

# Scotland's Energy Efficiency Programme Pathfinder Fund Pilot Projects 2017-18 Stage 2 Application Form



The SEEP Pathfinder Fund Pilot Projects 2017-18 Stage 2 Application Form seeks to obtain more information about your project following your expression of interest at Stage 1. The application form is split into five parts:

- **Part A** seeks details of the local authority (consortia) making the application and key staff.
- **Part B** seeks to identify how the project meets the eligibility criteria for the SEEP Pathfinder Fund and how it can contribute to the development of SEEP.
- **Part C** seeks information on the proposed project.
- **Part D** seeks information on the deliverability and risk involved in the project.
- **Part E** seeks information on how the project will be monitored and evaluated.
- **Part F** seeks certification by the local authority lead officer.
- **Part G** provides instructions for the submission of completed application forms.

## Part A: Local Authority Consortia Details

<b>A1:</b> Name of lead partner:	Aberdeen City Council
<b>A2:</b> Lead partner address:	Marischal College, Board Street, Aberdeen, AB10 1AB
<b>A3:</b> Lead partner contact:	Terri Vogt
<b>A4:</b> Job title:	Programme Manager - Powering Aberdeen
<b>A5:</b> Telephone number	01224 522 677
<b>A6:</b> Email address	<a href="mailto:tevogt@aberdeencity.gov.uk">tevogt@aberdeencity.gov.uk</a>
<b>A7:</b> Name(s) of partner organisation(s)	Stirling Council, Highland Council, Dundee City Council, Perth and Kinross Council, Scottish Cities Alliance (SCA). All of the partners have provided letters of support which are included within Appendix A.  The City of Edinburgh Council and Glasgow City Council have agreed if they are successful in their bid to take forward their SEEP LHEES projects to share the learning and knowledge gained from the process.
<b>A7:</b> Type of organisation (e.g. SME, third sector)	Public sector
<b>A8:</b> Partner's role in the project	The City Councils will act collaboratively to deliver this project with each Council completing the work defined within the methodology section within the geographic area detailed below. This will test the project approach across a range of city areas and ensure that learning from the project is widely shared. The Scottish Cities Alliance will support the cities to complete this work through the Low Carbon Project Manager who has worked with the cities on a number of collaborative projects under the theme of energy efficiency and low carbon heat. The SCA as part funder of this project will use its reporting mechanisms to update both the SCA Delivery Group – Senior City Council Managers and Leadership Group – Elected Leaders of the Councils and Chief Executives of the progress of the project and track the associated budget.
<b>A9:</b> Outline the contract/agreement between partners in relation to the project, including how it will be governed.	<i>Please see paragraph 5 of eligibility criteria in call document<sup>1</sup> (page 5)</i> Aberdeen City will lead on behalf of the City Councils and will be responsible for procurement of consultancy support on behalf of the other cities, managing the overall project and reporting on progress with support from the SCA Low Carbon Project Manager. The relationships between the partners will be managed through the SCA governance structure. The SCA was established in 2011 to progress the Agenda for Cities, the City Councils alongside Scottish Government are all members of the SCA, and have agreed at the SCA Delivery Group level to progress this project which fits with the current SCA Low Carbon Work Programme. SCA original signed protocols can be found at- <a href="http://www.gov.scot/Resource/Doc/365367/0124252.pdf">http://www.gov.scot/Resource/Doc/365367/0124252.pdf</a> and updated protocols have been attached as Appendix B. The city leads on this project are members of the SCA Low Carbon Working Group an operational group which drives forward the Low Carbon Work Programme of the Alliance which meets every 3 to 4 months. Aberdeen City Council will report project progress at these meetings and each participating city will contribute to the update in relation to progress in their own pilot areas. Updates

<sup>1</sup> <http://www.gov.scot/Resource/0051/00514144.pdf>

	<p>on progress will also be provided to the SCA Delivery Group that also meets approx. every 3 months. The SCA Delivery Group and made aware of any issues or risks which may impact on the project. Periodic reports will also be provided to the SCA Leadership Group to ensure senior level oversight of the project. The match funding of £125k required for this project was approved at the SCA Delivery Group on the 25<sup>th</sup> of April 2017 (Appendix C – email confirming funding approval). Monthly update reports will be provided to the SCA core team finance officer via Aberdeen City Council on the budgetary progress of the project.</p> <p>Any enquiries and complaints will be dealt with at the local level, but each City Council will advise the SCA Low Carbon Working Group of these issues and their resolution and if required the matter will be taken to the SCA Delivery Group for escalation.</p> <p>The SCA will work with the City Councils communications professionals to ensure that the project is communicated appropriately and a communications plan will be developed for each geographic region.</p> <p>The proposed project is to develop Local Heat and Energy Efficiency strategies (LHEES) for a number of pilot areas in the participating cities. The output from the project will include outline implementation plans for each area. The implementation of the opportunities identified in the LHEES is outside of the scope of this project.</p>
<p><b>A10:</b> Signature from Director of Finance (or equivalent)</p>	

**Part B: Project relationship with SEEP (please complete a separate Part B for each significant element of the project)**

