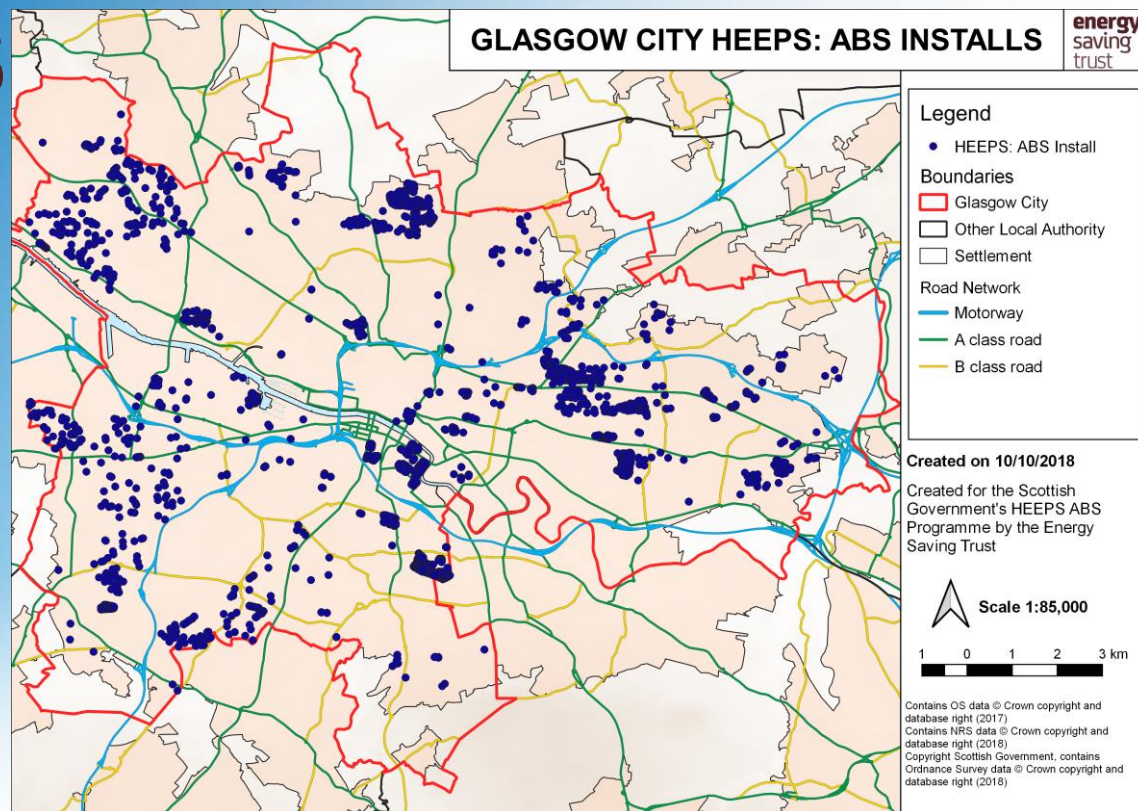


Glasgow City HEEPS: ABS Case Study

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Overview

The Scottish Government's HEEPS: ABS* team requested 8 case studies to compare the available HEEPS: ABS install data, alongside other energy efficiency related characteristics, with three goals in mind:

- To provide a more detailed breakdown of the install measures data to date.
- To allow greater comparison between the different local authorities as well as across the duration of the HEEPS: ABS programme.
- To provide a series of illustrations that the Scottish Government or local authorities can use to promote the work achieved under the HEEPS: ABS programme

This presentation contains the full case study and illustration set for Glasgow City (excluding GIS maps – please see appendix files).

