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# Scottish House Condition Survey: 2024 Key Findings



An Accredited Official Statistics Publication for Scotland

PEOPLE, COMMUNITIES AND PLACES

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# Introduction

The statistics in this report are based on a national survey of the housing stock, the only one of its kind in Scotland, which is part of the Scottish Household Survey (SHS). Until 2011 it was carried out as a stand-alone survey, under the name the Scottish House Condition Survey (SHCS). Following the review of the large-scale Scottish population surveys, the SHCS was incorporated within the SHS in 2012 and became one of its modules. We continue to report the results from this module of the SHS under the name the SHCS.

The SHCS consists of an interview with householders and a physical inspection of the dwelling they occupy, which provides a picture of Scotland's occupied housing stock. It covers all types of households and dwellings across the country - whether owned or rented, flats or houses. The physical data about the dwelling is recorded by surveyors trained to collect detailed information on housing characteristics. This is combined with information about the household collected through the (usually) face-to-face social interview, covering a range of topics such as household characteristics, tenure, neighbourhood satisfaction, dwelling satisfaction, health status and income. The result is a unique and powerful data set for examining the condition and characteristics of Scotland's housing stock alongside the views and experience of the people living in those dwellings.

This is the twentieth 'Key Findings' report since the SHCS changed to a continuous format in 2003 and the twelfth since it was integrated within the SHS in 2012. (Note that the 2020 SHCS could not be completed due to Covid-19 restrictions).

Details on the methodology and design of the survey are provided in the [Scottish Household Survey Methodology and Fieldwork Outcomes](#) reports. The incorporation of the SHCS within the SHS in 2012 introduced some discontinuities in the methodology of the survey and may contribute to some observed change over time.

In 2024 there were 2,902 surveyed properties. Statistics published in this report are based on fieldwork undertaken mostly during 2024. Household interviews took place between January 2024 and February 2025 with 8% of the interviews taking place in the first quarter of 2025. Physical surveys took place between January 2024 and March 2025 with 11% of the surveys taking place in the first quarter of 2024.

In 2009, the SHCS was [designated as a National Statistics](#) product by the UK Statistics Authority (UKSA) and in October 2020, following a [compliance check](#) by the Office for Statistics Regulation (OSR), it was confirmed that these statistics should continue to be designated as National Statistics. This demonstrates that the SHCS statistics are accurate, trustworthy, and compliant with the high standards required of National Statistics.

Due to Covid-19 restrictions the 2020 SHS and the 2021 SHS were undertaken using a push to telephone/video approach. It was not possible to resume the 2020 SHCS but the

2021 SHCS was undertaken using an external+ approach. For further details see the section on [external+ data quality](#) in the 2021 report.

However, due to the change in approach for the 2021 SHCS, the results are not directly comparable with the National Statistics from previous waves of the survey.

As such, in 2021 we agreed with the OSR (see [the letters between the OSR's Director General for Regulation and the Scottish Government's Chief Statistician](#)) that the key findings should be published as Experimental Statistics representing a snapshot of the key attributes, energy efficiency and condition of the housing stock and fuel poverty levels in 2021. The results for 2021 should not be compared with those for previous or future years.

As the 2022 survey returned to its typical methodology of in home surveying in March 2022 OSR conducted a review of the SHCS. Following this it was confirmed that these statistics should [resume the designation of Accredited Official Statistics](#).

While the key findings report is usually accompanied by the later release of Local Authority level analysis the lack of SHCS data for 2020 and the enforced changes for 2021 cause issues with the production of this, as they requires three consecutive years of survey data to be combined to provide a three-year average. The lack of SHCS data for 2020 and the enforced changes for 2021 meant we could not produce local authority estimates between 2019-2021 and 2021-2023 for two reasons. Firstly, there is no SHCS data for 2020 so we cannot produce a three-year average for the 2019 to 2022 survey years. Secondly, the data from the 2021 external+ SHCS is not directly comparable with that from other survey years due to the methodological differences and it would therefore not be appropriate to combine it with the data for 2022 or 2023 to produce a multi-year average.

As we now have a three year pooled data set (2022-2024), a Local Authority level analysis will follow this report.

We expect these estimates to be published in mid 2026.

Past methodological changes are described in each years' [key findings](#) report and associated [methodology notes](#) and, where relevant, in individual sections of this report. We always seek to improve and keep our methods and processes up to date and there may therefore be small changes to elements of data processing which do not impact significantly on the results. Details are provided in the respective technical sections.

Differences across characteristics are only highlighted in the commentary of this report if they are statistically significant. Values will be described as 'similar' if they are not significantly different. On occasion we also explicitly note that a difference is not statistically significant, particularly if it might appear large to the reader. This can occur if the statistic is based on a small sample size. Please see the [technical notes and definitions](#) for further details on confidence intervals, design effects and statistical significance.

The remainder of this report covers the following topics:

[Key Attributes of the Scottish Housing Stock](#): this chapter describes key dwelling characteristics such as dwelling type, age of construction, main heating fuel and the characteristics of the households that occupy them.

[Energy Efficiency](#): this chapter presents an analysis of the energy efficiency of the housing stock including presence and level of insulation.

[Fuel Poverty](#): this chapter presents an analysis of the characteristics of households in fuel poverty and extreme fuel poverty. It also examines the drivers of fuel poverty and how they have changed over time.

[Energy Perceptions](#): this chapter examines the householder's self-reported experience and satisfaction with their heating system and the extent to which they monitor their use of energy. This is analysed by the fuel poverty status of the household.

[Housing Conditions](#): this part of the report provides information on the number of dwellings with urgent disrepair to critical elements and the external critical elements with disrepair. As well as statutory housing standards including the Tolerable Standard, the Scottish Housing Quality Standard (SHQS).

[Bedroom Standard](#): this chapter examines the measures of whether households are living in overcrowded or under-occupied conditions. It also examines the householder's views on the number of rooms in their accommodation.

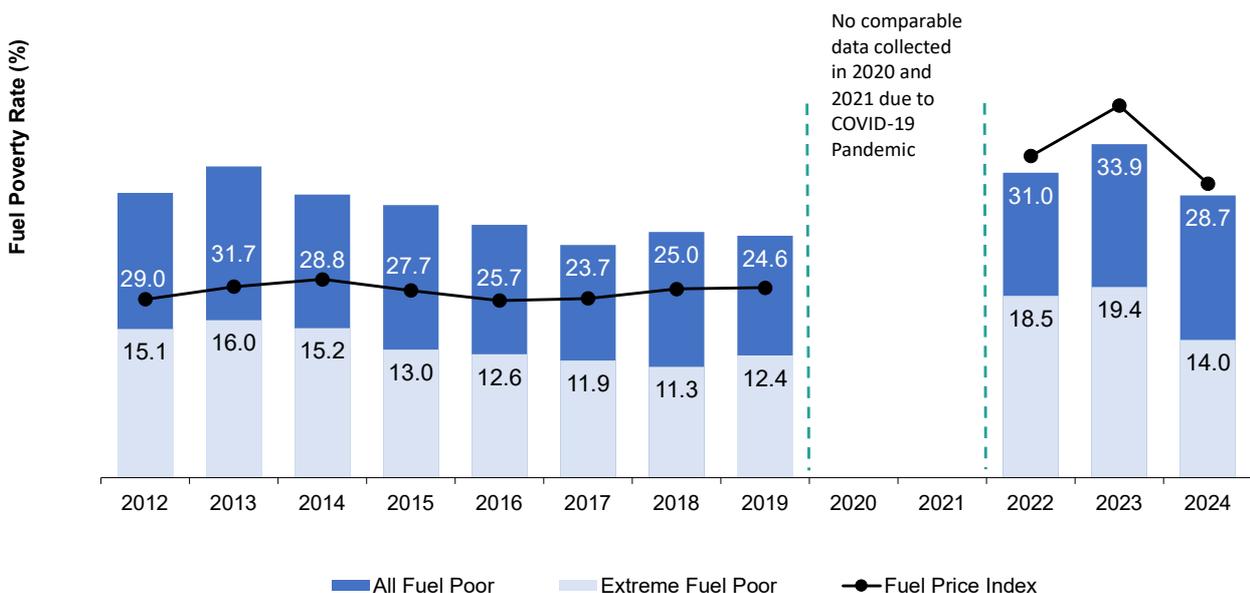
[Methodological and Technical notes](#): the final part of the report provides information about the content of the survey and the definition of some of the key concepts used. Discussion on the statistical reliability of the estimates is also included.

# Executive summary

## Fuel Poverty

- In 2024 an estimated 28.7% (around 732,000 households) of all households were in **fuel poverty**. This is lower than the 2023 fuel poverty rate of 33.9% (around 859,000 households). This corresponds to a decrease of 127,000 (or five percentage points) in the number of households in fuel poverty.
- 14.0% (or 357,000 of the 732,000 households in fuel poverty) were living in **extreme fuel poverty** in 2024, which is lower than the 19.4% (491,000 households) in 2023. This corresponds to a decrease of 134,000 (or five percentage points) in the number of households in extreme fuel poverty.
- This decrease in the fuel poverty rate largely reflects the fall in energy prices in 2024 wherein the average index price of fuels for Scotland decreased by 23.3% compared to 2023.
- The **actual median fuel poverty gap** for fuel poor households in 2024 was £1,030. This is lower than the median fuel poverty gap from 2023 of £1,250 and corresponds to a decrease of around £220.
- The **median fuel poverty gap (adjusted for 2015 prices)** for fuel poor households in 2024 (£770) is lower than the adjusted gap in 2023 (£960) and corresponds to a decrease of around £190.

## Proportion of Households in Fuel Poverty and Extreme Fuel Poverty, 2012-2024.



Notes: [\[note 6\]](#)

- Overall rates of fuel poverty differed between the social (49%) and private sector (22%). Similarly, households in the social sector were more likely to be in extreme fuel poverty (22%) compared to households in the private sector (11%).
- 42% of households using electricity as their primary heating fuel were fuel poor, higher than households using gas (27%), oil (23%), and households using other fuel types (26%) as their primary heating fuel.
- A higher proportion of households with a pre-payment meter (PPM; electricity, gas or both) were in fuel poverty compared to those without a PPM; 39% compared to 27% respectively.
- Fuel poverty and extreme fuel poverty have a strong association with income, with rates increasing as annual household income decreases. For example, 96% of households with an annual net income of less than £15,000 were in fuel poverty compared to 51% of households earning between £15,000 and £24,999 annually.
- For both fuel poor and extreme fuel poor households, the lowest rates of fuel poverty are generally associated with higher energy efficiency standards. 26% of households living in dwellings rated EPC band C or better were fuel poor, compared to 32% living in dwellings in band D.

## Heating Satisfaction

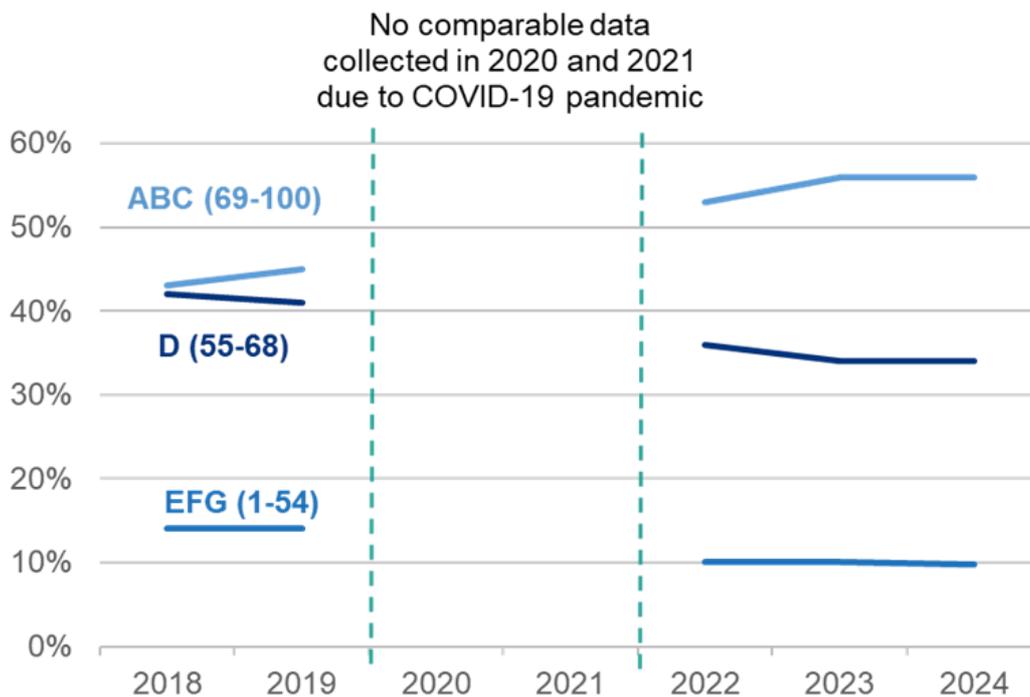
- 19% of all households found that their heating keeps them warm enough in winter only sometimes and 6% felt it never keeps them warm.
- Fuel poor households and extreme fuel poor households are more likely to have difficulties staying warm in winter and to report affordability problems; 28% of fuel poor and 31% of extreme fuel poor households say that their heating keeps them warm in winter “only sometimes” or “never”, compared to 23% of non-fuel poor households.
- 15% of fuel poor and 17% of extreme fuel poor households report that they cannot afford to heat their home, higher than the 10% of non-fuel poor households.
- 70% of householders stated they monitor their energy use “very” or “fairly closely” and 54% of all households report owning an energy monitoring device.
- Both fuel poor (48%) and extreme fuel poor (44%) households were less likely to own a monitoring device compared to non-fuel poor (57%) households.

## Energy Efficiency and Carbon Emissions

- In 2024, 56% of Scottish homes were rated as EPC band C or better under SAP 2012 (RdSAP v9.93), with around 10% of properties rated in the lowest EPC bands (E, F or G).

- Under SAP 2009, which allows comparisons over a longer period, almost two thirds of dwellings (62%) were rated C or better, up 38 percentage points since 2010. In the same period, the proportion of properties in the lowest EPC bands (E, F or G) has reduced from 27% in 2010 to 8% in 2024.
- Under SAP 2012 v9.93, the median EE rating in 2024 was 70, which is equivalent to Band C. This is an increase from 67 in 2018 which is equivalent to band D.

### Distribution of the Scottish housing stock by grouped EPC band (SAP 2012 v9.93), 2018 to 2024.



Notes: [\[note 5\]](#)

- The majority of loft spaces are insulated. In 2024, loft insulation with a thickness of 100 mm or more had been installed in 95% of dwellings. This has been broadly stable since 2017 but represents an increase of around 24 percentage points on 2007 levels.
- In 2024, 35% of lofts were insulated to a high standard of insulation (300 mm or more), higher than 2023 levels.
- The proportion of insulated cavity walls recorded by the SHCS was 71% in 2024.
- The proportion of solid wall dwellings with insulation was 20% in 2024.
- Levels of insulation (both loft and wall) are higher in the social sector than in the private sector. 56% of homes in the private sector have wall insulation compared to 72% in the social sector. In the private sector, 65% of lofts are insulated to 200 mm or more compared to 76% in the social sector.

- Based on the modelled energy use required to meet the SAP standard heating regime, the average Scottish home was estimated to produce 6.3 tonnes of carbon dioxide (CO<sub>2</sub>) per year in 2024, which is more than double the average carbon emissions per household as reported by Department for Energy Security and Net Zero (2.8 tonnes per year) in 2023, based on actual energy use. This suggests that households are not heating their homes to the SAP standard heating regime.
- Average modelled carbon emissions for all properties were 66 kg per square meter of floor area in 2024.

## Housing Conditions

- Disrepair to critical elements, which are central to weather-tightness, structural stability and preventing deterioration of the property, stood at 48% in 2024. Less than half of these (19% of all dwellings) had urgent disrepair to critical elements, and just 2% had extensive disrepair (covering at least a fifth of the element area) to one or more critical elements.
- Overall, this is an increase of around 3 percentage points compared to 2023, when 45% of dwellings had disrepair to critical elements.
- 16% of dwellings had disrepair to non-critical elements only, with 4% of dwellings requiring some urgent repair to non-critical elements, and 1% having extensive disrepair to non-critical elements.
- Levels of damp and condensation were similar to those seen in 2023: 90% of properties were free from any damp or condensation. The proportion of dwellings without mould improved in 2024: 92% of properties were free from mould compared to 90% in 2023.
- In 2024, 28% (or 702,000) of all dwellings fell below the Tolerable Standard, similar to 2023.
- The vast majority of dwellings failing the Tolerable Standard did not have satisfactory equipment for detecting and warning in the event of fire (76% or 532,000 dwellings) or against high levels of carbon monoxide (55% or 383,000 dwellings).
- For dwellings failing the smoke alarm criteria this represents a decrease of around 5 percentage points compared to 2023. However, the proportion of dwellings failing the carbon monoxide criteria was similar to 2023.
- The Scottish Housing Quality Standard (SHQS) failure rate in the social sector was 41%, this has fallen from 60% in 2010. Failures of the Energy Efficient criterion were the biggest driver of failures overall. In 2024, 25% of social sector properties did not meet the Energy Efficient criterion.
- The majority of dwellings falling below the SHQS failed on a single criterion; this accounted for more than 7 out of 10 failures in the social sector.

- The SHQS failure rate in the private sector was 58% and is driven primarily by failures of the Below Tolerable Standard criterion (32%) and the Energy Efficient criterion (35%).
- For 69% of social homes failing the SHQS this was due to falling short on just one of the 55 elements which make up the standard.

## **Bedroom Standard**

- In 2024 around 46,000 households lived in overcrowded accommodation (2%) under the bedroom standard.
- Around 36% of all households (919,000) had one bedroom in excess of the minimum requirement under the bedroom standard. A further 904,000 (35% of all households) had two or more bedrooms in excess.
- Social sector tenants are more likely to live in accommodation which meets but does not exceed the minimum requirements of the bedroom standard (50% compared to 19% in the private sector). Social sector tenants are also slightly more likely (4%) to live in accommodation which is overcrowded, according to the bedroom standard, than those households living in the private sector (1%).
- By comparison households in the private sector are more likely to live in accommodation which exceeds the bedroom standard (80% vs 46% for social tenants).
- However, when disaggregated, social sector tenants and private rental sector tenants had similar rates of both overcrowding (4%) and dwellings meeting but not exceeding the minimum requirements of the bedroom standard (50%).

# 1 Key Attributes of the Scottish Housing Stock

The Scottish House Condition Survey provides a snapshot of the Scottish housing stock in each survey year. This chapter sets out information on the basic attributes of occupied Scottish dwellings as captured in 2024. Subsequent chapters build on this and provide more details on energy efficiency, fuel poverty, housing quality, and disrepair.

The following topics are included:

- the construction age and built form of Scottish domestic buildings
- the dwellings' location in relation to the gas network and the type of fuel used to heat them
- the relationship between the dwellings' attributes, their urban/rural location and household tenure and
- the composition of the households who occupy them.

## 1.1 Dwelling Age and Type

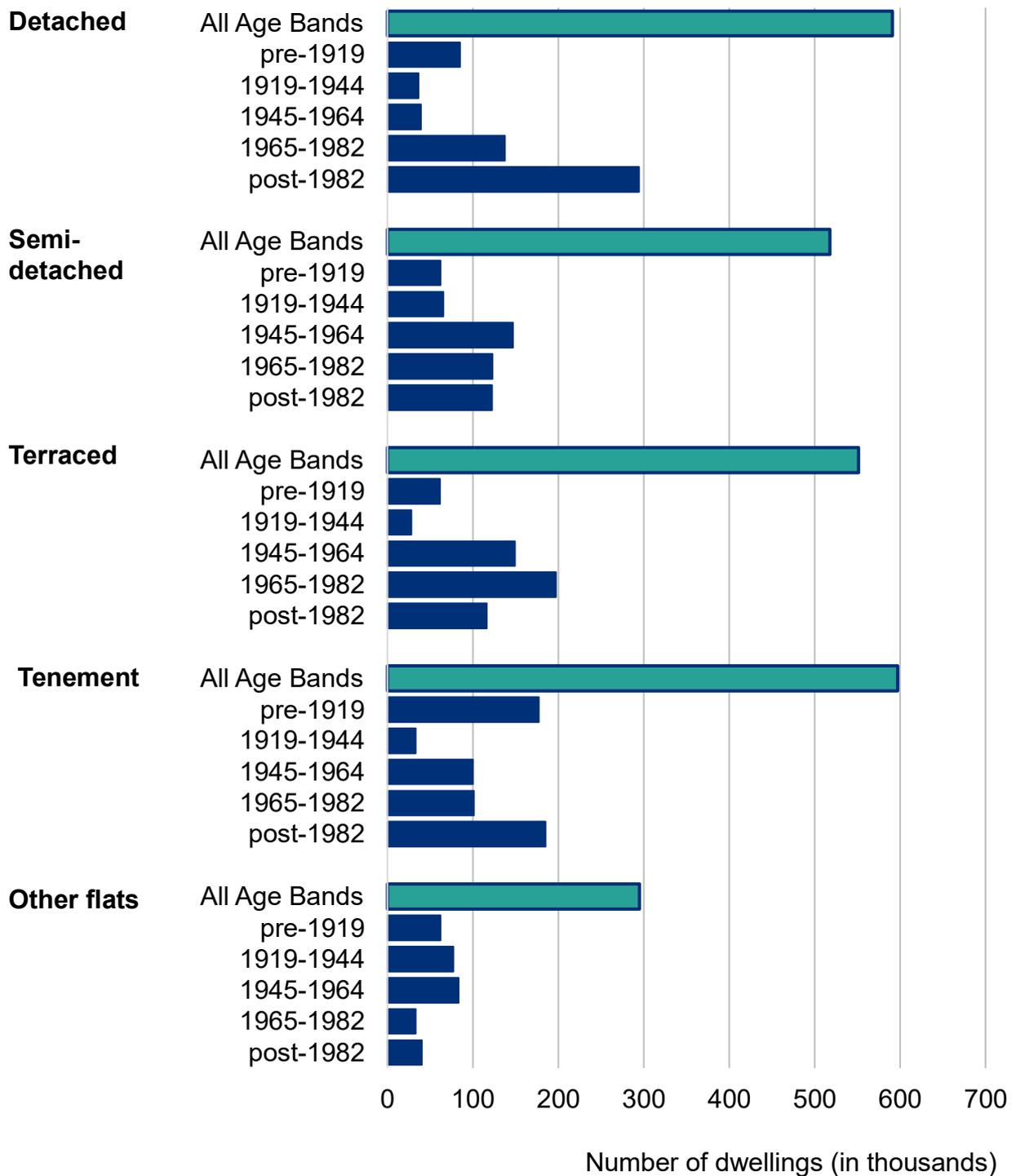
The age of construction and the built form of a dwelling has consequences for energy performance, running costs and living conditions. For example, older dwellings built with solid stone walls are typically less effective at preventing heat transmittance between the inside and the outside of a building than properties that have been built using modern construction materials and that, since 1982, have been subject to increasingly rigorous minimum standards of energy efficiency and airtightness.

At the same time, types of dwellings can differ in terms of the size of the external surface area; dwellings with a smaller area of exposed wall, for example those that are shielded by adjacent properties, typically have lower levels of heat loss than in buildings with fewer sheltered sides.

More information on the main dwelling types used in the SHCS is provided in [section 2.1](#) of the Methodological and technical notes.

## The housing stock in Scotland is diverse.

Figure 1.1: Number of occupied Scottish dwellings by age band and type, 2024.



## Description of figure 1.1

As shown in [Figure 1.1](#), the 2.55 million dwellings in the Scottish occupied housing stock are diverse and vary across the country. However, some common types can be recognised:

- Old (pre-1919) tenement flats (7%; 177,000).
- More modern post-1982 detached houses (12%; 294,000) and tenements (7%; 185,000).
- Post-war terraced houses (14%; 346,000 built between 1945 and 1982).
- Semi-detached houses, accounting for around 20% of the stock alone.

These six broad categories account for 60% of the overall housing stock (approximately 1.5 million occupied dwellings) however there is also variability within these groups. For example, among pre-1919 tenement flats, of the type common in Edinburgh and Glasgow, there is a wide range of sizes, layouts, and areas of exposure (for example in top floor flats the roof is exposed) which affects their energy efficiency and the living conditions experienced by the household.

Data Source: Table KA1a and KA1b in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

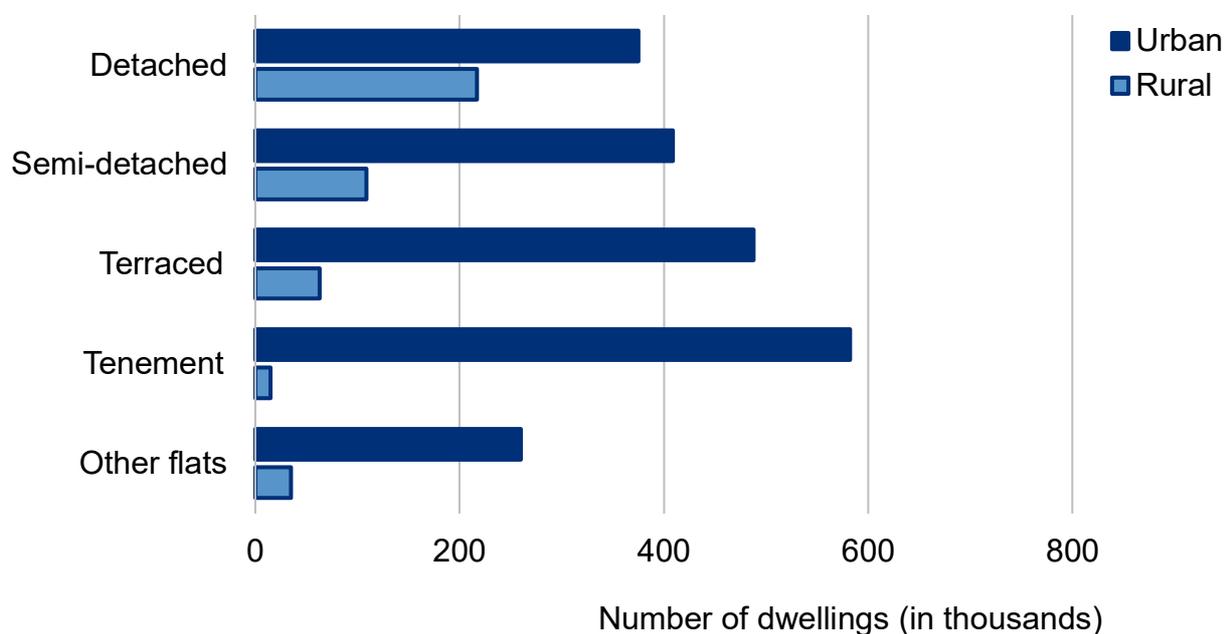
The category ‘other flats’ includes houses that have been converted to flats (35,000), towers / slabs (48,000) and “4-in-a-block” flats (212,000).

It should be noted that both tower/ slabs and converted flats are relatively uncommon in the Scottish dwelling stock and as such represent a small part of the achieved sample each year. For reference the achieved sample size for these dwelling types has ranged from between 35 to 67 sampled dwellings per year since 2018. Given the small sample sizes of these dwelling types these differences represent a considerable variation in the year on year achieved sample. As the width of a confidence interval is inversely related to the sample size there is greater uncertainty in these estimates and due to this uncertainty, year on year differences may not be statistically significant. See [section 1.1.2 of the technical and methodological notes](#) for more information on Confidence Intervals and how they relate to sample sizes and section 1.1.6 for a description of how the SHCS measures statistical significance.

More information is available on Table KA2a and KA2b in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

## Rural and urban dwellings tend to be different.

Figure 1.2: Dwelling types in rural and urban areas, 2024.



Description of figure 1.2

[Figure 1.2](#) shows the number of dwellings in rural (438,000 households) and urban areas (2.1 million households) by dwelling type. Around half (49%; 217,000 households) of all rural dwellings are detached, and 25% (109,000) are semi-detached. Only 11% of rural dwellings are flats; 50,000 in total. By comparison the most common dwelling type in urban areas are tenement flats (582,000), accounting for around 28% of urban housing. Around 60% of urban dwellings are detached, terraced and semi-detached houses, which account for 1.3 million of the 2.1 million urban dwellings.

Data Source: Table KA3b in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

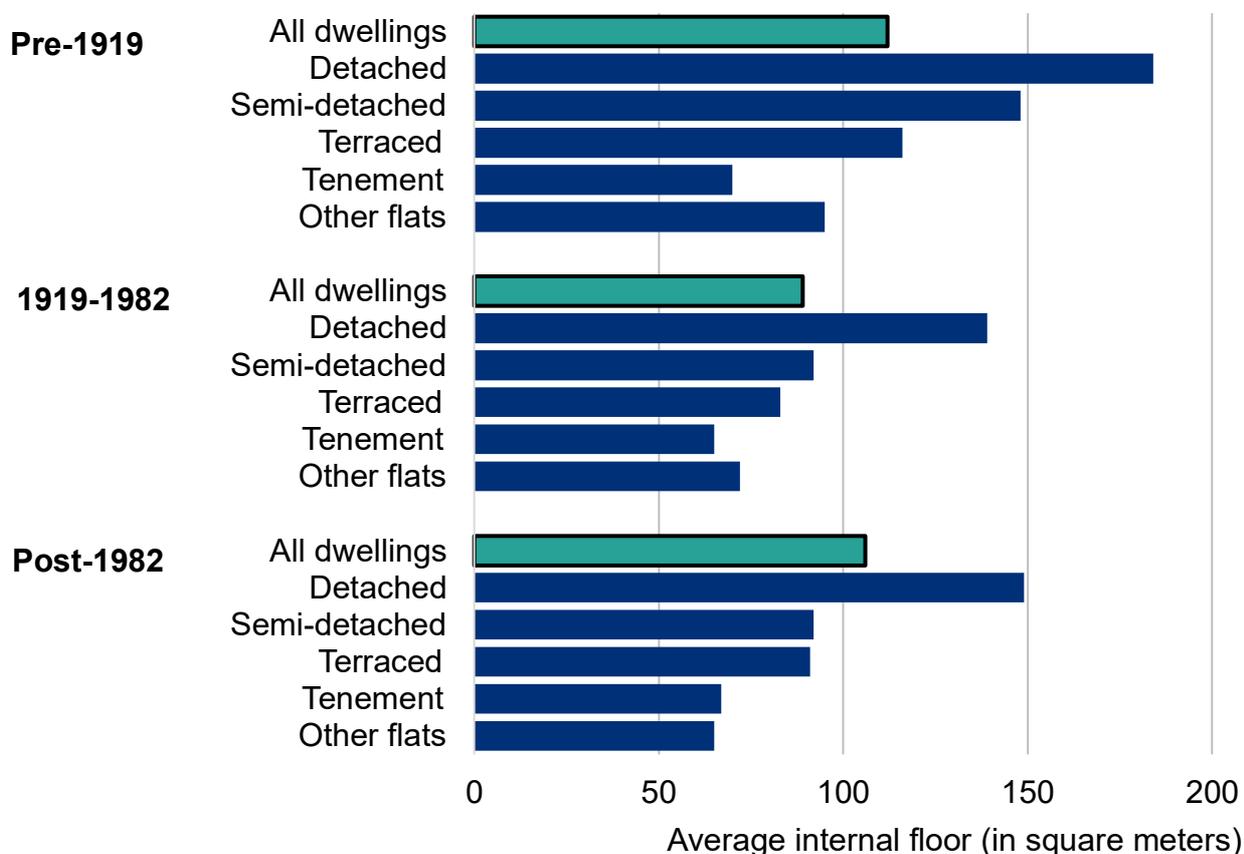
Notes: [\[note 1\]](#)

## 1.2 Dwelling Size (Floor Area)

The size of the internal floor area has implications for the heating requirements of a dwelling. Larger dwellings generally require greater heat inputs and therefore cost more to heat. This has a direct impact on fuel poverty (see [Chapter 3](#)).

## Across Scotland older dwellings tend to be larger than modern dwellings.

Figure 1.3: Average floor area (m<sup>2</sup>) by dwelling type and age, 2024.



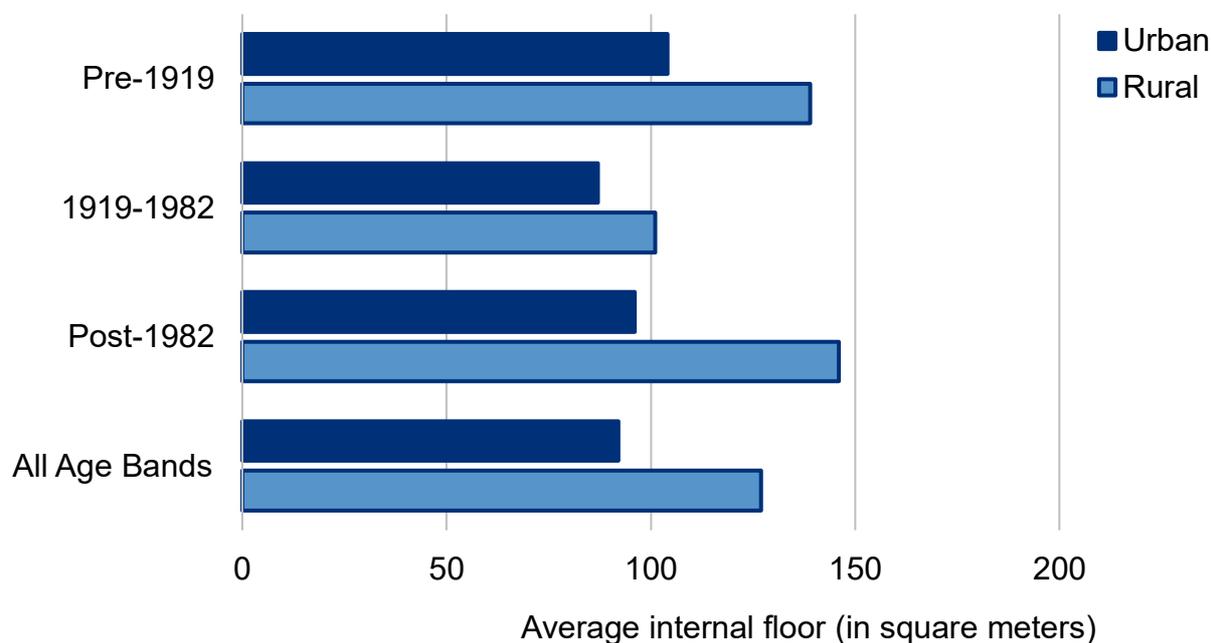
### Description of figure 1.3

[Figure 1.3](#) shows that overall, and across most dwelling types pre-1919 dwellings tend to be larger than the other two age categories. Semi-detached houses built after 1919 are on average around two-thirds of the size of those built pre-1919. Similarly, terraced houses built after 1919 are around three quarters the size those built pre-1919. However, the difference between pre 1919 tenements post 1919 tenements was found to be within the margin of error of the survey. The overall average for post-1982 dwellings is higher compared to those built between 1919 and 1982. This is largely driven by differences in detached houses, which are larger in size than other dwelling types and are more common in the post-1982 stock.

Data Source: Table KA4 in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

## Rural dwellings tended to be bigger than urban dwellings.

Figure 1.4: Average internal floor area (m<sup>2</sup>) by urban/rural location, 2024.



Description of figure 1.4

[Figure 1.4](#) shows that rural dwellings are, on average, 37% larger than urban dwellings based on internal floor area. The difference is smallest for dwellings built between 1919 and 1982 at 16%, and largest among post-1982 dwellings where rural properties are around 52% larger.

Data Source: Table KA5 in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#)

Notes: [\[note 1\]](#)

### 1.3 Gas Grid Coverage

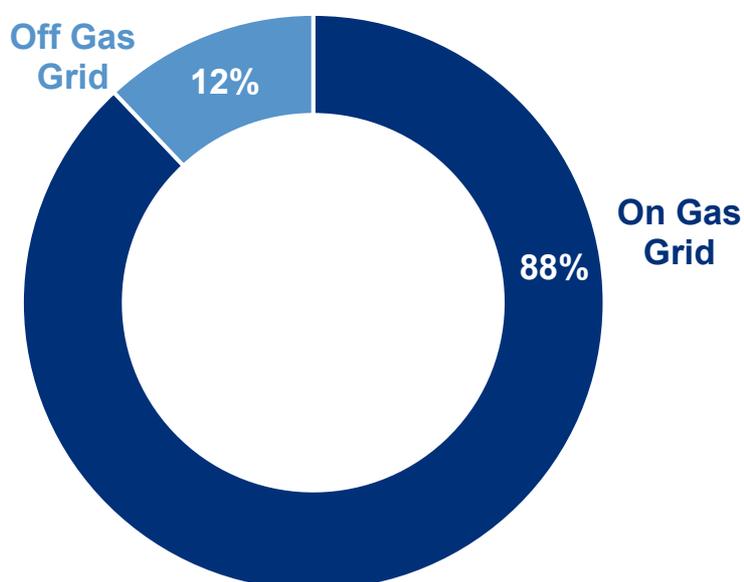
Gas grid coverage is determined on the basis of the distance of the dwelling from a low / medium / intermediate pressure gas distribution pipe. Based on the usual maximum distance for standard domestic connection (63 meters), dwellings are classified as being “on” or “off” the grid. This reflects whether the dwelling is within coverage of the gas grid and not whether the dwelling is actually connected to the grid. From 2021 onwards an improvement was introduced whereby in addition to this definition a dwelling is also classified as “on” the grid if a mains gas connection has been recorded in the physical survey, irrespective of the distance to the gas distribution pipe.

Further details on the method for estimating distance to the gas grid are available in [section 2.4 of the Methodology Notes](#).

Connection to the gas grid allows households to use gas for heating and hot water. Historically mains gas is amongst the cheapest of the major commercial fuels. However, in 2024 due to low liquid fuel prices this was not the case. Nevertheless, as gas remains substantially cheaper than electricity (the second most common heating fuel type) gas grid access can be a significant determinant in the required cost of heating a home to a satisfactory temperature.

## **Around 12% of dwellings in Scotland are estimated to be outside the coverage of the gas grid.**

**Figure 1.5: Gas grid coverage, 2024.**



Description of figure 1.5

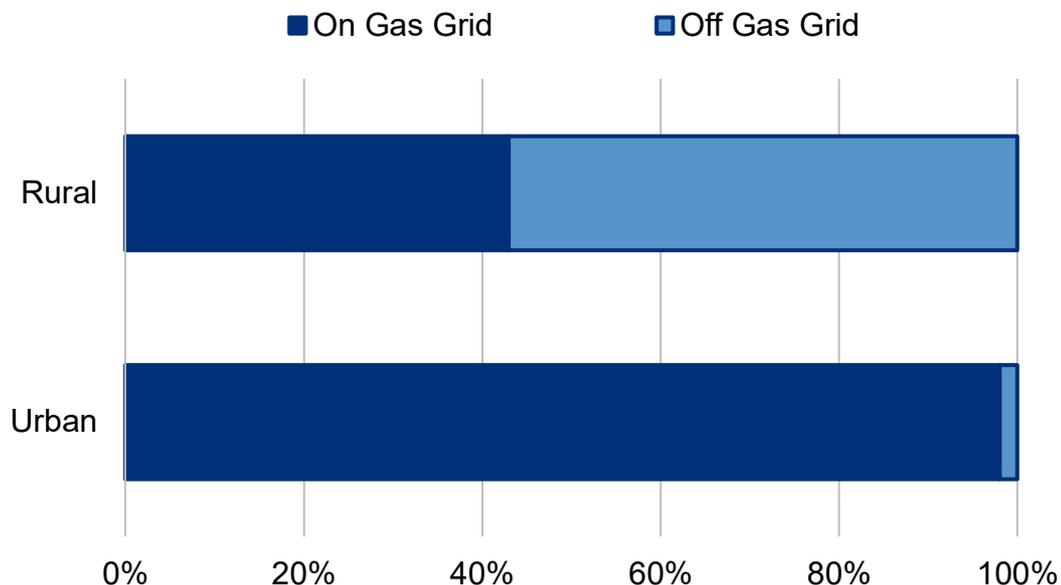
As shown in [Figure 1.5](#), approximately 12% of dwellings in Scotland are estimated to be outside the coverage of the gas grid.

Data Source: Table KA6a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

Notes: [\[note 2\]](#)

**The majority of urban dwellings are within the coverage of the gas grid, whereas just over half of those in rural areas are not.**

**Figure 1.6: Gas grid coverage by urban rural location, 2024.**



Description of figure 1.6

As shown in [Figure 1.6](#), the 98% of urban dwellings are within the coverage of the gas grid, whereas 57% of those in rural areas are not.

Data Source: Table KA6a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

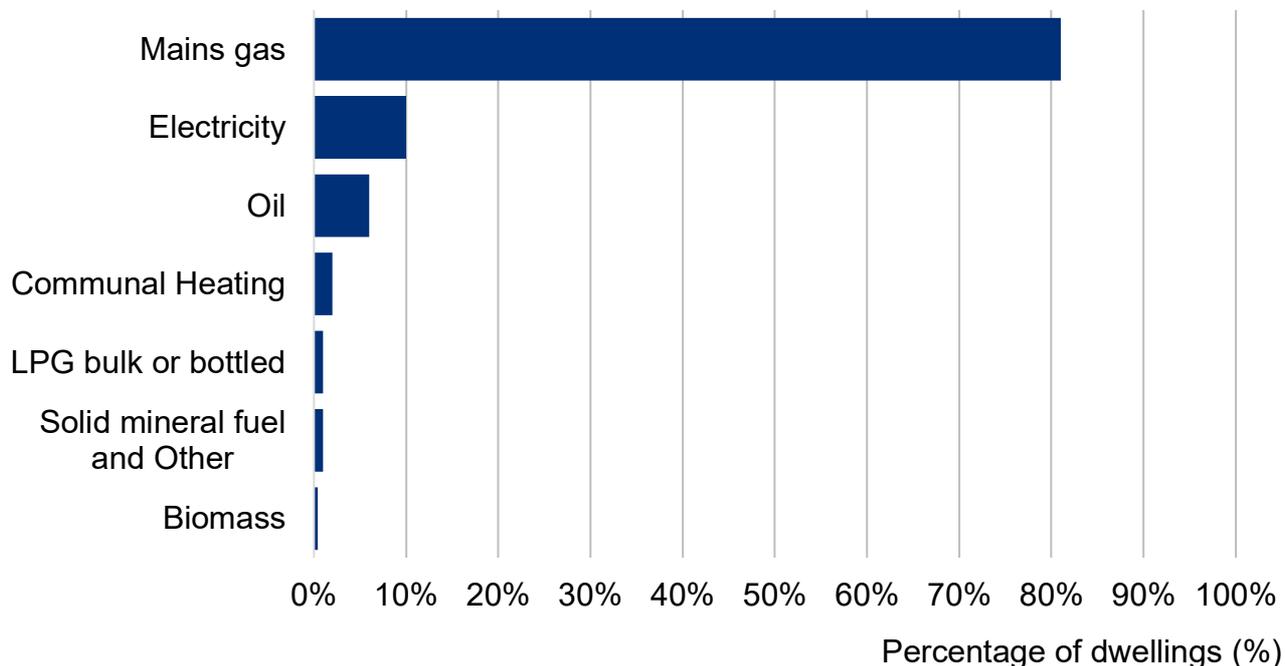
Notes: [\[note 1\]](#) [\[note 2\]](#)

## 1.4 Heating Fuel

This section examines the distribution of dwellings in terms of the primary heating fuel used broken down by a range of other characteristics, such as age and type of dwelling. The relationship between the type of fuel used, the energy efficiency rating, and fuel poverty will be explored further in later chapters.

## Mains gas is the most common heating fuel in Scotland.

Figure 1.7: Primary heating fuel, 2024.



Description of figure 1.7

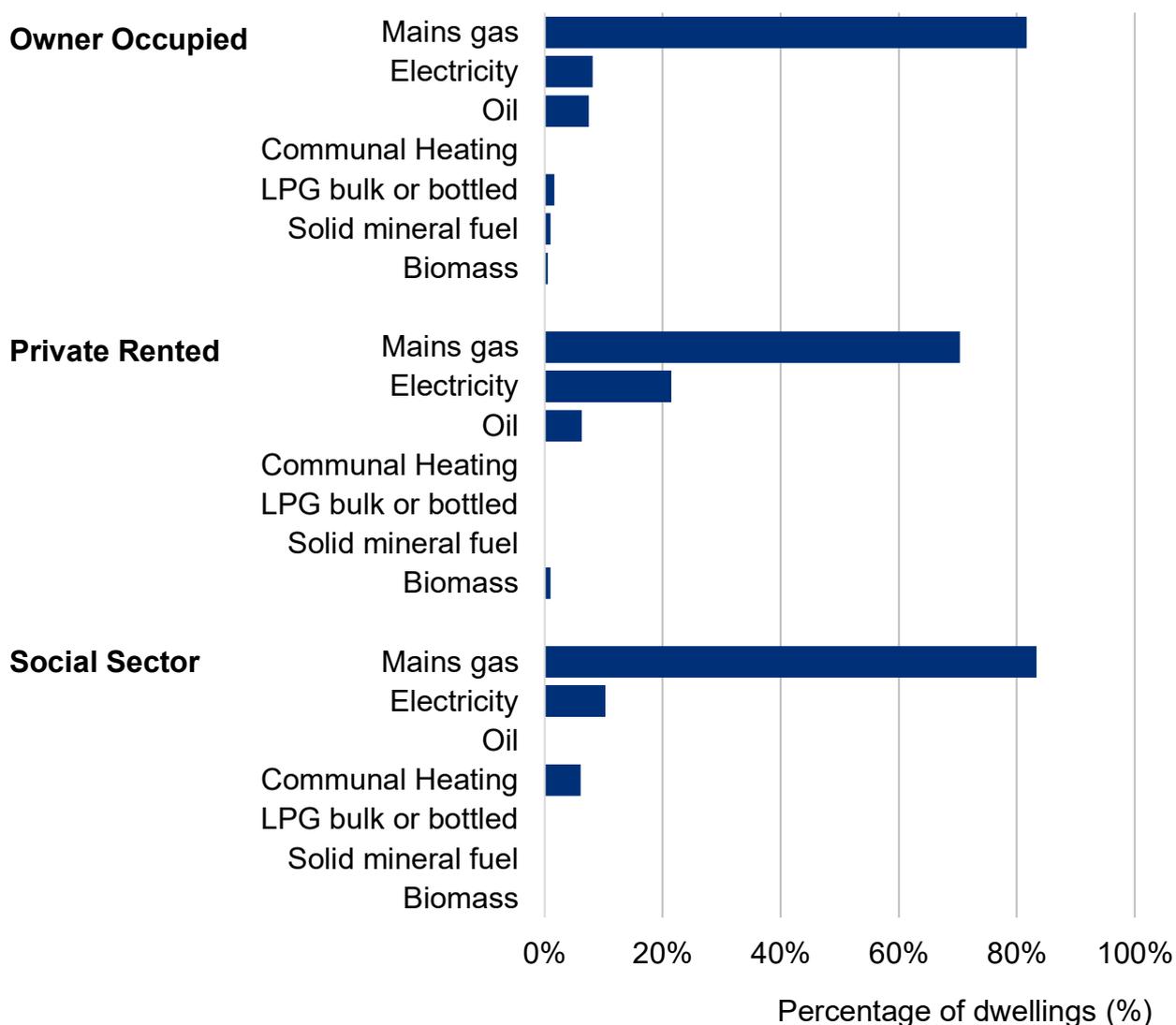
[Figure 1.7](#) shows that overwhelmingly the most common heating fuel is mains gas: 81% of Scottish households (around 2.1 million) use mains gas for heating, 10% (258,000 households) use electricity and 6% (142,000 households) use oil. Around 90,000 households (4% of all households) were estimated to heat their homes with communal heating, LPG bulk or bottled, solid mineral fuel or biomass. Around 9% of dwellings on the gas grid use an alternative fuel, such as electricity, as their main heating fuel.

