SMART NETWORKED GROUND SOURCE HEAT PUMPS

Future Homes Heating and Hot Water for Smarter, Greener, Low-Cost Living

Smarter for Housebuilders

- **Future Homes Standard ready** – 75-80% less carbon from day one
- **Offers homebuyers lower energy bills**, reliable heat and greener living
- **Significantly lower cost per plot** than individual air source heat pumps
- **Heat pumps are issued free**, with installer training included
- **Same electrical load as gas** – no grid reinforcement
- **Half the electrical demand** of air source heat pumps
- **Up to 15% more efficient** than individual air source heat pumps
- **One-provider delivery** from design to operation – including all maintenance

Smarter for Residents

- **Save Up to 44% on whole-home energy costs***
- **Smart controls** for easy-to-use, optimised heat and hot water
- **Reliable year-round performance** from stable ground temperatures
- **Freedom to choose** an electricity supplier
- **Built-in solar optimiser** boosts hot water efficiency up to 280%
- **Compact heat pump** sits neatly inside a cupboard – no outdoor unit
- **Ofgem-regulated** for consumer peace of mind

* when compared to an average, gas-heated, 3-bed semi-detached home.

SYSTEM

- Boreholes use **stable ground temperatures** for reliable year-round efficiency
- Shared **underground ambient loop** network
- **Discreet, quiet, compact** indoor heat pumps – no outdoor units
- **All maintenance and replacements included** – for life
- Scalable **from 10 plots to 4000+**
- Meets Future Homes Standard – **75-80% carbon saving from day one**

MODEL

- We invest in the boreholes and network – **fully maintained for life**
- **Significantly lower per-plot cost** than individual air source heat pumps
- **Ofgem regulated** for protection and peace of mind
- Reliable and fair **fixed monthly resident fee** linked to Consumer Price Index

TECHNOLOGY

- PE pipe network, **installs like gas/water,** fully managed by GTC
- No outdoor unit – **compact heat pump fits anywhere** in the home
- Smart controls ensure **reliable commissioning** and easy use
- Automated optimisation and Time-of-Use tariff ready – **for even more savings**
- **Solar optimiser boosts hot water efficiency** (up to 280% vs immersion diverters)

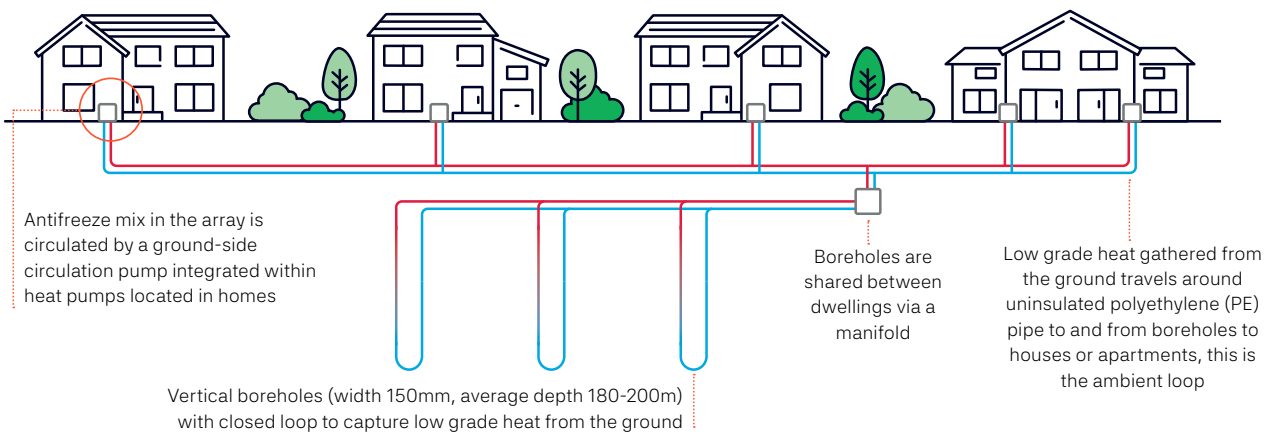
GRID

- **Lowest electrical load** – same as gas
- **Half the electrical demand** of individual air source heat pumps
- **Reduces need for additional electrical reinforcement** and infrastructure
- **Supports smart grid balancing** – optional service can earn payments for residents
- **Accelerates site build-out**, saves time and money

