



## EVALUATION OF THE LOW CARBON CHALLENGE FUND

**FINAL Summative Assessment Report - SUMMARY**  
from PFA Research Ltd

**December 2023**



**European Union**  
European Regional  
Development Fund



**HM Government**

**Authors:**

Katherine Stewart, Researcher | [katherine.stewart@pfa-research.com](mailto:katherine.stewart@pfa-research.com)

Robert Rush, Managing Director | [robert.rush@pfa-research.com](mailto:robert.rush@pfa-research.com)

Beate Galke, Operations Manager | [beate.galke@pfa-research.com](mailto:beate.galke@pfa-research.com)

[pfa-research.com](https://pfa-research.com)

Ref. JN1365

## Use of Data

### Market Research supporting PR activities

All of the work carried out by PFA Research Ltd is conducted in accordance with the Market Research Society Code of Conduct.

The Market Research Society places a duty of care on market research organisations to protect the interests of both their client and those that took part in any research. As part of this duty of care market research organisations are required to ensure that any press releases or other promotional material issued by the client is supported by the data. As such PFA Research reserves the right to view and suggest amendments to any press release or promotional material prior to its release into the public domain. This procedure is in line with the recommendation of the Market Research Society and does not undermine client ownership of the data.

### General Disclaimer

While every care has been taken during the course of the research, PFA Research Ltd takes no responsibility for any incorrect information supplied to us. Quantitative market information is based primarily on interviews or self-completed questionnaires and therefore is subject to fluctuation.

The contents of this report represent our interpretation and analysis of information that can be considered generally available to the public and provided voluntarily by respondents. It is not guaranteed as to accuracy or completeness. It does not contain material provided to us in confidence by our clients or research respondents.

## Contents

1	Introduction .....	4
1.1	Brief methodology statement .....	7
2	Summative Assessment Findings.....	8
2.1	Feedback from business beneficiaries .....	8
2.2	Feedback from the applicants for the Innovative Local Energy Scheme and the Innovative Housing Retrofit scheme .....	11
2.3	Feedback from the Delivery Team and Stakeholders .....	11
2.4	Context and relevance.....	13
2.5	Project progress and achievements .....	14
2.6	Outcomes and Impacts.....	15
2.7	Value for Money .....	16
2.8	Lessons Learned .....	16
3	Conclusions .....	20

## 1 Introduction

The LCCF project as a whole has been set up by the West of England Mayoral Combined Authority (MCA). It is funded by the European Regional Development Fund (ERDF), and two funds from the MCA's devolved funding – the West of England Recovery Fund and the Green Recovery Fund. The latter has been set up by the MCA to address climate change.

Fund	Amount	Projects
ERDF	£2,100,788 (100% capital)	<i>Green Business Grants</i> – standard rate intervention <i>Innovative Local Energy Scheme</i> – Ambition Community Energy (ACE) Wind turbine
West of England Recovery Fund	£1,943,111 (£1,100,000 capital and £843,111 revenue)	Green Business Grants – high rate intervention <i>Innovative Local Energy Scheme</i> - Bath & West Community Energy Fairy Hill solar array; Cleveland Pools heat pump infrastructure; Owen Square Demonstrator Home
Green Recovery Fund	£300,000 (100% capital)	Innovative Housing Retrofit Scheme – Brighter Places hard to treat project

The projects included within the LCCF are:

- **Green Business Grants and Carbon Surveys** - a Green Business Grant is designed to help small and medium sized enterprises (SMEs) purchase and install new products and equipment that reduce greenhouse gas emissions, cut utility costs and improve energy efficiency. In addition, all businesses have been given a free carbon survey.
- **Innovative Local Energy Scheme** – aims to deliver renewable energy projects that also deliver community benefits and green skills and jobs, and support bio-diversity. The projects are: Ambition Community Energy (ACE) Wind turbine, Bath & West Community Energy Fairy Hill solar array; Cleveland Pools heat pump infrastructure; Owen Square Demonstrator Home.
- **Innovative Housing Retrofit Scheme** – a pilot project to test innovative energy-saving improvements, focused on hard-to-treat homes, such as those off the gas grid or with solid walls. The project will support the development of green skills and installer capacity in the region, which will maximise new economic opportunities for local residents and businesses. The project is: Brighter Places 'hard to treat' project.

**This report focuses on the ERDF part of the LCCF project, which covers Green Business grants and carbon surveys, the Ambition Community Energy (ACE) wind turbine project**

and the Brighter Places project<sup>1</sup>. A further report, which evaluates all the projects funded through ERDF, the Recovery Fund and the Green Recovery Fund, will accompany this report in 2024/2025 when the projects have been fully completed.

The objectives of the ERDF Low Carbon Challenge Fund project are to:

- To deliver GHG savings (reductions in GHG emissions)
- To improve SME productivity through enabling them to make savings through more efficient energy management (including water use, embodied energy, waste handling and transport etc.)
- To increase the amount of energy generated from renewable sources and to improve the energy efficiency of public buildings, including housing stock

