

Introduction to Kensa



British

made in the UK, reducing
supply chain risks

25 years

experience delivering GSHP solutions

**Turnkey
solution**

manufacturing, design,
installation

17,000+

heat pumps installed to date

1 million

tonnes of CO₂ saved from installed
Kensa heat pumps over their
lifespan*

Heat Trust

the only ground source utility
registered with the Heat Trust

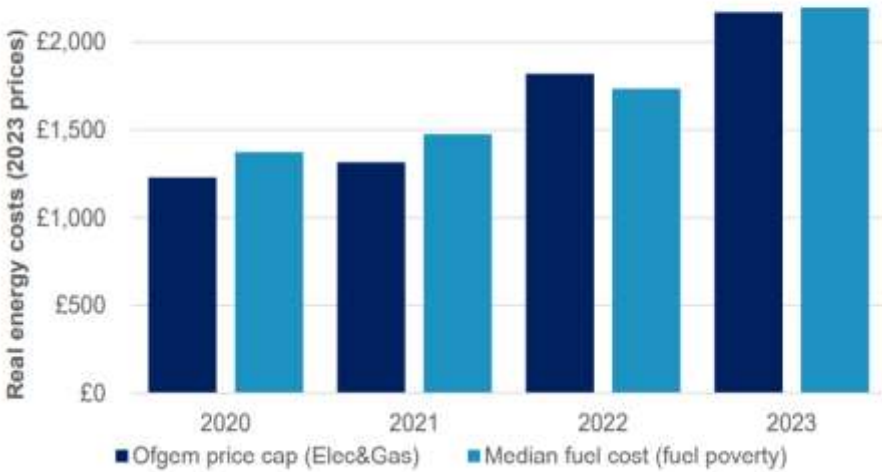
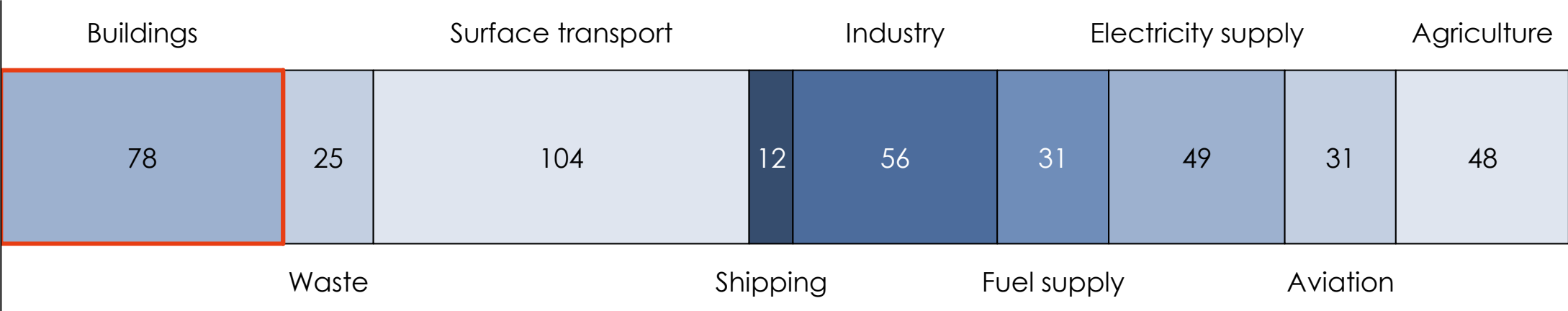


Agenda



- 1 **Ground source heat pump background**
- 2 **The Walton Hall Project**
- 3 **Wider applications of Ground source heat pumps**
- 4 **How you can start your decarbonisation journey with Kensa**

