



EUROPE & SCOTLAND
European Regional Development Fund
Investing in a Smart, Sustainable and Inclusive Future



Low Carbon Infrastructure Transition Programme
Scotland's Development Unit for Low Carbon Projects
Scottish Low Carbon Heat Funding Invitation
Guidance Notes

Guidance

Contents

1. [Lead Organisation](#)
2. [Project Partners](#)
3. [Who can apply?](#)
4. [Description of FTEs](#)
5. [Guidance note on investment, financial planning, business model and financial due diligence for the project](#)
6. [Anticipated CAPEX of the project](#)
7. [What type of financial support is available to projects?](#)
8. [State Aid](#)
9. [Developing an Investment Grade Proposal](#)
10. [Project Programme](#)
11. [Identifying direct beneficiaries of the project and any subsequent indirect impacts](#)
12. [Consents](#)
13. [Project risks, risk management and mitigation](#)
14. [Relevant skills and any gaps within the project team](#)
15. [Guidance for Estimating Carbon Impact of Projects](#)
16. [What do we mean by Innovation?](#)
17. [LHEES & Energy Efficient Scotland](#)
18. [Partnerships](#)
19. [How can I demonstrate the Replicability of my Project?](#)
20. [What should I include in the Effective Dissemination Strategy?](#)
21. [Demonstrating Economic Impact of Projects](#)
22. [Demonstrating Social Impact of Projects and Alleviation of Fuel Poverty](#)
23. [Demonstrating Effective Community Engagement](#)
24. [Community Investment and Shared Ownership](#)

1. Lead Organisation

The lead organisation should be the organisation that absorbs the risk, has the the rights and responsibilities in regards to the project during delivery process, and is responsible for the 50% match funding in terms of sharing of financial risk.

The lead organisation will be responsible for all aspects of the management and delivery of the project including, in the majority of cases, accepting responsibility on behalf of the consortia for any funding and any associated conditions of funding.

2. Project Partners

LCITP expect project partners to be in a cooperative relationship comprising people or groups who are prepared to contribute resources to their shared project, share in development risks and or anticipated benefits, profits and losses, and are individually liable for the entity's (projects) actions in relation to any support ultimately offered from LCITP. Where evidence is available to substantiate the partnership, for example, a contract, applicants should submit a copy along with the application.

3. Who can apply?

Applications for project support are accepted from organisations such as:

SMEs - [What is an SME? - European Commission](#)

Large Enterprises

Community groups

Registered charities

Social Enterprises/Development Trusts

Community Benefit Societies

Community Interest Companies

Local Authorities

Public sector organisations

Registered Social Landlords

Academic institutions

Inward investment is eligible provided the Project is entirely delivered in Scotland.

4. Description of FTEs

- Full-time Equivalent (FTE) jobs – this is a count of employment to adjust for part time working. It is the number of full time equivalent hours worked divided by the average weekly hours in a full time job
- Full-time jobs – a member of staff working a minimum of 35 hours per week (though the definition on this can vary across companies)
- Part-time jobs – a member of staff contracted for less than 35 hours per week (though, again, the definition can vary across companies)

5. Guidance on Investment, Financial Planning, Business Model and Financial Due Diligence for the Project

At Demonstrator stages we would expect financial modelling to include:

- Robust financial modelling
- sensitivity analysis on the key project risks

Please ensure your financial model:

- Ties in to the figures set out in the application
- Covers the construction and commissioning period on a monthly basis and the operating period on a quarterly basis
- Shows all expected capital expenditure, showing a monthly profile of the construction and commissioning phase
- Shows all finance cashflows (debt/equity/grants/etc.), including a monthly drawdown profile of the construction and commissioning phase, interest payments, dividend and repayments
- Includes return on investment calculations in the form of IRR and NPV calculations, and the model should be able to show any debt servicing ratios where the project has external debt/equity
- Includes all expected revenues (including incentives) for the project with each line item shown separately
- Includes all expected costs of the project with each line item shown separately
- Is dynamic (i.e. calculations do not contain hardcoded figures) and allows for sensitivity testing of key assumptions (including inflation)
- Includes a databook and assumptions

6. Anticipated total CAPEX of the overall project

CAPEX is an abbreviation for "capital expenditure". In relation to low carbon projects this is the overall build cost, which is intended to be the anticipated spend to acquire, upgrade or maintain depreciable and tangible long-term physical assets over the construction period of the project. If this figure is unknown, please provide your best estimate (this could be a value or a range).

