

CORNWALL COUNCIL & SWNZH

# Heat Pump Adoption in Cornwall

Perceptions and Barriers

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OUR MISSION

**To accelerate the move to  
a decarbonised future.**



## Objectives

1. **Establish the barriers** to heat pump adoption that stakeholders perceive to be holding back deployment
2. **Summarise the evidence base** for each barrier to assess validity and identify potential solutions.
3. **Make recommendations** for how to increase deployment rates across Cornwall.

OBJECTIVE 1

# Establish the barriers

# Tier 1 – Critical barriers

## **Prevalence: highest**

Raised by nearly all stakeholder groups

## **Impact: severe**

Described as fundamental blockers

*"It's actually the quality of the installation rather than the manufacturer, that makes the difference." – Housing association*

**1. High upfront installation costs**

**2. Installation quality and design**

**3. High running costs**

**4. Customer understanding and education**

## Tier 2 – Significant barriers

### **Prevalence: high**

Raised by most stakeholder groups

### **Impact: significant**

*"It's like a baroque tower of different eligibilities and different schemes... that make it extremely difficult to deliver." – Council officer*

*"Too much money is made up the chain, there's just none left for a decent install" - Installer*

**5. ECO/SHDF funding complexity and supply chain inefficiencies**

**6. Policy and funding uncertainty**

**7. Installer training and skills gap**

**8. Cornwall's housing stock suitability**

## Tier 3 – Context-specific barriers

### **Prevalence: moderate**

Raised by most stakeholder groups

### **Impact: context-dependent**

*"Heat pump lifespan figures range around 8 to 12 years... really short, shorter than we've been business planning for." — Housing association*

9. Maintenance, servicing and warranty availability

10. Misinformation and media narratives

11. Grid capacity and DNO processes

12. Coastal corrosion

OBJECTIVE 2

# Summarise the evidence base

# Evidence base

## MCS data analysis

Postcode-level data on installations since 2014

## Literature review

- DESNZ Public Attitudes Tracker
- Which? Homeowner research
- Electrification of Heat reports
- HeatpumpMonitor.org
- Paper: 'Bridging the Efficiency Divide' – Rosenow, Lea, Boni
- DESNZ BUS statistics
- MCS Data Dashboard
- EST – cost comparisons
- Ofgem price cap data
- Ambient – heat pump cost modelling
- Nesta research
- SWNZH/Gemserve – Retrofit Skills Report
- HPA – Workforce projections & training analysis

## Interviews

- Social housing providers
- Installers
- Training providers
- Council teams
- Community organisations
- DNO
- Policy/research experts

