Appendix V Funding and support

European funding

9.1.2 European Structural and Investment Fund (ESIF)

ESIF includes money from the European Social Fund (ESF), European Regional Development Fund (ERDF)[7] and European Agricultural Fund for Rural Development (EAFRD).

While the decision to leave the European Union will affect this funding in the medium term, in the short term UK local authorities still have access to this funding and it can be used to support appropriate projects that align with the ESIF strategy. The Government has confirmed that it will guarantee EU funding for structural and investment fund projects signed before the UK's departure from the EU, even when these projects continue after the country has left the EU. In practice this still means that funding bids for new projects need to be submitted by September 2018 to ensure funding is accessible.

The primary categories of funding that should be targeted are Priority Axis 4: Supporting the Shift Towards a Low Carbon Economy, Priority Axis 1: Promoting Research and Innovation and Priority Axis 6: Preserving and Protecting the Environment and Promoting Resource Efficiency.

Worcestershire LEP has developed a set of ambitions for use of ESIF funds which complement and reinforce the objectives within the Strategic Economic Plan. Key areas include use of funds under the priority of 'Research, Technological Development and Innovation (RTDI) and ICT' to support Research and Innovation, and goals under the 'Environment and Place' priority, which includes priorities of:

- Supporting the Shift Towards A Low Carbon Economy In All Sectors
- Preserving and Protecting the Environment and Promoting Resource Efficiency

9.1.3 Other European funding opportunities

There are two other European funds that can help to develop projects in the energy and low carbon space; these are:

Horizon 2020
According to the dedicated website,[8] "Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020) – in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market." Its goal is to ensure European nations can produce world-class science, remove barriers to innovation and make it easier for the public and private sectors to work together in delivering innovation. Within this pot of money is the

[7] https://www.gov.uk/government/publications/draft-european-regional-development-fund-operational-programme-2014-to-2020
[8] https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020

'societal challenges' tranche, which includes 'secure, clean and efficient energy,' along with 'smart, green and integrated transport' and 'climate action, environment, resource efficiency and raw materials. All these present opportunities for the LEP to bring together consortia and collaborations to help fund the priority actions outlined in this strategy.

In particular, the 'secure, clean and efficient energy'[9] aspect of Horizon 2020 is structured around seven specific objectives and research areas:

- Reducing energy consumption and carbon footprint
- Low-cost, low-carbon electricity supply
- Alternative fuels and mobile energy sources
- A single, smart European electricity grid
- New knowledge and technologies
- Robust decision making and public engagement
- Market uptake of energy and ICT innovation.

Its three main priorities are energy efficiency, low carbon technologies and smart cities and communities.

Interreg

Interreg Europe[10] offers opportunities for regional and local public authorities across Europe to share ideas and experience on public policy in practice, therefore improving strategies for their citizens and communities. Two of the categories that it provides funding for are listed as 'low carbon economy' and 'environment and resource efficiency.' It also provides what it calls the '3 C's:' cooperation, collaboration and community engagement and helps public authorities to access peer learning, policy advice, CPD and network expansion, again with particular support offered in the low carbon arena.

Funding for Interreg Europe projects is allocated through calls for project proposals; the next is due in 2019.

As with ERDF, both Horizon 2020 and Interreg funds provide an excellent opportunity to develop some exciting projects in this area, however, because it is a European fund the amount of time remaining to apply is limited and there is uncertainty about what support, if any, will replace them post-Brexit.

UK Government and local support

9.1.4 Shared Prosperity Fund

While ERDF funding is still available, it should be utilised where possible to support delivery of appropriate projects and to support the delivery of this strategy. Beyond this, the UK government has proposed a Shared Prosperity Fund to replace European funding after the UK's exit from the European Union. This fund has the aim *"to tackle inequalities between communities by raising productivity, especially in those parts of our country whose economies are furthest behind".*

At this stage it is unclear what form support under the Shared Prosperity Fund will take, and what the priority support areas will be, however given it is being put forward

[9] https://ec.europa.eu/programmes/horizon2020/en/h2020-section/secure-clean-and-efficient-energy
[10] https://www.interregeurope.eu/about-us/what-is-interreg-europe/

as a replacement for regional support currently provided through European funding it may be possible to leverage it in a similar manner to support the delivery of energy related projects and utilised to support the implementation of this strategy.

9.1.5 Local energy support from the Department for Business, Energy and Industrial Strategy (BEIS)

BEIS has identified that barriers to progression towards a low carbon economy at a local level include 'limited capacity and capability amongst Local Enterprise Partnerships (LEPs) and local authorities' to deliver local energy investment.