A burning platform: 18% of emissions & rising fuel poverty

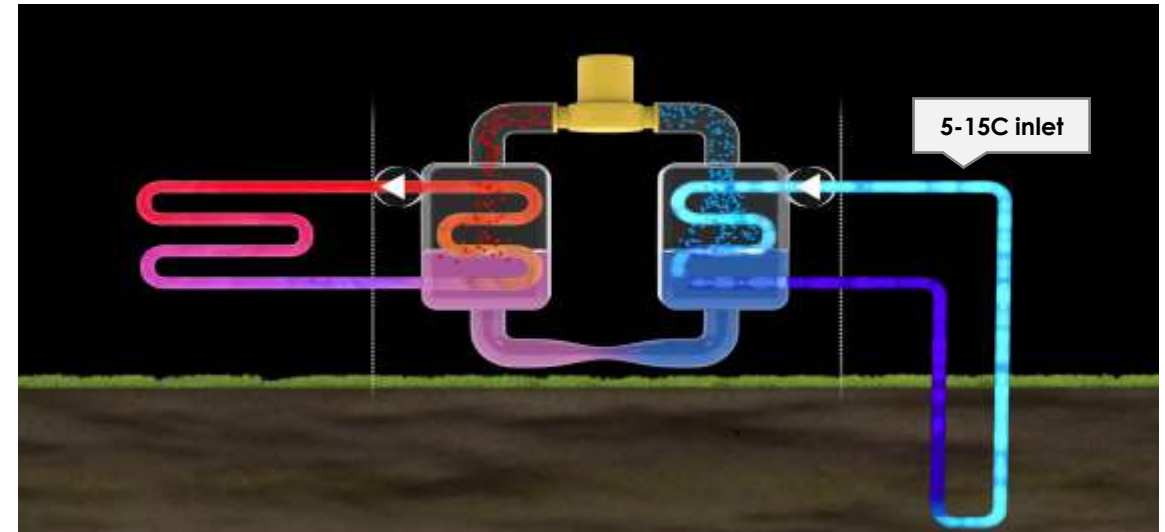


Ground Source Heat Pumps

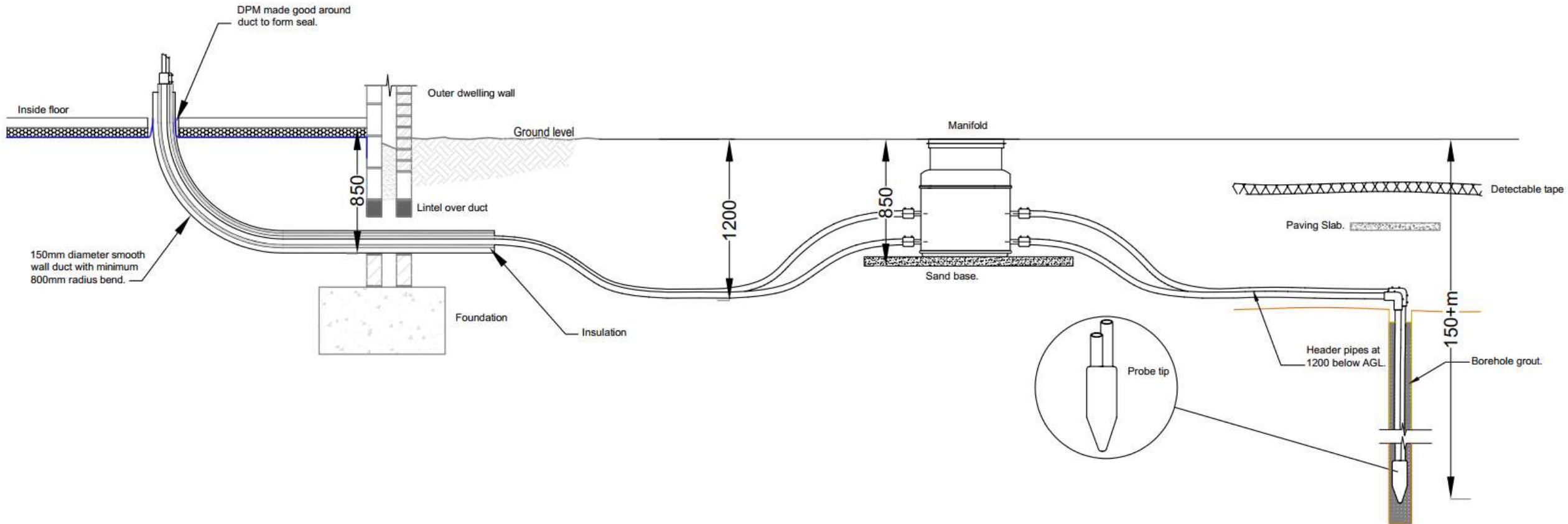


Like a gas boiler...

...but 4-5x more efficient, with no combustion or NOx/SOx emissions



Ground Array



Challenge with listed buildings



Conservation/ Listing Status



High Flow Temperatures



Keeping the grounds open



Walton Hall Works



- 7 month programme from January to July 2024 (Boreholes finished in May)
- Replacing 2 gas boilers with 2 GSHPs, complete with ground array and heating distribution upgrades
- Funded using the PSDS fund from the Government
- Mythbusting “surely you can’t put a GSHP in there?!”

Ground Array

- 18 boreholes at 167m each
- 3006 metres total (40x 747 jets!)

