

Zero-emission heat?

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14 October 2019



**Climate Change (Emissions Reduction Targets) (Scotland)
Bill**
[AS INTRODUCED]

CONTENTS

Section

PART 1

EMISSIONS REDUCTION TARGETS

The net-zero emissions target

1 The net-zero emissions target

The 2050 and interim targets

2 The 2050 target

3 The interim targets

4 Modification of the 2050 and interim targets

The target-setting criteria

5 The target-setting criteria

Advice about targets



**Fuel Poverty (Targets,
Definition and Strategy)
(Scotland) Act 2019**

2019 asp 10



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Scotland's Energy Strategy and 2018 Climate Change Plan



OUR VISION
BY 2040 OUR HOMES AND BUILDINGS ARE WARMER, GREENER AND MORE EFFICIENT

BY 2032 WE AIM TO ACHIEVE

23%
EMISSIONS REDUCTION IN THE RESIDENTIAL SECTOR



53%
EMISSIONS REDUCTION IN THE SERVICES SECTOR



TO DO THIS, WE ARE AIMING FOR:
60% OF WALLS INSULATED BY 2020

LOW CARBON TECHNOLOGIES WILL SUPPLY HEAT TO:

35% OF DOMESTIC AND
70% OF NON-DOMESTIC BUILDINGS



15%
REDUCTION IN RESIDENTIAL HEAT DEMAND FROM ENERGY EFFICIENCY MEASURES



20%
REDUCTION IN NON-DOMESTIC HEAT DEMAND FROM ENERGY EFFICIENCY MEASURES

EMISSIONS FROM ALL BUILDINGS IN SCOTLAND WILL NEED TO BE NEAR ZERO BY

2045

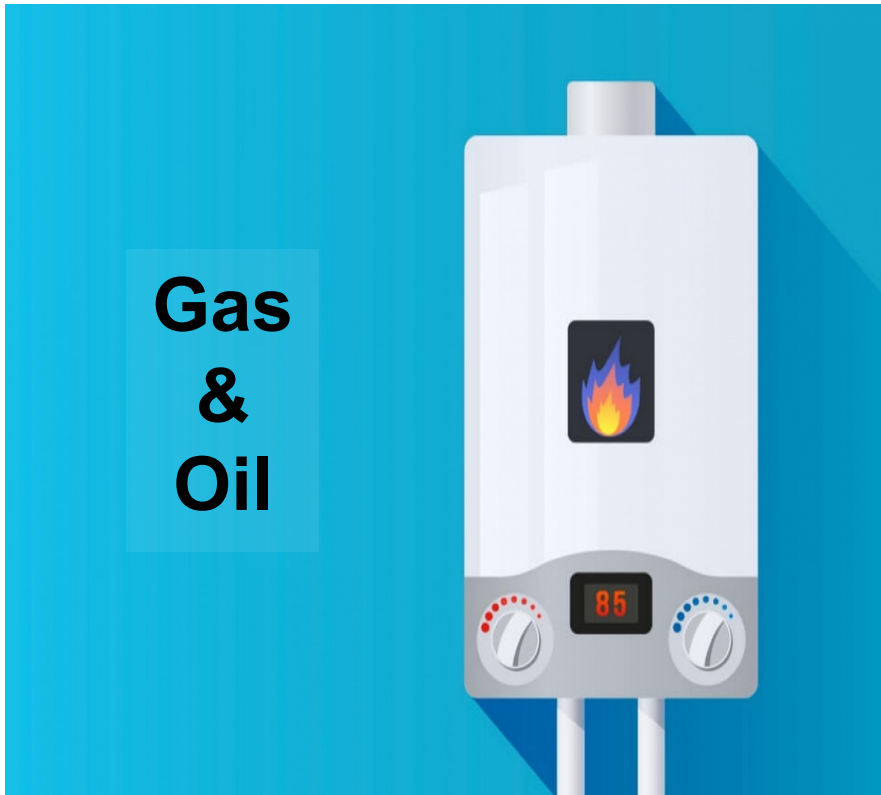
Dual Focus: *to promote energy efficiency in all buildings and low carbon heat*



