Business Energy Efficiency (BEE) Anglia Summative Assessment

Report by Giraffe Innovation Ltd

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Technical Brief

This report outlines the summative assessment of the Business Energy Efficiency (BEE) Programme Anglia on behalf of Suffolk County Council (SCC) and the project partners.

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Acknowledgements

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The Business Energy Efficiency (BEE) programme[1] provides free support to eligible organisations in Suffolk and Norfolk[2] to help them become more energy efficient including:

- Free energy reviews;
- Grant funding;
- Carbon Charter accreditation; and
- Travel planning.

Giraffe Innovation Ltd[3] was founded in 1998 and is an award-winning environmental management and technical consultancy[4]. Giraffe was described by The Guardian newspaper business pages as *'one of the UK's top green businesses'* due to its extensive experience in delivering a wide range of sustainability driven projects to UK and global organisations. The Manufacturer Magazine described Giraffe as *'Britain's leading eco-design consultancy'*

[1] http://www.beeanglia.org/about-bee/
[2] Organisations outside this region, but only a handful received support, as similar programmes in other areas were generally better placed.
[3] www.giraffeinnovation.com
[4] DBA Design Effectiveness Award (Gold) with Virgin Atlantic Airways (VAA). Green Apple (Gold) awarded at House of Commons.

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List of Acronyms

ASHP	Air sourced heat pump
DECC	Department of Energy and Climate Change
GEP	Green Economy Pathfinder
GHG	Greenhouse Gas
LCEGS	Low carbon and environmental goods and services
LEP	Local Enterprise Partnership
NALEP	New Anglia Local Enterprise Partnership
NCC	Norfolk County Council
NWES	Norfolk & Waveney Enterprise Services
PHEV	Petrol Hybrid electric vehicle
PV	Photo voltaic solar panel
SEP	Strategic economic plan
SCC	Suffolk County Council

Executive Summary

The BEE Anglia project was designed in 2014/15; when the economy was emerging from recession and the programme was part of the partners' work to stimulate further recovery through a focus on SMEs across the New Anglia Local Enterprise Partnership (LEP) area, specifically through improving business resource efficiency. The project aimed to actively identify SMEs with the greatest potential to improve their energy efficiency, reduce carbon emissions and operational costs. It was also aimed to address market failure where SMEs were failing to access and realise all the support and opportunities available to them, at a time when business resilience was particularly important and other sources of support were being scaled back.

The aims of the BEE Anglia programme which runs from January 2016 to July 2022 were as follows:

- Drive growth in the low carbon economy by supporting SMEs to implement business energy efficiency initiatives through a single point of contact, tailored to business need;
- Beneficiaries will deliver energy efficiency savings, reduce carbon emissions and realise the associated business benefits: reduced operating costs; competitiveness; business growth and resilience;
- Facilitate movement towards a low carbon economy in Norfolk and Suffolk by acting as a catalyst for the implementation of business energy efficiency initiatives; and
- To address the market failure, specifically around awareness and finance that are stopping SMEs from maximising the benefits available to them and inhibiting the growth of the green economy.

The BEE Anglia project provided a single point of contact, for small to medium-sized enterprises across Norfolk and Suffolk. The project offered business energy efficiency advice and support tailored to each business's individual needs and private match funded grants to assist the businesses invest in energy saving initiatives. This helped SMEs to improve their profitability and reduce their greenhouse gas (GHG) emissions, increased levels of renewable energy generation, reduced their energy intensity and improved their resilience to rising energy costs.

The project remained relevant and consistent to the brief in reducing the carbon footprint and energy consumption of SMEs in Suffolk and Norfolk.

The project's expected impacts and outcomes are:

- Number of enterprises receiving support (C1) - 920 Audits;
- Number of enterprising receiving non-financial support (C2) – 175 Grants;
- Private match funding (C6) - £2,685,336;
- Estimated greenhouse gas reductions (C34) – 2,500tCO_2e delivered;
- 12-Hr Assists for companies (C4) – 625; and
- Total number of new SMEs with carbon charter – 100.

With just over three months of the project to go, the financial inputs to the project to date include the following:

- ERDF funding £4,057,254.30;
- Funding from Norfolk County Council (NCC) £32,513;
- Funding from Suffolk County Council (SCC) £70,000;
- Funding from Groundwork £20,624 and
- Match funding Businesses £3,701,297

Total funding to March 2022 including business match was £7,881,687.82.

This Summative review of the project assesses a number of key aspects:

- Relevance & Consistency: To determine the continued relevance and consistency of the project, in light of any changes in policy or economic circumstances during its delivery period;
- Progress: Review the progress of the project against contractual targets, any reasons for under or over performance, and the expected lifetime results;

- Delivery & Management: Explore the experience of implementing and managing the project and any lessons which have emerged from this;
- Impact: where possible this identified the actual economic impact attributable to the project, including both the intended and actual outcomes and impacts; and
- Assessing Value for Money: Analysis of the cost-effectiveness of the project in light of its intended and unintended outcomes and impacts, and hence its value for money.

In order to carry out this assessment information and data was collected from the four delivery partners and the SME Beneficiaries. As of the end of May 2022, the progress against the final project targets was as follows:

- Total Number of Businesses Supported (C1) 880; Final Target 920;
- Total No. of BEE Anglia Grants Paid to date (C2) 249; Target 175;
- 12 hour assists for companies (C4) 795; Target 625;
- Private match funding (C6) £4,092,246.12; Target £2,685,336;
- Total Carbon Savings Claimed resulting from Grants (C34) 3,051tCO_2; Target 2,500tCO_2;
- Total number of new SMEs with carbon charter – 144. Target 100.

A review of 775 recipients identified the potential average annual savings per SME audited was £5,723 and 40.58tCO_2e with a project cost of £2,037.15 per audit. Therefore, the return on investment from a project perspective would be 0.35 years.

The estimated savings resulting from the 248 grants were 3,0411 tCO_2e and£770,021. This averages as 12.26tCO_2e and £3,104 per annum per recipient company. The BEE Anglia spend per business was £4,794.03 and the average total spend, by businesses was £16,978.42. This gives a total spend of £21,772.45 per SME for a saving of £3,485 per annum This gives a return on investment of 6.25 years.

The 3041tCO_2e saved by the SMEs receiving a grant this is equivalent to 434 UK citizens annual CO2 emissions[5].

Feedback from SCC and Groundwork has identified high, continual feed of enquiries over the last 12-18 months, from businesses seeking grant support, energy advice or accreditation. There continues to be strong demand from potential beneficiaries for the service since June 2016, even during the Covid lockdowns where reviews were carried out remotely via video conferencing such as Microsoft Team's meetings.

Recipient Company Feedback

The company recipient feedback surveys demonstrate that overwhelmingly businesses value the support provided to them:

- 85% gave positive feedback on the initial enquiry process;
- 75% rated the site visits as Good or Excellent;
- 85% of businesses say the support has identified Good or Excellent opportunities for savings;
- 92% said it will be easy or relatively easy to implement at least one recommendation; and
- 87% rate the service overall as Very Good or Excellent.

Based upon the feedback from the surveys 50% of the SMEs were aware that there is potential to save energy thorough updating plant, lighting and building infrastructure, however, only 16.74% of those would have carried out the recommended changes without a grant.

Analysis of past support to businesses by SCC has found that typically 24% of recommended savings are realised. This is likely to be a conservative estimate, as it is not always able to capture

[5] Based upon 7tCO_2 per person.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051408/2020-final-greenhouse-gas-emissions-statistical-release.pdf

information on implementations, and it is known that some businesses continue to refer to reports years after the site visit.

Scalability
According to the Office of National Statistics report "Small and medium sized enterprises in local authority districts, 2018 to 2019"[6] there were 62,770 SMEs in Suffolk and Norfolk. If the scheme was rolled out to the other 60,035 SMEs in the region and the grant success rate was 100% the savings could potentially be £209 million and 0.837mtCO_2e per annum.

The actual savings that could be made if only awareness was raised to all of the SMEs and no grant awarded could be 16.74%, based upon grant take up, of the SMEs in Suffolk and Norfolk this would equate to £35 million and 0.14mtCO_2e.

As a counterfactual to this it also means that SMEs in Suffolk and Norfolk are potentially wasting £209m and 0.837mtCO_2e per annum due to not updating lighting, plant or building infrastructure to save energy.

Based upon the success of the BEE Anglia project and the fact that there continues to be strong demand (since June 2016 there has been on average 12 audit visits a month) from potential beneficiaries for the service, an extension to the project will enable further benefits to the delivery area's carbon footprint and local economy.

An extension would start with a ready and self-sustaining supply of companies seeking support. The project team had identified significant latent demand for financial support towards efficiency measures, where capital outlay remains a core obstacle. An extension to the project is critical to achieve the further business investment and carbon savings which exist across the delivery area. This is especially true as demand is only likely to increase with fluctuating energy costs and growing interest in Net Zero targets.

6 https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/adhocs/10918smallandmediumsizedenterprisesinlocalauthoritydistricts2018to2019

Project Evaluation

The project evaluation was commissioned by Suffolk County Council (SCC) to review and report on the following criteria for the BEE Anglia programme of business support:

- Relevance & Consistency: To determine the continued relevance and consistency of the project, in light of any changes in policy or economic circumstances during its delivery period;
- Progress: Review the progress of the project against contractual targets, any reasons for under or over performance, and the expected lifetime results;
- Delivery & Management: Explore the experience of implementing and managing the project and any lessons which have emerged from this;
- Impact: where possible identify the actual economic impact attributable to the project, including both the intended and actual outcomes and impacts; and
- Assessing Value for Money: Analyse the cost-effectiveness of the project in light of its intended and unintended outcomes and impacts, and hence its value for money

In order to carry out this assessment, information and data was collected from the SME beneficiaries and four delivery partners:

- Suffolk County Council (SCC);
- Norfolk County Council (NCC);
- Groundwork; and
- Norfolk and Waveney Enterprise Services (NWES).

Groundwork is a charity working to transform lives in the UK's most disadvantaged communities. NWES is a not-for-profit enterprise agency providing business support to boost self-employment and encourage enterprise.

The following sections covers the requirements of the assessment based upon the information gathered and analysed:

- Project context;
- Aims and objectives of the project;
- Project process;
- Project delivery;
- Project evaluation;
- Conclusions; and
- Recommendations.

Programme Context, Rationale and Logic Model

The current world population of 7.9 billion[7] is expected to reach 9.7 billion by 2050 and 10.9 billion in 2100[8]. The pressure on our planet to provide our resources and absorb the emissions is significant, especially when we consider the human population are already living over 21% beyond our ecological footprint today. It is in this context that greater pressure is driving companies to not only consider their own direct environmental impacts but mitigate those around the world from extended supply chains.

The overwhelming scientific consensus is that the impacts of climate change are accelerating, and they're largely driven by human-caused greenhouse gas (GHG) emissions. Human activities, such as the burning of fossil fuels and land use changes such as clearing land to make way for agriculture or for urban development, are increasing the levels of GHG's in the atmosphere, causing global warming and climate change. One strategy to mitigate against carbon dioxide emissions is to save energy. Individuals and corporations around the world are recognising the importance of reducing their Greenhouse Gas (GHG) emissions. As a result, many of them are setting targets and reducing their carbon footprints.

[7] https://populationmatters.org/population-numbers
[8] https://news.un.org/en/story/2015/07/505352-un-projects-world-population-reach-85-billion-2030-driven-growth-developing

The BEE Anglia project aligns with the UK governments targets on the reduction of greenhouse emissions a such as the Climate Change Act, Kyoto Protocol and the Nationally Determined Contribution (NDC) under the Paris Agreement.

The BEE Anglia project was designed in 2014/15; the economy was emerging from recession and the programme was part the partners' work to stimulate further recovery through a focus on SMEs across the New Anglia Local Enterprise Partnership (LEP) area, specifically through improving business resource efficiency. The project aimed to actively identify SMEs with the greatest potential to improve their energy efficiency and reduce carbon emissions and operational costs.

The significant market for environmental goods and services expected to be driven by the project was considered a major opportunity for the New Anglia Low Carbon Environmental Goods and Services (LCEGS) sector.

A copy of the logic model Logic Model (Ref ESIF-Form-1-011) is given in Appendix A.

Project context

The BEE Anglia project aligned directly with Thematic Objective 4[9]: Supporting the shift towards a low carbon economy in all sectors. Potential activities therein include "promoting resource and energy efficiency improvements in SMEs, including investment in non-domestic energy efficiency and low carbon improvements providing finance to SMEs looking to grow their business through the adoption or design of new low carbon products, processes or services," and "building the market in low carbon environmental technologies, goods and services…"

The BEE project also aligned with the following:

- European Structural and Investment Funds 2014-2020 Strategy for Norfolk and Suffolk: "Enhancing the Competitiveness of SMEs" and "supporting the low carbon economy";
- The Specific Objective 4.2 under Investment Priority 4B ("increase energy efficiency in particular in SMEs, including through the implementation of low carbon technologies") and addresses all of the associated indicative actions:
    - Enhanced advice, support, information and action to promote innovation in businesses and how they operate in order to deliver best practice in energy management, energy efficiency and energy cost reduction to improve business competitiveness and resilience;
    - Support to businesses to undertake 'green' diagnostics or audits of energy efficiency, followed by the provision of information and guidance and tailored action plans, with support to implement them;
    - Supporting an increase in energy efficiency in enterprises including an emphasis on 'whole place' through improving industrial processes and designing out waste;
    - Supporting increased SME access to national and local government procured contracts for energy efficient goods and services; and
    - Support for retrofit and energy efficiency measures in enterprises.

The BEE project was the key delivery vehicle for the objectives locally, complementing other activities. It was integrated with the New Anglia Growth Hub to ensure the seamless cross-referral of potential beneficiaries. It also engaged with other relevant business engagement/support initiatives such as the STEM Ambassadors programme and Wild Anglia.

