

Heat in Buildings: Achieving Net Zero Emissions in Scotland's Buildings

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Overview

- Heat in Buildings Strategy
- Local solutions for local areas – Local Heat and Energy Efficiency Strategies (LHEES)
- Working in partnership to achieve net zero



Scotland's Statutory Targets

Climate Change Emission Reduction Targets (Scotland) Act 2019

- Net zero emissions by 2045
- 75% reduction by 2030

Fuel Poverty (Targets, Definitions and Strategy) (Scotland) Act 2019

- In 2040, as far as reasonably possible, no household in Scotland is in fuel poverty

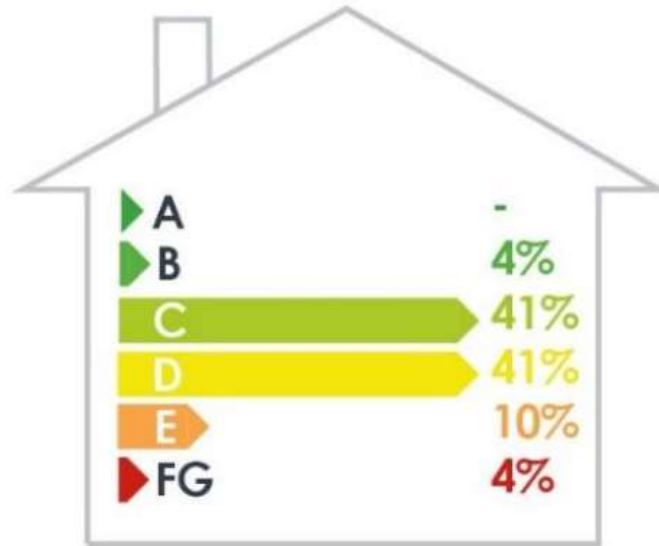
Heat Networks (Scotland) Act 2021

- Target of heat demand to be met by heat networks:
2.6 TWh by 2027, 6 TWh by 2030

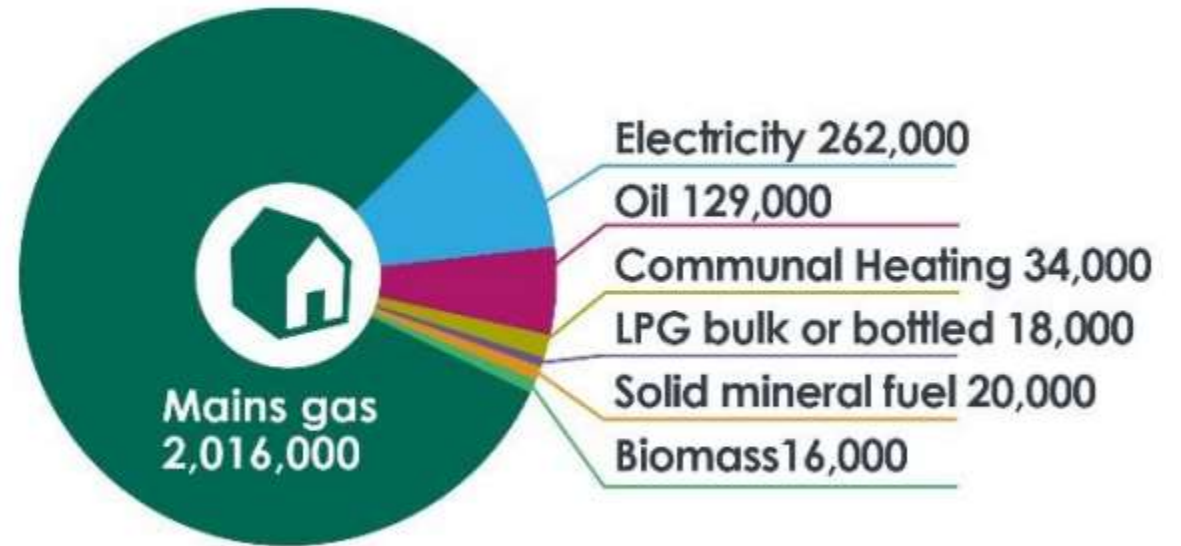
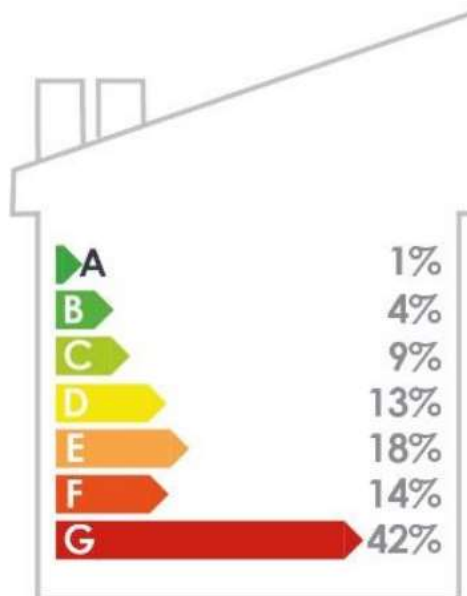


