

Saltdean Decarbonisation Plan

Community Event

28th July 2026



BHESCO

Clean Energy for People, Not for Profit



About BHESCo

Who are BHESCo?

A Sussex-based social enterprise who work in the community energy sector



465 investors



68 community
energy projects
completed



451+ tonnes
CO₂ saved
annually



£2.5 million
investment
raised

Agenda

- Introduction to the report
- Saltdean's energy system today
- Pathways to decarbonise Saltdean's energy system
- Practical interventions
 - An introduction to heat pumps
 - Domestic
 - Transport
 - Local generation
- Summary & next steps
- (Additional retrofit/heat pump resources)

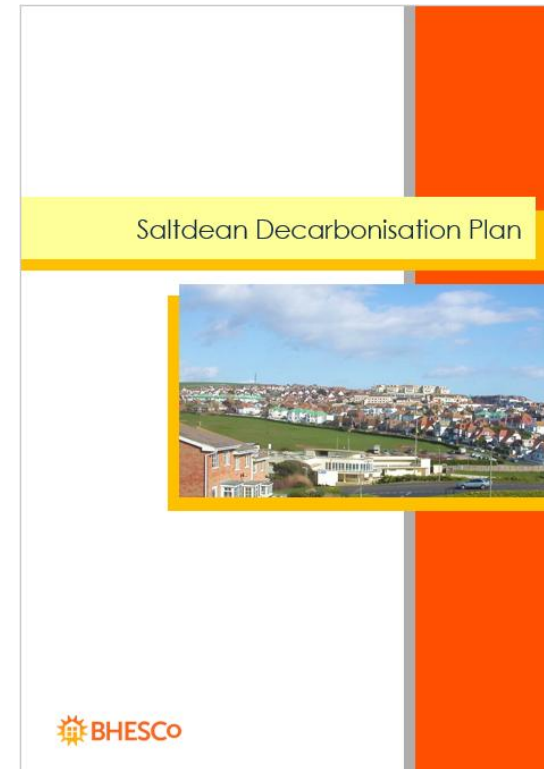
Introduction to the report

- **Why SCAN commissioned BHESCo?**

Provide a plan that the community can mobilise around to decarbonise Saltdean

- **What is decarbonisation?**

Decarbonisation means reducing and removing carbon dioxide and other greenhouse gas emissions released into the atmosphere by human activities



Report contents

- Context
- Decarbonisation scenarios
- Practical implementations
- Next steps

Available online
August 2026

Saltdean's energy system today

- **The study viewed Saltdean as a whole, taking a holistic and 'low risk of regret' approach**

Study deals with the local energy system but it should be noted that wider decarbonisation impacts can be made by modifying consumption patterns

- **Domestic heating**

85% of homes in Saltdean use gas for their heating

- **Private transport**

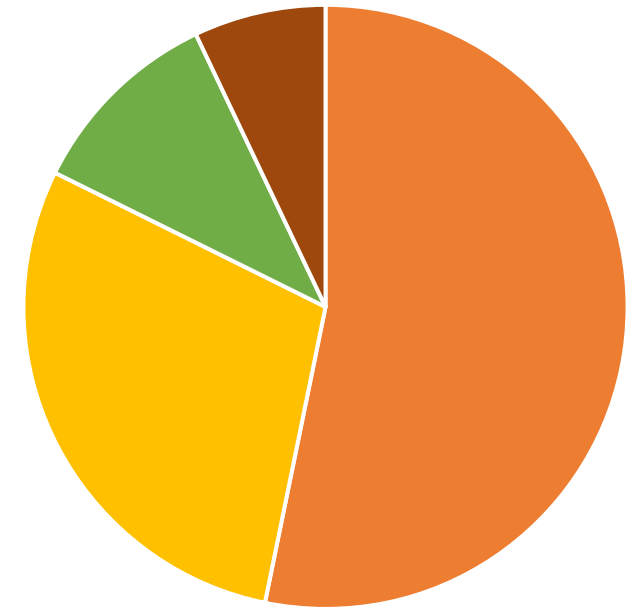
Slightly higher than average per household

- **Domestic power**

Total electricity usage ~15GWh

- **(Non-domestic)**

Current CO₂e emissions for Saltdean local area (~19ktCO₂e total per year)