7. What type of financial support is available to projects?

LCITP support will be provided on a co-funded basis. This approach encourages the growth of co-funding and allows for risk-sharing between LCITP and low carbon projects. A shared approach to project investment also accelerates the delivery of projects and enhances the quality and delivery of the objectives. Please note that historic/previous project spend cannot be considered as part of co-funding arrangements.

The financial support represents a funding contribution of up to £10 million per project, where the contribution represents up to a maximum of 50% of total CAPEX costs. The project must be able to demonstrate through legally executed agreements it has secured a minimum of 50% match capital for the project before any LCITP offer of funding could be drawn down.

Type of Funds: Repayable Assistance.

A pre-grant condition, for all projects seeking grant funding through LCITP, requires projects to have secured all match funding before a final grant offer letter is presented to projects. Evidence of the match funding, through legally binding agreements, must be in place and will be requested as part of the due diligence process. Following confirmation of the match funding from the projects, the final grant offer letter will be signed by both parties at an agreed date, time and venue.

Enabling Support: projects may be considered for enabling support up to as contribution towards consultancy costs and project management costs, enabling costs will be established as part of the application process.

Eligible Capital Costs

In line with the requirements of the European Regional Development Fund (ERDF) and the UK National Rules governing ERDF, the eligible capital costs are:

- financial costs incurred for the purchase of physical assets;
- costs of project build, installation and construction;
- costs of project deployment and commissioning;
- non reclaimable VAT for eligible capital costs;
- staff costs where staff members are contracted to work 100% on activities funded by LCITP capital support.
- receipted essential subsistence costs – only including essential travel and reasonable accommodation costs – will be considered in line with ERDF requirements and associated UK National Rules, which includes the requirement that all costs directly relate to the specified capital project.

Ineligible Project Costs

Ineligible project costs include but are not limited to:

- costs incurred prior to the agreed project start date;
- costs for work undertaken after the contractual end of the project;
- costs and fees for feasibility, development and design for the project;
- staff costs where staff members are not contracted to work 100% on activities funded by LCITP capital support;
- notional costs and in-kind contributions;
- any VAT reclaimable by the grantee for eligible capital costs;
- any non- essential subsistence costs, meal allowances are not permitted;
- interest and service charges arising from hire purchase, leasing or credit arrangements
- advertising, marketing and entertaining;
- profit earned by a subsidiary or related enterprise or person(s) in providing materials, sub-contracting, consultancy or trials/testing;
- Directors' dividends;
- certification fees;
- inflation and contingency allowances;
- costs of printing operating, service and maintenance manuals;
- costs of licensing in background intellectual property when the intellectual property is being licensed from a subsidiary or related enterprise or person(s);
- training costs related to sales or distribution of the developed product, process or service;
- the purchase of land and buildings;
- the cost of preparing LCITP application;
- recruitment and relocation costs;
- other expenses beyond those outlined in the eligible cost section above;
- costs associated with purchase fees for necessary licenses or other consultancy fees;
- statutory activities including Grants In Aid (GIAs), consents and planning activities.

PLEASE SEEK CLARIFICATION FROM LCITP IF YOU ARE UNSURE OF THE ELIGIBILITY OF PROJECT COSTS

8. State Aid

State Aid is a European term which refers to forms of public assistance, given to undertakings on a discretionary basis, which has the potential to distort competition and affect trade between Member States of the European Union.

The State Aid rules are set by the EC and comprise various articles of the Treaty on the Functioning of the European Union (TFEU), Regulations, Frameworks and Guidelines - which set out what aid *can* be given and under which circumstances. The EC governs Member States' compliance with these rules and many aid measures must be notified to the Commission for approval.

All financial support provided under LCITP will be in compliance with State Aid rules. Financial support may be provided within the limits set out in the following scheme notified to the European Commission under Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the common market in application of Articles 107 and 108 of the Treaty – General Block Exemption Regulation (GBER).

