

Action plan – City of Leicester (UK)

Introduction

Regional policy context

Leicester is situated in the East Midlands of England; it is the 11th largest city in the UK with a population of 329,900. Leicester City Council (LCC) is a single tier unitary authority. Leicester City was awarded the UK's first "Environment City" in 1990 and later, in 1996, was named Europe's "Sustainable city".

Following decentralisation in England and Wales, there has been a creation of more than 40 Local Enterprise Partnerships (LEPs) across England and Wales to replace the regional development agencies (RDA).

Whereas traditionally the European Structural Investment Funds were administered by the RDAs they are now administered through the LEPs (the Managing Authority) with the funds being managed nationally by the Ministry Housing, Communities and Local Government (MHCLG) (the overall Managing Authority nationally). Each LEP has its own priority areas for action.

Leicester falls within the Leicester and Leicestershire Enterprise Partnership (LLEP) area.

- The Low Carbon Sector

The LLEP has a series of areas as priority areas for action and the Low Carbon Sector is one of these particularly how to support the continued growth of this sector and stimulate a broader shift towards a low carbon economy.

The Low Carbon Sector Growth Plan therefore provides public and private sector partners with a unique opportunity to drive growth in the sector, generating wealth and jobs and supporting the wider economy to substantially reduce carbon emissions.

The low carbon sector has been growing rapidly in recent years and it has a vital role to play in driving economic growth and creating jobs in Leicester & Leicestershire. The actions contained in the Growth Plan have the potential to help the sector to grow even faster, up to 7% per year, and to add a further £1.2 billion to the LLEP economy by 2020. In doing so, the sector is expected to create an additional 2,500 jobs over the next five years, whilst making a substantial contribution to achievement of local carbon emissions targets; a reduction of 1,500 ktonnes per annum up to 2020.

The low carbon sector in Leicester & Leicestershire contains many innovative, companies and world class research establishments and facilities. The largest sub-sectors are alternative fuels, renewable energy and building technologies. There are also strengths in low carbon transport, and low carbon vehicles in particular. Each of these sub-sectors contains companies developing cutting edge technologies and services. The LLEP area is also home to specialist capabilities in smart grid development and the woodland economy.

Key areas of interest include:

- Energy sources and fuels: renewable energy technologies, nuclear energy, waste to energy, alternative fuels

- Environmental goods and services: air pollution control; environmental consultancy; recovery and recycling; water supply and wastewater treatment; renewable energy consultancy
- Low carbon activities: carbon capture and storage; carbon finance; energy management and efficiency; low carbon vehicles; building technologies
- Supporting SMEs to make the transition to a smart city / low carbon future.

Picture



Leicester Action Plan – contents in brief:

In order to meet the needs of the regional (LLEP) Low Carbon strategic growth priorities and look at the use of ERDF funds to support this as well as deliver on the city-wide sustainability and smart city objectives, Leicester City Council, through SET-UP will be looking at:

Action 1 Run a grant project to support SMEs to invest in low carbon solutions (Green BELLE)

Action 2 Contribute to the development of the local Energy Infrastructure Strategy

Action Plan

Part I – General information

Project: **SET-UP**

Partner organisation: **Leicester City Council**

Other partner organisations involved: Leicester and Leicestershire Enterprise Partnership

Country: United kingdom

NUTS2 region: Leicester and Leicestershire (formerly part of East Midlands region)

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Part II – Policy context

The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed:

- ***ESIF Strategy (2014-2020) Leicester and Leicestershire: Specific objective 4.4 Increase implementation of whole place low carbon solutions and decentralised energy measures.***
- ***Energy Infrastructure Strategy for Leicester and Leicestershire (this policy came in after we joined SET-UP and was introduced by the UK government following Brexit to support regional energy growth).***

Part III – Details of the actions envisaged

ACTION 1 – Run a grant project to support SMEs to invest in low carbon solutions (Green BELLE)

1. The background

The LLEP area in receipt of the 2014-2020 ESIF funds launched a call under PA4 of ERDF in September 2015 inviting prospective project bids to apply for ERDF funds to fulfil the strategic aspirations of the Low Carbon Sector Growth Plan and ERDF PA4 call priorities. The LLEP provided the local need but the bids would always be evaluated against the national strategic aims as well by the Department of Communities and Local Government (DCLG).