■ Domestic heating ■ Private transport
■ Domestic power ■ Non-domestic

Pathways to decarbonise Saltdean's energy system

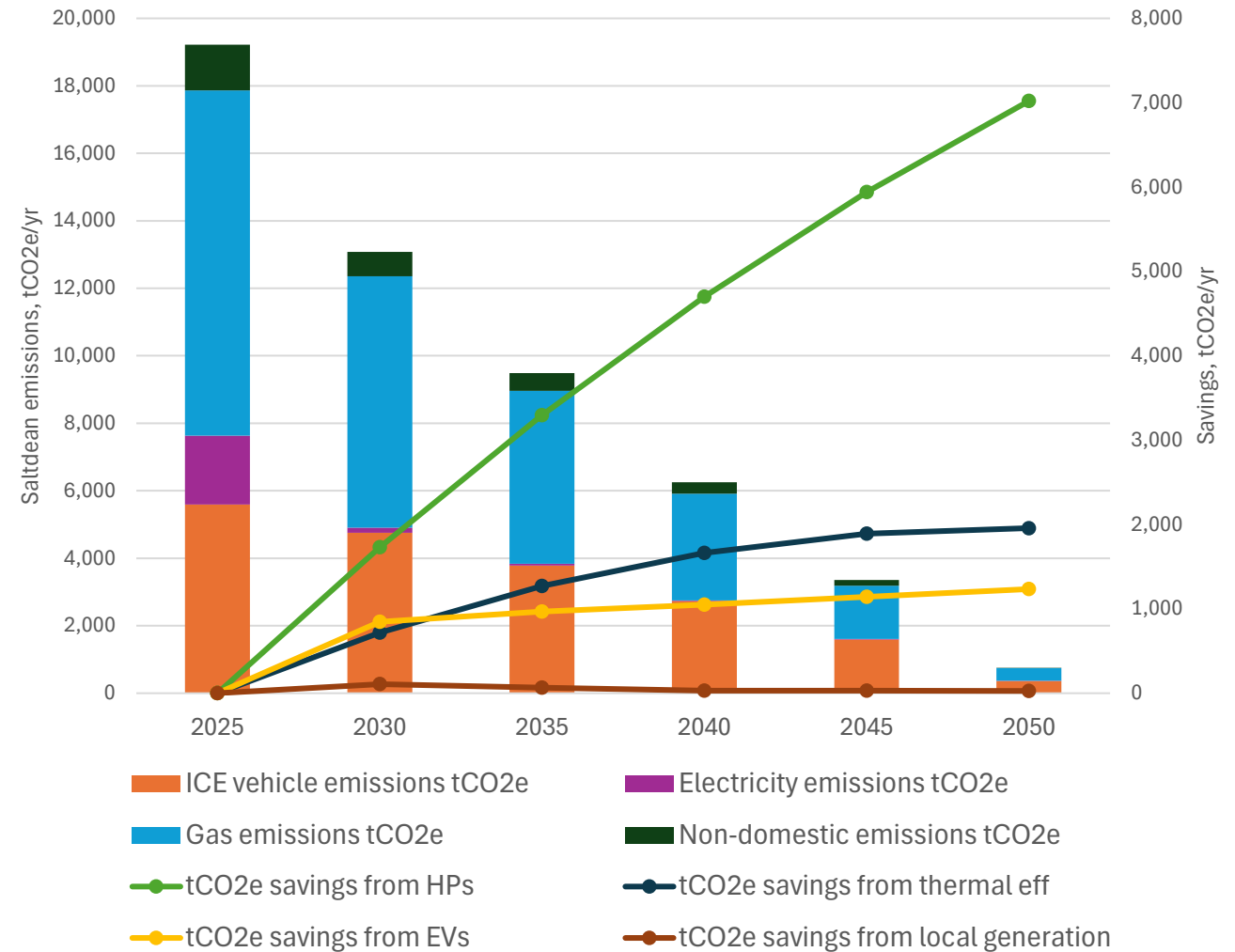
1. Three pathways modelled

- Focus on the ambitious “Leading” pathway

2. Electrification is the key driver

- Total electricity usage in 2050 ~32GWh
- National grid decarbonisation is a key enabler
- Electrification also enables the local ownership of energy