Appropriate cover for LCITP has been provisioned for under the General Block Exemption Regulation [[GBER](#)] and a registered scheme has been approved by the Commission - SCHEME REFERENCE NUMBER: SA.41844. This allows for public funding to be given to successful applicants under the specific articles we have cover for using the attached aid intensities. For some of these articles there are special uplifts depending on company size, and whether it is located in an assisted area [[Regional Aid map](#)]. The remainder of the funding for successful applicants must then come from private resources.

Awards will be made under the most appropriate Article of the GBER as it is recognised that each project circumstances will be unique. LCITP will make the final decision on the most appropriate Article in the case of each project.

Please note that no uplift to any Article will be applied if it were to take the LCITP contribution above the maximum permitted 50% of total CAPEX costs. This will not apply to this invitation for funding and we reiterate that the maximum award of up to £10m cannot exceed 50% of the total anticipated Project CAPEX.

If any aid granted is found to be illegal it is the responsibility of the project to repay it and not the Scottish Government

The European Commission have sole competence on the presence of State Aid however it is the responsibility of the Member State to ensure compliance of this. Any queries on this topic must be made to the funding body (Low Carbon Infrastructure Transition Programme - Email: LCITP@gov.scot / Postal address: LCITP Project Team, 4th Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow G2 8LU) in the first instance who will then liaise with State Aid colleagues where appropriate.

9. Developing an Investment Grade Proposal

Demonstrator applications will not be considered under this invitation for funding unless accompanied by a full investment grade business proposal.

Applicants should be able to identify the expected benefits that a project will deliver. These should be expressed in measurable terms against the situation prior to the project being

delivered. At Demonstrator stage where possible quantitative benefits should be estimated e.g. CO2 reduction, quantum of energy supply and/or energy demand reduction in kw/h, and economic benefits in £ and jobs created.

Business cases provided with LCITP support should include the benefits that would be achieved by the project's successful outcome, whilst also defining how the measurement of the improvement can be made.

LCITP has produced high level guidance on the probable content of a business case and proposition to prospective investors. The [Developing a Business Grade Proposal](#) guide is an organised list of information that projects can consult to determine if they have sufficient information available to produce an investment grade proposal, or what they may be required to produce to reach such a stage.

10. Project Programme

The Project Programme is used to forecast, track and monitor the progress and delivery of the project and resulting outcomes. This should include:

- timescales and sequences
- key dates for approvals and deliverables
- inter-dependency relationships

At Demonstrator stage this will include significant detail, breaking tasks down into sub tasks and highlighting interdependencies.

The Project Programme should also include details of the individual with responsibility for taking forward and completion of a particular task or project milestone e.g. the Project Manager or another names individual. This is to ensure clear lines of responsibility and provide LCITP with reassurance that the governance structure and processes in place to monitor project progress is adequate.

11. Identifying Direct Beneficiaries of the Project and any Subsequent Indirect Impacts

Applicants should list the direct beneficiaries of the project, including relevant project partners and other individuals and organisations that stand to gain from the project's objectives. Also consider indirect beneficiaries resulting from the project, for example wider impacts upon the local area (including businesses, local groups and individuals in the community), the scope for knowledge sharing with stakeholder groups, any benefits to Scotland at a national level, or any other resulting benefits as appropriate.

You should also be able to specify the end user(s) and end use(s) of the energy being created by the technology being demonstrated.

Applicants must also provide clear evidence and detail of any and all market testing taken place to assess local support and uptake for the project i.e. public consultation exercises. Examples of this commitment might include confirmed end users and a commitment to enter into heat purchase agreements.

12. Consents and supply agreements

The type of consents and nature of issues will vary from project to project. Where more detailed information is available we ask projects to provide in the application a fuller understanding of the consenting position to inform our assessment of project viability.

Consider the following and provide additional information where available:

- What consents/ licences/ third party authorisations are required for this project?
- Who is the consenting authority?
- Will the applicant for your capital call be the party applying for and controlling the consent/ licence application process, or will consents be obtained by third parties?
- If consents have yet to be obtained, at what stage are you in the application process? Is an inquiry a requirement of the application process? Is a planning obligation or other legal agreement with third parties a requirement of the application process?
- If consent has already been obtained, what is the timescale for implementation? Are there any outstanding conditions or obligation to be discharged prior to implementation? If, so please provide details. In whose favour have consents been granted? If to a party other than the applicant, what is the assignation process?
- Is your development consent limited in duration (e.g. 25 years, shorter period – may strike at assessment of longevity of asset).
- Have all land rights been secured for implementation of relevant consents?

