

Local Heat and Energy Efficiency Strategy (LHEES)

Executive Summary



Your Opportunity, Your Say

The Local Heat and Energy Efficiency Strategy is an important document for Fife. It will help Fife tackle the climate emergency and meet net zero. The strategy and delivery plan set out an approach for where we live, to improve buildings' energy efficiency and change to climate friendly heating.

This public engagement exercise on the draft strategy, will last for six weeks between 18th September and 29th October 2023. A short online survey is available here: [Local Heat and Energy Efficiency Strategy \(LHEES\) & Delivery Plan | Fife Council](#). We are seeking your feedback on:

- the vision of this strategy,
- our identified priorities,
- the scope of the high-level delivery plan, and
- any further actions we should include when developing our detailed delivery plan.

Survey responses will be summarised and published once the survey has closed. Feedback will either be incorporated into the final strategy or considered when developing the detailed delivery plan. We are also hosting an online public information session on 5th October, 6pm-7pm. This will provide the opportunity for you to provide feedback and ask questions in a more informal manner. You can register to attend [here](#). By engaging with us, this is your opportunity to have your say to help shape Fife's first Local Heat & Energy Efficiency Strategy, to ensure it helps make Fife's buildings greener.

Overview

What is a Local Heat and Energy Efficiency Strategy?	A long-term, flexible strategy providing a local, tailored approach for where we live to improve energy efficiency and change to climate friendly heating in buildings.
Why are the Council preparing a Local Heat and Energy Efficiency Strategy?	<p>Increasing buildings' energy efficiency and changing to climate friendly heating will help Fife and Scotland tackle the climate emergency and reduce greenhouse gas emissions.</p> <p>The Scottish Government's Local Heat and Energy Efficiency Strategies (Scotland) Order 2022 requires local authorities to publish a strategy and delivery plan by 31st December 2023.</p>
Focus of this Local Heat and Energy Efficiency Strategy?	<p>This strategy needs to start delivering quickly, flexibly, and to a high standard. This will allow us to meet the pace and scale appropriate to tackle climate change. It will also allow for new policies, targets, and data to be added when required.</p> <p>The strategy and delivery plan will have actions which can be delivered in the first few years to tackle climate change. It will also identify where further work is needed. This includes actions on tackling key challenges to ensure we have a successful document which benefits Fife.</p>
Call to Action	<p>Making buildings greener and more environmentally friendly will help reduce greenhouse gas emissions and meet national targets.</p> <p>To achieve this means everyone in Fife will need to do their part to reduce greenhouse gases from buildings and improve energy efficiency. The Council, businesses, organisations, communities, and householders will all need to work together to act.</p>

Introduction

In 2022, the Scottish Parliament passed The Local Heat and Energy Efficiency Strategies (Scotland) Order 2022¹. This places a statutory duty on Local Authorities to:

- Prepare, publish, and update a Local Heat and Energy Efficiency Strategy and Delivery Plan.
- Publish its first Strategy and Delivery Plan on or before 31st December 2023.

Local Heat and Energy Efficiency Strategies are at the heart of a place based, locally led, and tailored approach to the heat transition. They underpin an area-based approach to heat and energy efficiency planning and delivery. For Fife, this was developed in partnership with key stakeholders, and:

- provides a long-term, flexible strategy, and iterative delivery plan, to decarbonise heat and improve energy efficiency, considering wider priorities and targets,
- details how segments of building stock must change to meet national and local targets,
- identifies strategic heat decarbonisation zones, and
- uses an optioneering process to prioritise actions.

The 5-year delivery plan provides a strong basis for action for stakeholders, identifying early, low-regrets measures; and where ongoing analysis is required. It provides direction and informs wider energy planning with our regional city region deal partners.

This strategy will play a crucial role in helping the Council meet its 2045 Net Zero target, and help Fife be climate friendly, ready, and just by 2045.

Strategic Vision

Fife Council supports the Heat in Buildings Strategy² vision “*that by 2045 our buildings are cleaner, greener, and easy to heat, and no longer contributing to climate change, as part of the wider just transition to net zero.*” The vision for Fife’s first Local Heat and Energy Efficiency Strategy is to:

Improve the energy efficiency and decarbonise heat sources of Fife buildings in a climate friendly, ready, and just manner.

Policy & Drivers

Many national, regional, and local policies and strategies, containing a range of priorities and targets, have directed this strategy. It is primarily driven by Scotland's statutory targets for greenhouse gas emissions reduction; the Heat in Buildings Strategy; the Heat Network (Scotland) Act 2021; and fuel poverty targets. The main national and local policies influencing this strategy are detailed below.