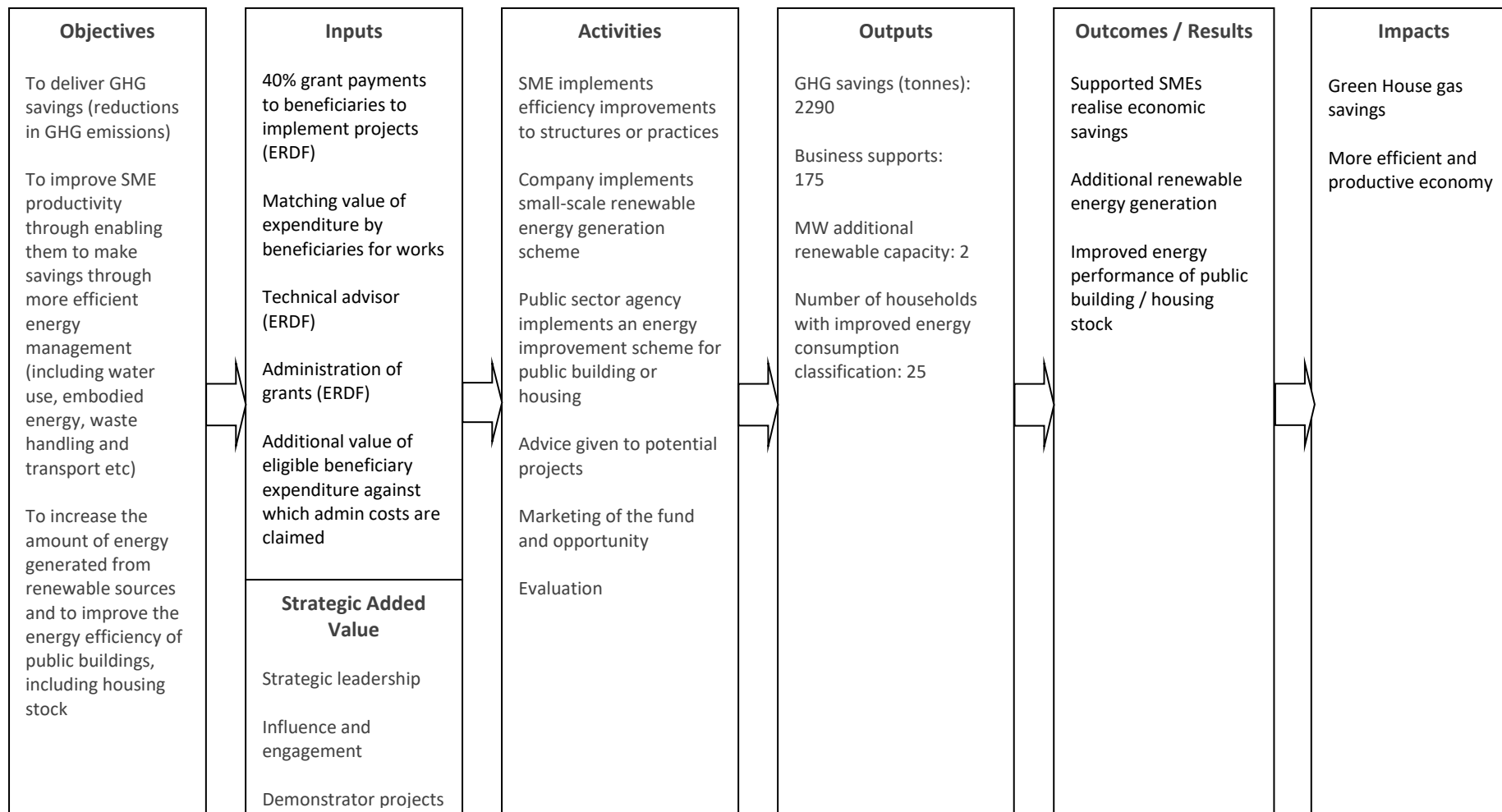
The original contracted ERDF output targets are:

Indicator	Description	Target
ER/C/O/01	Number of enterprises receiving support	130
ER/C/O/30	Additional capacity of renewable energy production	2 MW

The following diagram shows the updated logic chain for use during the summative assessment.

---

<sup>1</sup> Although the Brighter Places project is not going ahead with ERDF funding, it is included in this report in order to capture lessons learned around the application process and why the project could not continue with the ERDF funding



PFA Research, an independent research company, was appointed to undertake a summative assessment through the collation of data and compilation of the ERDF Summative Assessment report.

The objectives of the Summative Assessment are:

- Demonstrate the relevance and consistency, progress, delivery and management, impacts and value for money (including the effectiveness of the programme's design and delivery processes)
- Evaluate progress towards achieving the project's ERDF outputs
- Evaluate progress towards achieving the project's impacts
- Identify, collate and summarise lessons learned to inform relevant future delivery and best practice for future projects, and help to disseminate the findings
- Produce a final report consistent with the Programme Evaluation report summary template

## 1.1 Brief methodology statement

The research methodology for the final summative assessment comprised:

- Background review and desk analysis
- Three telephone interviews with the LCCF delivery team
- Two telephone interviews with stakeholders
- An online and follow-up telephone survey with 114 business beneficiary respondents
- Telephone interviews with three applicants for the Local Energy Scheme and the Innovative Housing Retrofit Scheme
- Analysis of data collected and report writing

## 2 Summative Assessment Findings

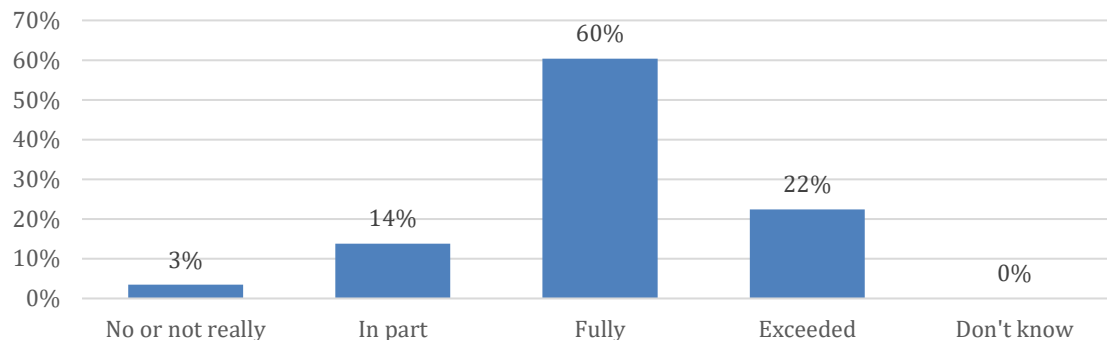
The key findings from the report have been summarised in this section.