The project also contributed directly to and aligned with the growth strategy of the LEP and delegated objectives under its BIS-sanctioned Green Economy Pathfinder (GEP); its design was a direct response to the call for "the rapid roll-out and replication of best practice in BRE and BRE [i.e. energy efficiency] support services" and "applying key learning across Norfolk and Suffolk that builds

[9] https://ec.europa.eu/regional_policy/en/policy/what/glossary/t/thematic-objectives

support where it's actually needed" under Priority Objective Four of the LEP's Green Economy Pathfinder Manifesto and the overall outcomes cited in the associated Route Map. The Project was welcomed and endorsed by both the GEP Board and Implementation Group.

The project also aligned well with the EU Roadmap to Resource Efficiency, which was launched in September 2011. This formed one of the Commission's building blocks of its Europe 2020 Growth Strategy and proposed ways of increasing productivity and decoupling economic growth from resource use and its environmental impact.

The project proposal anticipated that the emerging joint DECC/BIS/Defra Green Economy Roadmap, which set out the Government's long-term strategy to create the necessary conditions for green growth and minimise the burden on businesses during the transition. The "efficient use of natural resources" was a key part of the plan.

Furthermore, the project dovetails with UNEP's Towards a Green Economy document, which formed a key part of policy around the macroeconomic dimensions of green economic growth policy for the 2012 Rio+20 Earth Summit under a renewed focus on sustainable consumption and resource efficiency.

The Continued Relevance and Consistency of the Project

This section explores the continued relevance and consistency of the project, in light of any changes in policy or economic circumstances during its delivery period.

The project is still relevant and consistent with the initial aims as the awareness of the issue with climate change and energy conservation needed to reduce CO_2e emissions through energy reduction. This is based upon and consonant with European and UK long term strategies to reduce CO_2 emissions. These include the following.

The UK has domestic targets for reducing greenhouse gas emissions under the Climate Change Act 2008 (CCA). The CCA established a long-term legally binding framework to reduce emissions, initially by at least 80% below a 1990/95 baseline by 2050. In June 2019, following the IPCC's Special Report on Global Warming of 1.5°C and advice from the UK Climate Change Committee, the CCA was amended to commit the UK to achieving at least a 100% reduction in net emissions by 2050 (Net Zero).

On 28 November 2018, the European Commission presented its strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050. The strategy shows how Europe can lead the way to climate neutrality by investing into realistic technological solutions, empowering citizens, and aligning action in key areas such as industrial policy, finance, or research – while ensuring social fairness for a just transition.

Following the invitations by the European Parliament and the European Council, the Commission's vision for a climate-neutral future covers nearly all EU policies are in line with the Paris Agreement objective to keep the global temperature increase to well below 2°C and pursue efforts to keep it to 1.5°C.
In 2019 an ambitious date of 2030 was also proposed by Norfolk to achieve net zero carbon emissions, as part of a new and far-reaching environment policy for the County Council.

In 2020 Suffolk County Council published "The Suffolk Climate Emergency Plan." This sets out how SCC will "support and guide our residents, communities and businesses to make the changes required to best set Suffolk on the path for carbon neutrality by 2030".

On 12 December 2020, the UK communicated its Nationally Determined Contribution (NDC) under the Paris Agreement. The NDC commits the UK to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels.

Under Article 3 of the Energy Efficiency Directive, the UK's 2020 energy efficiency target was set at the level of 129.2 Mtoe for final energy consumption. In 2018, the Clean Growth Strategy (CGS) set out policies to promote clean growth, including improving energy efficiency of business, industry and UK homes. In 2021, the government set new targets for domestic energy efficiency: by 2025, homes should produce 75-80% less CO2 compared to current levels.

Emission targets under the second commitment period of the Kyoto Protocol (2013-2020) are set out in the Doha Amendment. These targets are translated into emission allocations called Assigned Amount Units (AAUs), as set out in each Party's 'initial report'.

In 2021, the government also set new targets for domestic energy efficiency: by 2025, homes should produce 75-80% less CO2 compared to current levels.

On 20 April 2021, the Government announced that it "will set the world's most ambitious climate change target" to reduce emissions by 78% by 2035 compared to 1990 levels as part of its sixth carbon budget. The UK's carbon budgets place a restriction on the total amount of greenhouse gases the UK can emit over a five-year period.

Efficient low-carbon economy

The BEE project anticipated and stimulated the shift towards an efficient low-carbon economy and, whilst this required investment and new ways of doing business, there was considerable business opportunities and economic benefits gained. The key success factors that enable businesses to successfully respond to this opportunity are on both:

1. The supply side (creating the right conditions for investment in and the development/promotion of low carbon, energy efficient products - such as access to capital; and
2. The demand side (either through policy measures – particularly regulation – or through a change in consumer behaviour; more specifically the anticipation of a change in regulation or consumer behaviour was the key driver for the most successful businesses.

This project and its delegated grant element address the second of these, stimulating uptake in cleantech. This increased demand applies to cleantech manufacturers, distributors and installers at the point of purchase and also – on an ongoing basis – those involved in servicing and maintaining equipment, generating additional opportunities around job creation, safeguarding and apprenticeships.

Market failure mechanism

In economics, market failure is a situation in which the allocation of goods and services by a free market is not efficient, often leading to a net social welfare loss.

The project identified that SMEs are failing to access and realise all the support and opportunities available to them, at a time when business resilience was particularly important and other sources of support are being scaled back. This reflects 4 key market failures:

1. Information failure - lack of awareness of the benefits and value of clean technology and green business;
2. Access to finance to realise the opportunities available;
3. CO_2e emissions impose a cost on society which is not borne by those who produce and consume energy, so a greater amount of energy is used than is socially desirable; and
4. Imperfect information – companies often lack the information/expertise to make optimal decisions on investment in energy efficiency.

Collectively these represent a failure in the market for LCEGS sector businesses, with low awareness and limited access to capital among their target customers limiting their ability to realise the significant potential for green growth.

Strategic added value

The strategic added value of the project includes:

- Encouraging SMEs to undertake the audits to reduce energy, increased local investment in energy saving equipment; and
- Contribution to broader understanding of SMEs needs and their understanding of energy efficiency. This has informed and defined what needs to be done by different actors in the local economy to reduce energy consumption.

Horizontal principles of the project

There are two 'Horizontal Principles' for this project, and they are:

1. Sustainable Development; and
2. Equal Opportunities and non-discrimination.

Sustainable development

The project was specifically aligned with the principle of sustainable development: supporting businesses towards the goal of ensuring that economic growth and development meets the needs of the present without compromising the needs of future generations. SMEs were supported to maximise their energy efficiency whilst minimising their impact on the natural environment, through for example, energy reduction, renewable energy generation, waste reduction and reuse, and engaging with their supply chains as well as local communities to improve environmental performance across participating businesses' whole sphere of influence.

This approach had clear economic (e.g., improving business resilience through reducing reliance on fossil fuels and improving profitability) and social (for instance ensuring a vibrant local economy which maximises the use of local supply chains) benefits. In this way all three pillars of sustainable development (economic, social and environmental) are tackled.

The team lead by example and demonstrate good practice by:

- Holding meetings via teleconference facilities where possible;
- Car share;
- Undertake one-to-many support through webinars and events;
- Provided hot-desking facilities for advisors throughout project area to reduce travel time/mileage; and
- Required contractors to submit robust proposals for environmental management and carbon offsetting during tendering.

SCC incorporated the framework established by the REV ACTIVE and Grants4Growth projects to sit alongside the official guidance to capture cost- and carbon-savings.

The original aim was to enable 500 SMEs to gain a local accreditation which encourages, recognises and certifies good environmental practices amongst businesses, enabling them to demonstrate their positive environmental credentials. This proved impractical with the need to revise project targets as a result of delays to the start date, and was revised down to 100 in 2018.

Equal Opportunities and non-discrimination

Equality and diversity criteria were included within the procurement process to ensure that any commissioned suppliers adhere to the project's requirements that this theme was integrated at all levels of delivery.

SCC ensured that all marketing materials relating to the project were checked against strict equality and diversity criteria in advance of sending out and actively targeted local organisations and networks which outreach to business networks such as Women in Rural Enterprise, Women in Business Network and Suffolk Businesswomen as well as non-gender specific networks and non-mainstream business communities, such as PRIME Business Club, ISCRE and MENTA.

Equality was integrated into all aspects of project planning, development, implementation, monitoring and evaluation. The design of the services and the communications used throughout was mindful of the needs of the non-mainstream business audience. The Project did not identify any adverse impact upon different groups.

SCC ensured that all marketing materials relating to the project were checked against strict equality and diversity criteria in advance of sending out and actively target local organisations and networks which outreach to .

The Project Board retained a standing agenda item to monitor the uptake of the service from the non-mainstream business community as well as the experience of non-mainstream users and took corrective actions wherever necessary.

The SMEs were engaged based upon factors not associated with ethnicity, gender etc. Any disparity would, therefore, reflect the target beneficiaries. The main groups that benefited from the programme was SMEs and, therefore, their owners and employees and the impact of the project was effectively neutral. Equality measures included:

- Structures in place to capture/respond to equality issues;
- Project team trained to ensure competence in this area, including an understanding of appropriate policies/frameworks, e.g., the CSR Competency Framework and EHRC human rights principles; and
- Assessment of partners', suppliers' and contractors' stance on equal opportunities and equality.

Accessibility for persons with disabilities to project roles, communication resources and the services themselves were carefully examined prior to launch and any corrective actions taken as the project progresses. A named member of the Project Board was given the responsibility to ensure accessibility is considered at every stage of the process.

Suffolk County Council and the Delivery Partners are Equal Opportunities employers and roles which are created for the project were advertised on an open basis, making clear that SCC are committed to upholding the disability access requirements in all aspects of our operations. Equality and diversity criteria were included within the procurement process to ensure that any commissioned suppliers adhere to the project's requirements that this theme was integrated at all levels of delivery.

All events held in connection with the project were accessible to persons with disabilities.

Cross-regional partnership

Cross-LEP working was fostered by the project, as well as a strengthening of links regionally via collaborative working with Peterborough Environment City Trust on the BEE Cambridge & Peterborough project.

Aims and Objectives of BEE Anglia.

The aims of the BEE Anglia project which runs from January 2016 to July 2022 were as follows:

- Drive growth in the low carbon economy by supporting SMEs to implement business energy efficiency initiatives through a single point of contact, tailored to business need;
- Beneficiaries will deliver energy efficiency savings, reduce carbon emissions and realise the associated business benefits: reduced operating costs; competitiveness; business growth; resilience;
- BEE Anglia will facilitate movement towards a low carbon economy in Norfolk and Suffolk by acting as a catalyst for the implementation of business energy efficiency initiatives; and
- The project will target market failures around awareness and finance that are stopping SMEs from maximising the benefits available to them and inhibiting the growth of the green economy.

To achieve these aims, the project defined two clear objectives:

- To help SMEs deliver energy efficiency savings and reduce carbon emissions to realise the associated business benefits: reduced operating costs and enhanced competitiveness, business growth, and resilience;
- To help foster the necessary conditions and success factors to develop the regional Low Carbon and Environmental Goods and Services (LCEGS) supply chain.

BEE Anglia provided a single point of contact, for small to medium-sized enterprises across Norfolk and Suffolk, for business energy efficiency advice and support. Promoted through the New Anglia Growth Hub, BEE Anglia offered a service which is tailored to each business's individual needs.

The project offered private match funded grants to assist the businesses invest in energy saving initiatives. This helped SMEs to improve their profitability and reduce their greenhouse gas emissions, increasing levels of renewable energy generation, reducing their energy intensity and improving their resilience to rising energy costs.

Based upon these aims and objectives the following are the agreed project impacts and outcomes:

- Number of enterprises receiving support (C1) - 920 Audits;
- Number of enterprising receiving non-financial support (C2) – 175 Grants;
- Private match funding (C6) - £2,685,336;
- Estimated greenhouse gas reductions (C34) - 2500TCO_2e delivered;
- 12-Hr Assists for companies (C4) – 625; and
- Total number of new SMEs with carbon charter – 100.

The savings in greenhouse gases and the associated savings in energy bills are annual and will continue after the completion of the project.

BEE Anglia Project Process

The following sections detail the project marketing strategy, energy efficiency audit, grant and Charter application.

BEE Anglia Marketing strategy

BEE Anglia undertook an initial exercise to match delivery plans against the New Anglia Local Enterprise Partnership (NALEP) Priority Sectors, with reference to the Strategic Economic Plan (SEP)[10]. Many of the relevant approaches cut across multiple sectors.

The SEP identified improving energy efficiency of businesses across all sectors as priority for improving profitability and greener economic growth (3.16) and highlights the critical role of access to information (3.17) and funding (3.17, 4.4) and support to develop visible leaders within the business community (3.19). This project directly responded to the call to "develop the existing successful business resource efficiency programmes to maximise the economic potential of this work for SMEs" (3.19).

The business population of the target area had been mapped using the latest Office of National Statistics (ONS) data from 2014 and cross-referenced with LEP priority sectors to develop project target. This identified 41,000+ enterprises that are potentially eligible for ERDF—funded assistance through this project, with around 32,000 enterprises corresponding very approximately to the LEP's ten priority sectors.

The marketing strategy was developed by SCC with support from Naked Marketing and the project partners. The target audience was determined by previous research by Groundwork which indicated that the following SMEs have an appetite for energy reduction:

- Manufacturing;

[10] https://newanglia.co.uk/our-economic-strategy/

- Wholesale;
- Automotive/ engineering;
- Accommodation /food service; and
- Logistics/transport.

These sectors have been proven by Groundwork to be:

- More receptive to business support;
- Higher appetite and means to invest;
- Have a higher energy spend than other sectors;
- Present a wide range of associated no/low cost/efficiency saving opportunities; and
- Deliver greater project outputs/outcomes per unit time/cost/effort than other sectors.