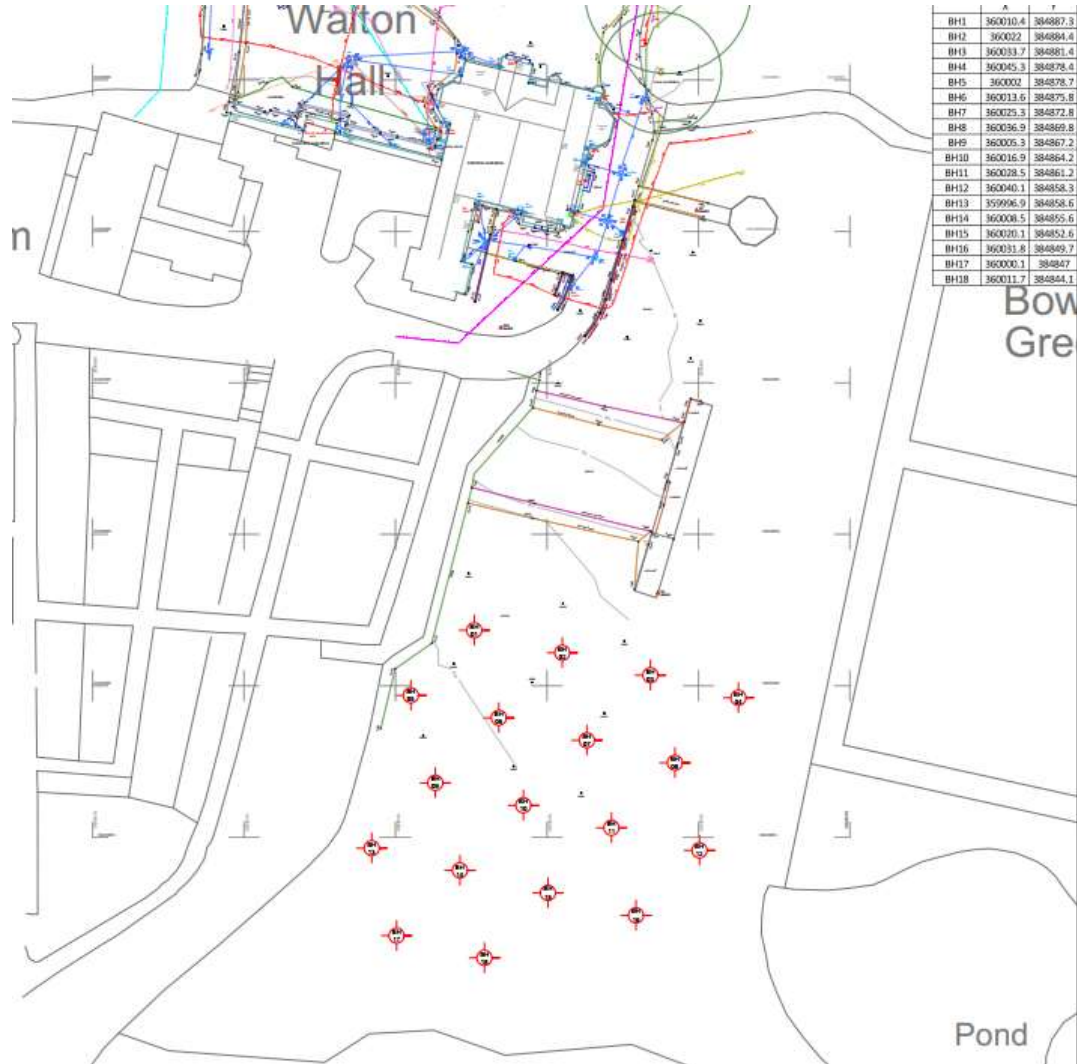
Plant Room

- 2x GSHPs replacing the 2x gas boilers, at 125kW heat load

Heating Distribution

- Replacing radiators with slightly larger radiators and fan coil units

Ground Array



- 18 boreholes at 167m depth
- Working alongside Heritage England
- Tidy & clean site; not disturbing weddings



Ground Array: Before & After – Guess Which?