Green BELLE was the only low carbon project to be approved and funded under the first low carbon ERDF LLEP call. Green BELLE, a three year project, began in November 2016.

The Green BELLE project provided capital grants to SMEs to invest in energy efficiency measures.

To date the Green BELLE project has proven to be very successful and has allocated capital grants of up to £1,090,000 (£545,000 ERDF and £545,000 match from SMEs) to 94 SMEs.

Green BELLE was deployed in parallel with SET-UP. This circumstance proved useful in a view of collecting feedback from the programme itself and discovering good practices to be used to improve it through the SET-UP interregional learning process.

The lack of applications to the PA4 calls is a concern nationally and many projects have been rejected as either they are too small in financial value, do not generate enough GHG emission savings or do not have the required match for ERDF.

The first phase of Green BELLE has helped demonstrate that:

- There is an appetite for this assistance from local SMEs
- SMEs are willing to engage with European funding despite the uncertainties of Brexit
- A capital grant has been essential to motivate SMEs engage with and invest in the low carbon agenda
- SMEs can act as a multiplier as they often motivate other SMEs to engage with low carbon
- Many SMEs did not understand their energy bills in terms of consumption
- Many SMEs are worried about rising energy costs but unsure how to tackle the issue e.g. many SMEs would think about window replacements rather than insulation or they would think about replacement lighting like for like but not think of sensors, LED or halogen.
- The project is the only grant of its type in the LEP area.

A LLEP survey showed that the cost of energy is the second highest concern of local SMEs. This is echoed by the first phase of Green BELLE. With a lack of support available, SMEs are often unsure or unable to implement low carbon solutions. With support SMEs are willing to match fund and invest in low carbon solutions.

Through discussions with similar project in Andalusia (the A+ programme) we were able to resonate with the finding that SMEs trust the Councils and prefer going through a council grant application process as they know it is non-commercial so there are no hidden charges and work is thorough and line with industry standards. This helped us understand the SME confidence in the scheme. The

popularity of Green BELLE meant that the majority of the grants were allocated by year two. This then gave us cause to develop a bid to extend Green BELLE (phase two).

Experience from project partners in the SET-UP consortium has demonstrated that there is a need and strong desire to move towards a smart low carbon economy however strong data is essential for this. This was particularly echoed in the Lithuanian workshop that had a strong focus on data and the need for data to drive smarter energy policy. Also, the importance of smart metering supported this as this would provide an accurate measure and an accurate way to measure the impact of measures.

Learning from the Spanish partners experience of working with ERDF and SMEs valuable lessons were learnt for Green BELLE phase one and phase two. The lessons namely were:

- SMEs are only willing to engage if the process is straight forward and less bureaucratic
- SMEs are willing to invest upfront and receive reimbursement retrospectively
- There is a lack of smart metering in SMEs and in fact a general lack of awareness of smart meters within SMEs. Therefore, any bid should not solely rely on smart metering data to evidence greenhouse gas emission savings.
- Battery storage is a good measure for SMEs where they have solar panels installed through other initiatives e.g. FITs.
- In Andalucía (Smart grid Incentive programme) there was a strong take up of support by SMEs but that was partly because there were local actors involved in driving the delivery and winning SME confidence. This was replicated in phase one of Green BELLE by having the LLEP and County Council as key partners. In phase two the City Council is seeking to raise match funding from the County Council and also develop commercial partnerships to encourage more applications from SMEs.
- The need for simple and clear financial instruments was highlighted by A+ project in Andalucía and the Inovgrid project in Portugal as these helped with consumer engagement.
- The Spanish projects showed that the project itself needs robust methodology to calculate greenhouse gas emission savings as projects cannot rely on SMEs or smart metering alone (often they either aren't installed, or SMEs do not understand this data).