BEE Anglia regularly reviewed SME enrolment from the NALEP priority sectors and showcase those participating and benefitting as case studies to encourage others to engage. Marketing activities were increased/focussed on particular sectors as required.

BEE Anglia: organised and attended events, roadshows, workshops, networking events and Greenest Suffolk promotions covering low carbon, environmental awareness, plastic pollution, energy efficiency, Net Zero, carbon zero, renewables and green technology in order promote the scheme and an estimated 2000 SMEs engaged with the project.

Press release

Main press considered was EDP, EADT, Anglia Business and both Norfolk & Suffolk Chamber publications.

The initial press release to local media raised awareness about the project and the opportunities:

- Energy efficiency audit support from a Groundwork adviser;
- Accreditation to the Carbon Charter - a recognised, local standard; and
- Access to grant funding for next-phase technologies.

Local authority

The project was marketed directly to Local Authority supply chain SMEs that could benefit from the project offering.

New Anglia Growth Hub

BEE Anglia had an effective cross referral and reporting relationship with the New Anglia Growth Hub. BEE Anglia ensured that each Growth Hub Advisor was fully briefed on the project offering and provided them with tips on how to identify businesses with energy efficiency saving potential.

Website

A content managed website[11] provided the hub of the marketing campaign. This was vital as the majority of the marketing strategy was built around creating leads and referrals both of which are likely to want to find out more information or be able to share more information.

Promotional videos

Three promotional videos[12] were produced by Giraffe and these were used to demonstrate the breadth of support that was available from BEE Anglia.

Direct marketing

A direct email and sales campaign was also used as a targeted sales approach that reaches to priority businesses, through both leafleting and a telesales approach. The telesales approach proved particularly impactful, although it required significant effort and resources. As the project progressed,

[11] http://www.beeanglia.org/
[12] http://www.beeanglia.org/case-studies/

marketing resources for new leads were reduced, because word of mouth referrals proved more than sufficient. This investment in raising awareness early was critical to success.

Varying the project offer to respond to the specific needs of the individual sectors being targeted

The comprehensive and flexible approach, including the capacity to draw on specialist expertise from outside the partnership as required, means that the project was well suited to support different sectoral needs. In addition, specific sectors benefited particularly from certain delivery aspects or targeted with particular approaches, such as:

- Growth in the sector;
- Sustainability accreditations;
- Growth in LCEGS; and
- Targeted publicity.

The package of support delivered was tailored to each business's individual needs to ensure the most efficient service was provided and to maximise project benefit. Groundwork's dedicated advisors used their experience of being able to determine the most appropriate type and areas of support for an SME to receive in order to meet their specific needs.

No two BEE Anglia energy efficiency reports were the same and each SME took a different journey, at a different timeframe, through the project depending upon their needs. Furthermore, specialist technical consultancy was available to ensure those more complex solutions are able to be dealt such as energy efficient product design and the associated most energy efficient manufacturing process.

All SMEs were screened before joining the project to ensure that there was sufficient need and potential for the SME to improve its energy efficiency. The process map for the SME initial stage assessment (Appendix B) includes:

- SME eligibility;
- Development of the support package;
- Site visit;
- Audit report;
- Follow up support.

Energy efficiency report and action plan

Following the screening and confirmation that the SME met the project criteria; each SME received an energy efficient audit. This included a site visit to determine the potential to save energy. The results were written up in an Energy Efficiency Report and Action Plan (an example of which can be found in Appendix C).

As of March 2022, 872 SMEs have received support in the form of a site visit and energy audit report. Each of the 872 reports produced covered the following:

- Company Profile and Executive Summary;
- Introduction concerning the company and their activities;
- Action Plan Summary;
- Background to Business Energy Efficiency Anglia (BEE Anglia) and Member Benefits
- An action plan of activities and solutions to save energy along with financial, energy and CO_2e savings;
- Energy Consumption and Emissions Statement
  - The details of the gas, electricity, oil and vehicle fuel use and the associated CO_2e emissions;
- Electricity Use Schedule
  - This is information gathered during the review and supplied by the SME which was then used to estimate the proportion of electricity used by each broad activity within the organisation;

Each assessment included an Electricity Use Schedule assessing consumption across major activities such as lighting, heating, machinery use and travel. Each activity was then broken down into how energy could be saved with suggested measures and how these could be implemented. The potential energy, financial and CO_2e savings are also given. Once the report has been received by the SME the project offers follow up support including the option to pursue a grant application.

Applying for a grant

To assist an SME in reducing energy consumption a grant was available, initially at an intervention rate of up to 28% of the total project cost (up to a maximum of £20,000) for any upgrade or improvement that achieves an adequate energy saving. As the project was extended, the intervention rate was changed – including the ability to offer a higher rate for certain more innovative technologies (for example going up to 50% for battery storage).

The process is detailed in the flow chart (Appendix D), which covers the following processes.

- Application submitted to panel;
- Grant panel meets on a weekly basis;
- The grant is reviewed and approved;
- Approval letter sent to SME;
- Offer Letter signed and returned to BEE Anglia;
- Project starts and energy saving equipment installed;
- Claim document completed;
- Grant claim approved and paid; and

As of March 2022, 218 grants had been awarded.

Carbon charter

The Carbon Charter is an award recognising carbon reduction measures in small and medium businesses (those with fewer than 250 FTEs (Full Time Equivalent staff)). Through BEE Anglia, this service was provided free of charge to eligible businesses in Norfolk and Suffolk.

A 'Charter Assessment' includes a full site visit and review by a qualified assessor, and results in a readily understood badge endorsing the company at one of three levels (Bronze, Silver and Gold).

Gaining Charter accreditation helps the business stand out from the crowd, gives them access to a dynamic network of like-minded businesses, and help guide the business towards greater sustainability.

As of March 2022, 142 Charters had been awarded through the project against a target of 100.

Project Evaluation

Method

The summative review of the project evaluation required the following to be assessed:

- Relevance & Consistency: To determine the continued relevance and consistency of the project, in light of any changes in policy or economic circumstances during its delivery period;
- Progress: Review the progress of the project against contractual targets, any reasons for under or over performance, and the expected lifetime results;
- Delivery & Management: Explore the experience of implementing and managing the project and any lessons which have emerged from this;
- Impact: where possible identify the actual economic impact attributable to the project, including both the intended and actual outcomes and impacts; and
- Assessing Value for Money: Analyse the cost-effectiveness of the project in light of its intended and unintended outcomes and impacts, and hence its value for money

In order to carry out this assessment information and data was collected from the four delivery partners and the SME Beneficiaries. The following data was collated from the relevant parties:

Groundwork

The SME beneficiary information collected from Groundwork included the following information:

- SME contact name, address, telephone number and email;
- Date of site audit;
- Identified financial and CO_2e savings;
- Copies of the energy audit reports; and
- Monthly progress reports.

Groundwork also assisted in the collection of feedback from the SMEs by emailing beneficiaries a link to the online feedback forms developed by Giraffe Innovation for the energy audit and for actions taken after the audit.

Suffolk County Council (SCC)

SCC supplied details on the following:

- Project spend;
- Progress reports against project targets; and
- Feedback on project performance.

NCC and NWES

NCC and NWES were both contacted and provided feedback on project performance.

SME Beneficiaries

SME beneficiaries were contacted by online surveys, emails and phone calls to give feedback on the following:

- Initial contact with Groundwork;
- Site audit;
- Grant application;
- Charter;
- Recommended energy reduction projects;
- Payback on investment;
- Energy saving awareness; and
- Progress on energy saving projects.

Data analysis

Once the required data was collected it was analysed to determine the following:

- Progress against the following targets: C1, C2, C4, C6 and C34;
- The expected spend vs predicted spend data;
- Grant spend vs predicted spend;
- Breakdown of the different sectors the SME beneficiaries;
- Diversity of the recommended energy saving projects;
- The satisfaction of the SME beneficiaries, based upon online feedback, telephone calls and emails as regards:
    - The energy audits;
    - Grant process;
    - Charter process;
    - Energy saving advice; and
    - Recommended energy saving projects.

The financial data and project progress were validated with SCC. Therefore, Giraffe is confident that the data supplied was true and accurate.

Feedback from 131 beneficiaries was received which accounts for 60% of the companies receiving a grant and 15% of those companies receiving support. This was above the original target set at 10%. The feedback covered a wide range of beneficiaries (sectors), and feedback was in the majority of cases positive.

Feedback on the actions undertaken following their site visit and report was given by 67 beneficiaries. This was higher than the agreed target of 50 interviews.

One caveat to the feedback was that it may only come from those that had a very positive experience (bias), but the results did show that there was some negative feedback on the grant application process.

Progress of BEE Anglia Project

This section sets out the progress of the project against contractual targets, and identifies where possible, any reasons for under or over performance, and the expected lifetime results.

Progress against targets

As of March 2022, the progress of the project by SCC, based upon claims received was as follows:

- Total Number of BEE Anglia Reviews Completed (C1) 872; Target 900;
- Total No. of BEE Anglia Grants Submitted to date (C2) 218; Target 175;
- 12 hour assists for companies (C4) 795; Target 625;
- Private match funding (C6) £3,701,296.52; Target £2,685,336;
- Total Carbon Savings Identified and claimed (C34) 2734.9 tCO_2; Target 2500tCO_2;
- Total number of new SMEs with carbon charter – 142. Target 100.

SCC has supplied data to show progress of the project against the targets from the start date to March 2022. The chart below shows the performance against profiled targets (Figure 2). These cover targets for C1, C2, C4, C6 and C34.

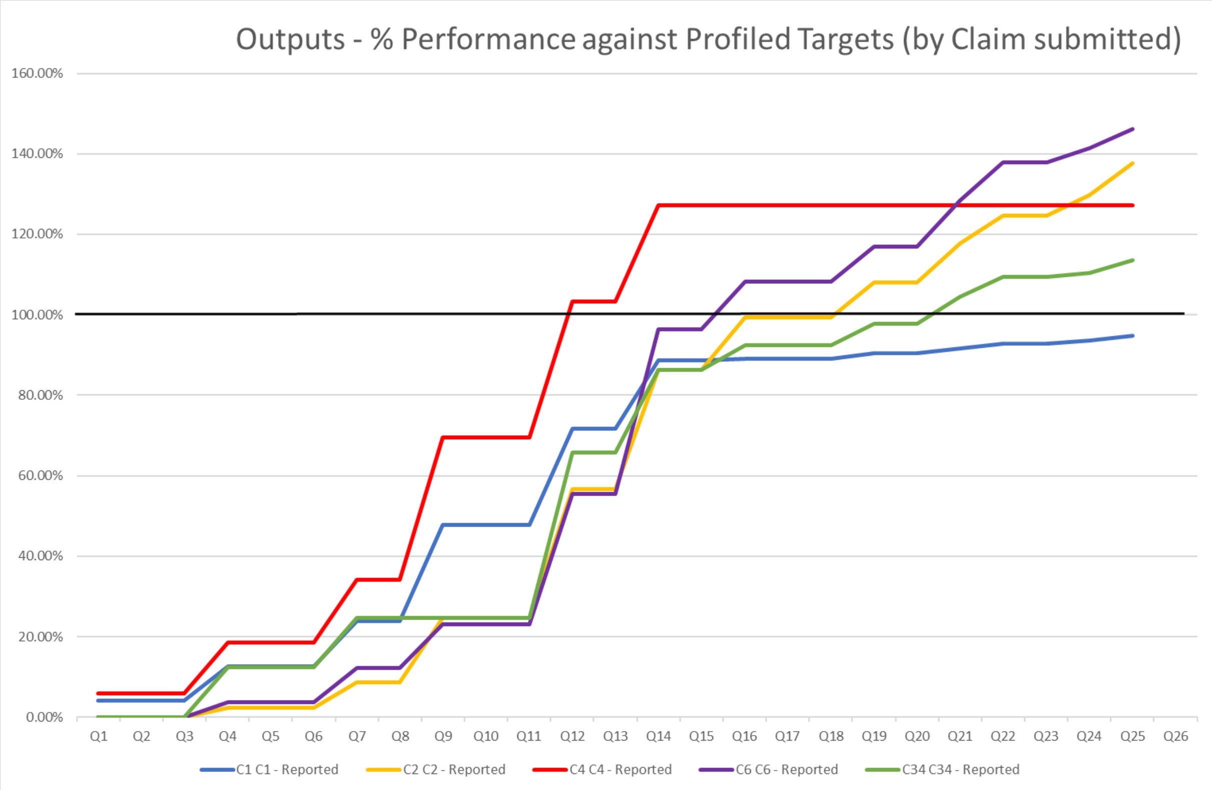

Figure 1: Output - % performance against profile targets

Detailed below is the progress against the final targets and the status as of March 2022 and if the results are on target.

C1

The total Number of BEE Anglia Reviews Completed (C1) was 872 against a target of 920 this includes the 819 on site energy audits. Therefore, progress against the targets was less than expected and this target may not be achieved. However, all of the other targets have been exceeded. A full list of beneficiaries are given in Appendix E. Reviews were harder to achieve of the past 2 years due to Covid restrictions limiting the number of site visits and audits.

C2

The total Number of BEE Anglia Grants Submitted to date (C2) was 218 against a target of 175. Therefore, the target has already been exceeded despite C1 not being achieved.

C4

The12 hour Assists for companies (C4) was 795 against an end target of 625. Therefore, the target has already been exceeded.

C6

Private match funding (C6) was 3,701,296.52 against a final target of £2,685,336. Therefore, the target has already been exceeded.

C34

Total carbon savings identified and claimed (C34) was 2,734.9tCO_2 against a target of 2,500tCO_2. Therefore, the target has already been exceeded.