Before



After

Plant Room



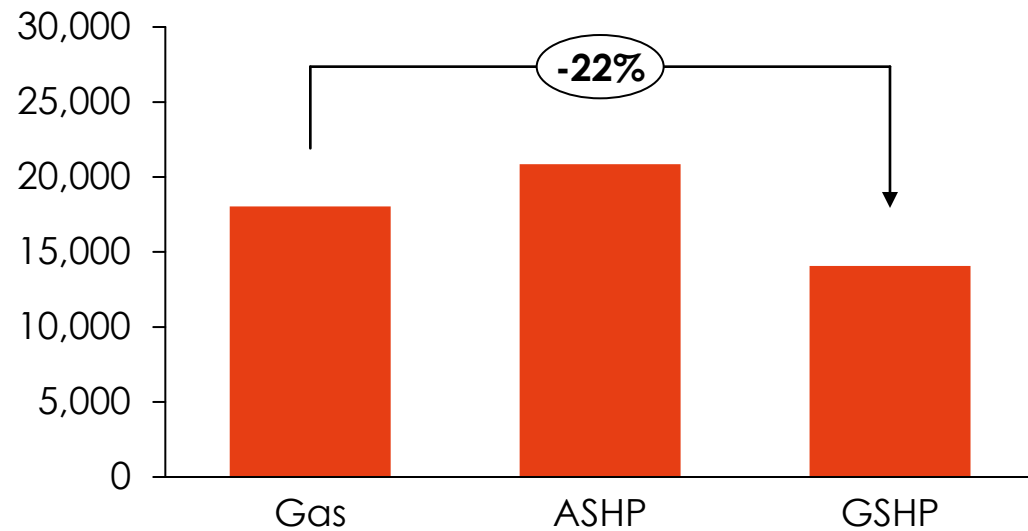
Heating Distribution



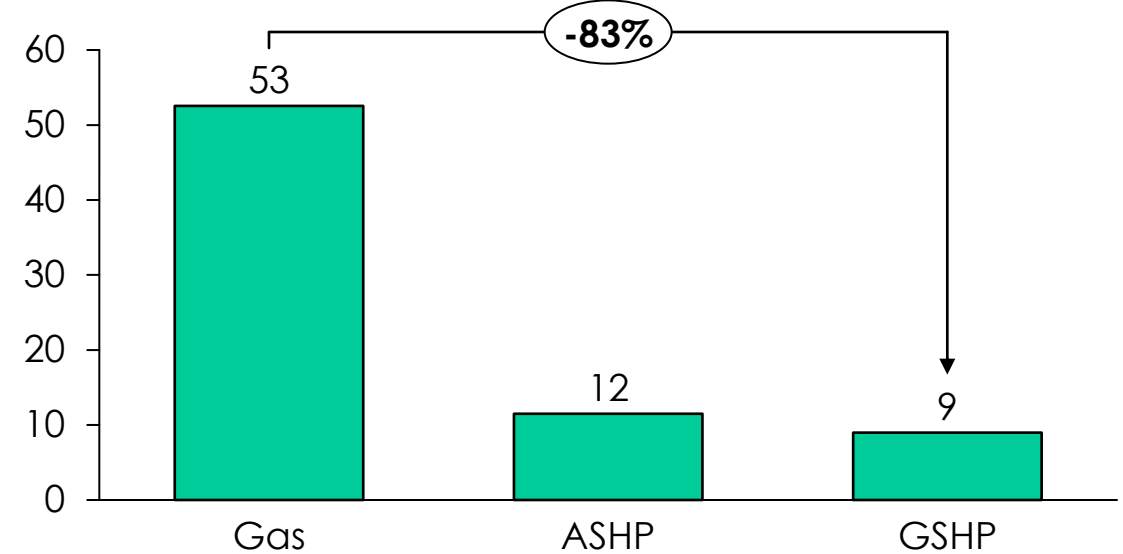
Case for Warrington Council



Estimated Running Costs (£/yr)



CO2 Emissions (tCO2/yr)



Wider impact: spending time educating local schoolchildren using the Hall on clean heating and the benefits of the technology, helping inspire the next generation

