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Safon Cartrefi Sir Gaerfyrddin

Decarbonising our Homes

Carmarthenshire Home Standard

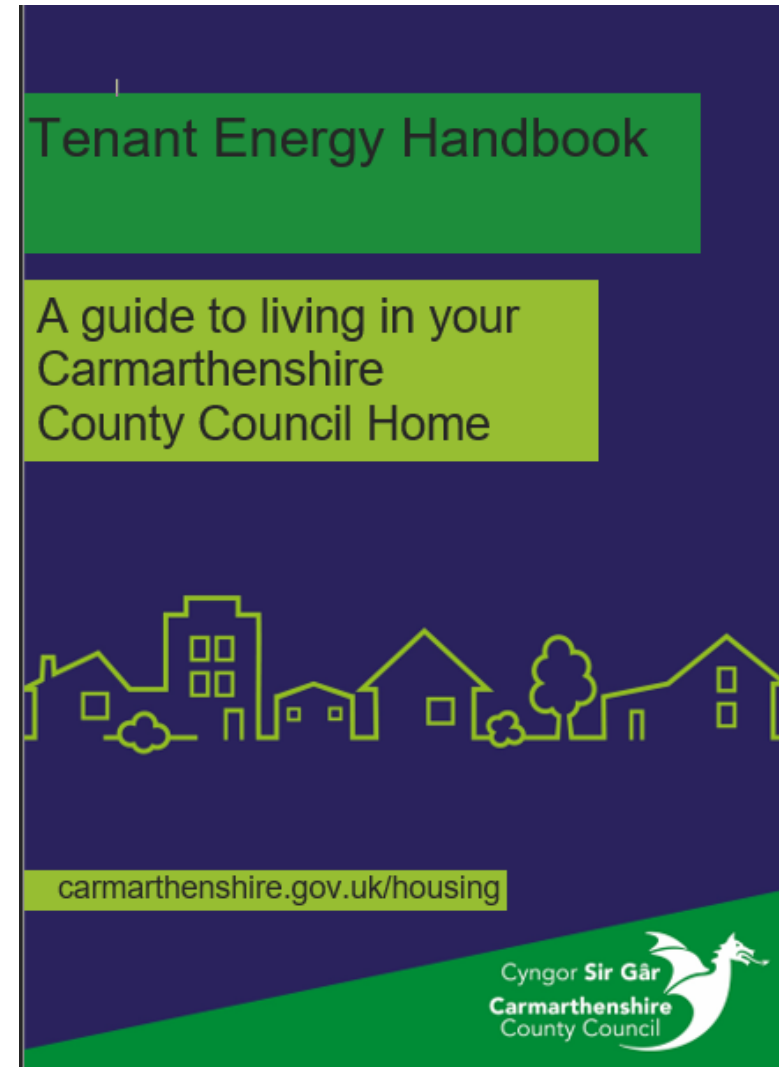


Cyngor **Sir Gâr**
Carmarthenshire
County Council



Our Aspirations

- Mitigate fuel poverty for our tenants by providing low energy housing solutions
- Reduce the carbon footprint produced by our homes
- Maximise local skills and trades
- Develop a decarbonisation strategy using the data gathered from ORP
- Improve tenant awareness around living with a lower carbon footprint



Project Overview

- Deep retrofit on 7 void properties
- Timing meant that we couldn't work on occupied properties
- 6 On gas properties
- 1 off gas property
- 1 Property had existing PV

	End terrace	Mid terrace	Semi-detached	Detached	Flat	Total
Pre 1919	0%	1%	0%	0%	0%	1%
1919-1944	2%	3%	7%	0%	1%	13%
1945-1964	3%	3%	26%	0%	6%	38%
1965-1990	8%	8%	14%	0%	13%	43%
Post 1990	1%	0%	2%	0%	2%	5%
Total	14%	15%	49%	0%	22%	100%

What we did & Achieved

MEASURES:

- Wall insulation
- Increased loft insulation
- LED lighting
- Mechanical ventilation with heat recovery (MVHR)
- High efficiency gas boilers or heat pumps
- Solar Photovoltaic (PV)
- Lithium ion batteries
- Intelligent Energy Systems (IES)