Revenue and spend

This section details the financial inputs and project spend. The financial inputs to the project were:

- ERDF funding £4,057,254.30;
- Funding from Norfolk County Council (NCC) £32,513;

- Funding from Suffolk County Council (SCC) £70,000;
- Funding from Groundwork £20,624 and
- Match funding Businesses; £3,701,297

Total funding including business match funding £7,881,687.82

The total revenue spend as of March 2022 on the project was as follows:

- Suffolk County Council (SCC) £1,028,894;
- Groundwork £1,357,721;
- Norfolk County Council (NCC) £409,383
- NWES expected total spend on project £169,988; and
- Capital spend £ £5,487,965 (of which £1,546,587was on grants).

Total spend as of March 2022 was £8,079,570. The project is expected to come in on budget including match funding of £8,323,760.

The chart below (Figure 2) shows the actual revenue spend for the duration of the project, up to March 2022.

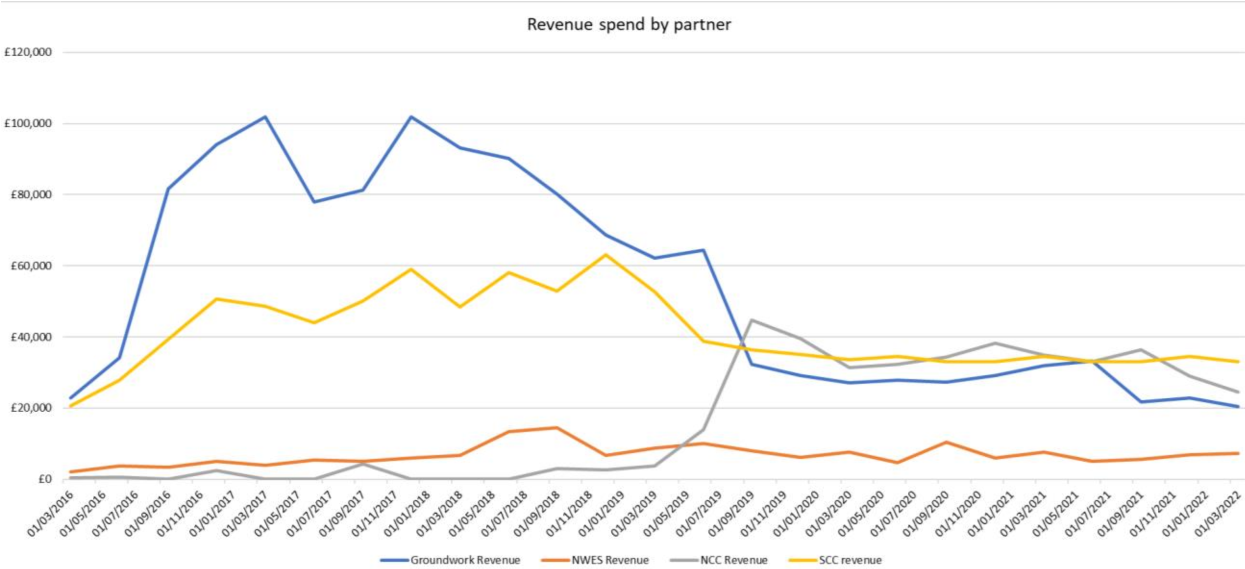

Figure 2: Revenue spend by partner

The grant value awarded over the duration of the project is shown below (Figure 3).

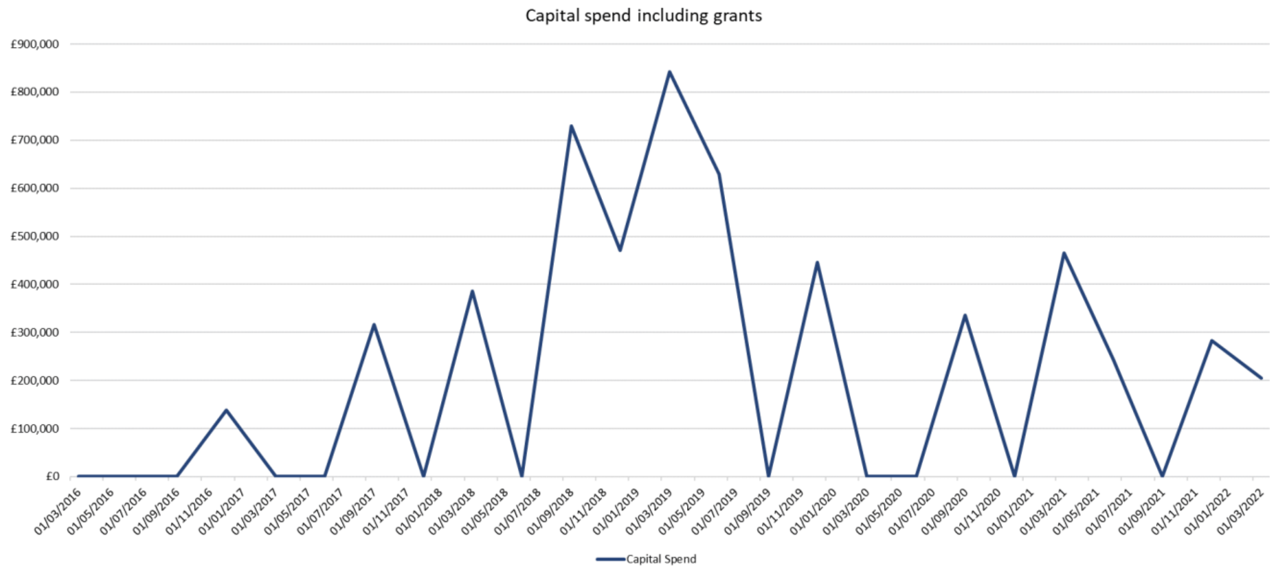

Figure 3: Monthly capital spend (grant-supported measures)

The chart shows the significant variation in the monthly values of capital spend . This was down to variation in the number of grant applications received monthly, their value and when they are claimed.

Economic impact and cost effectiveness of the project

In order to evaluate the cost effectiveness of the project the following have been considered:

- Identified financial and CO_2e savings for 775 of the 872 beneficiaries;
- Identified financial and CO2e savings for the 218 grants awarded;

Cost effectiveness of C1

Based upon the analysis of 775 audits the potential savings were £4,435,478 and 31,448tCO_2e. Therefore, the following conclusions can be made:

- Annual saving =£ 4,435,478/775 = average £5,723 per audit;
- Spend per audit = £1,578,794/775 = £2,037.15;
- Spend per saving =£0.36 for every £1 saving identified;
- Spend per tTCO_2e saved = £50.20;
- Forecast initially was per tCO_2 = £2956; and
- Tonnes of CO_2e saved per SME = 31,448/775 = 40.58tCO_2e.

Therefore, based upon the above data, the average annual identified savings were £5,723 and 40.58tCO_2e per SME for a cost of £2,037.15 per SME audit and report. Therefore, the return on investment from a project perspective would be 0.35 years.

<u>The return on investment of less than one year would be considered to be excellent value for money.</u>

The above figures exclude the cost of any capital investment required by the SMEs to achieve any carbon and financial savings.

Cost effectiveness of C2

The identified savings from the 218 grants was 3,040 tCO_2e and £759,730. This averages as 13.95tCO_2e and £3,485 per annum per company. The BEE Anglia spend per business was £4,180,391.30 /872 = £4,794.03 and the total spend, by businesses was £3,701,296.52/218

=16,978.42. This gives a total spend of £21,772.45 per SME for a saving of £3,485 per annum This gives a return on investment of 6.25 years. This is higher than expected due to high take up of PV and insulation which both have a long payback on investment. However, due to the recent escalation in the cost of energy this could have reduced by a least one year.

Carbon reduction

The 3040tCO2e saved by the SMEs receiving a grant this is equivalent to 434 UK citizens annual CO2 emissions[13].

Counterfactuals

This section deals with what the benefits would be if all SMEs in Suffolk and Norfolk were all made aware of the impacts of the energy they are wasting.

Based upon the feedback from the surveys, 50% of the SMEs were aware that there was potential to save energy thorough updating plant, lighting and building infrastructure, but only 16.74% of those would have carried out the recommended changes without a grant.

According to the Office of National Statistics report "Small and medium sized enterprises in local authority districts, 2018 to 2019"[14] there were 62,770,SMEs in Suffolk and Norfolk. If the BEE programme was rolled out to the other 60,035 SMEs in the region and the grant success rate was 100% the savings could potentially be £209 million and 0.837mtCO_2e per annum.

The actual savings that could be made if only awareness was raised to all of the SMEs and no grant awarded could be 16.74%, based upon grant take up, of the SMEs in Suffolk and Norfolk which would equate to £35 million and 0.14mtCO_2e.

As a counterfactual to this it also means that SMEs in Suffolk and Norfolk are potentially wasting £209m and 0.837mtCO_2e per annum due to not updating lighting, plant or building infrastructure to save energy.

The feedback from companies that received an energy audit found that 50% of the SMEs were not aware of the potential to save energy. As a counterfactual this demonstrates that 50% were aware and were potentially waiting on a third-party confirmation or a grant in order to carry out the work.

Effects of the economy on the project

The economy was expected to gradually improve through the delivery period, supporting an appetite for the BEE service. In practice, the impact of the Brexit decision in 2016 and its attendant uncertainty for businesses had a noticeably cooling effect on business appetite for investment and the BEE Anglia delivery team had to work extremely hard to maintain profiled delivery levels.

The publication of the Industrial and Clean Growth Strategies in 2018 as well as raised customer understanding of environmental concerns, along with slowly returning economic confidence, has meant that the delivery team faced the opposite problem as we move from phase one to phase two of delivery and they are managing strong levels of demand as the project made this transition.

The Covid pandemic was expected to have a negative impact on the economy and therefore this project. However, the demand for the grants actually increased as companies had time to review

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[13] Based upon 7tCO_2 per person. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051408/2020-final-greenhouse-gas-emissions-statistical-release.pdf

[14] https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/adhocs/10918smallandmediumsizedenterprisesinlocalauthoritydistricts2018to2019

their energy bills and to take action in reducing them. It may also be that awareness around the Climate Emergency and COP26 was a factor in this.

The recent escalation in the cost of energy will have reduced the time it will take to recover the cost of the investment in the lighting, PV, insulation etc.

Analysis of BEE Anglia Reviews

This section provides an analysis of the 872 energy audit reviews and grants awarded to SMEs carried out by BEE Anglia. A spreadsheet containing an overview of the status of each of the SMEs was supplied by SCC and Groundwork.

Number of BEE Anglia reviews

Based upon the review of all of the SMEs receiving an energy audit the following charts give a breakdown of the sectors that the SMEs were in.

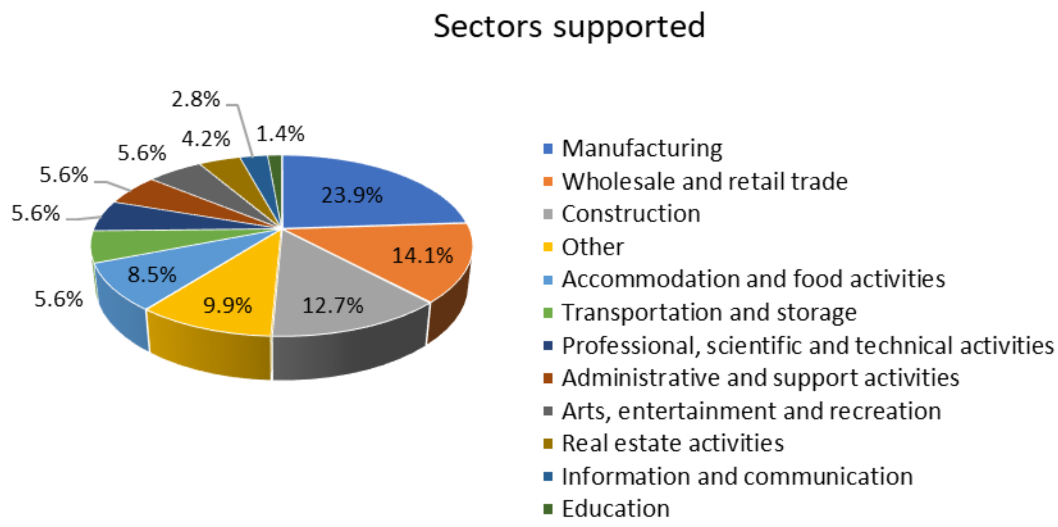

Figure 4: Support by sector

The four sectors contributing to the largest number of beneficiaries were:

- Manufacturing, 23.9%;
- Wholesale and retail, 14.1%;
- Construction 12.7%
- Other 9.9% and
- Accommodation and food services 8.5%

Together the top five sectors account for 68.27% of the total support and the following charts breaks each of these four sectors down further.

Manufacturing

Manufacturing accounted for 23.9% of the total site audits and these can be broken down into 9 sub sectors (Figure 5).

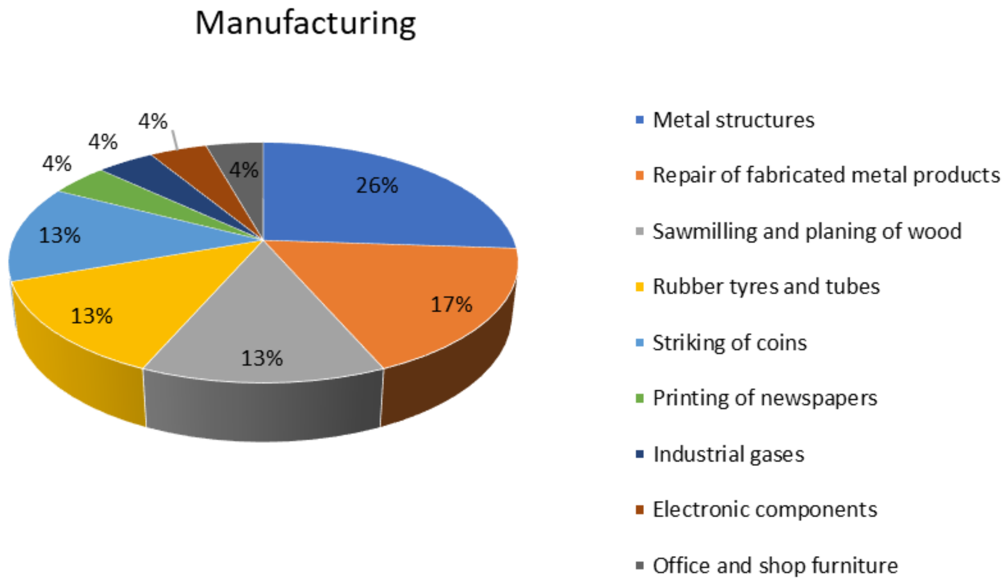

Figure 5: Support for manufacturers

This shows a relatively even spread of manufacturing industries receiving a site review. The wholesale and retail sector can only be broken down into three sub sectors (Figure 6).