<p><b>B1:</b> How does the project meet the categories and objectives of the SEEP Pathfinder Fund</p>	<p><i>Please outline which category (or categories) from the Phase 2 call document into which your project fits and how it meets the objectives of the call. (pages 2 – 4 of the call document)</i></p> <p>This pathfinder project will support five of the Scottish cities to determine how best to produce one of the core building blocks of Scotland’s Energy Efficiency Programme namely Local Heat and Energy Efficiency Strategies (LHEES). The objectives of the project will be to test the development of LHEES and the associated implementation plan which will support the development of an appropriate LHEES methodology – which can be adjusted to local circumstance but which meets national priorities. Locally focused delivery programmes will also be designed to take forward the implementation of LHEES considering opportunities for collaboration to achieve scale where appropriate.</p> <p>The project will help develop the methodology and evidence base to support zoning and phasing of areas for energy efficiency delivery programmes and for appropriate heat decarbonisation delivery programmes. The emphasis for each city will be different and form the necessary understanding to be able to develop a full LHEES at a later date. There will be a focus on ensuring the strategy can be delivered. The project as completed on a geographic basis will include all building types in these areas and consider the best solution to meet the multitude of needs across different sectors, building types and occupants including options for integrated approaches where most appropriate.</p> <p>When developing the LHEES for a given area the City Councils will have to consider technical, social and economic considerations to allow them to effectively plan the best solution for an area. This project will form a basis from which further benefits can be derived. The impacts on health, social opportunities and the local economy – skills, jobs and business will be considered and inform the wider benefits of the project.</p> <p>The project team will work with the monitoring and evaluation experts to assess the effectiveness of the approaches taken and development of the LHEES, including providing clear recommendations to take forward next steps in this area. The learning from this project will provide essential information for developing a methodology for developing full LHEES. This learning can be shared between the participants and other Scottish LA/regional organisations who may be required to develop LHEES in the future.</p> <p>The project outlined below, fits with the criteria under section A3 of the Local Heat and Energy Efficiency Strategy consultation definition of the scope of a LHEES.</p>
<p><b>B2:</b> Please outline how your project will contribute to the development of SEEP</p>	<p><i>Please set out clearly what you are testing and how the learning from the project will help inform the future development of SEEP.</i></p>

	<p>LHEES are considered a key component of SEEP as referenced in the recent Scottish Government consultation documents. The development of local energy efficiency and low carbon heat strategies is vital to ensuring the most effective and co-ordinated approach to addressing these issues is progressed which might otherwise be progressed on a more piecemeal basis.</p> <p>By working together across different cities the project will be able to identify commonalities and test different approaches to the development and implementation of a LHEES and ensure widespread learning. This project will directly inform how heat and energy efficiency could be addressed through the SEEP and will highlight areas which require support and development and additional resource. They will help identify the best delivery mechanism for LHEES prior to any regulation being finalised. As local authorities we believe it is important to integrate the LHEES within SEEP to ensure a coordinated approach to tackling energy efficiency and low carbon heat within the built environment.</p>
<p><b>B3:</b> Where there a range of elements in the project proposal please outline how they form an integrated proposal within the overall themes for the pilot call.</p>	<p>The projects are integrated through the common aim of understanding how to develop LHEES for different pilot areas, this will test the application of the process of developing a LHEES in different circumstances. Within the five areas chosen to test development of LHEES, there will be areas of similarity and areas of difference. The aim will be to share findings across the participating local authorities but also much more widely and to use this information to inform the development of a future methodology for delivering LHEES on a wider basis.</p>

**Part C: Project details (please complete a separate Part C for each significant element of the project)**

<p><b>C1:</b> Project start date</p>	<p>June 2017 – based on award from Scottish Government by this date.</p>
<p><b>C2:</b> Project end date</p>	<p>Feb 2019 – based on award from Scottish Government in June 2017</p>
<p><b>C3:</b> Financial end date</p>	<p>31<sup>st</sup> March 2019 – based on award from Scottish Government in June 2017</p>
<p><b>C4:</b> Please provide details of the project – including location(s), measures and technologies</p>	<p>The project will involve five of the seven Scottish City Local Authorities, namely Aberdeen, Inverness (Highland Council), Stirling, Dundee and Perth (Perth and Kinross Council) and would be coordinated by the lead council Aberdeen City Council and the Scottish Cities Alliance Low Carbon Project Manager.</p> <p>The City of Edinburgh Council and Glasgow City Council have submitted separate bids including the development of LHEES and have agreed that if they are successful that information will be shared across the projects to improve the outputs of both.</p> <p>The cities will work together and with procured consultancy support determine a methodology for the development of pilot LHEES. This methodology will be tested by developing LHEES for pilot areas in each of the five City Local Authority areas. Through this process information will be gained on the practicalities of implementing LHEES in these areas. The output from the process can then be used in the future to develop full LHEES.</p> <p>The project would utilise the experience from the City Local Authorities. The City Local Authorities have undertaken various collaborative projects linked to energy strategy which will contribute to the development of the LHEES methodology. All of the City Local Authorities have:</p> <ul style="list-style-type: none"> <li>• Run HEEPS ABS and ECO funded programmes</li> <li>• Developed programmes to meet the Energy Efficiency Standard for Social Homes (EESH), and the energy requirements of the Scottish Housing Quality Standard (SHQS)</li> <li>• Participated in the creation of Strategic Outline Cases for the use of the Non Domestic Energy Efficiency Framework</li> <li>• Participated in the development of the new 0913 Energy Efficiency Contractors framework, delivered by Scotland-Excel</li> <li>• Completed Non Domestic Energy Efficiency works in their own estates</li> <li>• Developed approaches to tackling fuel poverty, energy efficiency and climate change mitigation in the domestic sector through their Local Housing Strategies</li> <li>• Contributed to the development of the Scottish Heat Map and have used this at the local level.</li> <li>• Taken part in the Stratego Programme related to the production of heating and cooling plans.</li> <li>• Contributed to the SCA heating and planning project which has developed links between planning and low carbon heat, produced an assessment methodology for energy statements and developed an</li> </ul>

- understanding of the resource requirement to be able to assess these documents.
- Are part of the Celsius City Project and have close links with the Greater London Authority where a number of boroughs have adopted an energy master planning approach for the whole borough or for a specific site

The following pilot areas have been selected to be included in the project.