### 2.1 Feedback from business beneficiaries

Over half of all respondents said that the Green Business Grant has fully met their expectations, and a further 22% say that it has exceeded their expectations (see Figure 2-1).

**Figure 2-1**

**Q: Generally speaking, has the Green Business grant met your expectations?**



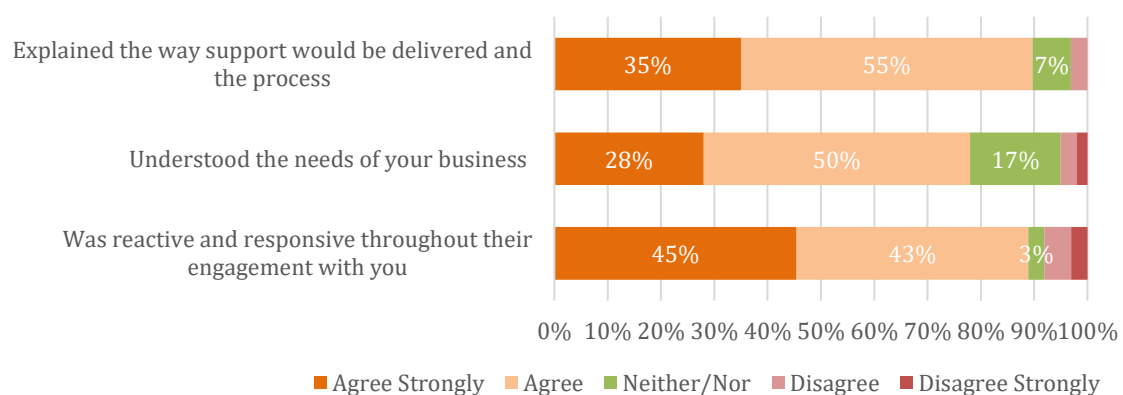
Base: All Grant Recipients; n=58

Beneficiaries say the grant has been mostly successful in supporting their energy-efficiency and sustainability projects. Many report positive project outcomes, such as installing solar panels, LED lighting, ventilation and other energy-saving improvements. They mention having reduced energy costs, increased comfort and lowering carbon emissions.

Most beneficiaries of the Green Business Grant agreed or agreed strongly that the MCA delivered the Low Carbon Challenge Fund well in terms of explaining the way the support would be delivered, understanding the needs of their business and the MCA were reactive and responsive throughout the engagement (see Figure 2-2).

**Figure 2-2**

**Q: To what extent would you agree or disagree that the West of England Combined Authority who delivered the Low Carbon Challenge Fund project:**



Base: All Grant Recipients (all answering); n=58

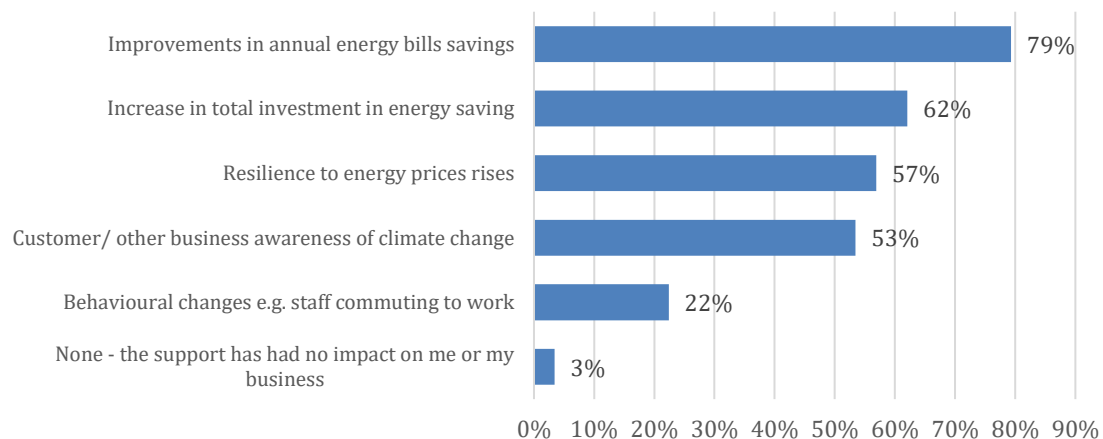


In terms of the process around onboarding and support around the Green Business Grant, most beneficiaries rated the project good or very good.

Regarding **energy saving improvements**, over three quarters of all respondents experienced improvements in annual energy bills savings, followed by 62% who have experienced an increase in total investment in energy saving and 57% say they are now more resilient to energy prices rising (see Figure 2-3).