Overall, around 309,000 households (12% of all households) were estimated to have low and/or zero greenhouse gas emissions heating systems in 2024, primarily heating their homes with electricity, communal heating, or biomass. This is similar to the estimate of 316,000 households (12% of all households) from SHCS 2023 and 319,000 households (13% of all households) from the 2022 SHCS.

Data Source: Table KA7a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

**Homes in the PRS were more likely to use electricity as their primary heating fuel than those in the owner occupied or social sector.**

**Figure 1.8: Primary heating fuel by tenure, 2024.**



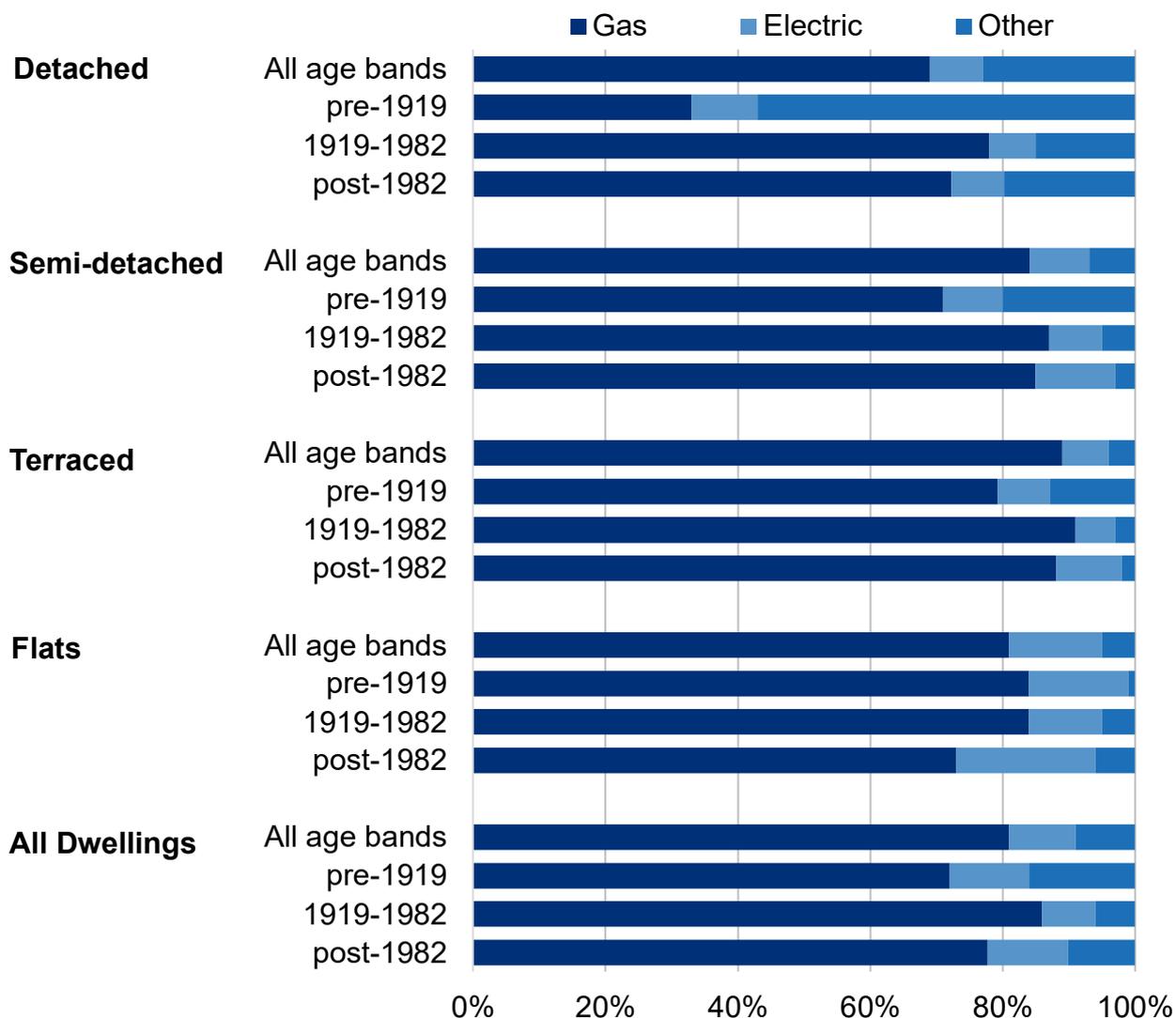
**Description of figure 1.8**

Mains gas and electricity are the primary fuel types present in 94% of social housing with a further 6% (37,000 households) using some form of communal heating. Conversely, while oil is rarely used to heat social housing it is the primary heating fuel in 7% of owner-occupied dwellings and 6% of private rented dwellings. Mains gas use is less prevalent in private rented households at 70% compared to 82% in owner occupied dwellings and social housing (83%). Private rented dwellings were more likely to use electricity as their primary fuel type at 21% compared to 8% of owner occupied and 10% of social sector dwellings.

Data Source: Table KA7a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

## Primary heating fuel across Scotland varies by age and type of dwelling.

Figure 1.9: Primary heating fuel by age and type of dwelling, 2024.



Description of figure 1.9

[Figure 1.9](#) shows that 86% of dwellings built between 1919 and 1982 use gas as their primary heating fuel. Higher than the 77% of dwellings built after 1982 and 72% of dwellings built pre-1919.

Older pre-1919 dwellings more commonly (16%) use other fuel types (such as oil) aside from gas or electricity than newer dwellings.

Primary heating fuel also varies by type of dwelling. Households living in detached dwellings are least likely to use mains gas for heating, 69%, compared to 89% of those households living in terraced houses, 85% in semi-detached houses, 81% of households living in flats, and 81% for Scotland as a whole.

This is driven in part by the greater prevalence of alternative heating fuels amongst pre-1919 detached houses. 57% use an alternative fuel source (other than gas and electricity) for space heating and hot water. Furthermore, as shown in [Figure 1.2](#) there is a higher proportion of detached dwellings in rural areas and as shown in [Figure 1.6](#) dwellings in rural areas are less likely to be within the coverage of the gas grid.

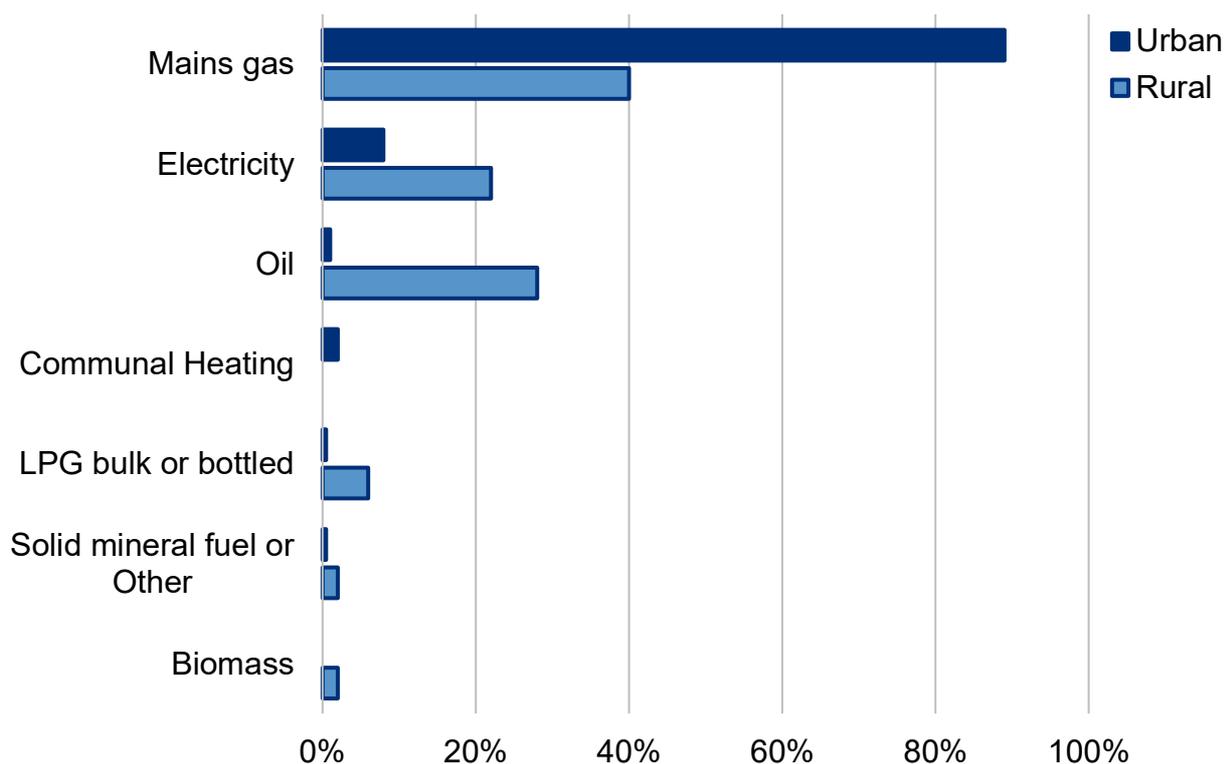
By comparison only 20% of pre 1919 semi-detached houses and 13% of pre 1919 terraced households are reliant on other fuels.

Flats have higher levels of electricity (14%) as the main heating fuel than all three house types.

Data Source: Table KA8a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

### 89% of dwellings in urban locations used mains gas as their primary heating fuel compared to 40% of those in rural locations.

Figure 1.10: Primary heating fuel by urban/rural location, 2024.



Description of figure 1.10

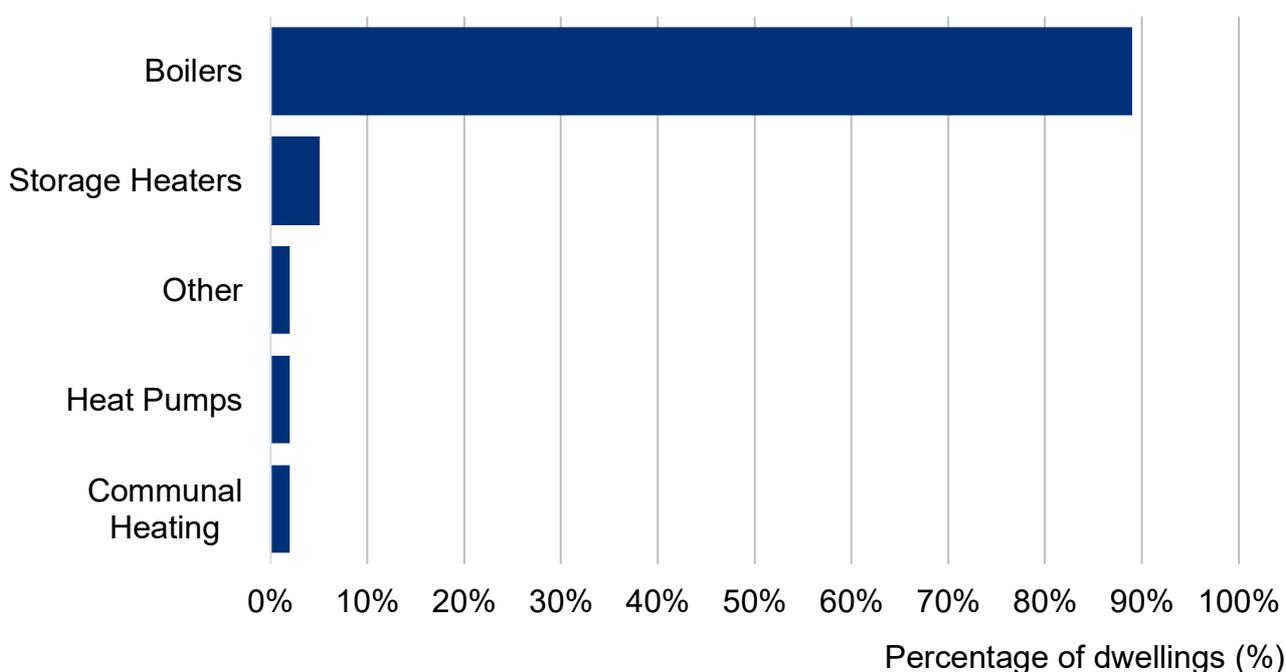
[Figure 1.10](#) shows that 89% of dwellings in urban locations use mains gas as their primary heating fuel compared to 40% of those in rural locations. By contrast, there are higher rates of electricity and oil as the primary heating fuel in rural locations, 22% and 28%, respectively, compared to urban locations where electricity is used in 8% and oil in 1% of dwellings.

Data Source: Table KA9a in '[SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures](#)'.

Notes:[\[note 1\]](#)

## Boilers are the most common method of heating homes.

**Figure 1.11: Primary heating type, 2024.**



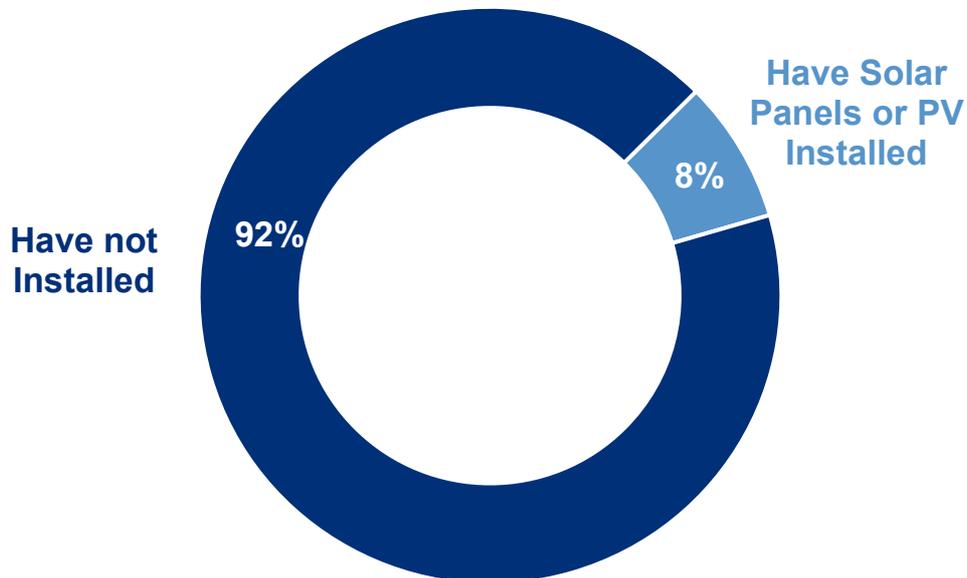
Description of figure 1.11

[Figure 1.11](#) shows that 89% of all dwellings in Scotland use a boiler (using any type of fuel) to heat their home. This is followed by storage heaters which are used by around 5% of the stock, and other forms of heating such as warm air systems, and room heaters which are used by 2% of dwellings. Heat pumps are used by around (2%) of dwellings.

Data Source: Table KA10 in '[SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures](#)'.

## Around 8% of dwellings in Scotland have solar panels or solar PV installed.

Figure 1.12: Dwellings with solar panels or solar PV, 2024.



Description of figure 1.12

As shown in [Figure 1.12](#) an estimated 8% of all dwellings in Scotland had either solar panels, solar PV, or both installed.

Data Source: Table KA11 in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

### 1.5 Household Type

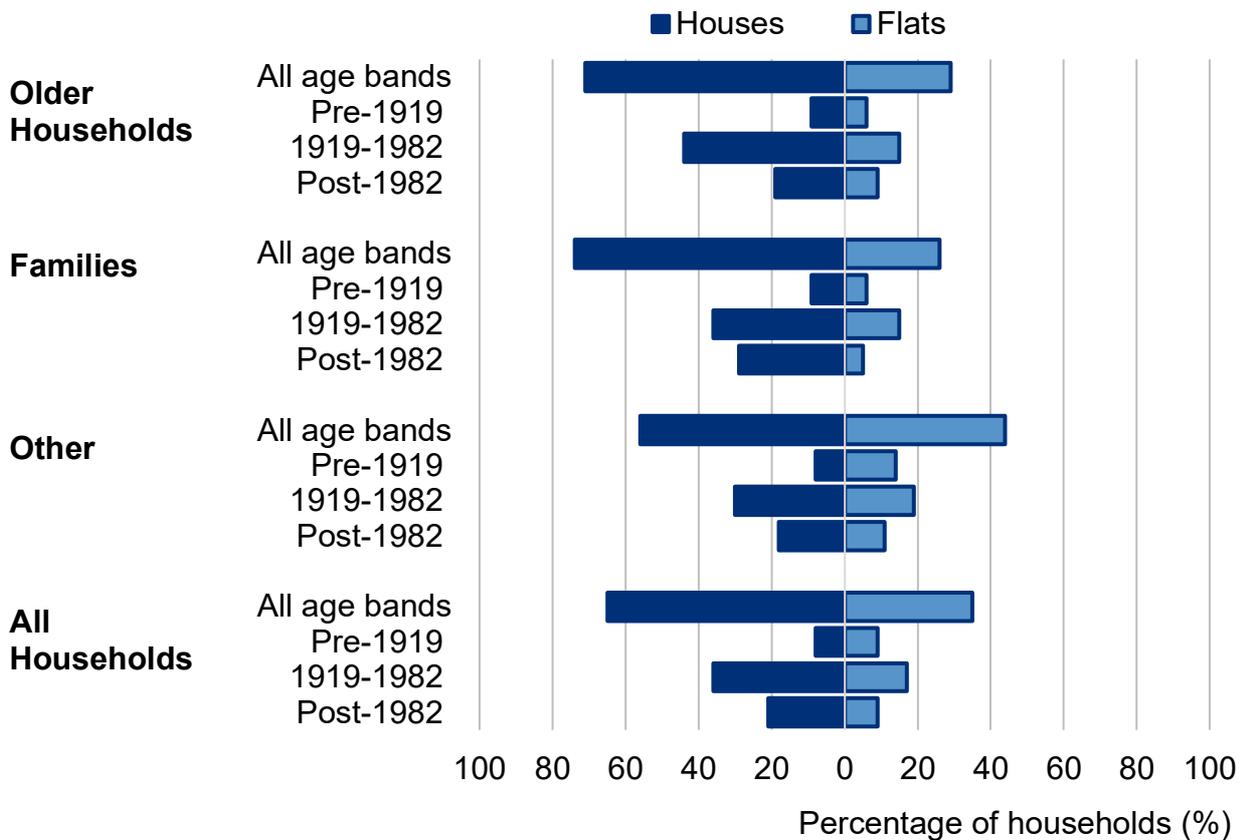
In this report we describe households in terms of three main types which are derived from the more detailed classification used in the [Scottish Household Survey](#):

- **Families.** These are households which contain at least one child aged under 16. The resident adult(s) may be of any age.
- **Older households.** One- or two-member households which include at least one resident aged 65 or older.
- **Other households.** These are all other household types which are made up of adults only and have no resident children.

More details about the definitions are provided in [section 2.2 of the Methodological and Technical notes](#).

## Families and older households are more likely to live in houses.

Figure 1.13: Households by dwelling type and age band, 2024.



### Description of figure 1.13

As shown in [Figure 1.13](#) there is a broad association between household types and the type of dwellings they occupy. While families and older households are more likely to live in houses (74% and 71% respectively), other households are more evenly split between houses and flats (56% and 44% respectively).

Families have the highest proportional occupancy of post-1982 houses: 29% of households with children live in post-1982 houses, compared to 19% of older households and 18% of other types of households. By comparison the highest occupancy of pre-1919 flats is observed among other types of households, 14%, compared to 6% for families and 6% for older households.

Data Source: Table KA12a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

## 1.6 Tenure

Statistics on tenure in the SHCS are based on the achieved sample of dwellings in the physical survey and are not calibrated against figures produced as part of the [Scottish Government Housing Statistics for Scotland](#) publication or the [Scottish Household Survey](#) publication (which is based on a larger sample and different weighting methodology).

As the SHCS is a sample survey all estimates will lie at the midpoint of confidence intervals and as such year on year trends presented in tables may not match administrative data, and year on year differences between SHCS estimates may not be statistically significant<sup>1</sup>.

When comparing households by housing tenure data, it is useful to consider trends in housing stock as there may be a combination of reasons why household data in the SHCS is lower than housing stock (in particular for social rented households). Including any possible slight bias in the sample that are not accounted for in the weights and the fact that there will naturally be empty housing stock (so no households residing in the property) at any point in time. See [Characteristics of households by tenure Scottish Household Survey](#) for a full discussion on households by tenure in the SHS.

See [section 1.1.2 of the technical and methodological notes](#) for more information on Confidence Intervals and how they relate to sample sizes and section 1.1.6 for a description of how the SHCS measures statistical significance.

For estimates of the total number of dwellings by tenure, readers are referred to the [Scottish Government Housing Statistics for Scotland](#) publication which uses information from social landlords' returns which comprehensively cover the social housing sector and therefore provides more accurate estimates of the total stock by tenure.

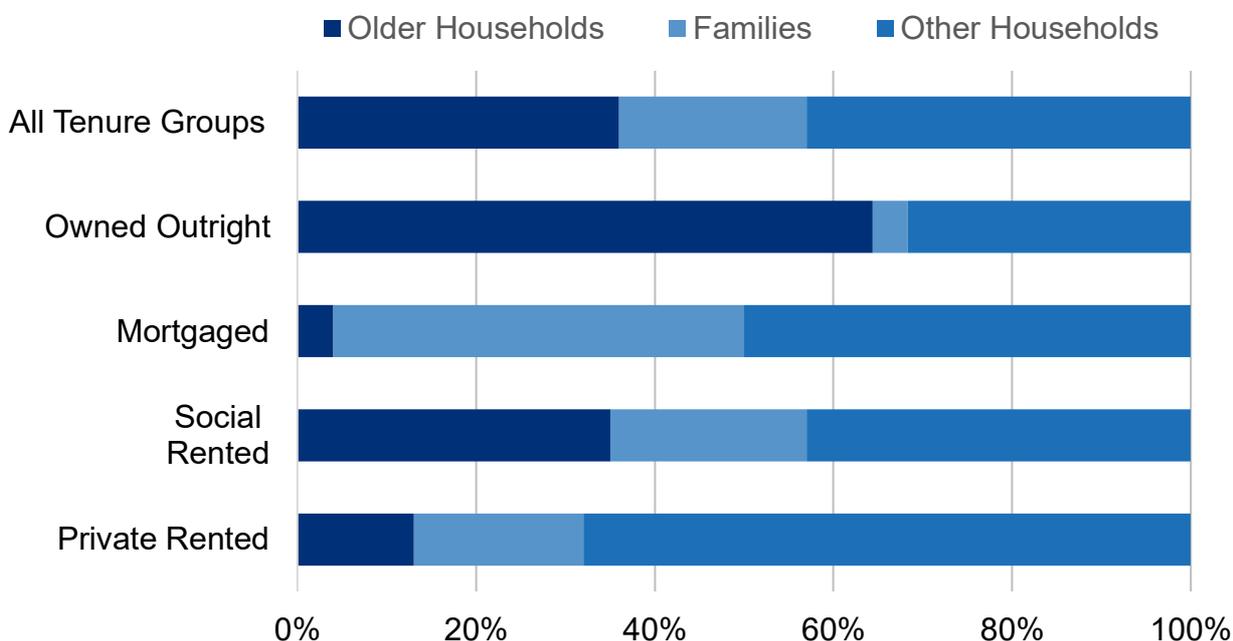
In this section we explore data from the SHCS sample which provides more detailed information on the composition of each tenure type.

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<sup>1</sup> Differences in the count of PRS properties and Socially rented properties between 2023 and 2024 were found to be within the margin of error of the survey.

## Household types vary across tenure.

Figure 1.14: Proportion of households in each tenure group by household type, 2024.



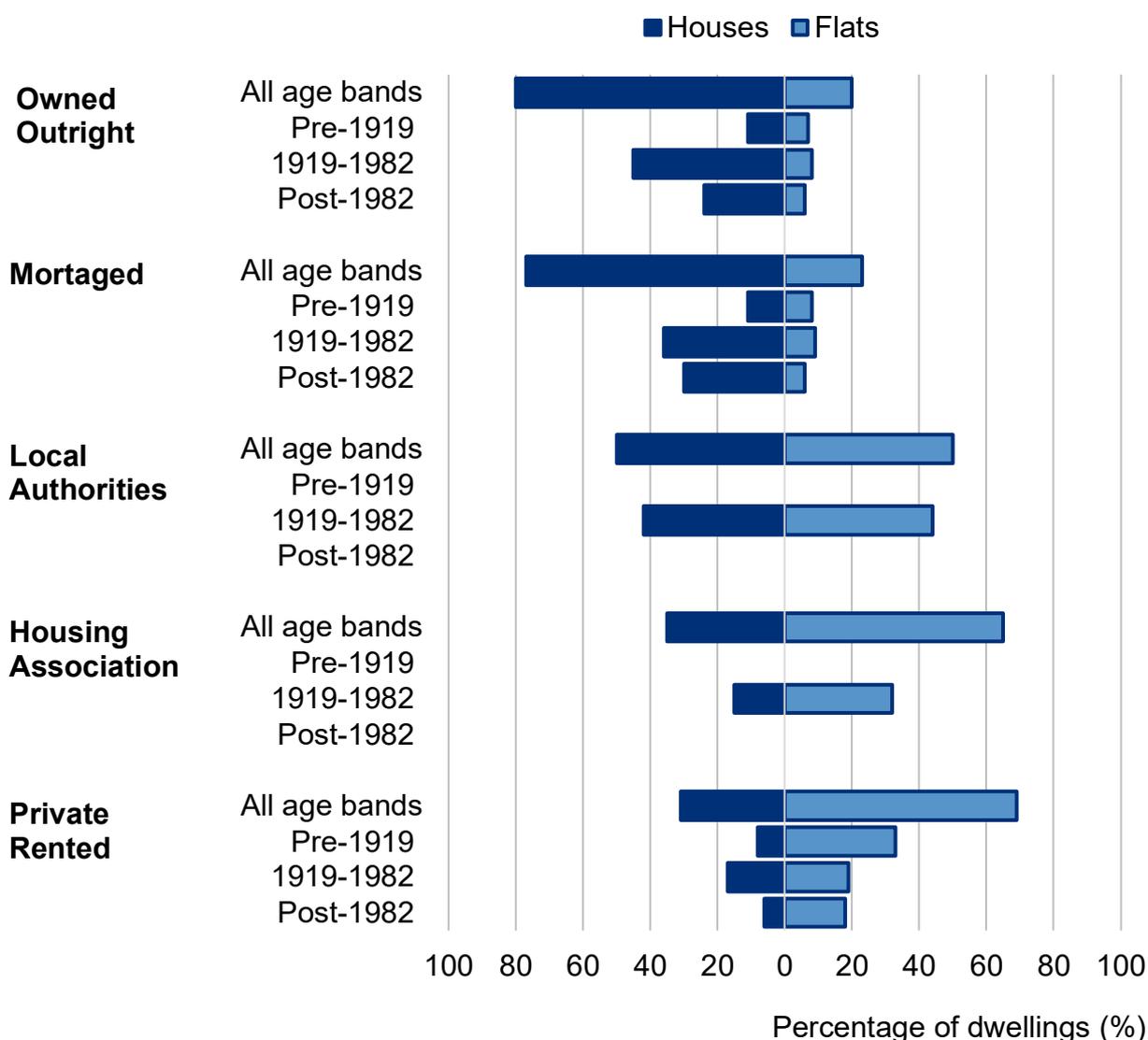
### Description of figure 1.14

As shown in [Figure 1.14](#), owner occupiers with mortgages are predominantly families (46%) and other households (50%). While the majority of those who own their properties outright are older households (65%) and a small amount are families (4%). The majority of those who live in the private rented sector (PRS) belong to other households (68%). Around 19% of private sector renters, and 22% of renters in the social sector, are households with children.

Data Source: Table KA13a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

## Owner-occupied dwellings are more likely to be houses.

Figure 1.15: Proportion of dwellings in each tenure group by age band and type of dwelling, 2024.



Description of figure 1.15

[Figure 1.15](#) shows that properties rented from Housing Associations (HA) or the Private Rented sector are more likely to be flats. Flats account for 65% of Housing Association (HA) stock and 69% of dwellings rented from private sector landlords. Conversely, owner-occupied dwellings are more likely to be houses: 80% of dwellings owned outright and 77% of those with a mortgage are houses, compared to 50% of dwellings owned by Local Authorities, 35% of Housing Association stock and 31% of private rented properties.

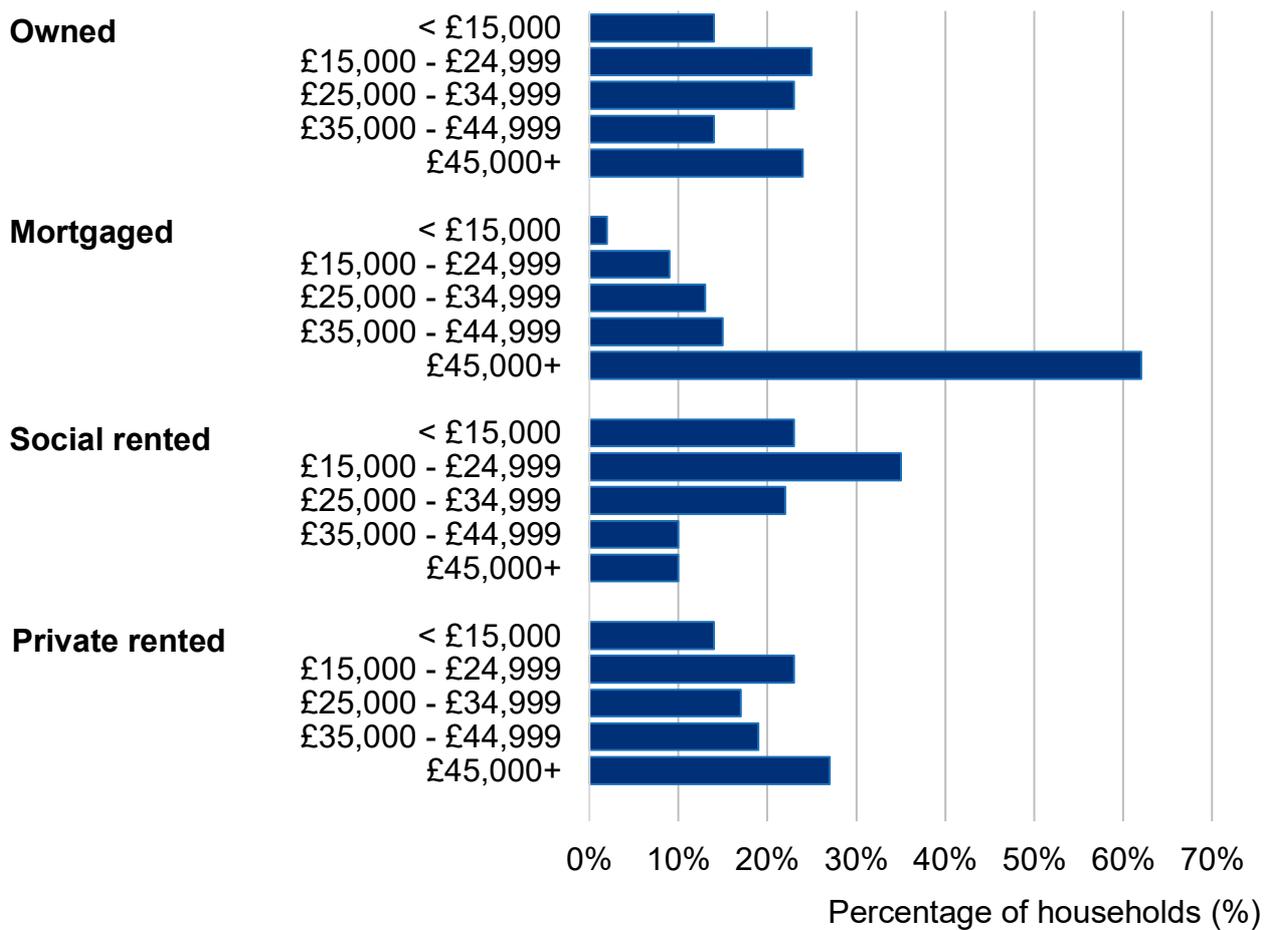
Almost all properties (86%) owned by Local Authorities were built between 1919 and 1982, while less than half (47%) of the Housing Associations stock was built in this period. By contrast, 40% of private rented sector dwellings were built before 1919, higher than both local authority (2%) and housing association (8%) properties.

Data Source: Table KA14a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

## 1.7 Household Income Band

**Income and tenure are closely correlated.**

**Figure 1.16 Households by tenure group and net annual household income band, 2024.**



## Description of Figure 1.16

The distribution of income is related to household tenure. For social sector residents the distribution of households is skewed towards lower income bands, as shown in [Figure 1.16](#), while for households with mortgages the distribution is skewed towards the highest income band. The distribution of households by income in the PRS and for households who own their home outright are more uniform than the other tenures.

Data Source: Table KA15a in [‘SHCS 2024 - Chapter 01 Key Attributes of the Scottish Housing Stock – tables and figures’](#).

## 2 Energy Efficiency

The energy efficiency of a dwelling depends on its physical characteristics. Factors such as the age of construction, the dwelling type, the heating and hot water systems in use and the extent to which the building fabric is insulated, all affect energy efficiency.

Based on information about the characteristics of the dwelling collected in the SHCS physical survey and using standard assumptions about the make-up and the behaviour of the occupying household, the energy consumption associated with the dwelling is modelled. This allows us to make comparisons of modelled energy use, emissions, and energy efficiency ratings between dwellings that are independent of occupant behaviour. Further details on the methodology underpinning these measures of energy efficiency are provided in sections 1.3 and 1.4 of the [Methodological and Technical notes](#).

In this chapter we report on:

- levels of insulation in Scottish dwellings ([section 2.1](#));
- boiler efficiencies ([section 2.2](#));
- Energy Efficiency Ratings (EER), also known as SAP ratings ([section 2.3](#));
- modelled carbon dioxide (CO<sub>2</sub>) emissions from dwellings ([section 2.4](#)); and
- Environmental Impact Ratings (EIR) ([section 2.5](#)).

A breakdown of findings is also provided by household tenure and other relevant dwelling characteristics.

### 2.1 Insulation Measures

Installing or upgrading insulation is one of the most effective ways to improve the energy efficiency of a building. The [Energy Saving Trust](#) estimates that an un-insulated dwelling loses a third of all its heat through the walls and a further quarter through the roof. As a result, insulation can significantly reduce energy consumption and therefore lower heating bills, making it cheaper to achieve satisfactory levels of thermal comfort. (See [Chapter 3](#) on Fuel Poverty).

Additional insulation is most commonly added to a property through the insulation of loft spaces, and by adding insulating material to external walls.

#### Key Points

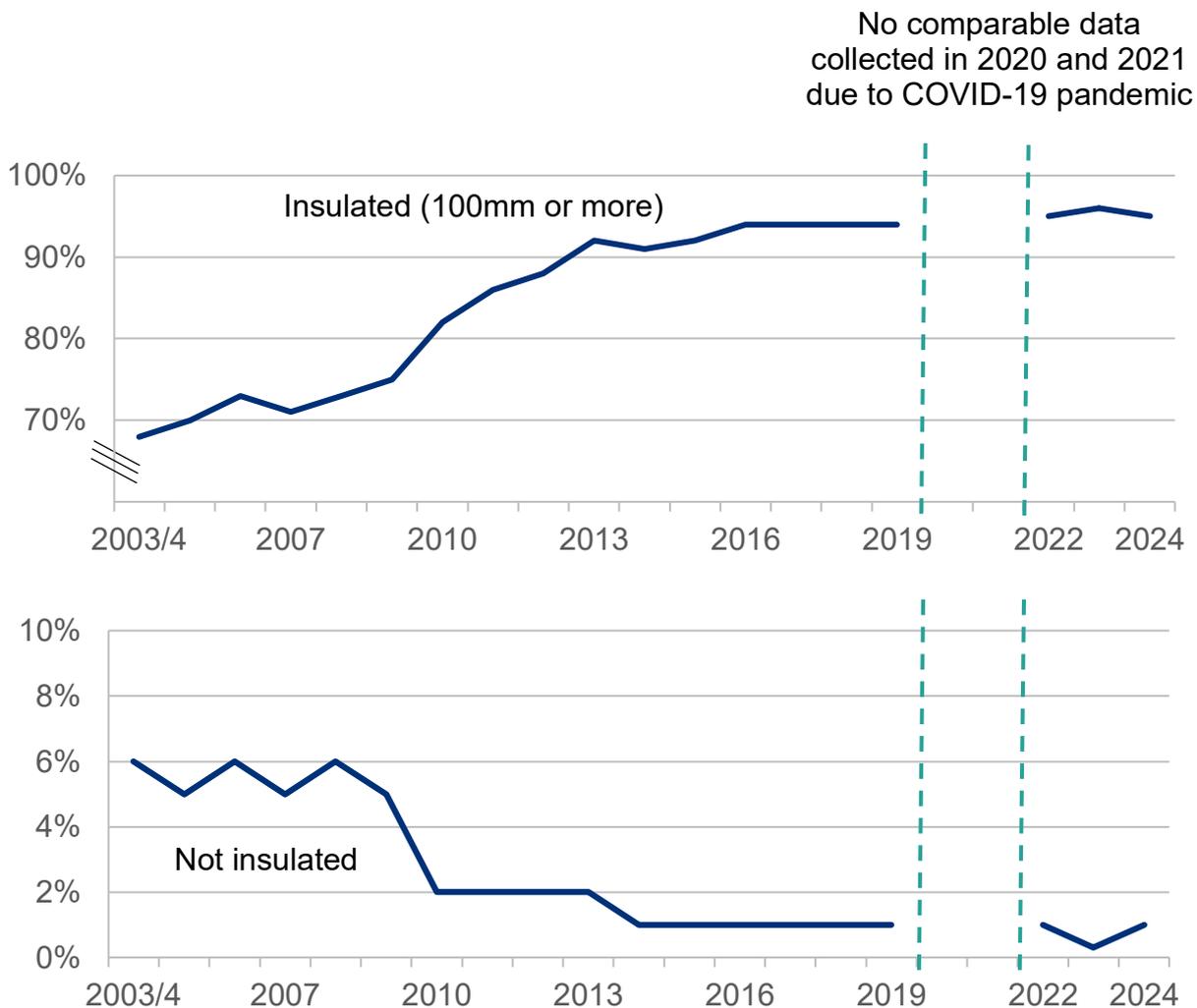
- The majority of loft spaces are insulated. In 2024, loft insulation with a thickness of 100 mm or more had been installed in 95% of dwellings. This has been broadly stable since 2017 but represents an increase of around 24 percentage points on 2007 levels.
- In 2024, 35% of lofts were insulated to a high standard of insulation (300 mm or more), higher than to 2023 levels.

- The proportion of insulated cavity walls recorded by the SHCS was 71% in 2024.
- The proportion of solid wall dwellings with insulation was 20% in 2024.
- Levels of insulation (both loft and wall) are higher in the social sector than in the private sector. 56% of homes in the private sector have wall insulation compared to 72% in the social sector. In the private sector, 65% of lofts are insulated to 200 mm or more compared to 76% in the social sector.

### 2.1.1 Loft Insulation

**The majority of loft spaces in Scotland are insulated.**

**Figure 2.1: Loft insulation (where applicable), 2003/2004 to 2024**



## Description of figure 2.1

[Figure 2.1](#) shows that since 2007, there has been an overall improvement in the uptake of loft insulation. The proportion of all applicable housing<sup>2</sup> with 100 mm or more of loft insulation has increased by around 24 percentage points on 2007 levels with 95% of applicable dwellings insulated to this degree in 2024. Most of this improvement occurred before 2014.

The share of dwellings with no loft insulation has fallen from 6% in 2003/4 to around 1% in 2024. Most of this decline occurred before 2010. Since then, improvement has slowed down, suggesting that there may be barriers preventing the installation of insulation in the relatively few remaining uninsulated lofts.

Data Source: Table EE1 in [‘SHCS 2024 - Chapter 02 Energy Efficiency - tables and figures’](#)

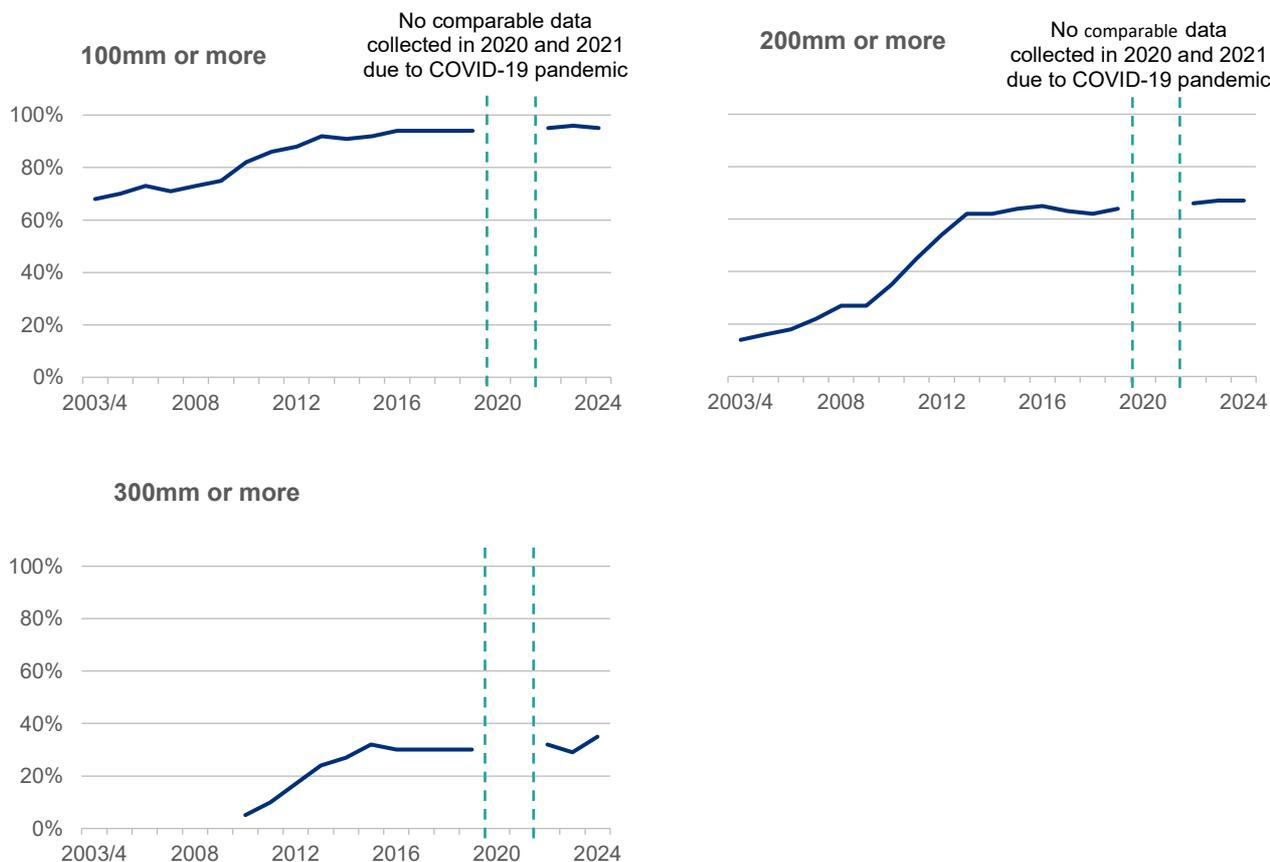
Notes: [\[note 3\]](#)

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<sup>2</sup> Dwellings without loft spaces are excluded from this analysis. A dwelling is classified as ‘not applicable’ for loft insulation if it has a flat roof or another dwelling above it (i.e. it is a mid- or ground-floor flat). Furthermore, in some instances dwellings with lofts cannot provide access to the surveyor (such as incidences with a locked hatch). These dwellings are also excluded from this analysis on depth of loft insulation, and therefore the count of applicable dwellings may vary each year. However, these dwellings are given the default appropriate Scottish Building Regulation standard of loft insulation for dwellings of the relevant age when modelling energy consumption.