GSHPs for wider sectors



Non – Domestic (Schools)



Domestic (Social Housing)



Project at Marshland Primary Academy

Boreholes: 18x 127m deep



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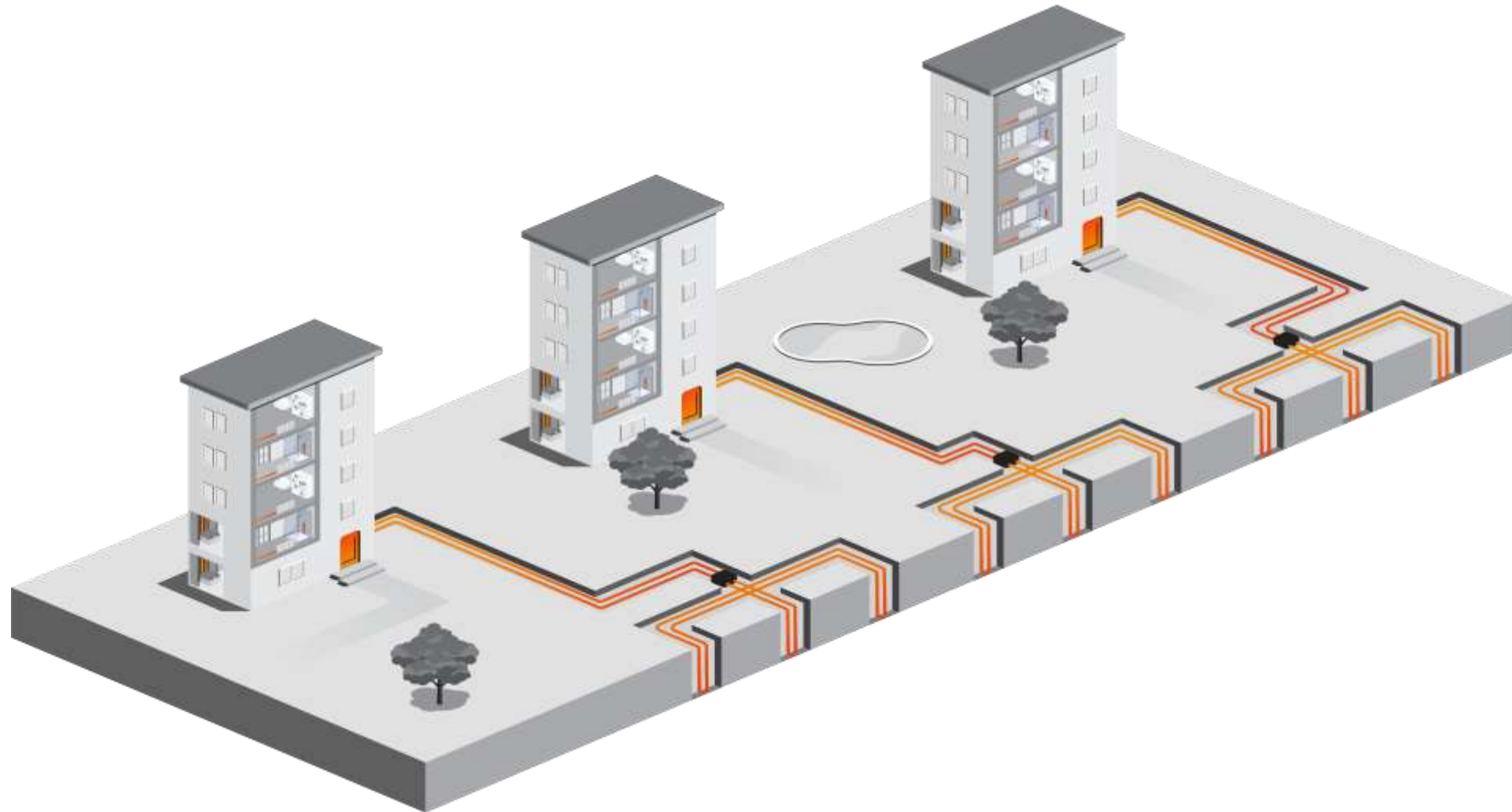
Project at Marshland Primary Academy
PV-T: 69 panels for 34kW electricity & 74kW heat