**Figure 2-3**

**Q. Have you experienced benefits or improvements in relation to any of the following energy saving improvements?**

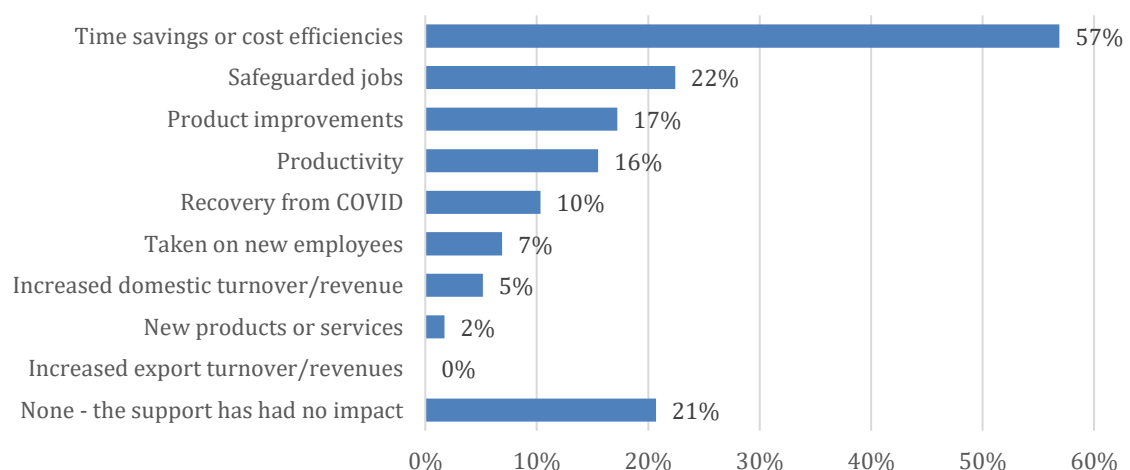


Base: All Grant Recipients; n=58

Regarding **economic improvements**, well over half (57%) responded with improvements around time saving or cost efficiencies, 22% have safeguarded jobs and 17% in product improvements. Overall, eight in ten (79%) say that the Green Business Grant has delivered benefits (see Figure 2-4).

**Figure 2-4**

**Q: Have you experienced benefits or improvements in relation to any of the following economic areas as a result of the Green Business grant?**

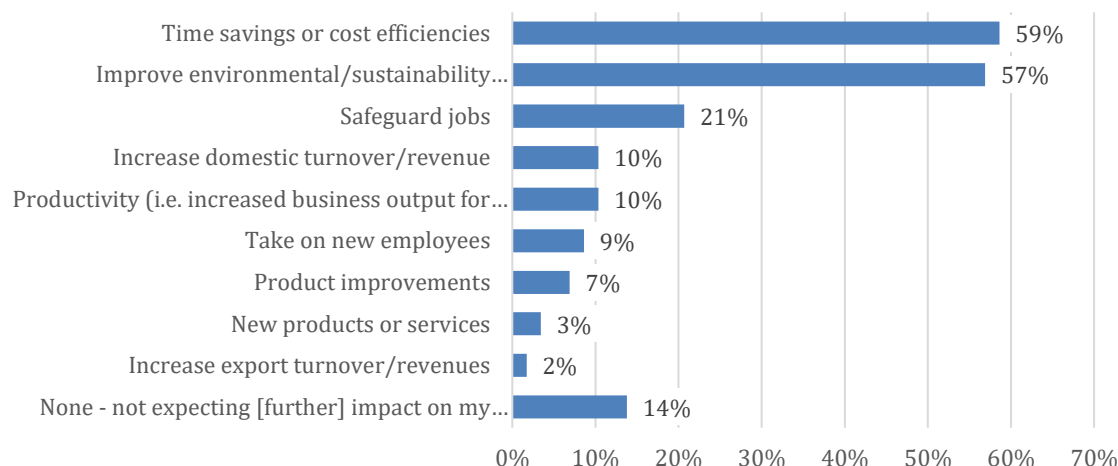


Base: All Grant Recipients; n=58

Regarding **future benefits**, 59% of respondents expect to experience improvements or benefits in time savings or cost efficiencies as a result of the Green Business Grant. A further 57% expect improvements in environmental/sustainability credentials and 21% to safeguard jobs (see Figure 2-5).

**Figure 2-5**

**Q: Over the next 12 months, do you expect to experience benefits or improvements in relation to any of the following areas as a result of the Green Business grant?**



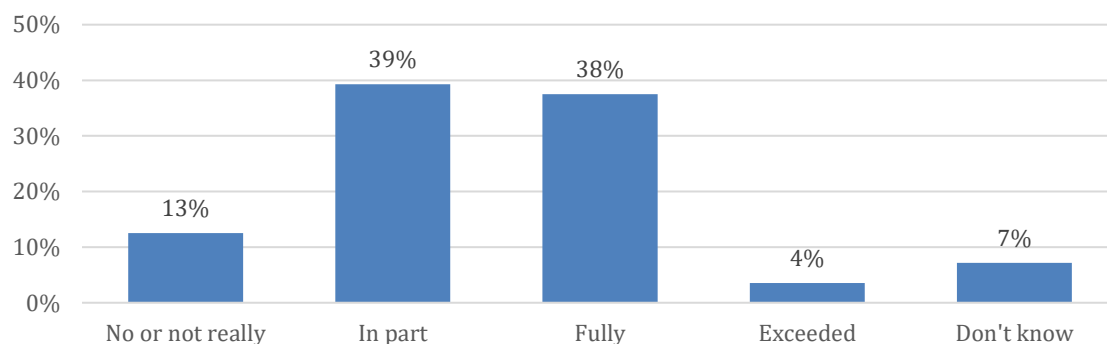
Base: All Grant Recipients; n=58

Regarding **impact**, half say their turnover has increased since before they received the Green Business Grant. The average increase is estimated at about 20% whilst for those who experienced a decrease the estimated decrease is around 13%. 69% of all respondents say they have achieved cost savings since the Green Business grant. Nearly half of those who say they have achieved costs savings have saved approximately 1%-5%, with the overall average saving estimated as 12%. Those who were able to predict absolute savings estimate an average saving of £3,670. 80% of respondents say they would have been unlikely to have achieved the same result in the timeframe without the support provided. Over nine in ten (93%) estimate that they have made greenhouse gas savings, and 43% say their business produces additional renewable energy.

