforts on the specific measures for which they had received a subsidy, and had disregarded others. If so, there is a danger that SMEs receiving grants to complete high priority measures are more likely to consider the 'job done'. With a long way to go to reduce energy demand and greenhouse gas emissions from non-domestic properties across Oxfordshire, this would be a pity.

The Abbey at Sutton Courtney received a grant to install loft insulation, LED lights and new heaters: saving 8.5 tCO₂e per year.



PART 4 – PLANS FOR FINAL SUMMATIVE ASSESSMENT

This interim summative assessment has reported on the success of the OxFutures programme to date. We focused in-depth on the Oxfordshire Greentech network, which will no longer be supported by ERDF. The Greenfund Innovation Programme and energy efficiency audits and grants will continue to be available to SMEs until March 2023, and a final summative assessment will be produced in December 2022. This section provides some brief recommendations for the final summative assessment.

Evaluating **additionality** in SME support programmes can be challenging. ERDF guidance for summative assessment suggests that counter-factual analysis should be conducted to demonstrate that projects enabled outcomes that would not have been achieved otherwise. This evaluation has included a partial exercise of this kind, by using surveys sent by EiE to all SMEs receiving energy audits as well as those receiving grants. We found significant differences between those receiving financial support compared with just energy expertise. This counter-factual analysis should be repeated and extended for the final summative assessment. Analysis could be strengthened by breaking down responses into categories of recommendation (insulation, lighting etc), SME sector and building type.

In addition, we recommend that a small cohort of SMEs who have *not* engaged with OxFutures is surveyed or interviewed. Questions to consider include: have they

taken measures to improve energy efficiency in the last three years, without having had an OxFutures audit? Have SMEs not receiving GIP grants been able to access finance to develop sustainable innovations? Recruiting SMEs can be difficult for any project, so we suggest working with other projects such as *Escalate*, run by OxLEP, to establish this ‘control group’. There may be potential for a reciprocal exchange.

The methodology used by Oxford Brookes’ EiE team to calculate energy savings from SME beneficiaries is sound and should continue to be used for the remainder of the project. The extension will give this team additional time in order to follow up with SMEs to collect savings data based on measures taken as a direct result of the intervention. However, the methodology does not include the collection of energy consumption data from SME bills or meters. Doing so would not necessarily lead to increased accuracy or validity, because changes in overall consumption have multiple causes, such as business expansion or the COVID-19 related lockdown. That said, we recommend tasking the independent evaluator to conduct site visits with a sample of SME beneficiaries, to gather consumption data and couple this with interviews to generate insights about how energy use may have changed since the audit report was received. This exercise would allow a comparison to be made between the energy savings *projections* made in audit reports and those *achieved* by SMEs. It would help to validate the methodology used by EiE and demonstrate **economic impact** and **value for money**.

Taken together, the audit reports are a valuable source of information about energy usage and cost-effective measures to decrease energy consumption in SME premises. This database can be used to make generalisations about potential for energy savings in the SME population. For instance, does insulation still represent the best opportunity for energy efficiency, or have most SMEs now made that investment?

Insights such as these will be of significant interest to policy makers and academics. We therefore suggest that the sample is analysed for representativeness. Our analysis indicates that SME beneficiaries are well distributed according to industrial sector, but we have

REPORTING BACK TO GOVERNMENT

The section in Part 2 titled ‘Recommendations for the LCH team’ suggested that issues and obstacles are carefully documented in a living document.

Besides being beneficial to Low Carbon Hub, this log could be used to feed back to government funders, as they design new support programmes to replace ERDF.

With a government audience, the Summative Assessment provides an opportunity for an independent evaluator to report and consolidate key messages, such as where guidance documentation is unclear.

been unable to compare this with business population statistics due to constrained resources. Such a comparison may be worthwhile for the final summative assessment. Analysing the population of beneficiaries of OxFutures would help to identify which sectors and business types were not reached as part of the programme. This information could be also used to adapt marketing strategy and inform future bids. Similarly, it would be valuable to gather data on building-type and tenancy status for the cohort of OxFutures SME beneficiaries. For instance, the buildings audited by EiE could be compared with national data, such as the 2016 Building Energy Efficiency Survey (BEES).

Finally, evaluations are most effective when conducted on a **longitudinal** basis. This allows independent consultants to track issues and obstacles as they occur, and to provide formative feedback to the project administrators. If possible, we suggest that for the extended OxFutures project, an independent evaluator is recruited to work *alongside* the project. We advise that the same survey questions are used to allow for comparison over time. The OxFutures consortium already have robust data gathering processes which will

FUTURE FUNDING NEEDS

Our survey asked GIP beneficiaries to say what their priorities would be for applying for a similar grant in future. While only 4 responses were received to this question, a clear theme emerged.

The SMEs supported by GIP did not struggle to develop innovative ideas for sustainable products and services, but found it difficult to fund their development at a very early stage. It was suggested that a (potentially smaller) grant could help get these ideas to 'first base'.

It should be noted, however, that this is a self-selecting group of innovators. It may be valuable for LCH to include a task in the final evaluation to gather views about SMEs' needs in a more systematic way, to inform future funding bids.

be valuable for the final summative assessment, however we recommend that discussions about a methodology for evaluating value for money take place at an early stage, so that any need for additional data can be incorporated into project management procedures.

ABOUT THE AUTHORS

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Thank you to all those contributing insights via surveys and interviews, and to the OxFutures team.

PARTNERS