SET-UP partners, particularly in Andalusia ([Smart City Malaga](#), [A+](#)), Brittany ([SMILE](#)) and AREAL ([Inovgrid](#)) demonstrated the need for support to SMEs to engage with Green BELLE. Simply offering

a financial aid was not enough and a great deal of face to face engagement, promotion of successes and sharing of credible results was also key.

Advising SMEs to make appropriate investments in measures to maximize carbon, energy and efficiency savings was crucial as often a SME may opt for a measure which they perceive to be the best one for them but is actually not the most urgent that needs attention. Helping SMEs prioritize and understand what needs to be done is an important task.

Supporting local providers has been an added benefit of Green BELLE. The Spanish programme in Andalusia and Malaga and the aspirations of the SMILE project in Brittany really demonstrated the value of supporting the local market to grow and be sustained especially in low carbon. This was particularly helpful to Leicester because we had seen a large insulation company go into liquidation in Leicester. The failure of government initiatives such as Green Deal had left a huge void in the market and there were few installers / providers of low carbon solutions locally. Growing the low carbon sector remained to be a key priority for the LLEP.

Initially many SMEs did not want to engage as they were unclear whether they would be asked to repay funding due to Brexit. Spanish colleagues shared very positive stories of engagement but colleagues from ARREAL and Tolna shared experiences of the difficulties often faced such as SMEs not believing that the grant exists or being convinced that there is some “secret catch” to the funding. Clear communication, cultivating customer confidence and credibility were key. This has been implemented in Green BELLE phase one (through working with local referral networks and providers) and this is something that will be replicated in phase two of Green BELLE.

The evaluation of the first phase of Green BELLE will be carried out in the last quarter of the project (Oct – Dec 2019). An interim evaluation carried out last summer has shown that:

- There is a need for Green BELLE
- SMEs are willing to engage with ERDF funding as long as it is through a LA provider (increases customer confidence)
- SMEs are often willing to match the investment by ERDF by 50% but we have seen many match by three to four times more
- There is a need to for primary retrofit, particularly in micro enterprises and retail
- Many SMEs are unsure of the best measure for them therefore an energy audit is crucial
- Lighting is by far the most popular measure in the LLEP area
- Renewable measures, especially is subject to planning processes are not popular with SMEs

2. Action

Integration of SET-UP learning into the bid (Green BELLE phase two)

Valuable lessons have been learnt through SET -UP which will also be integrated into the Green BELLE extension. An Expression of Interest has been submitted in November 2018 (to an autumn call) to extend Green BELLE.

Some other key differences between Green BELLE 1 and Green BELLE 2 are a larger capital pot of funding but a smaller maximum grant. Green BELLE 1 offered a maximum grant of £10,000 but Green BELLE 2 proposes a maximum grant of £7,000. This is because the average grant size under Green BELLE was around £5,800. Of the large grants awarded, the majority of whole scheme cost was over £25,000. This proved that SMEs, were willing to invest £15,000 + of their own money into measures.

A reduced maximum grant will mean more SMEs can be assisted. Discussions with SET-UP partners, particularly in Spain and Hungary showed that it was not always a large value grant that attracted a SME, but it is the potential to receive some assistance which is enough to encourage SMEs to invest.

Some of the key lessons embedded into the extension of Green BELLE include:

Smart Energy / Positive Energy district

- There is a need to explore the option of battery storage, particularly for SMEs that may have had a Feed in Tarif grant but also for SMEs looking to become prosumers. The concept of prosumer is still relatively new for many SMEs. SMART City Malaga has helped us realise that battery storage is a key aspect to a localised smart grid.

In Leicester, there is simultaneous discussion around creating a positive energy district. (ideas for this have also been taken from the SMILE project which has smart districts as one of its priority areas of action). A cluster of public and private owned buildings which will be connected to the district heating system and will be demonstrating smart technologies and smart energy grids.

SMART City Malaga has demonstrated to us the importance of having battery storage but then also the possibility of having good communication between buildings and the grid for this to work.