Most respondents in receipt of the Carbon Survey received some benefit of it, with 42% saying it fully or exceeded their expectations (see Figure 2-6).

**Figure 2-6**

**Q: Was the Carbon survey useful to your business?**



Base: All Carbon Survey participants; n=56

59% of Green Business Grant recipients and 57% carbon survey participants say they have carried out suggested energy saving improvements without grant funding. These non-grant funded improvements include changing to LED lighting, improving insulation, installing new or increasing solar PV, other types of installations (e.g. heating, air conditioning), switched vehicles to EV and installed chargers. However, a number also describe changes in procedures and encouraging different behaviours within their workplaces.

Those who participated with the Carbon Survey and who were aware that they could apply for a Green Business Grant were asked why they did not apply. More than a quarter (27%) said that they have applied, for which some have been unsuccessful. 22% did not have enough time and 16% said they did not meet requirements.

## 2.2 Feedback from the applicants for the Innovative Local Energy Scheme and the Innovative Housing Retrofit scheme

In terms of the engagement and satisfaction with the West of England Combined Authority who delivered the LCCF, there was agreement that the LCCF project was reactive and responsive throughout; that the LCCF understood the needs of their business; and that the MCA explained the way support would be delivered and the process (one organisation did not know as they were not involved at the beginning). In terms of the application process, those able to feedback were positive (good or very good).

Asked whether their project has achieved what was expected, one responded fully and two partially (noting that their projects are not yet completed). One respondent stated that benefits or improvements experienced to date, as a consequence of being involved with the LCCF, include actual renewable energy generation and local stakeholder awareness of climate change. The success to date for the one project delivered is the installation of a community-own wind turbine, which is now delivering energy and which has engaged local residents around climate issues. As a result the community has produced its own local climate action plan.

Two respondents strongly agreed and one agreed that they would have been unlikely to have achieved the same result in the timeframe without the support from the LCCF. The one project completed is unsure about greenhouse gas savings made. The two yet to be completed agree and strongly agree that their projects will reduce greenhouse gases. The wind turbine project already completed and one of the forthcoming solar PV projects strongly agree that their projects produce additional renewable energy.

Interviewees were asked to consider what their projects' legacy would be for businesses, stakeholders and the wider community. They discussed ongoing positive impact on their local communities, economic benefits, community engagement and resilience, and learning to support wider implementations in the future.

## 2.3 Feedback from the Delivery Team and Stakeholders

In order to assess the context and relevance of the project, the delivery team and stakeholders were asked whether the LCCF project is still relevant and the solutions implemented are fit for purpose. All the delivery team members were in agreement that it is relevant and fit for purpose. The topics discussed included the programme carrying on with new funding, the links between carbon reduction and cost savings and the project being about practical action.

In order to fully understand the background to the project and to accurately assess project progress and achievements, it is important to consider whether there have been changes in context during the delivery of the project. The delivery team and stakeholders were asked to comment on this and to identify the main challenges faced. The areas discussed included impacts from the Covid pandemic, the cost of living crisis, the Ukraine war, the momentum from COP26, uneven regional delivery and changing awareness of climate change and local action being undermined.

The participants were asked whether the project was well managed with appropriate governance and management structures in place and all of the delivery team agreed that it had. Topics discussed included governance arrangements, resourcing constraints and due diligence. The stakeholders also agreed that the project has been well managed e.g. *"I think the reporting and the governance side of it has also been really effective. The projects always came to the CEO's group and we always have that opportunity to be able to question any projects that we didn't feel perhaps quite fit the criteria of the grant, I think that was the two way conversation that we had; flexibility. [The team] have done a fantastic job, they organise things very well and they clearly communicated what was being delivered."*

The respondents were asked about the project's progress and whether the project has achieved what was expected; there was agreement that it had and areas discussed included the timing of the funding, the importance of the carbon surveys and whether the projects funded had the right focus.

The delivery team and stakeholders were asked about progress in achieving the outcomes and impacts of the project. The areas discussed included whether the private sector would have delivered these impacts anyway and the timescales over which the outcomes will be achieved.

The participants were asked in what ways the project has created Strategic Added Value and topics discussed included leadership, influence, knowledge exchange, how the LCCF has been strategically beneficial and a model for future investment.

The contribution that the project has made to the Horizontal Principles was also discussed. All respondents were in agreement that the project sits at the heart of the Environmental Sustainability principle. One delivery team participant talked about how it is difficult to demonstrate the Equality and Diversity principle for projects like this and another person talked about rural businesses.

The delivery team and stakeholders were asked about the legacy of the project and areas highlighted were the continuing funding and education of businesses, the carbon surveys and the Green Recovery Fund.

The participants were asked whether the LCCF project has provided good value for money to date and there were mixed responses including the suggestion that it is difficult to assess value for money in the current economic climate, though one respondent highlighted the 'ripple effect' of the project.

## 2.4 Context and relevance

### 2.4.1 Market failures

One of the key market failures relevant to the LCCF is the negative externality relating to carbon emissions, whereby there is no penalty on any undertaking that emits CO<sup>2</sup> leading to degradation of the whole environment. In addition, there is also information asymmetry in the market, as SMEs suffer from a lack of appropriate information and ability in terms of how to address their carbon emissions. The ERDF Operating Programme states: *“Generally, companies lack consistent and effective energy efficiency plans and understanding of appropriate measures and energy savings. Small and medium sized enterprises are particularly adversely affected in this respect and are either unaware of resource efficiency technologies or business processes or lack the know-how about approaches to adopt and embed new methods.”*

Therefore the LCCF intends to address these challenges by enabling SMEs, energy generators and the public sector to implement improvement schemes that will directly lead to greenhouse gas savings. Technical advice will ensure that intended measures are robust and effective and will deliver the expected savings. Funding for SMEs will enable the implementation of improvements or new generation interventions. The findings from the summative assessment suggest that these challenges are being addressed, particularly with regards to SMEs and the Green Business Grants.