3. Net zero would require carbon offsetting/removal



An introduction to heat pumps

- **Heat pumps move heat from one place to another**
- **Air source heat pumps use electricity to extract heat from the external ambient air and move it into your home**
 - For every unit of electricity a heat pump consumes it can extract between 3-4 units of heat i.e. they are 300-400% efficient
- **Heat pumps run most efficiently with lower radiator temperatures**
 - To offset this lower temperature, heat pumps generally have longer run times (and can require larger radiators)
 - This results in a more consistent and comfortable internal home environment
- **At an efficiency of 350% a heat pump should have equivalent running costs to a gas boiler with today's energy prices**
- **Solar PV & battery storage can further reduce running costs**
 - Gas standing charges can also potentially be avoided



Practical interventions – Domestic overview

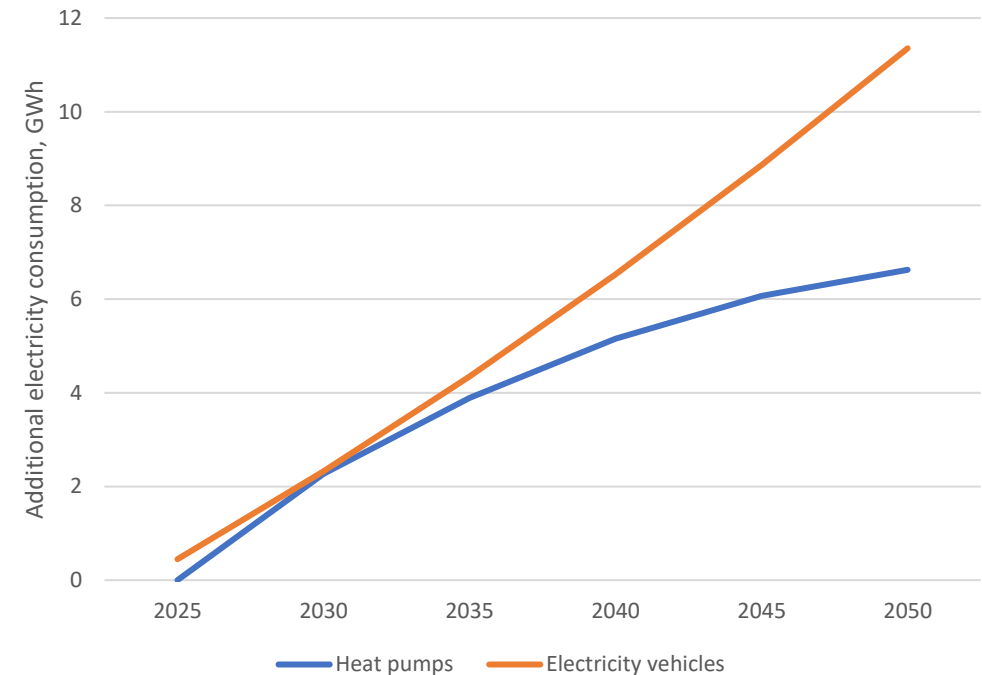
- **The single most effective decarbonisation measure is the electrification of heat via installation of heat pumps**
 - Moving away from the default message of 'fabric first'
- **The context of every dwelling will be different**
 - In all cases, the goal is to end up with a decarbonised, warm home with manageable bills
- **A quality heat pump installation delivers all of the above**
 - The pathway to this goal is nuanced
 - The study report proposes an approach rather than a prescription