Figure 6: Support for wholesale and retail

Construction only covered demolition. The accommodation and food services can only be broken down into two sectors (Figure 7).

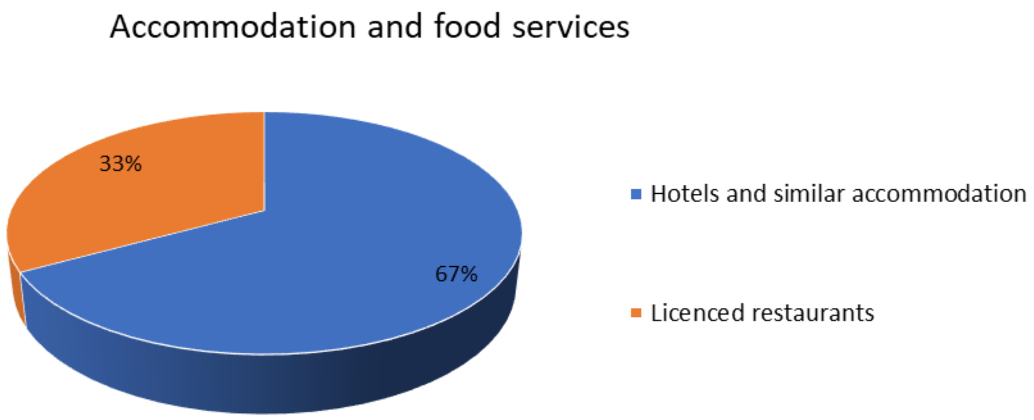

Figure 7: Support for accommodation and food service

The data on the SMEs was also used to determine the breakdown of support by county. Of the 819 on site energy audits, the split per county was as follows: Norfolk 65.9%, Suffolk 33.8%, 0.1% for Cambridgeshire and 0.1% for Essex. This is broken down further in the chart below.

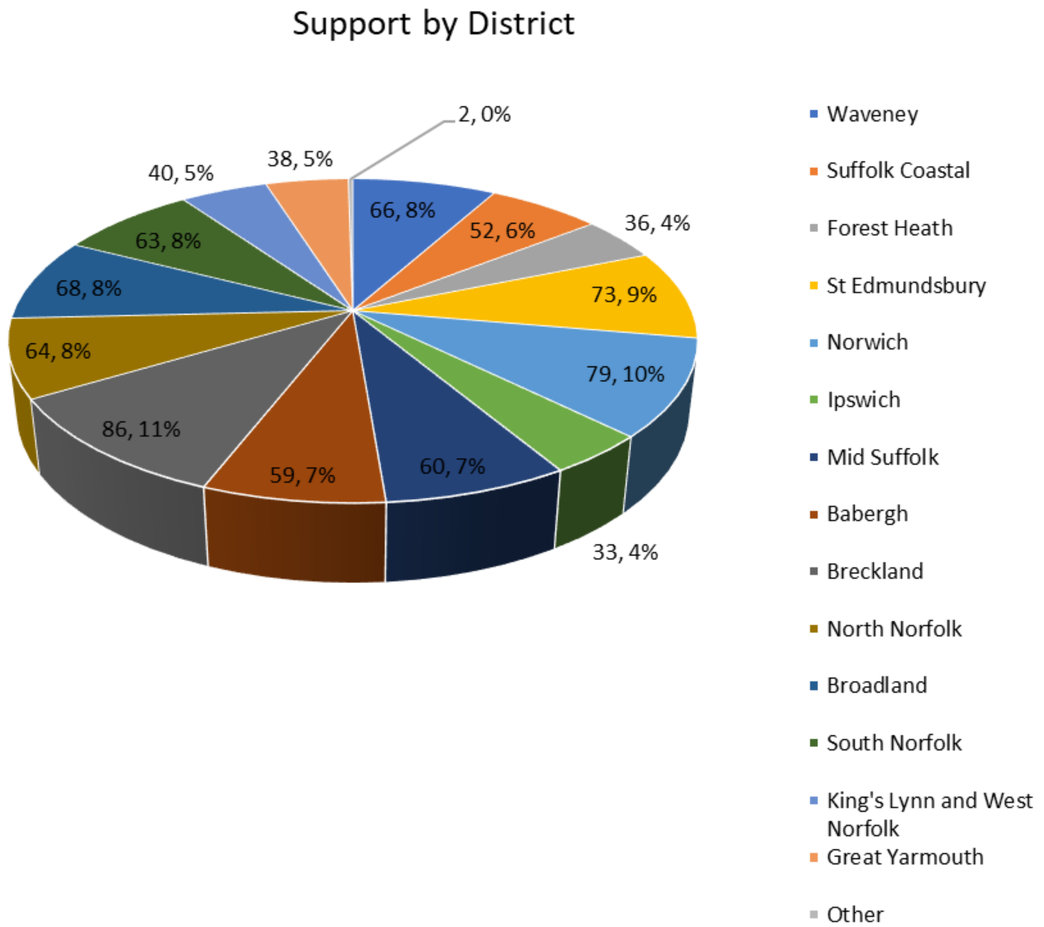

Figure 8: Beneficiaries by district

Analysis of grants awarded

This section details the breakdown of the different interventions that were carried out by the beneficiaries on receiving the grant.

The following charts shows the number of different measures taken by the beneficiaries.

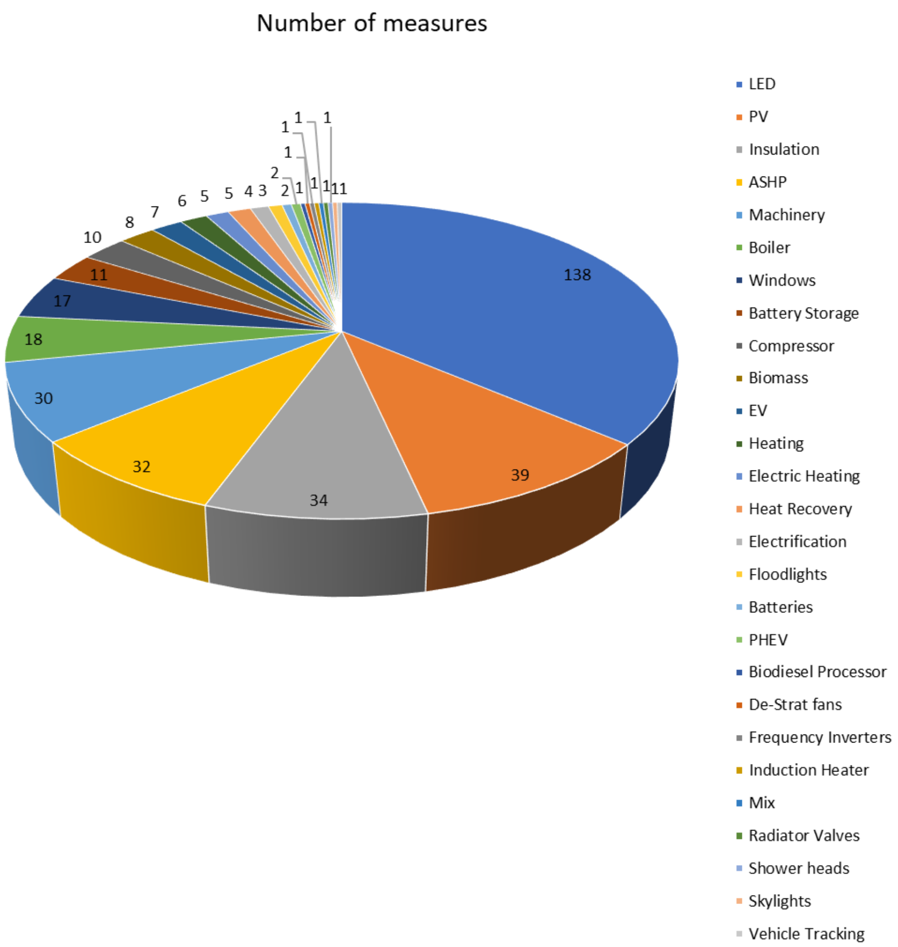

Figure 9: Number of measures installed

In total there were 380 different measures and LED lighting accounted for 36% (138) and Photovoltaic panels 10% (39) followed by Insulation 9% (34).

The following chart shows the grant application by value, which shows that the top three measures by value were LED lighting (£417,914), Photovoltaic panels (£249,411) and machinery (£224,350).

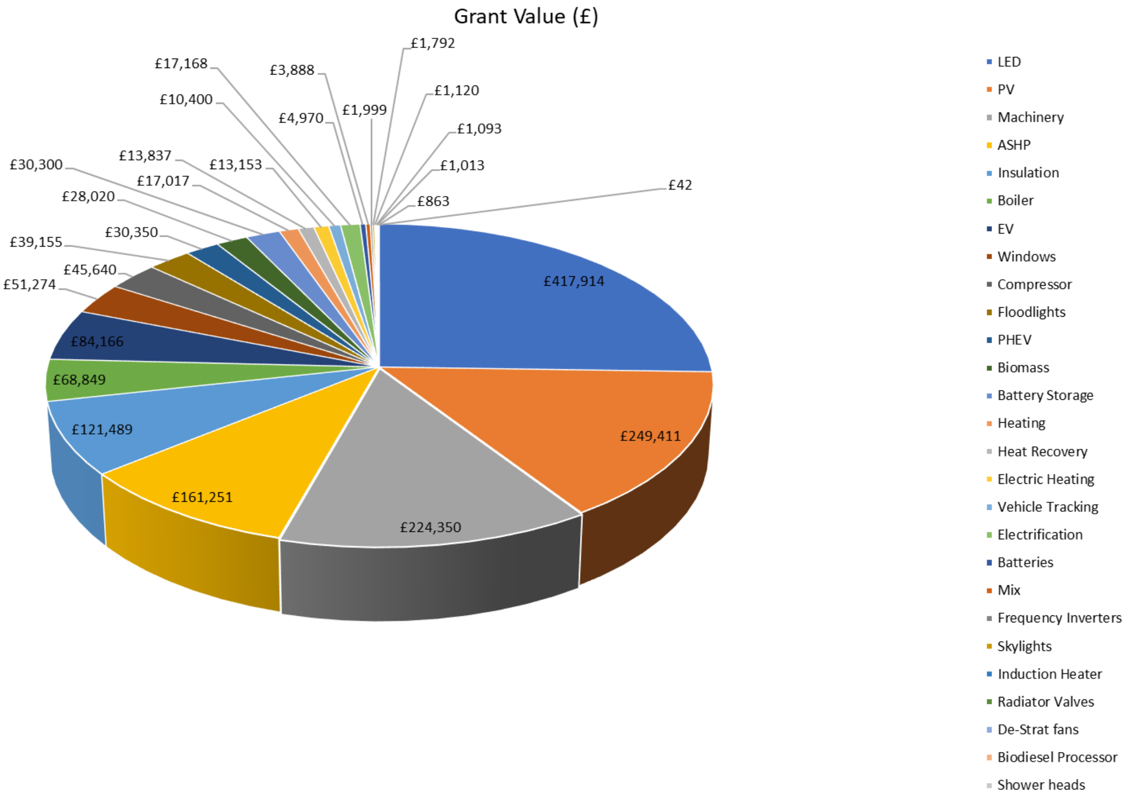

Figure 10: Grant value by measures installed.

Delivery and management

This section explores the experience of implementing and managing the project and any lessons which have emerged from this.

Feedback from companies that have received an energy audit was logged quarterly for the duration of the project until Mid-March 2022. At the end of each quarter an email went to all of the SMEs who had received support requesting them to complete the online survey[15]. The results of each quarterly feedback were reported back to SCC.
Feedback from 131 companies was received which represents 60.1% of the companies receiving a grant.

Analysis of survey results

The results of the feedback followed the format of the agreed questionnaire along with the following:

- Response percentage for each question where appropriate;
- Response total;
- Mean;
- Standard deviation;
- Variance;
- Standard error; and
- Satisfaction rate (where relevant)

A full list of the 131 companies responding to the survey is given Appendix F.

The feedback shows that the target audience was receiving the benefits of site audits and the analysis of the data shows that there continues to be strong demand from potential beneficiaries for

[15] http://www.smartsurvey.co.uk/s/preview/XWUI0/C87D9ACB0A4FB63373033C7851514D.

the service. Since June 2016, an average of 12 audit visits have been undertaken each month, this includes the Covid lock down periods.

Results of SME feedback

The results for all the feedback are detailed below along with the analysis and SME comments. The comments were attributed to the SME quarterly so the partners could offer assistance to the SME if any negative feedback was received.

All of the SMEs that received a grant were emailed a link to the online questionnaire and they were free to fill it in at their leisure. Any strong negative comments were fed back to SCC and Groundwork to follow up.

Question 1. SME details.

This question collects details about the SME name, contact name and email address.

Question 2. How did you hear about BEE Anglia?