### 2.4.2 Policy Context

Having reviewed the original project ERDF application form and more recently analysed published policy documents, it is felt that the LCCF project is contributing to the following policy and strategy areas:

- The West of England Climate and Ecological Strategy and Action Plan<sup>2</sup> - LCCF contributes to the **business and skills** element of the action plan: *“Help all businesses become more sustainable and resilient to meet our 2030 objectives; help low carbon sector businesses and ensure local people benefit from growth in the green economy”*, as well as the **net zero energy** and **buildings and places** themes
- The West of England Recovery Plan<sup>3</sup> to achieve a green recovery following COVID-19 – LCCF contributes to **supporting a green recovery**: *“using changes in behaviour brought about by the pandemic to accelerate our transition to net zero carbon”*
- The West of England Employment and Skills Plan<sup>4</sup> including green skills and jobs
- Build Back Better: our plan for growth 2023<sup>5</sup>
- The National Clean Growth Strategy 2017<sup>6</sup>

---

<sup>2</sup> [West of England Climate and Ecological Strategy and Action Plan 2023 \(westofengland-ca.gov.uk\)](https://www.westofengland-ca.gov.uk/wp-content/uploads/2023/03/West-of-England-Climate-and-Ecological-Strategy-and-Action-Plan-2023.pdf)

<sup>3</sup> [West of England Recovery Plan September 2020 \(westofengland-ca.gov.uk\)](https://www.westofengland-ca.gov.uk/wp-content/uploads/2020/09/West-of-England-Recovery-Plan-September-2020.pdf)

<sup>4</sup> [West of England Employment & Skills Plan \(westofengland-ca.gov.uk\)](https://www.westofengland-ca.gov.uk/wp-content/uploads/2023/03/West-of-England-Employment-&-Skills-Plan.pdf)

<sup>5</sup> [Build Back Better: our plan for growth \(HTML\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/build-back-better-our-plan-for-growth-2023)

<sup>6</sup> [Clean Growth Strategy \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/644441/clean-growth-strategy.pdf)

## 2.5 Project progress and achievements

The latest claim data (June 2023) shows the following output achievements to date, broken down by the different strands of the LCCF project:

LCCF strand	C1	C30	C34
Green Business Grants (IP4b)	176 enterprises receive support	2 MW additional installed renewable energy capacity (not contracted)	1,559.05 tCO <sub>2</sub> e
Innovative Local Energy Scheme IP4a	1 additional enterprise (not contracted)	4.2 MW additional capacity for renewable energy production	3,516 tCO <sub>2</sub> e
TOTAL – (ERDF Contracted)	176	4.2 MW	5,075 tCO <sub>2</sub> e

The following table shows the performance of the project to date, with an overall assessment (RAG status) applied to each indicator.

**Table 1: Performance of expenditure and outputs to June 2023**

Indicator	Original Target	Revised Target	Performance by project end	Performance % of target by project end
ERDF Expenditure <sup>7</sup>	£2,100,787	£2,100,787	£1,845,797.93	88%
C1 – No of enterprises receiving support	130	175	176	101%
C30 – Additional capacity of renewable energy production	2 MW	2 MW	4.2 MW	210%
C31 – No of households with improved energy consumption <sup>8</sup>	25	25	0	0%
C34 – Estimated annual decrease of GHGs	2020 tCO <sub>2</sub> e	2290 tCO <sub>2</sub> e	5,075 tCO <sub>2</sub> e	222%

Key	
	Less than 85%
	Between 85% and 95%
	Greater than 95%

The latest expenditure and output performance figures as of June 2023 show that the C1, C30 and C34 outputs have all been considerably over-achieved (101%, 210% and 222% respectively), which is a very positive result. The C31 output of households with improved energy consumption has not been achieved, as this part of the project did not go ahead with ERDF funding (but is progressing on a smaller scale with non-ERDF funding). The expenditure has been given an amber status (at 88% complete).

<sup>7</sup> The ERDF grant is revenue funding only (no capital)

<sup>8</sup> The Innovative Housing Retrofit Scheme has not completed due to supply chain and cost issues, but the Brighter Places project is progressing without ERDF at a smaller scale. The main reason for this was that Brighter Places were unable to enter an agreement with a delivery provider because the provider had assessed too much risk in their costs, as they did not fully understand how to treat homes. Although the ERDF funding was not taken up, the MCA took a flexible approach with the Green Recovery Fund and were able to continue the project at a smaller scale.

## 2.6 Outcomes and Impacts

The following table summarises the outcomes and impacts from the logic chain and comments on the progress towards achieving them.