#### **Dundee City Council**

Lochee Local Community Planning Partnership Area (Appendix D – Lochee Community Profile) is situated towards the west of the city and includes 11 distinct community areas as well as a District Centre (Lochee), Retail, Leisure and Industrial areas. Within the Ward there are:

- Council-owned buildings including schools - junior and secondary -, nurseries, offices, residential care, libraries, community centres, swimming pool and leisure centres etc.
- Healthcare - including clinics, private nursing homes, proximity to Ninewells, doctors/dentists/opticians
- Commercial including small independent shops, chains, large retail (e.g. Tesco Superstore, B & Q warehouse), wholesalers (e.g. Booker cash and carry), hotels, restaurants, pubs, car-dealerships, funeral parlor, garages etc.
- Various industrial across Dunsinane, Clement Pak/Foggyley/Beechwood areas.

The area has a population of approximately 19,000 across all tenures including Council, RSL, PRS and privately owned, including blocks of flats that are themselves mixed-tenure. A number of areas are within the most deprived datazones in Scotland with 56% of pop'n of Whorterbank living within the 5% most deprived areas; 32% for Lochee and 19% of Charleston. 96% of the population of Beechwood live within the 15% most deprived.

To meet the energy efficiency element of SHQS, Kirk Street, Lansdowne Gardens and Whorterbank Multi Storey Developments underwent an external insulation programme and replacement of electric heating with installation of gas-fired district heating. These were undertaken as joint projects between the Council and the utilities, blending Council finance and that obtained through CESP and ECO and that the energy centres were built with space for future expansion. As well as allowing the Council to achieve SHQS for the properties, this resulted in significant fuel bill savings to residents, thereby removing many from fuel poverty and improving their quality of life. The low-cost heating and hot water provided by the district heating continues to keep residents warm and comfortable in their homes and reduces the risk of them falling into fuel poverty. Feasibility studies are ongoing to determine expanding this network to include other municipal buildings in the area and expansion south eastwards towards the city centre.

An extensive external insulation programme is ongoing, using blended funding in mixed-tenure blocks which will continue into the future, providing external HEEPS:ABS funding continues. The Housing Department has allowed more than £20m each for external insulation and heating replacement in draft 5-year capital estimates as well as £10m for roof renewal and £5m for window replacements (all city-wide) a significant proportion of which will be for Lochee area and can, theoretically, be used to lever in additional public/private finance for other building types.

Other developments include an on-going, new-build mixed-use at Menziesshill and various sites being developed individually or as partnerships between Council and RSLs.

Dundee has completed high level masterplanning across the city for district heating and are about to launch their district heating strategy. The Tay Cities Deal has a number of energy projects and includes the development of a Regional ESCO.

#### **Stirling Council**

Based on the Stirling Council Local Development Plan the area under consideration is Stirling Central (excluding City Centre area) and connecting part of Stirling North (Raploch) (Appendix E – Stirling Council Site Profiles). This covers the areas of Braehead and Broomridge (incl Forthside), Torbrex, Raploch, which have community councils with a resident population of 6,835, there area number of small shops and business units throughout the areas specifically in Forthside and Raploch and some larger businesses. Currently Stirling considers these areas as potential "islands" opportunity's for district heating are also looking to implement energy efficiency measures across the area.

**Braehead & Broomridge (incl Forthside) Community Council area:** resident population 2,357; owner occupied: 57%; rented from Council: 26% (Appendix E – Stirling Council Site Profiles) have heat opportunities which have been investigated around a local glass manufacturer (through the SCA supported Stratego project)

as well the Community Hospital and Stirling Care Village. There are also a number of Council assets, including another secondary school and 3 x primary schools in this area. There is also high density Council Housing stock and high levels of fuel poverty in this area. This is proactive community and regularly engage with the Council on opportunities for energy projects within their area for the benefit of the community. In the City Development Framework, there is a solar thermal district heating project proposed similar to the Dronninglund project which would provide low cost heat to the residents of Braehead. In addition, a feasibility study has been complete in Braehead only by Ramboll on district heating opportunities using 2 different fuel types. There is also the opportunity for utilisation of the additional capacity in the sewage network to extend the network.

Within Forthside there is an LCITP funded district heating project. This area is mainly industrial with public buildings, including High School and Leisure Centre as well as new Civic Hub, national curling academy and national tartan centre. It is a regeneration area (The MOD site here is earmarked for closure) with a section earmarked for residential which we would have as a site requirement to connect to the district heating network. It is also a new business 'grow on space' so by connecting to the district heating network and offering lower energy costs, these new businesses would have a degree of protection as they are starting up. There is little housing here, it is largely an industrial/business area.

**Raploch Community Council area:** resident population 2,938; owner occupied: 27%; rented from Council: 55%; (Appendix E – Stirling Council Site Profiles). Raploch area has high levels of Council housing stock and fuel poverty and is also an area going through regeneration. In addition, there are opportunities around both the River as well as Raploch Community Campus which houses 3 x primary schools; additional support and special needs school; gym; nursery; Forth Valley College Bistro; job clubs; fitness classes; adult learning and youth work. Forth Valley College campus is also located close by, as is the Park & Ride and Castle Business Park and a care home as well as Stirling Fire Station. There are district heating opportunities around the River; sewage network with public buildings being used as anchor loads. In addition, we are looking at solar canopies at the Park and Ride at Castlevue (Raploch) as well as potential for Urban Turbines at the same site as energy generators. In this community a number of domestic premises have had the opportunity to have solar panels installed.