**In 2024, 35% of lofts were insulated to a high standard of insulation (300 mm or more).**

**Figure 2.2: Depth of loft insulation (where applicable), 2003/2004 to 2024**



### Description of figure 2.2

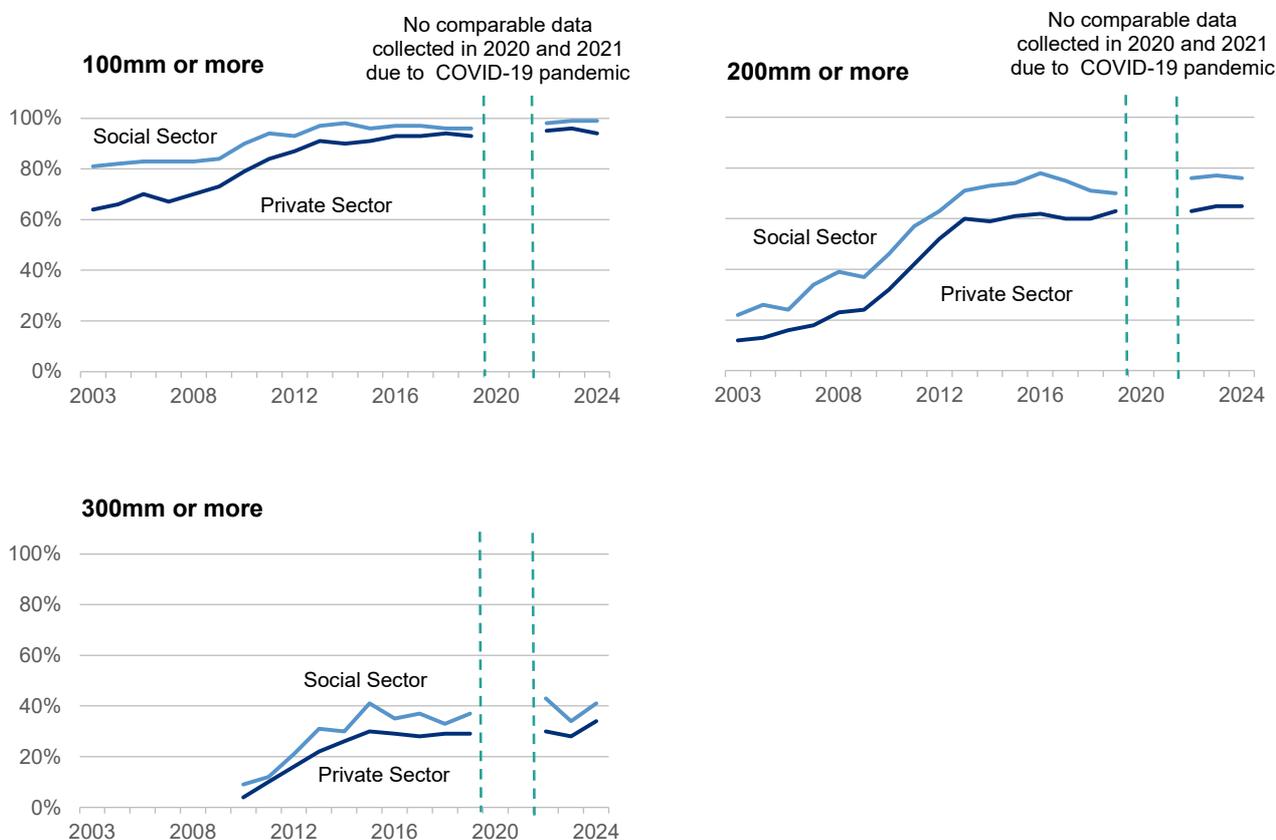
Since 2009 the thickness of loft insulation has notably increased. In 2024, 67% of dwellings with lofts had insulation with a depth of 200 mm or more compared to 27% in 2009. Much of this increase occurred between 2009 and 2013, when the percentage increased from 27% to 62%. This can largely be attributed to the installation of top-up insulation. The estimated number of dwellings with loft insulation of 200 mm or more in 2024 is similar to 2023. However, the estimated number of dwellings with loft insulation of 300mm or more rose from 32% to 35% between 2023 and 2024.

Data Source: Table EE1 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 3\]](#)

## Levels of loft insulation are higher in the social sector than in the private sector.

**Figure 2.3: Depth of loft insulation (where applicable) by tenure, 2003/2004 to 2024**



### Description of figure 2.3

As shown in [Figure 2.3](#) in 2024, 34% of private sector dwellings had a high standard (300 mm or more) of loft insulation, lower than 41% of dwellings in the social sector. 94% of private housing lofts were insulated to 100 mm or more and 65% to 200 mm or more. In the social sector, around 99% of dwellings had lofts insulated to 100 mm or more, and 76% had 200 mm or more of loft insulation.

One of the reasons for the difference in uptake of loft insulation over time between the private and social sector is that the [Scottish Housing Quality Standard \(SHQS\)](#), which was introduced in 2004 and applies only to social sector housing, required dwellings to have of loft insulation if there was an appropriate loft space. (see [section 5.2.3](#) for more information).

However, the difference in the proportion of lofts with 100 mm or more of insulation between the private and social sectors has been reducing gradually, from 17 percentage

points in 2003/04 (81% in the social and 64% in the private sector) to around 5 percentage points in 2024 (around 99% in the social sector and 94% in the private sector).

Data Source: Table EE2a in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 3\]](#)

## **2.1.2 Wall Insulation**

The presence of cavity wall insulation (CWI) added since built is becoming increasingly difficult for SHCS surveyors to identify as over time the injection holes age, fade, or are covered up by later work. Additionally, contractors are also getting better at concealing their work. This may mean that the SHCS underestimates the number of homes which have had CWI installed (see [section 6.2.2.4 of the 2019 SHCS key findings report](#)).

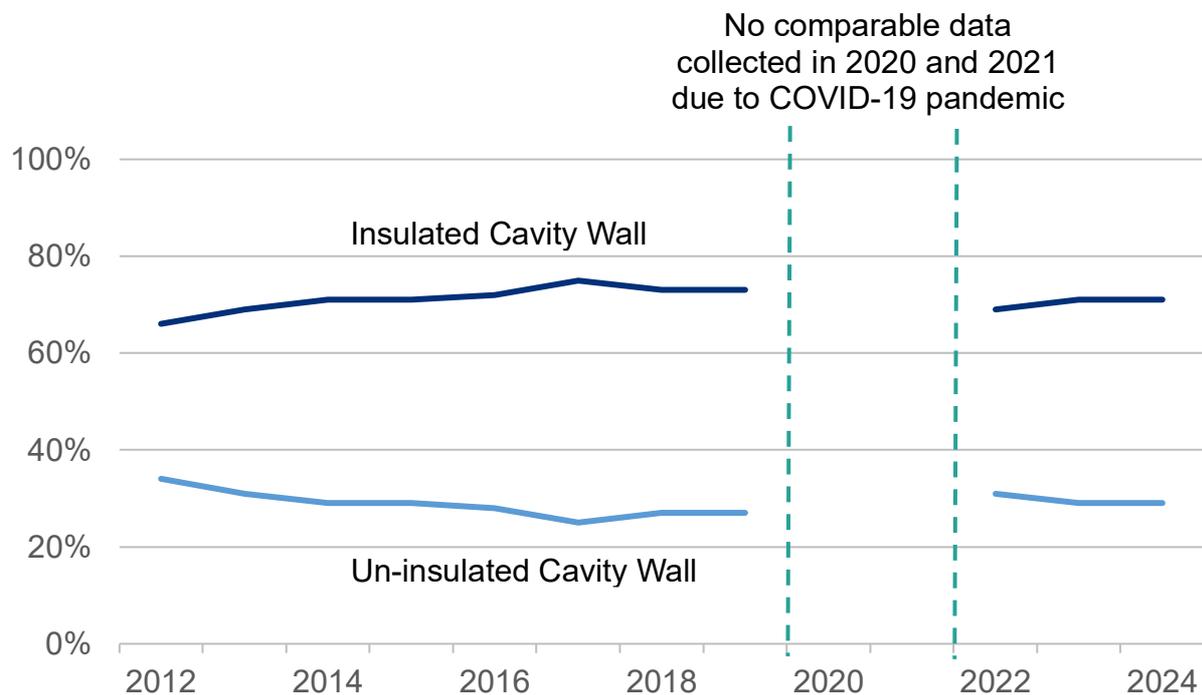
Therefore, despite efforts to maintain the high quality of the SHCS physical survey fieldwork, some misclassifications may remain.

In Scotland around 78% of dwellings (or around 1.98 million) have external cavity walls and the remaining 22% (or 573,000) have solid or other construction types of external wall. These “other” types may include steel, brick, block or dwellings made from prefabricated concrete. As the improvement of solid and other wall types generally requires more expensive interventions than CWI, this diverse group is addressed together in this chapter.

Higher insulation levels in new buildings have been required by building standards since 1983 when the [Building Standards \(Scotland\) Amendment Regulations 1982](#) came into force. These dwellings are therefore treated as insulated when built for the purposes of this report.

**In 2024, 71% of cavity wall dwellings in Scotland were insulated.**

**Figure 2.4: Cavity wall insulation, 2012 to 2024**



Description of Figure 2.4

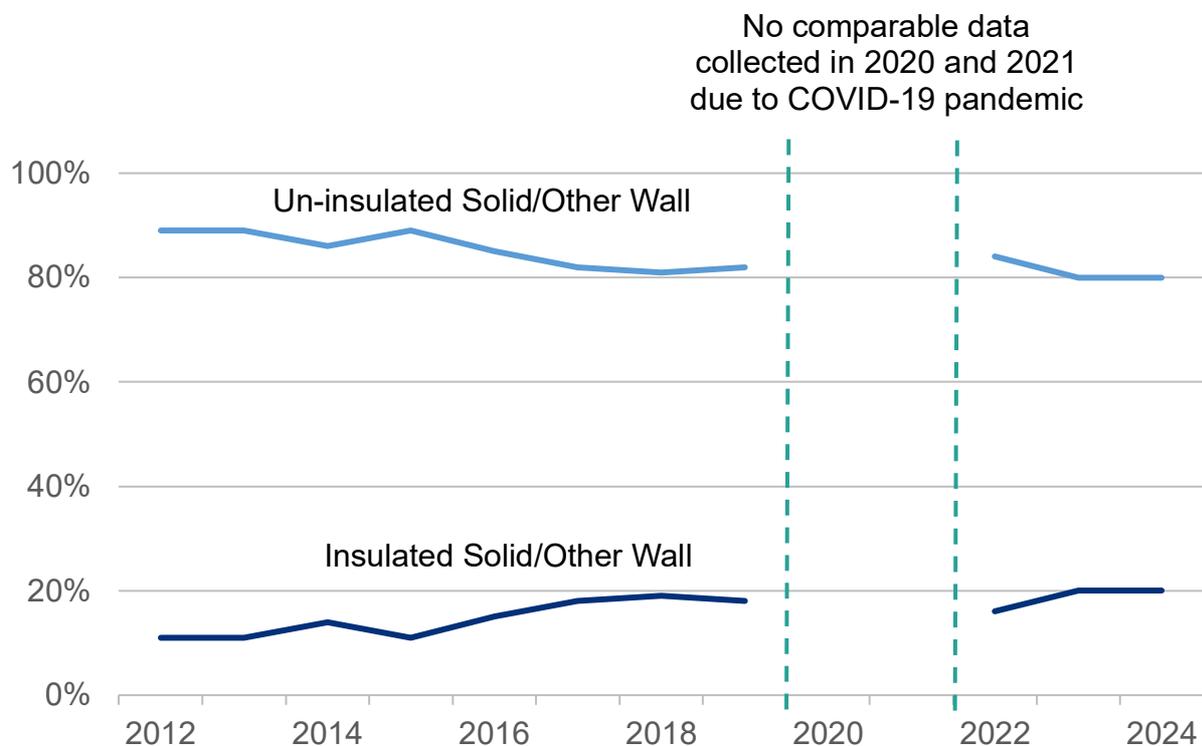
In 2024, 71% of cavity wall dwellings in Scotland were insulated, similar to the level in 2014. The long term trend shows a decrease in the share of uninsulated cavity walls of around 6 percentage points between 2012 and 2014, but has remained fairly stable since then.

Data Source: Table EE3a in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 4\]](#)

**In 2024, 20% of dwellings with solid and other wall types in Scotland were insulated.**

**Figure 2.5: Wall insulation of solid and other wall types, 2012 to 2024**



Description of Figure 2.5

[Figure 2.5](#) shows the levels of insulation in dwellings with solid or other construction type walls recorded by the survey from 2012 to 2024. The results show that 20% of dwellings in this category had insulated walls in 2024, similar to 2023, but a 10 percentage point increase from 2012. 682 dwellings with solid walls were surveyed in 2024 as part of the SHCS.

Data Source: Table EE3a in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 4\]](#)

The information in [Table 2.1](#) breaks down the type of cavity wall into hard to treat cavities (HTTC) and standard cavity walls using the ECO definition as far as possible with the available data (further details are available in [section 2.6](#) of the Methodological and Technical notes).

HTTCs have certain attributes which make CWI more expensive, complex or inadvisable. Standard cavity walls have no such barriers.

**Overall levels of wall insulation were higher in the social sector than in the private sector.**

**Table 2.1: Wall Insulation by wall type and tenure, 2024**

<b>Wall Type</b>	<b>Insulation Status</b>	<b>Wall/ Insulation Categories</b>	<b>Private Sector</b>	<b>Social Sector</b>	<b>All Tenures</b>
Cavity	Un-insulated	HTTC wall	8%	8%	8%
Cavity	Un-insulated	Standard wall	22%	17%	20%
Cavity	Un-insulated	All	30%	25%	29%
Cavity	Insulated	CWI insulation	29%	35%	31%
Cavity	Insulated	Int/External insulation	5%	15%	8%
Cavity	Insulated	As built insulation	36%	26%	33%
Cavity	Insulated	All	70%	75%	71%
Cavity	All	All	100%	100%	100%
Solid/Other	Un-insulated	Pre-1919 wall	75%	35%	70%
Solid/Other	Un-insulated	Post-1919 wall	10%	16%	11%
Solid/Other	Un-insulated	All	85%	50%	80%
Solid/Other	Insulated	Retrofit insulation	[c]	[c]	[c]
Solid/Other	Insulated	As built insulation	[c]	[c]	[c]
Solid/Other	All Status	All	15%	50%	20%
Solid/Other	All	All	100%	100%	100%
All	Un-insulated	All	44%	28%	40%
All	Insulated	All	56%	72%	60%
All	All	All	100%	100%	100%
Cavity	All	Sample size (number)	1,633	587	2,220
Solid/Other	All	Sample size (number)	603	79	682
All	All	Sample size (number)	2,236	666	2,902

Around 72% of dwellings in the social sector had insulated walls, with 75% of cavity wall dwellings, and 50% of dwellings with solid and other wall types estimated to be insulated in 2024.

In the private sector, 70% of cavity wall dwellings and 15% of solid and other wall dwellings, had insulation in 2024. Over half (56%) of all private sector dwellings had insulated walls.

Overall, 71% of cavity wall dwellings in Scotland have wall insulation. 31% have had retrofit cavity wall insulation, which is generally the lowest cost improvement available; the remainder of insulated cavity walls were insulated as built (33%) or insulated in another way such as with internal and external wall insulation (8%).

Levels of insulation are higher in the social sector at 72% (all wall types) compared with 56% in the private sector. This is driven by higher levels of insulated solid walls in the social sector (50%) compared to the private sector (15%). Within wall type, this tenure divide is also apparent for more expensive insulation measures such as internal / external insulation of cavity walls 15% of cavity wall dwellings in the social sector; compared to 5% of private dwellings.

Notes: [\[note 4\]](#)

## 2.2 Boilers

The heating system is a key factor in the thermal efficiency of a dwelling. Around 87% of households use a gas or oil-fuelled boiler. Trends in boiler efficiency are closely related to developments in energy efficiency and building standards regulations:

- From 1998, minimum boiler efficiency standards were set by [European Council Directive 92/42/EEC](#)
- In 2007, Scottish Building Standards increased the efficiency requirements for all new and replacement boilers, details are available in the [Domestic Building Services Compliance Guide for Scotland](#).
- From February 2023 boiler efficiency standards were again increased for all new and replacement boilers, details are available in the updated [Domestic building services compliance guide](#)

Building regulations in Scotland effectively require the installation of a condensing boiler<sup>3</sup> for gas and oil-fuelled heating when boilers are replaced in any dwelling. Prior to 2024 regulations essentially also required their installation in any new build property with gas or oil heating. However, from April 2024, the [New Build Heat Standard](#) now only allows zero direct emission heat solutions (this definition includes heat networks, bioenergy and peat) to be installed in new builds. Therefore, over time the percentage of dwellings with gas or oil boilers is expected to decrease.

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<sup>3</sup> This design has higher running efficiencies; a portion of the heat that would be lost through vented water vapour is recovered through condensation in a heat exchanger.

Since 2016 in order to track the improved efficiency of gas and oil boilers associated with the rising standards of the regulatory framework the SHCS records the age of the household's heating system and contains sufficient data to derive the Seasonal Efficiency (SEDBUK) ratings of surveyed boilers. Further details can be found in [section 1.4](#) of the Methodological and Technical notes.

Previous key findings reports assessed boiler efficiency against the minimum requirements set from 2007. These were: a minimum efficiency of 88% for condensing standard gas, oil and LPG boilers; for condensing combination boilers, 86% for oil, and 88% for gas and LPG; for ranges, back boiler and combined primary storage units (CPSUs), 75% when gas, and 80% when oil<sup>4</sup>.

However, from the 2024 wave of the survey boiler efficiency is measured against the new standards which took effect in February 2023. These are: 92% for condensing standard or combination gas boilers (including LPG). 91% for oil condensing standard boilers, and 86% for oil condensing combination boilers. For ranges, back boiler and combined primary storage units (CPSUs) the efficiency standards have remained, 75% when gas, and 80% when oil.

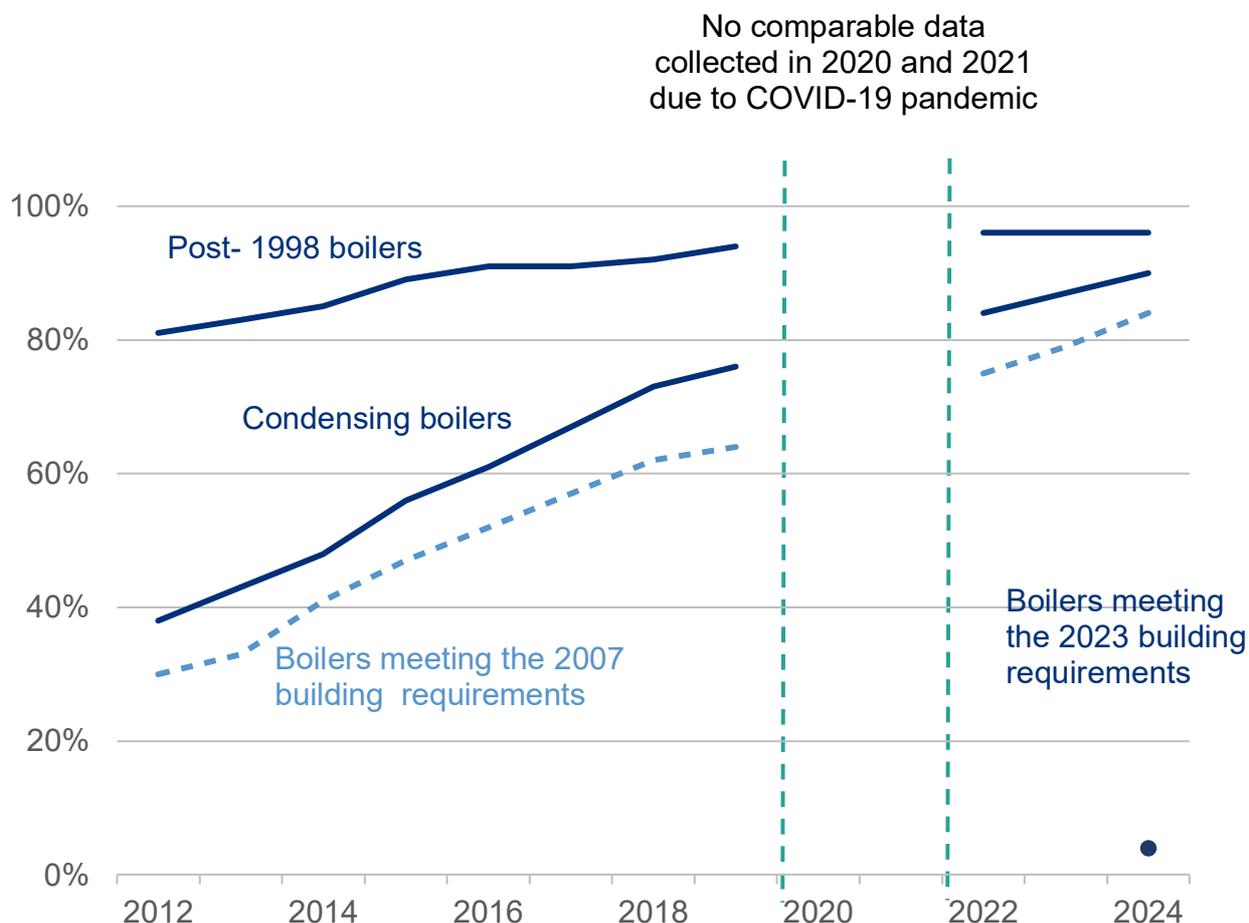
Due to the change in efficiency standards there has been a large decrease in the number of dwellings with boilers which meet the current efficiency standards. This is due to the fact that the SHCS will only capture a small number of dwellings with new boilers each year and as such most dwellings in the achieved sample of the survey will have had their boilers installed under the previous building standards, set in 2007, which had less stringent efficiency criteria. In order to allow comparisons to previous years we have produced two estimates, one for the current standard and one for the previous standard.

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<sup>4</sup> For existing dwellings, there are occasions where it may not be practical to install a condensing boiler. The [Condensing Boiler Installation Assessment Procedure Guide](#) offers further guidance in this area. Where a non-condensing boiler is installed this may result in a boiler with poorer efficiency than that of a newly installed condensing boiler of the same fuel type.

**4% of gas and oil boilers met the minimum efficiencies specified by the current Building Standards, in 2024.**

**Figure 2.6: Gas and oil boiler types, 2012 to 2024<sup>5</sup>**



**Description of Figure 2.6**

In 2024 the survey found that 96% of the domestic gas and oil boilers in Scotland have been installed since 1998, when the European Boiler Efficiency Directive minimum standards came into effect. The proportion of new boilers, those installed since 1998, has increased by around 15 percentage points since 2012. In 2024, 90% of gas and oil boilers were condensing boilers. This represents an increase of 52 percentage points since 2012.

Under the new building standards only 4% of dwellings meet the current boiler efficiency standards. This will increase over time, as the new boiler efficiency standards only apply to

<sup>5</sup> The new boiler efficiency standards only apply to new or replacement boilers.

new or replacement boilers. Under the previous standards, set in 2007, around 84% of gas and oil boilers met the minimum efficiencies, an increase over the 2023 figure of 79%<sup>6</sup>.

Data Source: Table EE5a in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

## 2.3 Energy Performance Certificates

### Key Points

- In 2024, 56% of Scottish homes were rated as EPC band C or better under SAP 2012 (RdSAP v9.93), with around 10% of properties rated in the lowest EPC bands (E, F or G).
- Under SAP 2009, which allows for comparisons over a longer period, 62% of dwellings were rated C or better, up 38 percentage points since 2010. In the same period, the proportion of properties in the lowest EPC bands (E, F or G) has reduced from 27% in 2010 to 8% in 2024.
- Under SAP 2012 v9.93, the median EE rating in 2024 was 70, which is equivalent to Band C. This is an increase from 67 in 2018 which is equivalent to band D.

[Energy Performance Certificates \(EPC\)](#) were introduced in January 2009 under the requirements of the EU Energy Performance Building Directive (EPBD). They provide energy efficiency and environmental impact ratings for buildings based on standardised energy usage. EPCs are required when a property is either sold or rented to a new tenant.

EPCs are generated through the use of a standard calculation methodology, known as [Standard Assessment Procedure \(SAP\)](#). SAP is the UK Government approved way of assessing the energy performance of a dwelling, taking into account the energy needed for space and water heating, ventilation and lighting and, where relevant, energy generated by renewables.

The Energy Efficiency Rating (EER) is expressed on a scale of 1-100 where a dwelling with a rating of 1 will have very poor energy efficiency and higher fuel bills, while 100 represents very high energy efficiency and lower fuel bills. Ratings can exceed 100 where the dwelling generates more energy than it uses.

Ratings are adjusted for floor area so that they are essentially independent of dwelling size for a given built form.

For Energy Performance Certificates, EERs are presented over 7 bands, labelled A to G. Band A represents low energy cost and high energy efficiency, while band G denotes high energy cost (and low energy efficiency).

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<sup>6</sup> See section 1.4 of the [Technical and Methodological notes](#) for previous boiler efficiency standards.

Energy Efficiency Ratings reported in this publication are calculated under two versions of SAP, the [SAP 2009 methodology](#) and the [SAP 2012 methodology](#). Using SAP 2009 enables us to examine the trend in the energy efficiency of the housing stock since 2010.

Trends for EPC and EER ratings under SAP 2009 are presented in the excel tables available at [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#) in infographic EE1, Table EE7A and B, and Figure EE8.

SAP is periodically reviewed by the UK government to ensure it remains fit for purpose and to address its continued application across an increasing range of carbon and energy reduction policy areas. SAP is used for assessment of new buildings whilst a ‘reduced data’ version of the methodology, RdSAP, is applied to the assessment of existing buildings.

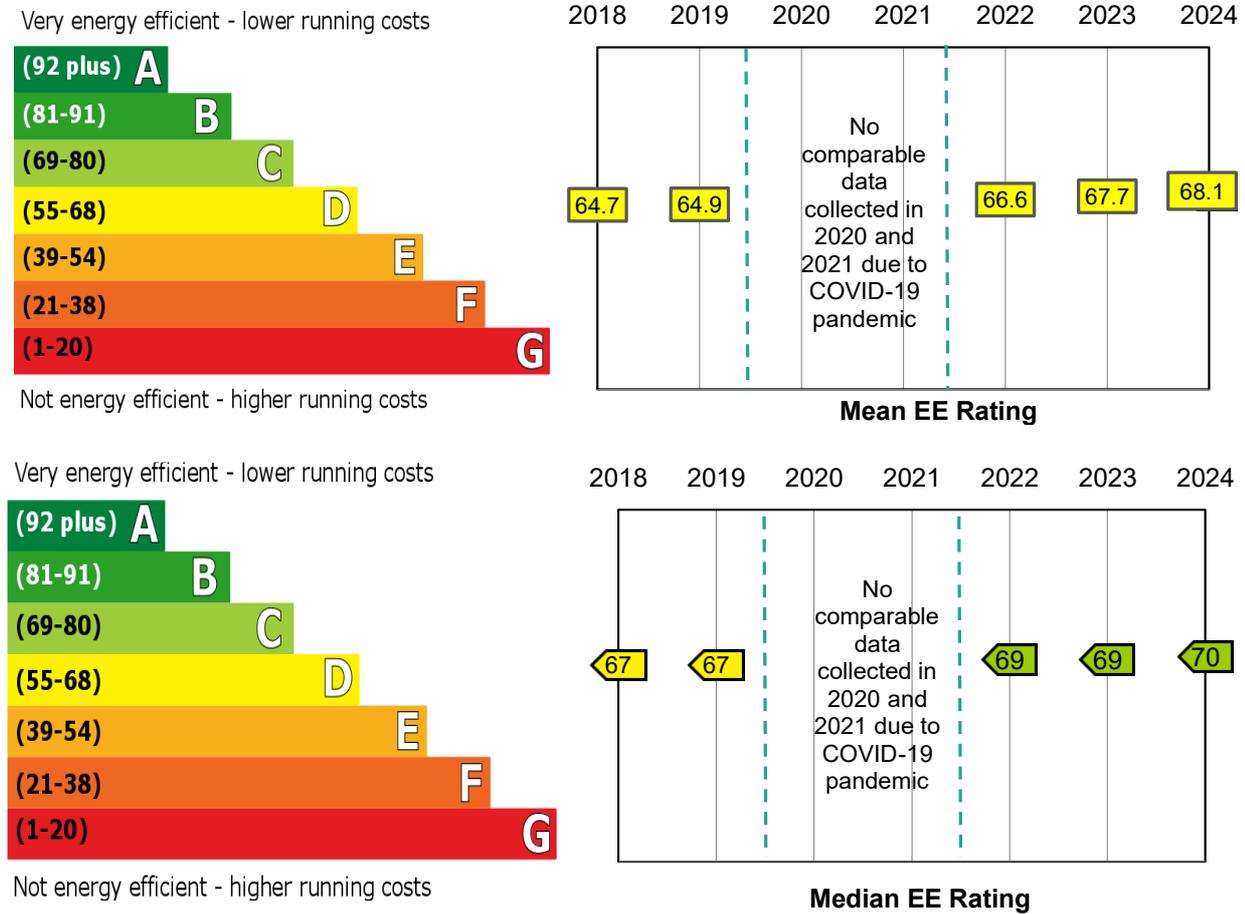
SHCS energy modelling for SAP 2012 in this report is based on [RdSAP \(v9.93\)](#). The RdSAP (v9.93) was released on 19 November 2017 and contains revisions to the underlying assumptions used within the SAP calculations. The most notable update to the methodology in v9.93 was a change to the default U-values of cavity, solid and stone walls, built prior to 1976. Compared to v9.92, U-values for solid, insulated stone and uninsulated cavity walls have improved, whereas they have declined for insulated cavity walls. These U-values are used to calculate the rate of heat loss through the walls, which contributes to the overall thermal performance of the building fabric of the dwelling. Data on the basis of RdSAP v9.93 is presented from 2018.

### **2.3.1 Energy Efficiency Rating, SAP 2012**

This section examines the energy efficiency profile of the Scottish housing stock under the [SAP 2012 methodology](#) (RdSAP v9.93) with time series analysis is presented from 2018. Further breakdowns by household and dwelling characteristics for 2024 are also presented.

# The Scottish housing stock is gradually becoming more energy efficient.

**Infographic 2.1: Mean and median EER relative to EPC bands, SAP 2012, 2018-2024**



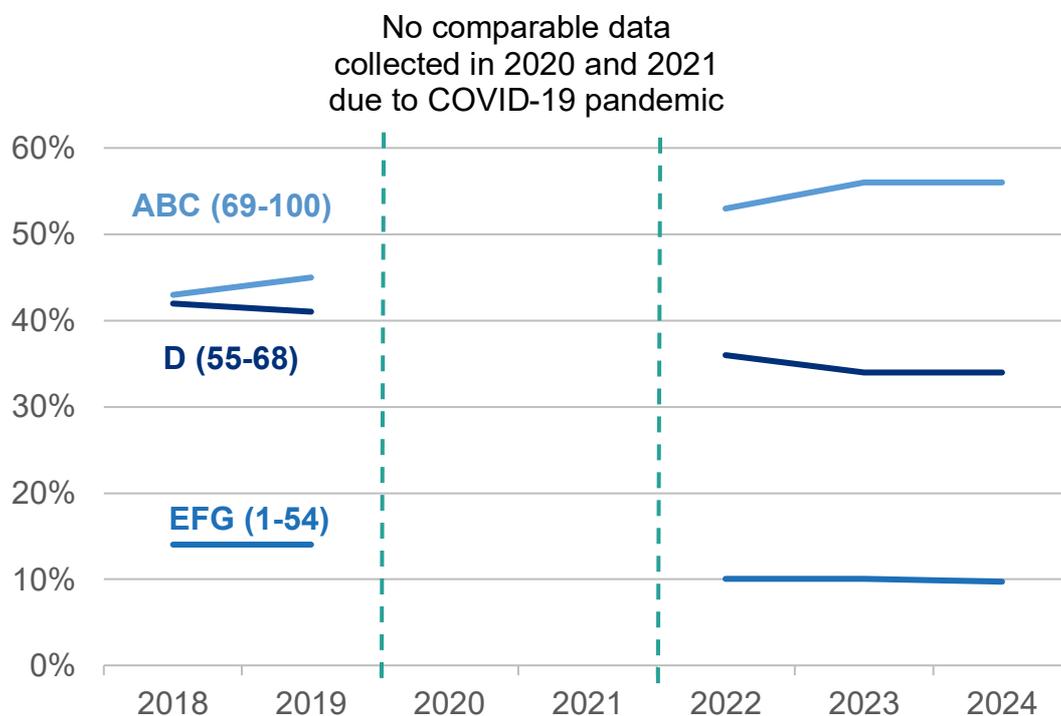
## Description of Infographic 2.1

In 2024, the mean energy efficiency rating of the Scottish housing stock under SAP 2012 (RdSAP v9.93) was 68.1 and the median was 70 points. The mean rating is similar to the 2023 figure, however there was an increase between 2022 and 2024, from 66.6 to 68.1.

Data Source: Table EE6 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

## Scottish housing is gradually moving up through the EPC bands.

**Figure 2.7: Distribution of the Scottish Housing Stock by EPC Band, SAP 2012, 2018-2024**



Description of figure 2.7

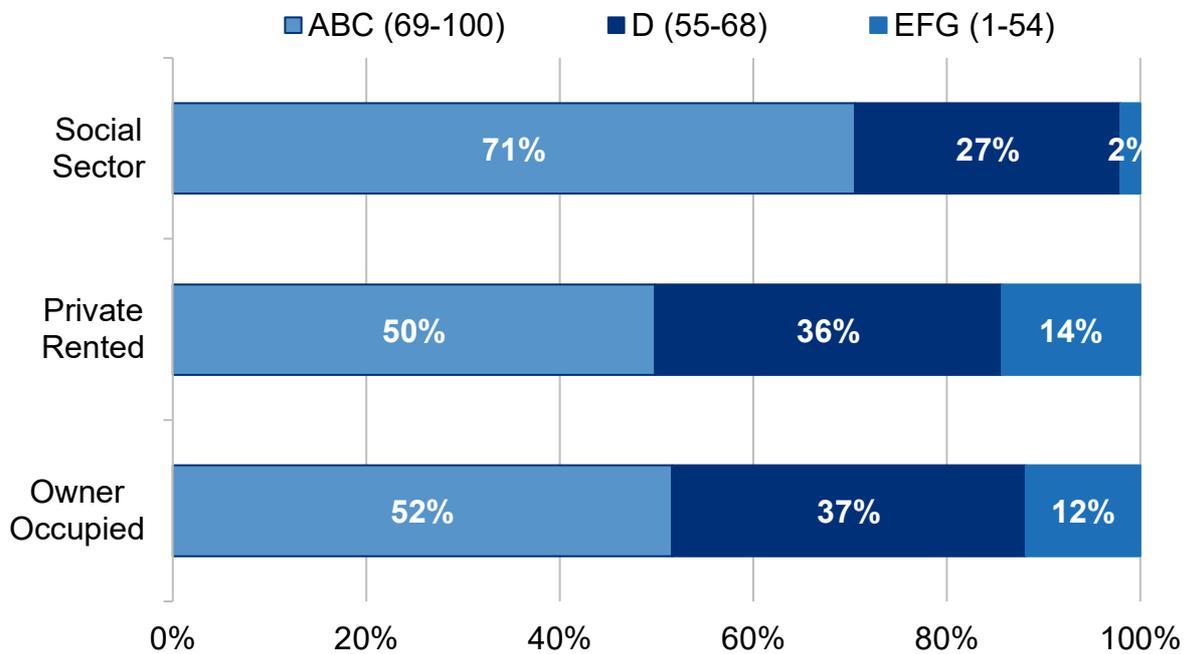
[Figure 2.7](#) shows that 56% of all properties in 2024 were rated C or better under SAP 2012 (RdSAP v9.93) similar to 2023 but an increase of around 13 percentage points from 2018. 10% of properties in 2024 were in bands E, F or G.

Data Source: Table EE7a in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 5\]](#)

**Housing in the social sector tends to be more energy efficient than the owner occupied or private rented sector.**

**Figure 2.8: Percentage of dwellings by EPC band and tenure in 2024**



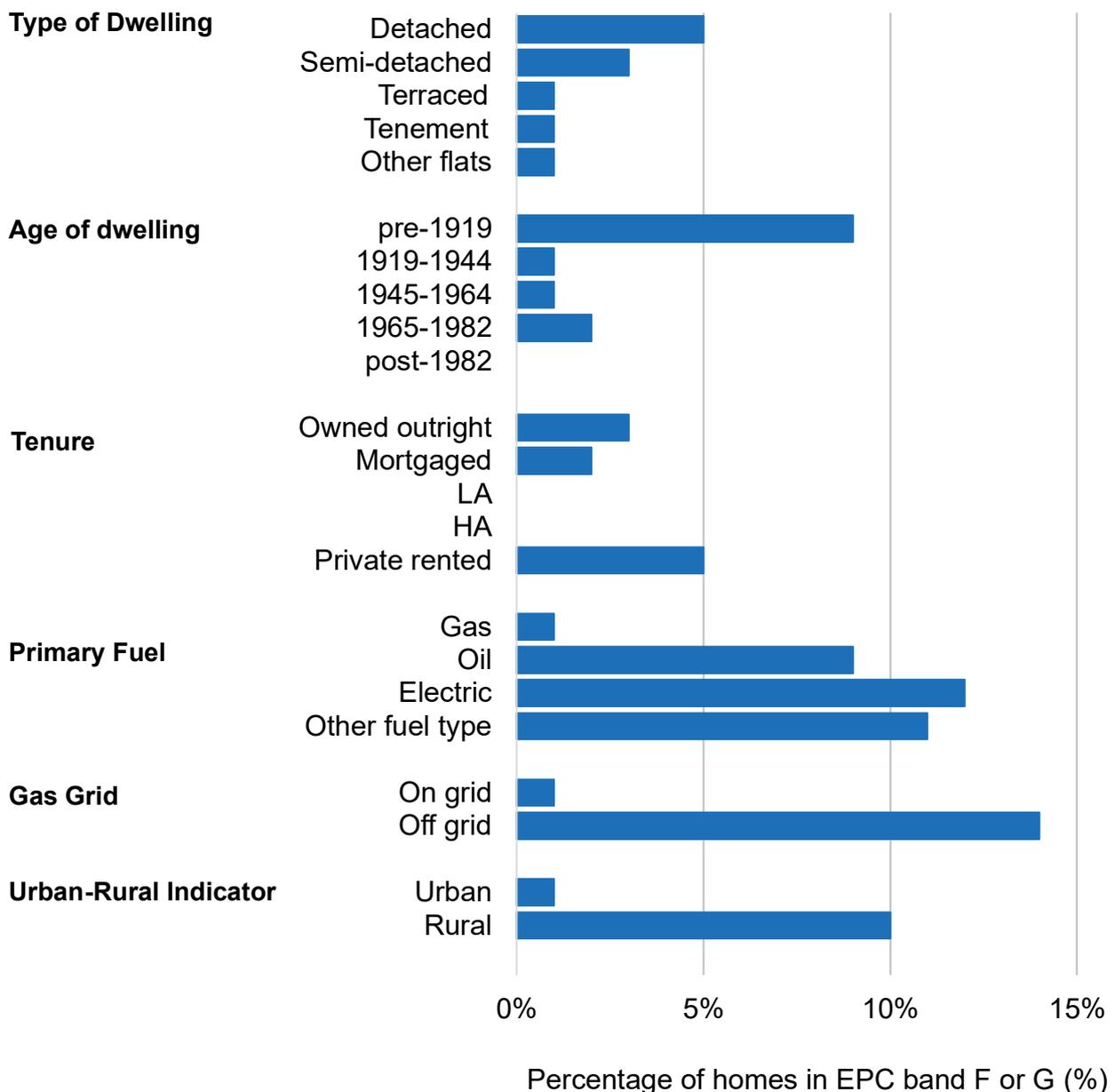
Description of figure 2.8

As shown in [Figure 2.8](#), 71% of social housing is in band C or better under SAP 2012 (RdSAP v9.93). Higher than both the private rented sector at 50% and the owner-occupied sector at 52%. Around 2% of dwellings in the social sector are within EPC bands E, F or G, while 12% of owner-occupied dwellings and 14% of the private rented sector are within these EPC bands. These differences could be driven by the [Scottish Housing Quality Standard \(SHQS\)](#) and the [Energy Efficiency Standard for Social Housing \(ESSH\)](#) which introduced minimum energy efficiency levels for the social sector.

Data Source: Table EE8a in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

**Across Scotland, 2% of properties were in bands F or G in 2024.**

**Figure 2.9: Proportion of homes in EPC Band F or G by dwelling and household characteristics, SAP 2012 v9.93**



Description of figure 2.9

[Figure 2.9](#) shows that dwellings in the lowest energy efficiency bands (F and G) are more likely to be older pre-1919 dwellings (9%), non-gas heated properties (12% for electric, 9% for oil and 11% for other fuels), detached properties (5%), off gas grid properties (14%), and in rural areas (10%). Across Scotland as a whole, 2% of properties were in bands F or G in 2024.

Data Source: Table EE9 and EE10 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

For sample sizes and corresponding values for EPC Bands ABC and DE, as well mean EPC ratings, please see Tables EE9 and EE10 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 1\]](#) [\[note 2\]](#)

**There is a strong association between tenure and mean energy efficiency rating.**

**Table 2.2: Mean EER and percentage in EPC bands ABC, by household characteristics in 2024, SAP 2012**

Household Characteristics	Category	SAP 2012 Ratings Mean	EPC Band ABC (%)
Tenure	Owned outright	65.8	47%
Tenure	Mortgaged	69.0	59%
Tenure	LA	70.5	64%
Tenure	HA	73.5	79%
Tenure	Private rented	66.0	50%
Tenure (grouped)	Private Sector	66.9	51%
Tenure (grouped)	Social Sector	71.8	71%
Household Composition	Older Households	66.8	50%
Household Composition	Families	70.0	63%
Household Composition	Other Households	68.3	58%
Net Annual Household Income	< £15,000	67.6	54%
Net Annual Household Income	£15,000 - £24,999	68.3	57%
Net Annual Household Income	£25,000 - £34,999	67.9	56%
Net Annual Household Income	£35,000 - £44,999	68.1	56%
Net Annual Household Income	£45,000+	68.3	56%
Council Tax Band	Band A	68.6	60%
Council Tax Band	Band B	66.9	51%
Council Tax Band	Band C	69.2	59%
Council Tax Band	Band D	69.2	60%
Council Tax Band	Band E	68.1	56%
Council Tax Band	Band F	68.0	53%
Council Tax Band	Band G & H	66.2	52%
All households	All households	68.1	56%

Mean SAP 2012 (RdSAP v9.93) ratings ranged from 65.8 in dwellings owned outright to 73.5 in housing association dwellings, a statistically significant difference. Furthermore, social housing as a whole is more energy efficient than the private sector, with a mean EER of 71.8 compared to 66.9 for private dwellings.

Older households (66.8) have lower average EER ratings than families (70) and other (adults without children) households (68.3). For sample sizes and corresponding values for EPC bands DE and FG, please see Table EE9 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

**There is a strong association between dwelling characteristics and energy efficiency rating.**

**Table 2.3: Mean EER and percentage in EPC bands ABC, by dwelling characteristics in 2024, SAP 2012**

Dwelling Characteristics	Category	SAP 2012 Ratings Mean	EPC Band ABC (%)
Dwelling Type	Detached	65.6	50%
Dwelling Type	Semi-detached	66.1	43%
Dwelling Type	Terraced	68.1	53%
Dwelling Type	Tenement	71.6	70%
Dwelling Type	Other flats	69.6	68%
Dwelling Age	pre-1919	59.3	23%
Dwelling Age	1919-1944	66.6	46%
Dwelling Age	1945-1964	67.2	51%
Dwelling Age	1965-1982	67.3	52%
Dwelling Age	post-1982	74.9	85%
Primary Heating Fuel	Gas	70.0	61%
Primary Heating Fuel	Oil	55.8	15%
Primary Heating Fuel	Electric	60.5	37%
Primary Heating Fuel	Other fuel type	64.7	60%
Urban-Rural Indicator	Urban	69.5	60%
Urban-Rural Indicator	Rural	61.4	38%
Gas Grid	On grid	69.7	60%
Gas Grid	Off grid	56.3	23%
All dwellings	All dwellings	68.1	56%

[Table 2.3](#) shows that across dwelling types, detached properties and semi-detached properties have the lowest energy efficiency ratings on average (mean EER 65.6 and 66.1) while flats have the highest ratings (71.6 for tenements and 69.6 for other flats).

The oldest, pre-1919, properties are the least energy efficient (mean EER of 59.3 and 23% rated C or better) while those built after 1982 have the highest energy efficiency ratings (mean EER of 74.9, with 85% in band C or better).

Primary heating fuel is a key determinant of the energy efficiency rating of the dwelling. Properties heated by mains gas have an average EER rating of 70 and 61% are in band C or better. Dwellings heated by other fuels (including electricity and oil) have considerably lower ratings by comparison. The average energy efficiency rating for oil heated properties is 55.8 (corresponding to EPC band D) and only 15% are in band C or better. For electrically heated dwellings the average energy efficiency rating was 60.5 with 37% in band C or better.

Proximity to the gas grid has a similar effect on the energy efficiency rating. Dwellings on the gas grid have an average SAP rating of 69.7, higher than the average SAP rating of 56.3 for off grid dwellings.

As dwelling characteristics associated with lower energy efficiency are disproportionately represented in rural areas, the average energy efficiency profile of rural properties is lower than that for urban areas. [Table 2.3](#) shows that the mean SAP 2012 (RdSAP v9.93) rating is 69.5 for dwellings in urban areas with 60% in band C or above. This is higher than the mean rating of 61.4 for dwellings in rural areas, where 38% of dwellings are in band C or better.

For sample sizes and corresponding values for EPC bands DE and FG, please see Table EE10 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 1\]](#) [\[note 2\]](#)

## 2.4 Carbon Emissions

### Key Points

- Based on the modelled energy use required to meet the SAP standard heating regime<sup>7</sup>, the average Scottish home was estimated to produce 6.3 tonnes of carbon dioxide (CO<sub>2</sub>) per year in 2024, which is more than double the average carbon emissions per household as reported by Department for Energy Security and Net Zero (2.8 tonnes per year) in 2023, based on actual energy use. This suggests that households are not heating their homes to the SAP standard heating regime.
- Average modelled carbon emissions for all properties were 66 kg per square meter of floor area in 2024.

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<sup>7</sup> The standard heating regime is: 21°C in the living room and 18°C in other rooms for 9 hours a day during the week and 16 hours a day during the weekend. See [section 3.1](#) for a breakdown of the 4 heating regimes used to measure fuel poverty in the SHCS.

Carbon Emissions are the amount of greenhouse gas emissions, expressed as their carbon dioxide gas equivalent, vented to the atmosphere. Estimates of emissions from the residential sector which take into account actual energy consumption by households are reported annually by Department for Energy Security and Net Zero in the [Local and Regional Carbon Dioxide \(CO<sub>2</sub>\) Emissions Estimates](#). This methodology is consistent with the Greenhouse Gas Inventory (GHGI) which is the source for monitoring progress against the Scottish Government's climate change commitments.

In contrast, emissions reported from the SHCS are modelled on the assumption of a standard pattern of domestic energy consumption and do not reflect differences in consumption behaviour due to cost, preferences or changes in weather conditions. As such, they are distinct from the carbon emissions figures published by Department for Energy Security and Net Zero and compiled in GHG inventories.

Estimates in [Scotland's Climate Change Plan](#) are also not comparable to SHCS estimates. These figures for the residential sector relate to non-traded emissions only (i.e. exclude electricity which is covered by the UK Emissions Trading System) while SHCS estimates cover all fuel types.

This report is only concerned with the level and variations in modelled emissions from the Scottish housing stock. These estimates are produced through the use of BREDEM 2012-based models, in line with other statistics on energy efficiency and fuel poverty reported here. Information on the energy modelling is available in [section 1.3 of the Methodological and Technical notes](#).

To derive emissions estimates, modelled energy demand is combined with carbon intensity factors as adopted for the 2012 edition of the SAP (see [section 1.3](#) of the Methodological and Technical notes). These are carbon dioxide (CO<sub>2</sub>) equivalent figures which include the global warming impact of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) as well as carbon dioxide (CO<sub>2</sub>).