**Table 2: Summary of progress towards achieving the project outcomes and impacts**

	Indicator	Comment
<b>Outcomes</b>	Supported SMEs realise economic savings	176 businesses have been supported – according to MCA data a cost saving of £424,370 has been achieved (£2,496 per business). According to the business surveys, 69% say they have achieved cost savings since the Green Business Grant. Nearly half of those who say they have achieved costs saving have saved approximately 1-5%, with the overall average saving estimated as 12%. Those who were able to predict absolute savings estimate an average saving of £3,670.
	Additional renewable energy generation	Reported output data shows that there is 4.2 MW of additional capacity of renewable energy production.
	Improved energy performance of public building / housing stock	Not achieved yet, as the Innovative Housing Retrofit Scheme has not completed due to supply chain and cost issues, but it is progressing without ERDF at a smaller scale and it is anticipated that improved energy performance of housing stock will be achieved in the future.
<b>Impacts</b>	Greenhouse gas savings	Reported output data shows an estimated annual saving of 5,075 tCO <sub>2</sub> e. In addition, the business survey reported that over three quarters of all respondents experienced improvements in annual energy bills savings, followed by 62% who have experienced an increase in total investment in energy saving.
	More efficient and productive economy	According to the business survey 57% responded with improvements around time saving or cost efficiencies, 22% have safeguarded jobs and 17% in product improvements. Overall, eight in ten (79%) say that the Green Business Grant has delivered economic benefits, suggesting a contribution to a more efficient and productive economy.

Good progress is being made towards all the outcomes and impacts, with evidence to support this drawn from different sources. The business survey and project data show that businesses are realising economic savings and contributing to a more efficient and productive economy. Additional renewable energy generation has been evidenced along with estimates of the greenhouse gas savings. All of these impacts should continue into the future, producing further cumulative benefits.

The improved energy performance of public buildings/housing stock has not been achieved yet, but is progressing and is likely to be achieved in the near future with other funding.

## 2.7 Value for Money

When assessing value for money, the amount of grant spent should be compared with the outputs that the project is trying to achieve, such as tonnes of carbon saved or businesses supported. The following calculations have been produced for the LCCF project:

**Total ERDF grant:** £1,845,797.93

**ERDF grant spent on Green Business grants:** £1,345,797.93

**Number of businesses supported (output claim data):** 176

**Cost per business:** £7,647 (£1,345,797.93 / 176)

**Tonnes of carbon saved (output claim data):** 5,075 tCO<sub>2</sub>e

**Cost per tonne:** £364 (£1,345,797.93 / 5,075)

In order to understand whether the value for money figure is positive or negative, it is important to benchmark or compare to other projects. In practice, this is hard as there are many differences which means it is hard to compare like for like e.g. differences in the way the project was delivered, being clear whether the amount of funding is comparable, understanding whether the outputs are measured for one year or over the course of the project.

The following table shows that the cost per tonne (on a per annum basis) for the Low Carbon Dorset and Gloucester/Wiltshire schemes. If we assume that the LCCF figure is cumulative and covers 2 years, the per annum comparison for LCCF would be £182 – which is considerably less than both schemes and influenced by the significant over-achievement on C30 and C34 outputs.

Project	Grant	Tonnes of carbon saved
Low Carbon Dorset	£5.3m ERDF	2,000 per year £2,650 per tonne
Gloucestershire and Wiltshire Target 2030	£1.6m	3,206 per year £499 per tonne

## 2.8 Lessons Learned

Lessons learned were collected from the delivery team and stakeholder interviews and these are presented thematically below.

### 2.8.1 Delivery

A team participant talked about the **importance of a knowledgeable team**: *“Having clearly dedicated staff who know their stuff is very important. The advisors that go out are experts so the advice they are giving is very useful and correct and they are dedicated to achieving the outcomes of the programme.”*

In addition, another respondent talked about **responding to market failures and filling a gap**: *“On the advisory and support side we’ve determined that there are very few people*



*doing that in the region for SMEs, so I feel like we have filled the gap. We gave them access to support they wouldn't have otherwise been able to afford, it was getting close to providing end to end support as well."*

Another person felt that a weakness of the project was **not having enough funding**: *"That's not something we could have done anything about, as our pot was limited. I think a larger scheme would have been more impactful and made it easier to publicise. The problem with that is that you get swamped with too many applications and you have more disappointed people than people who got money and that's not what you want. So, a weakness was the amount of money that we got."*

One team member discussed the importance of a **good communication strategy**: *"For Green Business Grants we have developed a really good communications strategy over the three grant competitions, we know how we can communicate as an organisation but we use our advocates as well."*

Another respondent stressed the need to be **flexible in future projects**: *"Projects of this length, four years in low carbon, is a long time, so there needs to be some flexibility to make any changes that might become necessary - to reflect changes in technology or in the economy. There needs to be the ability to flex, to respond to the situation. For example, the ERDF fund required us to use very specific carbon factors for our calculations, we had to use 2017 carbon factors and we were still using quite a lot of coal at that point for electricity, so carbon factors were quite high. That made it difficult for us to recommend or fund heat pumps where they were moving away from gas boilers to electricity because electricity was so high, the carbon measures didn't come out very well and the value for money struggled as a result. Because we're decarbonising and making changes like that it's important that programmes are able to flex to reflect that landscape."*

Another team member felt that there is a need to put more work into **equality and diversity targeting and diversification of industries**.

One of the stakeholders felt that **a strength of LCCF was the carbon survey**, which then enabled more businesses to get a grant: *"I think the strength is that providing these energy audits for businesses has been really powerful because it's enabled more people to benefit from the scheme i.e. actually gone on to get and receive the grant. It is beneficial that the scheme has given money and worked through the process with these businesses through to actually delivering as well, because then I think that gives a lot of insight into barriers and reasons why these things don't end up happening e.g. availability of contractors, cash flow issues. And I think the more we understand about that, the more we can design successful schemes to support businesses."*

They went on to stress **personal contact with businesses**: *"It's very important for businesses to have that contact with the person doing the energy audit. I don't think that the self-service information type grant referral schemes work that well. I think you do need experts who can see the actual contracts on the ground for a particular business. It can be quite costly, but I think that's what actually delivers results ultimately."*

