

Local Heat & Energy Efficiency Strategy Delivery Plan

Ro-innleachd Èifeachdas Teasa agus Lùtha Ionadail Plana Lìbhrigidh



Delivery Plan Plana Lìbhrigidh

Accompanying the Local Heat and Energy Efficiency Strategy is the high-level Delivery Plan, which enables the Highland Council and our partners to work towards delivery of the changes identified in the Strategy.

This is intended as a near-term delivery of actions, based on local priorities, LHEES Considerations and stakeholder engagement. This helps understand what actions can currently be delivered, given the changing policy landscape as well as understanding that new future policies and programmes will be developed.

A continuity of engagement with both internal and external stakeholders is critical to support the delivery of LHEES and embed LHEES within the local governance structures and processes.

The high-level LHEES Delivery Plan is a living document and is subject to change when the Council and partner organisations start delivering the LHEES project. It is expected to be updated in line with policy and target developments.

Table 1 – Summary of Actions

Skills and Jobs

- Support identification of the skills and jobs required for energy efficiency, retrofit and heat decarbonisation works.
- Support supply chain development.

Heat Networks

- Conduct feasibility studies and beyond to explore heat network delivery model options.
- Ensure that the new Local Development Plan is developed in conjunction with the LHEES heat network outputs.
- Support public sector organisations to discharge their duty to complete Building Assessment Reports (BARs).
- Engage with planners and other relevant stakeholders to discuss heat network potential and share best practices for future networks expansion.
- Engage with stakeholders to gather data and building information to investigate suitability for heat network connections and source potential.
- Request fuel data to support prioritisation of low carbon technologies and heat network analysis for Delivery Areas.

Building level

- Understand capacity for retrofit at scale and costings of repair works.
- Identify building level delivery actions that will assist in a just transition.
- Work with Historic Environment Scotland and Historic Environment Highland Team to develop a targeted approach to historic building interventions.
- Understand capacity for retrofit at scale.

Awareness and Engagement

- Ongoing engagement and collaboration with housing associations and private sector landlords to increase uptake of energy efficiency works.
- Engagement with the Federation of Small Businesses and the Chamber of Commerce around decarbonisation of heat within the business community.
- Engagement with relevant stakeholders to identify areas of collaboration across mixed tenure properties would provide an opportunity to decarbonise heat at scale.
- Engage with housing associations and private sector stakeholders to increase uptake of heat decarbonisation works.
- Raise awareness and knowledge of heat decarbonisation.

Energy Infrastructure

- Identify opportunities for project development across the Council area.
- Explore solar potential.
- Engage with Scottish and Southern Electricity Networks (SSEN) to determine available grid capacity throughout the lifetime of the Strategy, whilst taking a holistic approach to the wider energy system.
- Engagement with a Distribution Network Operator (DNO) to understand impact of individual heat pump installations on local grid.

Funding

- Maximise existing funding opportunities at national and local level on available options for different types of housing stock.



The actions set out in **Table 1** will be developed into a detailed Delivery Plan which will include timescales, inputs and desired outcomes, with targets included to aid in monitoring and evaluation. This will be further developed so that specific projects are identified and a programme plan put in place. This will be supported by a Resource Plan – enabling the scale and ambition of the Delivery Plan and associated projects to be adjusted according to the resources available. Additional columns can be added to track the Council’s progress.



Photo by Ewen Weatherspoon

Skills and Jobs

Action	Lead	Stakeholders	Funding	Journey	Timescales	Progress	Benefits Expected
Support identification of the skills and jobs required for energy efficiency, retrofit and heat decarbonisation works.							
Support supply chain development.							

Awareness and Engagement

Action	Lead	Stakeholders	Funding	Journey	Timescales	Progress	Benefits Expected
Ongoing engagement and collaboration with housing associations and private sector landlords to increase uptake of energy efficiency works.							
Engagement with the Federation of Small Businesses and the Chamber of Commerce around decarbonisation of heat within the business community.							
Engagement with relevant stakeholders to identify areas of collaboration across mixed tenure properties would provide an opportunity to decarbonise heat at scale.							
Engage with housing associations and private sector stakeholders to increase uptake of heat decarbonisation works.							
Raise awareness and knowledge of heat decarbonisation.							