**Torbrex Community Council area:** resident population 1,540; owner occupied: 87%; rented from Council: 1.5% (Appendix E – Stirling Council Site Profiles). Study on district heating have been completed in this area.

The Stirling Smart Energy project is an EU funded Smart Cities project which is looking at an energy app for householders (which would be an open data platform and allow communities to see the data and hopefully could identify opportunities for community energy projects) as well as an Ultra-Modern Remote Building Monitoring System for urban Council assets. These are buildings which are the Council's Top 30 energy users. Within the 3 areas outlined above 10 of these buildings would be included. This project aims to provide an innovative solution to energy efficiency which could then be replicated across the Council estate. 37 buildings were identified as having potential to be included in the Non Domestic Energy Efficiency Framework programme and the output from this project will be used in the development of the LHEES for this area.

Within these area's there is loft and cavity wall insulation across 90% as part of the Housing Energy Efficiency Programme. There is also renewable energy generation at 10 of the public buildings in the above areas.

An opportunity to test from first principles development of a LHEES, SEAP process at early stages of development, funding awarded for LCITP first of its kind district heating project and keen political support for DH in Stirling and wider energy projects as evidenced by the Stirling City Deal

#### **Aberdeen City Council**

Aberdeen City Council has selected the Ward of Tillydrone, Seaton and Old Aberdeen as their pilot area (Appendix F). This ward contains a large part of one of the cities regeneration areas Tillydrone, Woodside and Seaton.

A Locality Plan has recently been developed for the regeneration area setting out the future ambitions for the area which include improving the health and wellbeing of the residents and improving housing quality. People in the area have poorer life outcomes than their peers from less derived areas of the city and over 30% of households are in fuel poverty and around a quarter of children in the area are living in poverty. The population in the regeneration area is likely to see significant growth over the next 10 years, proportionally higher than Aberdeen as a whole with a number of new developments proposed in parts of the ward which provide an interesting context for development of a LHEES.

The area is mixed use including both social and private housing, primary and secondary schools, community

buildings, health services and some small retail and commercial development, part of the University is also included in this area. The housing types and demographics vary between areas;

Tillydrone is predominantly post 1960 council housing scheme, with mix of tenements, high-rise multi-stories, and low-level terraced housing, and an Scottish Index of Multiple Deprivation (SIMD) area.

Old Aberdeen is predominantly traditional built granite buildings, in a preservation area, with low SIMD deprivation level, including the historic Aberdeen University buildings,

Seaton is a predominantly a post 1930 built council scheme, with most buildings tenements or 4-in-a-blocks of more 'modern' granite construction, although there are also 11 multi-storey buildings, Seaton has SIMD datazones of multiple deprivation.

Powis, Froghall and Sunnyside areas have much more mixed housing types and also mixed socio-demographics scoring in the second quintiles of the SIMD.

The ward has 2 heat networks managed by local ESCO Aberdeen Heat and Power. Each network has an Energy Centre, one in Tillydrone and one in Seaton, both of which are Combined Heat and Power (CHP) Plants, fuelled by gas. The networks supply heat and hot water to over 1500 householders in 21 high-rise buildings, a low-rise sheltered housing complex, and non-domestically to a school, Community centre, Swimming Pool, and Sports Centre. Aberdeen University also heat their buildings in the area through a Heat Network

The area is wholly served by a gas network, with vast majority of buildings, not connected to the Heat Networks, heated by Gas Wet Central heating Systems. There have been various programmes over the years to improve the thermal efficiency of the housing and schools in the area, but this has been limited mainly to loft, cavity wall and underfloor insulation. There is currently thermal improvement works programme being delivered to 7 high-rise buildings in the Seaton area, building on from 4 that were completed a few years ago, which will mean 11 of the 21 high rise will have had their walls externally insulated along with rainscreen cladding.

This ward area has been chosen as it has a diverse range of buildings and construction types, and varying socio-economic factors, and therefore cover a range of scenarios to help inform a wider LHEES. It is a mixed use area similar to other areas in Aberdeen so elements of the LHEES are likely to be replicable. Fuel poverty levels are high, and the Neighbourhood of Tillydrone is currently in the process of regeneration which will include new development in the near future providing the opportunity to test the development of a LHEES in a developing community.

There are also some more unique aspects of the chosen Ward. There are three different heat networks (Tillydrone, Seaton, and Aberdeen university), therefore looking at the potential for integrating these into a wider heat network will form part of the LHEES. The other opportunity for learning is in Tillydrone, this is a dense compact urban neighbourhood, with an existing Heat Network, and offers the opportunity to transition away from directly supplying heat to buildings from a gas network.

#### **Perth and Kinross Council**

Perth & Kinross Council pilot LHEES area is located to the North and West of Perth City. The pilot area includes areas within but not all of the following Council Wards, as can be seen in Appendix F.

- Perth City Centre (the majority of the pilot area falls within this ward) – [link to ward profile](#).
- Perth City North (the western section of the pilot area falls within this ward, including Inveralmond Industrial Estate and SSE and other large business uses) – [link to ward profile](#).
- Strathtay (a small section of the pilot area at the western edge falls within this ward as land designated for future employment use as well as including a small section of the Cross Tay Link Road) – [link to ward profile](#)

Based on Census (2011) population data, the proposed area has approximately 4,167 residents across 1,864 households.