Please provide any other relevant information about the consenting and/ or licencing requirements for this project which may be relevant to consideration of your application.

Please also provide details of any supply agreements in place with end users and/or network operators. If the terms of agreements are yet to be finalised, please provide signed heads of terms, a signed memorandum of understanding or similar.

13. Project Risks, Risk Management and Mitigation

The purpose of this section is to understand the risks associated with the project and understand how LCITP support can help manage and mitigate these risks. The applicant should highlight key risks associated with the project. Cover technical risks and commercial risks (e.g. significant cost overruns/project delays), but do not necessarily limit your analysis to these topics.

At Demonstrator stage this will involve significant detailed risk analysis. Please provide a copy of the project risk register. The items the risk register should include as a minimum are:

- a unique reference
- a description of the risk
- probability of the risk occurring
- impact on the project should the risk materialise
- overall score (which will incorporate probability and risk)
- an indication of how these will be managed and mitigated
- score post mitigation
- risk actionee
- risk owner
- current status of the risk

14. Relevant Skills and any Gaps within the Project Team

The purpose of this question is to understand what skills currently exist within the project team/consortium and the role of partners. Also, the skills and resource gaps that require to be filled in order to successfully deliver the project. This will help LCITP understand the nature of the required support and how LCITP may be able to provide it.

The skills will vary depending upon the nature of the project however some examples are:

- financial expertise
- technical expertise (which may be general or in relation to a specific technology)
- legal expertise
- project management

Projects must provide a one page pen profile CV's for all members of the Project Team. This will allow LCITP to assess whether the project team has the correct mix of skills and experience to successfully deliver the project within the required timescale.

15. LCITP Guidance for Estimating Carbon Impact of Projects

The application should contain robust evidence of the potential of the project to contribute to the reduction of greenhouse gas emissions in Scotland. This generally means an estimate of reduction in carbon dioxide equivalent for the project.

Carbon Dioxide Equivalent

The use of fuels leads to emissions of carbon dioxide (CO₂) and small quantities of other greenhouse gases– including methane (CH₄) and nitrous oxide (N₂O). For a given quantity of a gas, the equivalent quantity of CO₂ that would be needed to give the same greenhouse effect can be calculated using its 'global warming potential'. This quantity is quoted in units of kilograms carbon dioxide equivalent (kgCO_{2e}) and factors are published on the Department for Business, Energy & Industrial Strategy (BEIS) Greenhouse Gas Conversion Factor Repository <http://www.ukconversionfactorscarbonsmart.co.uk>. The energy conversion factors are quoted as total direct per unit of fuel.

These factors are used to calculate the carbon footprint of the Business as Usual (BaU) case or conventional fuel source/s and the Low Carbon project proposal. The applications should clearly show the potential savings or carbon footprint reduction.

This can be calculated using the method below:

1. Business as Usual energy use (kWh) x energy conversion factor for fuel source (for appropriate year) = Business as Usual kgCO_{2e} emissions
2. Low Carbon Project energy use (kWh) x energy conversion factor for fuel source = Low Carbon Project kgCO_{2e} emissions
3. Business as Usual kgCO_{2e} emissions - Low Carbon Project kgCO_{2e} emissions = Savings in kgCO_{2e}emissions resulting from Low Carbon Project.

This is shown in the worked example below:

The energy conversion factors used in this example are listed in the table below:

Fuel Source	Energy conversion factor
Burning Oil	0.24675
Grid Electricity	0.2556
Biomass (Pellets)	0.01563

Worked example - A district heating scheme is proposed for an area serving a mixture of social housing and public buildings that are off gas grid and currently heated by oil fired boilers. The annual heat consumption for the properties is 18,000MWh and the proposal is to

serve these properties via a district heating network fed by a combination of a biomass boiler and a water source heat pump. The carbon benefit estimate is presented in the table below.