¹ [The Local Heat and Energy Efficiency Strategies \(Scotland\) Order 2022 \(legislation.gov.uk\)](#)

² Heat in Buildings Strategy - achieving net zero emissions in Scotland's buildings - gov.scot (www.gov.scot)

Table 1: National and Local Policies

National	Local
Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 ³	Plan4Fife (Local Outcome Improvement Plan) 2017-27 ¹⁰
Securing A Green Recovery on a Path to Net Zero: Climate Change Plan 2018–32 ⁴	FIFEplan ¹¹ (Local Development Plan) 2017 and the Low Carbon Fife ¹² and Making Fife's Places ¹³ Supplementary Planning Guidance Documents
Heat in Buildings Strategy ⁵ (2021)	Climate Fife: Sustainable Energy and Climate Action Plan ¹⁴ (2020)
Energy Efficiency Standard for Social Housing 2 ⁶	Local Housing Strategy 2022-27 ¹⁵
Heat Networks (Scotland) Act 2021 ⁷	Fife's Fuel Poverty Covid-19 Recovery Plan ¹⁶
Fuel Poverty (Targets, Definition and Strategy) (Scotland) Act 2019 ⁸	
National Planning Framework 4 ⁹	

The Heat in Buildings Strategy sets out several key targets which this Local Heat and Energy Efficiency Strategy has considered.

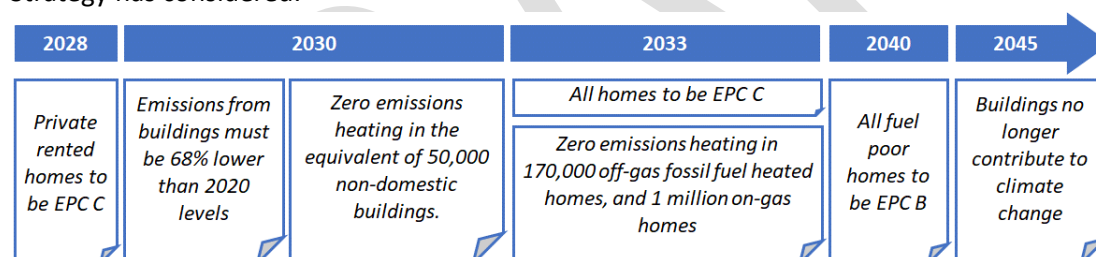


Figure 1: Key Heat in Buildings Strategy Targets

Other drivers include:

- In 2020, ~53% of Scottish energy demand was for heating and responsible for ~20% of energy related greenhouse gas emissions¹⁷. Scotland set targets of 50% of energy from renewable sources by 2030¹⁸.
- The Scottish Government have indicated Local Heat and Energy Efficiency Strategies will be a consideration when allocating funding.
- The energy crisis is adding costs pressure to everyone. Fife's domestic gas and electricity costs alone rose to an estimated £500m/year in 2022/23¹⁹. Higher fuel costs increase fuel poverty and costs for businesses. The likely cost for all energy in Fife is expected to be over £1Bn²⁰ - a sizeable proportion of Fife's total GDP which is mostly lost to the local economy.

³ [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2019 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2019/12/section/1)

⁴ [Executive Summary - Climate Change Plan: third report on proposals and policies 2018-2032 \(RPP3\) - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/Executive-Summary-Climate-Change-Plan-2018-2032-RPP3/pages/Executive-Summary-Climate-Change-Plan-2018-2032-RPP3.aspx)

⁵ [Heat in Buildings Strategy - achieving net zero emissions in Scotland's buildings - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/Heat-in-Buildings-Strategy/pages/Heat-in-Buildings-Strategy.aspx)

⁶ [Energy efficiency in social housing - Home energy and fuel poverty - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/Energy-efficiency-in-social-housing/pages/Energy-efficiency-in-social-housing.aspx)

⁷ [Heat Networks \(Scotland\) Act 2021 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2021/12/section/1)

⁸ [Fuel Poverty \(Targets, Definition and Strategy\) \(Scotland\) Act 2019 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/2019/12/section/1)

⁹ [National Planning Framework 4 - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/National-Planning-Framework-4/pages/National-Planning-Framework-4.aspx)