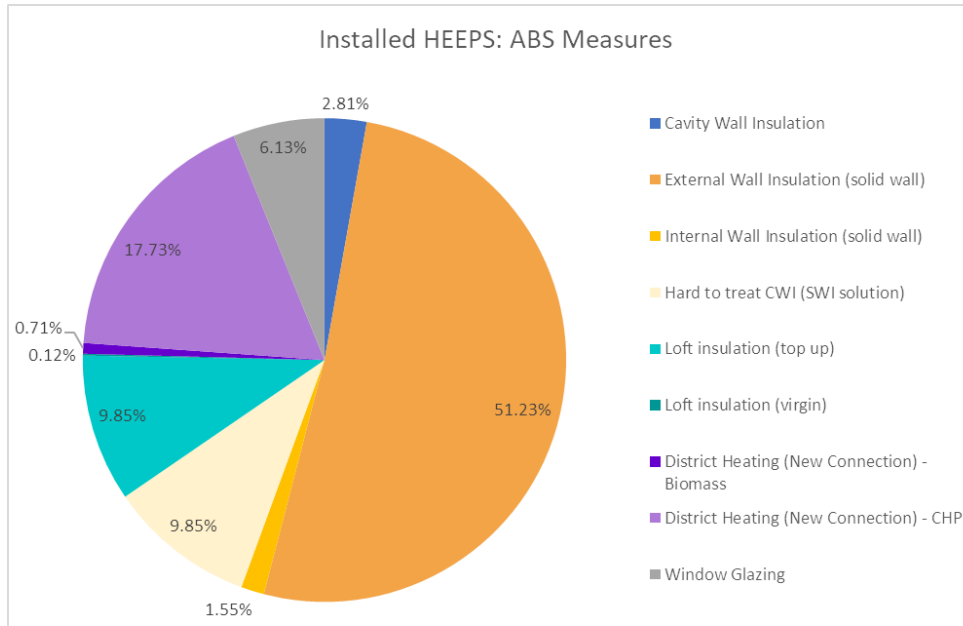
The Glasgow City HEEPS: ABS dataset

Financial Year	Number of records	% of records	Notes
2013/14	3,214	39.58	
2014/15	2,353	28.98	
2015/16	1,846	22.73	
2016/17	707	8.71	Small number of installs not yet reported
2017/18	0	0	No reporting yet as project delayed into 2018/19
Total Installs:	8,120	100.00	

Reference numbers	Number of records	% of records
With pre-installation EPC	2,647	32.60
With post-installation EPC	2,136	26.31
With pre and post-installation EPC	1,753	21.59
With GDAR	0	0
With measure reference number	217	2.67
Total Installs:	8,120	--

Glasgow City council has completed 12.6% of the total reported HEEPS: ABS installs to date (26/09/2018).

Installed Measures

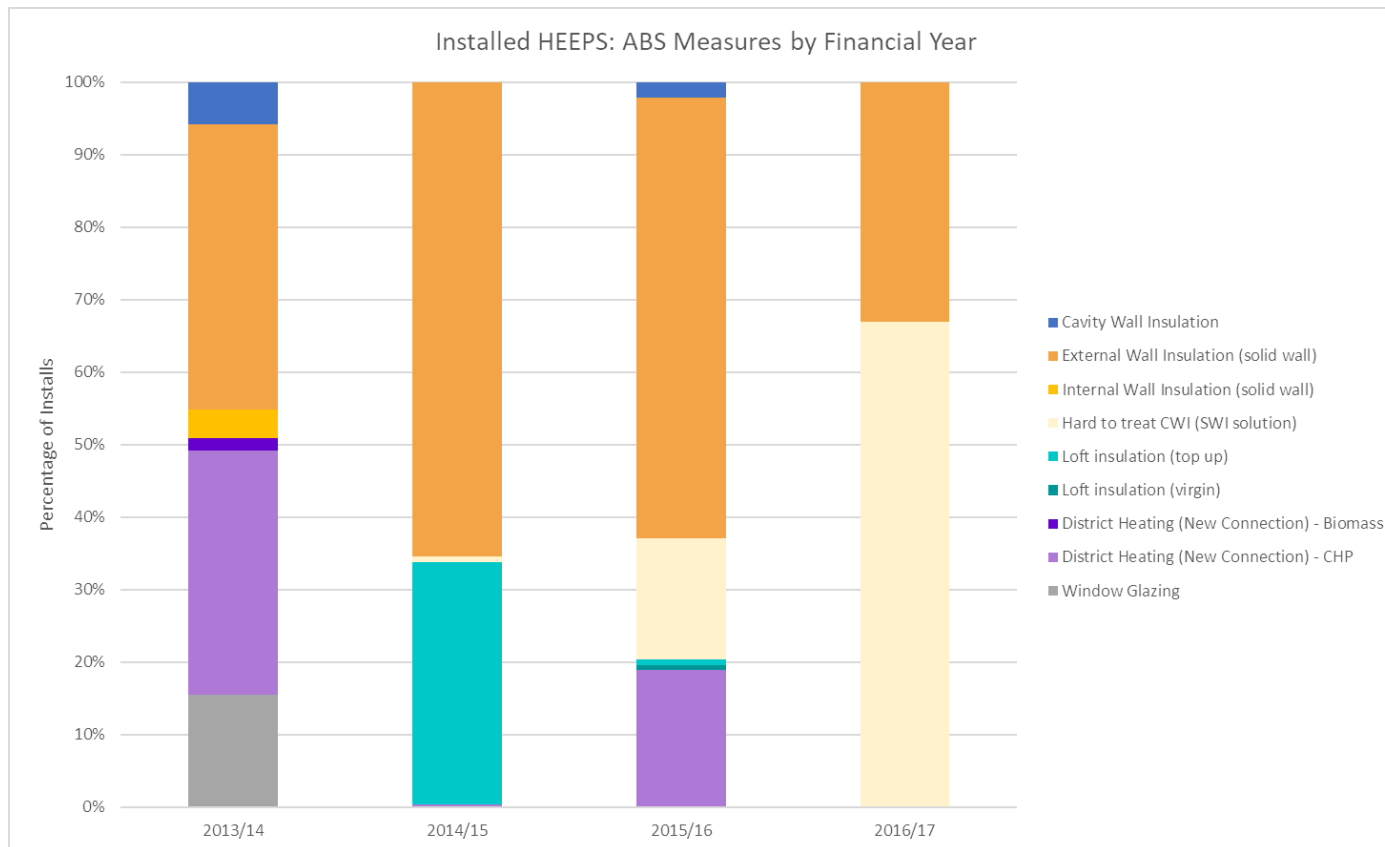


Glasgow City’s HEEPS: ABS programme is split between providing External Wall Insulation to solid walled properties and a wider suite of other energy efficiency measures.