The importance of smart metering is crucial to this and therefore we will be encouraging SMEs to request smart meters for this. Green BELLE (phase 2) will be used a tool to encourage those SMEs within the positive energy district to install some of these new technologies.

To support SMEs to take up smart metering we will be taking tips from the toolkits developed by the INNOVGrid project in Portugal which has tool kits and information sheets around developing community support, data protection and developing demand side management within SMEs.

[https://www.smartgrid-engagement-toolkit.eu/fileadmin/s3ctoolkit/user/guidelines/GUIDELINE INTRODUCING DEMAND SIDE MANAGEMENT TO SMES.pdf](https://www.smartgrid-engagement-toolkit.eu/fileadmin/s3ctoolkit/user/guidelines/GUIDELINE_INTRODUCING_DEMAND_SIDE_MANAGEMENT_TO_SMES.pdf)

This information will be discussed with SMEs when Green BELLE carries out the initial energy audits.

- SMEs are not aware of demand side / balancing therefore greater knowledge needs to be shared where they can control their energy demand. Many SMEs are still in the attitude of consuming and paying rather than planning consumption. This is particularly important as the city is interested in developing virtual power plants based on the experience of the Lithuanian partners.
- Simplified GHG calculations are important to help an SME understand the impact of its actions.
- Access to energy data through an energy / data provider is helpful (demonstrated through SMILE). The importance of good data in the development of smart energy grids has been clearly illustrated to us by Smart City Malaga and also the SMILE project in Brittany, France. The data needs to be easy to access and easy to interpret. Through Green BELLE we will be asking SMEs to request smart meters but will also be asking SMEs for their energy data. The data will be analysed to look at the impact of the measure installed. It is hoped that this analysis will support SMEs to better understand their own data and how it can be analysed to understand the carbon impact of their practices.
- Furthermore SMILE has demonstrated the huge potential to co-operate with other projects to realise the smart city dream. The way this is being implemented under Green BELLE (phase two) is that we will be trying to signpost SMEs to other ERDF projects supporting electric vehicles and the installation of charging points. When the energy audits are carried out Green BELLE will not just focus on machinery and process but will be considering the whole business including transport and hopefully be able to highlight opportunities to maximise funding but also prepare a whole SME for engagement into a smart grid scenario.

Generally this information will also be shared with SMEs in geographic clusters such as those located in common business parks, those having high potential for solar / wind generation or those already close to plants such as the solar generation plant in Seaton (Leicestershire).

3. Players involved

Leicester City Council, the project partner, delivers Green BELLE. Members of the team also sit on the ESIF subcommittee. Other key partners are the County Council (especially if they are willing to provide revenue match funding as a proportionate number of SMEs are actually in the County), the LLEP and the local universities as well as business networks.

4. Timeframe

ERDF low carbon call

A call was announced in October 2018 which was responded to by submitting an EOI to extend Green BELLE, referred to as Green BELLE phase two. Previously there has been an open rolling call for PA4 as well as interim calls however there has been no applications to these. This has demonstrated that despite there being a perceived interest for PA4 funding, projects were not coming forward to bid for the funds available. One of the reasons for this could be that the funds are being delivered by the LLEP as opposed to regional development agencies therefore there needs to be more correlation to a very localised need as opposed to a regional need which can be easier to achieve across a wider geographical area. The next low carbon call is expected in March 2019 but with the uncertainties of Brexit there is no clarity nor guarantee of anything. The time frame for the call will be six weeks.

The EOI submitted for Green BELLE phase two has been appraised and invited to submit a full application. This suggests that the managing authority views Green BELLE as a good project to continue and support. We have until 20 May 2019 to submit the full application to MHCLG (please note the EOI was submitted to the Ministry of Housing, Communities and Local Government (MHCLG) but also appraised by the LLEP ESIF committee. The Full Application is fully appraised by MHCLG).