The area includes residential, commercial and public sector building stock including:

- Educational Facilities – North Inch Community Campus; Perth Grammar School; North Inch Primary School.
- Council-owned / Social Housing – A mix of Council-owned and housing association housing, including areas identified as the most deprived according to Scottish Government figures. One area of social housing has district heating infrastructure installed but not currently used.
- Privately-owned housing – a mix of privately owned housing, including former council-owned housing.
- Scottish Water Treatment Works
- Sports Pavillion/Stadium with proposals for expansion
- North Muirton Industrial Estate including a range of industrial and employment uses
- Food & Drink Park – serviced employment land which the Council is currently exploring to be served

by a District Heating Network

- To the west of Dunkeld Road (A912) a variety of car showrooms and garages, various depots, a Holiday Inn Express hotel, SSE head office building
- Inveralmond Industrial Estate – a range of industrial, business and other employment uses, including significant heat loads
  - Car showrooms and garages
  - Retail units
  - Bus Depots
  - Inveralmond Brewery
  - Gas Distribution Station
  - Various Renewables companies
  - A laundrette service
  - Various Depots/medium-scale industrial units

Perth are undertaking local level renewable heat planning which will inform their district heating strategy. The Tay Cities Deal has a number of energy projects and includes the development of a Regional ESCO. Perth & Kinross Council are exploring the use of a District Heating Network to serve the Food & Drink Park and existing units at North Muirton Industrial Estate – options appraisal underway. In addition, options being explored for serving Perth Grammar School through a heat network in collaboration with Scottish Water (treatment works). There are energy efficiency measures likely to take place for Perth Grammar School and North Muirton Primary School as well as heating upgrades for social housing in the North Muirton area.

### Highland Council

Inverness Central, Inverness Millburn and Culloden and Ardersier wards will be included in this project further detail on these wards, maps and housing stock data from Changeworks can be found in Appendix H. Inverness Central has a total population of 14,066, 6790 households and is Highlands smallest and most densely populated ward. The population grew by 10.4% from 2001 to 2011, which is marginally lower than the Highland average.

#### Number of Council Houses

	Ward	Highland	Scotland
Number of Council owned houses	1,890	13,879	323,138
Source: Highland Council/Scottish Executive Nov 2015			

#### Housing Tenure

Percentage of households that are:	Ward	Highland	Scotland
owner occupied	46.6	67.2	62.0
rented from the Council/Scottish Homes	26.3	13.2	13.2
rented from housing association	8.1	5.7	11.1
privately rented	17.8	11.6	12.4
other	1.2	2.3	1.3
Source: Census 2011			

Inverness Millburn total population of 8,409, 3638 households and is an urban ward with a population younger than the Highland average. Population fluctuations are evident due to the movement to and from army housing and nurses accommodation at Raigmore Hospital. Land use in the ward is divided between business and industrial use on the Longman estate and housing to the south of Millburn Road where there is little land left for development as reflected by the fact that the total new built houses in the last 5 years was the lowest in highland and only 4 sites are identified in the Local Development Plan.

#### Number of Council Houses

	Ward	Highland	Scotland
Number of Council owned houses	381	13,879	323,138
Source: Highland Council/Scottish Executive Nov 2015			

#### Housing Tenure

Percentage of households that are:	Ward	Highland	Scotland
owner occupied	67.2	67.2	62.0
rented from the Council/Scottish Homes	10.0	13.2	13.2
rented from housing association	4.5	5.7	11.1
privately rented	16.9	11.6	12.4
other	1.3	2.3	1.3
Source: Census 2011			

Culloden and Ardersier has a total population of 11,647, 4975 households and is a mixed rural and urban ward

with an overall population density above the Highland average. The proportion of people in the 16-49 age group is one of the highest in Highland. The population fell by 0.3% between 2001 and 2011 and is showing the characteristics of an urban area built and populated over a relatively short period of time where population turnover and new house building is not enough to refresh an ageing population. The total number of housing built as been below average and the modest development is set to continue.

#### Number of Council Houses

	Ward	Highland	Scotland
Number of Council owned houses	575	13,879	323,138
Source: Highland Council/Scottish Executive Nov 2015			

#### Housing Tenure

Percentage of households that are:	Ward	Highland	Scotland
owner occupied	71.3	67.2	62.0
rented from the Council/Scottish Homes	11.6	13.2	13.2
rented from housing association	2.1	5.7	11.1
privately rented	13.7	11.6	12.4
other	1.3	2.3	1.3
Source: Census 2011			

Within the areas chosen there is currently no energy efficiency programmes running for the housing stock. There are a number of nondomestic buildings within the areas including a hospital and university campus, Inverness medical and 2 retail parks. Highlands have also developed the Heat Energy Renewables Opportunities plan development for the Council estate and are investigating district heating opportunities.

#### Project Outline

The project would use the definition of LHEES used within the LHEES and district heating regulation consultation. The work would cover the following aspects. A full description of tasks, responsibilities, assumed time allocation and costing is available in - Appendix I – Method, Timeline and Costs.

#### Development – LHEES

- Procurement of consultancy services via Aberdeen City Council for all participant Councils to support both the development of the LHEES and associated implementation plan.
- Stakeholder mapping of local occupants within the selected areas to understand the different groups that need to be engaged with, in relation to the LHEES and what their key issues are likely to be. Using this information and in close discussion with Council officers engaging with communities in the local areas develop an appropriate process for engaging with the communities around the development of the LHEES and implementation plan. This process is likely to vary from city to city taking into account local circumstances.
- Review current data availability and develop a baseline for energy efficiency and heat use in the defined area (data availability will be considered at a national level, local authority level and further defined local level). Data availability may differ across the areas and consideration of the need for consistent data will be reflected in the outline methodology output report. Example data sets which will be considered include:
  - Smart GB DCC third party data access opportunities
  - BEIS historical LA based energy data sets
  - Scottish Heat Map
  - EPC's
  - Energy Data from
    - Engagement with local occupants residential and commercial in the area including Housing Associations
    - Working with partners such as trade associations, chambers of commerce, Property and Facilities Management companies
  - Energy Surveys including RES, HES, Local Authority, SEPA -ESOS run programme outputs
  - Simulated data models for the given area either through building standards or as part of a previous area wide project

Local Authorities will work with the appointed consultant to gather the data required to create an understanding of the local baseline and share any work undertaken to date. Determine the adequacy

of this data for identifying opportunities to improve energy efficiency and decarbonise heat within the area. At this point there may be the need to consider how additional data may be determined such as energy audits in sample buildings, benchmarking or comparing data across other similar areas.