### **2.4.1 Modelled Emissions by Dwelling Type and Age of Construction**

The annual modelled emissions from a property reflect the energy use for the whole dwelling heated according to the SAP standard heating regime<sup>8</sup>.

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<sup>8</sup> The standard heating regime is: 21°C in the living room and 18°C in other rooms for 9 hours a day during the week and 16 hours a day during the weekend.

## Newer dwellings have lower modelled emissions than older ones.

**Table 2.4: Modelled annual carbon emissions by dwelling age and type, 2024**

Dwelling Age	Dwelling Type	Carbon Emissions (tonnes/ year)
Pre-1919	Detached	17.3
Pre-1919	Semi-detached	12.5
Pre-1919	Terraced	9.1
Pre-1919	Tenement	4.8
Pre-1919	Other flats	7.1
Pre-1919	All dwellings	9.2
1919-1982	Detached	9.3
1919-1982	Semi-detached	6.3
1919-1982	Terraced	5.5
1919-1982	Tenement	4.0
1919-1982	Other flats	4.3
1919-1982	All dwellings	5.9
Post-1982	Detached	7.5
Post-1982	Semi-detached	4.9
Post-1982	Terraced	4.4
Post-1982	Tenement	3.1
Post-1982	Other flats	3.0
Post-1982	All dwellings	5.3
All Dwelling ages	Detached	9.6
All Dwelling ages	Semi-detached	6.7
All Dwelling ages	Terraced	5.7
All Dwelling ages	Tenement	4.0
All Dwelling ages	Other flats	4.7
All Dwelling ages	All dwelling types	6.3

[Table 2.4](#) shows that on average newer dwellings have lower modelled emissions than older ones, likely as a result of their better thermal performance and higher energy efficiency (as shown in [section 2.3](#)). Post-1982 tenement and other flats have the lowest modelled emissions on average (3.1 and 3.0 tonnes per year, respectively).

Across all age bands, detached houses have the highest modelled emissions (between 17.3 tonnes per year for pre-1919 dwellings to 7.5 tonnes per year for post-1982 dwellings). As shown in [section 1.3](#) of this report, they are also the most likely to use high carbon-intensity fuels, such as oil, in place of mains gas.

For more information, please see Table EE12 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#).

## Older dwellings have higher modelled carbon emissions per square meter of floor area.

**Table 2.5: Modelled annual carbon emissions (per square meter of floor area) by dwelling age and type, 2024**

Dwelling Age	Dwelling Type	Carbon Emissions (kg/sqm)
Pre-1919	Detached	100
Pre-1919	Semi-detached	90
Pre-1919	Terraced	83
Pre-1919	Tenement	76
Pre-1919	Other flats	86
Pre-1919	All dwellings	85
1919-1982	Detached	70
1919-1982	Semi-detached	71
1919-1982	Terraced	69
1919-1982	Tenement	63
1919-1982	Other flats	61
1919-1982	All dwellings	67
Post-1982	Detached	52
Post-1982	Semi-detached	55
Post-1982	Terraced	51
Post-1982	Tenement	50
Post-1982	Other flats	49
Post-1982	All dwellings	52
All Dwelling ages	Detached	66
All Dwelling ages	Semi-detached	70
All Dwelling ages	Terraced	67
All Dwelling ages	Tenement	63
All Dwelling ages	Other flats	65
All Dwelling ages	All dwelling types	66

Older dwellings tend to be larger, thus generally having greater heat requirements and energy use (see [section 1.2](#)). When analysing emissions we control for this by dividing modelled emissions by total internal floor area, to derive carbon dioxide (CO<sub>2</sub>) emissions per square meter (kg/m<sup>2</sup>). Controlling for floor area in this way ([Table 2.5](#)) shows that in general older dwellings have higher emissions per square meter than newer dwellings of equivalent type, as well as higher emissions overall. For example, pre-1919 detached houses have the higher modelled emissions per square meter (100 kg/m<sup>2</sup>) than detached 1919-1982 dwellings (70 kg/m<sup>2</sup>) and post 1982 detached dwellings (52 kg/m<sup>2</sup>). Post-1982 dwellings have the lowest emissions of any age band.

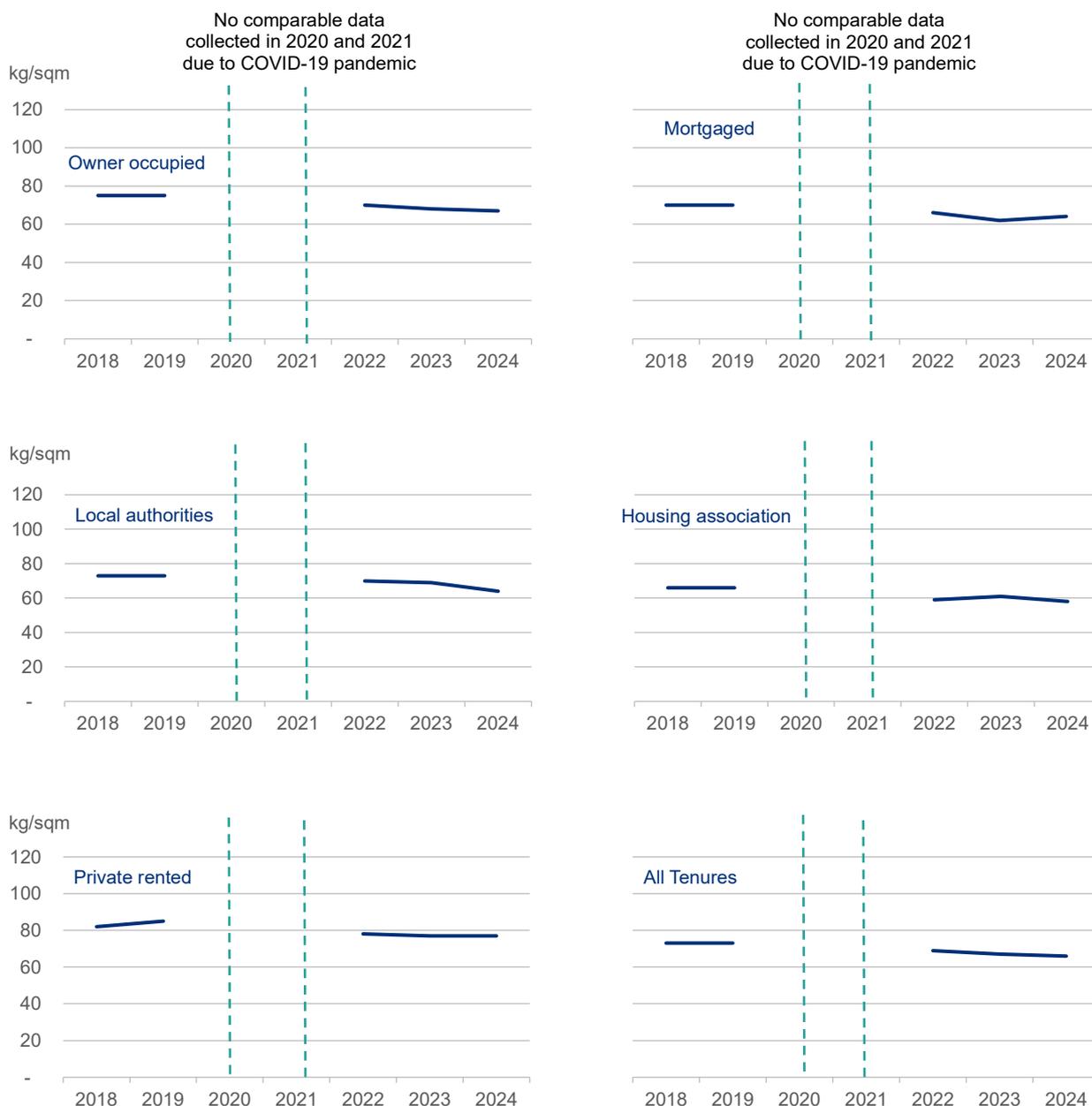
For more information, please see Table EE12 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#).

### **2.4.2 Modelled Emissions by Tenure**

Average modelled carbon emissions per m<sup>2</sup> have reduced from 73 kg/m<sup>2</sup> in 2018 to 66 kg/m<sup>2</sup> in 2024, showing a long term trend of reducing emission from the Scottish housing stock.

## Private rented sector dwellings have higher overall modelled carbon emissions than other tenure types.

**Figure 2.10: Average modelled emissions by tenure, 2018 to 2024**



### Description of figure 2.10

[Figure 2.10](#) shows how emissions differ across tenure for the period 2018 to 2024. In 2024, the highest emissions were observed for private rented sector dwellings ( $77 \text{ kg/m}^2$ ) with housing association dwellings ( $58 \text{ kg/m}^2$ ) having the lowest. Modelled emissions were similar to the previous year across all tenures with the exception of local authority managed dwellings which reduced from  $68.8 \text{ kg/m}^2$  to  $64 \text{ kg/m}^2$ . However, the longer time series shows a decreasing trend over the 2018-2024 period for all tenures.

Changes to the energy modelling methodology mean that figures for 2018 to 2024 by tenure are not fully comparable to earlier years<sup>9</sup>.

Differences that were statistically significant were seen in all sectors when looking at the longer time series between 2018 and 2024 with the exception of the PRS. The largest reductions were found in owner occupied dwellings, reducing from 75 kg/m<sup>2</sup> to 67 kg/m<sup>2</sup>, housing association dwellings reducing from 66 kg/m<sup>2</sup> to 58 kg/m<sup>2</sup> and in local authority dwellings which reduced from 73 kg/m<sup>2</sup> to 64 kg/m<sup>2</sup>.

Data Source: Table EE13 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

## 2.5 Environmental Impact Rating

The Environmental Impact Rating (EIR) represents the environmental impact of a dwelling in terms of carbon emissions associated with fuels used for heating, hot water, lighting and ventilation. Ratings are adjusted for floor area, so they are independent of dwelling size for a given built form. Emissions for this measure are calculated using the SAP methodology.

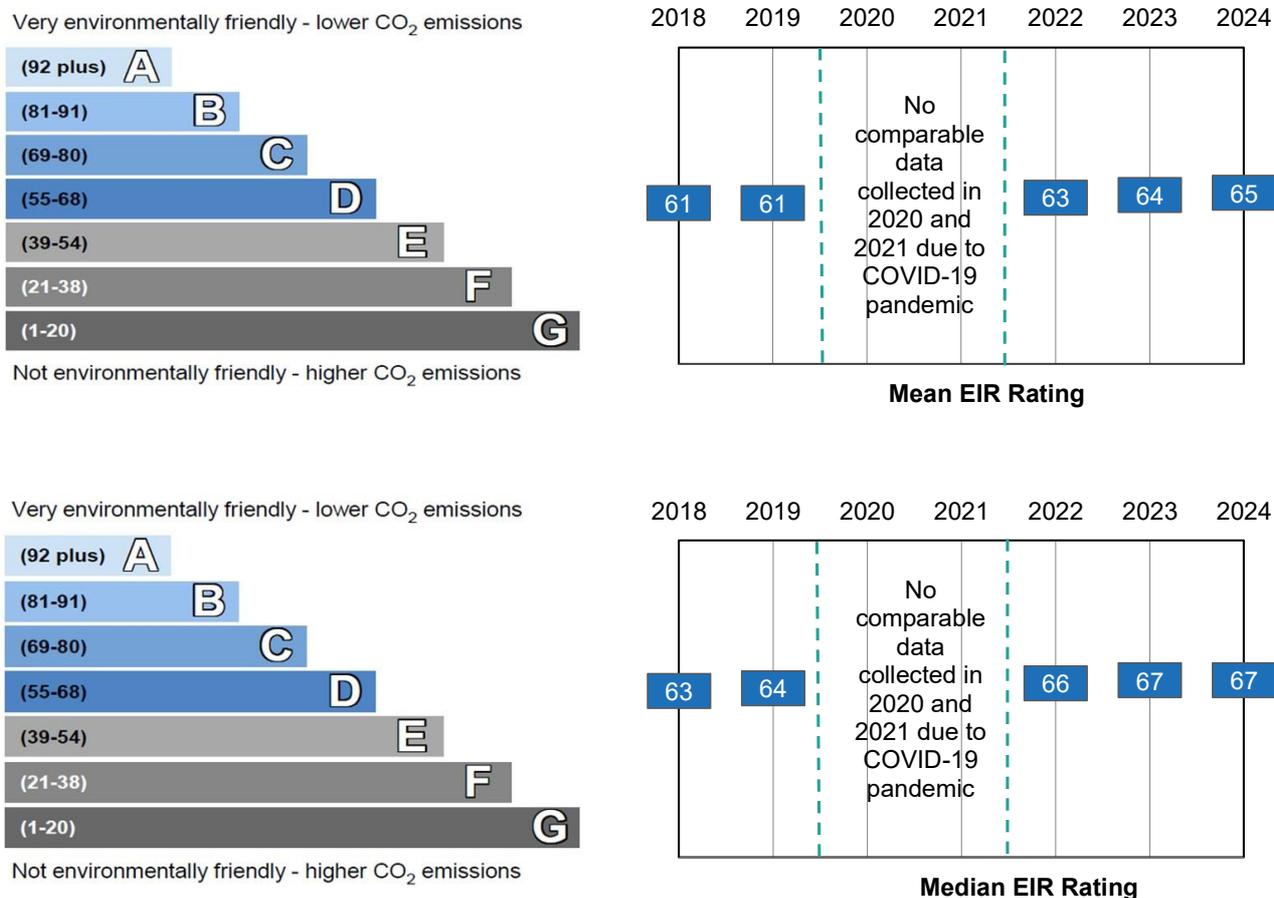
EIRs for this report are based on SAP 2012 under RdSAP v9.93.

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<sup>9</sup> Although broadly comparable emissions pre 2018 were calculated based on SAP 2012v9.92 while those post 2018 are calculated using SAP 2012 v9.93. See section 1.3 of the methodology notes for full details.

# The Environmental Impact Rating (EIR) of Scottish dwellings has gradually increased over time.

**Infographic 2.2: Median EIR relative to EIR Band, 2018 to 2024**



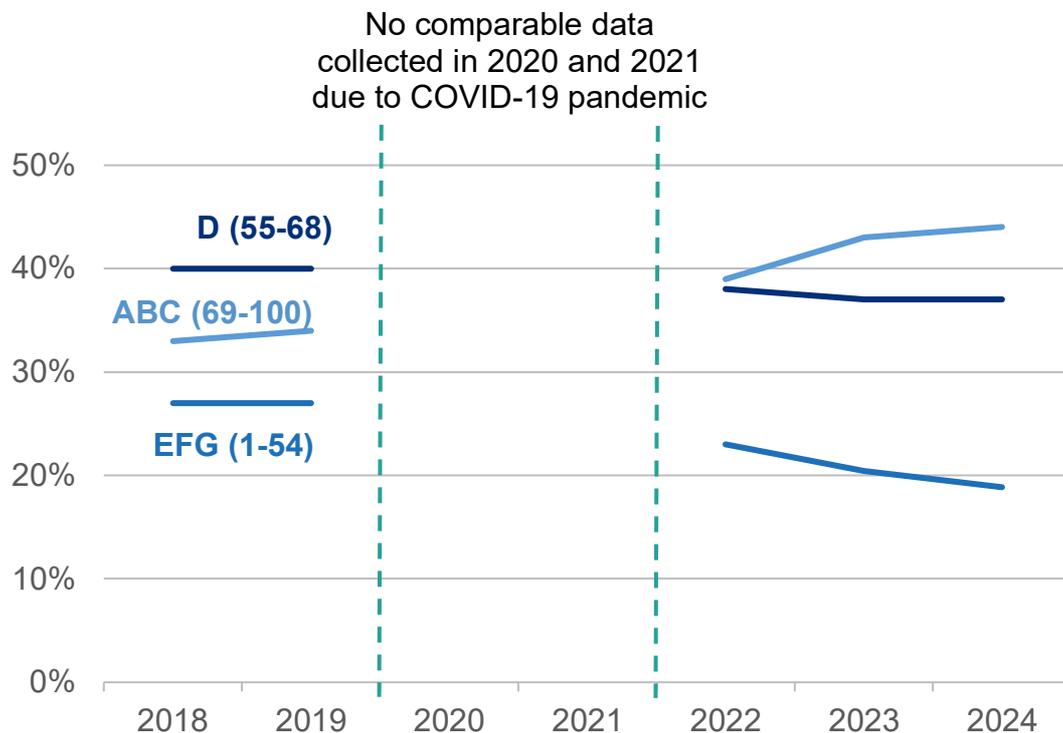
## Description of infographic 2.2

In 2024, the mean EIR rating was 65 and the median was 67, both of which fall into band D. [Infographic 2.2](#) illustrates the increasing trend in the mean and median EIR between 2018 and 2024. This indicates that the environmental impact of Scottish housing is gradually falling over time but has remained within band D.

Data Source: Table EE14a in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

**In 2024, 44% of dwellings had an EIR of band C or above.**

**Figure 2.11: EIR Bands in the Scottish Housing Stock, 2018 – 2024, SAP 2012**



Description of figure 2.11

As shown in [figure 2.11](#), 44% of dwellings had EI ratings in band C or better under SAP 2012 (RdSAP v9.93) in 2024 an improvement on the 2022 figure of 40%. In 2024 19% of dwellings were rated E, F or G in terms of their environmental impact, similar to the 2023 rate of 20% but lower than 2022 rate of 23%.

Data Source: Table EE15 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

## Environmental Impact Ratings (EIRs) vary across different type of dwellings.

**Table 2.6: Mean EIR and percentage in EIR Bands ABC, by dwelling characteristics, 2024**

Dwelling Characteristics	Category	EIR (Mean)	EIR Band ABC (%)
Dwelling Type	House	62.4	35%
Dwelling Type	Flat	69.4	61%
Dwelling Age	pre-1919	53.8	18%
Dwelling Age	1919-1944	62.7	33%
Dwelling Age	1945-1964	64.3	38%
Dwelling Age	1965-1982	63.6	35%
Dwelling Age	post-1982	73.3	74%
Primary Heating Fuel	Gas	67.4	48%
Primary Heating Fuel	Oil	46.6	6%
Primary Heating Fuel	Electric	53.4	26%
Primary Heating Fuel	Other fuel type	66.9	72%
Urban-Rural Indicator	Urban	66.4	46%
Urban-Rural Indicator	Rural	57.0	32%
Gas Grid	On grid	66.7	47%
Gas Grid	Off grid	50.4	20%
All dwellings	All dwellings	64.8	44%

Dwellings built post-1982 have (higher) better EIRs than other dwellings, with 74% rated band C or better. Flats have a lower environmental impact (higher EIR) than houses, as do gas heated properties compared to those heating using oil or electricity.

Oil heating systems and houses are more common in rural areas, leading to higher environmental impacts (lower EIRs) for rural dwellings. Dwellings on the gas grid have better EIRs than dwellings off the gas grid, with 47% of dwellings on the gas grid rated band C or better compared to 20% for dwellings off the gas grid.

This is likely due to gas having a lower emissions factor (0.216 kg of carbon dioxide per kilowatt hour) than electricity (0.519) in the underlying SAP methodology used in this report. See [table 1.5 in the Technical and Methodological notes](#) for a full list of emissions factors used.

For sample sizes and corresponding EIR bands DE and FG, please see Table EE15 in [‘SHCS 2024 - Chapter 02 Energy Efficiency- tables and figures’](#)

Notes: [\[note 1\]](#) [\[note 2\]](#)

## 3 Fuel Poverty

### Key Points

- In 2024, 732,000 households (28.7% of all households) were estimated to be in fuel poverty, of which 357,000 (14.0% of all households) were in extreme fuel poverty. This is lower than the 2023 estimates of 33.9% (859,000 households) for fuel poverty and extreme fuel poverty 19.4% (491,000 households)<sup>10</sup>.
- This corresponds to a decrease of 127,000 (or five percentage points) in the number of households in fuel poverty and a decrease of 134,000 (or five percentage points) in the number of households in extreme fuel poverty between 2023 and 2024.
- This decrease in the fuel poverty rate largely reflects the fall in energy prices in 2024 wherein the average index price of fuels for Scotland decreased by 23.3% compared to 2023.
- The actual median fuel poverty gap for fuel poor households in 2024 was £1,030. This is lower than the median fuel poverty gap from 2024 of £1,250 and corresponds to a decrease of around £220.
- The median fuel poverty gap (adjusted for 2015 prices) for fuel poor households was £770. This is lower than the adjusted gap in 2023 of £960 and corresponds to a decrease of around £190.
- Overall rates of fuel poverty differed between the social sector (49%) and the private sector (22%). Similarly, households in the social sector were more likely to be in extreme fuel poverty (22%) compared to households in the private sector (11%).
- 42% of households using electricity as their primary heating fuel were fuel poor, higher than households using gas (27%), oil (23%), and households using other fuel types (26%) as their primary heating fuel.
- A higher proportion of households with a pre-payment meter (PPM; electricity, gas or both) were in fuel poverty compared to those without a PPM; 39% compared to 27% respectively.

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<sup>10</sup> A minor error was identified in the method used to apply RRRSTI uplifts as part of the fuel poverty calculation for 2023. This affected the overall fuel poverty rate for the year and has been revised in this publication. The correction reduces the 2023 fuel poverty rate by less than 0.1 percentage points. However, all differences reported in the 2023 publication remain statistically significant. Additionally, the extreme fuel poverty rate was unaffected. See section 1.5.4 of the methodology notes for further details.

- Fuel poverty and extreme fuel poverty have a strong association with income, with rates increasing as annual household income decreases. For example, 96% of households with an annual net income less than £15,000 were in fuel poverty compared to 51% of households earning between £15,000 and £24,999 annually.
- For both fuel poor and extreme fuel poor households, the lowest rates of fuel poverty are generally associated with higher energy efficiency standards. 26% of households living in dwellings rated EPC band C or better were fuel poor, compared to 32% living in dwellings in band D.
- Although low income is associated with fuel poverty, it is not equivalent. 78% of fuel poor households were also income poor in 2024 whilst the other 22% would not be considered income poor.

### 3.1 Definition and Measurement of Fuel Poverty

Under the [Housing \(Scotland\) Act 2001](#) (section 88), the Scottish Government was committed to eradicating fuel poverty as far as practicably possible by November 2016. In June 2016, the Minister for Local Government and Housing informed Parliament that, based on the advice received from experts, it was unlikely that the statutory fuel poverty target would be met. This was confirmed by 2016 and 2017 fuel poverty rates, under the old definition of fuel poverty, of 26.5% and 24.9% respectively.

The [Fuel Poverty \(Targets, Definition and Strategy\)\(Scotland\) Bill](#) was introduced to the Scottish Parliament on 26 June 2018 and the [Fuel Poverty \(Targets, Definition and Strategy\)\(Scotland\) Act 2019](#) received Royal Assent on 18<sup>th</sup> July 2019. This includes a new definition of fuel poverty based on advice from an independent panel of experts and further scrutiny and amendment by the Scottish Parliament.

This was followed by [The Fuel Poverty \(Enhanced Heating\) \(Scotland\) Regulations 2020](#) which received royal assent in February 2020 and defined the heating regimes to be used in the measurement of fuel poverty.

As set out in section 3 of the Fuel Poverty (Targets, Definition and Strategy) (Scotland) Act, a household is in fuel poverty if, in order to maintain a satisfactory heating regime, total fuel costs necessary for the home are more than 10% of the household's adjusted net income (after housing costs), and if after deducting fuel costs, benefits received for a care need or disability and childcare costs, the household's remaining adjusted net income is insufficient to maintain an acceptable standard of living. The remaining adjusted net income must be at least 90% of the [UK Minimum Income Standard](#) (MIS) to be considered an acceptable standard of living, with an additional amount added for households in remote rural, remote small town and island (RRRSTI) areas.

**Extreme fuel poverty** follows the same definition except that a household would have to spend more than 20% of its adjusted net income (after housing costs) on total fuel costs to maintain a satisfactory heating regime.

It is important to note that households in extreme fuel poverty are also considered to be in fuel poverty and consequently represent a subset of the total number of fuel poor households.

Where a household is in fuel poverty, the **fuel poverty gap** is the annual amount that would be required to move the household out of fuel poverty. This is either:

- the amount required so that the fuel costs necessary for the home are no longer more than 10% of the household's adjusted net income (after housing costs), or
- the amount required which, after deducting fuel costs, benefits received for a care need or disability<sup>11</sup> and childcare costs, means the household's remaining adjusted net income is sufficient to maintain an acceptable standard of living.

The figure taken to determine the gap for each household is the lower of the two options.

The [Fuel Poverty \(Targets, Definition and Strategy\) \(Scotland\) Act 2019](#) also set targets to eradicate fuel poverty. The 2040 targets are that:

- no more than 5% of households in Scotland would be in fuel poverty
- no more than 1% of households in Scotland would be in extreme fuel poverty
- the median fuel poverty gap of households in Scotland in fuel poverty would be no more than £250 at 2015 prices (adjusted to take account of changes in the value of money).

The [Fuel Poverty \(Enhanced Heating\) \(Scotland\) Regulations 2020](#) and [Fuel Poverty \(Additional Amount in respect of Remote Rural Area, Remote Small Town and Island Area\) \(Scotland\) Regulations 2020](#) came into force on the 26<sup>th</sup> February 2020. These regulations set out the types of households to which the enhanced heating regimes are appropriate and specify a person who is to determine the uplifts to the UK MIS for households living in Remote Rural Area, Remote Small Town and Island (RRRSTI) areas.

The estimates in this report include an uplift to the UK MIS for households living in RRRSTI areas, as determined by the Centre for Research in Social Policy, Loughborough University. These uplifts are published in [The Cost of Remoteness: Reflecting higher living costs in remote rural Scotland](#). In 2024 the uplifts ranged from 8.4% to 32.8% depending on household type and location. A full breakdown of the uplifts is shown in [Table 3.1](#).

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<sup>11</sup> This includes amounts received for: Disability Living Allowance (DLA), Personal Independence Payments (PIP), and Attendance Allowance (AA)

**Table 3.1 Uplifts to MIS value for RRRSTI areas by household type.**

Household Type	Uplift if on mainland (%)	Uplift if on Island	Base MIS value applied
Couple with children	8.4%	9.7%	£28,420 - £58,670 <sup>12</sup>
Single working age	21.9%	24.6%	£15,300
Couple working age	22.4%	26.5%	£25,600
Single pensioner	32.8%	32.1%	£12,360
Couple Pensioner	21.3%	29.1%	£19,830

The UK MIS values used in this report are based on the full 107 MIS household budgets for detailed family types provided by Loughborough University<sup>13 14</sup>. Under this approach each household receives a MIS value based on the characteristics of the household including the age of the adults and children, and if adults in the household are in a relationship.

For statistics in this publication heating regimes are set based on the [Fuel Poverty \(Enhanced Heating\) \(Scotland\) Regulations 2020](#), which specifies the households for which enhanced heating temperatures and/or hours are appropriate.

**Enhanced heating temperatures** are 23°C in the living room and 20°C in other rooms.

**Standard heating temperatures** are 21°C in the living room and 18°C in other rooms.

**Enhanced heating hours** are 16 hours a day during the week and at the weekend.

**Standard heating hours** are 9 hours a day during the week and 16 hours a day during the weekend.

A **satisfactory heating regime** is defined as follows.

Enhanced heating temperatures and enhanced heating hours (**enhanced heating regime 1**) are appropriate for households where the dwelling is frequently occupied during the morning or afternoon or both on weekdays by any member of the household when it is cold and any member of the household meets one or more of the following criteria: is aged 75 or over; has a long-term sickness or disability; or is in receipt of benefits received for a care need or disability.

<sup>12</sup> The range in MIS budgets reflects different numbers of, and ages of children in households.

<sup>13</sup> [A Minimum Income Standard for the United Kingdom in 2024](#).

<sup>14</sup> MIS budgets are updated annually based on a public consultation where groups are asked to identify goods and services that people need inside and outside the home to meet an acceptable living standard. New research is conducted yearly alternating between households without children and households with children. For a complete description of the MIS methodology see section 1 and 2 of the full report [A Minimum Income Standard for the United Kingdom](#).

Enhanced heating temperatures and standard heating hours (**enhanced heating regime 2**) are appropriate for households where the dwelling is not frequently occupied during the morning or afternoon or both on weekdays by any member of the household when it is cold and any member of the household meets one or more of the following criteria: is aged 75 or over; has a long-term sickness or disability; or is in receipt of benefits received for a care need or disability.

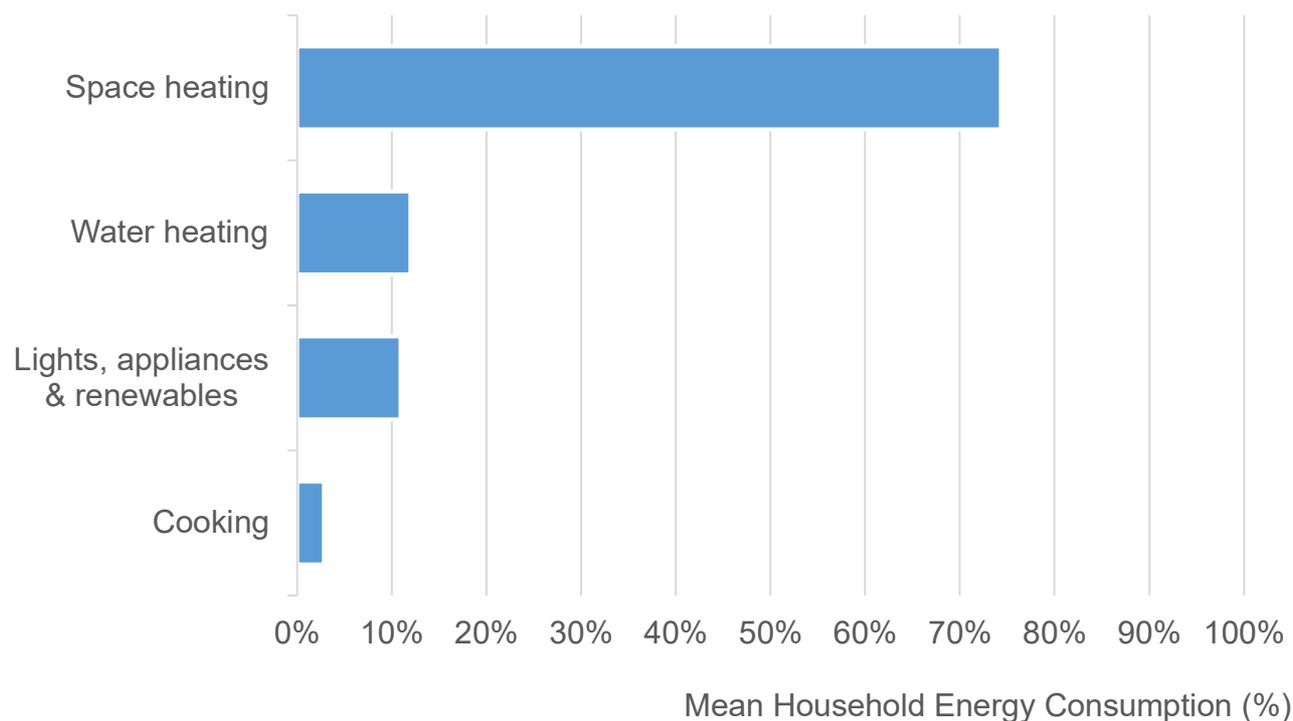
Standard heating temperatures and enhanced heating hours (**enhanced heating regime 3**) are appropriate for households where the dwelling is frequently occupied during the morning or afternoon or both on weekdays by any member of the household when it is cold and any member of a household has a child aged 5 years old or under and the household is not a household for which enhanced heating regimes 1 or 2 are appropriate.

For all other households, standard heating temperatures and standard heating hours (the standard heating regime) apply.

Although space heating is the largest component of the energy spend which underpins the fuel poverty estimate, there are other types of energy use that are also taken into account, such as water heating, lighting, appliance use, and cooking. All types of energy expenditure are estimated on the basis of a standard set of behavioural assumptions and do not reflect the actual energy use of the household, which may vary considerably depending on personal preference and priorities relative to other types of household expenditure.

## The majority of modelled energy use is for space heating.

**Figure 3.1: Mean Modelled Household Energy Consumption by End Use.**



Description of Figure 3.1

[Figure 3.1](#) shows that, on average, around 74% of the modelled household energy demand was from space heating, 12% from water heating, 11% from lighting and appliance usage, and 3% was accounted for by cooking.

Data Source: Table FP1 in [‘SHCS 2024 - Chapter 03 Fuel Poverty- tables and figures’](#)

The energy costs of maintaining a satisfactory heating regime and other uses of energy are modelled using data from the physical inspection of dwellings, the household interview conducted as part of the SHCS, as well as information on consumer fuel prices.

The methodology for modelling the cost of energy use was updated for the 2014 Key Findings report and details were provided in the accompanying [2014 Methodology Notes](#).

This report continues to use the improved BRE Domestic Energy Model (BREDEM) methodology for estimating domestic energy requirements, incorporating refinements introduced since 2016. These include adjustments made in 2019 for pre-payment meters, detailed combi boiler data, and off-peak tariff assignments for lighting and appliances. From 2021, postcode-level weather data replaced regional averages to better reflect local conditions. Energy costs account for the Warm Home Discount but exclude the discontinued Government Electricity Rebate. For full details on these methods and assumptions, see the [methodology notes accompanying this publication](#).

Additionally, from 2021 methodological changes were implemented to allow fuel poverty estimates to fully meet the definition of fuel poverty as laid out in the [Fuel Poverty \(Targets, Definition and Strategy\) \(Scotland\) Act 2019](#), [The Fuel Poverty \(Enhanced Heating\) \(Scotland\) Regulations 2020](#), and [The Fuel Poverty \(Additional Amount in respect of Remote Rural Area, Remote Small Town and Island Area\) \(Scotland\) Regulations 2020](#). This included: Placing households on one of 4 heating regimes as laid out in [The Fuel Poverty \(Enhanced Heating\) \(Scotland\) Regulations 2020](#), using the full 107 Minimum Income Standard (MIS) Household budgets produced by Loughborough University, including childcare costs, using the net income of all household members, and including imputed housing costs<sup>15</sup>.

For 2024 household income used in the calculation of fuel poverty also includes an adjustment to account for the cost of living payments as paid in the 2024 calendar year. For 2024 this was the £299 paid to eligible households under the Low income benefits and tax credits Cost of Living Payment. (See Section 1.5.3, of the [technical methodological notes](#) for full details)

### 3.2 Fuel Poverty and Extreme Fuel Poverty

In 2024, an estimated 28.7% of all households were in fuel poverty, around 732,000 households (see [Table 3.2](#)). Lower than the 33.9% of households in in 2023. This corresponds to a decrease of 127,000 (or five percentage points) in the number of households in fuel poverty.

Around 357,000 of these households (14.0% of all households) were living in extreme fuel poverty (see [Table 3.2](#)). Lower than the 19.4% of households in 2023. This corresponds to a decrease of 134,000 (or five percentage points) in the number of households in extreme fuel poverty.

#### 28.7% of households were in fuel poverty in 2024.

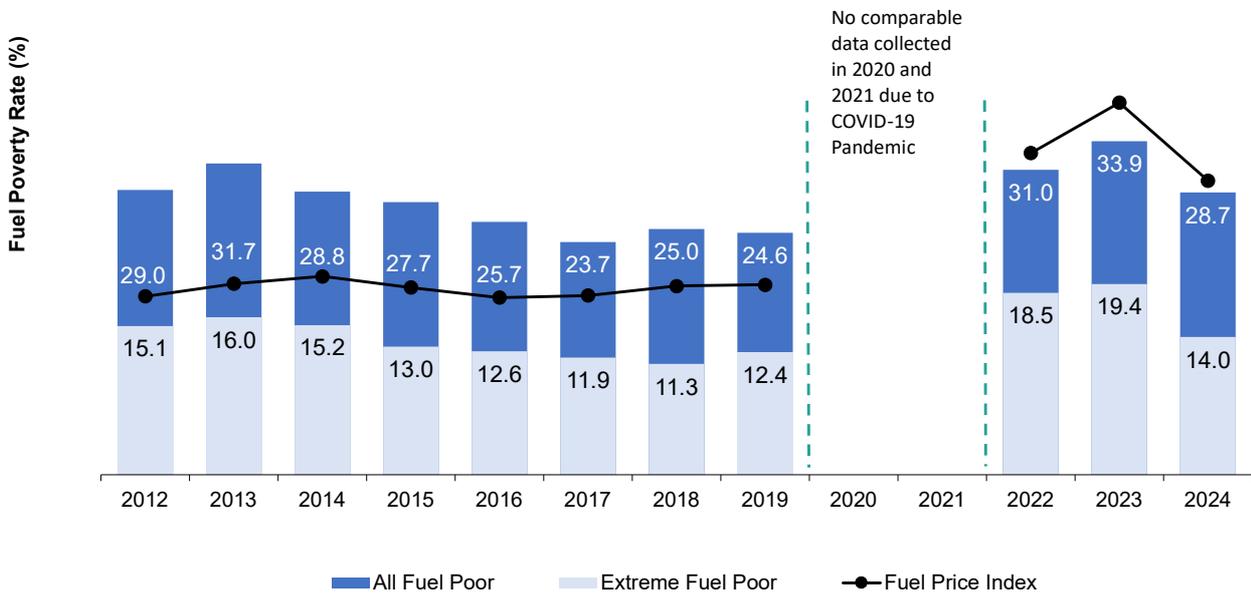
**Table 3.2: Fuel Poverty and Extreme Fuel Poverty since levels and rates.**

<b>Fuel Poverty and Extreme Fuel Poverty</b>	<b>2023</b>	<b>2024</b>
Fuel Poverty (%)	33.9%	28.7%
Fuel Poverty (thousands)	859	732
Extreme Fuel Poverty (%)	19.4%	14.0%
Extreme Fuel Poverty (thousands)	491	357
Sample size (number)	3,104	2,834

<sup>15</sup> For a full description of methodological improvements for fuel poverty see [Section 1.5.1 of the Methodology notes](#).

## Fuel poverty and extreme fuel poverty has decreased since 2023.

Figure 3.2: Estimates of Fuel Poverty and Extreme Fuel poverty since 2012.



Data Source: Tables FP2 and FP4 in [‘SHCS 2024 - Chapter 03 Fuel Poverty- tables and figures’](#).

Notes: [\[note 6\]](#)

### 3.3 Fuel Poverty Gap

Where a household is in fuel poverty, the fuel poverty gap is the annual amount that would be required to move the household out of fuel poverty. The fuel poverty gap is presented as the median gap before adjustment and the median gap adjusted to 2015 prices. The median gap before adjustment presents the actual amount that fuel poor households require to move out of fuel poverty. The adjusted median gap figures have been presented in order to assess progress against the 2040 fuel poverty gap target. The adjustment has been made in alignment with the increases or decreases in the [annual average consumer prices index \(CPI\)](#) over the period from 2015 to the year which the figure relates to.

**The median fuel poverty gap in 2024 was £1,030.**

**Table 3.3: Median Fuel Poverty Gap of Fuel Poor Households, 2024.**

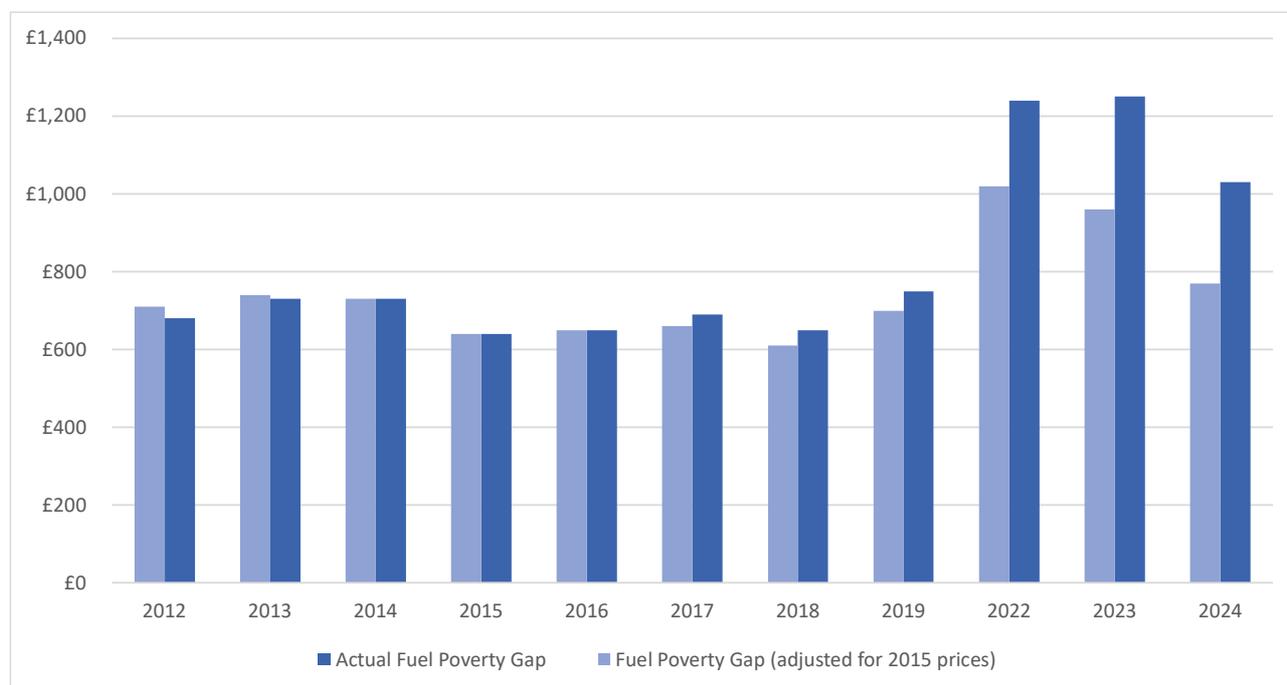
<b>Fuel Poverty Gap Measurement</b>	<b>2023</b>	<b>2024</b>
Actual Median Fuel Poverty Gap (£)	£1,250	£1,030
Median Fuel Poverty Gap (adjusted for 2015 prices) (£)	£960	£770
Sample size (number)	1,030	835

In 2024 the median fuel poverty gap for fuel poor households was £1,030 ([Table 3.3](#)). This is lower than the median fuel poverty gap from 2023 of £1,250 and corresponds to a decrease of around £220.

The median fuel poverty gap (adjusted for 2015 prices) for fuel poor households was £770. This is lower than the adjusted median fuel poverty gap from 2023 of £960 and corresponds to a decrease of around £190.

**The actual and adjusted fuel poverty gap has decreased since 2023.**

**Figure 3.3: Estimated adjusted and actual median Fuel Poverty gap since 2012.**



Description of Figure 3.3

Figure 3.3 shows the actual and adjusted median fuel poverty gap since 2012. As shown, there was little change in the fuel poverty gap between 2012 and 2014 after which there was a fall in 2015. The gap remained at a similar level between 2016 and 2018, but rose for both the actual and adjusted gap in 2019. In 2022, the adjusted and actual fuel poverty gaps saw a sharp increase due to rising fuel prices. The fuel poverty gap remained stable in 2023 before falling in 2024.

Data Source: Table FP3 [‘SHCS 2024 - Chapter 03 Fuel Poverty - tables and figures’](#).

## 3.4 Drivers and Trends

Fuel poverty is affected by levels of household income, the price of fuel required for space and water heating, the energy efficiency of the dwelling, and the required use of fuel by households to maintain satisfactory heating regimes. Fuel poverty is distinct from poverty in that, while low income is an important driver, it is not a prerequisite. As shown in [Figure 3.5](#) fuel poor households are found in all income bands. For example in 2024 around 6% of household earning a net income of between £35,000 and £44,999 were fuel poor, despite being in the top half of the income distribution recorded in the SHCS (see Table FP8 in [the Excel tables](#)).

[Table FP4 in the Excel workbook](#) shows indexes constructed to compare trends in three key drivers of fuel poverty since 2012.

In the below sections we describe the changes observed in household income, fuel prices and energy efficiency (through energy consumption). As well as break down the impact that changes in each of these drives has had on the overall fuel poverty rate between 2023 and 2024.

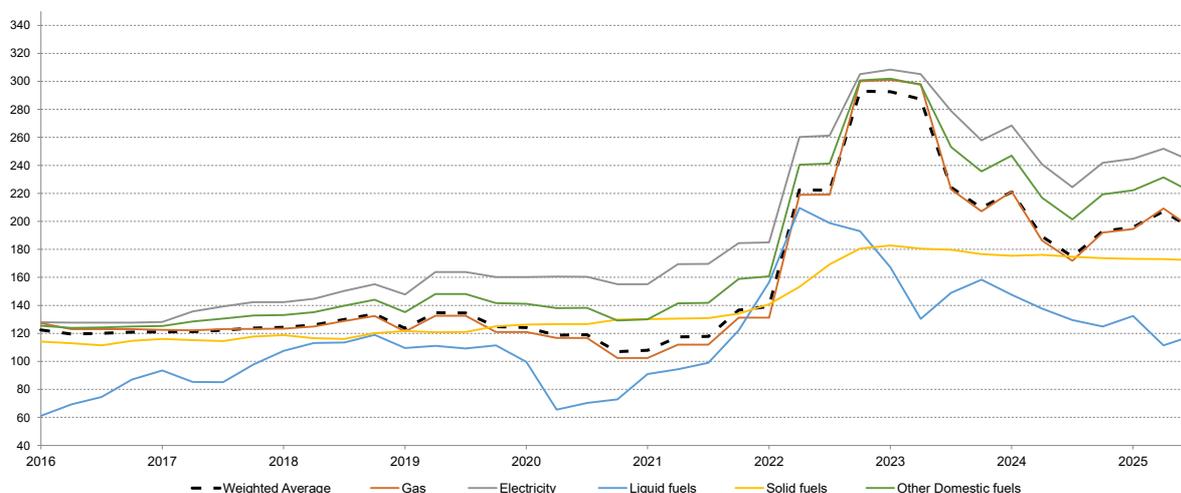
### 3.4.1 Fuel Costs

DESNZ publish [quarterly energy prices](#) data on the price of key fuels which enables us to construct a time series of the price of fuels for the average Scottish household over the longer term. For further information on the data sources which feed into these National Statistics and the quality assurance processes undertaken see the [DESNZ domestic energy prices guidance document](#).

Using information from the SHCS about the fuels used for space and water heating we can weight the published national quarterly fuel price indices, [DESNZ QEP 2.13](#) and produce an average index value for the price of the heating fuel requirement for Scotland. Since the majority of Scottish households heat their properties with gas (81%), the national average index follows the gas index closely.

## The weighted index price of fuel fell by 23.3% in 2024.

Figure 3.4: Index prices of fuels 2016 to September 2025.



