



# Strategic Approach to Asset

# Management

**The role of Local Heat and  
Energy Efficiency Strategies**

[LHEES@gov.scot](mailto:LHEES@gov.scot)

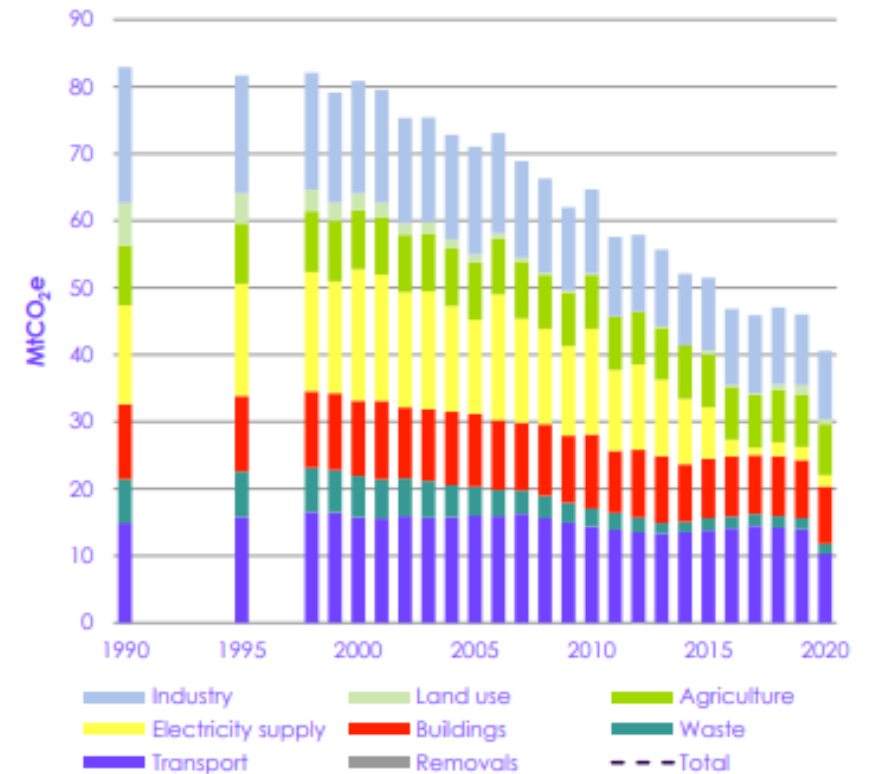


Scottish Government  
Riaghaltas na h-Alba  
[gov.scot](http://gov.scot)

# Context

- Net zero emissions by **2045**.
- The way we heat our homes, workplaces and other buildings is the **third-largest cause of greenhouse gas emissions** in Scotland.
- There is no way to meet our net zero target without **changing the heating systems** in the vast majority of our buildings.
- **Energy efficiency improvements** can reduce energy bills, address fuel poverty, make our homes healthier and more comfortable to live in, and enable clean heating systems to run efficiently.
- **By 2045** our homes and buildings no longer contributing to climate change
- Target for 2.6 TWh of thermal energy to be supplied by **heat networks** by 2027 and 6 TWh by 2030

Figure 5 Scotland's historical emissions (1990-2020)