Where are we now?

Homes



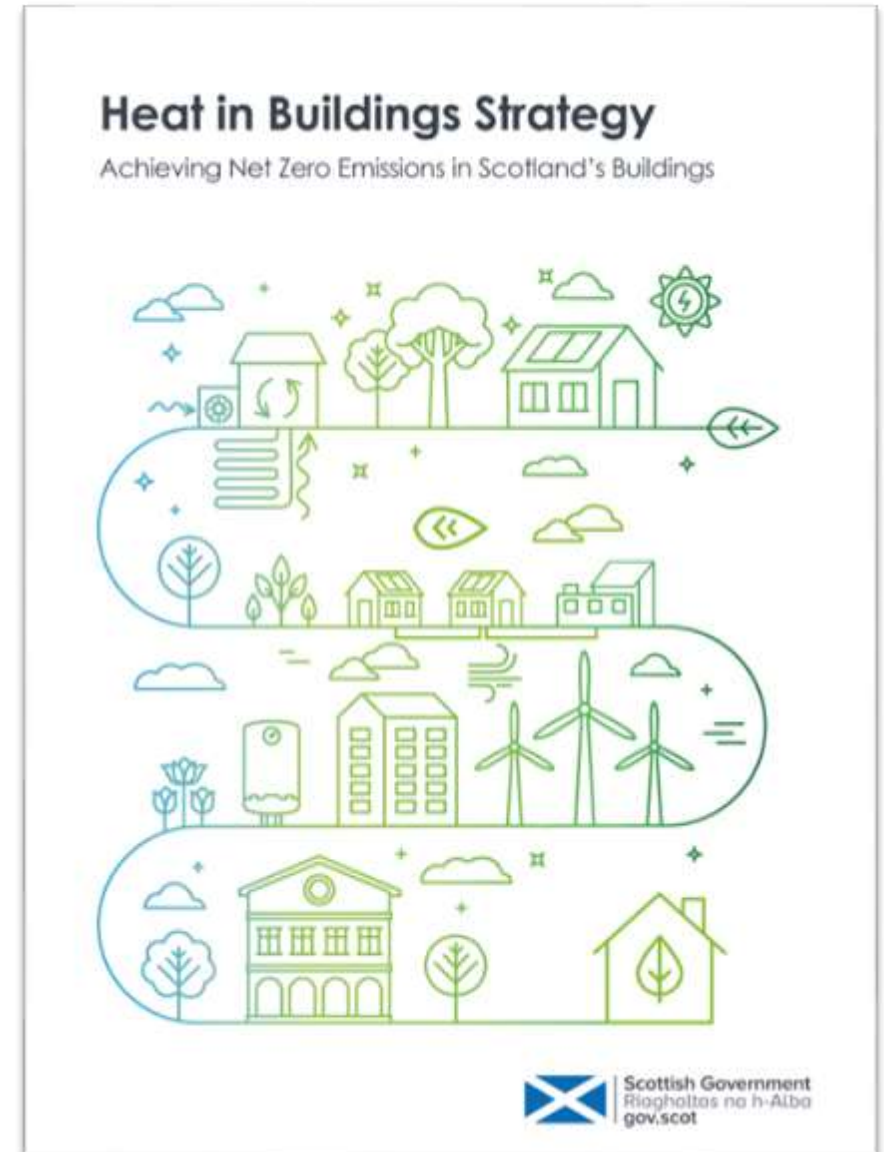
Non Domestic



Our vision is that by 2045 our homes and buildings are cleaner, greener and easy to heat, with our homes and buildings no longer contributing to climate change, as part of the wider just transition to net zero.