OBJECTIVE 3

# Recommendations

**Build a regional consensus on heat pump best practice**



**Maximise the impact of Warm Homes funding**



**Reframe the economic case for owner-occupiers**



**Ensure heat pump users get the most from their systems**



**Drive consistent quality in installations**



**Develop the supply chain and skills and training**



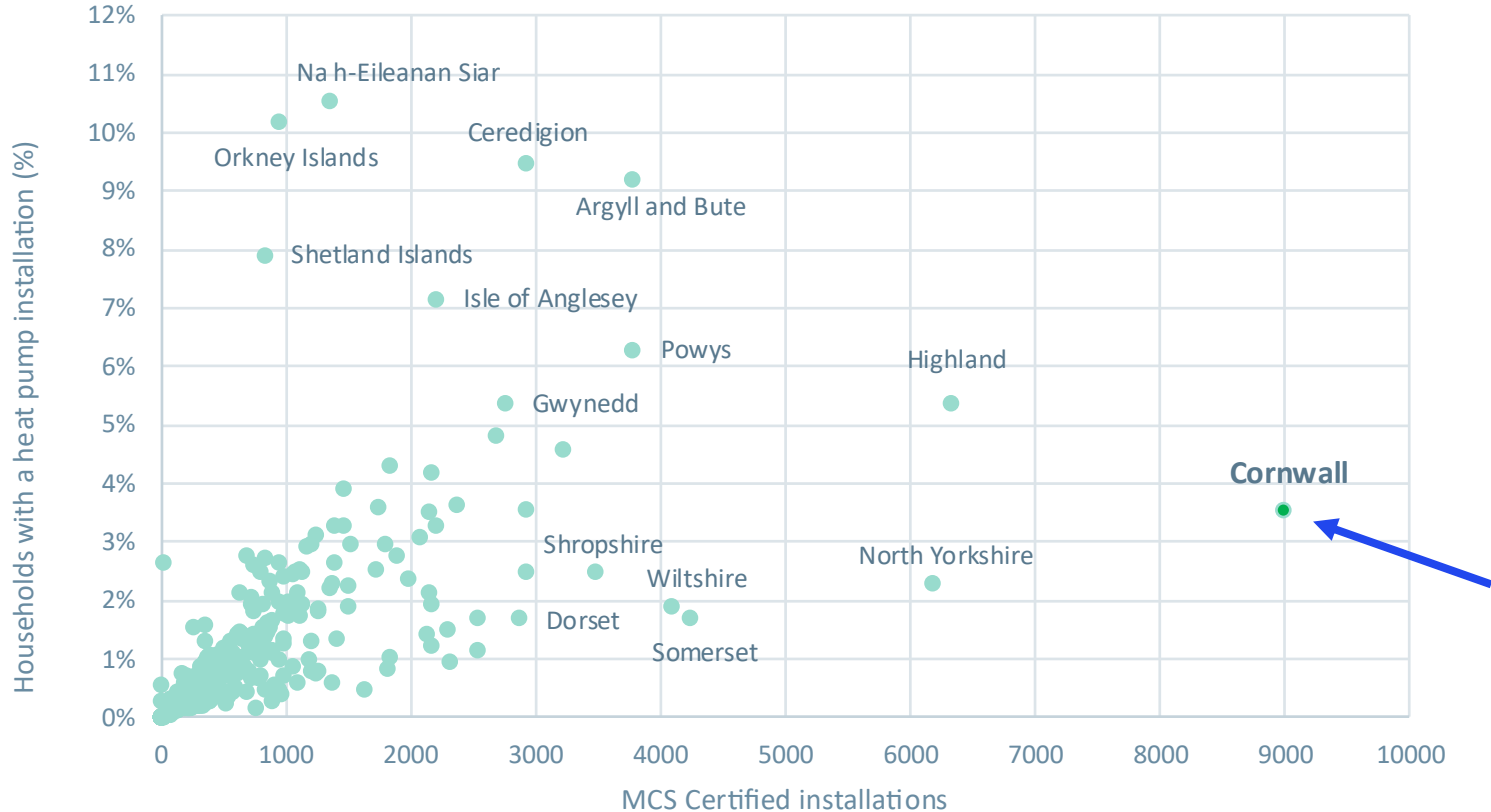
**Support social landlords to develop heat pump transition plans**



**Accelerate high-performing heat pump deployment in the Private Rented Sector**

# Recommendations

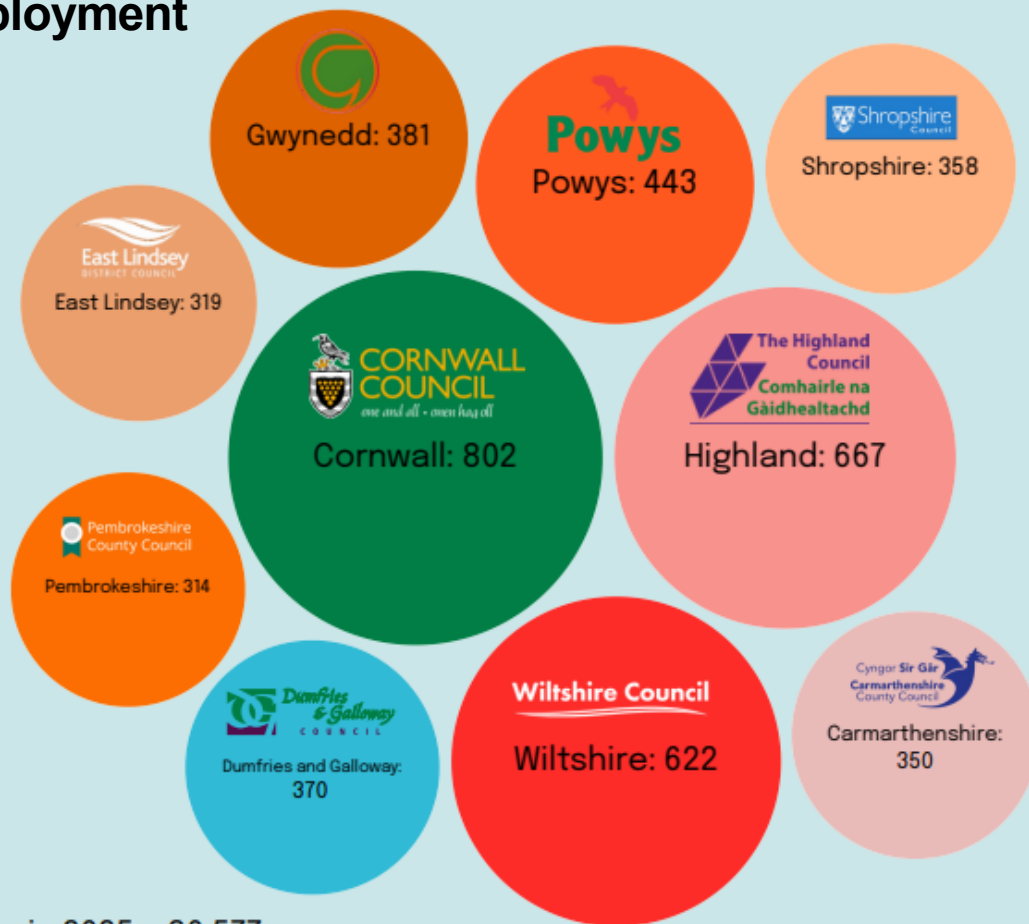
# Cornwall leads the UK in heat pump deployment