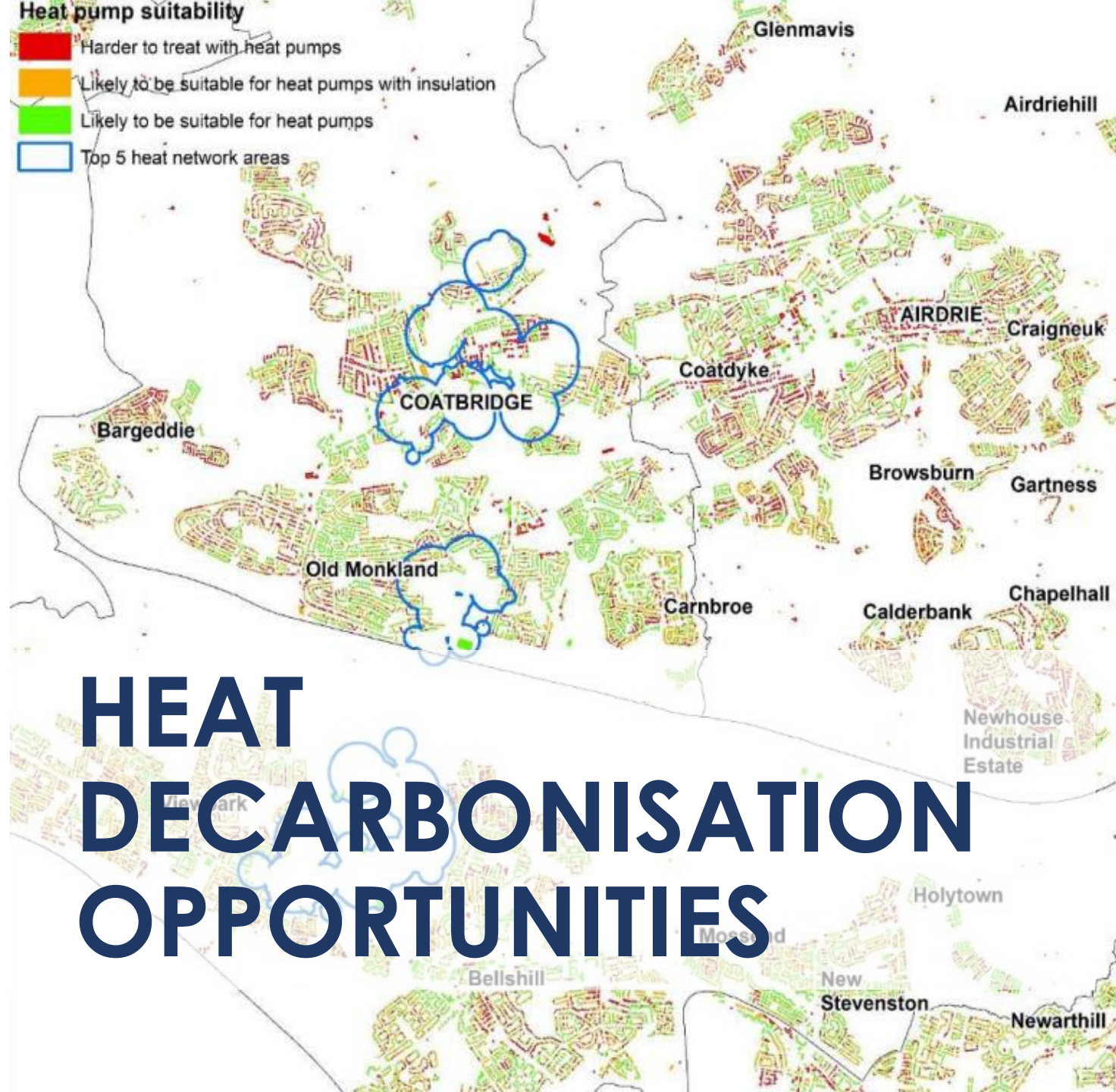
Source: NAEI (2022) Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland: 1990-2020; Scottish Government (2020) Securing a green recovery on a path to Net Zero: Climate Change Plan 2018-2032 - update.  
Notes: Historical emissions are not available for the years 1991-1994, and 1996-1997.