Heat in Buildings Strategy

- **By 2030** emissions from buildings have to be 68% lower than 2020 levels, which requires zero emissions heating in:
 - The vast majority of 170,000 off-gas fossil fuel heated homes
 - At least 1 million on-gas homes
 - The equivalent of 50,000 non-domestic buildings
- By 2030 the large majority of buildings achieve a good standard of energy efficiency.
- By 2033 all homes have the equivalent of EPC C.
- **By 2045** our homes and buildings no longer contributing to climate change



Cost of living

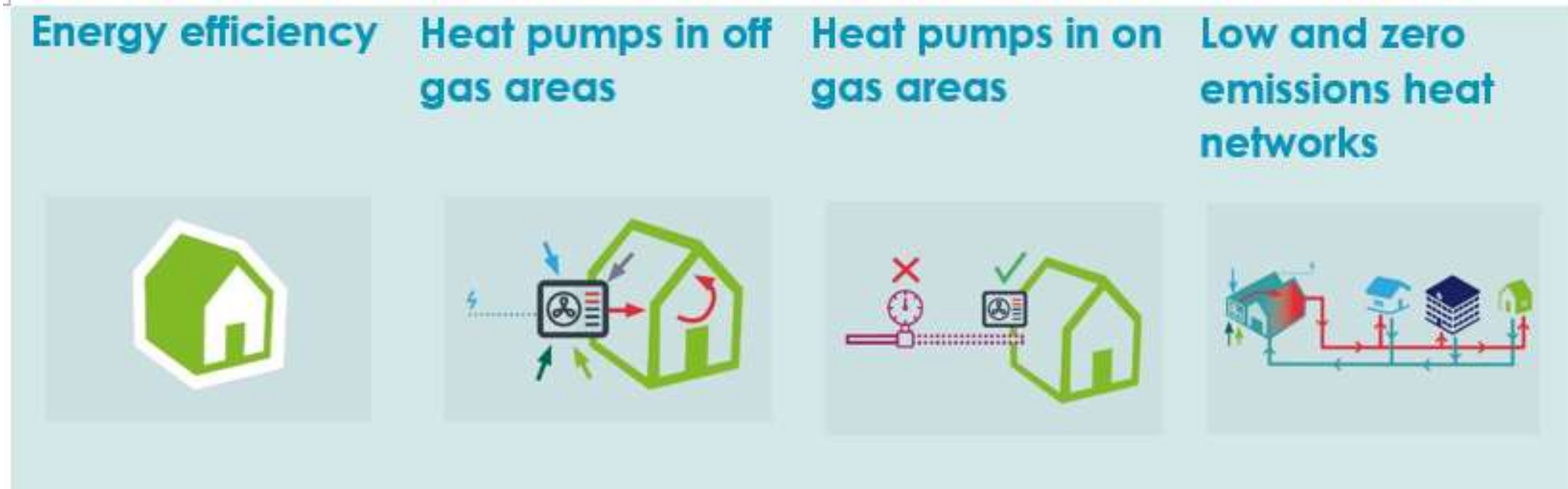
- The cost of living crisis and unprecedented surges in energy prices make the heat decarbonisation challenges harder. We continue to call on the UK Government to cancel further rises in bills, and find the funds that can make this happen.
- We have increased our support for heat and energy efficiency measures and to support those least able to pay, with a £1.2 million package of support for consumer-facing advice services.
- We are doing this because being comfortable at home is something everyone should be able to afford. This principle will guide us right through the transition to zero emissions heating.
- And of course the current energy bills crisis is driven by the cost of gas – which makes the shift away from fossil fuels and towards efficient, zero carbon buildings more important than ever.



costofliving.campaign.gov.scot

The Journey to Net Zero

We need rapid increase deployment of no and low regrets strategic technologies that are available today



People

- **Key areas**

- A people-centred transition
- Consumer protection
- Continue to reduce fuel poverty



- **Key actions:**

- **Public Engagement Strategy** and action plan for heat decarbonisation.
- **National Public Energy Agency** to accelerate transformational change, including informing the public and providing expert advice.
- Guiding principles, aligning decarbonisation and fuel poverty objectives, and underpinning our commitment that **no one is left behind in the transition.**

Place

- **Key areas**

- Local Heat & Energy Efficiency Strategies (LHEES) at the heart of a place based, locally-led and tailored approach
- The role of communities, and community ‘heat’ models.