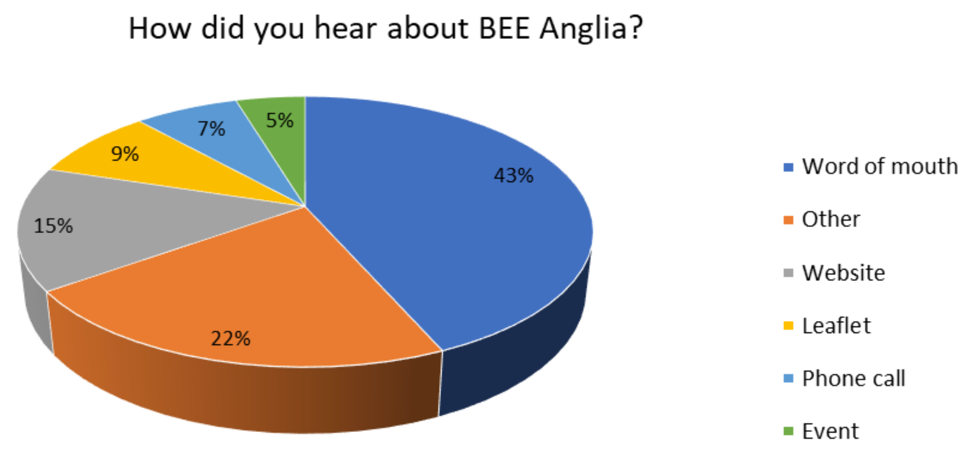

Figure 11: How did you hear about BEE Anglia

There was a total of 129 responses to this question. The results shows that word of mouth was by far the highest method that the SMEs heard about BEE Anglia.

Question 3. BEE Anglia Service - Initial Enquiry Process

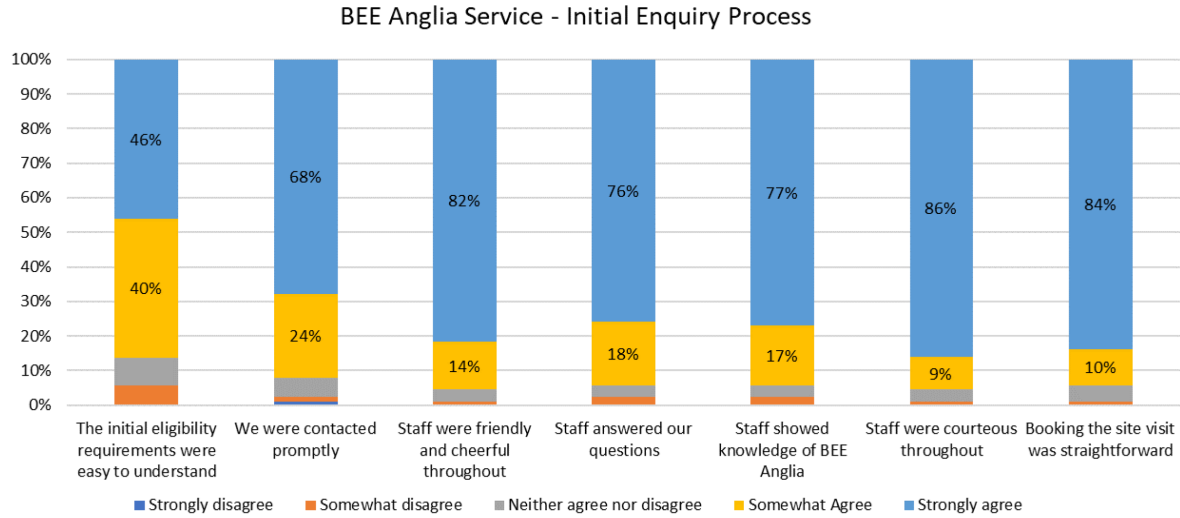

Figure 12: Initial Enquiry Process feedback

There were 87 respondents to the questions concerning the initial enquiry process. For all questions, over 85% somewhat or strongly agreed with the statements. This shows significant positive responses to the initial enquiry process.

Question 4. BEE Anglia audit/ energy review report

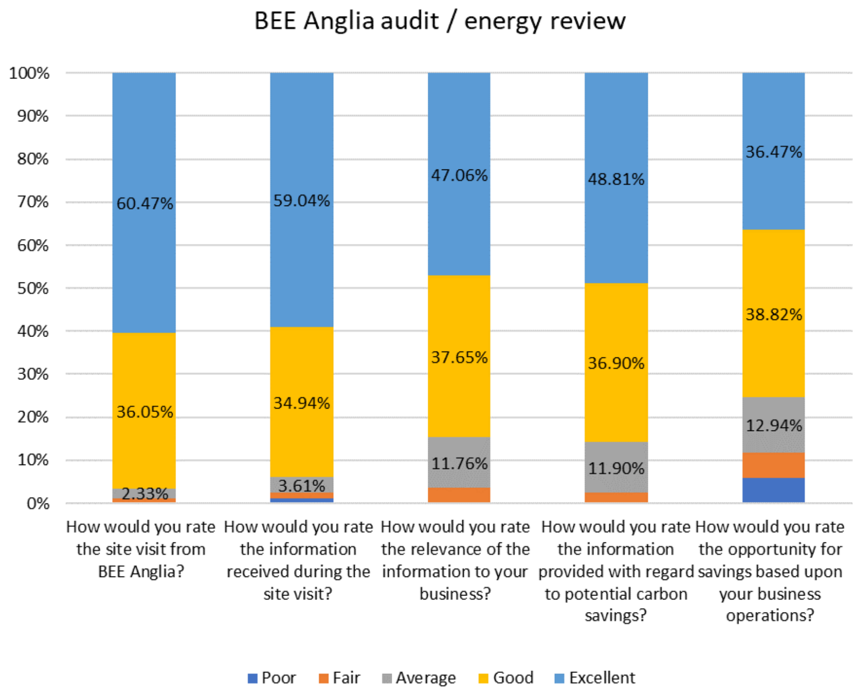

Figure 13: BEE Anglia audit /energy review feedback

There were 88 respondents to the questions concerning the audit/ energy review and for all questions over 75% responded with good or excellent. This shows significant positive responses to the initial enquiry process.

Question 5. Report recommendations

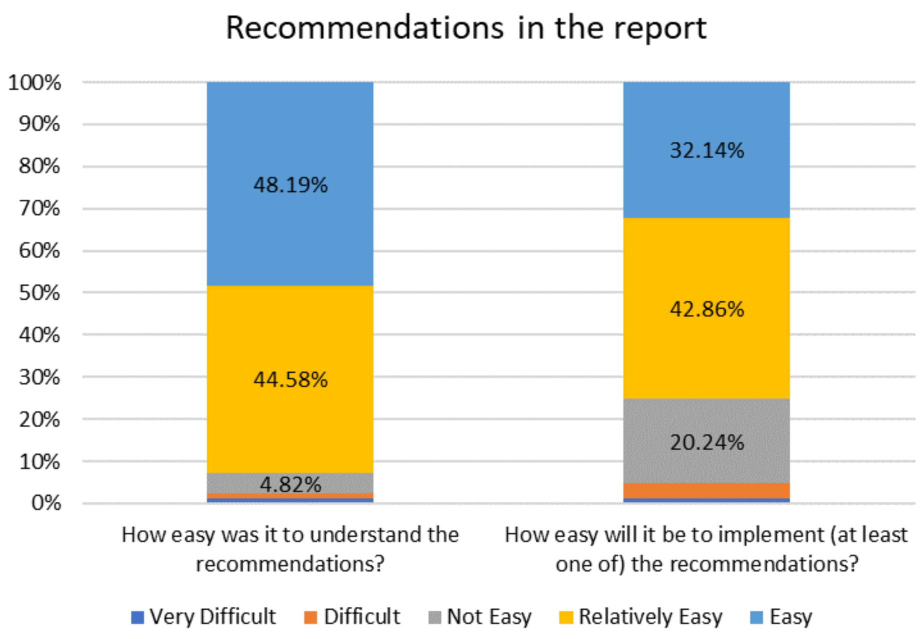

Figure 14: Feedback on recommendations in the report

There were 84 respondents to the questions concerning the recommendations in the report they received. 92% found the recommendations at least relatively easy to understand. 75% responded that the recommendations were also at least relatively easy to implement.

Question 6. Will you be taking up follow up support?

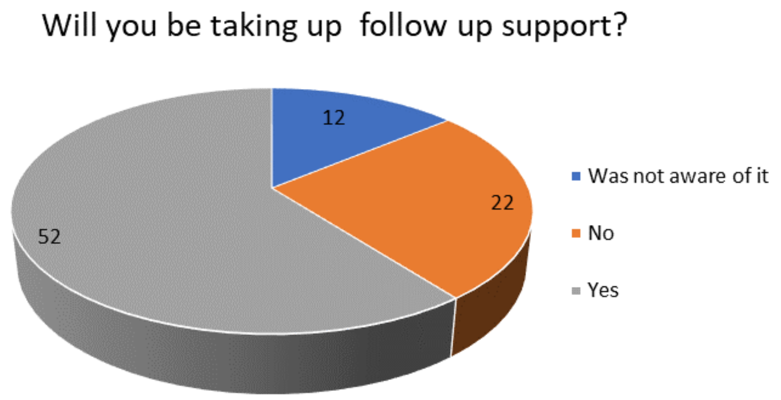

Figure 15: Will you be taking up follow up support?

There were 86 respondents to this question with 52 (60%) considering taking up follow up support. There were no reasons given for why the companies will not be taking up the follow up support.

Question 7. Grant Application

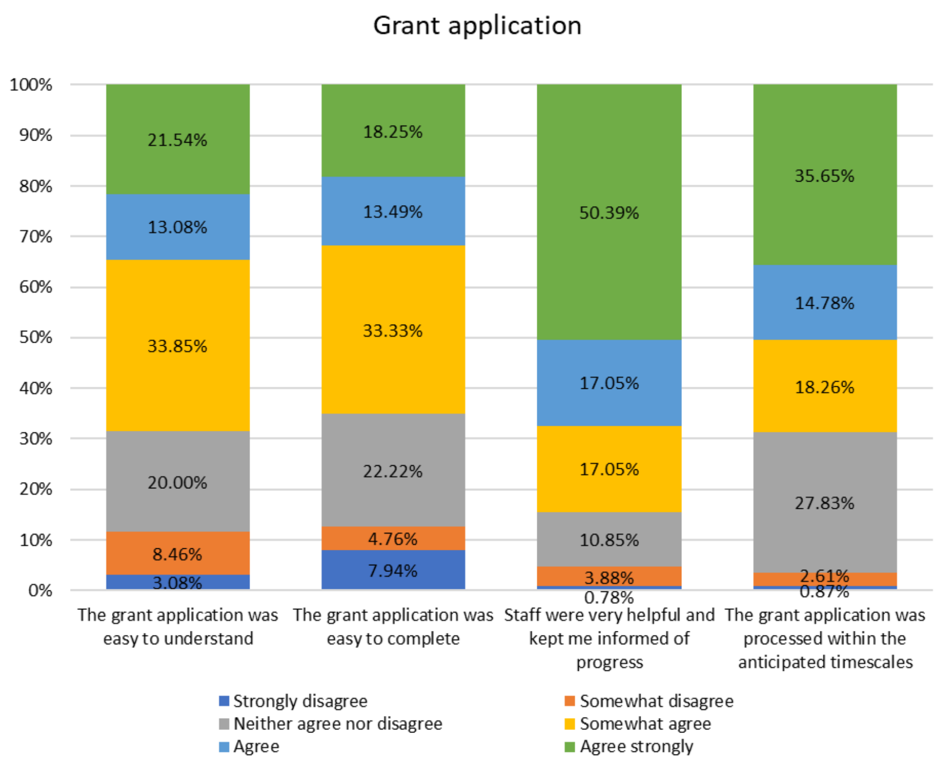

Table 1: Grant application

There were 90 respondents to the questions concerning the grant application with at least 65% of the respondent agreeing with the statements. This shows that the grant application processes were relatively easy to understand and complete. Also, the staff were helpful, and the grant was processed within anticipated timescales.

Question 8. If your company has not applied for a grant, please let us know why

This was an open-ended question with 57 responses. The responses varied from not worth it (10) and time constraints (7) to reviewing report (10) and waiting on report (4).