Project at Marshland Primary Academy Plant Rooms

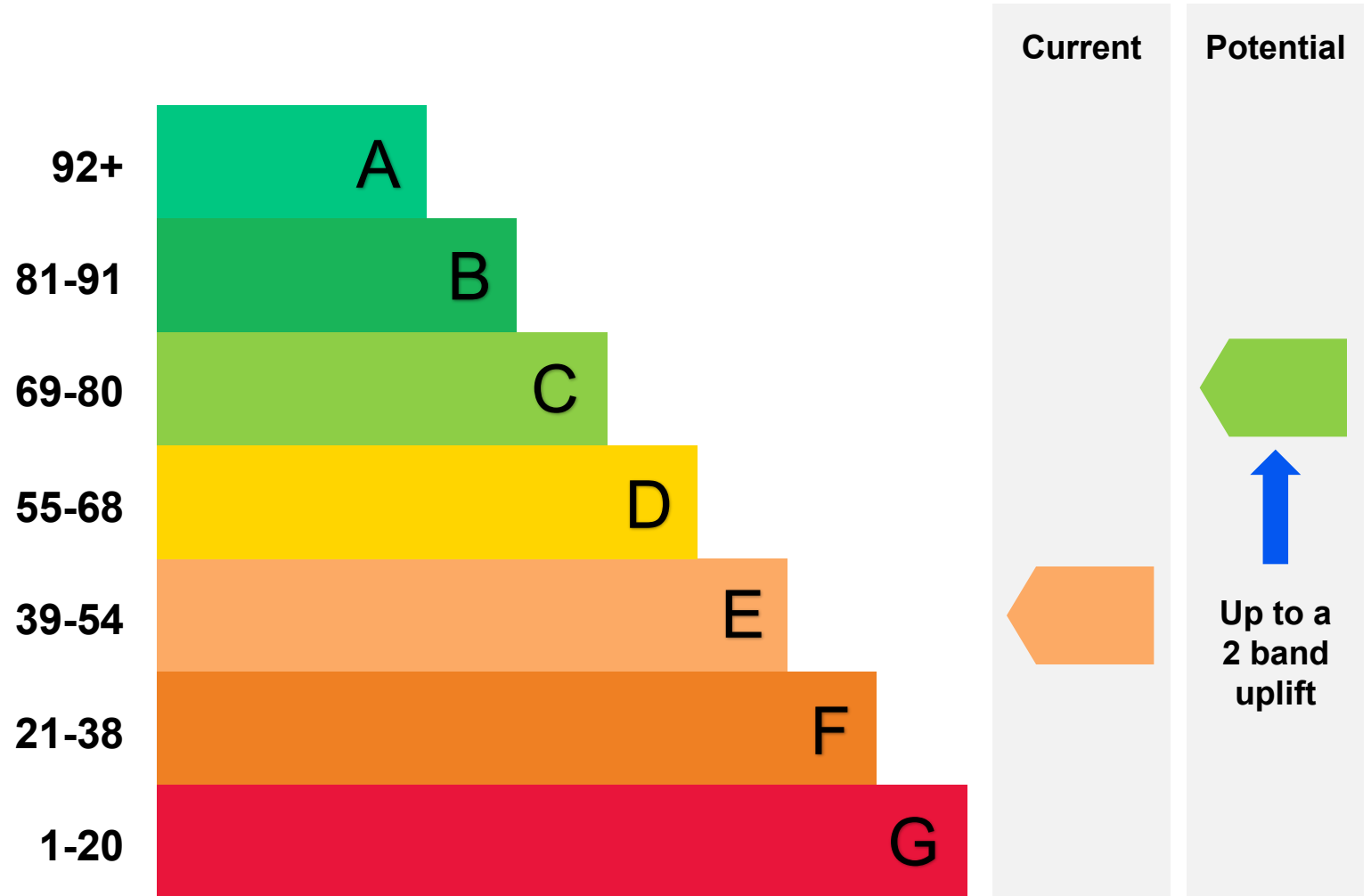


GSHPs in Social Housing