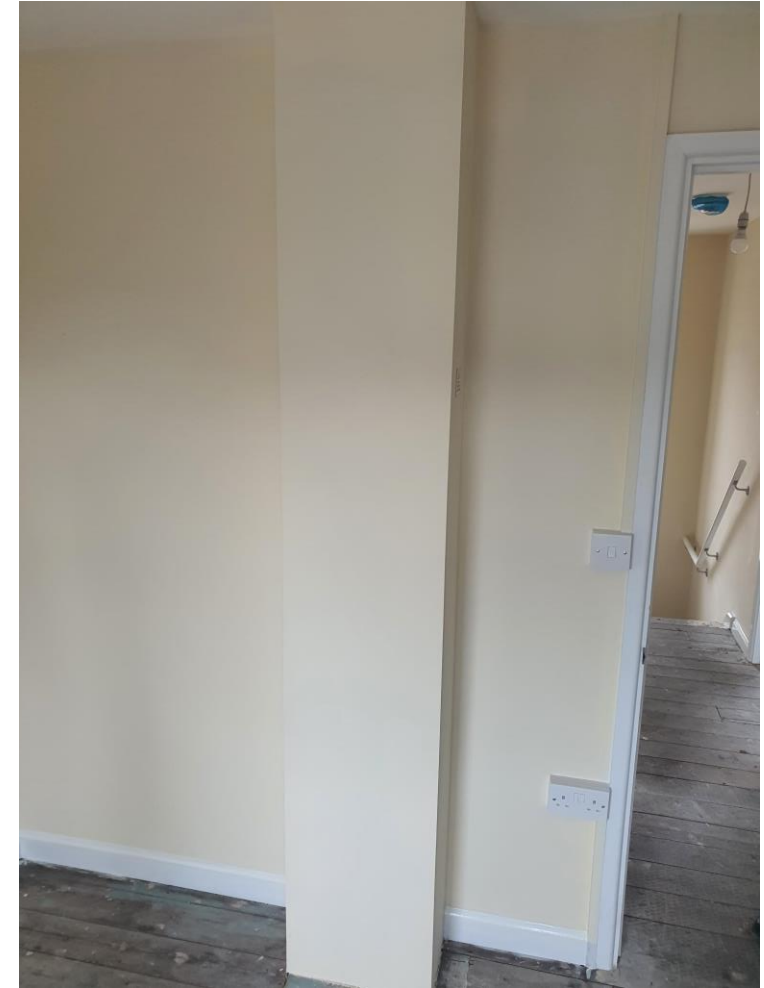
Our SAP calculations for all the properties will achieve an average Environmental Impact Rating of SAP 93 (EPC A)

Properties will achieve an average saving of 71% in carbon reductions and a fuel bill saving of 63% per year for tenants



How it Looks

Retrofit Component – MVHR



Low Impact Retrofit for Tenants



Low Impact Retrofit for Tenants

In order to help with tenant buy-in, we needed to ensure that we:

- Minimised the number of controls within the property
- Provide support for tenants moving in
- Avoid making a home look like a 'factory'
- Manage expectations



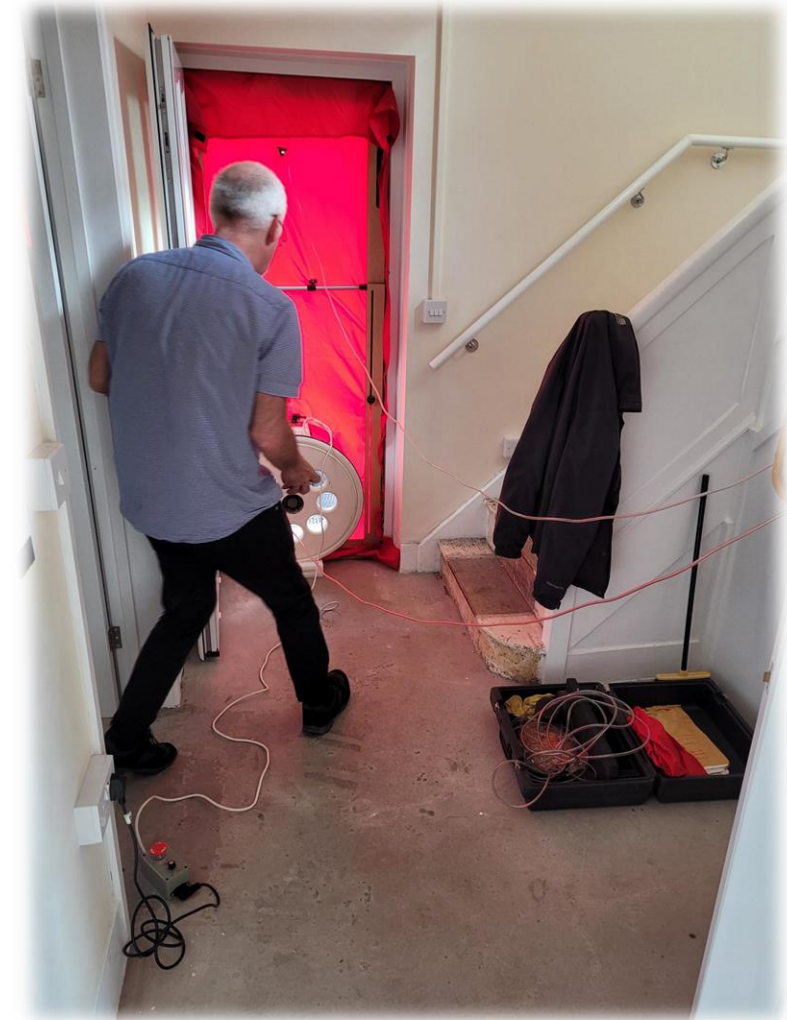
The Results so far...

Average Gap
Funding per
home -
£23,518

Biggest
running cost
saving - **£610**
to **£168**
/year

Biggest carbon
Reduction -
2463 to 707
kg CO₂ /year

All properties
performed better
than Building
Regs standard for
air tightness –
5.4 m³/h/m²



Lessons Learnt

Speed
up
delivery

Work on
tenants
Homes

Design/location
of technology in
existing/
occupied
buildings

Competitive
Tender not
Direct Award

Fully adopt
PAS2035 at
concept
stage

Implementation
of Simaxx
monitoring
software from
start

Diolch | Thank you

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