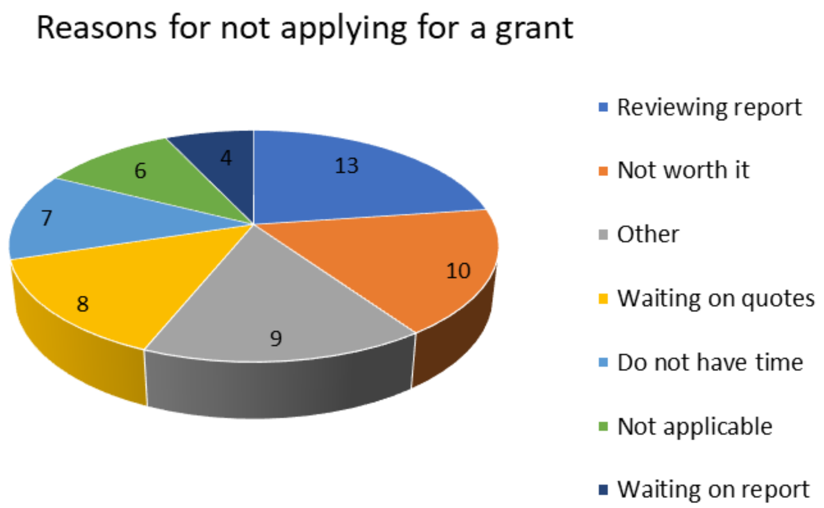

Figure 16: Reasons for not applying for a grant

Question 9. Feedback on Charter Application

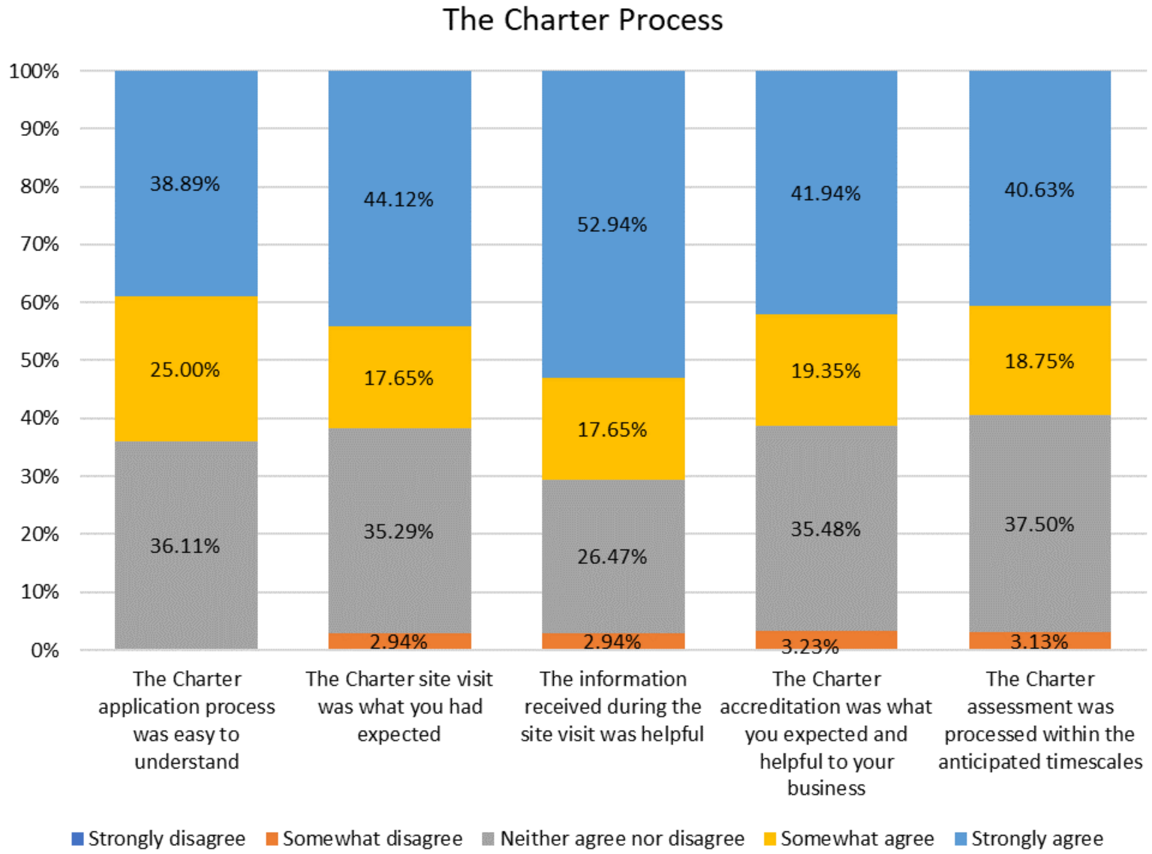

Table 2: Feedback on Charter Application

There were 36 respondents to this question, with over 60% agreeing with the statements.

There were 39 responses concerning why they had not applied for a charter, and these are shown in the pie chart below, some respondents gave more than one reason for not applying.

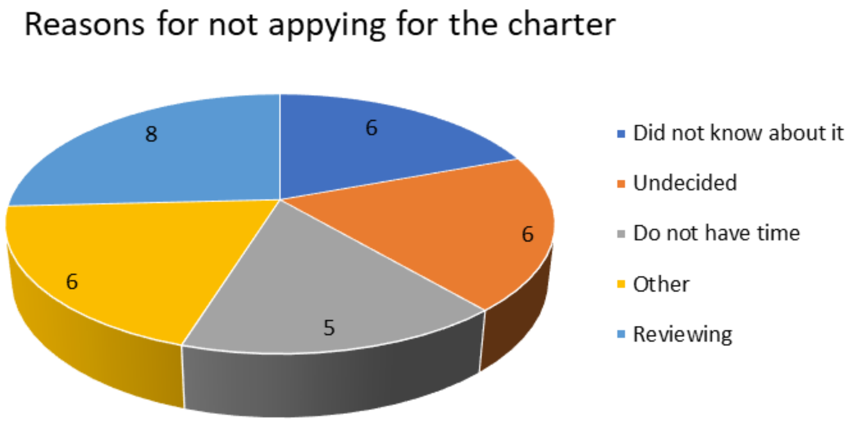

Figure 17: Reasons for not applying for a charter

There were 47 respondents to the question on why they had not applied for the Charter.

Question 10. Management Engagement

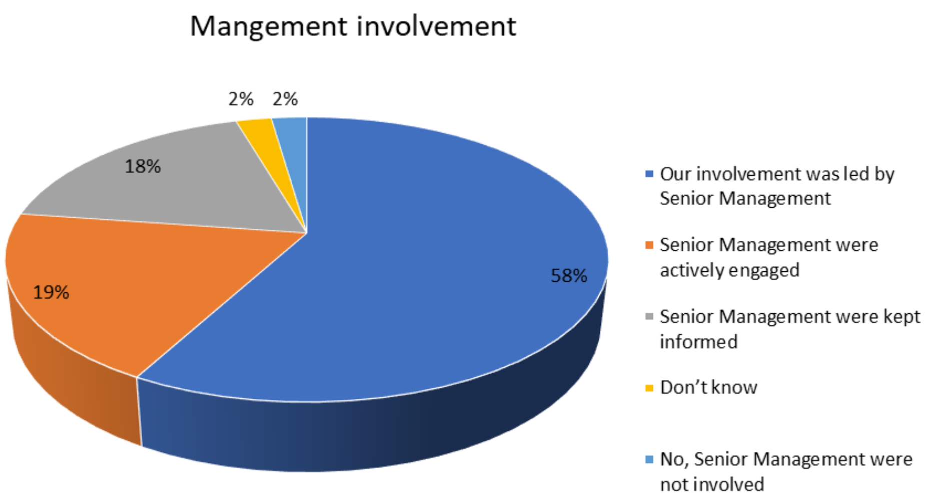

Figure 18: Management Engagement

It was clear from these results that senior management were involved with the grant application and this may also be driven by the fact that all the grants required capital plant investment.

Question 11. Overall, how would you rate our service to date?

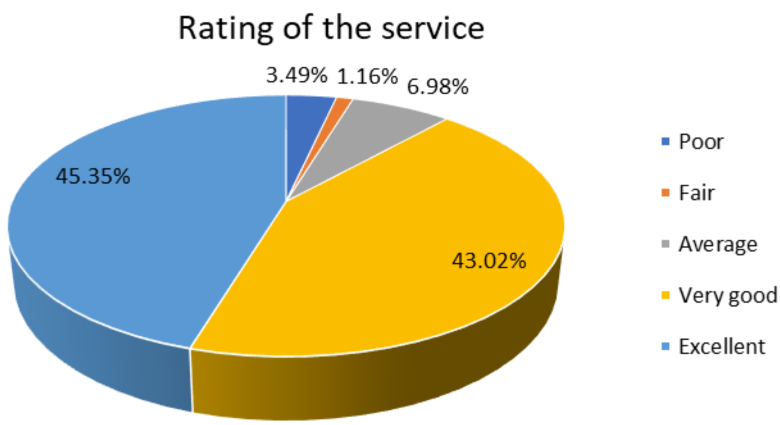

Figure 19: Overall, how would you rate our service to date?

There were 86 responses to this question and over 88% rated the services as at least very good.

Conclusions from SME feedback

It is clear from the feedback that in all areas - initial contact, site visit, report, grant application and charter the satisfaction rate was over 75%, with two exceptions both concerning the grant application process.

The reasons for not applying for the grant were quite varied and ranged from not worth it to time constraints and costs.

Feedback from SMEs on Energy Audit Actions

Against an agreed target of 50 interviews a total of 67 companies gave feedback on the actions they have taken since their site visit and report.

To get a broad review of the activities completed all of those having had a site visit were asked to complete a short online questionnaire[16].

The responses are given from the following companies:

- Number of companies who had received a grant 33;
- Number of companies who had not received a grant 34;
- Number of companies who had received a grant and completed energy saving projects 28 (85% of those with a grant); and
- Number of companies who had not received a grant and completed energy saving projects 11 (32% of those without a grant).

A total of 57 different energy saving projects were completed with some companies carry out more than one project. A full list of companies responding to the survey is given in Appendix G.

The energy saving projects completed by the SMEs responding to the survey are broken-down below (Figure 16).

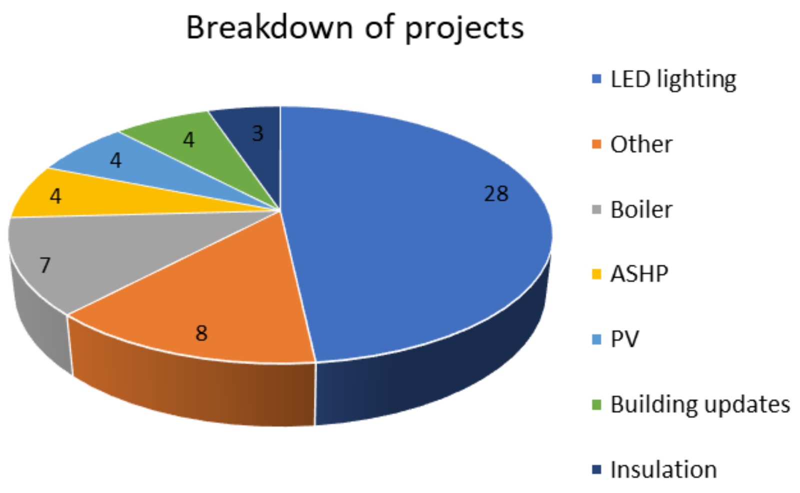

Figure 20: Breakdown of Energy saving projects

[16] http://www.smartsurvey.co.uk/s/preview/QKGK4/FF44C3B12E912E290CF7B14A8F323D

By far the largest energy saving project was LED lighting (48%) followed by boiler updates. (12%) This was not unexpected as lighting offers a very quick return on investment of 2 to 3 years in the majority of circumstances. Replacing old (10 years or older) gas or oil-fired boilers could save 10% in energy costs through an increase in efficiency.

The responses to the questions are as follows:

Question 1: Prior to the audit visit were you aware of the potential energy savings?

There were 67 responses to this question and 49% said no and 51% said yes.
This demonstrates that 49% prior to the audit were not aware of how much energy they could save.

Question 2: Would your company have gone ahead with the improvements in energy saving if the grant was not awarded?

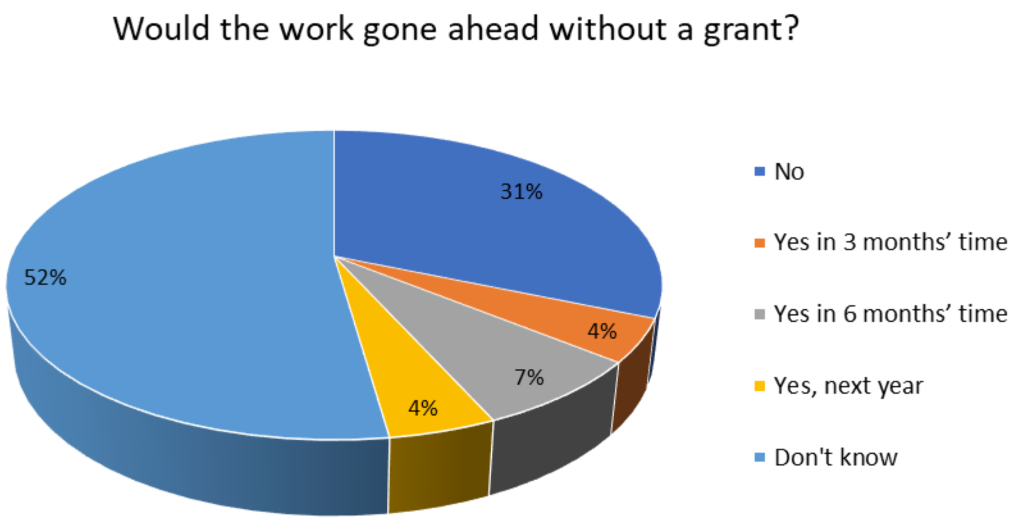

Figure 21: Would your company have gone ahead with the improvements

Of the 67 respondents 21 (31%) confirmed that they would not have gone ahead with the work without a grant.

This chart shows that without a grant, 16.42% of the companies would have gone ahead with energy saving projects if they did not receive a grant. A third of those not receiving a grant had installed energy saving equipment.

Question 3: Were there any issues with the installation and running of the equipment purchased through the grant?

Of the 67 respondents to this question only 3 said yes and these were due delays in the installation, wiring access and compatibility issues. All of which have been rectified.

Question 4: Did the energy savings exceed your expectations?

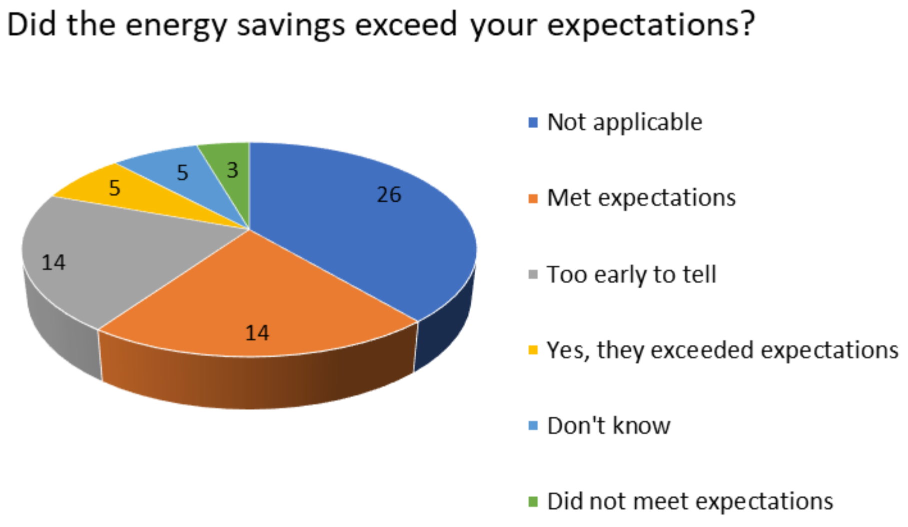

Figure 22: Did the energy savings exceed your expectations

Only 14 out of the 67 respondents confirmed that the saving met their expectations, but a further 14 responded that it is was too early to tell.