- **Key actions**

- **LHEES** to be in place by the end of 2023 for all local authority areas
- LHEES developed on a **statutory basis** and resourced accordingly
- Align the **planning system** with LHEES and ensure it supports low and zero emissions heating.
- Support cities deliver a pipeline of projects

Preparing the wider energy system

▪ Key areas

- Electricity system impacts
- Emerging evidence around the feasibility and cost of hydrogen
- The Heat Networks (Scotland) Act 2021



▪ Key actions

- Ongoing work with **industry, UK Government and Ofgem** to understand energy system issues
- Supporting **development and demonstration** projects, including on hydrogen for heat
- Business rates reliefs to support **heat networks**
- **Heat Networks Delivery Plan** and regulatory regime

Kick-starting investment in the transition

- **At least £1.8bn over the current parliamentary period** to kick-start market growth and support those least able to pay.
- Four strategic priorities:
 - 1. Supporting those least able to pay**
 - 2. Investing in strategic technologies in low and no regrets areas**
 - 3. Showcasing net zero leadership through early adoption**
 - 4. Investing in innovation and demonstration**
- Funding for social housing, public estate and large scale projects.
- Increased funding through existing support programmes



Regulatory framework

- Energy efficiency and zero emissions heating investments are long term decisions that require **certainty and clear end-points**.
- We will introduce new **mandatory legal standards** for zero emissions heating and energy efficiency, where it is within our legal competence, during this term of Parliament.
 - Minimum standards and timing across new buildings, social housing, private housing and non-domestic buildings
 - Mixed-use and multi-tenure buildings
 - Potential **trigger points**:
 - Building-level events (change of tenancy, sale, refurbishment, etc.)
 - Area-based triggers (e.g. where there are shared or common issues)
- Regulations subject to detailed consultation



Local Heat and Energy Efficiency Strategies



- Long-term **plan for an entire local authority** area to decarbonise heat and improve energy efficiency
- Sets out how each **segment of the building stock** needs to change to reach net zero
- Identifies **strategic heat decarbonisation zones**, and sets out the principal measures for reducing buildings emissions within each zone
- **Prioritises areas for delivery** of heat decarbonisation action
- **Near term actions** (5 years) - what can be delivered now given the existing and known policy landscape
- Act as a **prospectus** for where government funding and private investment for heat decarbonisation and energy efficiency investment should be targeted
- An LHEES is structured in two parts:
 - A Local Heat and Energy Efficiency Strategy
 - A Local Heat and Energy Efficiency Delivery Plan

Local Heat and Energy Efficiency Strategies

- Work on LHEES started in 2017 and all 32 local authorities have been involved in initial **pilots**.
- **The Local Heat and Energy Efficiency Strategies (Scotland) Order 2022** came into force in May, requiring local authorities to have strategies and delivery plans in place **by the end of 2023**.
- The Scottish Government will shortly publish **Guidance** which sets out what is required to fulfil the SSI.
- A **Methodology** has been developed from the pilots by Zero Waste Scotland this sets out how a local authority could fulfil the requirements (optional).