# H1 2025

## Rate of deployment

South West  
**NET ZERO**  
HUB 



Total installations in 2025 = 30,577

Top 10 regions (4% of UK population) = 15% of total installations in 2025

# Heat pumps can work in all housing types, irrespective of property age and insulation levels

HeatPumpMonitor (280 systems with 12+ months of data)

Property Age ▾	Average Combined SCOP
Pre-1900	3.88
1900 to 1939	3.87
1940 to 1982	3.97
1983 to 2011	3.78
2012 or newer	3.73

Insulation level	▾ Average Combined SCOP ▾
Passivhaus	3.37
Fully insulated walls, floors and loft	3.81
Some insulation in walls and loft	3.91
Cavity wall, plus some loft insulation	3.73
Non-insulated cavity wall	4.02
Solid walls	3.85

**Build a regional consensus on  
heat pump best practice**



# Home upgrade sequencing

## STEP 1

- High-performing heat pumps
- Smart tariffs
- Low-cost fabric measures (draught proofing, loft insulation, cavity wall insulation where appropriate)

## STEP 2

- Solar PV
- Batteries

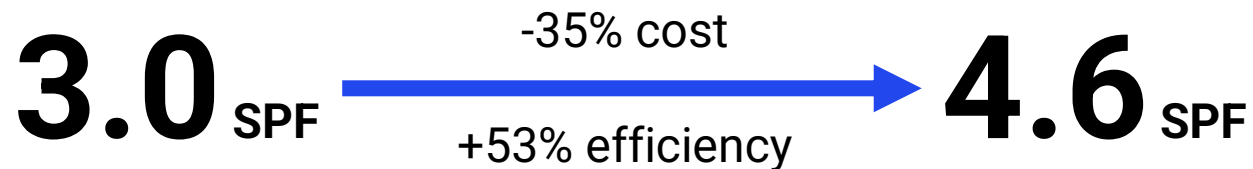
## STEP 3

- Deep fabric upgrades (where done well and affordable)

**Build a regional consensus on heat pump best practice**



# Commissioning is key!



- High-temperature ramping
- Extended 'off' periods
- Optimised weather compensation
- Slower ramp up to temperature