### Description of Figure 3.4

As shown in [Figure 3.4](#) in 2017 and 2018 the average index grew by 1.2% and 5.4%, respectively, mostly driven by electricity (up 8.7% in 2018) and liquid fuels (up 25.3% in 2018). In 2019, the fuel price index grew again by 0.7%. The largest increases were in electricity (up 7.3%), solid fuels (3.6%) and other domestic fuels (3.8%). The average index for liquid fuels fell by 2.6% compared to 2018. In 2020 the average index fell by 9.4% driven by falling gas prices (-10%) and liquid fuels (-30.1%) due to the Covid-19 pandemic. In 2021 the fuel price index grew by 2.4% due mainly to increases in liquid fuel prices (31.8%) however it remained 7% lower than 2019 levels. In 2022 the average index grew by 82.7% driven by an increase in all fuel types with gas 90%, and liquid fuels 86.5% showing the largest increases compared to 2021. Increases in gas prices were driven in part by uncertainties over the future Russian gas supply following the invasion of Ukraine.

In 2023 the average index continued to rise and grew by 15.6%, with gas showing the largest increase at 18.4% compared to 2022.

In 2024 the weighted average index price of heating fuels fell by approximately 23.3% compared to 2023, driven primarily due to gas (down 25.0%), and electricity (down by 15.2%). As seen in [Figure 3.3](#) energy prices peaked between Quarter 4 of 2022 and Quarter 2 of 2023 before falling in Quarter 3 of 2023.

DESNZ has published fuel price data up to September 2025. As fuel use changes slowly, we assume that the fuel mix in Scotland in 2025 was the same as captured by the 2024 SHCS in order to extend the weighted average for Scotland into 2025. Under this approach the weighted average in 2025 is similar to 2024 (a 2.4% increase). Between 2024 and Q3 2025 liquid fuels decreased the most at 10.5% while Gas increased the most at 3.4%.

Data Source: Weighted Average -Table FP4 in '[SHCS 2024 - Chapter 03 Fuel Poverty - tables and figures](#)' and Individual fuels - [DESNZ Domestic energy price indices](#).

### 3.4.2 Household Income

The SHCS is not designed to capture income as comprehensively as other formal surveys of income and is collected on a self-reported basis. Income was previously collected on the highest income householder and their spouse. However, from 2018 a methodological improvement was implemented to collect total household income, including the income of other adults. For context, in the 2024 survey 12% of households interviewed (or 334 households) had a different total household income under this methodology, compared to the income of only the highest income householder and their spouse. Due to this change in data collection, while we are able to provide a time series from 2012 for income data ([Table FP4 Excel files](#)), it should be noted that all data prior to 2018 represents the income of the highest income householder and their spouse only. See [Table FP 4 in SHCS 2023- Chapter 03 Fuel Poverty- tables and figures](#) for a full time series of median household incomes from 2012.

Income is reported in nominal terms and is not equivalised to take into account that households of different size and composition need different levels of income to sustain the same living standard. However, household size and composition is accounted for in the fuel poverty calculation by assigning each household a MIS value based on their household characteristics (see [Table 3.1](#) for range of MIS values). Figures in this section therefore may not align with official statistics on household income and inequality.

### Median net household income was £31,200 in 2024.

**Table 3.4: Annual total net household income, average (mean) by decile 2023 and 2024.**

Income Decile Group	2023	2024	Percentage Change
1	£9,400	£9,600	3%
2	£15,400	£15,900	3%
3	£19,600	£20,500	5%
4	£23,300	£24,500	5%
5	£27,800	£29,000	4%
6	£33,300	£34,500	4%
7	£39,900	£41,400	4%
8	£49,000	£50,700	4%
9	£61,100	£62,700	3%
10	£92,500	£93,400	1%
All	£37,100	£38,200	3%
Median	£30,400	£31,200	3%
Mean	£37,100	£38,200	3%
Sample Size	3,104	2,834	

In 2024, 50% of households earned £31,200 or more after tax, higher than the £30,400 in 2023 ([Table 3.4](#)). This equates to an increase in median net income of 3% compared to 2023, although the difference for mean net income was found to be within the margin of error of the survey.

The mean net income of surveyed households was similar in 2024 (around £38,200) compared to 2023 (£37,100). Percentage change in income between years varied across income deciles with increases in income ranging between 1% in decile 10 and 5% in decile 3 and 4. There were no decreases in income for any decile group.

### 3.4.3 Housing Stock

As shown in [Table 3.5b](#) the mean modelled energy consumption in 2024 was 24,520 Kwh, similar to the modelled consumption of 24,380 Kwh in 2023. This annual consumption is calculated based on households being placed on one of four heating regimes as described in [section 3.1](#) above. As shown in Table EE7a in '[SHCS 2023- Chapter 02 Energy Efficiency- tables and figures](#)' 56% of Scottish homes had an EPC rating of C or better in 2024 similar to 2023 levels.

Over the same time period, mean running costs as shown in [Table 3.5a](#) have decreased by around 16.3% from £3,150 in 2023 to £2,640 in 2024. This reflects the overall decrease in domestic fuel prices, between 2023 and 2024, and demonstrates the importance of fuel prices as a driver of fuel poverty rates. Mean annual running cost is calculated based on a household's specific fuel type, annual fuel costs (as discussed in [section 3.1](#)) and their specific heating regime.

### Mean modelled annual running costs were £2,640 in 2024.

**Table 3.5a: Mean annual running cost and year on year change.**

Year	Mean annual running cost	Annual change	Sample size
2012	£1,730		2,787
2013	£1,860	8%	2,725
2014	£1,900	2%	2,682
2015	£1,740	-8%	2,754
2016	£1,610	-8%	2,850
2017	£1,660	3%	3,002
2018	£1,710	3%	2,964
2019	£1,820	7%	2,997
2022	£2,810	54%	2,983
2023	£3,150	81%	3,151
2024	£2,640	-16%	2902

**Mean modelled annual energy consumption was 24,520 kwh in 2024.**

**Table 3.5b: Mean modelled annual KWh consumption and year on year change<sup>16</sup>.**

<b>Year</b>	<b>Mean KWh</b>	<b>Annual change</b>	<b>Sample size</b>
2012	29,620		2,787
2013	28,960	-2%	2,725
2014	29,200	1%	2,682
2015	29,070	0%	2,754
2016	28,290	-3%	2,850
2017	28,260	0%	3,002
2018	27,790	-2%	2,964
2019	28,430	2%	2,997
2022	25,350	-11%	2,983
2023	24,380	-4%	3,151
2024	24,520	1%	2,902

### **3.4.4 Impact on fuel poverty**

To understand how the changes in the price of domestic fuels, the incomes of the households included in the SHCS sample, and household MIS budgets required for an acceptable standard of living interact with other factors such as the performance of the housing stock, and housing costs, we carry out a micro-simulation. This seeks to isolate the impact of each set of factors on the level of fuel poverty recorded in 2024. The results are illustrated in [Figure 3.4](#).

The analysis which underpins these findings uses SHCS data from 2024 and 2023 to model hypothetical rates of fuel poverty under different scenarios, adding one change at a time. This included the following steps as shown in [Table 3.6](#).

- First, 2024 fuel prices were applied to the 2023 survey sample to determine the effect of fuel price changes alone under 2023 levels of energy demand and household net income.
- Next, the income of households in the achieved sample were updated by the mean change observed for their decile group between 2023 and 2024 and households were assigned the 2024 Mis value for their household type. This demonstrated the additional effect of changes to income and household budgets needed for a decent standard of living on fuel poverty between 2023 and 2024.

<sup>16</sup> Annual consumption from 2012 to 2019 is calculated based on households being placed on one of the two heating regimes as defined in [Fuel Poverty \(Targets, Definition and Strategy\)\(Scotland\) Act 2019](#) while estimates from 2022 reflect households being placed on one of the four heating regimes defined in [The Fuel Poverty \(Enhanced Heating\) \(Scotland\) Regulations 2020](#).

- We then compare the fuel poverty rate modelled at the previous step with the estimate for 2024. The difference is estimated to be the effect of other factors including the energy performance of the housing stock, changes to housing costs, and other sampled housing stock changes between 2023 and 2024<sup>17</sup>.

**Decreases in fuel prices had the largest impact on the change in fuel poverty rate between 2023 and 2024.**

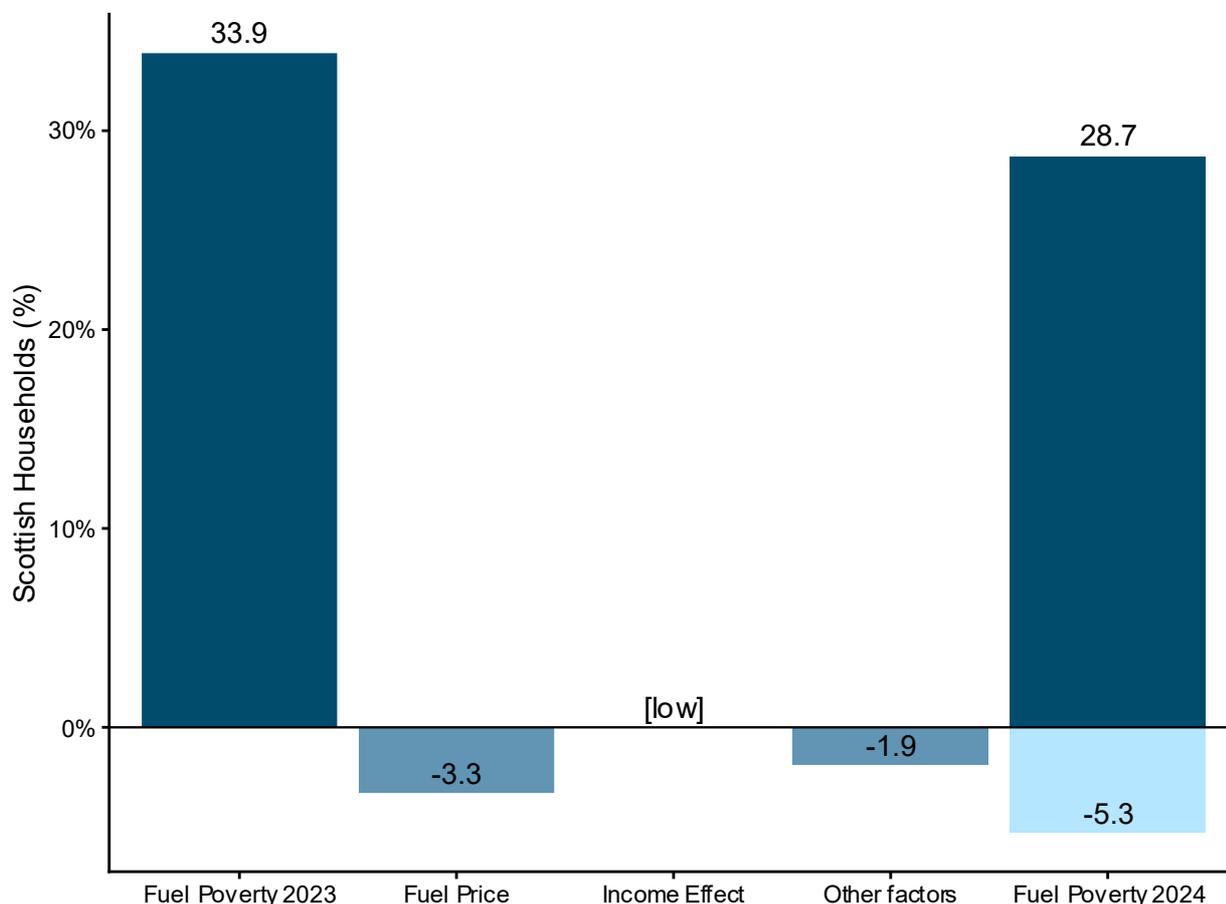
**Table 3.6 Steps in attributing change in fuel poverty rate between 2023 and 2024.**

Steps	Fuel Poverty Rate	Step Difference
Fuel Poverty 2023	33.9%	
- Step 1: Fuel price change	30.6%	-3.3%
- Step 2: Income change (MIS included)	30.6%	[low]
- Step 3: Other changes	28.7%	-1.9%

<sup>17</sup> The sequence of steps in this method affects the size of the estimated impact. Where factors operate in the same direction any potential joined effect will be attributed to those assessed first.

## Decreases in fuel prices had the largest impact on the change in fuel poverty rate between 2023 and 2024.

**Figure 3.5: Contributions to Change in Fuel Poverty Rate Between 2023 and 2024.**



### Description of Figure 3.5

The results from the micro-simulation analysis indicate that changes in fuel prices and changes in income and MIS budgets would affect fuel prices differently. Applying fuel price changes decreases the fuel poverty rate by 3.3 percentage points following the trend of decreasing fuel prices between 2023 and 2024.

However, changes to income and MIS budgets resulted in a broadly neutral effect on fuel poverty rates. This is likely due to the fact that MIS budgets have grown between 8% and 10% between 2023 and 2024, reflecting increases in the cost of living, which has counteracted any increases in income observed in the survey.

The residual change is attributed to other factors such as differences in energy efficiency performance, changes to housing costs, other changes in the housing stock as described in section 3.5.3 and other underlying changes to the sampled stock distribution. These factors combine to decrease the rate by 1.9 percentage points.

Data Source: Table FP7 in [‘SHCS 2024 - Chapter 03 Fuel Poverty - tables and figures’](#).

### 3.5 Characteristics of Fuel Poor Households

Fuel poverty is affected by four key drivers: levels of household income, the price of fuel used to meet space and water heating requirements, the energy efficiency of housing, and the use of fuel in households<sup>18</sup>. The following sections present the fuel poverty rate broken down by three of these drivers (income, primary heating fuel used, energy efficiency) as well as other key household and dwelling characteristics. Tables FP15 and FP16 in the [excel files](#) show the composition of all fuel poor households broken down key dwelling and household attributes.

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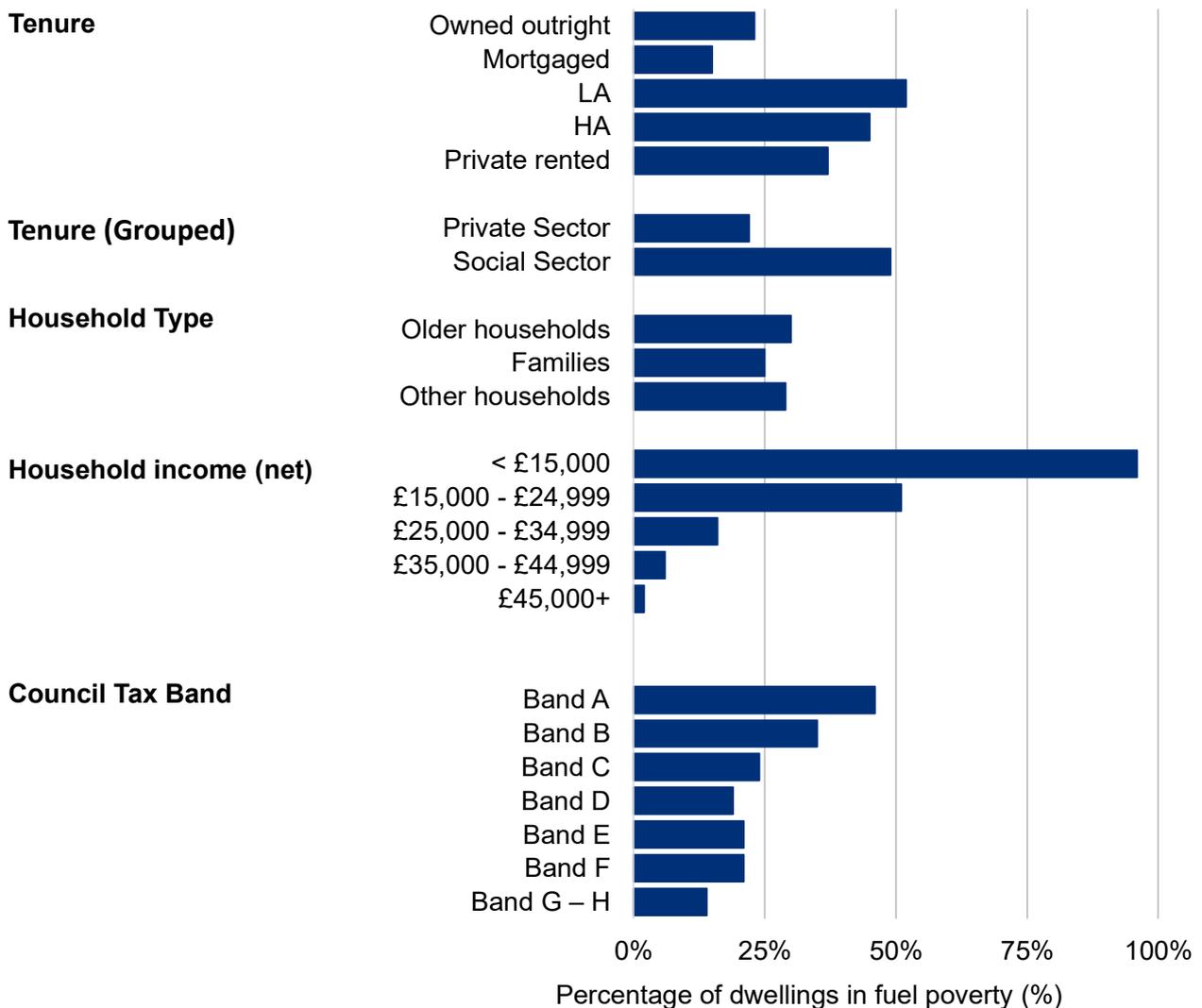
<sup>18</sup> The use of fuel in a household impacts on a household's lived experience of fuel poverty, but does not affect the measurement of fuel poverty which considers the energy required to meet a the households statutory heating regime as set out in [section 3.1](#), not the actual amount of energy used.

### 3.5.1 Household Characteristics

Figure 3.6 shows fuel poverty rates by a number of household characteristics.

**Households earning under £15,000 (net) income had the highest rates of fuel poverty (96%).**

**Figure 3.6: Fuel Poverty Rates by Household Characteristics, 2024.**



#### Description of Figure 3.6

Overall rates of fuel poverty differed between the social (49%) and private sector (22%). The highest rates of fuel poverty by tenure continue to be found in the rental sector where 52% of households renting from a local authority and 45% of households renting from a housing association are fuel poor. Similarly, 37% of private rented sector households are fuel poor. In comparison, only 15% of those with a mortgage and 23% of those who own outright are assessed to be fuel poor.

Fuel poverty has a strong association with income, and households in the lower income bands have the highest rates of fuel poverty: 96% for the bottom income band (less than £15,000 annually), which is similar to 2023, and 51% for the 2nd bottom band (£15,000 - £24,999 annually), lower than 2023 but still significantly higher than the income bands above it. For comparison, the fuel poverty rate for households earning between £35,000 and £44,999 annually was found to be 6%.

Fuel poverty rates generally decrease as council tax bands increase from band A (46%) to band F (21%) and bands G to H (14%).

Families (25%) have lower rates of fuel poverty than older households (30%), but similar rates to other households (29%). Other households<sup>19</sup> have similar rates to older households.

Data Source: Table FP8 in [‘SHCS 2024 - Chapter 03 Fuel Poverty - tables and figures’](#).

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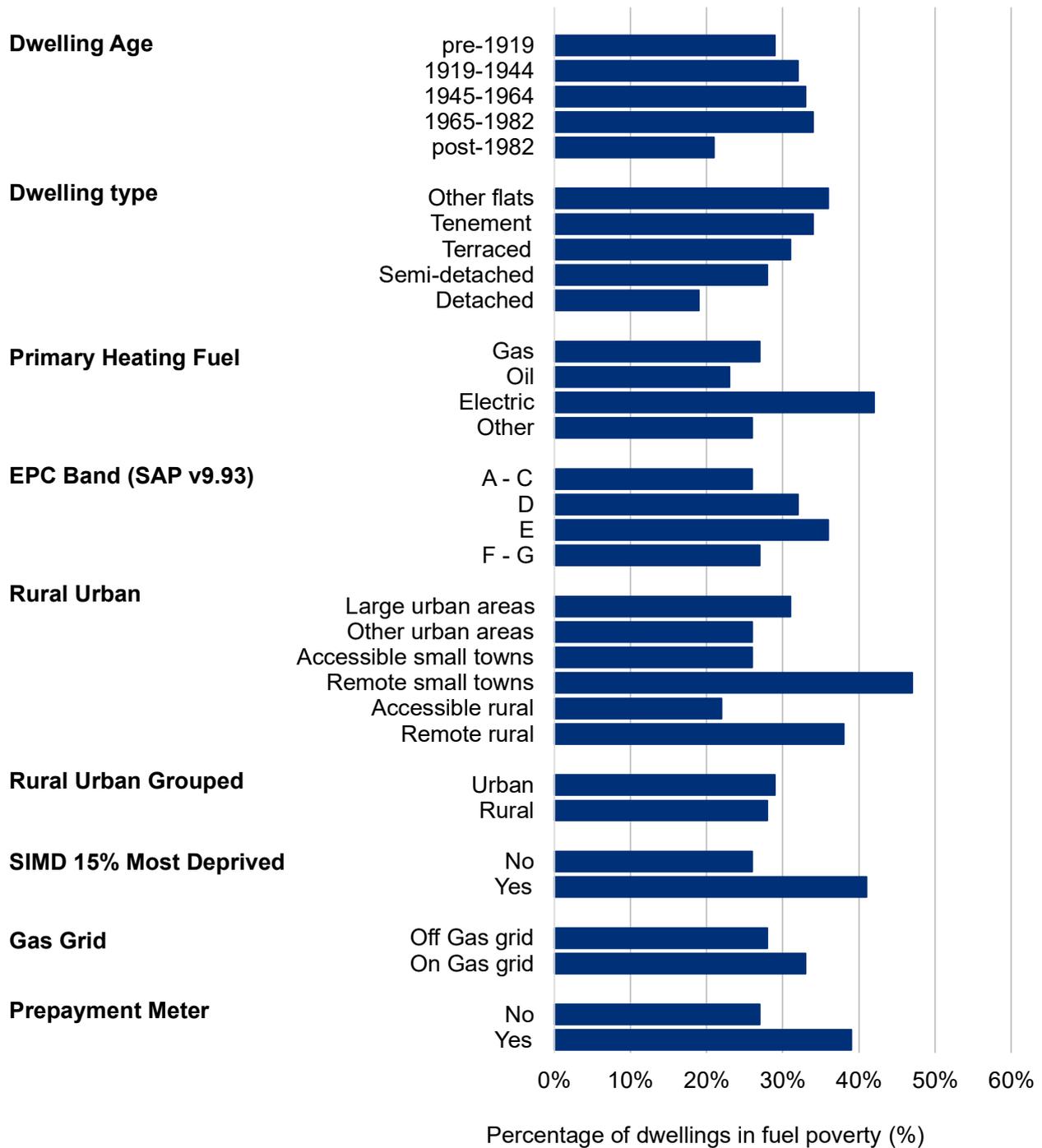
<sup>19</sup> Other households are specifically those all other households with adult residents (of any age) and no children. See section 2.2 of the [Methodology Notes](#).

### 3.5.2 Dwelling Characteristics

Figure 3.7 shows how the level of fuel poverty varies across dwelling characteristics.

**Dwellings in remote rural areas (38%) and remote small towns (47%) had similar rates of fuel poverty which were higher than other areas.**

**Figure 3.7: Fuel Poverty Rates by Dwelling Characteristics, 2024.**



### Description of Figure 3.7

The lowest rates of fuel poverty are generally associated with higher energy efficiency standards. 26% of households living in dwellings rated EPC band C or better were fuel poor compared to 36% of households living in dwellings rated EPC band E and 32% for households in band D. Similarly, households living in dwellings built after 1982 had lower rates of fuel poverty (21%) compared to all other dwelling ages.

Detached houses had the lowest rates of fuel poverty, at 19%, despite having lower energy efficiency ratings than the national average ([Figure 2.10](#)), likely reflecting higher household incomes.

The fuel poverty rate for rural households (28%) was similar to the fuel poverty rate for urban households (29%). However, the rate of fuel poverty for households in remote small towns (47%) is higher than all other areas except remote rural households (38%) which have a statistically similar rate.

The rate of fuel poverty among households using electricity as primary heating fuel was 42%, higher than households using gas (27%), oil (23%), and other heating fuels (26%) as their primary heating fuel. This reflects the higher per unit cost of electricity relative to gas, and oil.

A higher proportion of households in the 15% most deprived areas were in fuel poverty compared to other areas of Scotland; 41% compared to 26% respectively.

A higher proportion of households with a pre-payment meter (PPM; electricity, gas or both) were in fuel poverty compared to those without a PPM; 39% compared to 27% respectively.

Data Source: Table FP9 in '[SHCS 2024 - Chapter 03 Fuel Poverty - tables and figures](#)'.

Notes: [\[note 1\]](#) [\[note 2\]](#) [\[note 7\]](#)

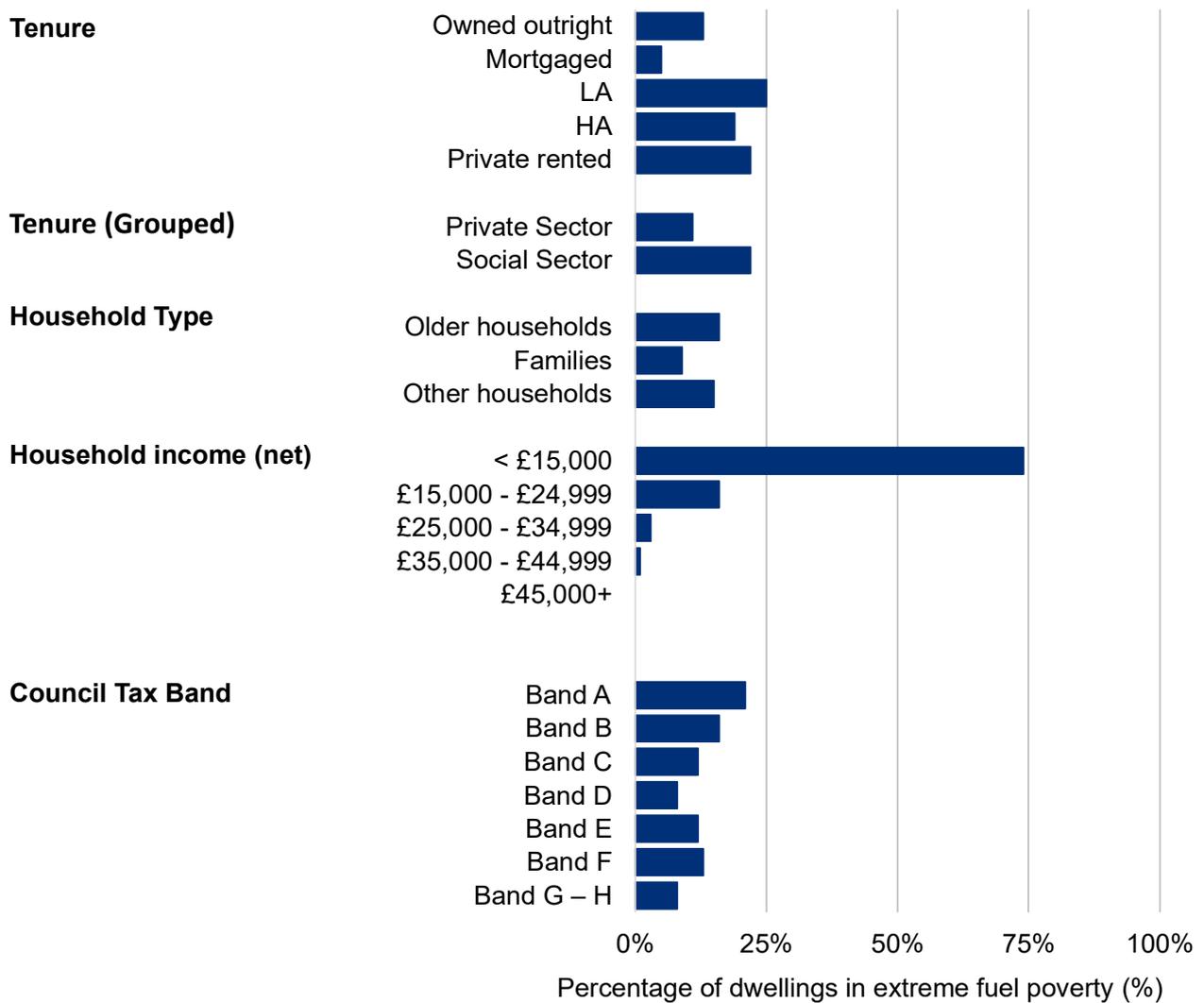
### 3.6 Characteristics of Extreme Fuel Poor Households

#### 3.6.1 Household Characteristics

Figure 3.8 shows extreme fuel poverty rates by a number of household characteristics.

**Households earning under £15,000 had the highest rates of extreme fuel poverty (74%).**

**Figure 3.8: Extreme Fuel Poverty Rates by Household Characteristics 2024.**



Description of Figure 3.8

Overall rates of extreme fuel poverty were higher in the social sector (22%) than in the private sector (11%).

As with fuel poverty overall, extreme fuel poverty has a strong association with income. Households in the lowest income band (<£15,000 annually) have the highest rate of extreme fuel poverty (74%) dropping to 1% for households in the £35,000 - £44,999 annual income band.

Similar to income, the highest rates of extreme fuel poverty are seen in the lowest council tax bands with band A having an extreme fuel poverty rate of 21%. By comparison households in council tax band F have a rate of 13%.

Families have a lower rate of extreme fuel poverty (9%) than both older households (16%) and other households (15%).

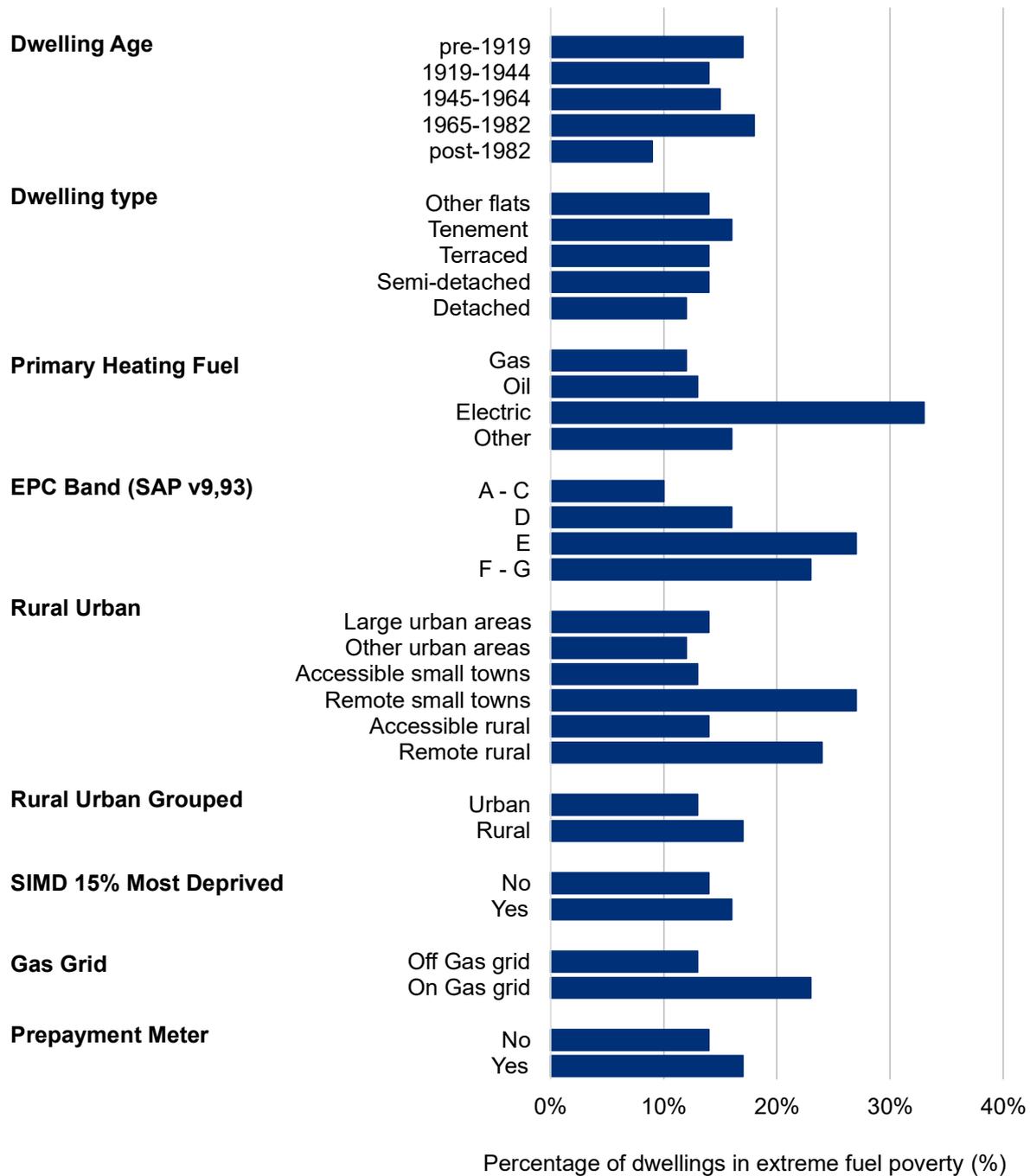
Data Source: Table FP10 in [‘SHCS 2024 - Chapter 03 Fuel Poverty - tables and figures’](#).

### **3.6.2 Dwelling Characteristics**

[Figure 3.9](#) shows how the level of extreme fuel poverty varies across dwelling characteristics<sup>20</sup>.

**Dwellings in rural areas had higher rates of extreme fuel poverty (17%) than urban areas.**

**Figure 3.9: Extreme Fuel Poverty by Dwelling Characteristics 2024.**



Description of Figure 3.9

Levels of extreme fuel poverty among households using electricity as their primary heating fuel were higher, at 33%, than households using oil (13%), gas (12%), or other fuels (16%) as their primary heating fuel.

The lowest rates of extreme fuel poverty are associated with higher energy efficiency standards. Only 10% of households living in dwellings rated EPC C or better were in extreme fuel poverty, compared to 16% for dwellings in band D, 27% for dwellings in band E and 23% in bands F-G.

Levels of extreme fuel poverty were higher in rural areas (17%) compared to urban areas (13%) in 2024.

Rates of extreme fuel poverty were higher in properties off the gas grid (23%) compared to dwellings on the gas grid (13%).

Data Source: Table FP11 in [‘SHCS 2024 - Chapter 03 Fuel Poverty - tables and figures’](#).

Notes: [\[note 1\]](#) [\[note 2\]](#) [\[note 7\]](#)

### 3.7 Fuel Poverty and Income Poverty

Although fuel poverty is correlated with low income, it is not equivalent to income poverty. This section provides an analysis of how fuel poverty and income poverty relate in the household population.

According to the official poverty definition, individuals are considered to be in relative (income) poverty if their equivalised net household income is below 60 per cent of the UK median income in the same year. Official poverty estimates are calculated using the Department for Work and Pensions’ (DWP) Family Resources Survey (FRS). The [latest estimates for Scotland](#) were published on 27 March 2025 and relate to 2023/24.

It is possible to use the SHCS to determine how fuel poverty and income poverty relate. The main caveat to note is that the SHCS is not designed to capture income as comprehensively as other formal surveys of income, e.g. the FRS. Household income is collected in the SHS on a self-reported basis. Therefore, figures in this section may not align with National Statistics on household income and inequality.

A further caveat is that the latest published income poverty estimates relate to 2023/24. In order to derive a poverty threshold figure for 2024 we use the relationship between the SHCS and the FRS estimates of the median equivalised household income for the previous year, 2023. We adjust the 2024 SHCS median by the ratio between the two estimates observed in 2023 to obtain a 2024 poverty threshold. We estimate this as £385 per week after housing costs (AHC) for a couple without children, while the actual FRS 2023/24 poverty threshold is £337.

As Table 3.7a shows, over three quarters of fuel poor households would be considered poor in terms of their income (78% or 570,000) while around one quarter have incomes above the relative poverty threshold (22% or 162,000 households).

Table 3.7b shows the fuel poverty rate by income poverty status. In 2024 89% of income poor households were fuel poor.

**The majority of fuel poor households (78%) are also in income poverty.**

**Table 3.7a: Estimated Number and Proportion of Households by Fuel Poverty and Income Poverty Status, SHCS 2024.**

<b>Income Poverty Status</b>	<b>Fuel Poor (%)</b>	<b>Fuel Poor (thousands)</b>	<b>Not Fuel Poor (%)</b>	<b>Not Fuel Poor (thousands)</b>
Income Poor	78%	570	4%	72
Not Income Poor	22%	162	96%	1,748
All	100%	732	100%	1,820
Sample size (number)	835	[z]	1,999	[z]

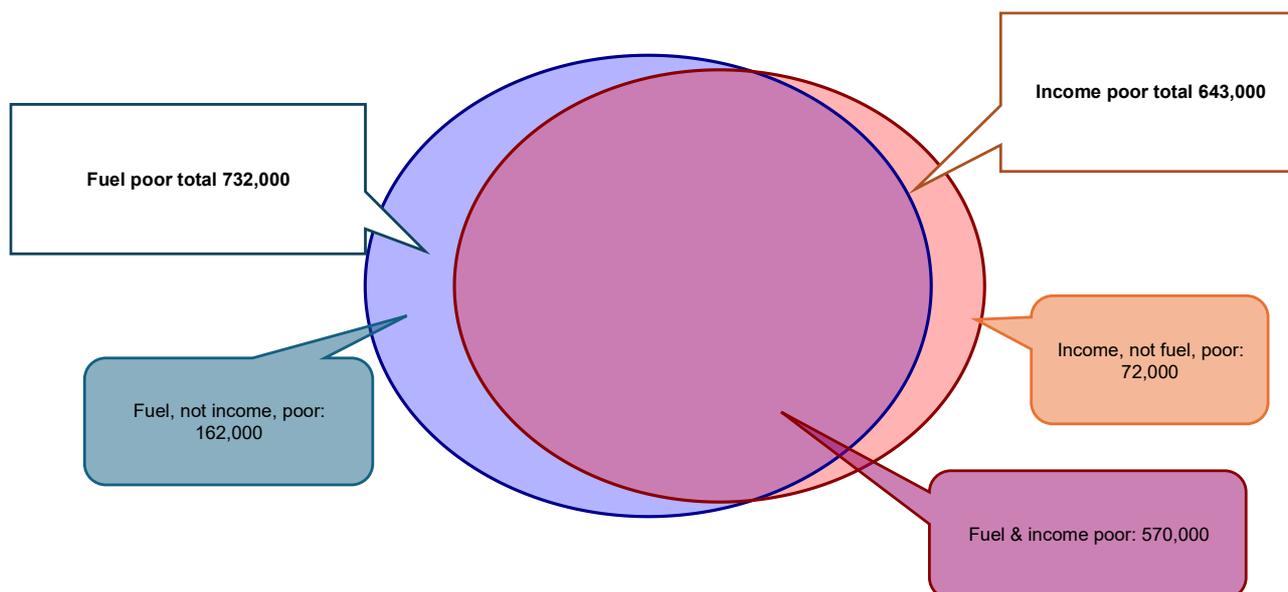
**In 2024, 89% of income poor households are also fuel poor.**

**Table 3.7b: Fuel Poverty Rate (%) by Income Poverty Status, SHCS 2024.**

<b>Income Poverty Status</b>	<b>Fuel Poverty Rate (%)</b>	<b>Sample size (number)</b>
Income Poor	89%	700
Not Income Poor	9%	2,134
All	28.7%	2,834

## The majority of income poor households are in fuel poverty.

**Figure 3.10: Fuel Poor and Income Poor Households, SHCS 2024.**



Description of Figure 3.9

[Figure 3.10](#) is a Venn diagram which sets out this information graphically. As shown in the diagram the majority of fuel poor households (570,000) are also in income poverty. Conversely, 162,000 households are estimated to be fuel poor only (and not income poor), and around 72,000 households are estimated to be income poor but not fuel poor.

This chart demonstrates, that while low income is associated with fuel poverty, it is not equivalent. Around 22% of fuel poor households (162,000 households) would not be considered income poor. Similarly, 11% of income poor households (72,000 households) would not be considered fuel poor.

Data Source: Table FP12 in [‘SHCS 2023 - Chapter 03 Fuel Poverty - tables and figures’](#).

[Table 3.8](#) provides further information about the characteristics of the households who fall into the different sub-groups.

Households that are both income poor and fuel poor tend to live in more energy efficient dwellings than other fuel poor households, potentially because of high energy efficiency standards in the social rented sector. They are more likely to use gas for heating, live on the gas grid and live in urban locations compared to other fuel poor households. These characteristics point to low income as a key reason for their experience of fuel poverty.

Conversely, households who are not income poor but experience fuel poverty have a higher likelihood of living in low energy efficiency properties, using electricity for heating, and living in rural areas compared to fuel poor and income poor households.

**Households that are both income poor and fuel poor tend to live in more energy efficient dwellings than other fuel poor households.**

**Table 3.8: Household and Dwelling Characteristics by percentage of all households in Poverty and Fuel Poverty, 2024.**

<b>Dwelling Characteristics</b>	<b>Category</b>	<b>Fuel Poor &amp; Not Income Poor (%)</b>	<b>Fuel Poor &amp; Income Poor (%)</b>	<b>All Fuel Poor (%)</b>	<b>Not Fuel Poor &amp; Income Poor (%)</b>	<b>All Scotland (%)</b>
EPC Band (SAP 2012)	A - C	40%	54%	51%	81%	56%
EPC Band (SAP 2012)	D	36%	38%	38%	19%	34%
EPC Band (SAP 2012)	E-G	23%	8%	11%	[c]	10%
Household Type	Older households	39%	38%	38%	29%	36%
Household Type	Families	15%	19%	18%	50%	21%
Household Type	Other households	46%	43%	44%	21%	43%
Urban-Rural Indicator	Urban	77%	85%	83%	82%	83%
Urban-Rural Indicator	Rural	23%	15%	17%	18%	17%
Primary Heating Fuel	Gas	71%	81%	79%	89%	82%
Primary Heating Fuel	Oil	8%	3%	4%	[c]	6%
Primary Heating Fuel	Electric	20%	13%	15%	6%	10%
Primary Heating Fuel	Other	1%	3%	2%	[c]	2%
Gas Grid Coverage	Off Gas Grid	24%	11%	14%	6%	12%
Gas Grid Coverage	On Gas Grid	76%	89%	86%	94%	88%
All dwellings	Sample size (number)	214	621	835	79	2,834

Notes: [\[note 1\]](#) [\[note 2\]](#)

## 4 Energy Perceptions

### Key Points<sup>21</sup>

- 19% of households found that their heating keeps them warm in winter only sometimes and 6% felt that it never keeps them warm.
- 11% of households reported that their homes were difficult to heat because they cannot afford to heat them, similar to 2023.
- Fuel poor households and extreme fuel poor households are more likely to have difficulties staying warm in winter and to report affordability problems; 28% of fuel poor and 31% of extreme fuel poor say that their heating keeps them warm in winter “only sometimes” or “never”, compared to 23% of non-fuel poor households.
- 15% of fuel poor and 17% of extreme fuel poor households report that they cannot afford to heat their home, higher than the 10% of non-fuel poor households.
- 70% of householders stated they monitor their energy use “very” or “fairly closely”, similar to 2023. While 54% of all households report owning an energy monitoring device, an increase from 48% in 2023.
- Both fuel poor (48%) and extreme fuel poor (44%) households were less likely to own a monitoring device compared to non-fuel poor (57%) households.

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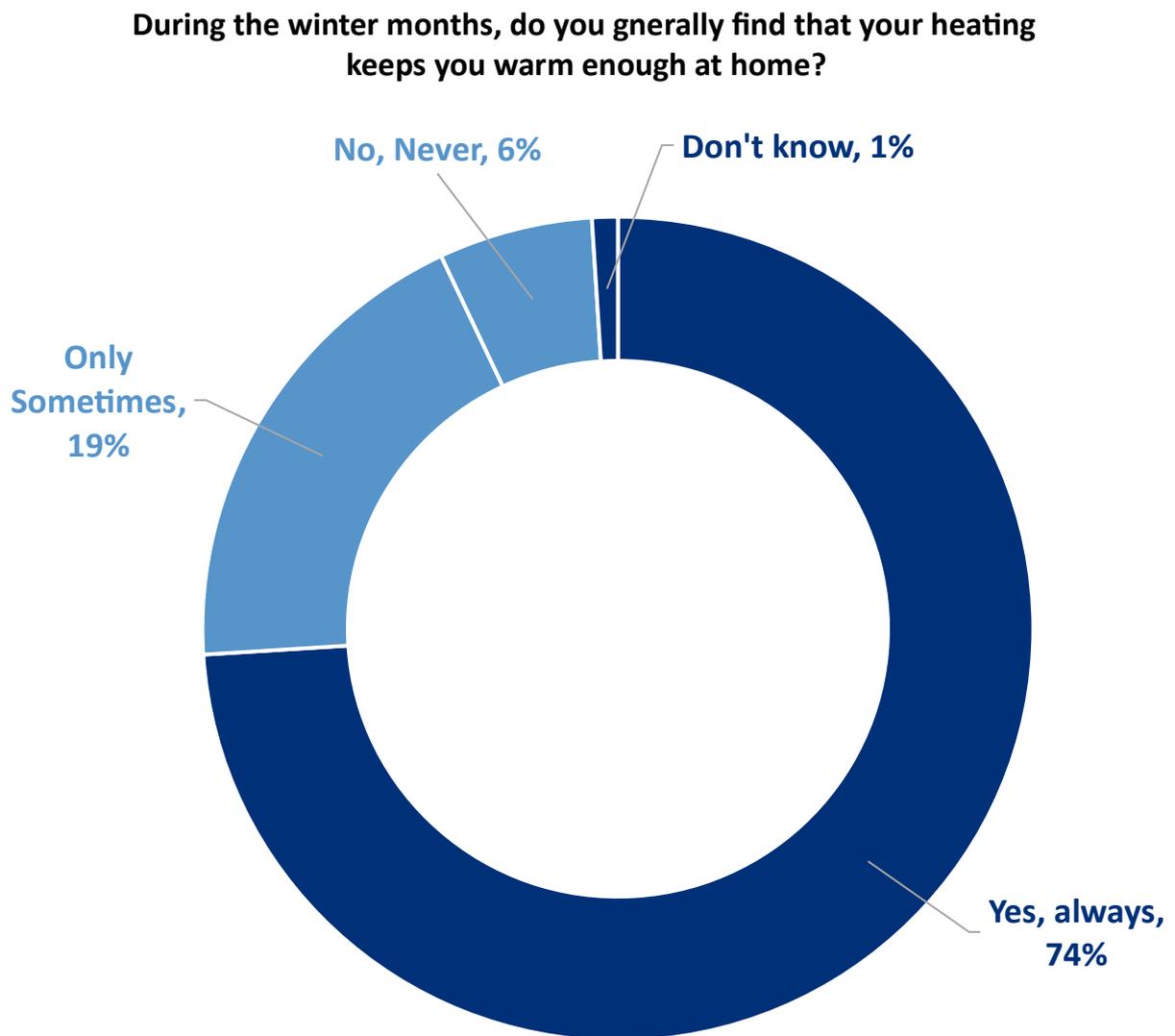
<sup>21</sup> There was one dwelling in the 2024 SHCS achieved sample which did not provide a response to the energy perceptions or household perceptions questions. They are excluded from the tables and analysis in this chapter.