Glasgow City is one of only two local authorities to have used HEEPS: ABS funding to install connections to district heating systems (the other being Aberdeen City).

Measure Name	Number of records	% of records
Cavity Wall Insulation	228	2.81
External Wall Insulation (solid wall)	4,160	51.23
Internal Wall Insulation (solid wall)	126	1.55
Hard to treat CWI (SWI solution)	800	9.85
Loft Insulation (top up)	800	9.85
Loft insulation (virgin)	10	0.12
District Heating (New Connection) - Biomass	58	0.71
District Heating (New Connection) - CHP	1,440	17.73
Window Glazing	498	6.13
Totals	8,120	100.00

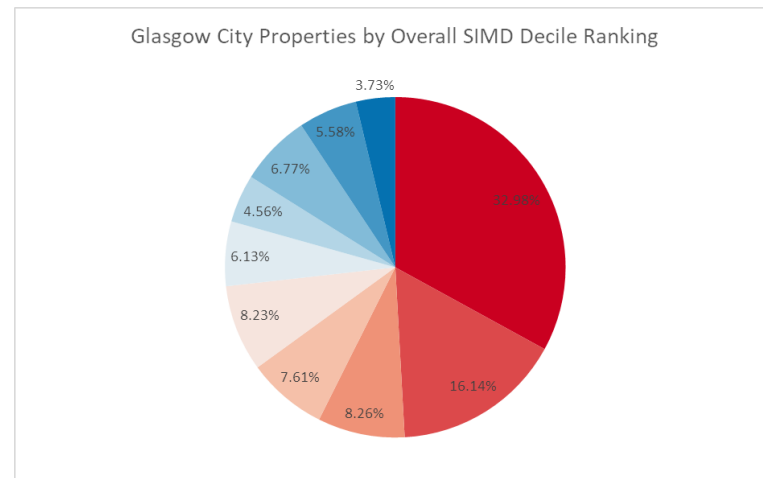
Installed Measures by Financial year



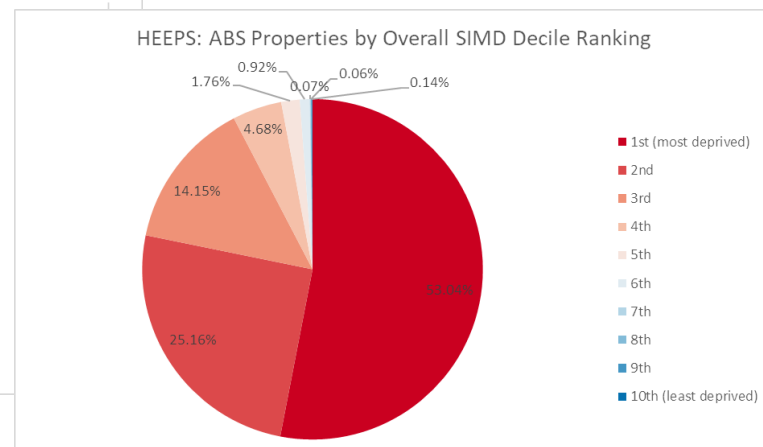
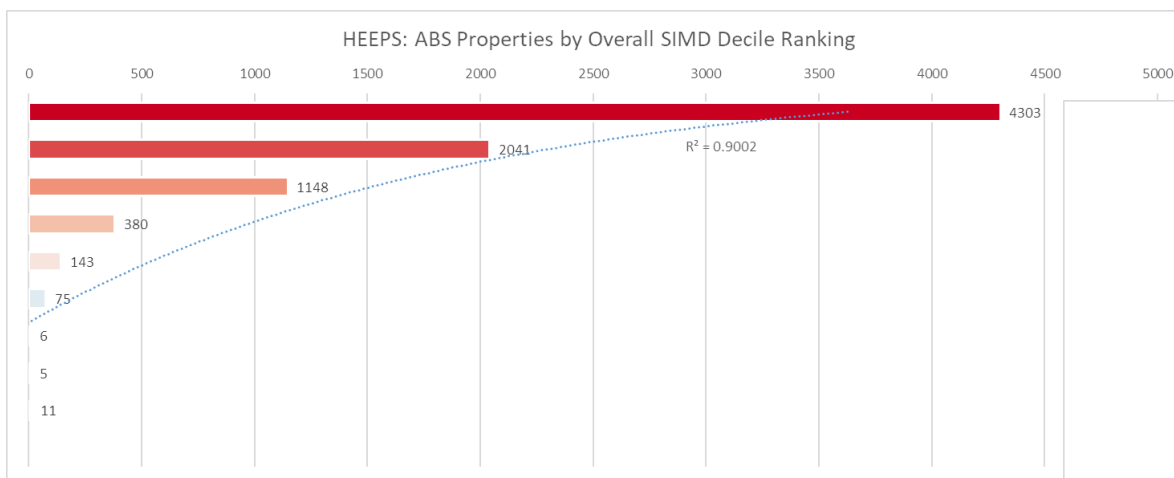
A considerable component of EWI installs remain present throughout each year of Glasgow City’s HEEPS: ABS programme. We can also see large phases of district heating work during the 2013/14 and 2015/16 financial years (35% and 19% of the total financial year installs respectively).