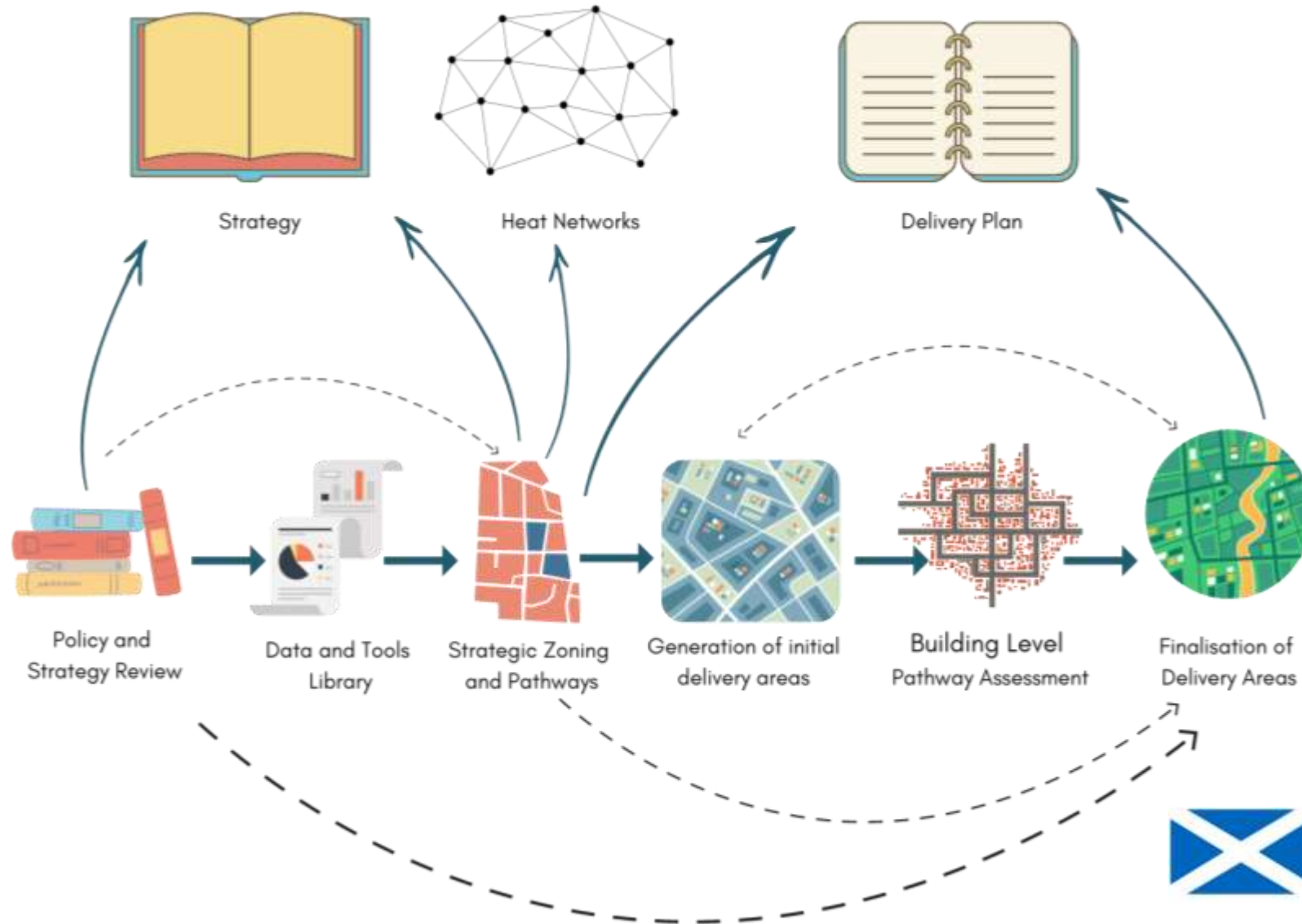
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LHEES Guidance

- Aim is to set out production and content requirements for a local authority to develop their LHEES
- Backed up by robust data and analysis, supported by stakeholder engagement, linked to national and local priorities, plans and targets.
- Evolve with future standards and regulation
- Multi-year funding package to LAs