5. Costs (if relevant)

Total project cost for phase 2 of Green BELLE £1,974,846

Capital pot is £1,650,000 (half ERDF and half SME match) solely measures

Revenue pot is £324,845 (half ERDF and half LCC match) to cover salaries, marketing etc

6. Funding sources (if relevant): 50% from ERDF. 50% capital money from SME contributions and 50% revenue match from Leicester City Council (as well as revenue match requested from Leicestershire County Council)

ACTION 2 – Local Energy Infrastructure Strategy

1. The background

The Government Department for Business and Energy and industrial Strategy invited proposals to provide a series of local energy hubs across England that, via staff and funding, will:

- Develop and prioritise a pipeline of local energy projects identified through LEP and partner energy strategies and take these projects from concept to business cases that attract investment and are then taken forwards to implementation by other partners.
- Help coordinate local action across several local LEP areas.
- Provide a local good practice link between local LEP activity, other local LEP areas, and national Government.

To achieve this, indicative funding for each hub will be enough to cover four full time equivalents for two years with the expectation of becoming financially self-sustaining after two years. In Leicester and Leicestershire, the work to develop our LLEP Energy Infrastructure Strategy was co-ordinated by the LLEP. The strategy was launched on 30 November 2018. SET-UP was one of several projects and stakeholders that fed into the development of the strategy.

The SET-UP learning and experience was shared after each workshop with colleagues within the Council and sometimes papers going to politician briefings. This information was then cascaded to different teams within the Council. SET-UP also attending consultation workshops (often attended by the Service Manager from Energy and Environment Teams). These meetings were organised through the LLEP area (our MA). On various occasions SET-UP also contributed directly as a project through phone interviews, responding to surveys and one to one meetings.

<https://www.llep.org.uk/strategies-and-plans/energy-infrastructure-strategy/>

The Service Managers for Energy and Sustainability that manage the SET-UP project within Leicester City Council had a key role in developing this strategy. Leicester City Council and Leicestershire County Council have both committed to reaching 100% clean energy by 2050 as part of the UK100 Pledge. While it is not clear what this will mean in practice, it is unlikely that any remaining fossil fuel consumption (without carbon capture and storage) will be compatible with this. As such, it is likely that the energy system will need to be decarbonised by 2050 to an extent where it reaches

the lower level of the purple wedge indicated in Figure 1-1. Through the UK100 Pledge, there will be opportunities to bring together private and public-sector organisations and to work with other UK100 members to share learning and influence national policy. In addition to its UK100 Pledge, the City Council has also pledged to reduce its carbon emissions by 50% by 2025, from a 1990 baseline.

Low carbon energy is one of the LLEP's priority sectors for economic growth. Some projects outlined in the strategy, such as installing public charging points for electric cars or pursuing a low-carbon public transport network, can be pursued in the short term. Transport accounts for 35% of all UK energy use and 25% of our carbon emissions. Others, such as building thousands of new energy-efficient homes, are long term ambitions. By building energy-efficient homes, and better insulating existing homes, households in Leicestershire could save up to £100m per year in energy bills.

Leicestershire is ideally located to reap the benefits of a low-carbon economy. By improving the energy infrastructure, the region can further bolster the booming logistics sector, and provide low-energy homes of the future to residents.

The opportunities for Leicestershire business in the low-carbon sector can't be overstated. Leicestershire is home to two Enterprise Zones where some of the most innovative companies in the UK are based, currently working on new technologies to reduce carbon emissions and improve the environment and quality of life. With this new energy strategy in place, more low-carbon businesses will see Leicestershire as the place to invest and innovate.

2. Action

The projects proposed span the LLEP area and are cross-sectoral, covering homes, businesses, transport, power generation and energy networks. The potential benefits to the local region of delivering the projects are outlined, including the potential contributions to:

- carbon emissions reduction;
- reduced energy costs;
- increased energy productivity; and
- local economic growth and employment.