Fuel Source	Conventional – Current/existing kWh	Energy conversion factor	Conventional – Current/existing kgCO _{2e} (A)	Proposed kWh	Proposed kgCO _{2e} (B)
Burning Oil	18,000,000	0.24675	4,441,500		
Grid Electricity		0.2556		4,400,000	1,124,640
Biomass (Pellets)		0.01563		7,000,000	109,200
Total	18,000,000		4,441,500	11,400,000	1,233,840
Saving (A-B)					3,207,660

Project Lifetime Savings

LCITP will estimate lifetime CO₂ savings based on appropriate persistence factors (PFs) to the annual savings.

16. What do we mean by Innovation?

In light of the ongoing challenges in addressing heat decarbonisation this invitation has been designed to target projects that deliver for decarbonisation of heat specifically. This financial support has been designed to encourage innovation of technology, design and business models. The financial support focuses on low carbon heat generation solutions and measures which will support the decarbonisation of heat in Scotland. As a result this will contribute to Scotland's carbon reduction ambitions. The aim of this invitation is to accelerate the delivery of new low carbon energy solutions that support the Scottish Government's Climate Change ambitions.

Successful project applications will be innovative in design incorporating one or more low carbon technologies, demonstrating economic, social and low carbon benefits for Scotland

You should use this section to set out new ideas, device/technologies, or methods or unique business models or partnerships that make your application innovative. LCITP is particularly interested in low carbon solutions that meet new market requirements, or new ways of meeting existing market needs.

Please use the link below to select the Technology Readiness Level that applies to the Project for which you are requesting LCITP support and include in your answer to this question on the application form.

https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf

There is a word limit of 250 words associated with this section.

17. LHEES & Energy Efficient Scotland

The Scottish Government have proposed that Local Authorities have a key role to play in the delivery of energy efficiency and the decarbonisation of heat. We have provided details of these proposals in our [Energy Efficient Scotland Routemap](#).

To help coordinate local delivery of heat decarbonisation and energy efficiency, we have also consulted on the possible introduction of a statutory duty for Local Authorities to produce a local heat and energy efficiency strategy (LHEES). Each local authority would assess the building stock across its area, identifying the potential for improvement in energy performance of buildings and low regrets opportunities for heat supply decarbonisation. The strategy would allow local authorities to prioritise delivery programmes over a 15-20 year period and designate zones that set out the most appropriate energy efficiency and heat decarbonisation options for the area, providing valuable market information to investors.

The initial scope and context of LHEES was set out in the Scottish Government's policy scoping consultation paper on *Local Heat & Energy Efficiency Strategies, and Regulation of District Heating* (published January 2017). Our response to this consultation has been published as part of a [subsequent consultation](#) on our proposals during Autumn 2017.

In 2017, as part of the SEEP Pathfinder fund, 12 Local Authorities were supported financially to test the LHEES concept. The aim of the pilot projects is to improve our understanding of the tools, data, skills and resources required for local authorities to deliver such strategies, should they be introduced as a statutory duty.

As set out in our second consultation, we would envisage that prior to the introduction of LHEES, all local authorities would have the opportunity to pilot approaches.

Alignment with capital projects

Not all Local Authorities have developed an LHEES covering their entire local authority area. However where local plans and strategies exist, we are keen to ensure that projects applying for capital support have engaged with local authorities and any other relevant partners, and provide evidence of this in their application.

A list of local authority contacts can be found [here](#).

There is a word limit of 250 words associated with this section.

18. Partnerships

Where the project is to be delivered by project partners, please provide a copy of your Joint Venture Agreement, Memorandum of Understanding or any other relevant document evidencing the project partnership detailing, clearly, the role of each partner in delivering the project.

As a minimum requirement, you must also provide signed heads of terms, a letter of intent (or similar) confirming that you have a customer/end user for the energy produced by this project. **(See Guidance Note 10)**

19. How can I demonstrate the Replicability of my project?

Projects supported should be able to demonstrate that they have significant commercial potential for further roll out if demonstration is successful.

Projects should look to clearly state the potential markets for future roll out and indicate the potential scale of future opportunities.

There is a word limit of 250 words associated with this section.

20. What should I include in the Effective Dissemination Strategy?

Sharing the learning from and between projects that are funded through LCITP is a key aim of the programme.