## 4.1 Heating Satisfaction

Respondents' views on their ability to keep warm in the winter and why this may be difficult is useful context for understanding statistics on fuel poverty and energy efficiency in the home.

**74% of households reported that their heating always keeps them warm in winter.**

**Figure 4.1: Staying Warm in Winter, 2024.**



### Description of Figure 4.1

In 2024, 74% of householders reported that they were always able to stay warm at home during the winter ([Figure 4.1](#)), similar to 2023. Whereas 19% said that their heating keeps

them warm only sometimes, and 6% report that their heating never keeps them warm in winter.

As shown in [Table 4.1](#), of those reporting that their heating keeps them warm in winter “only sometimes” or “never”, 23% report this to be “a serious problem”, 53% say it is “a bit of a problem”, while 23% said it was “not very much of a problem” or “not a problem”.

Data Source: Table EP1 in [‘SHCS 2024 - Chapter 04 Energy Perceptions - tables and figures’](#).

**53% of households whose heating does not always keep them warm say this is “a bit of a problem”.**

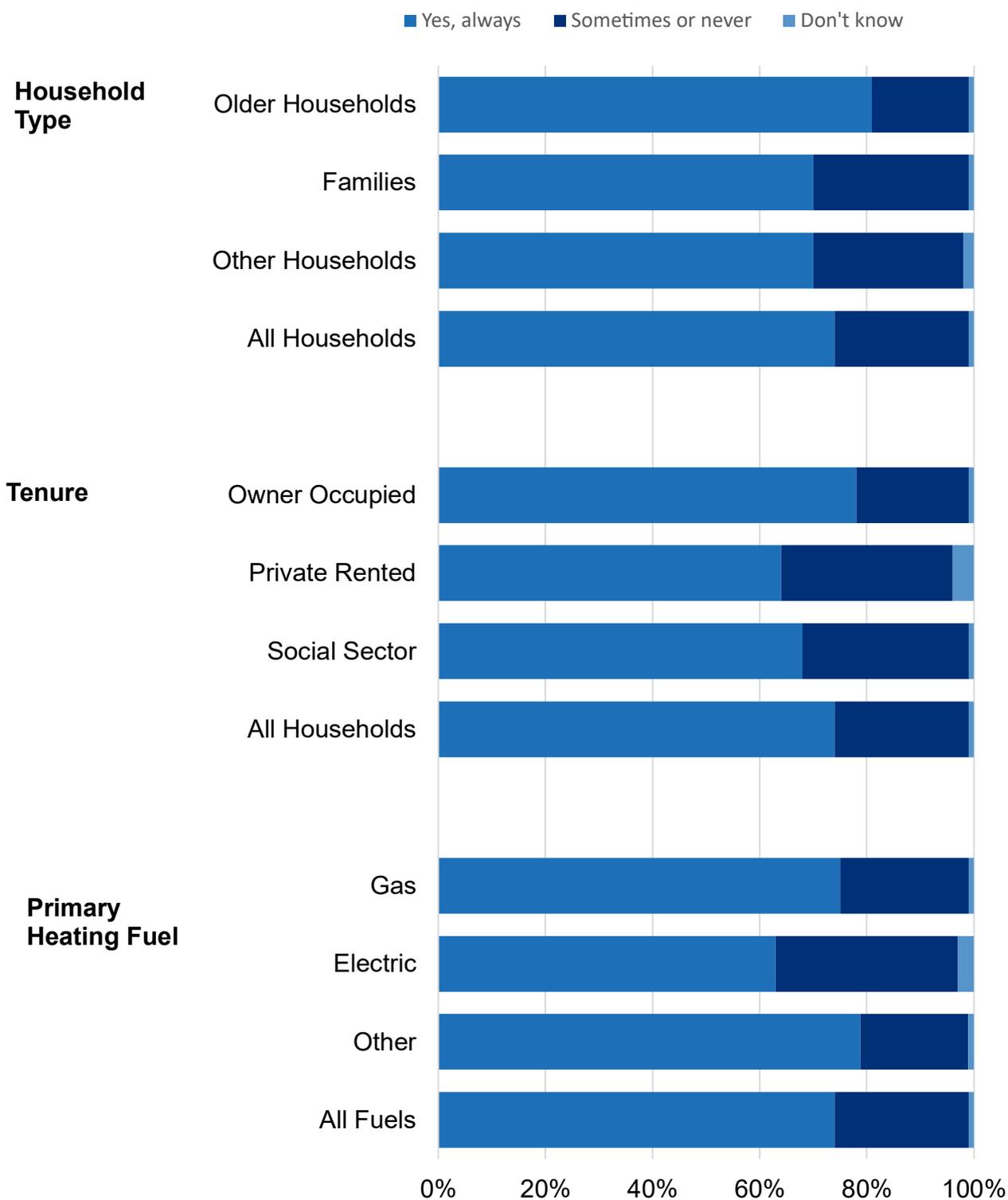
**Table 4.1: Households whose heating does not keep them warm in winter.**

<b>How much of a problem is it?</b>	<b>Percentage of dwellings (%)</b>
A serious problem	23%
A bit	53%
Not very much	18%
Not a problem	5%
Total	100%
Sample size (number)	713

[Figure 4.2](#) shows how respondents’ views on how well their heating kept them warm in winter varies depending on household type, tenure, and the primary heating fuel they use.

Tenants in socially and privately rented properties are more likely to say their heating keeps them warm “only sometimes or never” compared to owner occupiers.

Figure 4.2: “Does Your Heating Keep You Warm Enough in the Winter?” by Household Type, Tenure and Primary Heating Fuel; SHCS 2024.



### Description of Figure 4.2

Families (29%) and other households (28%) were more likely than older households (18%) to report that their heating doesn't always keep them warm in the winter.

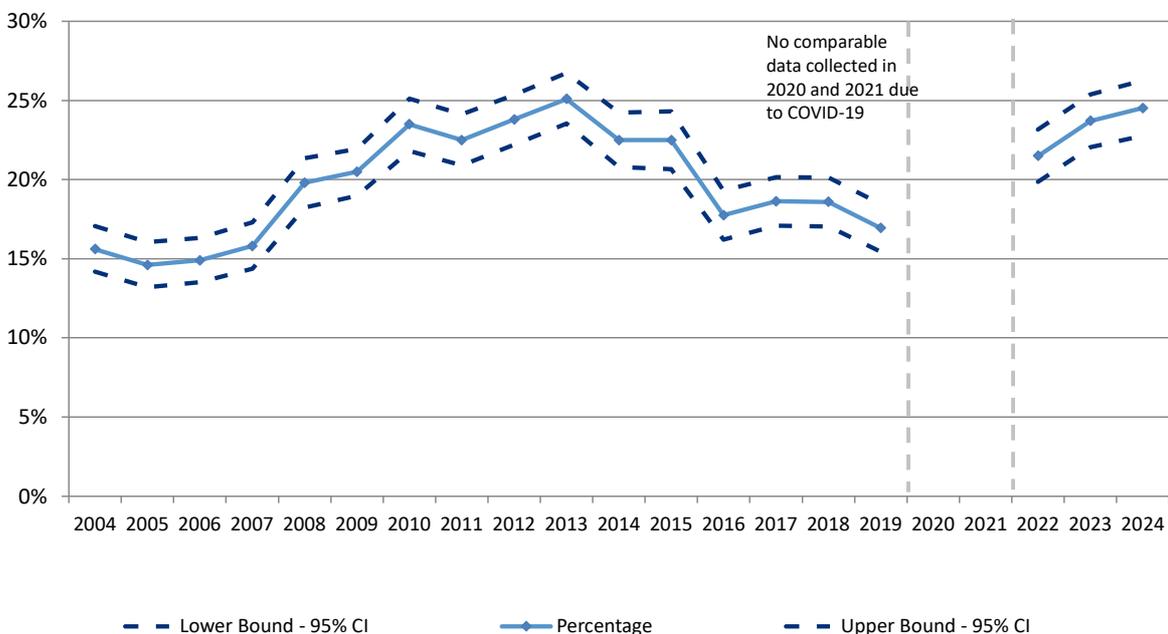
Social and private renters were more likely to report that their heating does not always keep them warm compared to owner occupiers; 31% for social and 32% for private renters, compared to 21% for owner occupiers. For social sector tenants this contrasts with the relatively better energy efficiency of the dwellings they occupy compared to the housing stock overall (as shown in [Figure 2.9](#)).

Households with electric heating were also more likely to report that their heating does not always keep them warm in the winter (34%) when compared to households heated with gas (24%).

Data Source: Table EP3 in [‘SHCS 2024 - Chapter 04 Energy Perceptions - tables and figures’](#).

**The proportion of households reporting that their heating does not always keep them warm was similar to 2023.**

**Figure 4.3 “Does your heating keep you warm enough in the winter”? Proportion responding only “sometimes or “never” 2004-2019, 2022 – 2024.**



### Description of Figure 4.3

[Figure 4.3](#) shows how the proportion of householders reporting that their heating does not always keep them warm enough has changed over time, allowing for the margin of error. As shown in figure 4.3 the proportion of households reporting that their heating does not always keep them warm (25%) is similar to 2023 (24%).

The reasons why people found their homes difficult to heat in 2024 are shown in [Table 4.2](#). 60% of all households did not report any problems heating their homes. Private rented (50%) and social sector tenants (46%) were more likely than owner occupiers (37%) to report difficulties in 2024.

The most common reasons people find it difficult to heat their homes relate to poor energy performance of the dwellings: draughts (14%) and poor or inadequate heating systems (14%), were the most common, followed by poor insulation (13%).

The percentage of householders who consider it unaffordable to achieve the indoor temperatures they want is higher among social renters (17%) compared to private renters (12%) and owner occupiers (9%).

Data Source: Table EP4 in [‘SHCS 2024 - Chapter 04 Energy Perceptions - tables and figures’](#).

## 60% of all households did not report any problems heating their homes.

**Table 4.2: Reasons Heating Home is Difficult by Tenure, 2024.**

Which of these things, if any, make it difficult to heat your home?	Owner occupied	Private Rented	Social Sector	All Tenures
No problem reported	63%	50%	54%	60%
Draughty	12%	16%	19%	14%
Poor or inadequate heating	12%	23%	16%	14%
Poor insulation	12%	17%	12%	13%
Can't afford to heat house	9%	12%	17%	11%
Need new windows	9%	15%	11%	10%
Hard to control heating	3%	7%	5%	4%
Rooms too big	2%	4%	0%	2%
Other	2%	2%	3%	2%
Sample size (number)	1,947	289	665	2,901

[Table 4.3](#) shows how fuel poor and non-fuel poor households compared in their views on winter heating and heating affordability in 2024, while [Table 4.4](#) shows householders' views on how much of a problem it is if their heating does not keep them warm in winter.

Fuel poor and extreme fuel poor households<sup>22</sup> are more likely to report that their heating keeps them warm in winter “only sometimes” or “never”, 28% and 31%, respectively, compared to 23% of non-fuel poor households. For those households who replied “only sometimes” or “never” 88% of fuel poor and 83% of extreme fuel poor households reported this is “a serious” or “a bit of a problem”, higher than 71% for households who are not fuel poor.

Fuel poor and extreme fuel poor households are also more likely to report affordability problems. When asked about the reasons why they find it difficult to keep their home warm, 15% of fuel poor households and 17% of extreme fuel poor households say “cannot afford to heat my home”, compared to 10% of non-fuel poor households (see [table EP9 in ‘Energy Perceptions’ tables](#)).

**Fuel poor and extreme fuel poor households are more likely to report that their heating keeps them warm in winter “only sometimes” or “never”.**

**Table 4.3: Staying Warm and Fuel Poverty - “During the winter months, do you generally find that your heating keeps you warm enough at home?”.**

<b>Answer</b>	<b>Not Fuel Poor</b>	<b>Fuel Poor</b>	<b>Extreme Fuel Poor</b>
Yes, always	76%	70%	66%
Only Sometimes	18%	20%	23%
No, Never	5%	8%	8%
Don't know	1%	2%	3%
Sample size (number)	1,998	835	423

<sup>22</sup> Households in extreme fuel poverty are a subset of those in fuel poverty. Therefore, it should be noted that the estimates presented in Tables 4.3, 4.4, and 4.6 for fuel poor and extreme fuel poor households are not for two distinct mutually exclusive groups.

**Fuel poor and extreme fuel poor households are more likely to report that their heating not keeping them warm in winter is a problem.**

**Table 4.4: Staying Warm and Fuel Poverty - “If your heating only keeps you warm sometimes or never how much of a problem is this?” Households who responded that heating does not keep them warm.**

<b>Answer</b>	<b>% of all Not Fuel Poor households who responded heating does not keep them warm</b>	<b>% of all Fuel Poor who responded heating does not keep them warm</b>	<b>% of all Extreme Fuel Poor households who responded heating does not keep them warm</b>
A serious problem	19%	31%	29%
A bit of a problem	52%	57%	54%
Subtotal	71%	88%	83%
Sample size (number)	452	242	133

For a full breakdown of these stats see Table EP6 and Table EP8 in [‘SHCS 2024 - Chapter 04 Energy Perceptions - tables and figures’](#).

## 4.2 Monitoring Energy Use

The Scottish Household Survey asks respondents to what extent they monitor their energy use and whether or not they have energy monitoring devices.

As shown in [Table 4.5](#), the proportion of households that do not monitor their energy use at all was 11%, with a further 18% stating they do not monitor very closely.

Conversely, the proportion of those who report monitoring their energy use “fairly” or “very closely” was 70%. Similar to 2023 levels, but an increase of 14 percentage points since 2019.

54% of households reported having energy monitoring devices, higher than the 48% of households who reported having one in 2023.

See [Table EP10 and EP14 in the tables on energy perceptions](#) for more details.

**70% of households monitor their energy use “very” or “fairly” closely.**

**Table 4.5: Extent to which Energy Use is Monitored, 2024 - “To what extent do you monitor your energy use in your property?”.**

<b>Answer</b>	<b>Percentage of dwellings (%)</b>
Very closely	29%
Fairly closely	42%
Not very closely	18%
Not at all	11%
Don't know	[low]
Total	100%
<hr/>	
Sample size (number)	2,901

[Table 4.6](#) shows that fuel poor (73%) and extreme fuel poor (74%) households have higher rates of monitoring their energy use “very” or “fairly closely” compared to non-fuel poor (69%) households. However, both fuel poor households (48%) and extreme fuel poor (44%) households were less likely to have a monitoring device than non-fuel poor (57%) households. (see [table EP12 in ‘Energy Perceptions’ tables](#)).

**A higher proportion of fuel poor households monitor their energy “very” or fairly” closely.**

**Table 4.6: Monitoring Energy Use and Fuel Poverty - “To what extent do you monitor your use of energy in your property?”.**

<b>Answer</b>	<b>Not Fuel Poor</b>	<b>Fuel Poor</b>	<b>Extreme Fuel Poor</b>
Very closely	26%	34%	33%
Fairly closely	42%	40%	42%
Not very closely	19%	16%	14%
Not at all	12%	11%	12%
Don't know	[low]	[c]	[c]
Total	100%	100%	100%
Sample size (number)	1,998	835	423

# 5 Housing Conditions

## 5.1 Disrepair

The Scottish House Condition Survey (SHCS) measures disrepair for a wide range of different building elements ranging from aspects of roofs and walls, to chimney stacks, internal rooms, and common parts of shared buildings like access balconies, and entry doors.

This is reported in two categories:

- **Critical elements.** This refers to disrepair to building elements central to weather-tightness, structural stability and preventing deterioration of the property, such as roof coverings or the structure of external walls. These elements are listed in [section 2.7.1](#) of the Methodological and Technical notes.
- **Non-critical elements.** This relates to any damage to a non-critical element (such as skirtings and internal wall finishes, staircases, boundary fences or attached garages) which requires some repair beyond routine maintenance.

Elements in both of the above categories can be assessed according to the severity of disrepair, as follows:

- **Urgent disrepair.** This relates only to external and common elements (a mixture of critical and non-critical). Urgent disrepair to these elements is recorded where immediate repair is required to prevent further deterioration to the building fabric or health and safety risks to occupants. Not all disrepair to critical elements is necessarily considered urgent by the surveyor. However, internal room floor structures and floor finishes as well as internal walls and the presence of dry / wet rot are the only critical elements for which urgent disrepair is not recorded.
- **Extensive disrepair.** Damage which covers at least a fifth (20%) or more of the building element area. This can apply to any element whether critical or otherwise.

Disrepair, which is not to a critical element, is not urgent or extensive, is referred to as basic. This is the minimum category of disrepair in the survey.

A correction has been applied to the extensive disrepair to one to more critical element timeseries figures, See section [2.7.3 of the Technical and methodological notes](#) for more details.

More detailed description of the categories of disrepair is given in [section 2.7](#) of the Methodological and Technical notes.

It is fairly common for dwellings to display elements of disrepair in more than one category. The [SHCS surveyor manual](#) provides guidance for our surveyors on assessing the type and severity of disrepair for each element, for example:

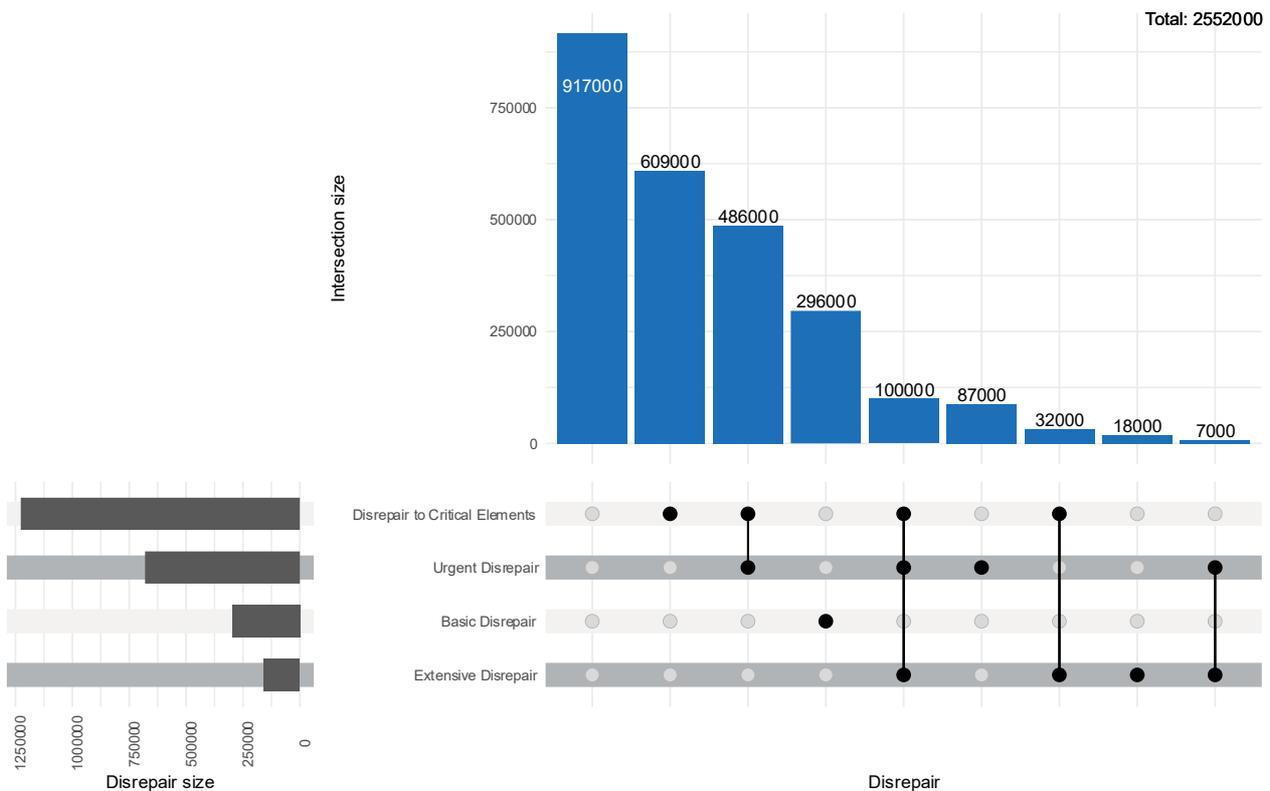
- A leaking tap in the bathroom (disrepair to a non-critical element).

- A large section (covering over 20% of the area) of the render on an external wall has broken off but is not considered an urgent repair by the surveyor (extensive disrepair to a critical element).
- A small area of guttering is damaged, causing rainwater to pour down an external wall surface. This is marked as urgent by the surveyor as it is likely to lead to further damage and compromise the weatherproofing of the building in the short term (urgent disrepair to a critical element).

## **Key Points**

- Disrepair to critical elements, which are central to weather-tightness, structural stability and preventing deterioration of the property, stood at 48% in 2024. Less than half of these (19% of all dwellings) had urgent disrepair to critical elements and just 2% had extensive disrepair (covering at least a fifth of the element area) to critical elements.
- Overall, this is an increase of around 3 percentage points compared to 2023, when 45% of dwellings had disrepair to critical elements.
- 16% of dwellings had disrepair to non-critical elements only, with 4% of dwellings requiring some urgent repair to non-critical elements, and 1% having extensive disrepair to non-critical elements.
- Levels of damp and condensation were similar to those seen in 2023: 90% of properties were free from any damp or condensation. The proportion of dwellings without mould improved in 2024: 92% of properties were free from mould compared to 90% in 2023.

## Infographic 5.1: Number of dwellings to display elements of disrepair in more than one category, 2024.



[Infographic 5.1](#) is an upset plot which shows the overlap of different types of disrepair in Scottish dwellings graphically. The vertical axis shows the number of dwellings with different combinations of disrepair. For example, 486,000 (19%) had urgent disrepair (to any element) as well as disrepair to critical elements, while 100,000 dwellings (4%) had disrepair to critical elements as well as urgent and extensive disrepair (to any elements). In 2024 around 32,000 dwellings (1%) had extensive disrepair (to any element) and disrepair to critical elements. 917,000 (36%) dwellings had no disrepair to any element.

The horizontal axis shows the total number of dwellings within each type of disrepair including overlaps between groups. For example, around 1.23 million dwellings had disrepair to a critical element (48%) while 157,000 (6%) dwellings were recorded as having some extensive disrepair.

It should be noted that where categories overlap in the above figure, this means that the properties have instances of each type of disrepair. However, this disrepair may be to different elements. For example, 486,000 (19%) of properties have disrepair to critical elements and urgent disrepair. This can include properties where disrepair to an element (e.g. guttering) is both critical and urgent as well as properties which have critical disrepair to one element (e.g. external wall finish) and urgent disrepair to another (e.g. flashings).

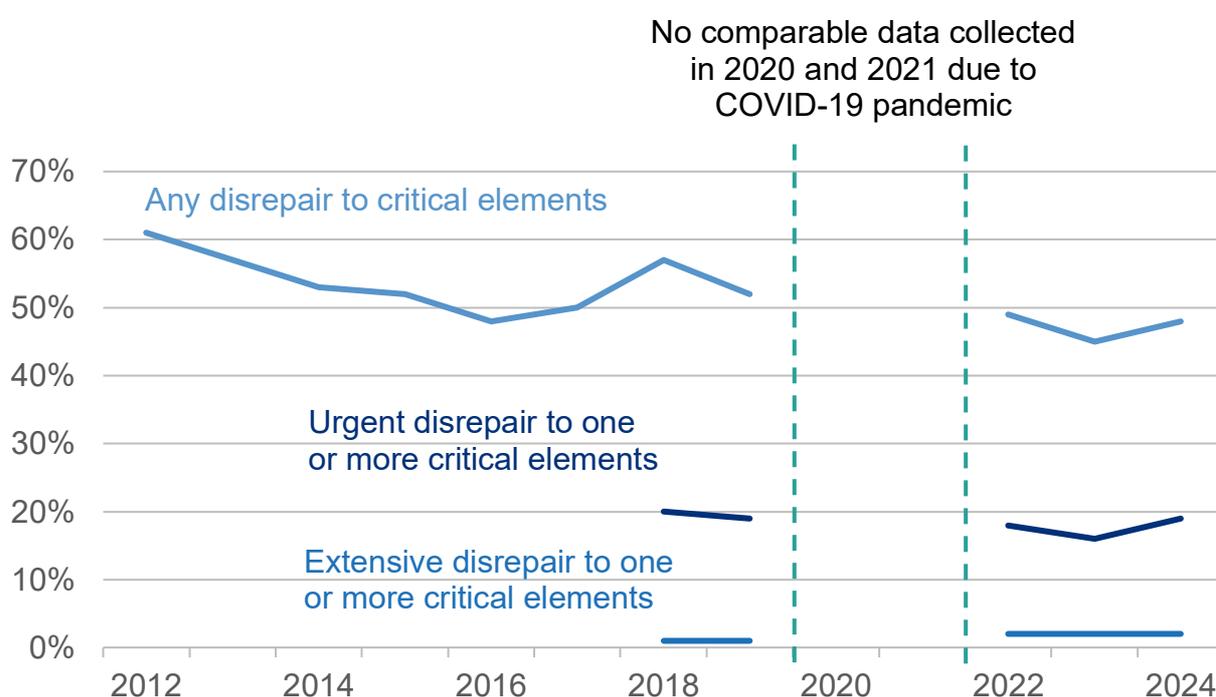
Data Source: Table HC1 in [‘SHCS 2024 - Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 10\]](#) [\[note 11\]](#) [\[note 12\]](#)

### 5.1.1 Rates of Disrepair

**Levels of disrepair to critical elements increased from 45% in 2023 to 48% in 2024.**

**Figure 5.1: Percentage of dwellings with disrepair to critical elements, 2012-2024.**



Description of Figure 5.1

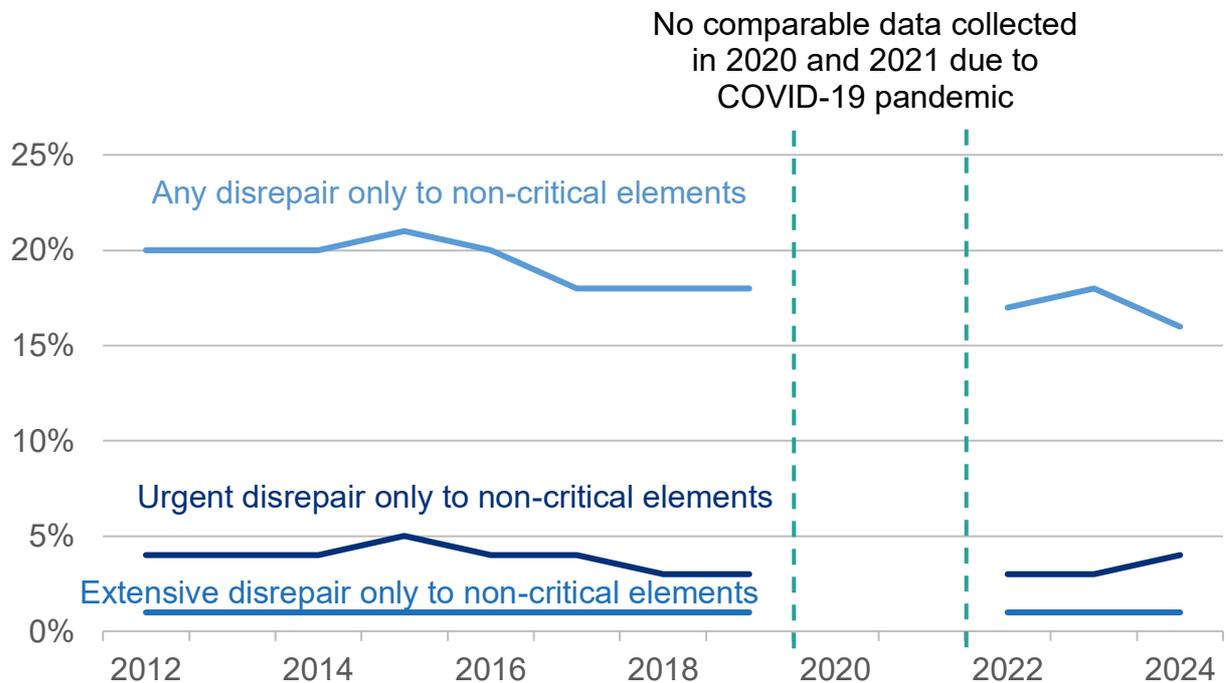
[Figure 5.1](#) provides details of rates of disrepair over time for dwellings with disrepair to critical elements. In 2024, disrepair to critical elements stood at 48% of all dwellings. Less than half, 19% of all dwellings, had instances of urgent disrepair to these critical elements and only 2% of dwellings had extensive disrepair to one or more critical elements. These dwellings may also have other instances of disrepair (including urgent and extensive) to non-critical elements.

Data Source: Table HC2a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 9\]](#) [\[note 10\]](#) [\[note 11\]](#) [\[note 12\]](#)

**In 2024, 16% of dwellings had disrepair only to non-critical elements.**

**Figure 5.2: Percentage of dwellings with disrepair only to non-critical elements, 2012-2024.**



Description of Figure 5.2

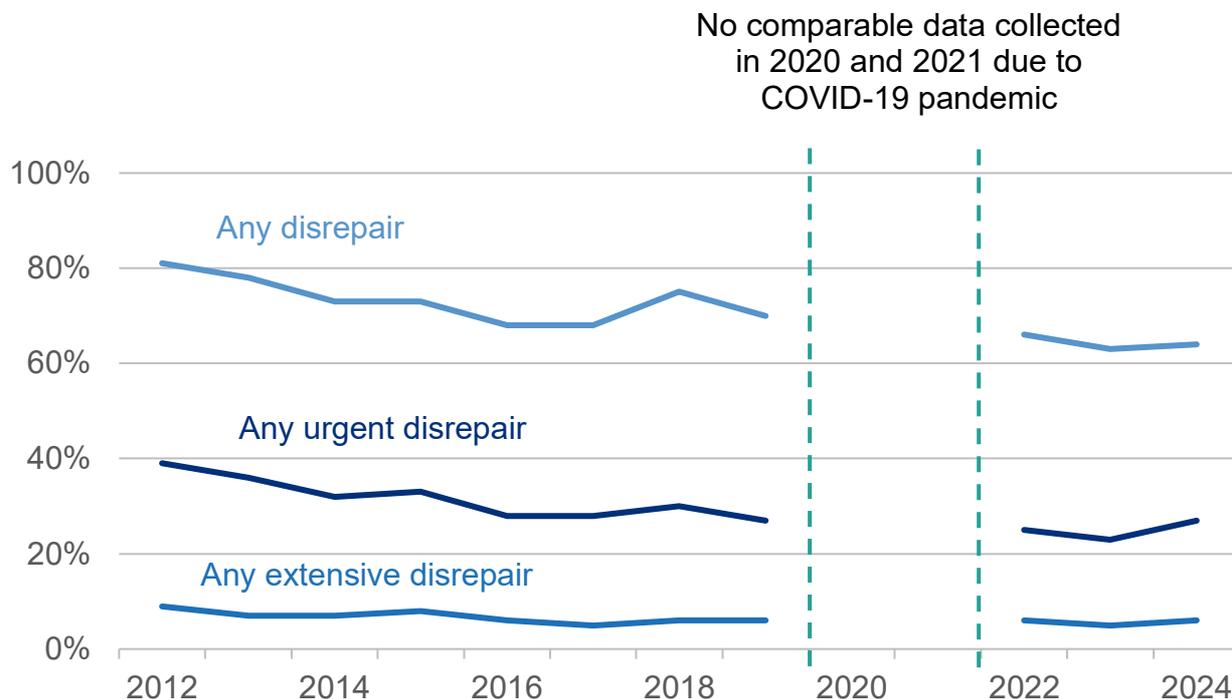
[Figure 5.2](#) shows the rates of disrepair over time for dwellings with disrepair to non-critical elements only. In 2024, 16% of dwellings had disrepair to non-critical elements, with 4% of dwellings requiring some urgent repair to non-critical elements, and 1% having extensive disrepair to non-critical elements.

Data Source: Table HC2a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 10\]](#) [\[note 11\]](#)

**In 2024, 27% of properties had some instances of urgent disrepair.**

**Figure 5.3: Percentage of dwellings with any disrepair 2012-2024.**



Description of Figure 5.3

Urgent and extensive disrepair can apply to both critical and non-critical elements. [Figure 5.3](#) shows the rates of this type of disrepair regardless of element type. In 2024, 27% of properties had some instances of urgent disrepair, an increase of 4 percentage points since 2023. However, in 2024, 6% of the housing stock had some extensive disrepair present, an improvement from 9% in 2012.

Data Source: Table HC3 in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 10\]](#) [\[note 11\]](#)

### 5.1.2 Disrepair to Critical Elements

This section examines in more detail disrepair to critical elements (affecting 48% of dwellings in 2024) and its prevalence across tenure, dwelling age bands and location.

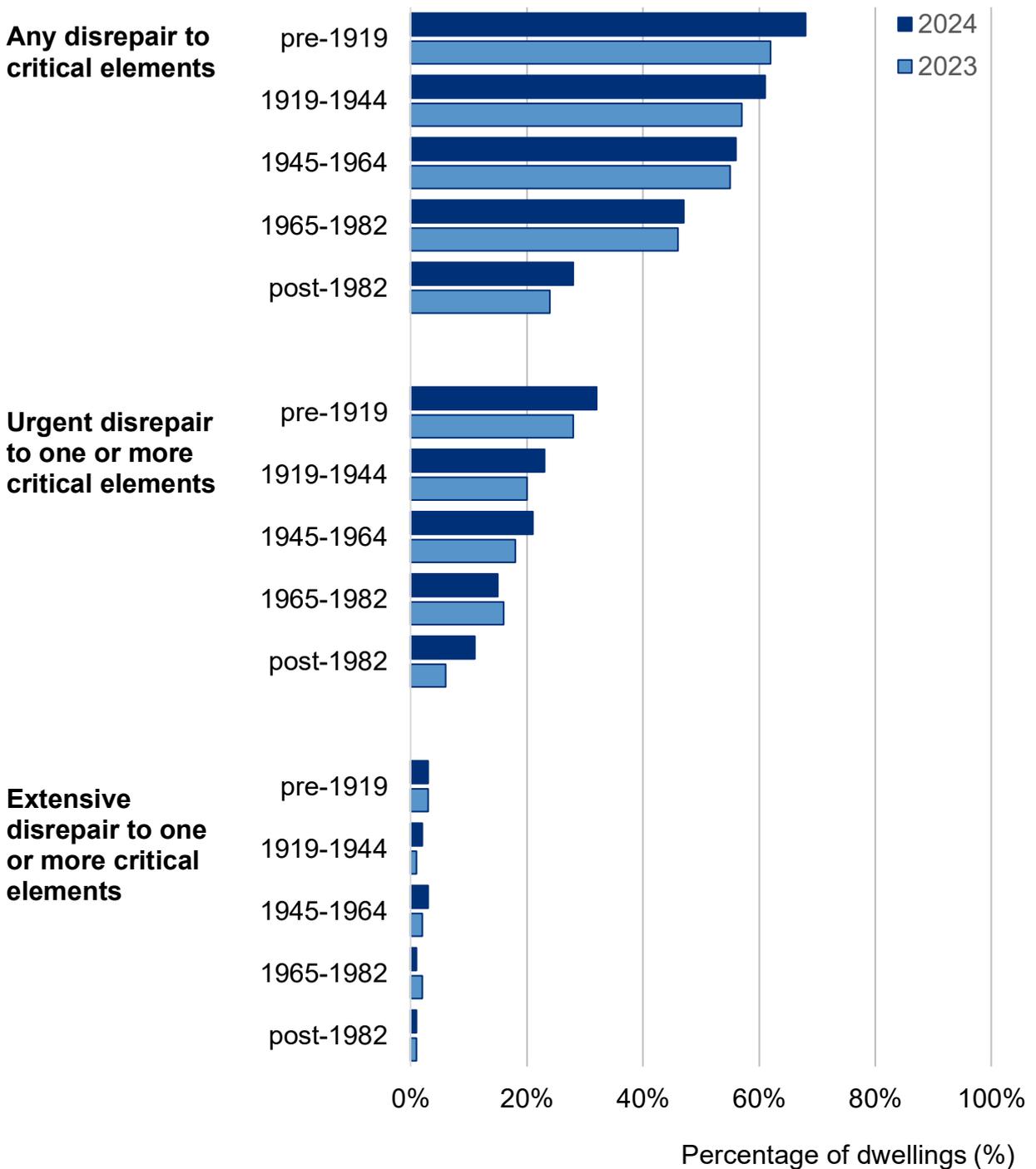
As shown above in [Infographic 5.1](#), in some of those dwellings with disrepair to critical elements there was also some urgent disrepair (not necessarily to the same element, or the critical elements), accounting for 23% of the housing stock.

In 2024, 4% of the housing stock, in addition to the presence of disrepair to critical elements and urgent disrepair, had some disrepair to the property assessed as extensive.

### 5.1.2.1 Dwelling age and location

The prevalence of disrepair to critical elements is associated with age of construction.

Figure 5.4: Disrepair to critical elements by dwelling age, 2023 and 2024.



Description of Figure 5.4

The prevalence of disrepair to critical elements is associated with age of construction, with newer dwellings significantly less likely to fall within this category. [Figure 5.4](#) shows that dwellings built pre-1919 have a rate of disrepair to critical elements of 68%, with 32% having urgent disrepair to critical elements. Comparatively dwellings built after 1982 have lower rates of disrepair to critical elements at 28%, with 11% also having urgent disrepair to critical elements.

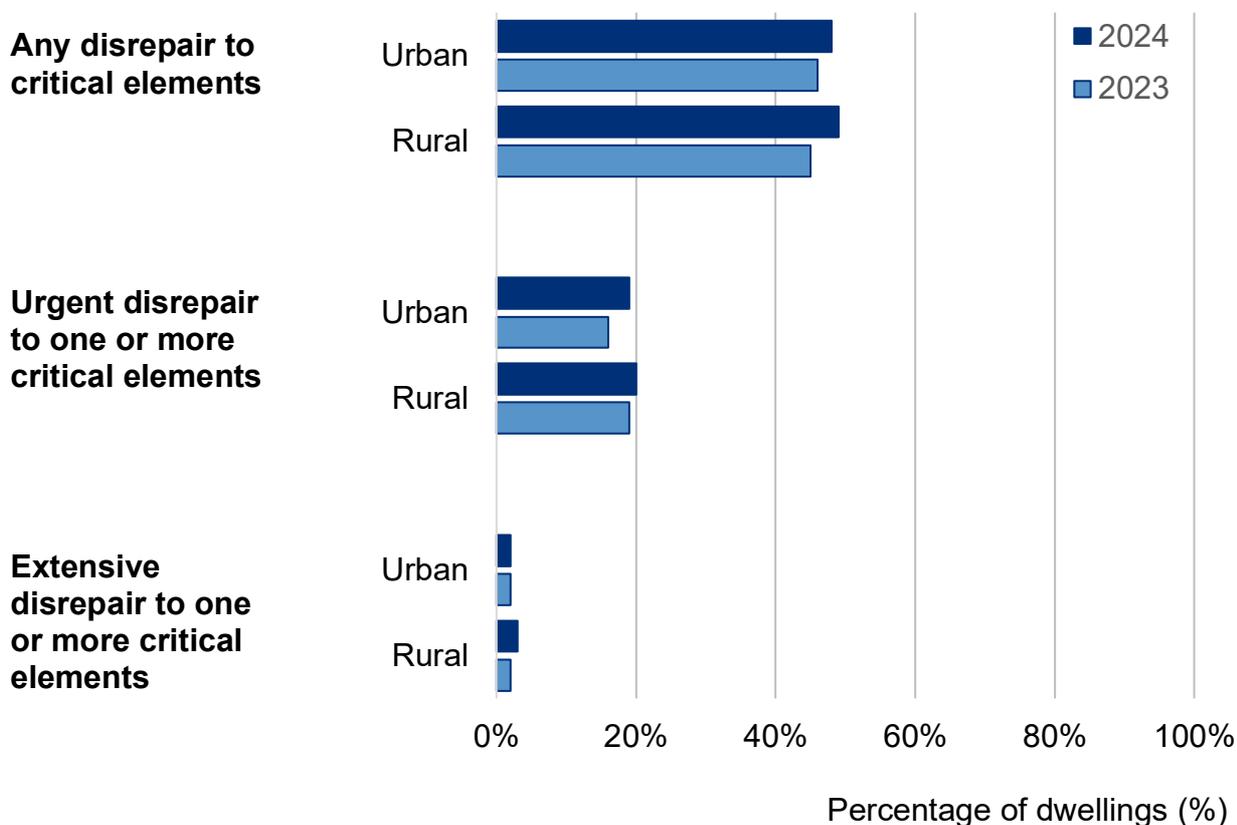
Overall, rates of disrepair, extensive disrepair, and urgent disrepair to critical elements across all dwelling age bands remained broadly similar between 2023 and 2024, with some notable exceptions. Specifically, the proportion of dwellings recorded as having urgent disrepair to critical elements increased between 2023 and 2024 for dwellings built after 1982, (from 6% to 11%) and in urban dwellings from 16% to 19%. Additionally, the proportion of pre 1919 dwellings with any disrepair to critical elements, and any urgent and any extensive disrepair increased between 2023 to 2024 from 4% to 7%.

Data Source: Table HC4a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 9\]](#) [\[note 10\]](#) [\[note 11\]](#) [\[note 12\]](#)

In 2024, rates of disrepair to critical elements were similar between urban and rural areas for most categories.

Figure 5.5: Disrepair to critical elements by dwelling location, 2023 and 2024.



Description of Figure 5.5

In 2024, rates of disrepair were similar between urban and rural areas for the three categories shown. Furthermore, rates of disrepair were similar between 2023 and 2024 for most of the categories and areas shown with the exception of rates of urgent disrepair to one or more critical elements for urban areas which were higher in 2024 (19%) compared to 16% in 2023.

The above figures consider the presence of critical, urgent, and extensive disrepair within a dwelling. However, these do not necessarily apply to the same elements in every case.

Data Source: Table HC4 in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 1\]](#) [\[note 9\]](#) [\[note 10\]](#) [\[note 11\]](#) [\[note 12\]](#)

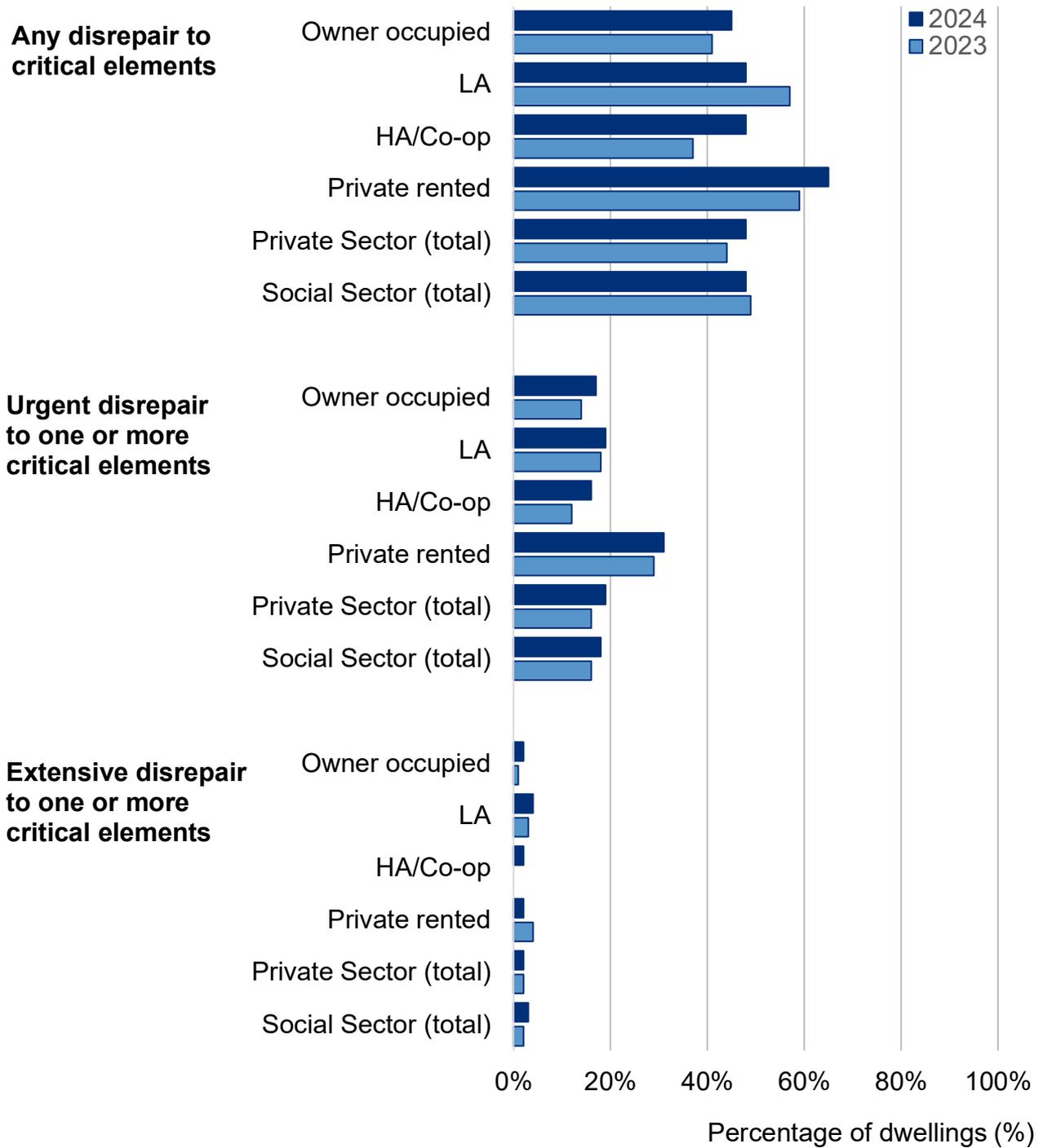
Table HC4 in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#) provides further breakdowns for dwellings which have disrepair to critical elements **and** urgent

disrepair as well as dwellings with extensive or urgent disrepair to critical elements. In general, the prevalence of disrepair to critical elements is associated with age of construction, with newer post 1982 dwellings significantly less likely to have extensive disrepair to critical elements (1%) or urgent disrepair to critical elements (11%) than pre 1919 dwellings 3% and 32% respectively.