Developing a Strategy and Delivery Plan



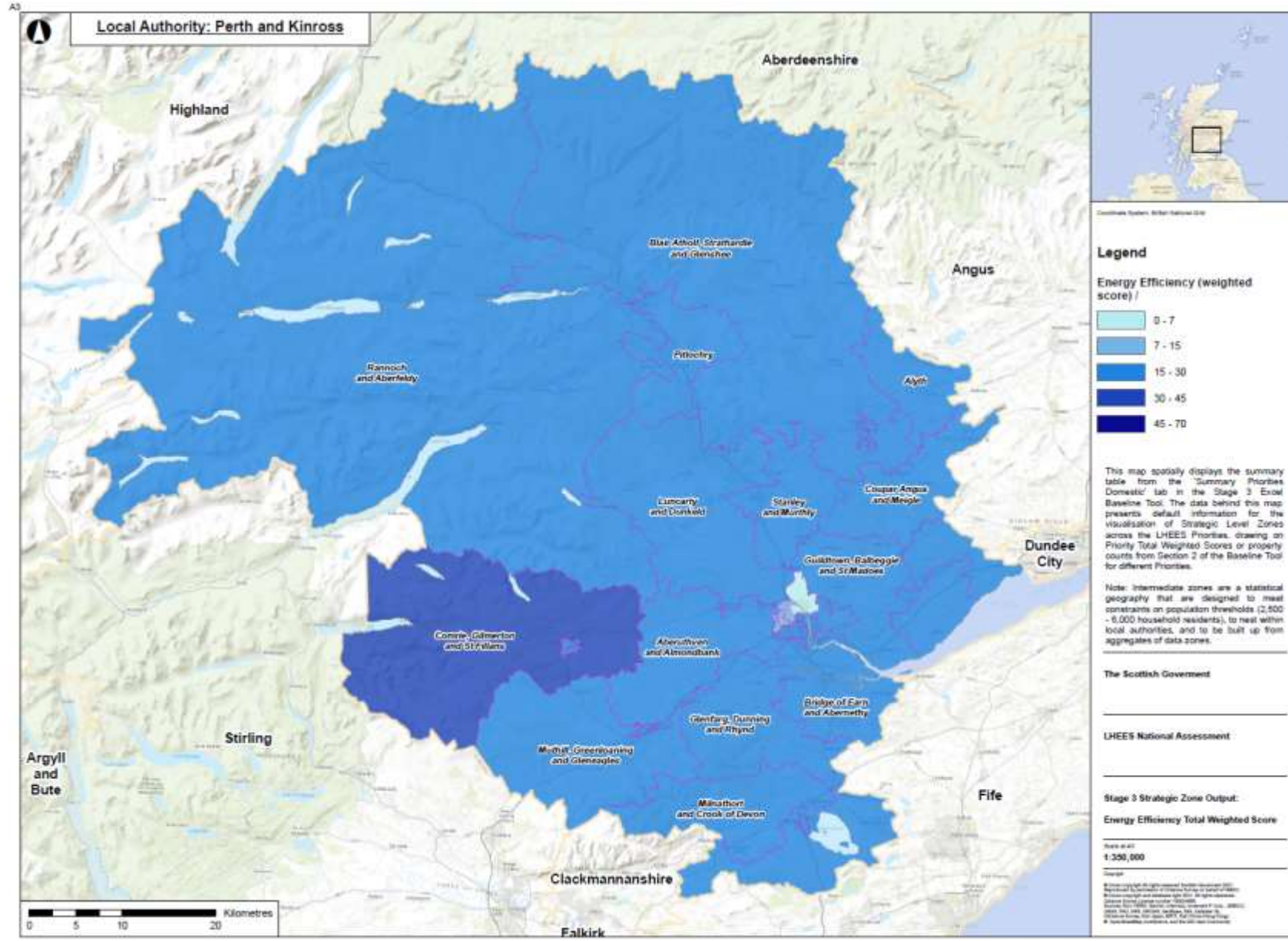
LHEES Considerations

	No.	LHEES considerations	Description
Heat decarbonisation	1	Off-gas grid buildings	Transitioning from heating oil and LPG in off-gas areas
	2	On-gas grid buildings	On-gas grid heat decarbonisation
	3	Heat networks	Decarbonisation with heat networks
Energy efficiency and other outcomes	4	Poor building energy efficiency	Poor building energy efficiency
	5	Poor building energy efficiency as a driver for fuel poverty	Poor building energy efficiency as a driver for fuel poverty
	6	Mixed-tenure, mixed-use and historic buildings	Mixed-tenure, mixed-use buildings, listed buildings, and buildings in conservation areas