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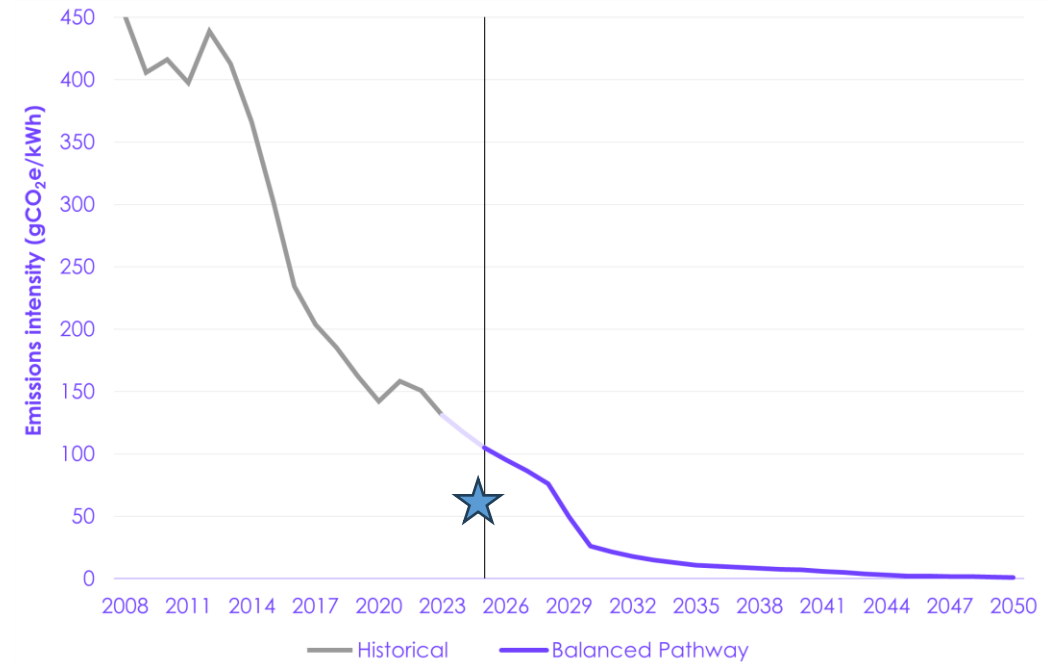
Practical interventions – Transport overview

- **Switching from internal combustion vehicles to electric vehicles**
 - Consumption from electric vehicles forecast to exceed that of heat pumps
- **Saltdean local context provides opportunities and constraints**
 - Low density development means lots of room for EV chargers (public & private)
 - Opportunity for benefits from vehicle-to-grid/home
 - Geography makes modal shift to public transport and/or active travel challenging
 - Community effort could facilitate this



Practical interventions – Local generation

- **The national grid is forecast to decarbonise quickly**
 - This diminishes the decarbonisation impact of local generation
 - (Note: the forecasts are ambitious)
- **Local generation (and storage) can provide other positives**
 - Lower running costs
 - Resilience
 - 'Control'
 - Community benefit
- **By 2050 Saltdean could require less than a third of its electricity to be sourced from the grid**



Source: The Climate Change Committee, 2025

Summary & next steps

- **Fossil fuel powered domestic heating is the biggest target for decarbonisation action**
 - Enabled through the rollout of heat pumps
- **Electrification of heat is complimentary to local generation & storage measures**
 - This brings broader benefits than just decarbonisation
- **Individual action is key, engagement with community groups (e.g. SCAN or BHESCo)**