- Review national and local targets and national and local plans/policies (specifically planning, housing and energy/heat) and how these relate to the LHEES. As part of this process review the role that target setting will play in developing LHEES and the challenge of linking local area based targets with national targets and how these will play out across the proposed 20 year period of the LHEES.
- Consider the likely changing demographic, development or use of an area in developing a LHEES and taking a strategy forward and how this will need to impact on the flexibility of the developed strategy.
- Determine the appropriateness of defining zones within the area or defining the area itself as a zone and how the definition of zones should be taken into account when developing LHEES in the future. This should consider scale and method for their creation.
- For each area identify opportunities to reduce heat use, increase energy efficiency and develop low carbon heat opportunities which may incorporate heat storage. This will consider the range of existing technologies as well as consider the role that future technology development may have on the ability to deliver the LHEES and will take account of any work undertaken by the Local Authorities in this area prior to the project. Through this process each Local authority, working with the consultant, will be seeking to understand the challenges of developing long term strategies where technology is changing while ensuring the flexibility necessary to allow for new developments and change. In this part of the work the solutions will be developed to meet local circumstances but there will be learning that can be shared across the local authorities in relation to understanding the appropriate situations in which different solutions can be applied which may then be replicable. At this stage metrics to measure the effectiveness of the proposed actions should also be identified.
- Identify the potential parameters which should be incorporated in the socio economic assessment from the local perspective. It is not the intention of this project to develop a full socioeconomic assessment methodology as this will require considerable resource in itself. However as part of the project we will look at the issues that need to be addressed within a socio economic assessment and consider the extent to which these vary from one local authority area to the next and the extent to which they are comparable. This will provide useful information for the development of a full methodology in the future.

#### **Development of the Implementation Plan**

Following the establishment of the baseline data and review of available and possible technology solutions to improve energy efficiency and decarbonise heat an implementation plan will be developed for each area. An important element of developing the implementation plan will be to engage with local residents and businesses to understand how best plans might be implemented and what would most encourage local stakeholders to participate or take up “offers” in relation to issues such as energy efficiency interventions or connecting to a heat network. This is likely to take the form of a number of focus groups although the final means of communication will be agreed as part of developing the initial communication plan as set out above. The implementation plan is likely to incorporate the following:

- A delivery programme setting out the most appropriate intervention for different buildings, groups of buildings or areas including the proposed scale and extent of any local heat networks if these are to be part of the solution.
- The “offers” that will be developed within this programme for local residents or businesses to encourage and stimulate uptake.
- An indication of the resources necessary to deliver the programme this would include local authority resources and any additional resource from third parties.
- Outline costs for delivery of the programme and possible funding sources.
- Proposed timescales for delivery of the programme.

The implementation plans will be specific to each area and the project will therefore test the ability to develop plans in different areas and on the basis of different baseline data. For example it may be easier to develop delivery plans where significant amount of baseline work has already been undertaken by the Local Authority in the area. The size of the area under consideration may also impact on the ability to understand the costs and resources of delivery. Anticipated differences across the area include baselining i.e. energy data availability and quality, target setting, different methodologies for assessing energy performance and heat demand and the social and economic local considerations. Through the Low Carbon Working Group and project specific meetings the cities will be able to share their findings and the collation of this information as part of the final

	<p>project output will ensure this information can be used to inform the development of a future LHEES methodology.</p> <p>The implementation of the opportunities identified is not included in the scope of this project. This project will focus on understanding and testing the process for developing a LHEES and implementation plan which can then provide the programme for future development and action by individual local authorities.</p> <p>The development of the implementation plan will build important learning in relation to the future development of LHEES. It will provide information on appropriate timescales for developing the plans and the level of detail that is possible for different time periods, the ability to develop detailed plans on the basis of available data, how easy it is to cost plans and understand resource implications at this early stage in the process, on this basis how implementation plans should be evolved and developed over time as more information becomes available and as learning is developed from initial projects.</p> <p><b>Outputs</b></p> <p>The following is a summary of the project outputs.</p> <ul style="list-style-type: none"> <li>• A LHEES for each pilot area covered by the project and an associated implementation plan delivery programme setting out how the options identified will be delivered.</li> <li>• An overview report setting out the lessons learnt from the process and how these need to be taken account of in the future development of regulations around LHEES and their future development and implementation. In particular the overview report will cover the following: <ul style="list-style-type: none"> <li>○ The methodology used to develop the LHEES and the learning from implementing this methodology and what needs to be considered in the development of a future methodology.</li> <li>○ Opportunities and challenges around the information and datasets available to develop the LHEES. What data sets/ baseline information are of most value, what baseline information was most useful with recommendations on the use of these datasets and how LAs might develop them in the future to be better prepared for developing future LHEES.</li> <li>○ An assessment of the challenges of target setting at local level and comparison with wider regional and national target setting with recommendations on how the different targets might be managed, combined or related in the future and whether any additional national or regional targets are required to support target setting at local level.</li> <li>○ Learning that will inform the future development of a process for undertaking socioeconomic assessments. This will include identifying the parameters which should be incorporated in the socio economic assessment and an assessment of the extent to which these vary from one local authority area to the next and the extent to which they are comparable.</li> <li>○ Recommendations on the development of zones based on the experience of developing the LHEES for pilot areas.</li> <li>○ Recommendations relating to any findings from the community engagement processes which take place as part of the study.</li> <li>○ Recommendations relating to the development of implementation plans and how these can be improved in the future.</li> <li>○ Recommendations on how local authorities can best translate the learning from developing the LHEES in local areas to wider areas and the resources, time and costs that are likely to be associated with this.</li> <li>○ Challenges and opportunities for LHEES in the future of SEEP</li> </ul> </li> </ul>
<p><b>C5:</b> Please provide evidence on why this work is needed and the impact that it will have on the building(s).</p>	<p>Energy efficiency or low carbon heat projects undertaken to date have been developed in isolation and focused on buildings or measure specific improvements, development of an LHEES provides an option for the Councils to gain greater strategic understanding of the building stock at a local level and to develop projects that may otherwise have not been identified.</p> <p>The production of a long term plan such as the LHEES also provides a platform for the SEEP as it provides evidence for the development of the long term project management and financial management needed to deliver wide scale changes in energy efficiency and low carbon heat.</p> <p>The value of this LHEES project is that it will show what planned area based SEEP projects could look like, the value of a planned approach and inform future integrated SEEP projects. The project will identify where gaps in</p>