¹⁰ [A Plan for Fife | Our Fife - Creating a successful, confident, and fairer Fife](https://www.fife.gov.uk/our-fife/creating-a-successful-confident-and-fairer-fife)

¹¹ [Local Development Plan \(FIFEplan\) | Fife Council](https://www.fife.gov.uk/our-fife/creating-a-successful-confident-and-fairer-fife)

¹² [Adopted Low Carbon Fife SG Jan 2019](https://www.fife.gov.uk/our-fife/creating-a-successful-confident-and-fairer-fife)

¹³ [Making-Fifes-Places-Supplementary-Guidance-August-2018.pdf](https://www.fife.gov.uk/our-fife/creating-a-successful-confident-and-fairer-fife)

¹⁴ [Microsoft Word - Climate Fife FINAL](https://www.fife.gov.uk/our-fife/creating-a-successful-confident-and-fairer-fife)

¹⁵ [Local Housing Strategy | Fife Council](https://www.fife.gov.uk/our-fife/creating-a-successful-confident-and-fairer-fife)

¹⁶ [Fifes-Fuel-Poverty-Covid-19-Recovery-Plan-2021-22-Final-1.pdf](https://www.fife.gov.uk/our-fife/creating-a-successful-confident-and-fairer-fife)

¹⁷ [Scottish Energy Statistics Hub \(shinyapps.io\)](https://shinyapps.io/scottish-energy-statistics-hub/)

¹⁸ Scottish Energy Statistics hub.

¹⁹ Calculation based on the UK Government October 2022 price cap figures.

²⁰ Estimation based on previous figures from Climate Fife and analysis on the UK Government Price Cap October 2022.

Opportunities and Challenges

Opportunities

What can help us make these changes? Several technologies and measures exist which will reduce energy consumption and decarbonise heat:

- all types of insulation to reduce heat and energy loss,
- heat networks,
- air and ground source heat pumps,
- new energy sources via expanding the electricity grid supply and exploring new energy options,
- energy storage, including thermal storage, and
- other decarbonised heat sources include infra-red/electric heaters combined with solar photovoltaic, and solar water heating.

Other opportunities include economic benefits related to the just energy transition by reducing local energy costs and internalising part of Fife's energy spend; feeding into wider energy planning; and improving stakeholder connections.

Challenges

Stakeholders identified challenges which will be addressed, otherwise they may impact the success of this strategy and delivery plan. Short term actions will look for opportunities to work collaboratively to find solutions to these challenges. The main challenges are:

- uncertainty of measures,
- energy performance certificates,
- heat pumps,
- skills and knowledge, and
- ongoing funding and delivery.

Some challenges increase uncertainty of achieving a robust delivery or cause undesired short- and long-term impacts. These could potentially damage confidence in the strategy and early actions.

Potential impacts, if not correctly addressed, may include:









- higher energy costs,
- increasing or not reducing fuel poverty,
- damp/mould, and
- interstitial (inter-wall) condensation leading to degradation over decades.

To address this, **we will only include measures where there is a high certainty of success and positive impacts**. Furthermore, there are actions focussing on research and analysis to help identify high certainty building level measures. We will raise nationally significant challenges to the Scottish Government to allow for a centrally coordinated response and action.

Priorities

Eight priorities (Table 2) form the basis of this strategy and delivery plan. These were developed from national and local policies and strategies; engaging stakeholders; and building analysis. They help ensure this strategy improves energy efficiency and decarbonises heat of buildings, and other important considerations such as fuel poverty and community wealth building.