### 5.1.2.2 Tenure

In 2024, levels of disrepair to critical elements differ by housing tenure.

Figure 5.6: Disrepair to critical elements by tenure, 2023 and 2024.



Description of Figure 5.6

As shown in [Figure 5.6](#) private rented properties tend to have the highest levels (65%) of any disrepair to critical elements. In contrast, housing association, local authority, and owner occupied properties have lower rates than private rented properties. Additionally in 2024 rates any disrepair to critical elements were statistically similar between housing association, local authority and owner occupied properties and ranged from 48% to 45%.

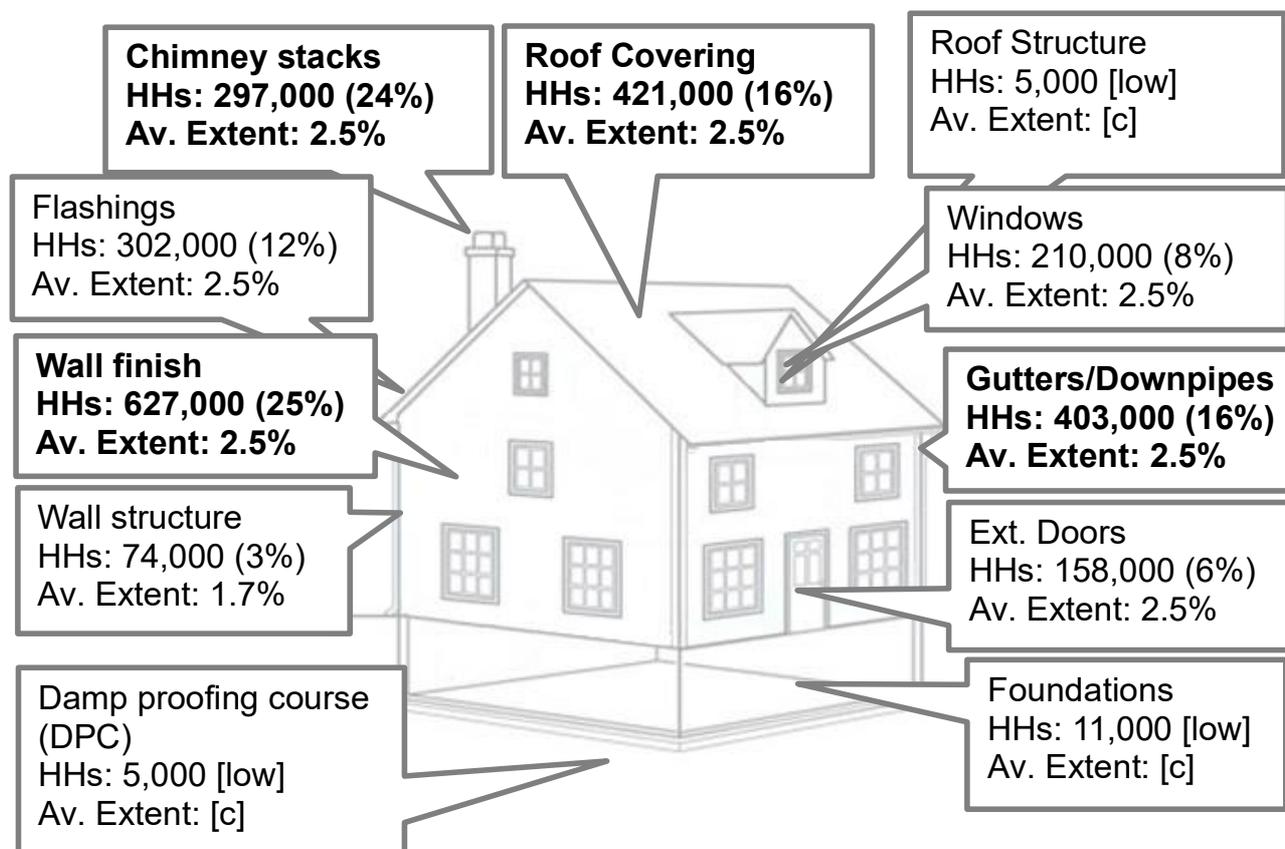
Data Source: Table HC5a in '[SHCS 2024- Chapter 05 Housing Conditions - tables and figures](#)'.

Notes: [\[note 9\]](#) [\[note 10\]](#) [\[note 11\]](#) [\[note 12\]](#)

### 5.1.2.3 Type of Disrepair to Critical Elements

As shown in [Infographic 5.2](#) although some disrepair to critical elements is fairly common it tends to be at a relatively low level in each property, affecting on average (median) 2.5% of the relevant area. A full list of elements in this category is provided in [section 2.7.1](#) of the Methodological and Technical notes along with details of how the extent of disrepair is recorded in the survey for each type, and how an average extent is calculated.

**Infographic 5.2: The number of dwellings affected and average (median) extent of disrepair to external critical elements.**



Description of Infographic 5.2

Wall finish, gutters / downpipes, roof coverings and chimney stacks are most commonly affected. Around 25% of dwellings had some disrepair to wall finish, 16% had some disrepair to gutters / downpipes, 16% had some disrepair to roof coverings and 24% to chimney stacks; however, in all four cases the average (median) disrepair covered around 2.5% of the area. Where stone pointing, render or harling on walls is damaged, moisture can seep into the structure of the walls and cause further damage. Similarly slipped roof tiles or slates can allow water to access the roof structure or the tops of internal walls. Unchecked disrepair to chimney stacks can lead to water ingress and eventually falling masonry.

Data Source: Table HC6 in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes [\[note 10\]](#) [\[note 12\]](#) [\[note 13\]](#) [\[note 14\]](#)

### **5.1.3 Damp, Mould and Condensation**

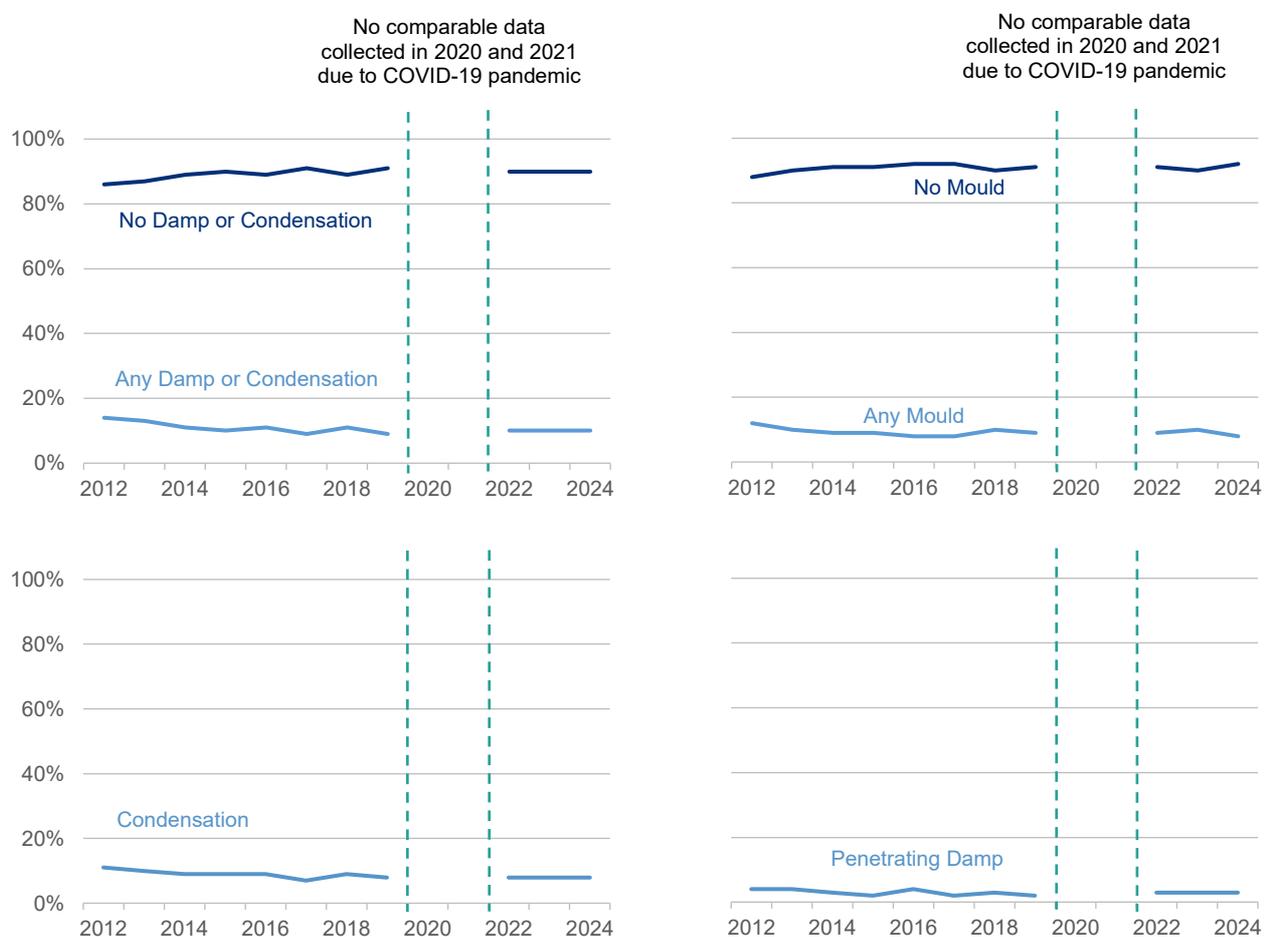
The definitions of mould, damp and condensation are provided in [section 2.8](#) of the Methodological and Technical notes.

Condensation, rising or penetrating damp, or mould recorded in the SHCS can cover anything from a small damp patch or area of condensation on a single wall in one room (caused for example by ineffective ventilation whilst cooking) to prevalence throughout the entire dwelling. Therefore, it does not indicate a serious housing quality issue in all cases.

The incidence of these defects in isolation and together is given in [Figure 5.7](#).

**In 2024, around 92% of all dwellings in Scotland were free from mould.**

**Figure 5.7: Presence of damp, mould and condensation, 2012 to 2024.**



### Description of Figure 5.7

Around 90% of all dwellings in 2024 were free from any form of condensation or damp. This rate has been stable in recent years but represents an overall improvement from 86% in 2012. In 2024, 92% of all dwellings were free from mould, an improvement from 90% in 2023.

In 2024, 3% of the housing stock (around 80,000 dwellings) suffered from some degree of penetrating damp. The presence of penetrating damp has fluctuated between 2% and 4% across the past 12 years of the survey. There were a very small number of properties with rising damp in the survey sample in 2024, suggesting that their share in the housing stock is less than 0.5%. Condensation was observed in 8% of the surveyed stock (around 199,000 dwellings) which is similar to recent years. However, this represents a reduction from 11% in 2012. In 2024, mould was observed in 8% of the housing stock (around 195,000 dwellings). This percentage has fluctuated between 8% and 10% since 2013. Breakdowns of the prevalence of mould and damp by housing characteristics such as dwelling age, and tenure are available in an [interactive dashboard](#).

Data Source: Table HC7a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

## 5.2 Housing Quality Standards

### Key Points

- In 2024, 28% (or 702,000) of all dwellings fell below the Tolerable Standard, similar to 2023.
- The vast majority of dwellings failing the Tolerable Standard did not have satisfactory equipment for detecting and warning in the event of fire (76% or 532,000 dwellings) or against high levels of carbon monoxide (55% or 383,000 dwellings).
- For dwellings failing the smoke alarm criteria this represents a decrease of around 5 percentage points compared to 2023. However, the proportion of dwellings failing the carbon monoxide criteria was similar to 2023.
- The Scottish Housing Quality Standard (SHQS) failure rate in the social sector was 41%, this has fallen from 60% in 2010. Failures of the Energy Efficient criterion were the biggest driver of failures overall. In 2024, 25% of social sector properties did not meet the Energy Efficient criterion.
- The SHQS failure rate in the private sector was 58% and is driven primarily by failures of the Below Tolerable Standard criterion (32%) and the Energy Efficient criterion (35%).
- The majority of dwellings falling below the SHQS failed on a single criterion; this accounted for more than 7 out of 10 failures in the social sector.
- For 69% of social homes failing the SHQS this was due to falling short on just one of the 55 elements which make up the standard.

### 5.2.1 Housing Standards

Two housing quality standards are set by the Scottish Government and monitored through the Scottish House Condition Survey. These are:

- The [Tolerable Standard](#). A "condemnatory" standard which means that it is not reasonable to expect people to continue to live in a house that falls below it<sup>23</sup>.

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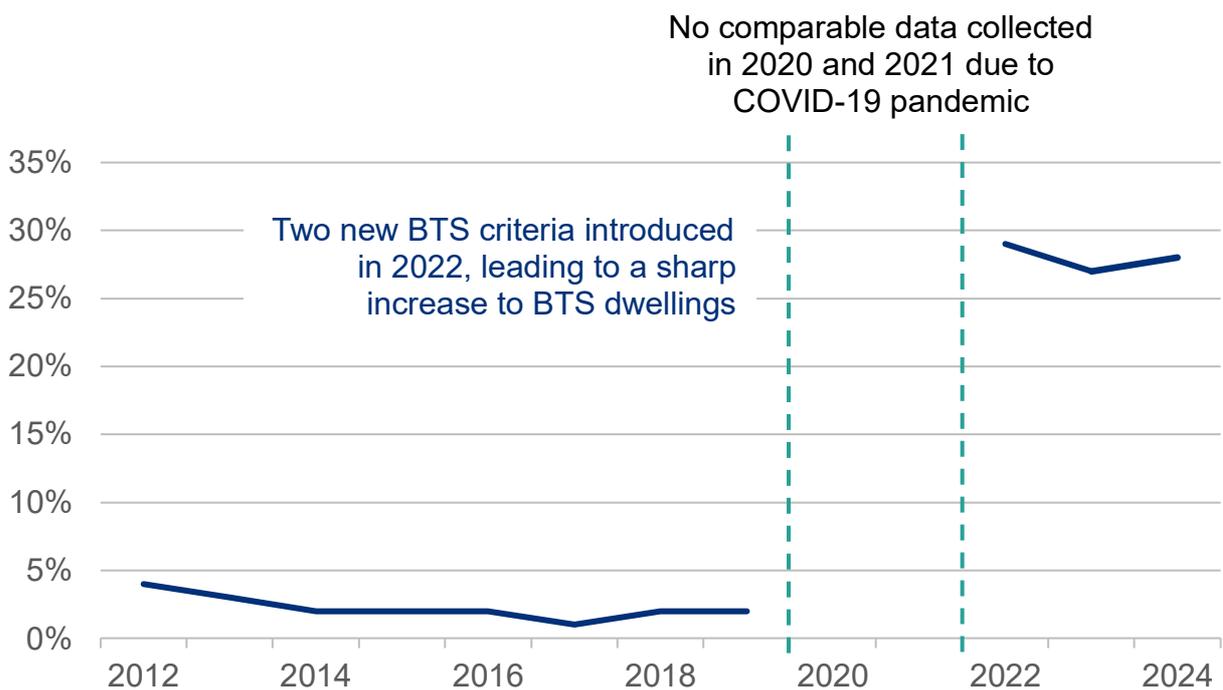
<sup>23</sup> The Tolerable Standard was amended by the Housing (Scotland) Act 1987 (Tolerable Standard) (Extension of Criteria) Order 2019 and from 2022 includes a [new element covering smoke, heat, and carbon monoxide alarms](#). For more information on the Tolerable Standard see [section 2.10](#) of the Methodological and Technical notes.

- The [Scottish Housing Quality Standard \(SHQS\)](#). This was introduced in February 2004 and means social landlords must make sure their tenants' homes are in a good state of repair, energy efficient, healthy, safe and secure. A target was agreed that all social landlords must ensure that all their dwellings pass the SHQS by April 2015.
- Since 2012 this target has been incorporated in the Scottish Social Housing Charter, and the performance of landlords has been monitored by the independent Scottish Housing Regulator (SHR). For more information on the SHQS see [section 2.11](#) of the Methodological and Technical notes.
- Private owners and private landlords are currently under no obligation to bring their properties up to the SHQS standard. However, SHCS collects the same data for all dwellings to allow comparison across the housing stock.

### 5.2.2 Tolerable Standard

**In 2024, 28% of all dwellings (around 702,000) fell below the tolerable standard.**

**Figure 5.8: Dwellings below tolerable standard (BTS), 2012 to 2024.**



Description of Figure 5.8

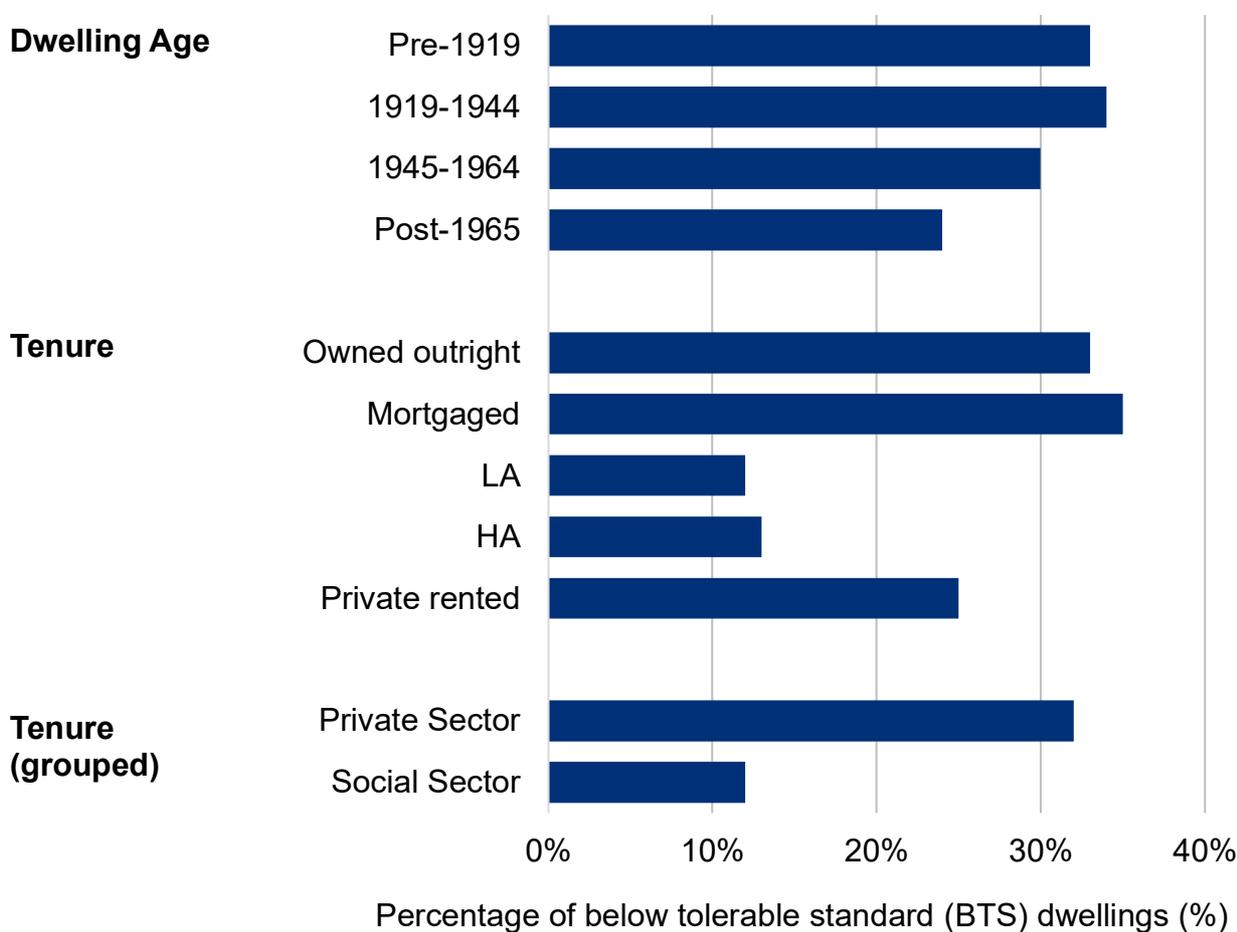
Figure 5.8 shows that in 2024, 28% of all dwellings in Scotland fell below the tolerable standard, similar to 2023. The sharp increase in the proportion of below tolerable standard dwellings from 2% in 2019 to 29% in 2022, is [due to the two new below tolerable standard criteria](#) that were introduced in 2022 (assessing the presence, type and condition of smoke, heat, and carbon monoxide alarms).

Data Source: Table HC8 in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 15\]](#)

**In 2024, 32% of private sector and 12% of social sector dwellings fell below tolerable standard.**

**Figure 5.9: Dwellings below tolerable standard (BTS) by tenure, 2024.**



Description of Figure 5.9

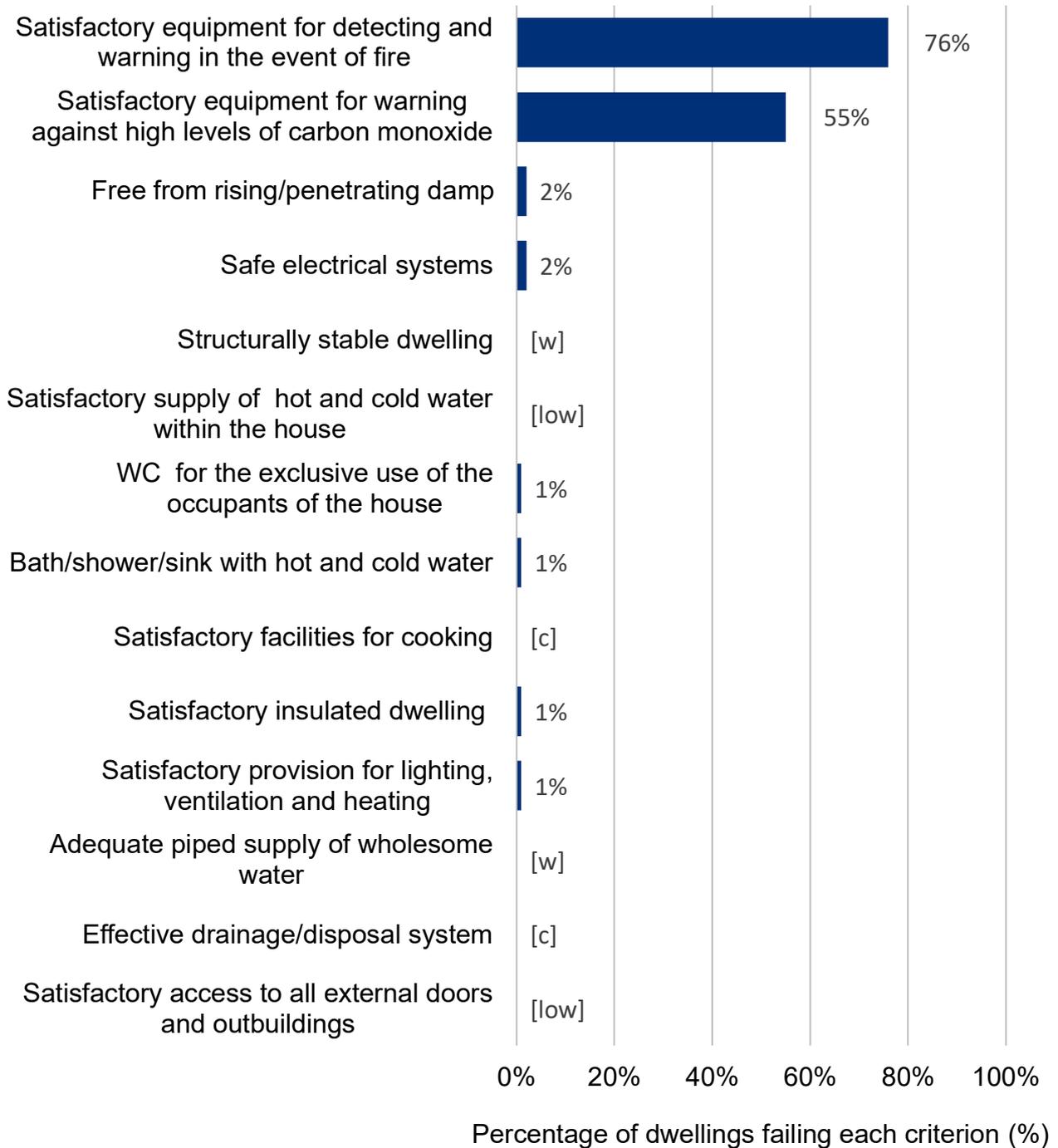
As shown in [Figure 5.9](#) the 32% of dwellings in the private sector fell below the tolerable standard, higher than the social sector at 12%. Looking at the private sector in a more disaggregated way we see that the proportion of owned outright and mortgaged dwellings failing the tolerable standard was similar at 33% and 35% respectively, while the rate for private rented sector dwellings was lower at 25%.

The proportion of dwellings estimated below tolerable standard was higher for older dwellings, 33% for pre-1919 dwellings compared to 24% for post 1965 dwellings.

Data Source: Table HC9a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

**Dwellings which failed the tolerable standard in 2024 most commonly did so because they failed the two criteria assessing the presence, type and condition of smoke, heat, and carbon monoxide alarms.**

**Figure 5.10: Below tolerable standard (BTS) dwellings by individual tolerable standard criteria failures, 2024.**



Description of Figure 5.10

[Figure 5.10](#) shows that of the 702,000 dwellings which failed to reach the tolerable standard in 2024 the majority failed due to the two criteria assessing the presence, type and condition of smoke, heat, and carbon monoxide alarms.

- 76% of below tolerable standard dwellings (around 532,000 dwellings) did not have satisfactory equipment for detecting and warning in the event of fire, a decrease of around 5 percentage points compared to 2023.
- 55% of below tolerable standard dwellings (around 383,000 dwellings) did not have satisfactory equipment for warning against high levels of carbon monoxide, similar to the 2023 figure of 59%.

Other reasons causing dwellings to fail the tolerable standard in 2024 were:

- not free from rising/penetrating damp<sup>24</sup> (14,000 or 2% of BTS dwellings).
- unsafe electrical systems (11,000 or 2% of BTS dwellings).

Data Source: Table HC10a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

### 5.2.3 Scottish Housing Quality Standard (SHQS)

The SHQS is made up of [55 different elements](#) grouped into 5 higher-level criteria:

- Tolerable Standard (A)
- Serious Disrepair (B)
- Energy Efficiency (C)
- Modern Facilities and Services (D)
- and Healthy, Safe and Secure (E)

In the SHCS 54 of the 55 individual elements are assessed by surveyors trained to collect detailed information on housing characteristics. Only one element is not assessed using SHCS data: no information is collected on external noise insulation<sup>25</sup>. The data collected is subsequently aggregated by Scottish Government analysts into higher level measures for each of the 5 criteria and the standard overall.

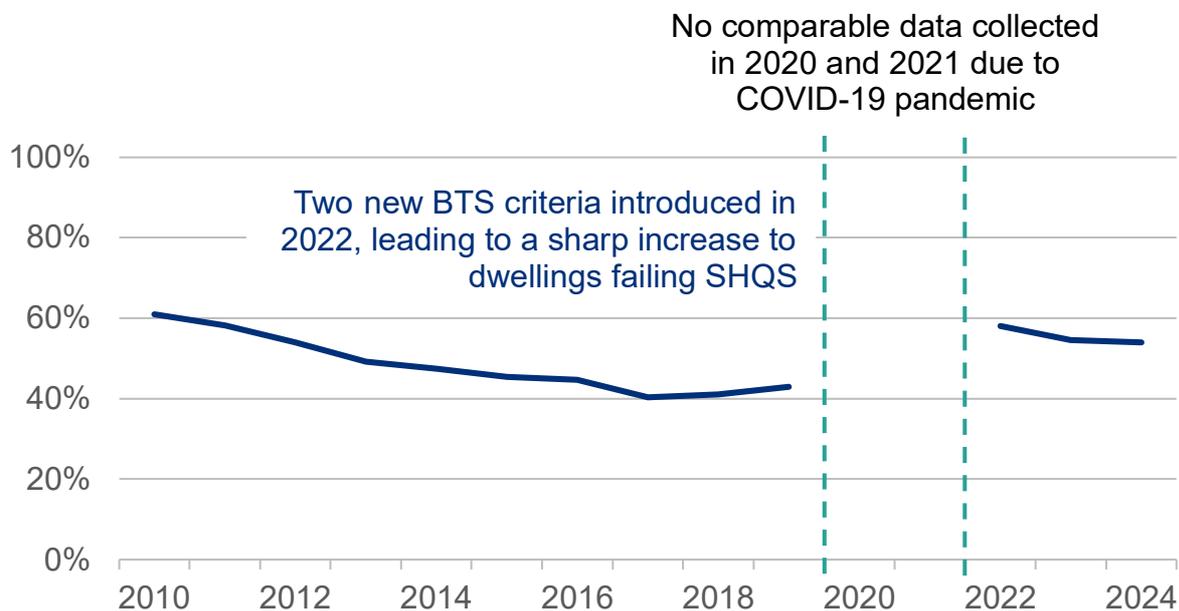
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<sup>24</sup> In general, fewer dwellings fail the tolerable standard based on the presence of rising or penetrating damp than experience this issue overall. For more information see [section 2.10](#) of the Methodological and Technical notes.

<sup>25</sup> Compliance with this element will be considered in social landlords’ annual reporting to the Scottish Housing Regulator on properties meeting the SHQS.

## In 2024, 54% of dwellings failed to meet the SHQS.

Figure 5.11: Dwellings failing SHQS, 2010 to 2024.



Description of Figure 5.11

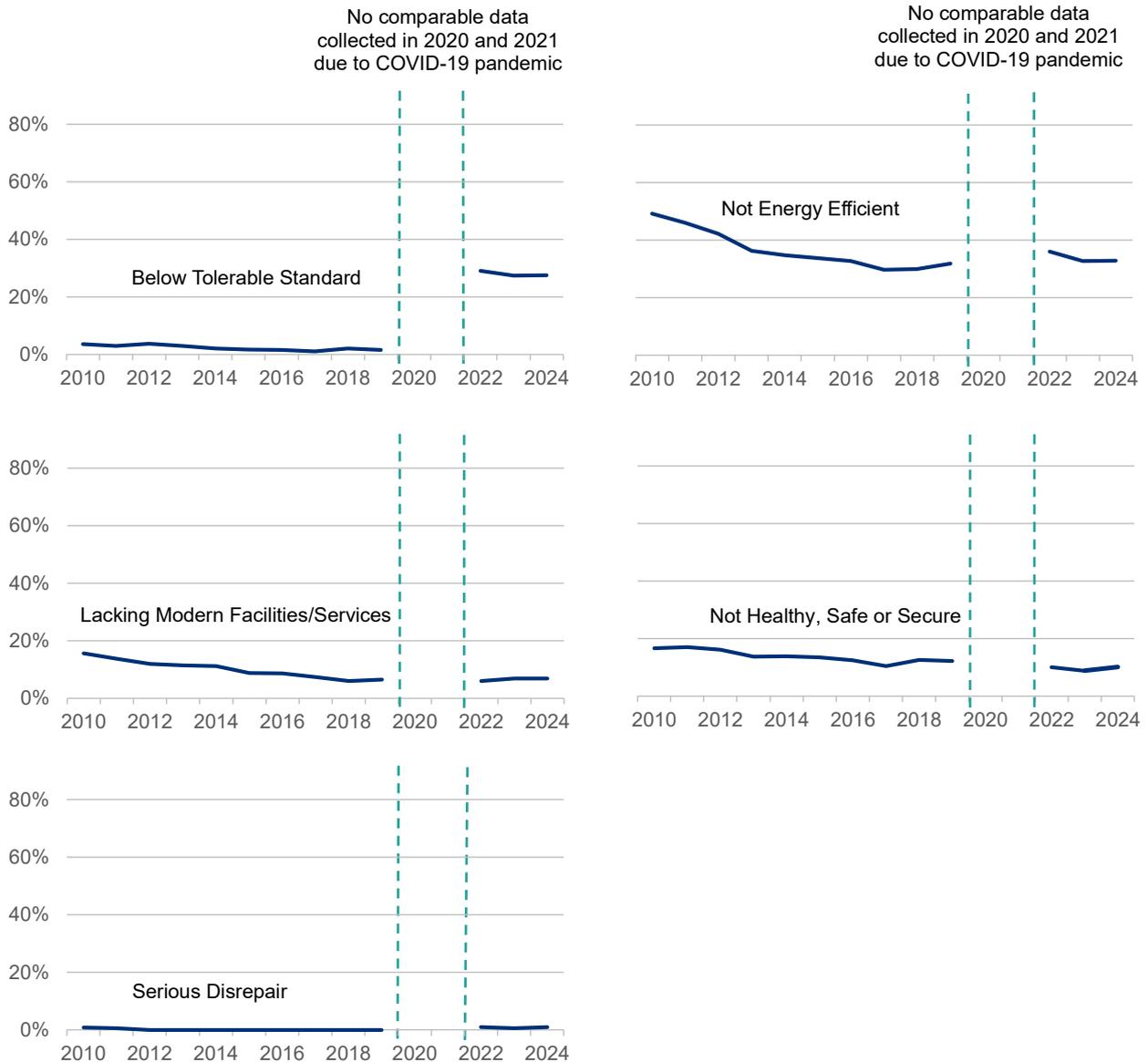
[Figure 5.11](#) shows the overall results for the Scottish housing stock, covering the period 2010 to 2024. In 2024, the SHQS failure rate was 54%, similar to 2023. Similar, to overall failure rates of the tolerable standard, the introduction of the two new below tolerable standard criteria in 2022, led to a sharp increase in the proportion of dwellings failing to meet the SHQS from 43% in 2019 to 58% in 2022.

Data Source: Table HC11a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 15\]](#) [\[note 16\]](#)

**In 2024, the highest failure rate was with respect to the Not Energy Efficient criterion (33%) followed by the BTS criterion (28%).**

**Figure 5.12: Dwellings failing SHQS individual criteria, 2010 to 2024.**



**Description of Figure 5.12**

As in previous years, the highest failure rate was with respect to the not Energy Efficient criterion at 33%, which is similar to 2023 levels. This was followed by the below tolerable standard criterion at 28% again similar to 2023 levels.

In 2024 the failure rate for the Healthy, Safe and Secure criterion (10%), Modern Facilities criterion, (7%), and the Serious Disrepair<sup>26</sup> criterion (1%) were all also similar to 2023.

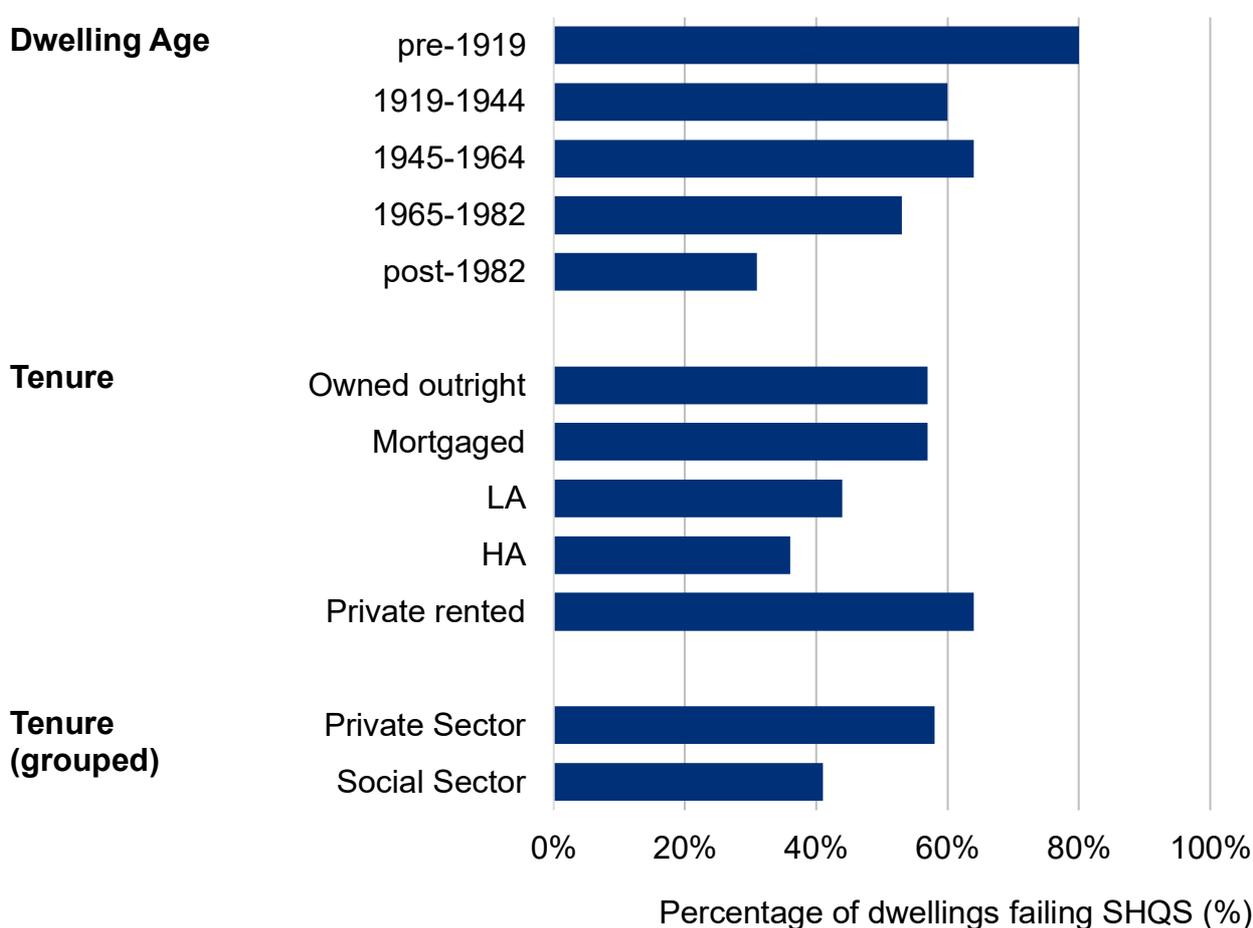
Data Source: Table HC11a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 15\]](#) [\[note 16\]](#)

### 5.2.3.1 Compliance with SHQS by Tenure, Dwelling Age and Location

The overall SHQS failure rate in 2024 stood at 41% for the social sector and 58% for the private sector.

Figure 5.13: Dwellings failing SHQS by dwelling characteristic, 2024.



<sup>26</sup> ‘Serious disrepair’ under the SHQS is not always equal to the disrepair categories quoted in the Section 5.1 of this report. In general a primary element fails the SHQS if more than 20% of the element requires repair or replacement, whereas disrepair recorded in the SHCS does not need to meet this threshold. More information about the ‘Serious Disrepair’ criterion failures and a full list of assessed elements is available on the [SHQS Technical Guidance for Social Landlords \(pdf\)](#).

## Description of Figure 5.13

[Figure 5.13](#) shows the proportion of properties failing the SHQS by selected characteristics. The lowest failure rates are found in the newest dwellings (post-1982, 31%) and in Housing Association (36%) and Local Authority properties (44%). Conversely, households in the PRS had the highest failure rates at 64%. Subsequently the overall SHQS failure rate for social sector housing in 2024 stood at 41%, lower than the private sector at 58%.

Data Source: Table HC12a in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

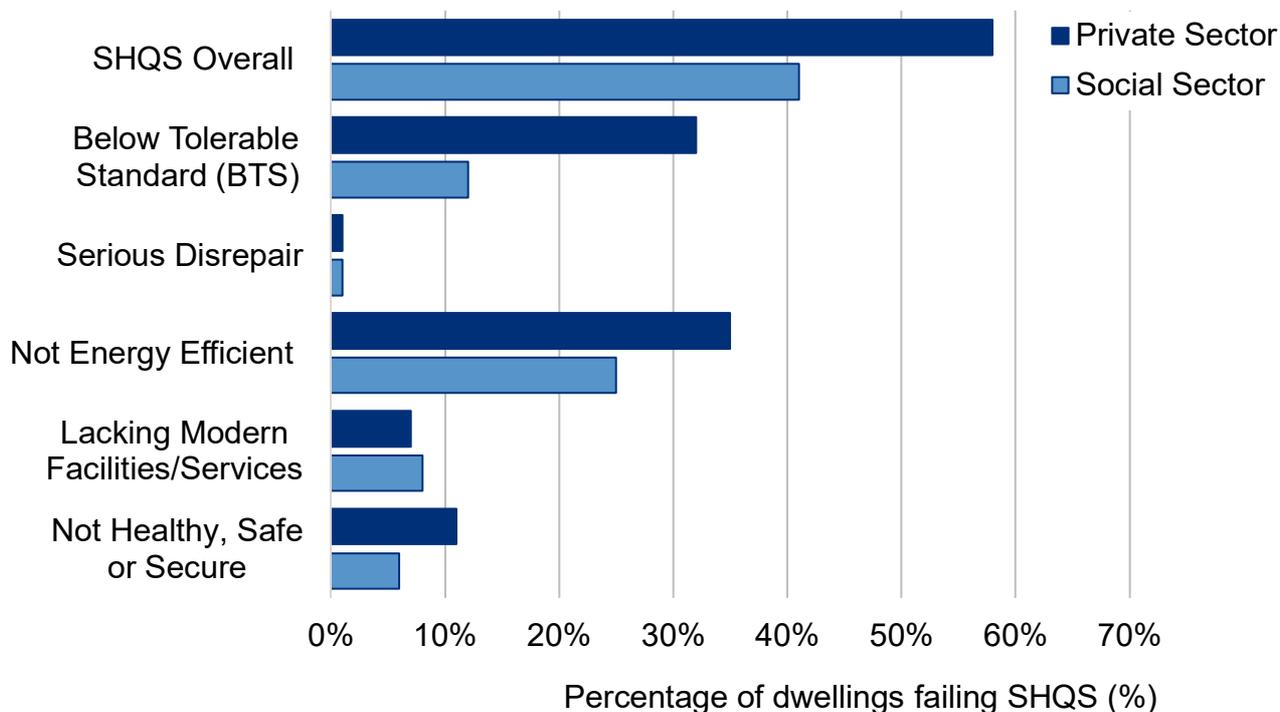
### 5.2.3.2 Individual SHQS Criteria

Failure rates for each criterion of the SHQS for private and social sector housing since 2010 are available in [Table HC13 in ‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

As shown in [Figure 5.12](#) between 2010 and 2017, there was a consistent trend of falling rates of SHQS failures, which then remained similar between 2018 and 2019. Although in some cases the survey sample is not large enough to measure accurately year-on-year changes for each criterion. In 2022, the sharp increase in Below Tolerable Standard (BTS) criterion failure and SHQS failures overall is due to the introduction of two new BTS criteria.

**In 2024, the highest failure rates in the private sector were with respect to the not Energy Efficient criterion (35%), and the BTS criterion (32%). Comparatively in the social sector it was the not Energy Efficient criterion (25%).**

**Figure 5.14: SHQS criteria failure rates by tenure, 2024.**



**Description of Figure 5.14**

The SHCS estimates that 41% of social sector housing failed to meet the SHQS in 2024. This was predominantly due to the not Energy Efficient criterion, where 25% of properties failed. Other failure rates were lower with 12% failing the Below Tolerable Standard criterion, while 6% failed the Healthy, Safe and Secure criterion and 8% failed the Modern Facilities criterion. A small proportion (1%) failed the Serious Disrepair criterion.

If the SHQS applied to private sector housing, around 58% would have failed to meet it in 2024. This would be primarily due to 32% of private sector properties failing to meet the Below Tolerable Standard criterion and 35% failing to meet the Energy Efficient criterion. Additionally, 11% of private sector properties would also fail the Healthy, Safe and Secure criterion and 7% would fail the Modern Facilities criterion. A small proportion (1%) would fail the Serious Disrepair criterion.

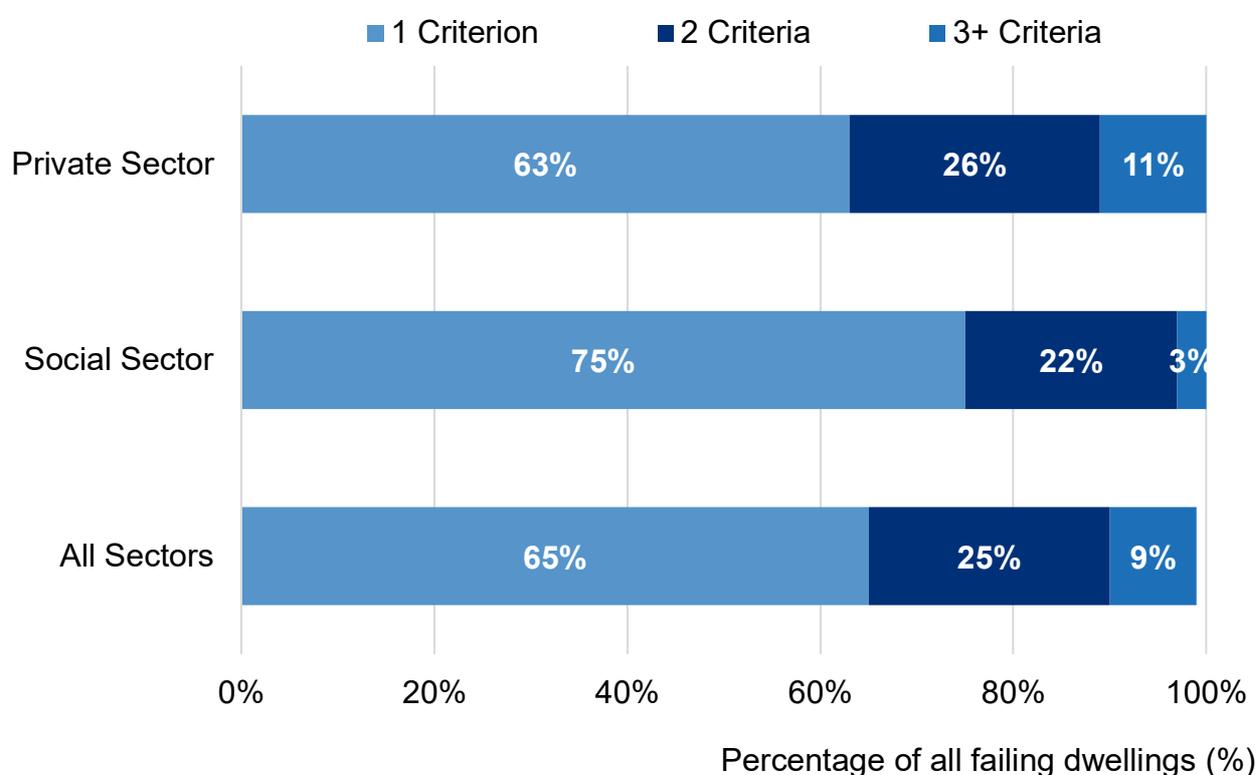
Data Source: Table HC13 in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

### 5.2.3.3 Number of Criteria and Elements Failing

In the large majority of cases failure to meet the SHQS is due to a dwelling not passing one criterion or even a single element. As the standard incorporates 55 different elements, it is generally sufficient for a dwelling to fail on a single one of these in order to be considered not satisfying the higher level criterion requirement and the SHQS overall<sup>27</sup>.