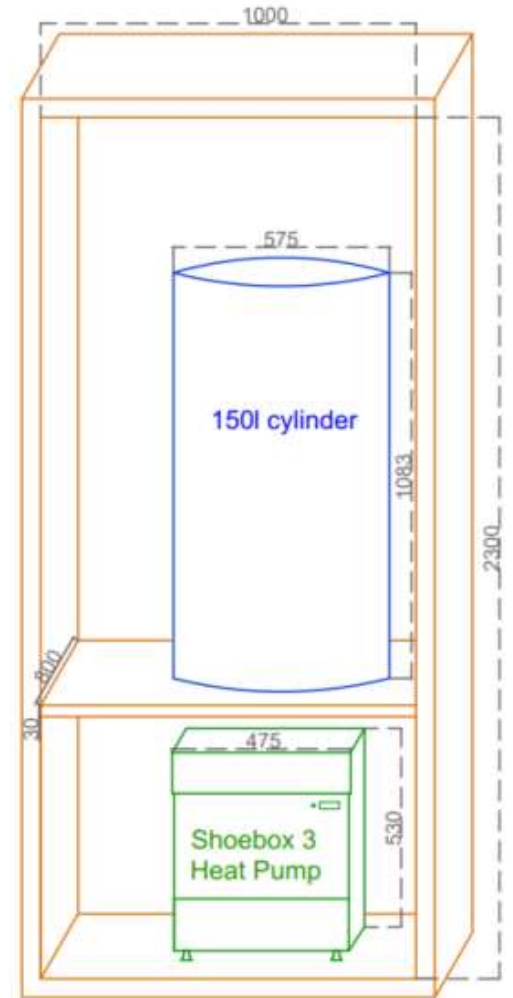


Up to a two band EPC uplift

With just **one** measure.