Please use this section to advise how you will share the findings from your project at both a local and national level. Please note that highlighting barriers and challenges that you require to overcome will also be of value. Projects should identify the groups/audiences that they will look to target and include information about how they will be in a position to “influence” and “bring about change” within their organisations/area.

Please state in your answer whether you plan to write articles; publish case studies; present at seminars, conferences; provide training / workshops; allow tours of the new facilities etc

There is a word limit of 250 words associated with this section.

21. Demonstrating Economic Impact of Projects

The application should, where possible, quantify the economic impact of the overall project to Scotland. Details of positive economic impact should seek to cover:

- Capital investment and Scottish supply chain impact (e.g. proportion of capital expenditure expected to be retained in Scotland, key Scottish suppliers)
- Number of full-time equivalent (FTE) jobs to be safeguarded (split by direct employees and contracted workers)
- Number of additional FTE jobs to be created (split by direct employees and contracted workers)
- Expected increase in sales/turnover as a result of the project
- Potential for replicating projects in other parts of Scotland
- Potential to access any international market opportunities from the model being delivered more widely; and
- Expected savings related to improved infrastructure, e.g. per annum reduction in energy costs

The application should also provide details of any wider economic benefits associated with the project. Where it isn't possible to quantify the economic impact of the project, the application should clearly articulate in qualitative terms how the project is expected to deliver a positive and significant economic impact to Scotland.

22. Demonstrating Social Impact of Projects and Alleviation of Fuel Poverty

The application should provide details of social impact associated with the project. LCITP wishes to maximise the social impact from projects – positive benefits felt by the wider community of an area. Such impacts may include local regeneration, culture and heritage, social care, social inclusion, poverty mitigation, local services, and recreation. Identify any non-financial benefits which may be realised through the project and how these may improve quality of life or encourage behaviour change etc. For example, this may cover the number of beneficiaries, volunteers, learners, trainees, participants, or the impact upon local services or amenities. Consider any further qualitative benefits and list these as appropriate.

See <http://www.hie.co.uk/common/handlers/download-document.ashx?id=83fb11e0-2884-4715-bca7-400c2f31557c> for more information.

- **Fuel Poverty**

Higher fuel costs, lack of access to the mains gas grid, premiums on energy, a challenging housing stock and difficulty getting companies delivering energy efficiency measures to operate in some areas are a few of the difficulties faced by rural communities across Scotland and in particular the Highlands and Islands.

With so much of the grid network in Scotland 'constrained' – i.e. operating at full capacity or unable to take any more generation, grid reinforcement (to increase capacity) or network innovation (to allow more connection and network use without destabilizing the system) is central.

Communities across the Highlands and Islands and rural parts of wider Scotland face grid constraints which prevent them from maximising the benefits from their local renewable energy resources. As a result communities have been investigating alternative models for using energy locally to derive both social and economic benefits for the region.

Within your application you should provide detail on the area where your project will be located and what the current level of fuel poverty is in that area – detailing what is the main source of fuel used and how your project will help to alleviate fuel poverty and how this could be replicated more widely across Scotland. Include information on the wider economic, social and community benefits your project will have from the alleviation of fuel poverty.

23. Demonstrating Effective Community Engagement

LCITP looks for applicants to demonstrate that community engagement is being undertaken. The degree of community engagement should be appropriate to the particular stage of the project is at the time of making an application.

Ideally, engagement should start as early as possible and should continue throughout the development phase of the project.

When planning initial community consultation, it may be helpful to consider:

- a) What should be the geographical area to engage?
- b) Within that area, who should be the appropriate contacts and communities of interest for consultation?

For more information on identifying stakeholders, see Scottish Government Good Practice for Community Benefits available at www.localenergyscotland.org/goodpractice

24. Community Investment and Shared Ownership (taken from the Scottish Government Shared Ownership Principles)

There are now a variety of ways in which local people can engage with the low carbon sector. Shared ownership projects, where the community is involved as a partner rather than a passive recipient of funds, can have mutual benefits for both local people and commercial developers. We believe shared ownership of energy projects offer Scotland the opportunity for improved community empowerment, a leading and respected low carbon industry and increased local economic and social benefits.

Information provided about community investment and shared ownership in response to Q 8.2 will be used to contribute towards policy development in this area.