# WHAT ARE LHEES?

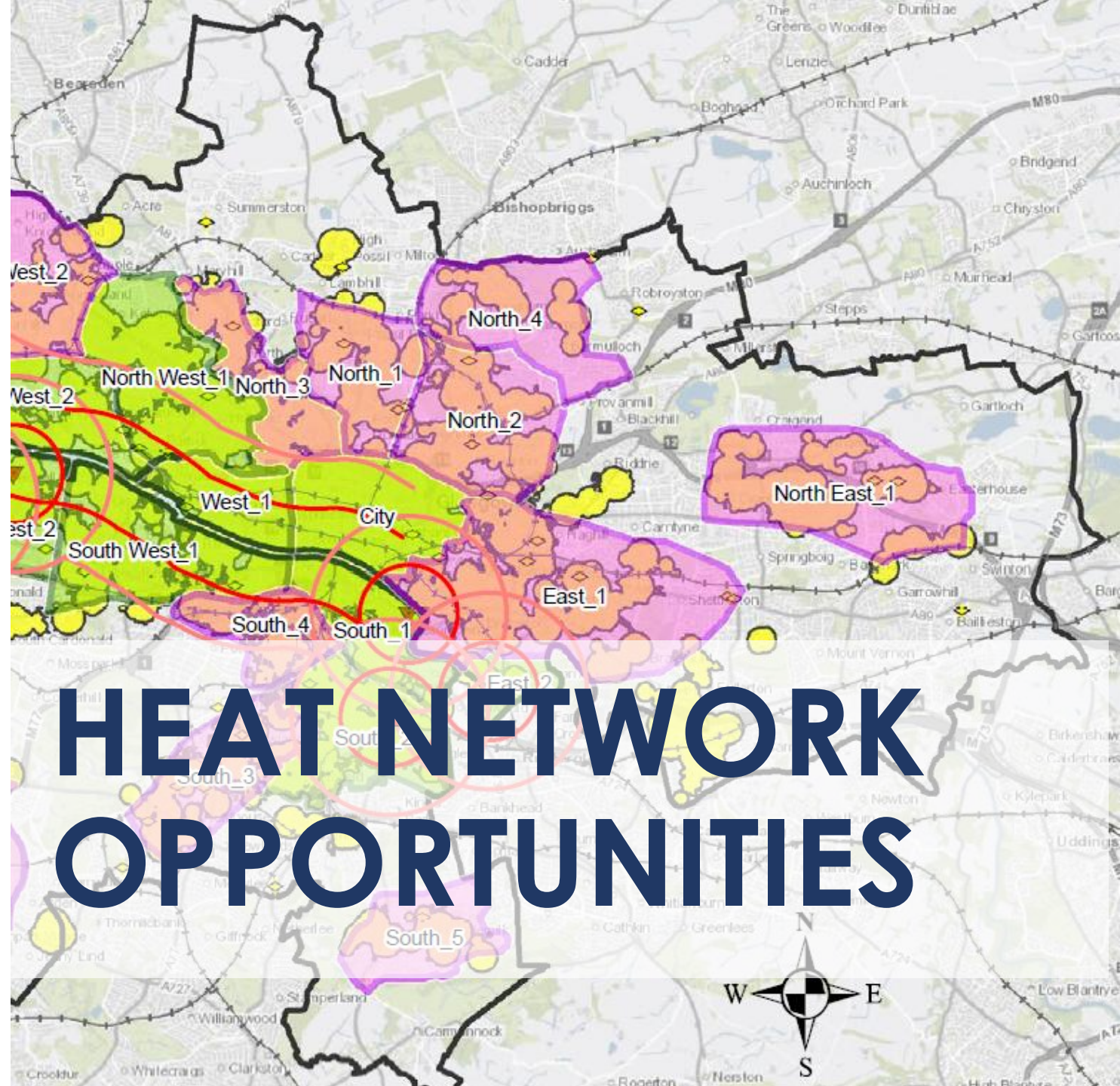
- Long-term **plan for an entire local authority** area to decarbonise heat and improve energy efficiency
- Sets out how each **segment of the building stock** needs to change to reach net zero
- Identifies **strategic heat decarbonisation zones**, and sets out the principal measures for reducing buildings emissions within each zone
- **Prioritises areas for delivery** of heat decarbonisation action
- **Identifies opportunities** – investment for heat decarbonisation and energy efficiency and targeted government funding

- Significant opportunities already exist for heat decarbonisation
- **North Lanarkshire** - potentially over 70k homes could be already suitable for new heat pumps installations without additional fabric measures
- **West Lothian** – 60% of on gas grid homes and nearly 1000 off gas grid homes are already suitable for a heat pump
- **Edinburgh** – nearly 10k off gas grid properties and over 100k on gas grid properties already suitable for a heat pump or connection to a heat network.
- LHEES provides us with a plan for where to target heat decarbonisation action