	knowledge, resources and funding exist and where support is most required to achieve a planned and integrated approach to energy efficiency and low carbon heat.
<b>C6:</b> Please outline the wider benefits of the project, including the benefit for individuals, the local community and local economy.	<p><i>Schemes should be designed to support the local economy and use local installers as far as possible within the framework of procurement legislation and best practice.</i></p> <p>This project will involve developing a strategic approach to the management of energy efficiency and heat decarbonisation and development of an implementation plan, it will not include the implementation of the measures proposed. However as part of developing the LHEES each Local Authority will need to consider the benefits to the local area. This will include potential benefits associated with reduced energy costs and improvements to the quality of the built environment for both residents and commercial properties. When developing the implementation plan the consultants will be asked to consider the opportunities for developing the local economy through the potential to use local suppliers or to develop the local skill base by training local people to undertake for example installation and maintenance of relevant technology</p>
<b>C7:</b> Please provide a timeline for the project and list all consents or procurement required (and the status of such applications or exercises)	<p>Please see timeline within Appendix I – Method Timeline and Costs which relates to the Project Outline described in section C4.</p> <p>The only consent required relates to procurement of consultancy support which it is anticipated due to the size will need to be approved through the Aberdeen City Council Committee system.</p>
<b>C8:</b> Please confirm the total anticipated capital and revenue costs of the project, provide an outline of the project's budget and financial model, including other finance secured. Please list all sources of funding to be utilised to deliver the project.	<p><b><i>This information must be added to the attached table at ANNEX A of the application form</i></b></p> <p>Total cost of the project has been projected based on the currently available information to be £283,246.50 all of which are revenue costs. This includes cities costs (£28,658) and SCA costs (£4588.5) based on internal resource totalling £33,246.50. There is a budget of £50,000 per City Council totalling as £250,000 for services to be procured to enable the delivery of the project, £125,000 is requested from SEEP as grant and £125,000 has been secured from the Cities Investment Fund (Appendix C). Breakdown of the assumed costs, timescales and method are included within Appendix I – Method Timeline and Costs.</p>
<b>C9:</b> Total SEEP support requested (please specify whether this is grant or loan, and whether it is capital or resource funding).	Total SEEP supported requested is £125,000 grant as we understand that in-kind support cannot be claimed for.
<b>C10:</b> Please tell us the percentage of SEEP funding compared to the overall cost of the project.	Compared to the overall project cost the SEEP funding requested is 44% of the total.

## Part D: Deliverability and Risk (please complete a separate Part D for each significant element of the project)

<b>D1:</b> Please outline the key risks to delivering the project and how these will be managed.	<p><i>Please ensure you have captured all relevant risks, this should include the following:</i></p> <ul style="list-style-type: none"> <li>• <i>Procurement</i></li> <li>• <i>Technological</i></li> <li>• <i>Environmental</i></li> <li>• <i>Financial</i></li> <li>• <i>Legal</i></li> <li>• <i>Regulatory</i></li> <li>• <i>Customer engagement and sign up to the project</i></li> <li>• <i>Other project related risks</i></li> </ul> <p><i>We are looking to ensure that you have considered all risks and that these have been built into the development</i></p>
--	---

and ongoing management of the project.

Risk	Mitigation Measure
Procurement delays	Procurement colleague within Aberdeen City Council have been informed of the potential procurement and an assigned officer will be requested to the project once funding is awarded.
Lack of sufficient consultancy skills – LHEES is a new product and the project requires a multi-disciplinary team.	A LHEES is a detailed from of energy master planning, consultancies have been providing energy master planning for a number of years in the UK and in Europe. As the scale of the procurement is OJEU it is anticipated that by going out to a large market sufficient skills will be available. Consortia applications will also be considered as there is a requirement for technical and engagement skills.
Delays due to multi stakeholder project	The mechanism of the SCA has been in place since 2011 and the cities have now worked on a number of collaborative projects. Using the SCA governance mechanism and the support of the SCA Low Carbon Project Manager any delays should be minimised.
Changes in staff	As the SCA project manager will support the delivery of the project changes in city council staff disruption will be minimised. In addition to this accurate and up to date record keeping will be required from each partner in the project.
Lack of community engagement in chosen areas	City Councils will use a variety of mechanisms to engage with the occupants in these areas which are already in existence such as locality or community planning.
Poor quality output from consultants	The contract will be managed by Aberdeen City Council and supported by the SCA Low Carbon Project Manager with specific outputs, milestones and KPIs. Regular meetings will be held with the consultants and issue identification raised and escalated when required.