Heat Networks

Action	Lead	Stakeholders	Funding	Journey	Timescales	Progress	Benefits Expected
Conduct feasibility studies and beyond to explore heat network delivery model options.							
Ensure that the new Local Development Plan is developed in conjunction with the LHEES heat network outputs.							
Support public sector organisations to discharge their duty to complete BARs.							
Engage with planners and other relevant stakeholders to discuss heat network potential and share best practices for future networks expansion.							
Engage with stakeholders to gather data and building information to investigate suitability for heat network connections and source potential.							
Request fuel data to support prioritisation of low carbon technologies and heat network analysis for Delivery Areas.							



Energy Infrastructure

Action	Lead	Stakeholders	Funding	Journey	Timescales	Progress	Benefits Expected
Identify opportunities for project development across the Council area.							
Explore solar potential.							
Engage with SSEN to determine available grid capacity throughout the lifetime of the Strategy, whilst taking a holistic approach to the wider energy system.							
Engagement with a DNO to understand impact of individual heat pump installations on local grid.							

Funding

Action	Lead	Stakeholders	Funding	Journey	Timescales	Progress	Benefits Expected
Maximise existing funding opportunities at national and local level on available options for different types of housing stock.							

Building Level

Action	Lead	Stakeholders	Funding	Journey	Timescales	Progress	Benefits Expected
Understand capacity for retrofit at scale and costings of repair works.							
Identify building level delivery actions that will assist in a just transition.							
Work with Historic Environment Scotland and Historic Environment Highland Team to develop a targeted approach to historic building interventions.							
Understand capacity for retrofit at scale.							

8.1 Monitoring and Evaluation

The Monitoring and Evaluation Plan (MEP) covers progress related to Delivery Plan actions, and any other ongoing projects related to LHEES.

It will be developed with the detailed Delivery Plan. It is necessary to consider if current methods of reporting provide sufficient detail going forward.



Glossary

Clàr-mìneachaidh

AG	Address Gazetteer
ASHP	Air Source Heat Pump
BAR	Building Assessment Report
CAB	Citizens Advice Bureau
CAG	Corporate Address Gazetteer
CPAG	Caithness Poverty Action Group
CARES	Community and Renewable Energy Scheme
CO2	Carbon Dioxide
DNO	District Network Operator
ECO	Energy Company Obligation
EE	Energy Efficiency
EES:ABS	Energy Efficient Scotland: Area Based Scheme
EESHS	Energy Efficiency Standard for Social Housing
EPC	Energy Performance Certificate
EST	Energy Saving Trust
EWI	External Wall Insulation
FNA	First National Assessment
Flex	Flexible Eligibility
GBIS	Great British Insulation Scheme
GHGs	Greenhouse gases
GHIGS	Green Heat in Green Spaces

GIS	Geographic Information System
GSHP	Ground Source Heat Pump
HA	Housing Association
HHP Granites	High Heat Production Granites
HIE	Highlands and Islands Enterprise
HNSU	Heat Network Support Unit
HNZ	Heat Network Zone
HRA	Housing Revenue Account
HwLDP	Highland-wide Local Development Plan
IZ	Intermediate Zone
kWh/m/yr	Kilowatt-hours per metre per year
kWh/yr/m²	Kilowatt-hours in square metres per year
LA	Local Authority
LDP	Local Development Plan
LEAP	Local Energy Action Plan
LED	Light Emitting Diode
LEIP	Learning Estate Improvement Plan
LHD	Linear Heat Density
LHEES	Local Heat and Energy Efficiency Strategy
LPG	Liquefied Petroleum Gas
MEP	Monitoring and Evaluation Plan



