

# RESEARCH INSIGHT

## TRANSITIONS IN HEAT

### THE ARRIVAL AND DISAPPEARANCE OF GAS CENTRAL HEATING

#### Key points

- Changes in home heating matter for when and how different parts of the home are used and for what it means to be comfortable. Heating is important for the use of space, and vice versa.
- Gas central heating is now widespread but its arrival was a gradual, patchy and partial process. Different heating systems continue to co-exist.
- Evidence of past transitions suggests that future heating systems need not perpetuate the model of full central heating: other configurations are possible.

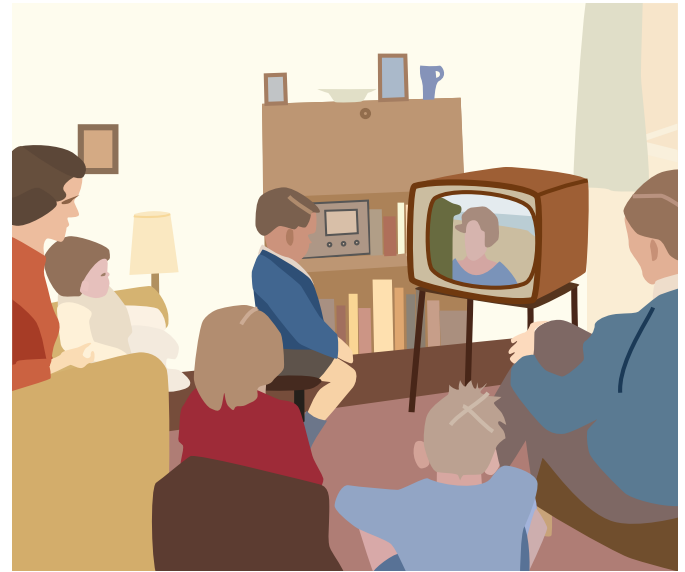
#### Introduction

The residential sector is responsible for 14% of UK greenhouse gas emissions, much of which relates to the gas used for central heating. Current proposals are to reduce this use of gas to 'close to zero'<sup>1</sup> by 2050, with some homes being connected to a heat network, but the majority using heat pumps.

Around 90% of homes now have central heating. Since almost all of these rely on gas, the conclusion that 'there is no role for standalone gas boilers in 2050'<sup>2</sup> implies a forthcoming upheaval in domestic heating.

This is not just a matter of swapping one technology for another. Methods of home heating are important for how homes are used, for what people do in different rooms and at different times of day, for what they wear, for what else is involved in keeping warm and for how experiences and expectations shift.

Our research was designed to capture these interwoven aspects: looking at past transitions in order to inform future strategy. As well as learning in detail about the installation and removal of fires, stoves, boilers, and heaters of different types from the 1930s to the present, we discovered how methods of heating have contributed to changing rhythms and practices of daily life. Council records from Stocksbridge, near Sheffield, and from Stevenage provided information about the kinds of heating installed as standard in different decades, and about when and how these systems were replaced or modernised. Oral history interviews with people who had lived in selected council estates in both areas and who had first-hand experience of different generations of heating technology showed what living with these systems entailed, and how heat was organised in the home.



#### Questions

- What can past developments – from coal fire to gas central heating – reveal about future transitions – from gas central heating to heat networks and heat pumps?
- How do heating systems and patterns of daily life shape each other?
- How have understandings of comfort changed and how are they formed?
- Does the experience of full gas central heating constitute a standard that future technologies have to match?

#### Findings

Innovations in home heating have had direct consequences for household routines and for the use of space in the home. In brief, solid fuel fires heated one or perhaps two rooms, and needed pretty constant attention: lighting, stoking and removing ash. Upstairs was cold. Closed stoves and radiators increased the extent of heated space and reduced some of the labour involved. Gas central heating made it possible to heat all rooms in the home, and do to so 'automatically' and at the flick of a switch.

“Well I mean everything happened in the kitchen in those days (1950s). You virtually lived in the kitchen. Rarely did you put a fire on in the living room, but there was an open fire in the living room as well. You really didn't live in the living room because there were no tellies ...

John, Stocksbridge: born in 1943, talking about his childhood.

