



Priority Axis 4: Supporting the Shift Towards a Low Carbon Economy in All Sectors; Guidance Advice

September 17

Changes to the Guidance from version 3

Investment Priority 4a

- The requirement to benchmark the low carbon strategy against 2013 data for local authorities has been removed.

Investment Priority 4b

- The support provided to SMEs has been widened beyond energy and can incorporate the CO₂e impact of wider resource efficiency such as CO₂e savings associated with water use, embodied energy in materials, waste and transport etc.

Investment Priority 4c

- The inclusion of standard retrofit technologies can be an eligible part of a project which incorporates either innovation or a whole place approach to the retrofit of domestic properties.

Investment Priority 4e

- The requirement to benchmark a low carbon strategy(s) against 2011 data for local authorities has been removed.
- Green and Blue Infrastructure can be a significant part of a whole place solution to support an approach to urban cooling.

Investment Priority 4a – promoting the production and distribution of energy derived from renewable sources.

Guidance

- Where a project is supporting micro generation only, the project value can have a total value of £500,000 instead of the standard £1 million as the nature of the project involves the delivery of small scale renewables which require a smaller project size.
- Within 4a projects can enable the installation of renewables of up to 5 Mega Watts.
- Projects can include small scale infrastructure which focuses on the development of supply chains or to unlock a larger scheme.
- Proposals must demonstrate how the activity will support the delivery of a local low carbon strategy. A low carbon strategy may cover a city, LEP area or down to a business park.
- The majority of projects that could come forward within 4a have the potential to apply for Feed in Tariff (FIT's) and/or Renewable Heat Incentive (RHI). While ERDF is the funder of last resort projects can still apply for ERDF even if FIT's and RHI are available. See below for clarification of how FIT's and RHI can be used alongside ERDF.
- Projects cannot apply for ERDF if they have or plan to apply for the FIT's. Where an applicant is applying for ERDF directly (they are the named organisation/ named delivery partner on the Grant Funding Agreement) for a heat based project, then the RHI can also be applied for, where the application for both funds is from the same named applicant/organisation. It is the responsibility of the applicant when applying to OFGEM for RHI to detail the amount of ERDF that has been granted, as there is a requirement to detail any other sources of public funding. Evidence of the OFGEM agreement should be provided and milestone date set within the grant funding agreement. Where the applicant to RHI is an SME for example, and has been given support from an ERDF business support project, e.g. an energy efficiency project in 4b then they would not be able to claim RHI due to the issue of double funding.
- Support for district heating is not predicated on the project being innovative: heat networks are an eligible activity as they provide the long-term infrastructure that facilitates the supply of low carbon energy. To enable heat networks to be delivered in urban areas and provide the effective delivery of low to zero carbon heat, the heat production should be from renewable and low carbon sources. Examples of low carbon heat sources can include gas-fired combined heat and power, waste heat, waste water heat and energy from waste; however this is not an exhaustive list. Where an existing unutilised heat source is in place then ERDF can be used to

support the installation of the heat networks infrastructure to capture that energy. Where this is being installed for the use of social housing then the internal infrastructure is also eligible to enable the most efficient use of the heat network.

- Where a proposal is coming forward with an innovative/ demonstration low carbon renewable technology, it would be expected that the technology will have gone from a design to proof of concept process. This should be verified through an independent assessment ideally by a university to ensure that the technology is viable. Consideration may be for an element of revenue to be made available for the technology to be independently assessed prior to investing in installation. Consideration will be given to support technologies that are not widely adopted in the UK but have been deployed within other countries.

Call Requirements for 4a

- [The Renewable Energy Directive \(2009/28/EC\)](#) provides a definition of energy from renewable sources'. It means energy from renewable non-fossil sources, namely wind, solar, aero-thermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases.
- Projects will need to evidence how they will support the [UK Renewable Energy Road Map](#). This will be achieved by detailing which of the key renewable energy areas they will be supporting:
 - Biomass Electricity
 - Onshore Wind
 - Offshore Wind
 - Marine
 - Solar PV
 - Renewable Heat
- Proposals will need to detail how the project supports the delivery of a named local carbon strategy.