**Since 2010, the majority of failures in both the private and social sector were due to failure on a single SHQS criterion.**

**Figure 5.15: Proportion of dwellings failing the SHQS by numbers of SHQS criteria failures and sector, 2010 to 2024.**



Description of Figure 5.15

[Figure 5.15](#) presents the distribution of dwellings which failed the SHQS by number of criterion failed and tenure. For dwellings which failed the SHQS the majority of failures in 2024 were due to a single criterion: 63% in the private sector, 75% in the social sector and 65% of all dwellings failed due to single criterion.

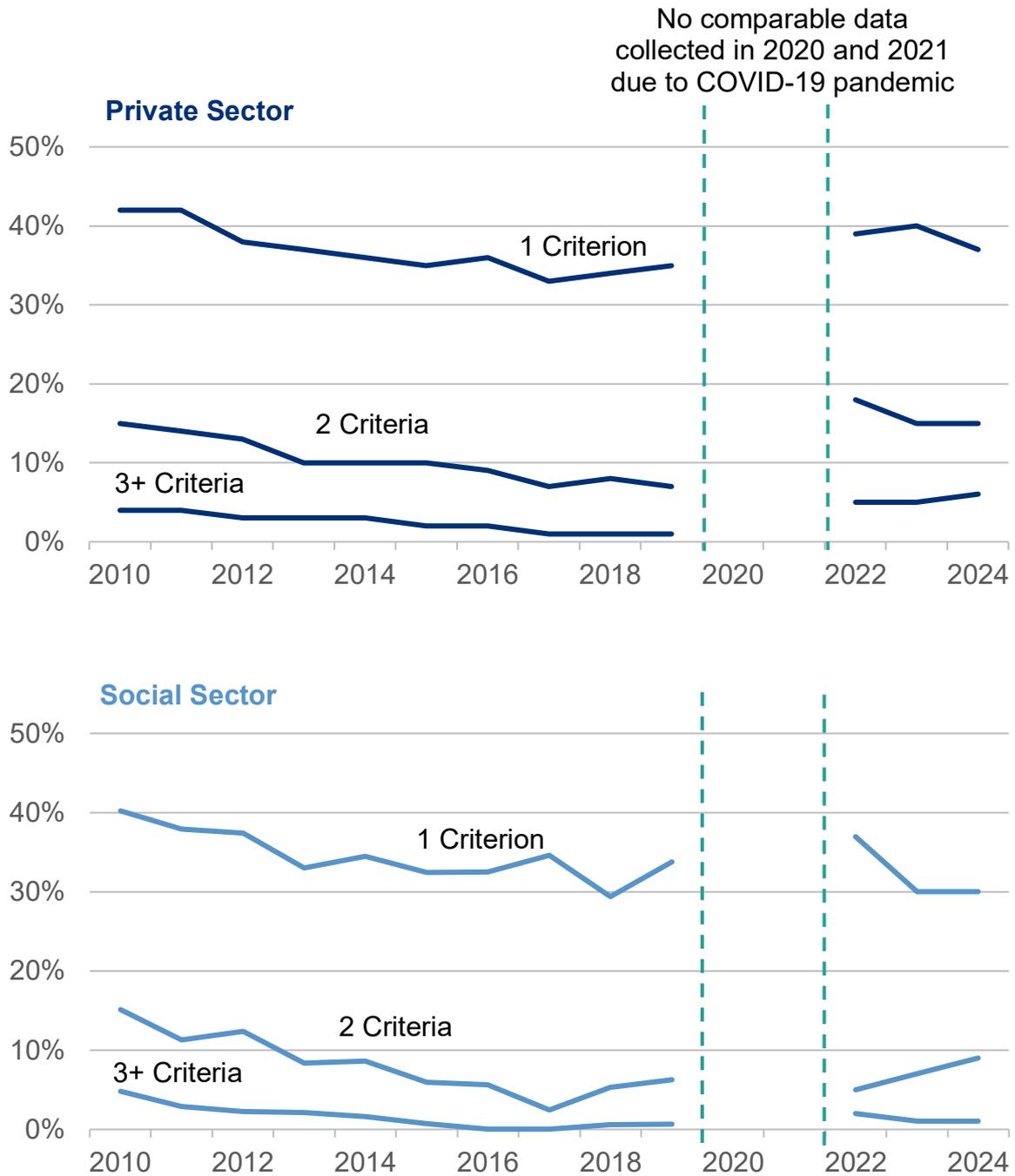
<sup>27</sup> There is an exception to this principle with respect to 14 secondary building elements where failure on at least two is required for a building to be considered not meeting the standard overall. The full guidance is available at [Improving housing standards - Social housing](#).

Data Source: Table HC14 in [‘SHCS 2024- Chapter 05 Housing Conditions - tables and figures’](#).

Notes: [\[note 15\]](#) [\[note 16\]](#)

In 2024, the majority of dwellings failing the SHQS failed due to a single criterion.

**Figure 5.16: Proportion of dwellings failing by number of SHQS criteria failures and sector in 2024.**



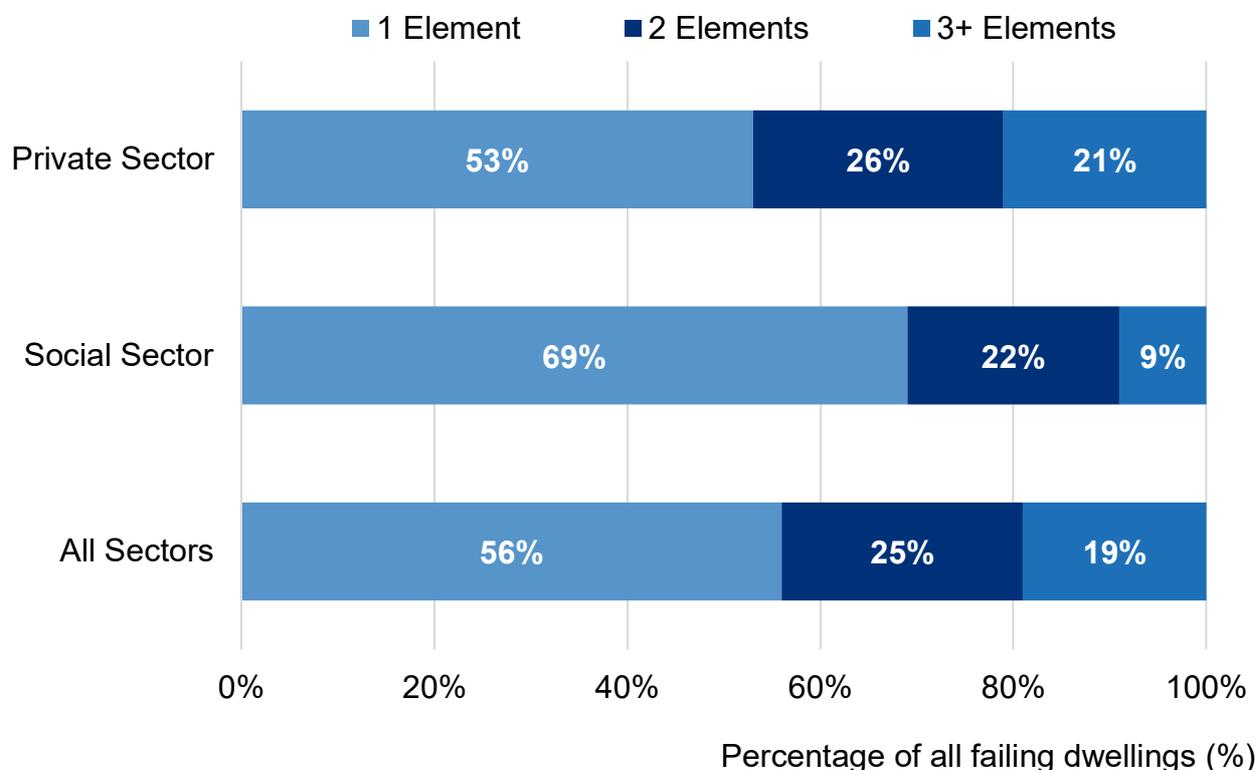
Description of Figure 5.16

[Figure 5.16](#) shows the distribution of dwellings for the private and social sector by number of criteria failed. Since 2010, the majority of failures in both private and social sector dwellings have been due to a single criterion. In 2024 37% of private sector dwellings, and 30% of social sector dwellings failed due to not passing one SHQS criterion.

Data Source: Table HC14 in '[SHCS 2024- Chapter 05 Housing Conditions - tables and figures](#)'.

**In 2024, 56% of dwellings failing the SHQS did so because of a single element.**

**Figure 5.17: Proportion of dwellings failing the SHQS by numbers of SHQS elements failed and sector, 2024.**



Description of Figure 5.17

[Figure 5.17](#) presents the distribution of dwellings failing the SHQS by number of elements failed and sector. The majority of failures in 2024 were due to a single element failure: 53% of private sector, 69% of social sector, and 56% of all failing dwellings failed due to 1 element.

Data Source: Table HC15 in '[SHCS 2024- Chapter 05 Housing Conditions - tables and figures](#)'.

# 6 Bedroom Standard

## 6.1 Overcrowding and Under-Occupancy

### Key Points

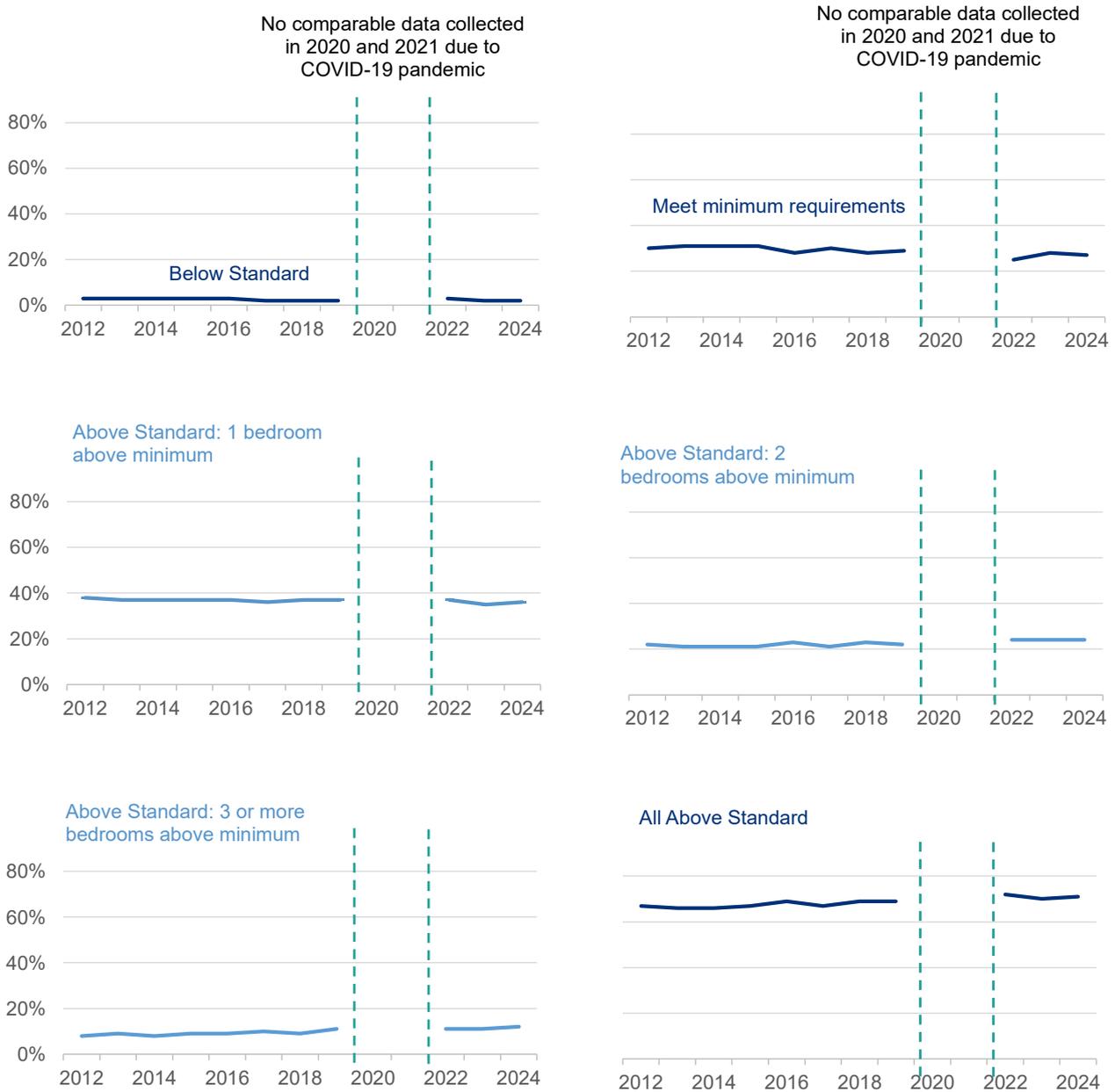
- In 2024 around 46,000 households lived in overcrowded accommodation (2%), under the bedroom standard.
- Around 36% of all households (919,000) had one bedroom in excess of the minimum requirement under the bedroom standard. A further 904,000 (35% of all households) had two or more bedrooms in excess.
- Social sector tenants are more likely to live in accommodation which meets but does not exceed the minimum requirements of the bedroom standard (50% compared to 19% in the private sector). Social sector tenants are also slightly more likely (4%) to live in accommodation which is overcrowded, according to the bedroom standard, than those households living in the private sector (1%).
- By comparison households in the private sector are more likely to live in accommodation which exceeds the bedroom standard (80% vs 46% for social tenants).
- However, when disaggregated, social sector tenants and private rental sector tenants had similar rates of overcrowding (4%), and dwellings meeting but not exceeding the minimum requirements of the bedroom standard (50%).
- 17% of households living in homes meeting (but not exceeding) the bedroom standard felt their home had too few rooms, while 36% of households living in overcrowded homes felt that their home had just about the right number of rooms.

This section examines some key measures of whether households are living in overcrowded or under-occupied conditions. This is determined on the basis of the bedroom standard as defined in the [Housing \(Overcrowding\) Bill 2003](#) taking into account the number of bedrooms available in the dwelling and the type of household that occupies it.

Minimum requirements for bedrooms under the bedroom standard should not be confused with criteria for the removal of the spare room subsidy. More information on the bedroom standard and the differences between the two is included in [section 2.9](#) of the Methodological and Technical notes.

**The majority of dwellings in Scotland have at least one bedroom above the minimum standard.**

**Figure 6.1: Proportion of dwellings which are overcrowded, meet the minimum standard, or exceed it, 2012-2024.**



## Description of Figure 6.1

[Figure 6.1](#) shows how headline occupancy measures have changed over time. In 2024, the national rate of households with at least one bedroom above the minimum standard was 71%, similar to 2023. The proportion of households who live in accommodation that meets (but not exceeds) the minimum bedroom standard was 27%, similar to 2023 as well. The rate of overcrowding (i.e. below the standard) has remained around 2-3% since 2012 and is currently at 2% in 2024. The proportion of dwellings with 3 or more bedrooms above the minimum requirements increased from 8% in 2012 to 11% in 2019 but has remained stable since then and is currently at 12% in 2024.

Data Source: Table BS1a in [‘SHCS 2024- Chapter 06 Bedroom Standard- tables and figures’](#).

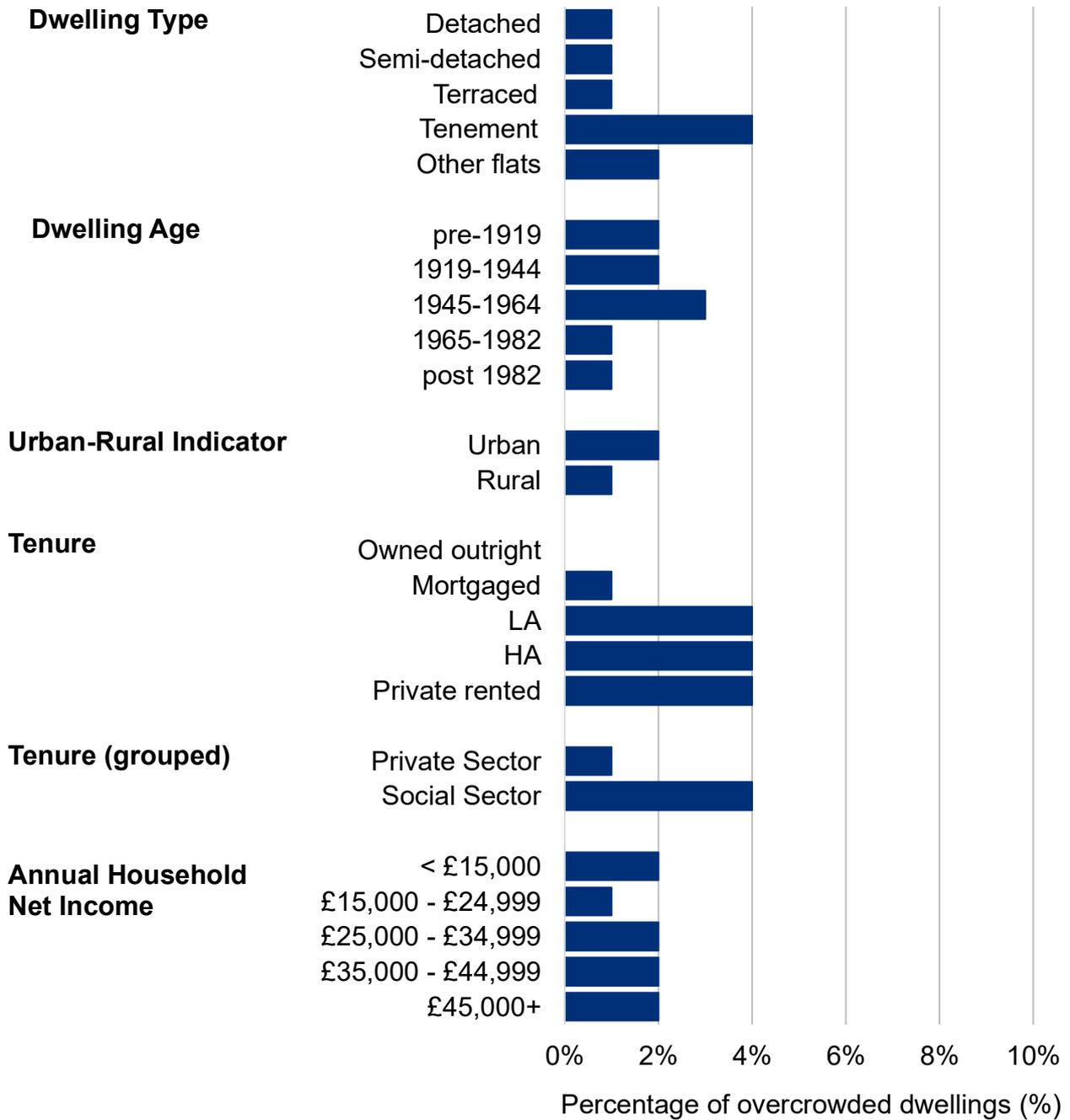
Subsequent sections examine in more detail the differences across household and dwelling characteristic.

### 6.1.1 Overcrowding

A dwelling is considered overcrowded if there are insufficient bedrooms to meet the occupants’ requirements under the bedroom standard definition (see [section 2.9](#) of the Methodological and Technical notes).

**Around 46,000 or 2% of households in Scotland live in overcrowded accommodations.**

**Figure 6.2: Overcrowded dwellings by dwelling and household characteristics, 2024.**



Description of Figure 6.2

In 2024, around 2% of all households (46,000) were found to live in overcrowded accommodation (see [Figure 6.2](#)). Social sector dwellings (4%) were more likely to be overcrowded than private sector dwellings (1%). However, there is a split amongst private sector dwellings as households who own their properties outright (<0.5%) had overcrowding rates below the national average. While those who rent privately (4%) had overcrowding rates statistically similar to socially rented properties and the national average.

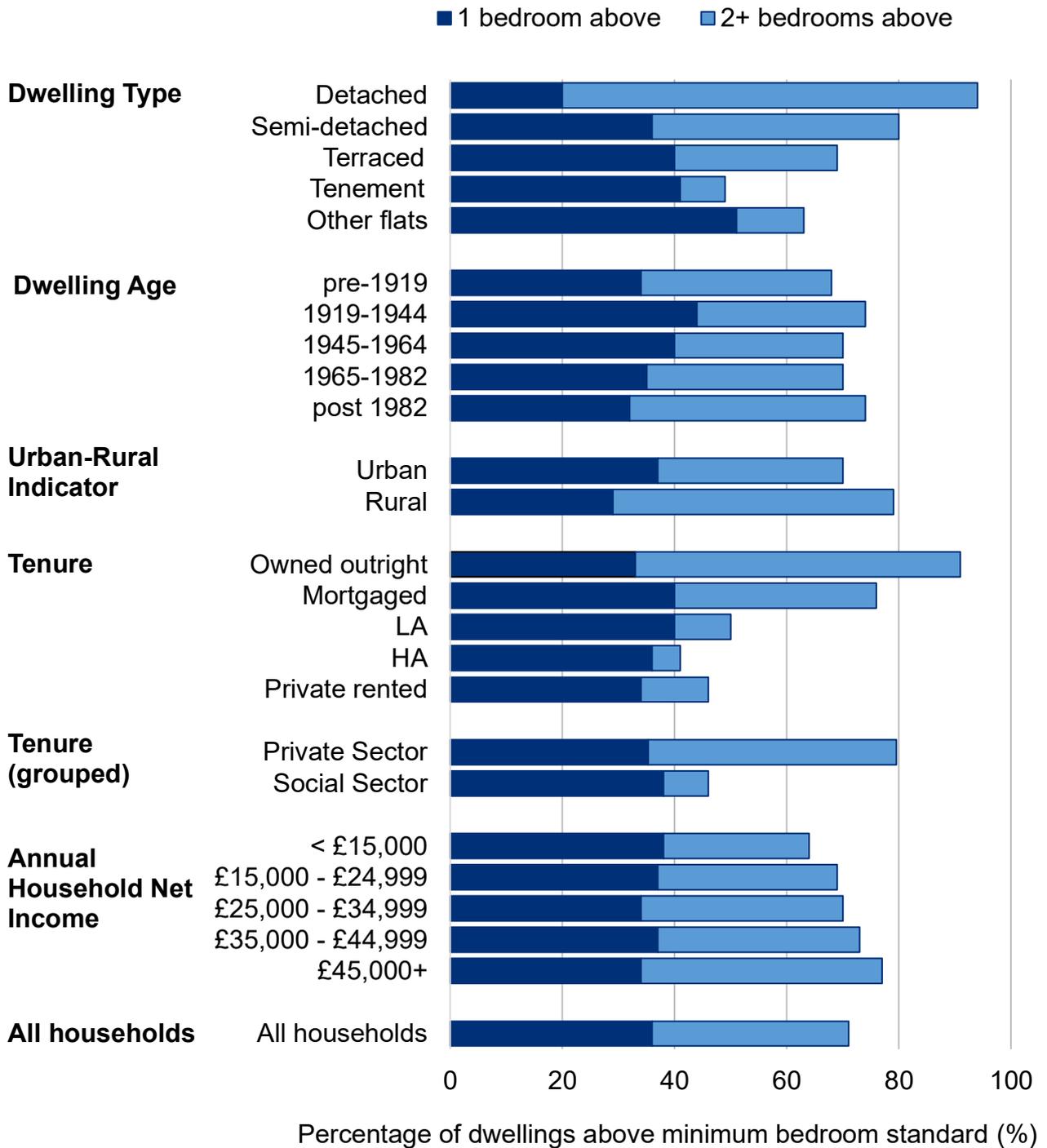
Data Source: Table BS2 in [‘SHCS 2024- Chapter 06 Bedroom Standard- tables and figures’](#).

Notes: [\[note 1\]](#)

### 6.1.2 Under-Occupancy

**919,000 or 36% of households had one additional bedroom above the minimum bedroom standard and around 904,000 or 35% had two or more bedrooms in excess of the minimum standard.**

**Figure 6.3: Dwellings above minimum bedroom standard, by dwelling and household characteristics, 2024.**



### Description of Figure 6.3

As shown in [Figure 6.3](#), around 919,000 or 36% of all households had one additional bedroom above the bedroom standard minimum. Additionally, a further 904,000 or 35% of all households had two or more bedrooms in excess of the minimum standard.

Households in the social and private rented sectors are less likely to have two or more bedrooms in excess of the minimum requirements. Only 8% of social tenants and 12% of private rented tenants have two or more additional rooms, compared to 58% of those who own outright and 36% of those with a mortgage. The proportion of households with one bedroom in excess of minimum requirements is similar between the private and social sectors (38% and 35% respectively).

Higher income households (£45,000 or more per year) are more likely to live in dwellings with two or more additional bedrooms (43%) than the national average (35%).

Detached houses have the highest rates of under-occupancy compared to other dwelling types with 74% having two or more additional bedrooms. By comparison, tenements (8%) and other flats (12%) have the lowest rates of two or more additional bedrooms.

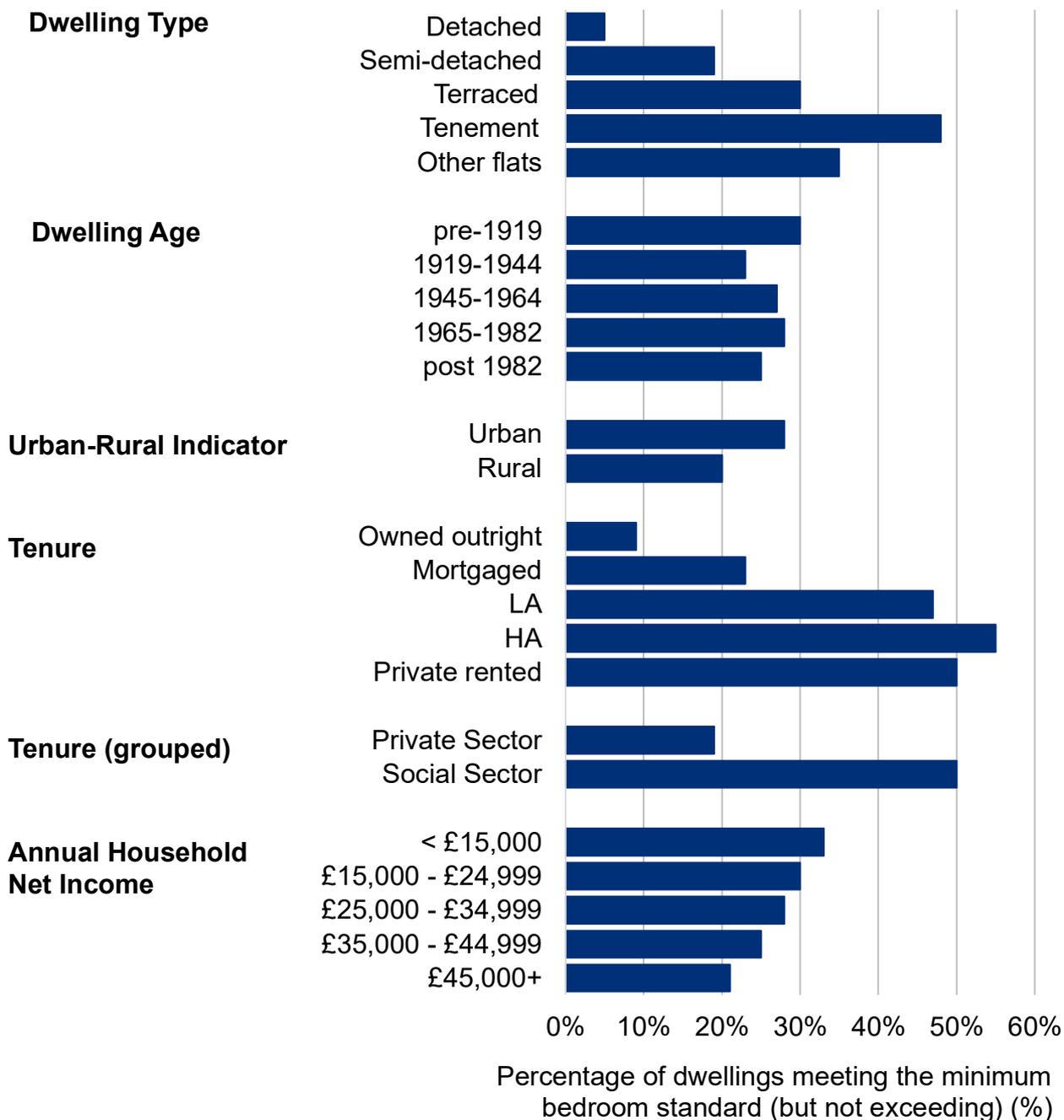
Under-occupation is more common in rural areas. Around 50% of rural dwellings have two or more bedrooms in excess of the minimum requirements under the bedroom standard, compared to 33% for urban properties.

Data Source: Table BS3 in [‘SHCS 2024- Chapter 06 Bedroom Standard- tables and figures’](#).

Notes: [\[note 1\]](#)

In 2024, 683,000 or 27% of households in Scotland lived in accommodation that meets (but does not exceed) the minimum bedroom standard.

Figure 6.4: Dwellings meeting the minimum bedroom standard (but not exceeding), by dwelling and household characteristics, 2024.



Description of Figure 6.4

Social and private rented sector tenants are more likely to live in accommodation which meets (but doesn't exceed) the minimum requirements of the bedroom standard ([Figure 6.4](#)). 50% of social sector and 50% of PRS households live in dwellings which meet but do not exceed the bedroom standard compared to 9% for those who own outright and 23% for those with a mortgage.

In 2024, 48% of tenements and 35% of other flats met (but did not exceed) the minimum standard, a higher rate than most other dwelling types. Urban dwellings are more likely to meet, but not exceed, the minimum standard (28%) than rural dwellings (20%).

Lower income households are more likely to meet and not exceed the bedroom standard compared to higher income households; 33% of households with annual household net income lower than £15,000 meet but do not exceed the standard compared to 21% for those with a net income higher than £45,000.

Data Source: Table BS4 in '[SHCS 2024- Chapter 06 Bedroom Standard- tables and figures](#)'.

Notes: [\[note 1\]](#)

## 6.2 Overcrowding and Under-Occupancy Perceptions

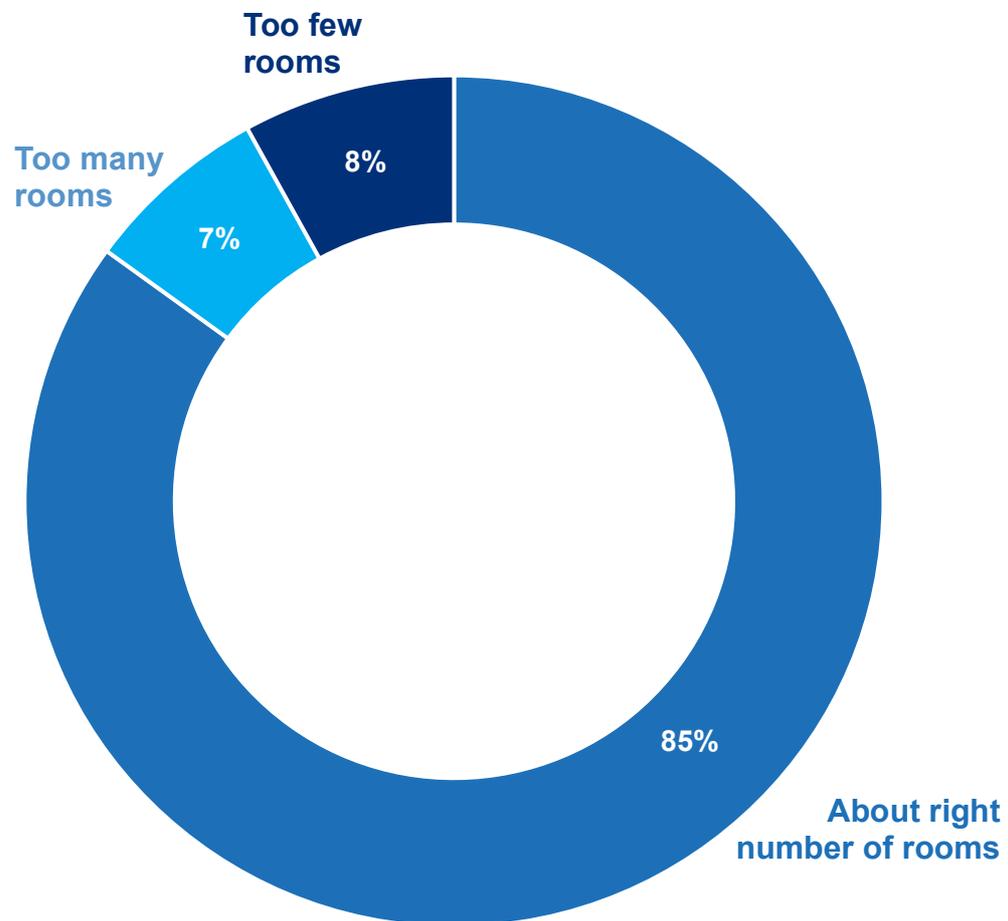
The Scottish Household Survey asks householders about their views on the number of rooms in their house/flat. Since 2021 we have provided an analysis of the responses to this question overall, as well as in relation to the household's compliance with the bedroom standard. It should be noted that this question does not ask specifically about the number of bedrooms in the house/flat<sup>28</sup>.

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<sup>28</sup> There was one dwelling in the 2024 SHCS achieved sample which did not provide a response to the energy perceptions or household perceptions questions. They are excluded from the tables and analysis in this section.

The majority (85%) of householders reported that their accommodation had about the right number of rooms.

Figure 6.5: Householders' perceptions about the number of rooms in their accommodation, 2024.



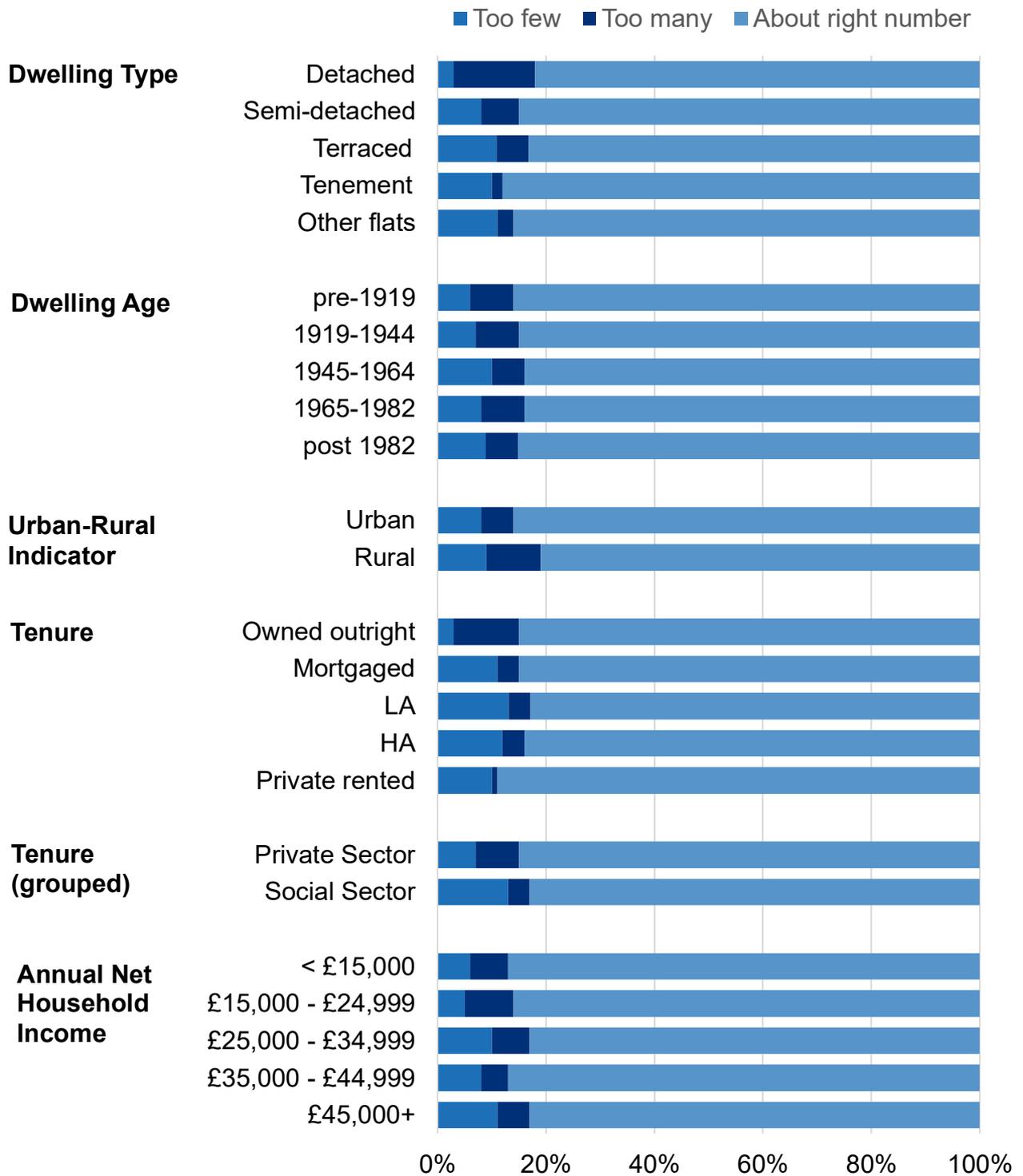
Description of Figure 6.5

85% of householders reported that their accommodation had about the right number of rooms, while 7% believed that they have too many rooms and 8% that they have too few rooms (see [Figure 6.5](#)).

Data Source: Table BS5 in [‘SHCS 2024- Chapter 06 Bedroom Standard- tables and figures’](#).

**Householders' views on the number of rooms in their accommodation vary across household and dwelling characteristics.**

**Figure 6.6: Householders' perceptions about the number of rooms in their accommodation, by dwelling and household characteristics, 2024.**



Description of Figure 6.6

[Figure 6.6](#) shows that in private sector dwellings 8% of householders feel that their accommodation has too many rooms while 7% feel that their accommodation has too few rooms. By comparison in the social sector only 4% feel that they have too many rooms while 13% of the respondents felt that their accommodation has too few rooms.

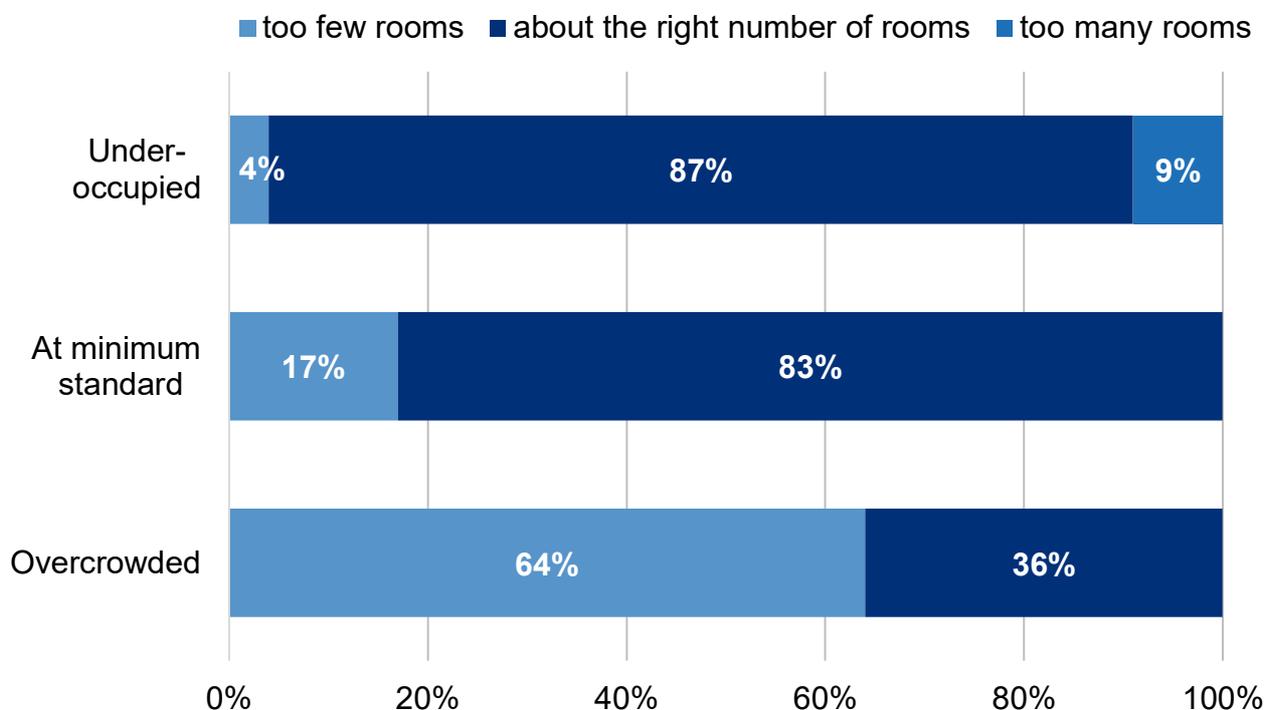
15% of householders who live in detached houses believe that their house has too many rooms, higher than all other dwelling types. By comparison 7% of semi-detached, 6% of terraced houses, 2% of tenements and 3% for other flats believe they have too many rooms. 11% of households with an annual net income of £45,000 or more believe that their accommodation has too few rooms, higher than households with an income less than £15,000 where only 6% of feel the same way.

Data Source: Table BS6 in [SHCS 2024- Chapter 06 Bedroom Standard- tables and figures](#)'.

Notes: [\[note 1\]](#)

**87% of householders who live in under-occupied dwellings feel that they have about the right number of rooms.**

**Figure 6.7: Householders' perceptions about the number of rooms in their accommodation, by bedroom standard, 2024.**



Description of Figure 6.7

[Figure 6.7](#) shows that 87% of respondents who live in a dwelling with 1 or more rooms above the bedroom standard feel that they have the right number of rooms, while 9% feel that they have too many and 4% feel that they have too few rooms. 83% of householders who live in accommodation meeting (but not exceeding) the bedroom standard feel that they have the right number of rooms, similar to dwellings exceeding the bedroom standard. Conversely, 17% feel that they have too few rooms, higher than dwellings with 1 or more rooms above the bedroom standard (4%). 36% of households that live in overcrowded accommodation, feel that they have the right number of rooms, a lower rate than households at or exceeding the bedroom standard.

Data Source: Table BS7 in [SHCS 2024- Chapter 06 Bedroom Standard- tables and figures](#)'.

## 7 Notes

[note 1]: For 2022 onwards, the 2020 urban rural classification is used for reporting. The 2013/14 urban rural classification (2011 data zone edition) is used for reporting 2016 to 2019 data. Prior to 2016, 2001 data zones are used. For information is available in [section 2.3 of the Methodological and Technical notes](#).

[note 2]: Gas grid coverage is determined on the basis of the distance of the dwelling from a low / medium / intermediate pressure gas distribution pipe. Based on the usual maximum distance for standard domestic connection (63 m), dwellings are classified as being “on” or “off” the grid. This does not reflect whether the dwelling is actually connected to the grid. For 2021 an improvement has been introduced whereby a dwelling is classified as “on” the grid if a mains gas connection has been recorded in the physical survey. Further details on the method for estimating distance to the gas grid are available in [section 2.4 of the Methodological and Technical notes](#).

[note 3]: Dwellings without loft spaces are excluded.

[note 4]: Dwellings built post-1983 are presumed insulated when built.

[note 5]: No A-rated properties were sampled between 2010 and 2019.

[note 6]: There are some discontinuities in the underlying methodologies used to calculate fuel poverty therefore: the 2012-2017 estimates were updated in 2019 and are not comparable to those in the 2012-2017 Key Findings reports, see [section 3.1](#) for more details.

[note 7]: Based on the [Scottish Index of Multiple Deprivation \(SIMD\) 2020](#).

[note 8]: Some tables in this report have cells with no data. When this is the case, the cells are marked up with shorthand:

- [low] indicates a value is less than 0.5% or 500 households
- [w] indicates there are no sample cases
- [c] indicates that the base sample is too small to report (below 30 cases) or the estimate represents 2 or fewer sampled households
- [z] indicates that a value is unavailable as it is not applicable

These conventions are consistent with the guidance on [using symbols and shorthand](#) when publishing data tables on public sector websites.

[note 9]: A correction has been applied to the extensive disrepair to one to more critical element timeseries figures, See section [2.7.3 of the Technical and methodological notes](#) for more details.

[note 10]: For a very small number of cases, it was not possible to obtain the disrepair status of every element of the property. Where that element feeds into one of the disrepair categories the result is recorded as unobtainable.

[note 11]: Urgent disrepair concerns only external and common elements which are a mixture of critical and non-critical. Urgent disrepair to critical elements and extensive disrepair to critical elements have been calculated for the first time in 2019 and back updated for 2018 to allow a comparison.

[note 12]: Dwellings which have disrepair to critical elements may also have instances of disrepair to basic elements. Similarly, dwellings which have urgent or extensive disrepair to critical elements may also have urgent or extensive disrepair to basic elements which is not captured in this table. Table HC3a and HC3b in the [SHCS 2023- Chapter 05 Housing Conditions - tables and figures](#) provides rates of urgent and extensive disrepair regardless of element type.

[note 13]: The percentage of disrepair is calculated considering only dwellings where the element is present.

[note 14]: Median extent of disrepair by area of the element.

[note 15]: The Tolerable Standard was amended by the Housing (Scotland) Act 1987 (Tolerable Standard) (Extension of Criteria) Order 2019 and now includes a new element covering smoke, heat, and carbon monoxide alarms. From 2022 the SHCS surveyors considered the presence, type and condition of smoke and heat alarms in a house when deciding if the house meets the Tolerable Standard.

[note 16]: Figures on SHQS failure rates for 2014 onwards are not entirely comparable to previous years published in key findings reports from the SHCS. Because of missing tenure information, a small number of dwellings (see the subsection on missing tenure information for more detail) are excluded from tenure breakdowns in figures relating to years prior to 2014. In addition, small changes to data processing relating to failure thresholds for the energy efficiency criterion, as well as other minor data processing corrections were introduced in 2014. Although the effect of these corrections on the overall failure rates in the social sector was neutral, some discontinuities with previous years cannot be ruled out, especially when considering more detailed breakdown.