Table 2: Priorities and Outcomes

1	Being Climate Friendly and Ready	
	1.1 Net Zero & Climate Emergency	Fife buildings move towards Net Zero and help address the climate emergency.
	1.2 Adaptation	The resilience of Fife's buildings, communities and economy is supported to adapt to the impacts of climate change.
2	Tackling Fuel Poverty, Health, and the Just Transition	
	2.1 Tackling Fuel Poverty, Health, and the Just Transition	All communities experience a just transition to Net Zero, with fuel poor homes becoming more energy efficient, and actions only implemented where there will be no detrimental impact.
3	Supporting an Inclusive Economy, Jobs, and Skills	
	3.1 Skills & Jobs	The skills and jobs required to support retrofit actions across Fife are identified and supported, as part of the just transition.
	3.2 Community Wealth Building	Actions will continue to support recovery, focus on place and work in partnership with our communities, as part of the just transition.
	3.3 Finance	Fife actions are identified where local, regional, and national expenditure and funding could support the just energy transition.
4	Maximising Knowledge and Awareness	
	4.1 Awareness & Knowledge	All stakeholders across Fife are aware of how to improve energy efficiency, decarbonise heat, and access support programmes.
5	Ensuring Certainty of Success	
	5.1 Ensuring Certainty	Actions will be prioritised on certainty of success and minimal potential unintended consequences.
6	Transitioning the Energy System	
	6.1 Energy System Opportunities & Constraints	Actions are informed via engagement with utility providers to determine capacity, opportunity, and security of projects, whilst taking a holistic view of the wider energy system.
7	Energy Efficient Buildings	
	7.1 Domestic	Homes across Fife become more energy efficient and work towards national targets, recognising the challenges.
	7.2 Social Housing	
	7.3 Private Rented	
	7.4 Mixed-Use, - Tenure & Historic	
	7.5 Non-Domestic	Non-domestic buildings across Fife become more energy efficient, recognising the challenges.
8	Decarbonising Heat Sources	
	8.1 On Gas	Homes across Fife have decarbonised heat and work towards national targets, recognising the challenges.
	8.2 Off-Gas	
	8.3 Non-Domestic	Non-domestic buildings across Fife have decarbonised heat and work towards national targets recognising the challenges.
	8.4 Heat Networks	Potential heat network zones identified, including expansion of existing networks, as a mechanism to decarbonise heat.

Delivery Plan

A high-level summary of actions to take forward in the first delivery plan are detailed below (Table 3)²¹. 'Sub-actions' are being identified and assigned against stakeholders for delivery, with an initial action to finalise and publish a detailed delivery plan. Sub-actions include those already scheduled for implementation, and those supporting strategy implementation and development. New, scalable, deliverable building level actions are being identified by an optioneering process. This will identify buildings suitable for energy efficiency and/or heat decarbonisation measures, weighted against key priorities and indicators. This will support understanding of how identified actions align against stakeholder requirements.

Table 3: Summary of Actions

Building Level ²²	Heat Networks	Energy System	Skills & Jobs
Building level studies to understand the specific energy efficiency and heat decarbonisation measures required.	Identify new heat networks.	Identify existing electricity grid capacity to meet heat decarbonisation requirements.	Skills and jobs baseline.
Planned projects to decarbonise buildings' internal heat sources.	Expand and optimise (smart grids/networks) existing heat networks and explore changing to decarbonised heat sources.	Explore potential opportunities for expansion of energy systems to meet heat decarbonisation requirements.	Training of existing providers.
Planned projects improving buildings' energy efficiency.	Explore heat network delivery model options.	Development of settlement level energy plans.	National and regional coordination to tackle the skills gap.
			Transitioning skills.
			Fostering and feeding the skills pipeline.
			Supply Chain Development.
Funding	Knowledge & Awareness Raising	Data, Modelling & Methodology	
Help inform the direction of new funding sources.	Raise Awareness of the Local Heat and Energy Efficiency Strategy.	Publish detailed delivery plan.	
Identify and promote existing funding sources.	Improve knowledge of how to improve energy efficiency of buildings and decarbonise heat sources.	Review of the Methodology to inform future iterations.	
		Data collection to inform future iterations and identify high certainty actions.	
		Modelling to inform future iterations and identify high certainty actions.	

²¹ Some actions may apply to multiple categories and have been assigned where most appropriate.

²² To ensure quality of delivery, building level actions have only been included where there is a high certainty of success and positive impacts (Chapter **Error! Reference source not found.**) or are already planned for implementation by building owners.

Governance and Monitoring

Governance

The Local Heat and Energy Efficiency Strategy provides a framework for future capital and revenue spend. It will help move Fife's buildings towards meeting Net Zero targets by recommending projects to improve energy efficiency and decarbonising heat.

This first iteration was developed by the Council's Planning Service. To ensure ongoing success we will continue partnership collaborating with other Council services, external partners, businesses, and communities. To achieve this a governance and delivery model has been developed (Figure 2). It aligns with existing governance structures; understands cross-cutting opportunities; and works with partners to take the strategy forward.