Investment Priority 4b – Promoting energy efficiency and renewable energy use in enterprises

Guidance

- Support to SMEs can include the CO_{2e} impacts of resource efficiency which can cover the energy associated with water, waste, embodied carbon in materials, transport as well as direct energy etc.
- Proposals coming forward that incorporate capital support for SMEs for capital equipment or improving the energy efficiency of the building would need to demonstrate that a suitably detailed diagnostic had been undertaken, which would normally form part of a project's delivery.
- At full application, projects delivering diagnostic activity to SMEs should provide a detailed approach to how they would assess an SMEs viability for grant support.
- ERDF grant can be used to support standard retrofit for an SME.
- The expectation is that deep renovation would be delivered through a Financial Instrument not through an ERDF grant.

Investment Priority 4c – Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings and in the housing sector.

Guidance

- The Operational Programme particularly encourages ERDF to be used for innovation-based technologies and demonstrator activities.
- Within a whole building or place solution which incorporates an innovative technology ERDF may be used to contribute towards some standard retrofit activity such as loft, cavity wall insulation, double/ standard triple glazing, boilers, and solid wall insulation etc.
- Whilst ERDF can make a particular difference in encouraging innovative technologies there is also strong national evidence that innovative approaches will lead to higher uptake for energy efficiency in the long term. Therefore innovative approaches, such as new ways to combine a range of existing measures, will also be considered for ERDF funding.
- Some examples of innovation may include:
 - A housing retrofit project assesses homes in terms of the structural, technological and behavioural changes and installations that could bring about energy changes. A range of building fabric improvements are selected and deployed. Through procurement, a low carbon technology development partner is selected and a sample 20% of the houses are engaged in installing a near to market low carbon technology. Monitoring and evaluation compares the innovative technology group to the control group to assess benefits.
 - Solid wall insulation is an eligible activity and standard solid wall insulation can be supported, however it is expected that the use of solid wall will be applied through an innovative approach and/or as part of a whole place solution to support the installation of innovative low carbon solutions.
 - A solid wall insulation project may challenge the supply chain through procurement to bring forward for trial more sustainable, carbon neutral and thinner insulation boards.

- A project may procure for a solid wall scheme from the market to deliver an off site solution to retrofit where previously traditional ‘built on site’ methods have led to significant costs and delays, which has acted as a disincentive.
- To provide clarity on whether a building can be considered public will depend on whether the organisation itself is considered “Public”. For this to be the case the organisation has to directly or indirectly receive over 50% of its main funding from central or local government. (This does not include payment for work carried out by private enterprise for the public sector.) To decide if an organisation can be defined as Public, work out their previous year’s receipts, excluding any EU monies, and the income forecast for the following year, again excluding any EU monies. If over 50% of the net amount (after deductions) comes from central or local government sources, they will be considered “Public” and by default their buildings.
- Public Buildings cover a wide range of buildings and organisations who occupy them. The application of an ERDF grant to support low carbon activity on a public buildings would need to demonstrate clearly why:
 - The use of a financial instrument has not been utilised;
 - A capital loan to deliver the activity has not been applied for which could be repaid through FIT’s/RHI and/or through savings made.
- The use of grant based support by ERDF to support the application of energy efficiency, renewable energy or smart energy management should be to deliver demonstration and applying innovative low carbon technologies across housing and public buildings.
- Revenue based projects could be supported where they provide advice and support to a wide range of public buildings above and beyond what is currently provided. Applications would need to clearly demonstrate that they are not duplicating or subsidising existing provision.

Investment Priority 4e – promoting low carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation- relevant adaptation measures