Scottish Index of Multiple Deprivation (SIMD)

Glasgow City has a higher proportion of more deprived areas compared to the rest of Scotland with 73.2% of the properties being found in the 5 lowest SIMD ranks. However 99.8% of installs occur within those same ranks and 92.4% of installs occur within the 3 most deprived ranks. This shows that there is a clear relationship between the targeting of HEEPS: ABS properties and SIMD deprivation.



For more information see the HEEPS: ABS Installs by SIMD map.

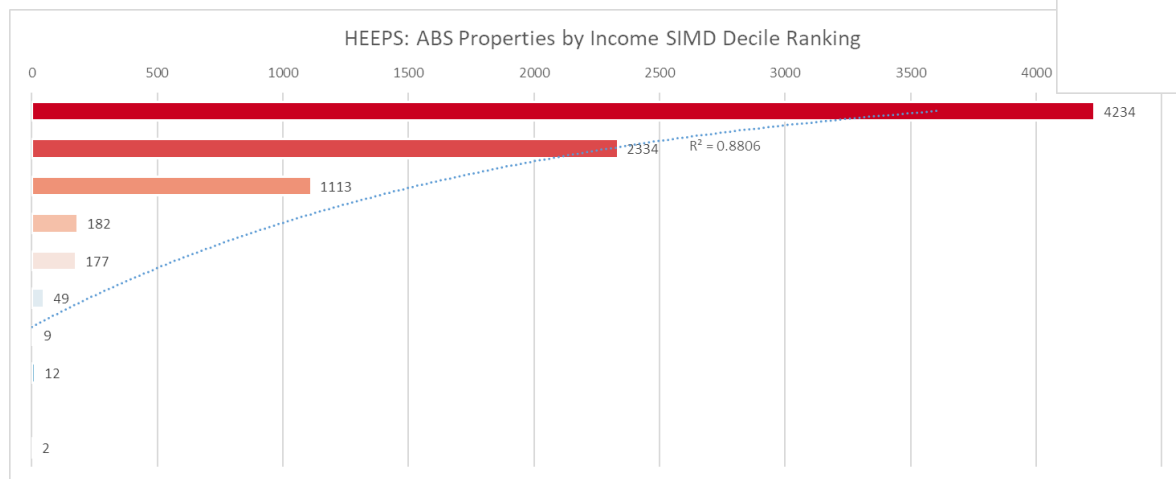
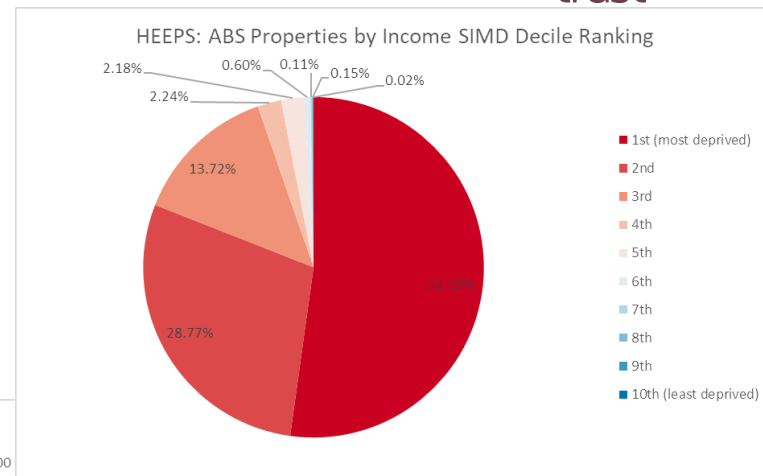


The relationship between HEEPS: ABS installs and the SIMD remains strong amongst many of the different information domains from which it is based upon although the income and housing domains may be of particular importance to fuel poverty schemes.

SIMD Income Domain

The income domain is calculated by dividing the number of adults, and dependent children, who receive a means tested or income replacement benefit by the total number of people per data zone.

Again the vast majority of installs, 94.7%, occur within the 3 most income deprived ranks.