MW/h/yr	Megawatt-hours per year
m²	The square metre
NAEI	National Atmospheric Emissions Inventory
NDA	Non-Domestic Analysis
NHS	National Health Service
NPF	National Planning Framework
OBC	Outline Business Case
OGG	On Gas Grid
OS	Ordnance Survey
OSG	One Scotland Gazetteer
PEAT	Portfolio Energy Analysis Tool
PPA	Power Purchase Agreement
REMA	Review of Electricity Market Arrangements
RSL	Registered Social Landlord
SAP	Standard Assessment Procedure
SEA	Strategic Environmental Assessment
SEEP	Scotland's Energy Efficiency Programme
SEG	Smart Export Guarantee
SEON	Scottish Energy Officers Network
SEPA	Scottish Environment Protection Agency
SHM	Scotland Heat Map
SFT	Scottish Futures Trust
STEM	Science, Technology, Engineering, and Mathematics
Solar PV	Solar photovoltaic

SSE	Scottish and Southern Electricity
SSEN	Scottish and Southern Electricity Networks
TWh	Terawatt-hour
UHI	University of the Highlands and Islands
UK	United Kingdom
UPRN	Unique Property Reference Number
WHD	Warm Home Discount
WHS	Warmer Homes Scotland
ZWS	Zero Waste Scotland



Terms

Terms	Description
Baselining	Baselining is the purpose of understanding at local authority or strategic level, the current status of the buildings against the LHEES Considerations, Targets and Indicators.
Building-level Pathway	As part of LHEES Stage 5, a building-level pathway is the outcome of the assessment undertaken using PEAT. It provides the likely energy efficiency retrofit technologies, as well as the low carbon heating system (where applicable) to support building level decarbonisation.
Criteria	Criteria are the settings applied to the Indicators for each Consideration in order to support Baselining, Strategic Zoning and the identification of Delivery Areas. An example of Criteria is a simple “no” applied to the Indicator of “wall insulation (Y/N)” to identify properties with uninsulated walls. Another example is the definition of an “anchor load” within the Heat Network zoning analysis, which applies a minimum threshold to the “heat demand” Indicator. The LHEES methodology provides a set of default Criteria that local authorities may wish to use, with flexibility to update and augment these to support local needs or for more focused analysis linked to specific actions and project identification within the Delivery Plan.
Data - Alternative	Alternative data, can overwrite the Core data to improve accuracy (national to local level of detail, e.g. local housing data to overwrite fields in Home Analytics).
Data - Core	Core data is the data that is essential to complete the minimum requirements of the LHEES analysis. Core data will come from national datasets e.g. Home Analytics or the Scotland Heat Map.
Data - Supplementary	Supplementary data allows inclusion of additional Indicators to inform specific, local priorities & targets; also, Supplementary data can be used in GIS investigation to complement the Core analysis carried out in any assessment. An example of Supplementary data would be the inclusion of a constraints appraisal as part of a district heating analysis.
Data Zone	Data zones are groups output areas which have populations of around 500 to 1,000 residents.
Delivery Area	Delivery areas are at a higher granularity than Strategic Zones. These spatial zones should set out clusters of buildings within a Strategic Zone or across the whole local authority that identify potential solution(s) at a delivery level. They will be an important starting point for identifying a range of projects, regulation and actions that are within the competence of the Scottish Government, local authorities and wider partners (included as actions to be developed in the LHEES Delivery Plan).
Detailed practitioner approach	These Steps form part of the detailed practitioner approach in LHEES Stage 4, Generation of Initial Areas to set out particularly suitable heat network zones and to support project identification.