Guidance

- Investment Priority (IP) 4e aims to deliver a holistic approach within a defined area to reduce greenhouse gas emissions across a range of thematic areas to create an integrated approach to reducing emissions. Whilst in some instances the implementation of individual low carbon activities can bring significant greenhouse gas reductions, an integrated approach which combines several connected measures within an area is likely to generate greater impacts in the short and long term, and maximise the value of investments.
- In order to deliver this integrated, whole-place approach, it is therefore a requirement under IP4e to have in place a low carbon strategy(s) that will provide a framework for measuring activities that reduce CO₂ emissions. In practice, since local areas already typically plan on this integrated basis, it is expected that the majority of activity could be covered by existing plans. These plans can include:
 - Local Authority or locally agreed Low Carbon Strategy
 - Low Carbon Energy Strategy
 - Low Carbon Transport Strategy
 - Low Carbon Housing Strategy
 - Covenant of Mayor Strategy
 - University Low Carbon Strategies
 - Low Carbon Strategy for a Business/ Industrial Park
- Where an existing low carbon strategy doesn't cover the full breadth of the activity proposed, the use of supplementary strategies can be combined to deliver a whole place approach. The agreement of the ERDF Managing Authority should also be obtained in this instance.

- Where the purpose is to reduce whole place energy requirements or carbon emissions, green and blue infrastructure and other climate change mitigation or adaptation activities are important components.
- Within the outline & full application proposal will need to detail which low carbon strategy(s) will be used as the framework to deliver the activity.
- It is expected that the strategy will cover a geographically defined area. Since a low carbon strategy and related CO₂ reduction measures will typically cover areas where there is a greater concentration of infrastructure, such areas will tend to be predominantly urban. This does not exclude peri-urban or rural areas where CO₂ reduction measures may also be appropriate. The extent of this geographical area will be defined by the scale and type of activity being proposed. Where the primary focus of the strategy is low carbon transport for example, the geographical scale may be considerably larger than the delivery of low carbon energy solutions element which could have a more closely defined area.
- To deliver a whole place solution it is expected that a strategy will focus on a least two thematic areas to deliver an integrated approach. It is expected that energy efficiency/renewable technologies or low carbon transport activity would form the lead thematic areas. An impact of urbanisation has been the creation of urban heat islands, where the temperatures can be higher than surrounding rural areas and the impacts of climate change may well exacerbate this. The use of green & blue infrastructure can have a significant impact on modifying the heat island effect by absorbing heat and releasing it slowly back. The use of green and blue infrastructure can be delivered strategically as part of a whole place solution, as only through a strategic approach can Green Infrastructure have an impact on the urban heat island effect.

Call Requirements for 4e

- Calls will need to detail that a whole place solution is required which focuses on more than one thematic low carbon activity e.g. not just low carbon transport.

Investment Priority 4f – Promoting research and innovation in, and adoption of low carbon technologies.

Guidance

- Where a project is working with an SME on a low carbon technology, the project may not be able to report CO₂e savings as they are working with business on the low carbon products and the saving generated by these cannot be evidenced.

Call Requirements for 4f

- The call should detail that applicants will need to reference how the project is consistent with the priorities in [England Smart Specialisation Strategy](#)
- Applications will need to reference how the activity being undertaken will support the strategic framework, and the underpinning technology focus areas of the [Low Carbon Innovation Coordination Group](#).

Technical measurement factors across all Priority Axis 4 Investment Priorities

- The measurement of greenhouse gases should be through CO₂e where the e' refers to equivalent. Carbon dioxide is one of a number of greenhouse gases such as methane. Where carbon dioxide has a value of one, methane for example is 21 times a more potent greenhouse gas and therefore CO₂e incorporates all other green house gases and is used in standard conversation factors.
- Projects detailing CO₂e savings will need to provide a breakdown of their methodology, detailing how the savings will be generated and measured.
- Projects will need to use [BEIS Conversion Factors](#) as part of the methodology. For DEFRA figures the scope of the CO₂e emissions will need to be detailed. The definition of scope of CO₂e emissions are:
 - **Scope 1:** All direct GHG emissions.
 - **Scope 2:** Indirect GHG emissions from consumption of purchased electricity, heat or steam.

- **Scope 3:** Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

Terms

- **Whole Place Solution** - This means the combination of a number of actions within a building or within a location as part of a low carbon strategy where the actions combine to deliver an integrated approach.
- **Standard Retrofit** – The application of measures that deliver basic energy efficiency in buildings that can include the standard application of cavity wall insulation, double & triple glazing, boiler replacement for example.

The changes to this guidance can be applied retrospectively to projects already contracted and those about to be contracted or under appraisal, subject to approval of a change control.