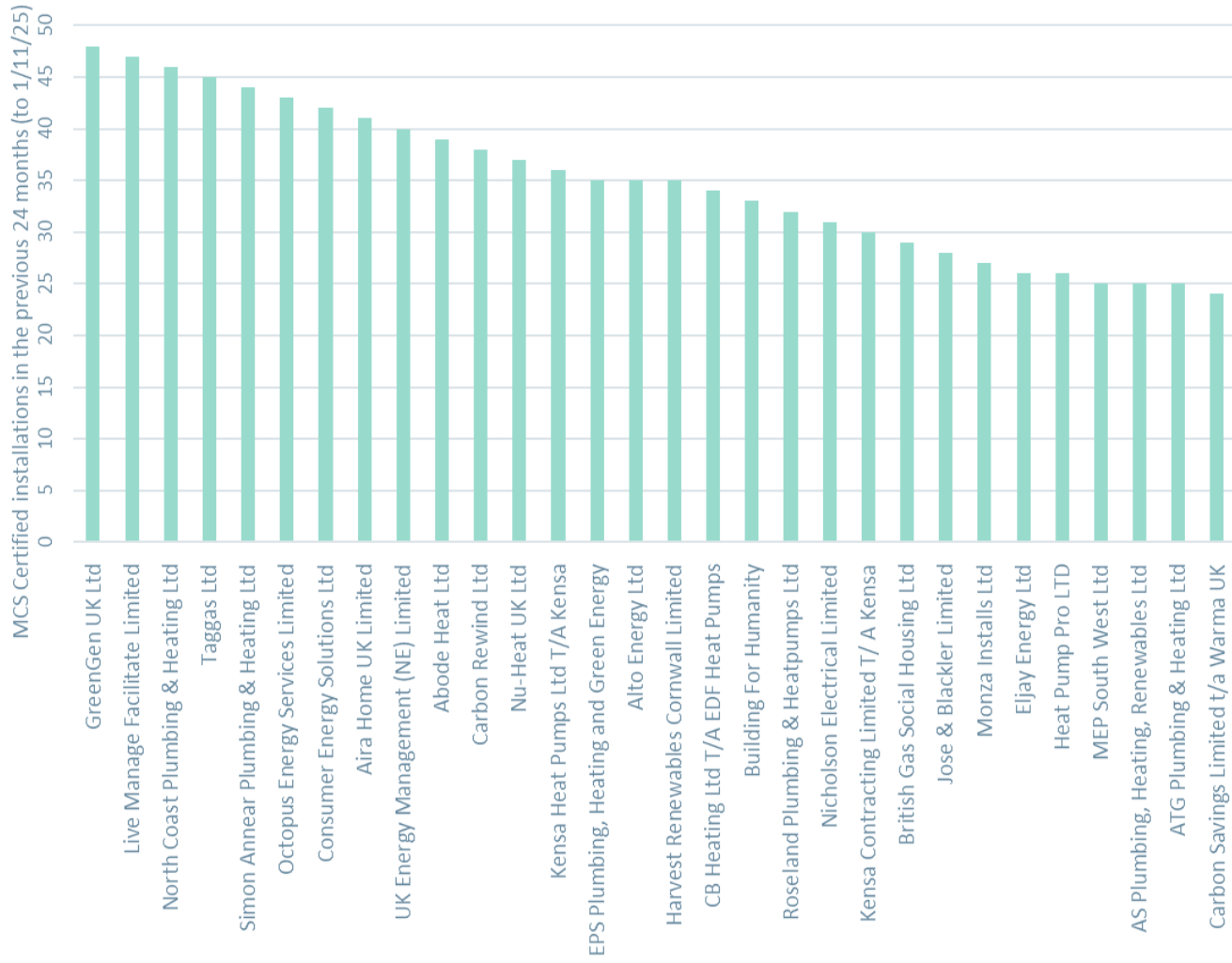
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