Example Strategic Zone Map

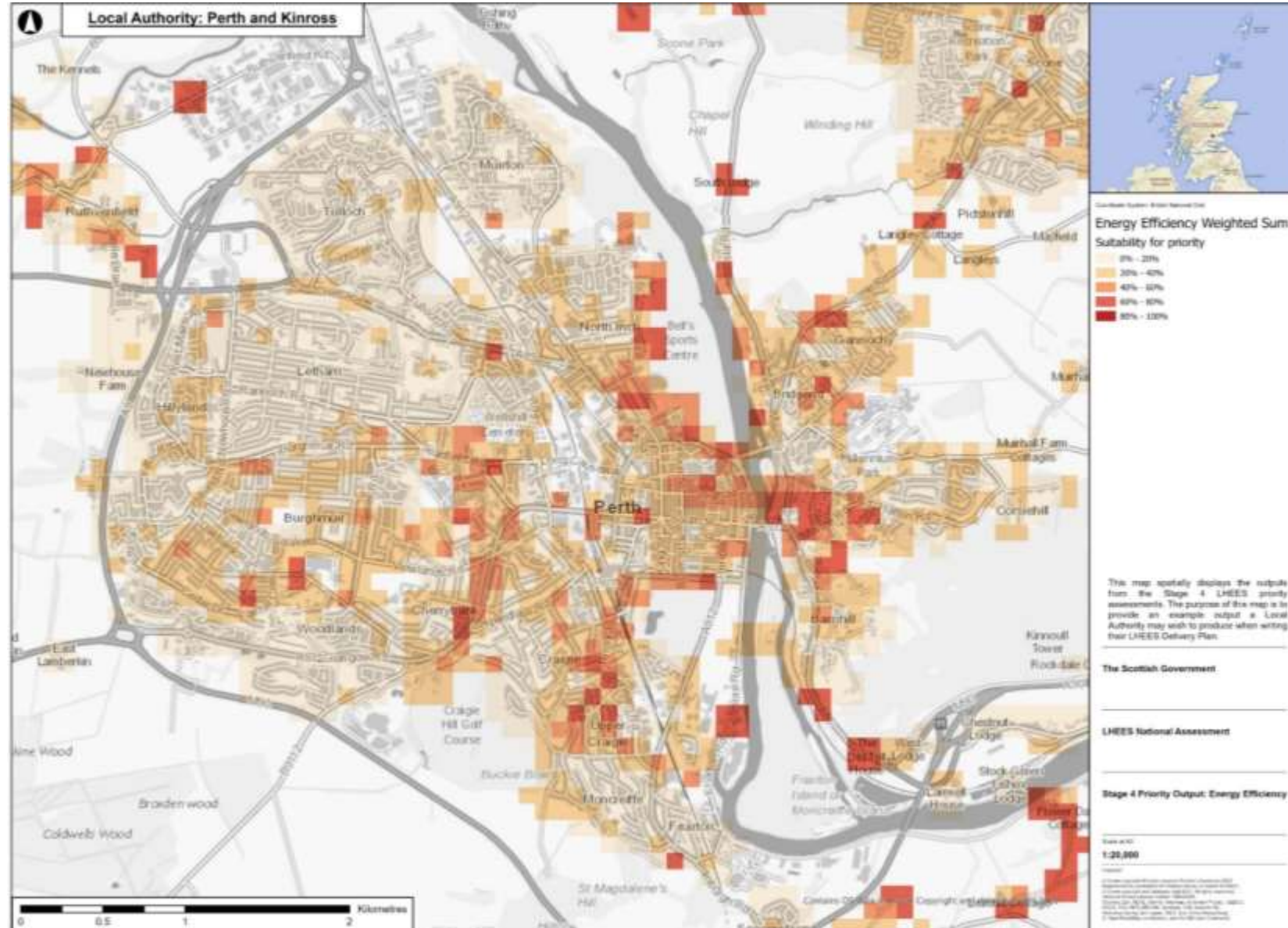
LHEES Consideration:
Energy Efficiency (Mean Total Weighted Score of total domestic properties within a local authority).

This section contains maps using data with permission from Perth and Kinross Council. The following map outputs are for exemplar purposes only. They are indicative of evidence provided to support the development of LHEES Strategies and Delivery Plans, but at this stage are only in draft format, subject to further development and consultation both internally and as part of the wider national review of the approach. They should not be used for any purposes other than an example of how a local authority might want to produce map outputs.



Example Delivery Area Map

Energy Efficiency
Weighted Sum
(Suitability
against the
priority)



Working in partnership

Delivery

National Public Energy Agency

LHEES resourcing & Support Network

Heat Network Support Unit

Area Based Schemes

Regulations

Heat Network Regulations

Energy Efficiency Standards for Social Housing

New Build Heat Standards

Public Sector Building Decarbonisation

Funding

Green Heat Finance Taskforce

Heat Network Fund (£300m)

Social Housing Net Zero Heat Fund (£200m)

Green Public Sector Estate Decarbonisation Scheme (£200m)

Governance

COSLA oversight of Heat in Buildings Programme

Agency Independent Strategic Board



Thank you

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