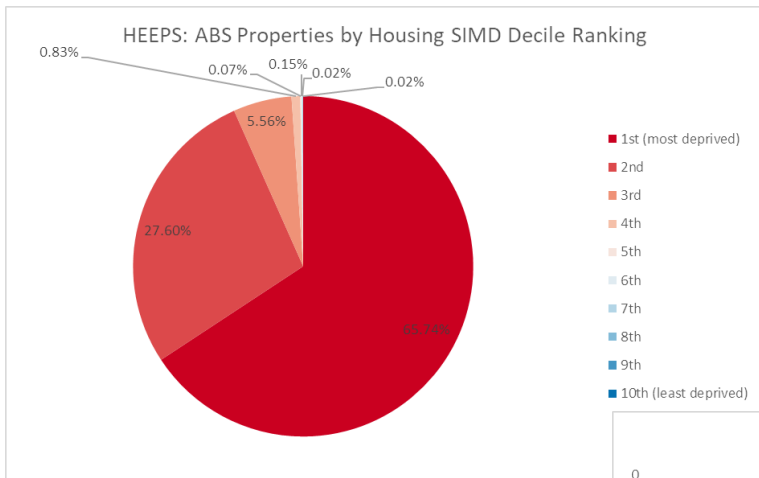


Those in the lowest income domain ranks will not only be more likely to be in fuel poverty (using either the 10% of income or LIHC* measurements) but the high prevalence of benefits means

that there is a greater potential of HHCRO** ECO funding which can be leveraged to assist install measures in these areas. This may become even more important in the proceeding years as the CERO*** ECO, which was not benefits dependent, has now been discontinued and the reliance on HHCRO may increase as a result.

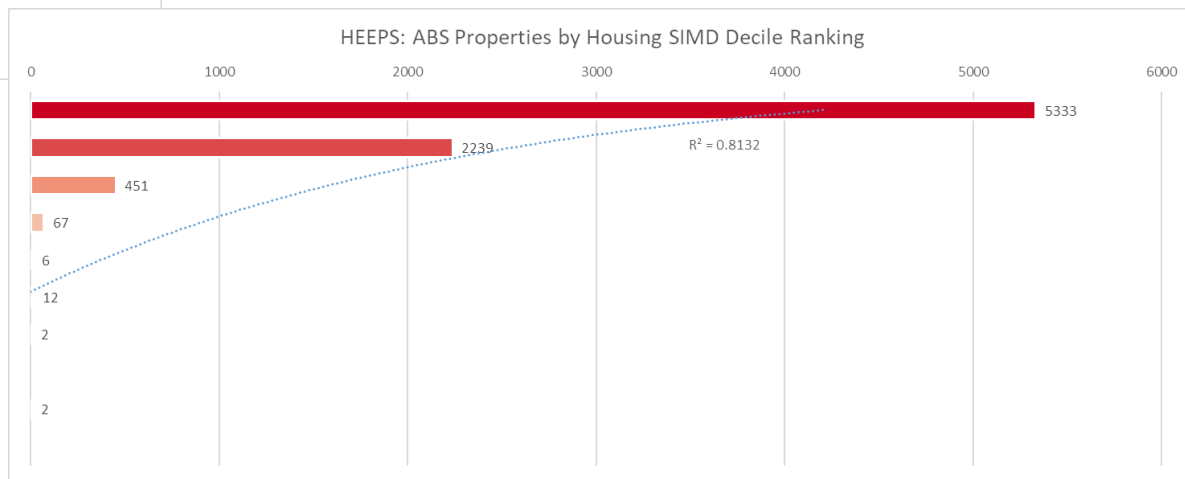
SIMD Housing Domain

The housing domain is based on census data and represents a combination of households which are overcrowded (more occupants than required rooms) and/or which have no central heating (as answered by the householder) divided by the data zone population.



The occupants are therefore not only more likely to be in fuel poverty due to a lack of affordable heating but may also be more susceptible to the effects of fuel poverty because larger households may contain a greater proportion of vulnerable individuals such as children, the elderly and those with long-term health issues.

As 98.9% of installs occur within the lowest 3 housing ranks there is a strong argument that Glasgow City has helped some of the most vulnerable to the effects of fuel poverty.