Indicator	<p>For a given Consideration, the purpose of an Indicator is:</p> <ol style="list-style-type: none"> 1. to act as a key information field to help characterise and baseline the local authority. 2. to act as a key information field to support strategic zoning and generation of initial delivery areas; 3. if suitable, to act as a key information field to measure progress against Targets over the duration of the LHEES - set out in the LHEES Delivery Plan. <p>For some Considerations, one Indicator may be sufficient, but for others a range may be appropriate.</p>
Intermediate Zone	<p>Intermediate zones are a statistical geography that are designed to meet constraints on population thresholds (2,500 - 6,000 household residents), to nest within local authorities, and to be built up from aggregates of data zones.</p>
LHEES Considerations	<p>The LHEES Considerations are a list of technologies, building typologies and policy priorities used to identify and target interventions. They include:</p> <ul style="list-style-type: none"> • Heat networks • Off-gas grid buildings • On-gas grid buildings • Poor building energy efficiency • Poor building energy efficiency as a driver for fuel poverty • Mixed-tenure, mixed-use and historic buildings.
LHEES Delivery Plan	<p>An LHEES Delivery Plan is a document setting out how a local authority proposes to support implementation of its local heat and energy efficiency strategy.</p>
LHEES Guidance	<p>The LHEES Guidance sets out the production and content requirements for a local authority to prepare a Local Heat and Energy Efficiency Strategy and Delivery Plan. Its purpose is to ensure that a Local Heat and Energy Efficiency Strategy and Delivery Plan contain outcomes and actions that are backed up by robust data and analysis, supported by stakeholder engagement, and that are linked to national and local priorities, plans and targets.</p>
LHEES methodology	<p>The LHEES methodology is a more detailed, step by step approach, which includes models, tools and templates, and represents best practice in how to produce an LHEES in accordance with the requirements set out in the LHEES Order and Guidance.</p>

LHEES Stages	<p>There are 8 LHEES Stages proposed in this methodology. The purpose of the LHEES methodology is to enable the local authority to complete LHEES Stages 1 to 6. The completion of these Stages will provide the local authority with the data analysis and evidence base to enable them to complete their LHEES Strategy and Delivery Plan documentation. There are two LHEES reporting templates included alongside this methodology– LHEES Strategy example template and LHEES Delivery Plan example template. The completion of these two templates will satisfy the completion of LHEES Stages 7 and 8. The 8 LHEES Stages proposed in this methodology are:</p> <ol style="list-style-type: none"> 1. Policy and strategy review 2. Data and tools library 3. Strategic zoning and pathways 4. Generation of initial delivery areas 5. Building-level pathway assessment 6. Finalisation of delivery areas 7. LHEES Strategy 8. LHEES Delivery Plan.
LHEES Strategy	<p>An LHEES Strategy is a long-term strategic framework for:</p> <ul style="list-style-type: none"> • the improvement of the energy efficiency of buildings in the local authority’s area, and • the reduction of greenhouse gas emissions resulting from the heating of such buildings.
Mixed-tenure, mixed-use and historic buildings	<p>Mixed-tenure and mixed-use buildings could include a mixture of owner occupied, private rented and social housing, and also non-domestic uses, or simply multiple ownership within the same tenure. Historic buildings include the buildings that are within conservation areas or those that are listed buildings. These categories may require established alternative approaches and regulation for the installation of low carbon heat and energy efficiency solutions and where specific advice and support might be available relating to the installation of these solutions.</p>
Phase (Delivery Plan)	<p>A suggested period of work to complete the initial LHEES Delivery Plan.</p>
Raster	<p>A matrix of squares, or grid, used as a method of data analysis in GIS. Each cell in the grid contains a value representing information on the cell’s contents.</p>
Strategic Zone	<p>Strategic Zones present a visualisation of the potential pathways to decarbonise the building stock at a local authority level. These could, for example, be split out by intermediate zone or data zone. They are useful to understand the baseline performance, the scale of potential and initial areas of focus, which could be used to inform Delivery Areas and follow on engagement.</p>

Targets	<p>Targets are the measurable aspect of the Consideration and are likely to be taken directly from national and/or local policy documentation, for example Net Zero by 2045, or EPC C by 2040. Targets are likely to comprise of end-point targets and milestone targets and would sit along a timeline within (and beyond) the LHEES. This timeline would help to prioritise the types of projects undertaken within the LHEES over its duration.</p>
Weighting	<p>For some Consideration, one Target and Indicator may be sufficient, but for others a range of Indicators may be appropriate to contextualise and characterise performance against a Target and/or progress towards a Consideration. If multiple Indicators are used in strategic zoning or the identification of delivery areas, a Weighting can be applied based on the importance of each. The LHEES methodology sets out a core set of default Weightings for instances where multiple Indicators are suggested as a default setting. There is flexibility to update and augment these to support local needs or for more focused analysis linked to specific actions and project identification within the Delivery Plan.</p>