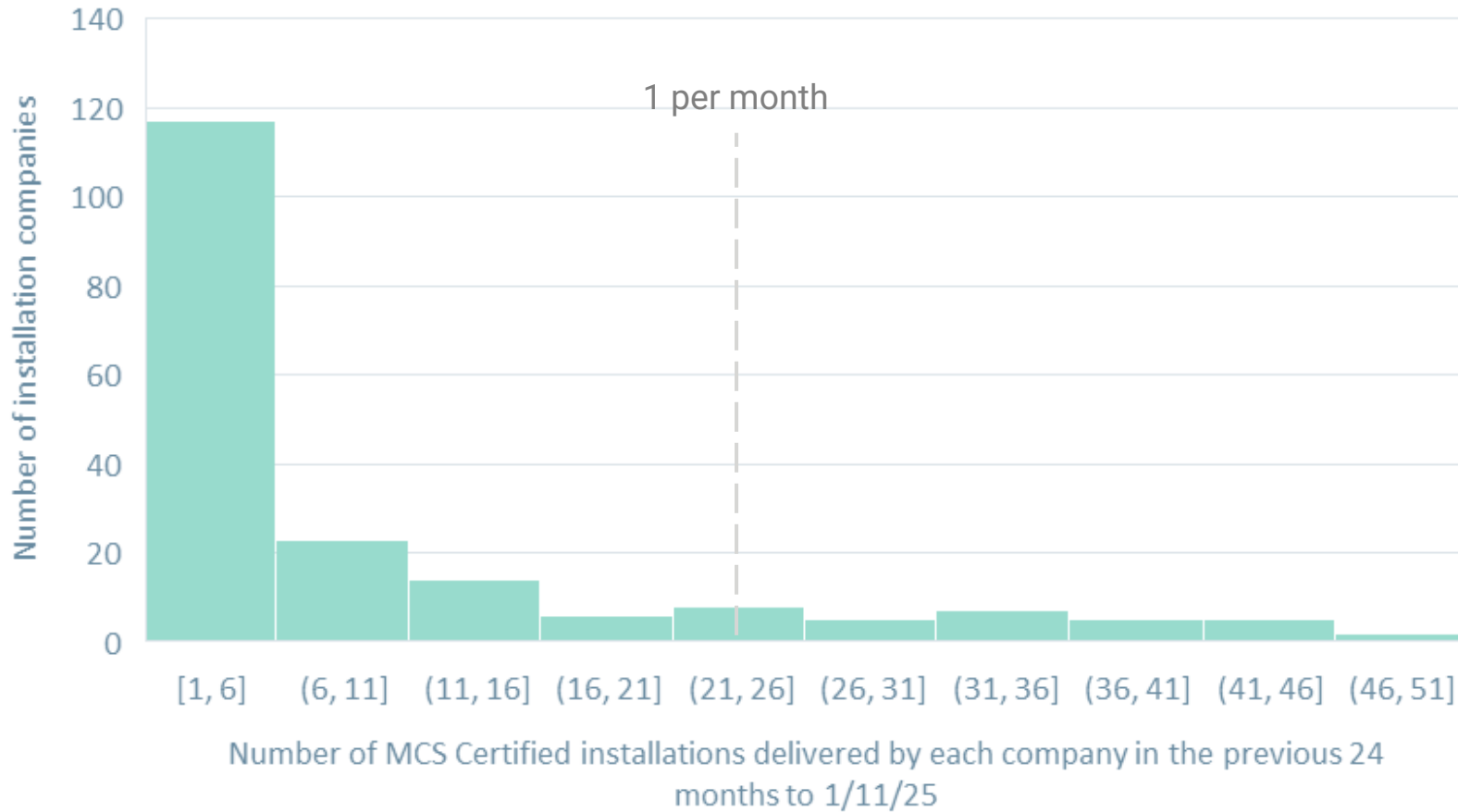