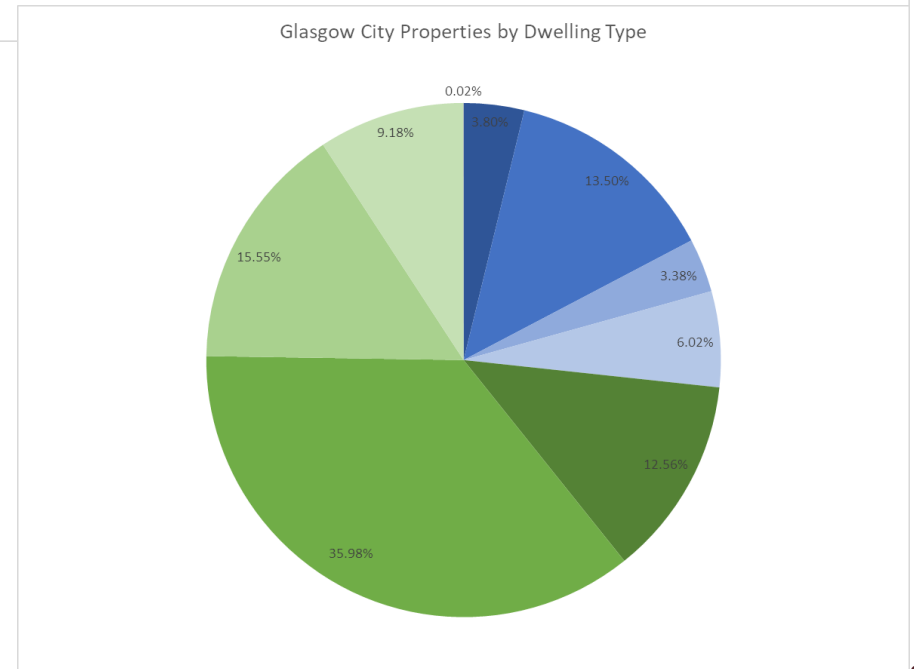
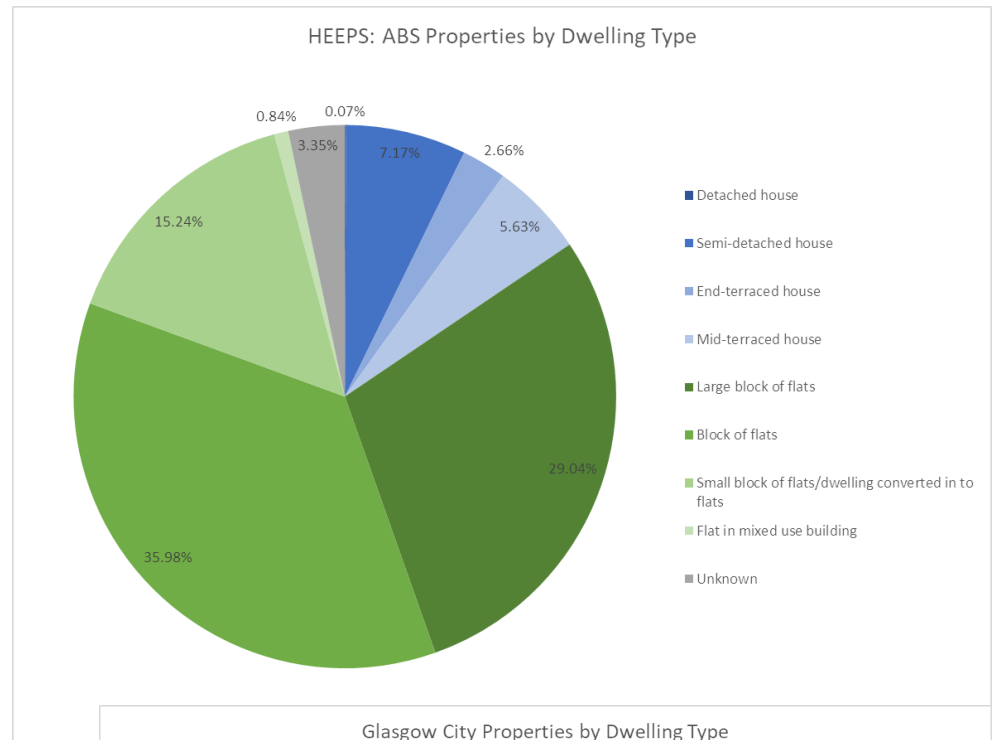


Dwelling Type

Glasgow City's programme has a very strong focus on improving flats as this dwelling type received 81% of the total installs.

Bigger units containing a larger number of homes are the main priority because large blocks of flats (defined as 15+ flats per building) are over represented and small blocks of flats (defined as 2-5 flats per building) are under-represented compared to the general property type distribution of Glasgow City.

Larger individual homes such as detached and semi-detached houses provide only a small proportion of the total installations (15.5%).