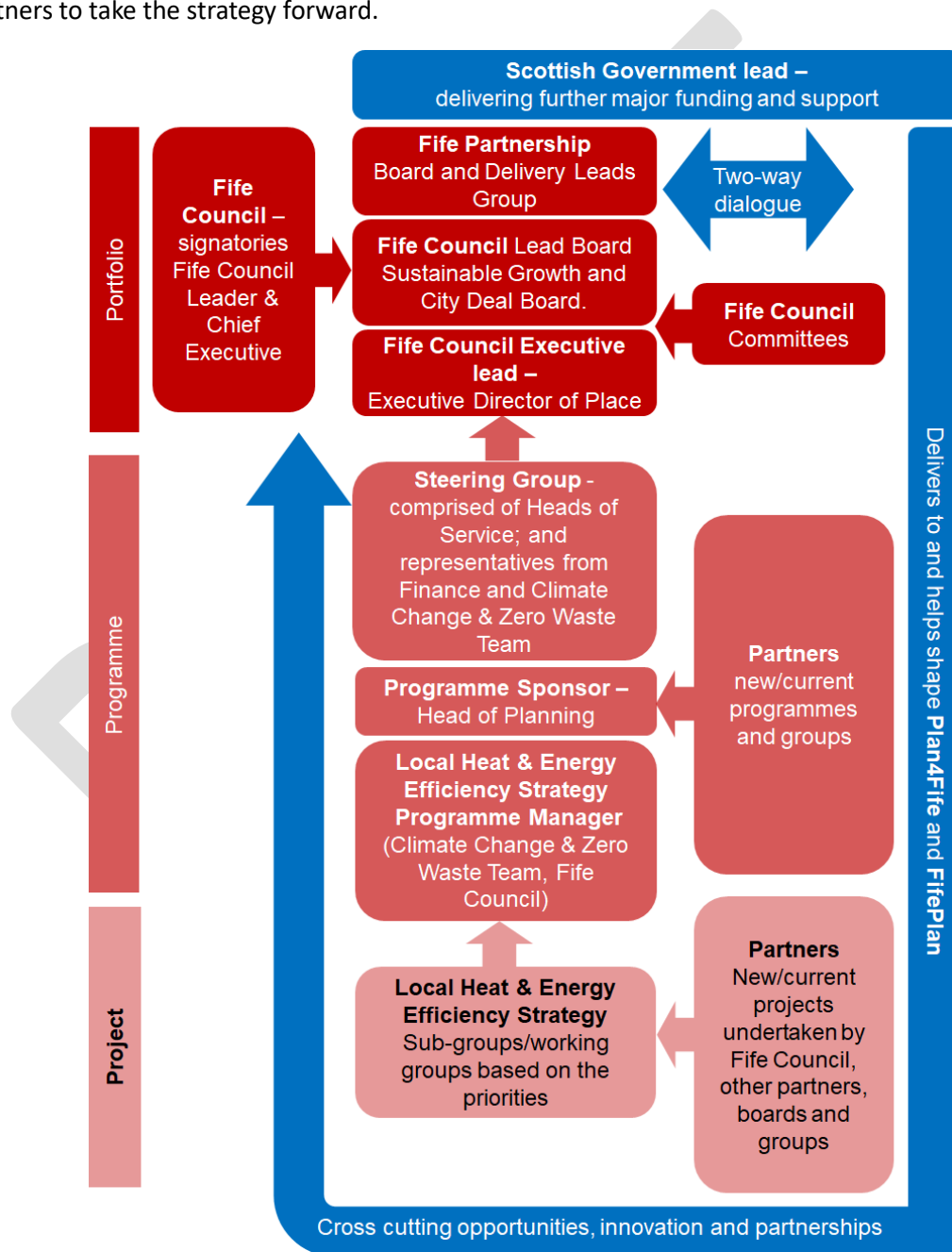


Figure 2: Governance and Delivery Model

Reporting and Monitoring

Ongoing monitoring will be critical for the success of this strategy. This will ensure key outcomes are achieved and allow for continuous improvements to be made. It will also help guarantee Fife's strategy and delivery plan are living, flexible documents. Reporting will occur for significant delivery risks, changes, and achievements. This will form part of the Council's Public Bodies Climate Change reporting duties. In addition, regular progress updates will be reported to the Local Heat and Energy Efficiency Strategy Steering Group. The strategy and delivery plan will be regularly updated in line with changes to policies, targets, information, and data. Every 5 years the strategy will be formally reviewed, and delivery plan updated, to meet requirements of the Local Heat and Energy Efficiency Strategies (Scotland) Order 2022.

Proposed indicators have been identified to measure success against each priority, and where suitable aligned against the National Performance Framework²³. Alongside the development of the detailed delivery plan, indicators will also be finalised.

²³ [National Outcomes | National Performance Framework](#)