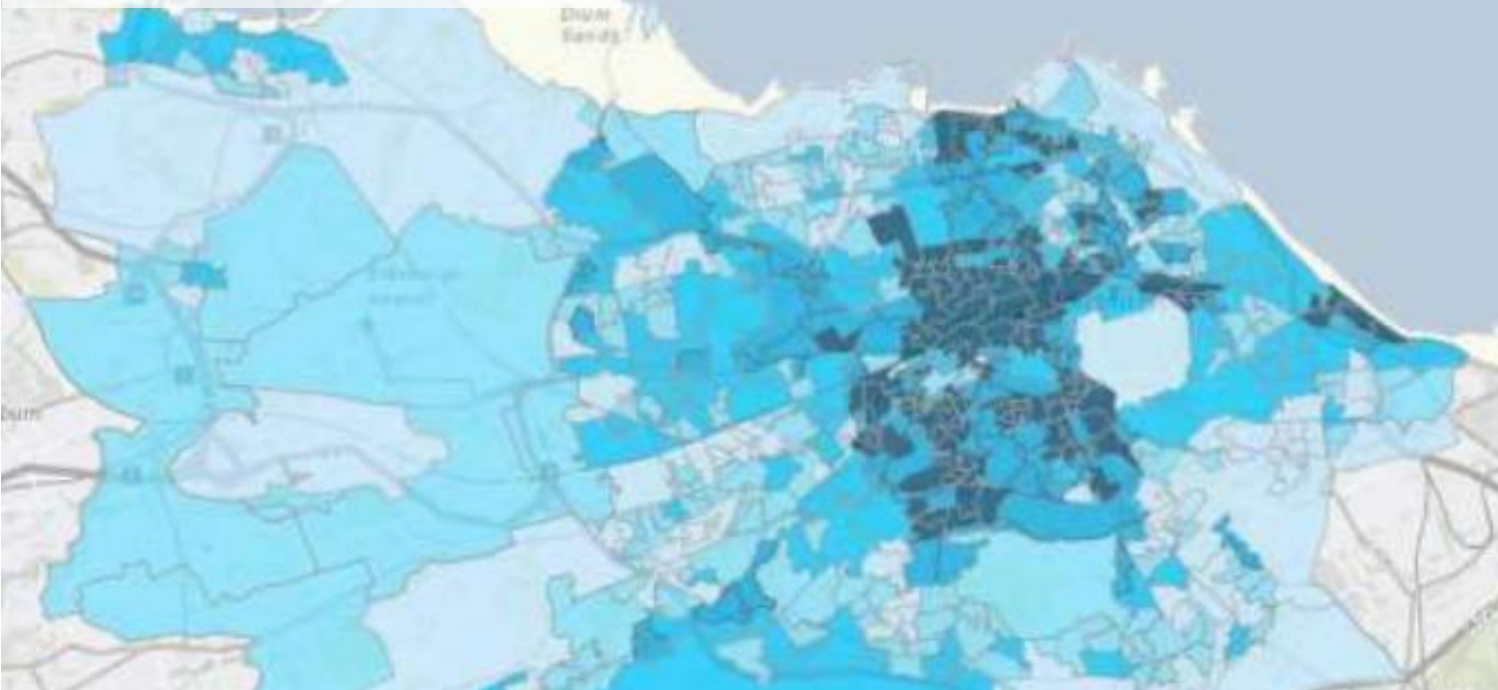
# HEAT DECARBONISATION OPPORTUNITIES

- LHEES provides takes the first step looking at potential for heat networks – anchor load, linear heat density and gridded heat density.
- **Edinburgh** - 17 prospective heat network zones identified
- Collectively they represent 3.7 TWh/yr of heat demand
- **Glasgow** – potential for heat networks to supply between 1.31 – 4.4 TWh/yr of heat demand.
- Which is up to 70% of Glasgow's total heat demand and up to 47% of Glasgow's populations' heat requirements.



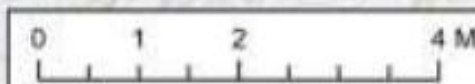
# HEAT NETWORK OPPORTUNITIES

Poor Energy Efficiency:  
Uninsulated Walls



# ENERGY EFFICIENCY RETROFIT OPPORTUNITIES

- Sets out how many properties need energy efficiency improvements – wall insulation, loft insulation, double/triple glazing?
- Where are those properties?
- **Highlands** – over 11.7k properties need upgraded loft insulation, over 8k need double/triple glazing and over 53k have uninsulated walls (left)
- **Edinburgh** – 25k properties need upgraded loft insulation, over 51k need double/secondary glazing
- **Comhairle Nan Eilean Siar** – nearly 3k properties need their loft insulation upgraded



- LHEES are a starting point, setting the local direction.
- Not a replacement for asset management plans or feasibility studies.
- Area based approach highlights opportunities to work collaboratively.
- LHEES acts as a node to bring different stakeholders together.
- By working together the benefits of economies of scale can be harnessed.
- Collaborative approach creates opportunities to make projects in more rural/remote areas economically viable.
- Large projects can also bring in expertise to support delivery.



OPPORTUNITIES  
FOR  
COLLABORATION