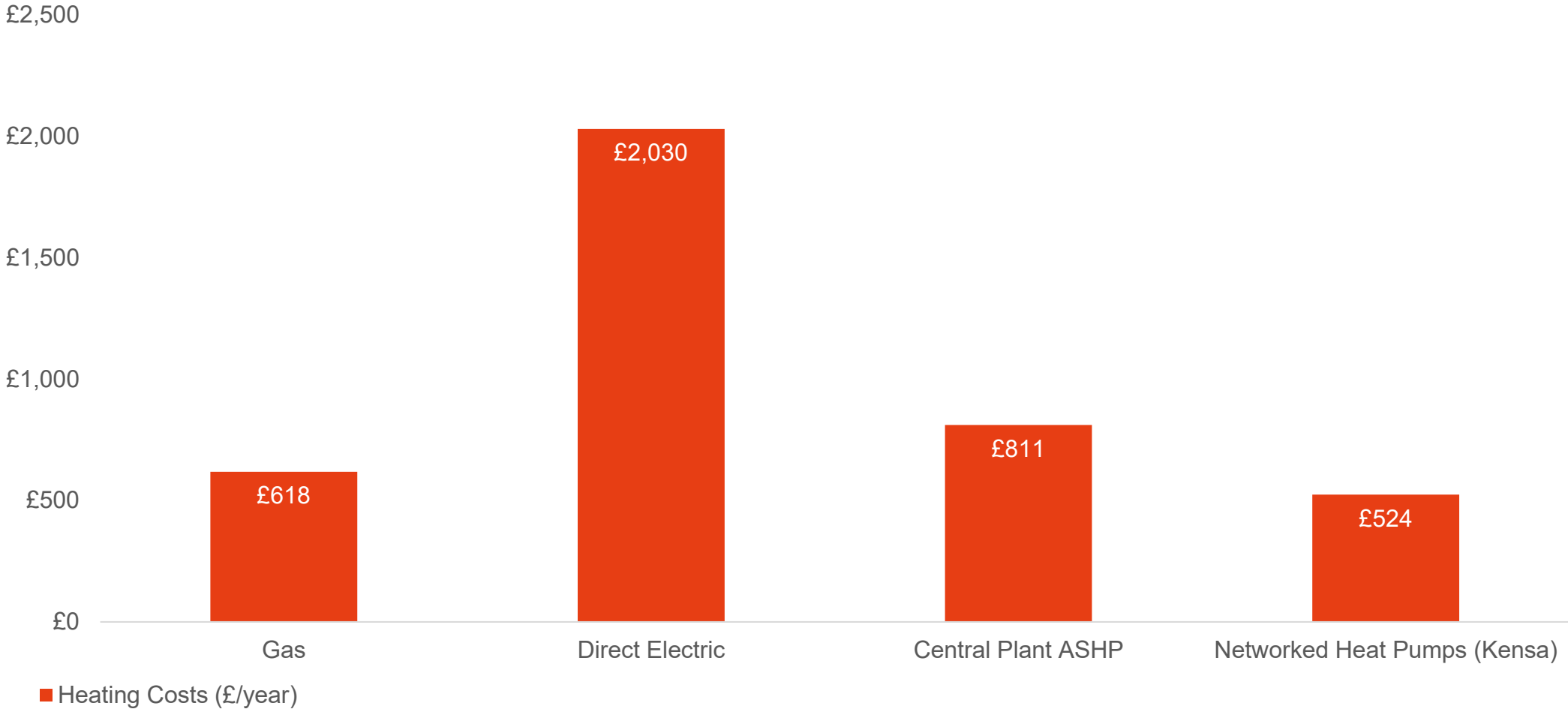


Internal set up inside a Social home



All dimensions are in mm

With Kensa's solution your residents will be able to warm their homes at an affordable cost



Will GSHPs work for your portfolio?



- There's only one way to find out – Give us a call
- We can arrange CPD sessions/ Lunch and learn events
- We offer free of charge feasibility studies showing:
 - Upfront costs
 - New running costs
 - Projected Carbon savings
- We can take you to site and show you our drilling process in action!

Thank you

More info: kensa.co.uk

Presented by: Joe Curwen