*'Bridging the efficiency divide: open-source  
insights into UK heat pump performance gaps'*  
– J.Rosenow, T. Lea, G. Boni



## Develop the supply chain and skills and training





**Develop the supply chain and skills and training**

# Workforce in Cornwall

**50-100** installers based in Cornwall

**900** heat pump installers needed

**1,000** heating engineers on Gas Safe Register

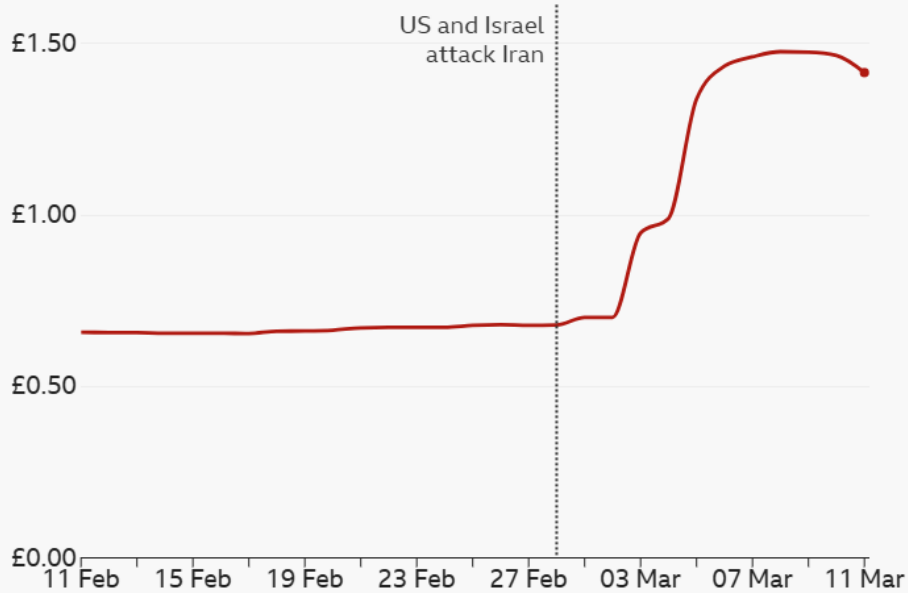


Develop the supply chain and skills and training

**47%  
off-gas**

## Heating oil prices in Scotland have more than doubled since Iran war

Price per litre of home heating oil, February to March 2026



Source: BoilerJuice, as of 11 March • Note: Price excludes 5% VAT



**Reframe the economic case for  
owner-occupiers**



**Build a regional consensus on  
heat pump best practice**



**Maximise the impact of Warm  
Homes funding**



**Reframe the economic case for  
owner-occupiers**



**Ensure heat pump users get the  
most from their systems**



**Drive consistent quality in  
installations**



**Develop the supply chain and  
skills and training**



**Support social landlords to develop  
heat pump transition plans**



**Accelerate high-performing heat  
pump deployment in the Private  
Rented Sector**

# Recommendations

# Recommendations 1–3: Foundations, funding and economics

## 1 Build a regional consensus on heat pump best practice

- Adopt a 'deep fabric fifth' sequencing framework — prioritising heat pumps and smart tariffs first
  - Convene a regional forum with installers, HAs and advisors to develop shared best practice
  - Develop a Cornwall-specific best practice guide (flow temps, emitter sizing, commissioning, coatings)
  - Embed principles into procurement specs, training and public guidance
  - Promote a unified message: performance depends on design quality, not just building fabric
- 

## 2 Maximise the impact of Warm Homes funding

- Onboard local sub-contractors and embed quality standards with aftercare requirements
  - Break contracts into smaller packages accessible to Cornwall-based firms
  - Build a joint cross-tenure property pipeline for integrated funding from 2028
  - Systematically capture learning to strengthen future bids
- 

## 3 Reframe the economic case for owner-occupiers

- Present the clear financial case to off-gas residents via the proposed Cornwall Retrofit Hub
- Promote combined heat pump + solar PV + battery packages for gas-connected homes
- Organise community events and showcases using trusted Cornwall voices

# Recommendations 4–6: Users, quality and skills

## 4 Ensure heat pump users get the most from their systems

- Coordinate education across CEP advice, social housing liaison, void/tenant processes and Retrofit Hub
  - Develop standardised guidance building on Nesta, Energy Systems Catapult and Heat Geek resources
  - Recruit satisfied users as heat pump champions for peer-to-peer reassurance
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## 5 Drive consistent quality in installations

- Introduce strengthened procurement specs: performance targets, commissioning checks, flow temp limits
  - Promote performance guarantee models (e.g. Heat Geek Guarantee of minimum performance)
  - Mandate remote performance monitoring within funded programmes
  - Involve manufacturers and wholesalers in improving standards
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## 6 Develop the supply chain, skills & training

- Convene Cornwall College, Truro & Penwith, SWAAT, manufacturers and local installers
- Develop coordinated training strategy addressing geographic gaps and the full workforce spectrum
- Establish task-and-finish working groups of leading installers to co-develop skills pathways

# Recommendations 7–8: Social landlords and private rented sector

## 7 Support social landlords to develop heat pump transition plans

- Apply 'deep fabric fifth' framework for targeted investment allocation
- Prioritise off-gas properties at end-of-life, aligned with asset management and MEES timelines
- Share learning on cost-effective retrofit pathways for Cornwall housing archetypes
- Invest in comprehensive tenant engagement spanning the full tenancy lifecycle, including peer champions

*"It's going to be really challenging... our heat pump costs are normally around £16,000, that's quite a significant amount to spend on one part of a property."  
— Social landlord*

## 8 Accelerate high-performing HP deployment in the PRS

- Communicate early on 2030 EPC C requirement with recognition schemes (e.g. 'Green Landlord')
- Guide landlords on maximising the £10,000 MEES spending cap via best practice sequencing
- Establish local quality assurance framework with monitoring and annual PRS performance reporting
- Include dedicated PRS stream within CEP's proposed Cornwall Retrofit Hub
- Deepen collaboration with CRLA and letting agents for retrofit education
- Pilot block retrofit schemes in PRS clusters as demonstrators



Q&A

**Thanks for  
listening!**

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