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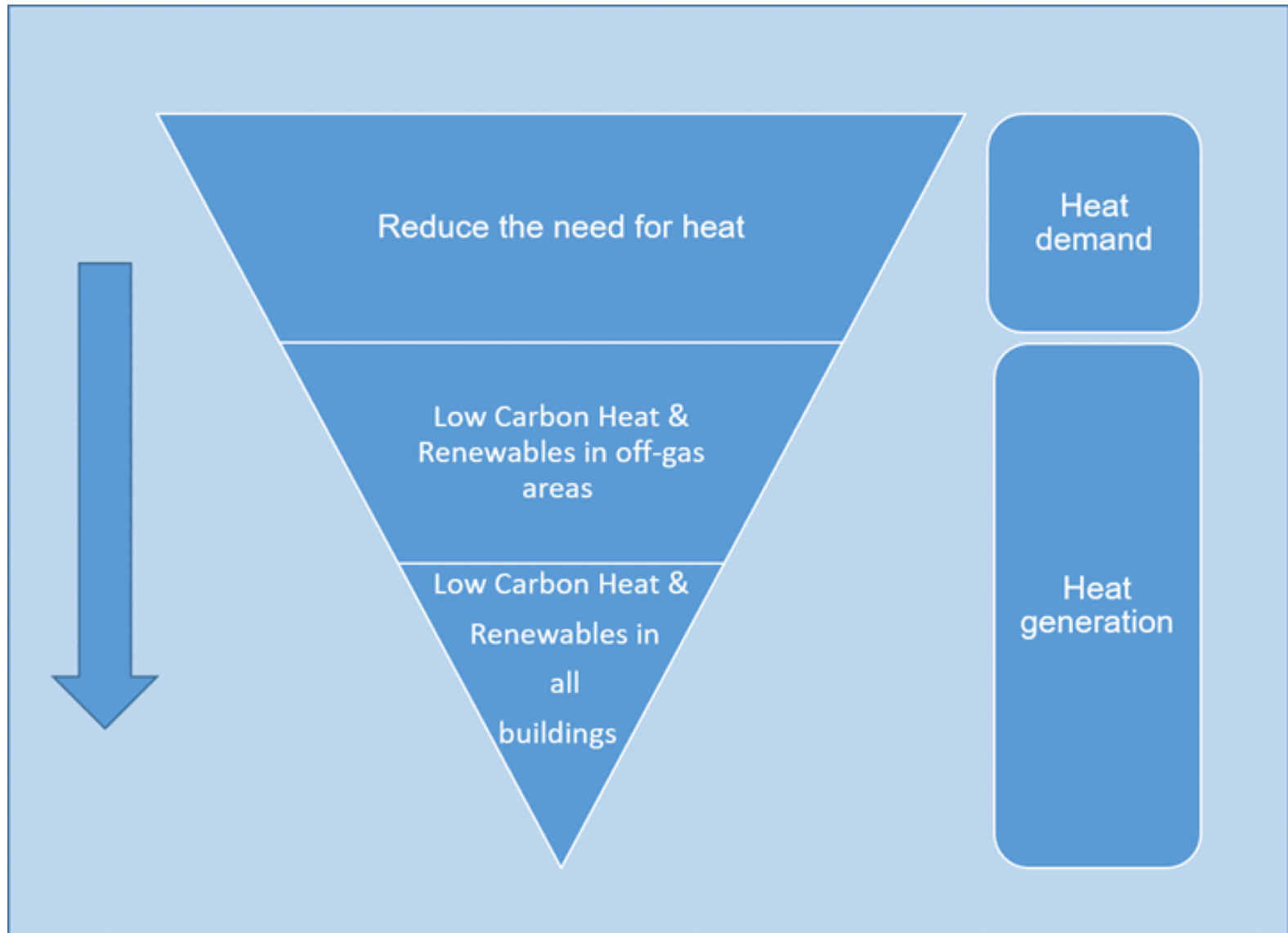
2019

2045



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Emerging Policy Focus



Programme for Government 2019

Programme for Government commitments:

- Heat Decarbonisation Policy Statement
- New homes from 2024 must use renewable heat; non-domestic buildings phased in from the same date
- Public sector as an exemplar
- Heat Networks Bill
- £30 million Low Carbon Heat call
- Commitment to publish bioenergy action plan by end of 2019.
- Commitment to bring forward Local Heat & Energy Efficiency Strategies



Challenges and Barriers

- **Technological**

- Suitability of buildings to maximise efficiency of low carbon heat
- Constraints on electricity grids
- Hydrogen – not yet proved at scale. UK government yet to decide

- **Price**

- Higher upfront costs compared to incumbent technologies
- Can generally have higher running costs compared to fossil fuel incumbents, particularly natural gas

- **Engagement**

- Can require extensive changes to internal systems (e.g. radiator replacement)
- Lack of awareness of alternative options for heating
- Myths, bad experiences, etc. of low carbon systems

- **Replacement cycle**

- Heating systems often replaced in crisis e.g. heating systems breakdown

- **UK reserved powers**

- Timescales on UK wide decisions, regulation of the Gas Network, Consumer Protection, Price signals and future of the Renewable Heat Incentive



SG-commissioned research:

- **Analysis of Call for Evidence responses (concluding)**
- **Research on Building Archetypes – domestic and non-domestic (underway)**
- **Research on potential consumer impacts (to be commissioned)**

This workshop:

- **An important contribution to knowledge**
- **A platform for exploring how to develop the heat research agenda**