The Energy Infrastructure Strategy is divided into three targeted themes:

- Improving the energy efficiency of our homes and businesses, and supporting clean growth;
- Accelerating the shift to low carbon transport;

- Delivering clean, smart, flexible power

Proposed ideas for energy infrastructure where the SET-UP projects knowledge transfer has a key role include:

Project opportunity 6: Providing low cost and low lead time connections for new demand customers

The knowledge from the Inovgrid project in Portugal demonstrated to us the value of having a strong a robust business case to encourage engagement with this. Many SMEs / funders will look at this as an investment therefore low set up costs are central to making the investment choice a correct one. In addition to that ease of connection was an important factor. In the UK, under FITs connection times were longer as there were not enough “certified connectors”. This had a negative impact on the industry. The ability to identify local certified engineers and readily available technology as well as facilitating a dialogue between them to work swiftly is essential to the scheme being a success in our local area.

Project opportunity 7: Flexibility based connection offers for new electricity demand loads

There is an increased interest since the FITs in self generation. Now that the FITs are ending there is still an increased awareness and desire to:

- Install new energy projects
- Make existing ones work better for the owner

This involves many things such as understanding your consumption pattern, flexibility based around connections. In the UK we have for the past couple of years heard increasingly about the threat of black outs. Lessons learnt from how flexibility around connections particularly from the French SMILE project (in terms of themes and issues to consider to generate the correct dialogue at a local level) and the Portuguese legislation will to shape this aspiration into reality in our area under this new LLEP strategy.

Project opportunity 8: Strategic plan for renewable electricity generation deployment

This is one of the central themes of the Energy Infrastructure Strategy and is ever more important now that Leicester City Council has declared a climate emergency.

Our own white label is proving energy from renewable sources, but we are keen to encourage more and more renewable energy generation in our local area. This has to happen across three levels:

- Households
- Businesses

- Large scale (maybe consortium led)

[Local Energy Loop \(Brittany\)](#) - a regional financial scheme to promote the development of local energy projects, based on an integrated approach - has helped us understand the value co-funding from local authorities can play in securing the commitment of policy makers and leverage extra public funding. In our LLEP area we are keen to lever in private sector funding as well as government funding to deliver this aim as the local authorities can act as a facilitator engine but are still facing austerity cuts and have now money to directly invest.

Smart Grid Incentive Programme Andalusia which providing non-refundable funds for investments in smart grid projects, in line with the goals of the regional energy strategy showed again that a policy is great in driving discussion, but it needs to be matched with some financial tool to make it a reality. It is hoped that the LLEP will have a key person employed to deliver the Energy Infrastructure Strategy who will seek to secure investment in these projects.

3. Players involved

Leicester and Leicestershire Enterprise Partnership,
Leicester City Council, Leicestershire County Council, Harborough Energy, Western Power Distribution, National Forest, Loughborough University, Intelligent Energy, GenGame Ltd, NW Leicestershire District Council, Leicester Energy Agency, Melton Borough Council, Harborough District Council, National Farmers' Union, Energy Technologies Institute, Hinckley & Bosworth Borough Council, Rockhaus Development, Cenex, PyroGenesys, Charnwood Borough Council, Pick Everard, National Space Centre and Electrical Design & MFG. These organisations fed into developing the strategy and identifying local need and expertise and identifying what is feasible in the local area.

Other stakeholders required to mobilise action will include: BEIS, the Regional Energy Hub (in Nottingham), investors, Energy Distributor Companies, Energy Generators and Prosumers.

4. Timeframe

There will now be a period of three to five years to seek investment and implementation of these ideas with regular reviews and updates. The idea is that an officer will be appointed to drive this work and they will be the ones responsible for brokering funding and accessing government grants

and funds available too. The Government has made available a set amount of funding to each regional energy hub to support initial projects.

5. Costs (if relevant)

The idea is for projects to be selected by the LLEP and submitted to the regional Energy Hub to bid for government funding. Selected projects led by the LLEP will also need to attract private sector and other funding. Which projects will be selected is not yet known as a lot of the information is political too and with local elections soon it is difficult to gain any steer. The complications of Brexit also have a direct impact on the selection.

6. Funding sources (if relevant):

- funding from the regional energy hub – has to be bid for
- funding from national projects – has to be bid for (particularly if these funds are to replace ERDF post Brexit)
- investment from companies, generators, Power companies.

Date: _____

Signature: _____

Stamp of the organisation (if available): _____