## Part E: Monitoring and Evaluation (please include a separate Part E for each project)

<p><b>E1:</b> Please confirm how you will monitor the outcomes and deliverables for the project.</p>	<p><i>EST and the University of Edinburgh will be available to support the development of a monitoring and evaluation plan and all applicants invited to submit a Stage 2 application must attend a monitoring and evaluation workshop on Friday 28 April which will set out the guidelines which you must comply with. You are also expected to work with EST and the University of Edinburgh in the development of a monitoring and evaluation plan which should be included with this application.</i></p> <p>The project team are happy to work with the monitoring and evaluation team within the University of Edinburgh and have agreed with the team the below monitoring and evaluation plan. It is understood that as the project focuses solely on the development of the LHEES that technical monitoring and evaluation is not necessary. It is recognised that the monitoring and evaluation of this project is very important as the outputs and learning will form the basis of the future development of the LHEES and SEEP.</p> <p>What we want to understand from the evaluation of the project is:</p> <ul style="list-style-type: none"> <li>• What should an LHEES look like and what should it deliver?</li> <li>• What aspects should be considered at local, regional or national levels?</li> </ul>
--	--

- What processes, resources and support need to be in place to produce an LHEES? And how long do these take? (Data analysis? Partnership building? Consultation? Committee sign-off?)
- What data is useful? What data is missing and how can this be addressed?
- How does the LHEES link with existing mechanisms?
- What is replicable across LHEES? What is not replicable?
- How does the support provided by working on a multi City Council project support the development of the LHEES?
- What lessons are available for LHEES within the SEEP programme

The SCA will coordinate the knowledge sharing and lessons learned meetings held across the project. To ensure that duplication of effort is not created we would invite the evaluation and monitoring team to integrate into the project plan (section c7) rather than have separate workshops. We have highlighted six Low Carbon Working Group Meetings that the evaluation and monitoring teams would be able to attend to learn from the activity ongoing in the city council areas from the Councils perspective. A section of one or more of these meetings can be dedicated to the evaluation approach with space on the agenda of the meeting. Each of the Low Carbon Working Groups follow on from key tasks, discussions should be able to focus on those task areas at each meeting. The lead from each local authority will work with the Monitoring and Evaluation team to provide ongoing updates either directly or through SCA.

Where information is collected through the process such as community engagement outputs, participant's outputs, community planning outputs then this can be fed back to the evaluation and monitoring team and required permissions will be sought to do this.

We understand that the monitoring and evaluation team may also wish to speak to the consultant conducting the work. Further details are required on the level of engagement required and we would suggest this is confirmed with the monitoring and evaluation team post award and can then be included within the consultant specification.

The project partners are aware that in addition to the City Councils (including GCC and CEC), 4 other local authorities intend to submit bids to take forward LHEES, the project partners feel that due to the nature of the topic that mechanism to support all those successful to engage with each other on the work taken forward would enhance the project outputs and would be happy to discuss the practicalities of doing so when it is appropriate after award decisions have been made.

## Part F: Declaration

The SEEP application form should be certified by the senior responsible officer in the local authority promoting the pilot as being true, accurate and being formally approved for submission by the local authority.

*On behalf of the council, I named below confirm that I have the authority to submit this application and that committee approved this application on the following date:*

<b>F1: Signature:</b>		<b>F2: Date:</b>	12.05.17
<b>F3: Name (printed):</b>	Eric Owens		
<b>F4: Job title:</b>	Head of Planning and Sustainable Development (interim)		
<b>F5: Organisation:</b>	Aberdeen City Council		
<b>F6: Address:</b>	Marischal College, Board Street, Aberdeen, AB10 1AM		
<b>F7: Email address:</b>	eowens@aberdeencity.gov.uk		
<b>F8: Telephone number:</b>	01224 523 133		
<b>F9: Date of committee approval (where</b>	Approval to proceed and confirmation of match funding was been provided by the SCA delivery group on the 25 <sup>th</sup> of April 2017.		

committee approval is not yet confirmed, please state this and provide an expected date of approval):	Aberdeen City Council expect to receive approval from the Communities Housing and Infrastructure Committee which takes place on the 24 <sup>th</sup> May 2017.
---	--

### **Part G: Completed Application Forms**

Completed application forms **must** be emailed to [SEEP@gov.scot](mailto:SEEP@gov.scot) by 23:59 on **12 May 2017**. Emailed applications **must** be followed up with a hard copy of your application signed by the senior responsible officer in the local authority by 23:59 on **19 May 2017**.

**SEEP Pilots Phase 2 - Funding Breakdown**

Please use the table below to set out the funding breakdown for your Pilot application  
 Please be realistic with estimates at this stage in terms of spending across each financial year

**Note - SEEP Pilot funding cannot be accrued or carried over into the next financial year and the Scottish Government will be unable to make up any shortfall.**

Project name	2017/18				2018/19				Overall
	Proposed SEEP grant	Proposed Loan funding	Other Funding	Total funding in 2017/18	Proposed SEEP grant	Proposed Loan funding	Other Funding	Total funding in 2017/18	Total project Funding
LHEES Project (full breakdown of assumptions and costs can be found in Appendix I Method, Timeline and Costs)	£35,000	/	£35,000 (SCA Cities Investment Fund) and £11,229.75 (SCA and Cities Resource)	£81,229.75	£90,000	/	£90,000 (SCA Cities Investment Fund) and £22,016.75 (SCA and Cities Resource)	£202,016.75	£283,246.50