Issues about not meeting expectations were down to confusions about the clients wants and needs and the assessor not understanding what they needed. This has been fed back to Groundwork and addressed.

Conclusion on energy audit feedback

The feedback highlights that 50% of beneficiaries were unaware of the potential energy savings that could be achieved through updating plant, lighting and building infrastructure.

LED lighting accounts for 48% of the installed projects and these normally offer the quickest return on investment. Boiler and ASHPs accounted for 19.3% and these can offer in the region of 20 to 30% costs savings per annum.

The feedback also demonstrates that the two market failure mechanisms - reduction in CO_2e emissions and assistance to SMEs in giving them information on energy efficiency have been addressed.

Analysis of past support to businesses by SCC has found that 24% of recommended savings are realised. This was likely to be a conservative estimate, as it is not always possible to capture information on implementations, and yet previous evidence suggests that some businesses continue to refer to reports even years after the site visit.

The results indicate support already provided will result in annual savings of around 7,550 tCO_2e and financial savings of nearly £1.09 million – representing additional money staying in the local economy every year, and businesses that are more resilient to energy price changes.

The Experience of Delivering and Managing the Project

The delivery partners were asked to respond to a series of questions on their experience of implementing and managing the project and any lessons which have emerged.

Feedback from Groundwork

A summary of the feedback on the BEE Anglia project from Groundwork.

What went well and not so well for you in the project;

It took time to get our internal systems developed and to develop a good stream of suitable businesses to work with. Once up and running the marketing and referrals has been going particularly well. With regards to the energy efficiency work itself, our in-house tools have continued to be refined and developed and these have proved invaluable – along with a highly competent team of advisors – in providing an effective service to our clients. Changes in requirements from DCLG throughout the project have caused some inconvenience, and at times inefficiencies, but the team has worked around these successfully.

The grant funding has been the most meaningful in terms of carbon saved and useful support to the business. At the end of the day, even if they know a little more about energy efficiency, they would only able to save around 5% through behaviour change (which is very difficult to change), it is the technology change that has the most impact (which most likely would only take place with grant support after an audit), and it is reducing running costs that helps the businesses the most (especially when this does not include additional management time or admin).

Any lessons learnt from the BEEA project

Marketing is extremely important for a project such as this, as we need to ensure that businesses are aware of the services we can offer to them. This should be done prior to the launch of a project to avoid 'dead' time at the outset. It would be good to have a little more flexibility within the services we can offer through BEEA – one size does not fit all, and we need to be able to tailor the level of support we provide to each business.

Any funding issues e.g., the late start of the project

Yes, the late start of the project affected the stream of businesses and grants which we have been able to submit and may have led to unrealistic targets and objectives being set at the start of the project. This may have led to us recruiting too many businesses from the retail sector and smaller businesses which were not eligible for grant support.

Funding issues in terms of cash flow from grants defrayals being paid out –
The key factors in getting this moving have been the successful marketing in getting in the sheer number of audits we need for a certain % to successfully convert into grants applications. Momentum has also helped with this with much more interest coming in the middle and end of the project compared to the start, with much of this momentum being generated from a long and continuous marketing campaign.

There could have been additional issues at the start with only being able to fund "next phase" measures (originally a requirement of the funding), but I was not an advisor at the time and do know have any knowledge of how this affected things.

What could have been done and what was changed to improve the service

Changes to the eligibility requirements to include retail businesses helped increase the number of grant applications. Increased value of maximum grant levels also helped us to widen the pool of business we could work with to provide grant funding.

The implication and impact of the changes to the way 12 hours of support was accounted for;

This caused some minor inconveniences and inefficiencies to the way we provide our support to businesses but was not a significant problem from my point of view. It is the changes to rules mid-way through a project which cause the most problems – not the changes themselves.

Feedback on the support and management of the project by SCC
This has been good and generally the SCC team have been very responsive to any queries we have had within the BEEA advisor team.

Audits Site visit
This has worked very well, and businesses have found it useful. Businesses are most keen for this aspect of the project along with the grant money. They are keen for face-to-face conversation, even though it can take up to 1-2hours of their time, when they will not spend 15minutes reading a report that's sent through later.

Feedback from SCC – Claims Management team

What went well and not so well for you in the project
Delivery partners not always submitting claims evidence on time. This meant they couldn't be included in a quarterly claim, or it gave us less time to process the evidence to meet the submission deadline (which is an issue when you are working on lots of different projects all requiring claims work to be completed by specific deadlines).

Poor quality of some grant claim evidence (which has been seen and allowed by delivery partners). In particular scanned evidence that could not be read – or evidence which didn't actually prove defrayal. Lack of consistency in claims process across EU programmes. All of the programmes we work on seem to have different requirements and different forms - even other ERDF programmes. This creates extra work and duplication of effort.

At the start of the programme the guidance from MHCLG was not definitive enough – this ambiguity created additional work and some delays initially and took some time to iron out.

SCC has been impacted by changes in personnel. Pressures on public bodies has led to increased turnover of staff. The loss of skilled claims staff within the team caused delays in the claims process as valuable knowledge of the programme was lost.

What could have been done and what was changed to improve the service;
Introducing the use of Dropbox in order to facilitate the sharing of files has streamlined the claims process. It means that MHCLG (Department for Levelling Up, Housing and Communities) can obtain the relevant claim evidence (when carrying out spot checks) without having to request it from SCC.

Feedback from NWES

There were no suggestions or comments for improvement.

The support they have received in the latter stages of the programme has been "reassuring."
"Groundwork are always helpful and able to provide information as and when requested."

Specific feedback from SME beneficiaries

Goodchild Marine
"We are delighted with the LED lighting throughout the company, and it is returning more savings than anticipated. It produces daylight working conditions internally for all staff in all areas of our production process. The boiler is also incredibly efficient compared to the old boiler we had. This has enhanced our prospects when quoting for new work due to the reduction in our carbon footprint."
Sue Goodchild, Director

Plinth Medical
"Our new site needed a complete renovation; BEE Anglia were extremely helpful with energy saving advice and recommending grant funding for LED Lighting. We have seen a significant difference in quality of light and expect to see a substantial reduction in our running costs."
Niall Dyer, Managing Director

Odalisque
"Sustainability is at the core of what we do, it is one of our key values so booking an energy review with BEE Anglia was an easy decision. The process was simple, BEE Advisor David helped us to complete the form for the grant and identified the carbon savings. I would definitely recommend BEE Anglia."
Abigail Weeds, Director

Warren Services
"I was very impressed with the service of the BEE Anglia team, especially the Advisors that came out to visit us. You are helping us all to achieve the goal of reducing energy use and it worked for me."
William Bridgman, Chairman

Roland Plastics
"At Roland Plastics we are introducing ongoing improvements to become greener and more environmentally friendly."

Thanks to the efforts and support by the BEE Anglia project, led by Cllr Hicks, we are able to meet both criteria. Their help is much appreciated, and we would recommend working with BEE Anglia on any potential project"
Ursula Austin, Sales and Marketing Director

Hadleigh Business Centre
"We have replaced all our old tube lighting, with the wonderful new LED lighting in all our Serviced Offices. It looks so much better, it is much gentler on the eyes and of course, more energy efficient, so its win, win all round! A BIG thank you from all at the Hadleigh Business Centre to BEE Anglia, without you this would have not been possible!"
Gina McCarrick

Kaepernick UK
"Without the funding supplied by BEE Anglia we would not have been able to afford the extra cost of installing energy saving freezer condensing units, frequency inverters and LED lighting. Our aim is to grow the company without having any increased impact on the environment. Hopefully implementing these energy saving techniques has helped us achieve this goal"
Alasdair Gordon, Operations Director

The Brook Inn
"We expect to save around 20-25% on our energy bills following grant funding from BEE Anglia. Thanks, on behalf of Directors, Shareholders and customers of The Brook Inn who will benefit greatly from this work"
Ian Evans, Director

Little Beck Properties
"BEE Advisor Ollie found that our system was grossly inefficient and left on all the time.
Our new boiler works at 95% efficiency and it is controlled by a fully programmable electronic system, both of which should combine to result in significant savings in fuel over the year.
A good reason to look forward to winter!"
Adrian Sampson, Partner

Box-it East Ltd
"From the support and advice received from BEE Anglia we now have a clearer environmental policy, recycling policy and 'switch off the lights' policy! Box-it East have now been awarded Silver Carbon Charter status, and anyone that knows us will also know that Silver isn't good enough and we will be going for gold!"
Claire Brooks

Barnwell Print Ltd
"BEE provided a comprehensive survey of energy saving ideas complimented with good advice on grants available for businesses. Winning Gold for the Carbon Charter has added huge kudos to our environmental achievements which is something we are very proud of and without a doubt has helped us win new business."
Lincoln Barnwell

The Cadogan Hotel
"The BEE Anglia Advisor suggested lots of things that we could do to improve our energy efficiency in the Hotel. The measures suggested were easy to implement, including changing the size of the kettles in the rooms to smaller ones as they use less power
Julie Reed

Clickers Archery
"BEE Anglia have enabled us to reach our long term goal of carbon saving in a short period of time, receiving the grant funding through BEE Anglia has accelerated that process
Graham Harris, Director

Liquid 11
"BEE Anglia offered great advice and practical help with our Projects; I'd recommend any business take the time to see how BEE can help their business."
Grant Hardy.

Negative feedback
There was minimal negative feedback and once an issue was raised via the online review, this was followed up with the parties concerned and each one was dealt with swiftly and any necessary corrective actions were put in place.

The main issues raised were concerning time delays between the different stages of the grant process for example site visit and audit report and the grant claims procedures.

Impact of the BEE Anglia project

In conclusion the BEE Anglia project has had a significant positive impact on the SMEs taking part in the project. The project will:

- Meet or exceed its C2, C4, C6 and C34 targets;
- May not meet the C1 target.
- Meet its charter target;
- Meet its spending target;
- Address all four of the market failure mechanisms for the SME beneficiaries through - reduction in CO_2e emissions and supplying information on energy efficiency;
- Enable the SMEs to demonstrate to their customers that these benefits have improved their environmental performance; and
- Support diverse range of SME beneficiaries with an even spread of locations between Suffolk and Norfolk companies;

Cost effectiveness of C1

The average annual identified savings accord the site audits was £5,723 and 40.58tCO_2e per SME for a cost of £2,037.15 per SME audit and report. Therefore, the return on investment from a project perspective would be 0.35 years.

The return on investment of less than one year would be considered to be excellent value for money.

The above figures exclude the cost of any capital investment required by the SMEs to achieve any carbon and financial savings.

Cost effectiveness of C2

The identified savings from the 218 grants was 3,040 tCO_2e and £759,730. This averages as 13.95tCO_2e and £3,485 per annum per company and based upon the project spend this gives a return on investment of 6.25 years.

The 3040tCO_2e saved by the SMEs receiving a grant this is equivalent to 434 UK citizens annual CO_2 emissions.

Feedback from SCC and Groundwork has identified high, continual feed of enquiries over the last 12-18 months, from businesses seeking grant support, energy advice or accreditation. There continues to be strong demand from potential beneficiaries for the service and since June 2016 there has been an average of 12 audit visits a month.

The results of the surveys demonstrate that overwhelmingly businesses value the support provided to them:

- 98% rate the site visits as Good or Excellent;
- 77% of businesses say the support has identified Good or Excellent opportunities for savings;
- 79% say it will be easy or relatively easy to implement at least one recommendation; and
- 91% rate the service overall as Very Good or Excellent.

Analysis of past support to businesses by SCC has found that 24% of recommended savings are realised. This is likely to be a conservative estimate, as it is not always possible to capture information on implementations, and some businesses continue to refer to reports even years after the site visit.

Based upon the feedback from the surveys, 50% of the SMEs were aware that there was potential to save energy thorough updating plant, lighting and building infrastructure, but only 16.74% of those would have carried out the recommended changes without a grant.

If the BEE programme was rolled out to the other 60,035 SMEs in the region and the grant success rate was 100% the savings could potentially be £209 million and 0.837mtCO_2e per annum.

The actual savings that could be made if only awareness was raised to all of the SMEs and no grant awarded could be 16.74%, based upon grant take up, of the SMEs in Suffolk and Norfolk which would equate to £35 million and 0.14mtCO_2e.

As a counterfactual to this it also means that SMEs in Suffolk and Norfolk are potentially wasting £209m and 0.837mtCO_2e per annum due to not updating lighting, plant or building infrastructure to save energy.

Project relevance and consistency

The project remained relevant and consistent to its aim and objectives throughout the project with constant positive feedback from the beneficiaries.

Recommendations

Based upon the success of the BEE Anglia project and the fact that there continues to be strong demand from potential beneficiaries for the service, an extension to the project will enable further benefits to the delivery area's carbon footprint and local economy.

An extension would start with a ready and self-sustaining supply of companies seeking support. The project team had identified significant latent demand for financial support towards efficiency measures, where capital outlay remains a core obstacle. An extension to the project is critical to achieve the further business investment and carbon savings which exist across the delivery area.