The BEIS Local Energy Programme is designed to address the gap in the capacity and capability of LEPs and other local organisations. Part of this involves funding LEP Energy Strategies to understand the opportunities and challenges across each LEP area.

BEIS is also supporting the establishment of 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.

This will take the form of around five hubs established around the country that will provide regional support to LEPs and local authorities for energy. The Midlands Energy Hub is based in Nottingham and works closely with the energy team at Nottingham City Council, where the manager of the hub will be based. The hub will also provide a project support officer who will be locally based to support project delivery in each LEP area. This role is funded for an initial two year period, with the aims that it then becomes self-financing through revenue brought in from local project investments.

9.1.6 Innovation funding

Innovate UK

Given the government's focus on innovation within the Industrial Strategy, this is an important area to explore. Access to this funding is likely to primarily be through Innovate UK, which offers part funding for projects which do the following:

- to test the feasibility of an idea and make sure it will work
- create a new product, process or service, or improve an existing one, through research and development
- work with other businesses or research organisations on collaborative projects

These opportunities will typically be business led, but could incorporate local authority or LEP involvement to encourage commercialisation of innovative projects that have been taken forwards by private sector partners. Opportunities may initially be

considered at the feasibility stage, but this could then lead to opportunities for implementation of pilot projects and indeed larger scale roll outs.

Network Innovation

There are also opportunities to work with Distribution Network Operators (DNOs) on their innovation projects to ensure that DNO spending on innovation is appropriately targeted at the local area. DNOs have licence to invest in innovation through Ofgem's regulatory framework. This includes an annual Network Innovation Competition (NIC) which DNOs are encouraged to submit bids into, as well as support for new technology or operation through the Network Innovation Allowance (NIA).

Gas Network Operators also have access to their own NIC funding, and can also look to develop innovative local projects. This could include developments such as piloting areas with increased proportion of green gas (gas produced from sources including anaerobic digestion and landfill).

The LEP could liaise with Western Power Distribution as the local electricity network operator, and with Cadent and Wales and West Utilities as the local gas distribution networks (GDN) in order to ensure that the LEP's views and local challenges within Worcestershire are adequately represented when the operators are considering their bids for this type of funding.

Industrial Strategy Challenge Fund (ISCF)

ISCF[11] provides funding and support to UK businesses and researchers. The fund is part of the government's £4.7 billion increase in research and development over four years. Government has worked with businesses and academics to identify the biggest core industrial challenges where:

- the UK has a world-leading research base and businesses ready to innovate
- there is a large or fast-growing and sustainable global market

One important challenge area for Worcestershire is 'prospering from the energy revolution' including up to £41.5m of support for smart energy system projects and ground-breaking, localised energy system demonstrators. Other relevant challenges have also been identified such as 'transforming construction,' 'healthy ageing,' 'next generation services,' and 'the Faraday Battery Challenge'. Further challenges may be added to the list in the near future. The ICSF is managed by a combination of BEIS and Innovate UK.

[11] https://www.gov.uk/government/collections/industrial-strategy-challenge-fund-joint-research-and-innovation

9.1.7 Salix funding

Salix Finance Ltd.[12] provides interest-free Government funding to the public sector to improve their energy efficiency, reduce carbon emissions and lower energy bills. Salix is funded by BEIS and was established in 2004 as an independent, publicly funded company, dedicated to providing the public sector with loans for energy efficiency projects. Given its longevity, Salix is one of the most popular, flexible and trusted funding sources in operation and can provide significant energy savings for any local authority, school, college, university or NHS Trust based in Worcestershire.

9.1.8 Heat network support

The Heat Network Delivery Unit (HNDU) has been running since 2013 and was set up to address the capacity and capability challenges which local authorities identified as barriers to heat network deployment in the UK.

Government is keen to support the development of heat networks because they can enable a transition to lower carbon heating sources, and can be effectively implemented using a variety of different heat supply technologies. Once the infrastructure is in place, even if carbon emitting fuel sources such as gas boilers are used to supply the heat initially, it will be possible in future to replace the central plant used to supply the heat with lower carbon options without causing any disruption to the homes or businesses supplied, therefore enabling easier decarbonisation of heat supply.