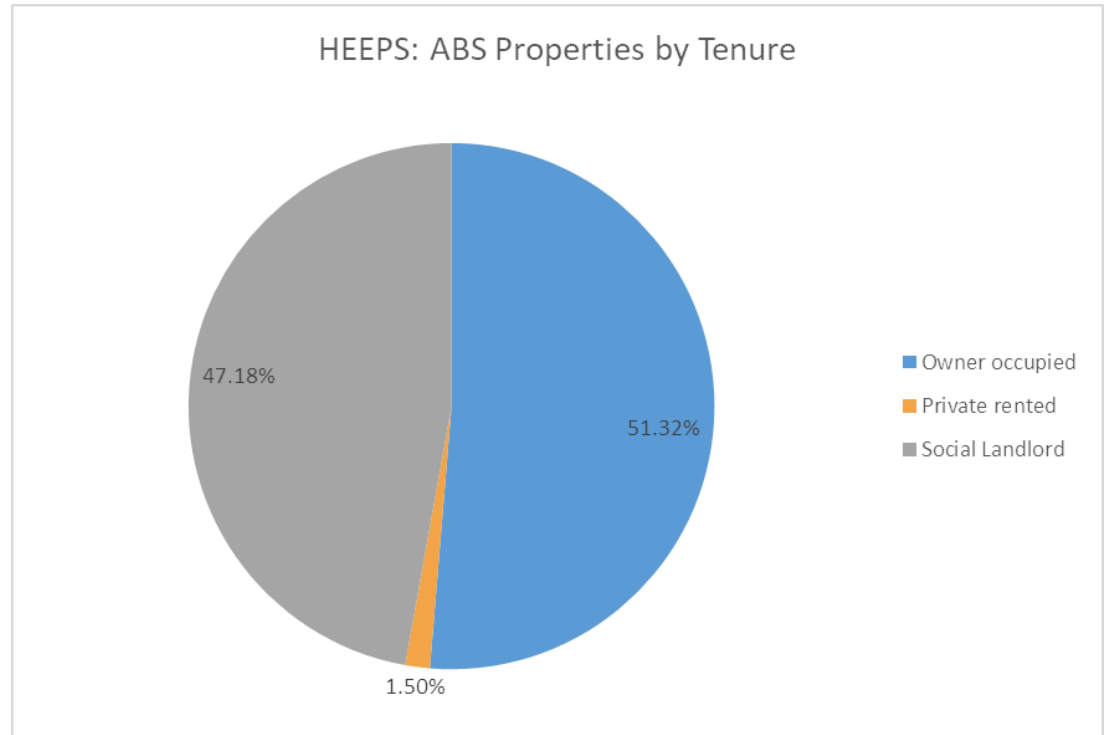


Tenure

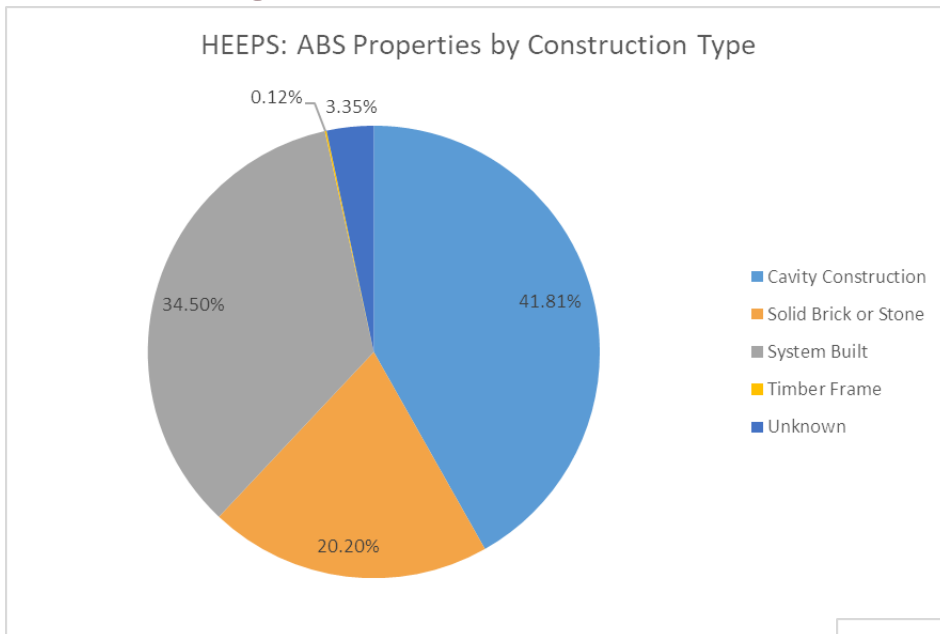
The HEEPS: ABS work completed can be more or less evenly divided between the owner occupied and social landlord sectors, with an additional small private rented sector component.

As Glasgow City owns no social housing stock themselves this highlights the close relationship between the council and housing associations to tackle energy

efficiency issues. The tenure data, alongside the previous slides, also show the council's commitment to working in areas which are densely populated, of mixed tenure and suffer from a high degree of deprivation.