## 2.8.2 Administration

A team participant talked about the **scale of the paperwork required from businesses**: *"The amount of paperwork and bureaucracy required, that does tend to put people off, they just can't be bothered which is unfortunate given what it was trying to do, but public money is never going to be easy."*

Another team member discussed **technology difficulties**: *“The technology in which to deliver the programme has been somewhat lacking in some ways. For example, I think there’s a learning exercise we are looking at now to just streamline stuff so that a grant application doesn’t have to go through about five sets of paperwork in order to put it together. When Covid came along we were almost forced into using digital signatures for grant offer letters. It was a positive thing, but did it really need a pandemic to bring that in? It’s not a weakness really, more something to improve, we’re going to be delivering grants or finance for a long time, so we need to make use of technology and become slicker.”*

One team member talked about **application mechanisms and improving cost saving evidence**: *“[It would be good to have] more sophisticated and quicker mechanisms for applying and possibly more sophisticated ways of calculating savings and making sure they are captured to use for evidence for other business about why they should be thinking about the same kind of thing.”*

Another person talked about **devolved funding**: *“In terms of grants, the UK Shared Prosperity Fund is the new ERDF but it’s nothing like the scale of the ERDF but devolving that funding to combined authorities is a really good idea so we can have that overview of projects across the region rather than having to bid into it.”*

One of the stakeholders talked about **reviewing the application forms**: *“In the early phases there were aspects of the way the application form was worded which that meant that we did get projects coming through that didn’t quite meet the aims. A lesson there is [to undertake] an early review of kind of how the proposals have put forward a set of driving applications and whether it’s actually going back to the beginning, i.e. are we really missing the aims of what we set out and intended to achieve?”*

### 2.8.3 Partnership

One delivery team participant focused on **partnerships with the community** as a way of moving forward: *“With renewable energy I would say the focus needs to be on community energy because you will get more for your money and get renewable energy delivered.”* And: *“We also had very strong community energy groups in the region and that’s been a benefit.”*

### 2.8.4 Lessons Learned compiled by the MCA delivery team

In addition, some lessons learned were provided directly from the MCA delivery team, as follows:

#### Renewable Energy

- Innovation can conflict with energy generation, it’s hard for projects to meet both aims – they should be separate grants.
- A wider scope might help more projects come through including not just single renewable energy generation but smart energy systems and projects that unlock renewable energy.
- Different technologies struggle to compete on value for money, for instance a hydro scheme would not compete well with a solar array, nor a solar array against a wind turbine. A more sophisticated evaluation process needs to be developed.
- An energy grant scheme for both community energy groups (usually highly skilled small & medium enterprises) and more general businesses is difficult to market.

Community energy provide added value to any renewable energy scheme and can reach into communities and gain support that others can't.

- Some funding for renewable energy may be better delivered as a revolving loan scheme, although some projects might still need grant. This requires a more nuanced understanding of viability and where public grant is needed. Hard to pin down when costs are in flux.
- It may be better to offer funding on a rolling basis rather than through grant windows. Community energy projects are complex and have their own timelines and projects may be missed with a grant window model.
- There needs to be clearer guidance on the added value that projects should provide, to justify the support of public funds – like innovation, biodiversity, green skills etc.
- There is also a clear need for development finance and other support to help applicants build fundable projects. Often this is the phase that needs money not the capital phase.

### **Business Support**

- The wide range of projects that could have been funded through Green Business Grants made it difficult to scale or streamline processes. Grant may be able to be delivered faster through programmes that support fewer project types. 75% of projects were LED lighting or Solar PV. It could also make marketing easier.
- Some projects do not need as much grant intervention as others as they are more cost-effective and pay back faster. However, there's a risk that lower intervention may negatively impact action being taken. Costs are also more variable, making it difficult to fix this.

### 3 Conclusions

As the LCCF project comes to the end of the ERDF funding, there have been a lot of positive findings highlighted through this summative assessment. The project contributes to key policy and strategy areas and everyone interviewed agreed that the project is still relevant and the solutions implemented are fit for purpose. The project was deemed to still be relevant as the LCCF programme is carrying on with new funding. There have been some changes in context and background, with impacts from the Covid pandemic, the cost of living crisis and the Ukraine war being the main challenges.

There was agreement that the project is being well managed with appropriate governance and management structures in place. Resourcing constraints was raised as a potential issue but it was noted that the team had done a good job, particularly around organisation and communication.

In terms of output achievement and expenditure, most of the outputs have been considerably over-achieved, which is a very positive result. The C31 output of households with improved energy consumption has not been achieved, as this part of the project did not go ahead with ERDF funding (but is progressing on a smaller scale with non-ERDF funding). The expenditure has currently been given an amber status (at 88% complete), but it is likely that this will increase by the end of the project.

Evidence from the delivery team, stakeholders and beneficiaries show that the LCCF project is making progress towards the outcomes and impacts on the logic chain. Businesses are realising economic savings and contributing to a more efficient and productive economy. Additional renewable energy generation has been evidenced along with estimates of the greenhouse gas savings. All of these impacts should continue into the future, producing further cumulative benefits.

Stakeholders reported that strategic impacts have been created too, including leadership, influence, knowledge exchange, how the LCCF has been strategically beneficial and a model for future investment. In terms of legacy, interviewees talked about the continuing funding and education of businesses, the carbon surveys and the Green Recovery Fund.

When asked about the contribution that the project has made to the Horizontal Principles, the interviewees felt that the LCCF project sits at the heart of the Environmental Sustainability principle. Many lessons learned have also been collated through the summative assessment process.

The LCCF project has made a positive contribution to the region, and the key legacy is that the funding will continue to support businesses and move towards a net zero carbon future for the West of England.