HNDU provides support to local authorities in England and Wales through the early stages of heat network development:

- Heat mapping
- Energy masterplanning
- Techno-economic feasibility
- Detailed project development
- Early commercialisation

This funding enables local authorities to explore the potential opportunities for heat networks within their towns and cities, and move from there through feasibility to initial commercialisation to a point where a local heat network may become commercially viable. HNDU grant funding can provide up to 67% of the estimated eligible external costs of these early stage development studies (meaning the money paid by the local authority to third parties to deliver the heat network development stages). The local authority will have to secure at least 33% in match funding.

Many of these studies have identified networks where the commercial returns are marginal, and are unlikely to be taken forward by the private sector; this has led to capital funding being made available by government to support these in order to overcome initial economic barriers to investment. This funding is known as the Heat Networks Investment Project (HNIP), and is a £320m capital investment programme providing support for the capital costs of heat networks. So far £24m of support has been provided to a total of nine local authority projects on an initial trial basis. The

[12] https://www.salixfinance.co.uk/loans

supported heat network projects provide heat to approximately 5,000 domestic customers and 50 non-domestic buildings.

In order to ensure carbon reductions, HNIP funding requires that heat networks must meet one of the following criteria for their heat supply:

- 75% of heat from non-renewable fuelled CHP
- 50% of heat from a non-renewable source
- 50% of heat recovered a waste heat source
- 50% of the heat from any combination of renewable/recovered heat and non-renewable fuelled CHP

This places some limitations on the type of networks that are eligible for support. HNIP will also only contribute a proportion of total eligible capital expenditure and this funding should be used to lever in other sources of funding.

The full HNIP funding scheme is open to applications from January 2019, with a quarterly review of applications and funding award. The application period runs to December 2021 with the scheme closing by March 2022.

Private sector investment

Where opportunities have been identified for businesses to improve their own energy efficiency or reduce energy consumption, there are potential funding routes available for them to implement some of these schemes that are financially viable. These may include energy efficiency improvements, heating system replacement or lighting upgrades through to more ambitious energy projects such as local heat networks.

'Green' finance has started to become more common, with funding offered specifically for energy related projects that can reduce energy consumption or carbon emissions. These loans often include attractive rates of interest for credit that is used for qualifying projects, and is typically appropriate for once a project is ready for implementation, rather than feasibility or early project development.

The Green Investment Group (formerly UK Green Investment Bank) offers finance specifically for energy projects and energy infrastructure, typically funding large-scale multimillion-pound energy projects including development funding, construction phase equity and debt and asset financing. Their main investment sectors are in onshore and offshore wind and investment in waste facilities including anaerobic digestion and energy from waste, however they also invest in a wider array of energy projects including energy efficiency, transport and energy storage.

There are also funding solutions from more traditional corporate banking known as 'green loans' which offer finance dependent on meeting environmental criteria for the planned use of funds. These can be used to support delivery of a variety of thematic projects including energy efficiency, renewable energy, green transport, sustainable food, agriculture and forestry, waste management and greenhouse gas emission reduction. This type of finance allows medium sized firms who do not have available capital to invest in these types of opportunities a bespoke funding route to delivery of their energy objectives. The implementation of new technologies such as LED lighting present opportunities for businesses to save significant amounts of energy and hence

also reduce their costs, with the costs and paybacks of these type of opportunities now well understood.

Large firms have been required to undergo an assessment under the Energy Savings Opportunity Scheme (ESOS) since July 2014 to identify potential energy savings measures that could then be delivered cost effectively to save both time and money. This type of opportunity identification has led to a number of energy projects being taken forward; the government is currently holding a consultation to better understand the effectiveness of the scheme to date. Firms that have undertaken an ESOS audit will have identified energy efficiency projects that may be easier to take forwards using third party funding.

9.1.9 Green Finance Taskforce

In March 2018 an independent taskforce established by Government reported on measures to accelerate green finance. The Green Finance Taskforce report sets out a series of recommendations on how the government and the private sector can work together to make green finance an integral part of our financial services. These include:

- boosting investment into innovative clean technologies
- driving demand and supply for green lending products
- setting up Clean Growth Regeneration Zones
- improving climate risk management with advanced data
- building a green and resilient infrastructure pipeline
- issuing a sovereign green bond

The response from Government to these recommendations should be monitored to identify any resultant changes in access to finance.

9.1.10 Other sources of funding

Other funding sources that may be relevant to the LEP and the energy and low carbon agenda are listed on the government website.[13]

[13] https://www.gov.uk/guidance/innovation-funding-for-low-carbon-technologies-opportunities-for-bidders