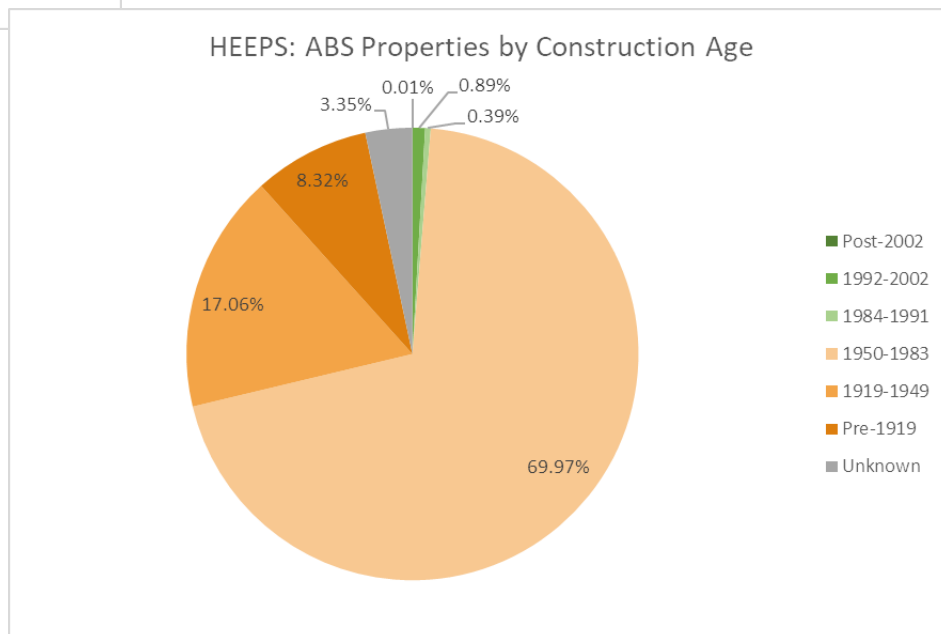


Building Construction



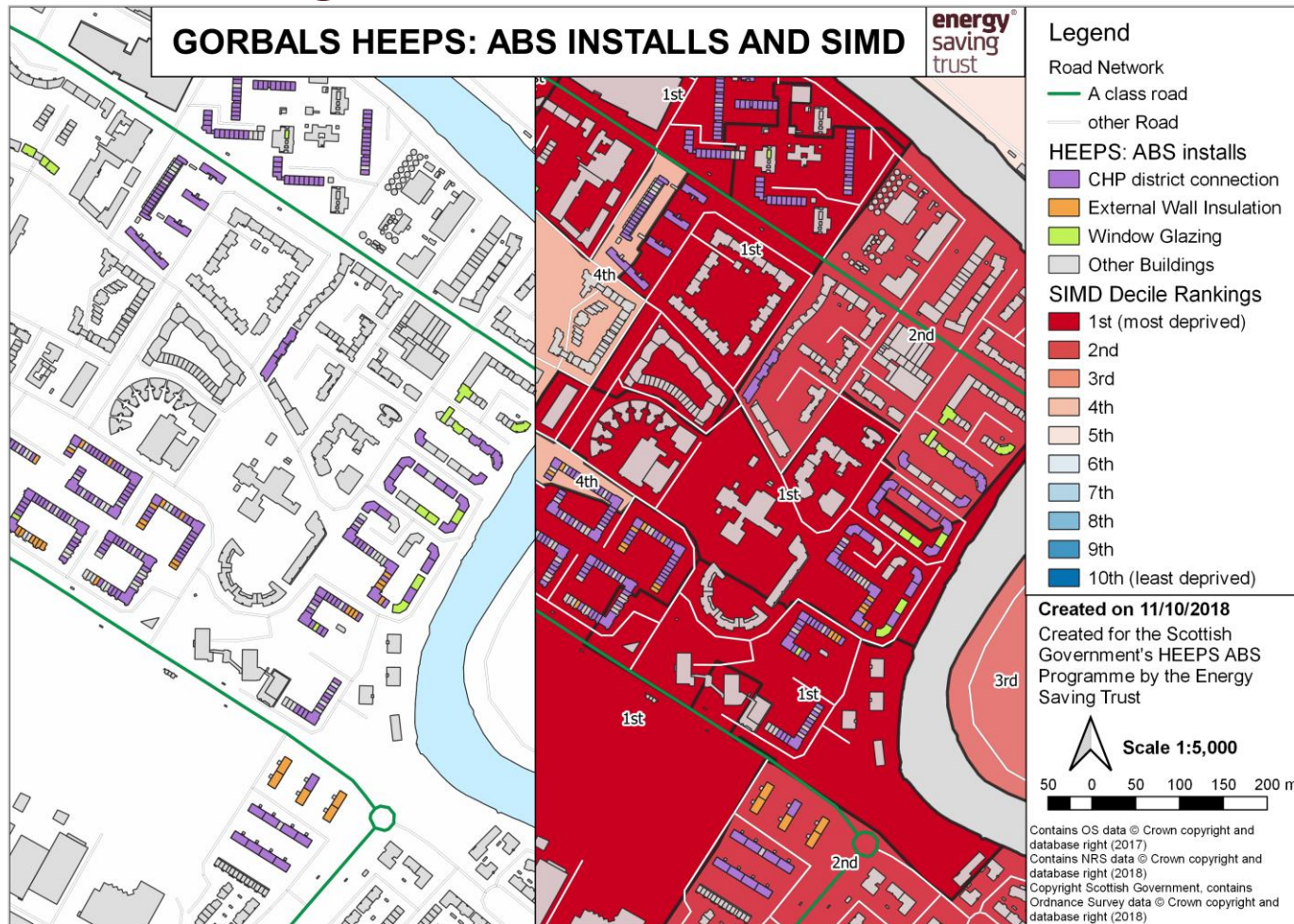
Over half the properties targeted are made of solid brick or stone or were system built. This is as expected when there is a significant amount of external wall insulation installations taking place. Most of the properties treated were constructed some time after WWII with a smaller proportion pre-dating the 1940's.

The majority of non-external wall insulation measures, including district heating connections, were installed in blocks of flats of cavity wall construction.



Note: Construction type and age are taken from EST's Home Analytics dataset which is a combination of EPC and modelled data.

Exploring the Data: Gorbals



The Gorbals is a prime example of HEEPS: ABS installations in Glasgow City. The area is densely populated, of mixed tenure and also received a combination of EWI, CHP connections, loft insulation top-ups and window glazing installations.

The area is extremely deprived with a high concentration of the lowest ranks of

overall SIMD as well as for the income and housing domains. The approach taken here also fits well with the goals and aims set out in the council's energy and carbon masterplan: to decentralise energy sources, reduce carbon usage and help those most in fuel poverty.

For more information on Glasgow City's masterplan see <https://www.glasgow.gov.uk/index.aspx?articleid=17181>