can help to realise this

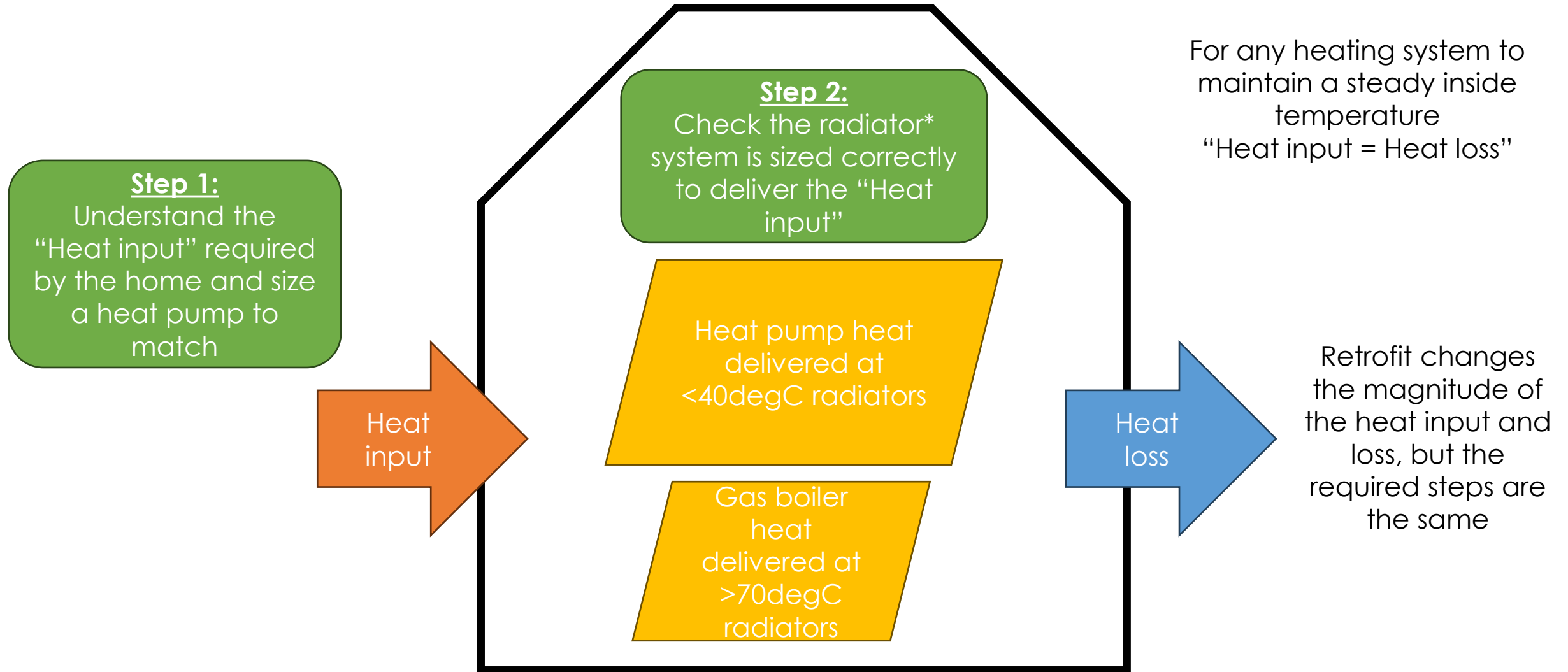
- Advice in starting out your decarbonisation journey
- Access to community champions with real life experience
- Network of trusted installers
- Advocacy
- Campaigning



Thank you!

(Additional retrofit/heat pump slides)

Understanding a quality heat pump install



*or equivalent e.g. under floor heating (this example assumes an air-to-water heat pump)

Two different approaches to retrofit

Figures shown are illustrative only

“fabric first”

Start

Heat demand = 12,000 kWh/yr;
80% efficient gas boiler
→ Gas consumption for heating 15,000 kWh/yr
→ 3.2 tCO₂e/yr

Roof insulation

→ 10% reduction in heat demand
→ £2,500 upfront

Glazing upgrades

→ 5% reduction in heat demand
→ £15,000 upfront

Wall insulation

→ 15% reduction in heat demand
→ £25,000 upfront

Floor insulation

→ 10% reduction in heat demand
→ £15,000 upfront

Result

→ Heat demand 7,200 kWh/yr
→ Gas consumption for heating 9,000 kWh/yr
→ 1.9 tCO₂e/yr
→ £57,500 upfront

“decarbonisation first”

Roof insulation

→ 10% reduction in heat demand
→ £2,500 upfront

ASHP w/system upgrades

→ SCOP >3.5
→ £15,000 upfront (net inc. BUS)

Result

→ Heat demand 10,800 kWh/yr
→ Gas consumption for heating zero
→ Electricity consumption for heating = 3,086 kWh/yr
→ 0.4 (0.04 in 2030) tCO₂e/yr
→ £17,500 upfront

Third of the price and a quarter of the operating CO₂e emissions

Illustrative payback periods

Retrofit Carbon payback (Years)

Carbon 
Cash 

Photovoltaic

2 years 
9 years   

150mm Insulation

2 years 
2 years 

Double Glazing

14 years   
29 years    

Triple Glazing

14 years   
20 years   



Air Source Heat Pump

9 months 
10 years   

Source: Nigel Banks, Octopus energy Technical Director (LinkedIn)

Assistance in getting a quality heat pump installation

- Specific schemes
 - Heat Geek - [The Heat Geek Performance Guarantee | Heat Geek | Heat Geek](#)
 - The Guild of Master Heat Engineers - [Find an installer | BetaTeach Newsletter](#)
- Talk to BHESCo
- Talk to others in the community