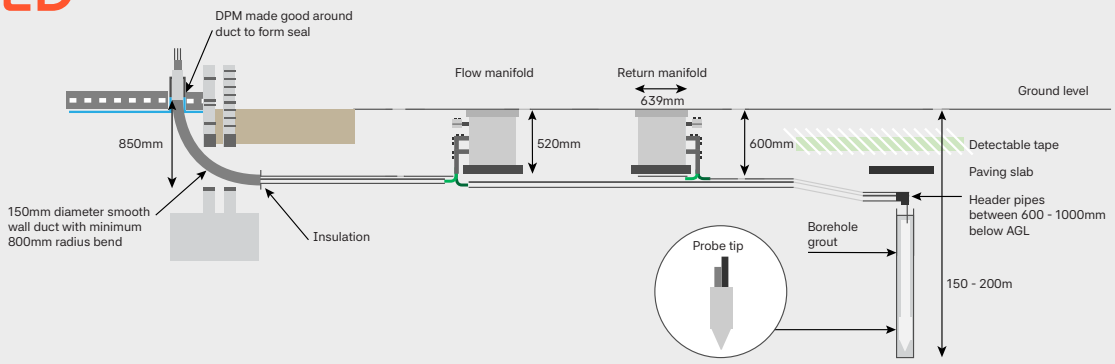
PERFORMANCE

- Draws low temperature energy from the ground, delivering **high temperature heat**
- **Up to 4.2kW of heat per 1kW electricity**
- Stable ground temperature = **no seasonal usage variations**
- Designed to **comply with Part L** Building Regulations
- **Passive cooling option** supports Part O compliance
- Helps **improve SAP rating**, subject to building specification
- **15% more efficient** than individual air source heat pumps

Take a look at how it works:



ENGINEERED FOR EASE



EASY

- Site build-out characteristics **like our other pipe networks**
- Developed using **proven multi-utility** techniques
- **Non-insulated pipes, electrofusion joints, minimal civils**
- Installs **like a gas or water network** – familiar and easy

UNIQUE

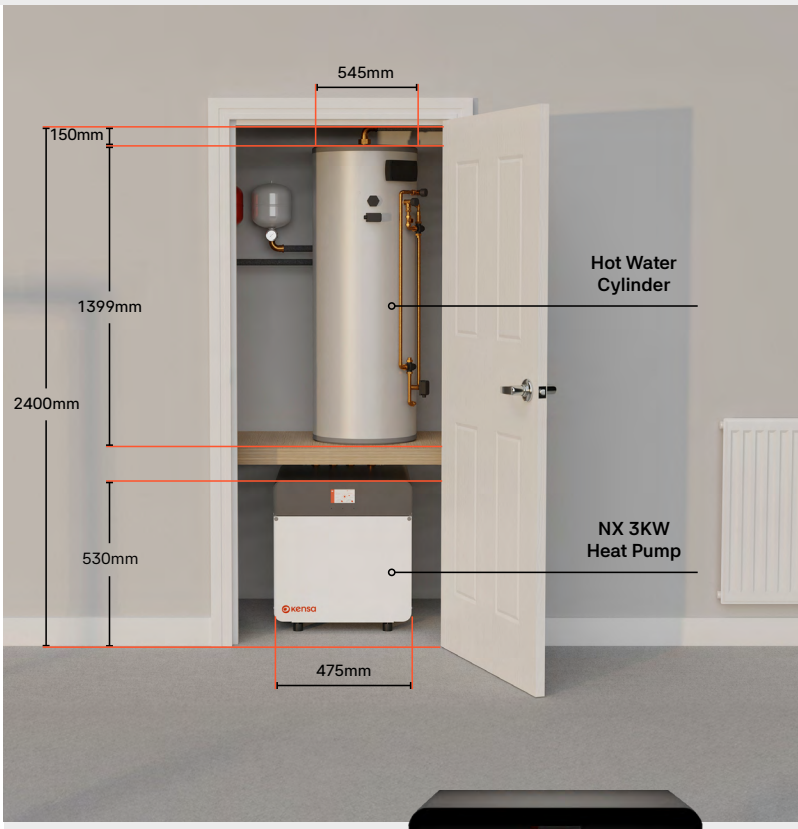
- Exclusive structurally rated chamber **installs in footpaths** with other utilities
- Ensures **quick, low-cost civils** with **minimal space** requirement

COMPLETE

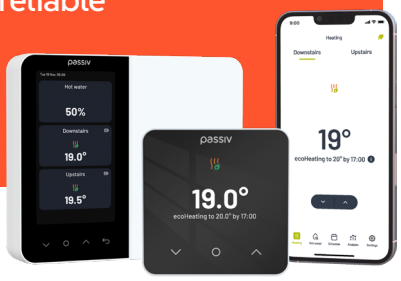
- **Automated borehole drilling** for speed and safety
- Simplified **PE pipe network**
- **Unique chamber design**
- **Easy service pipe** entry into each property

FAMILIAR

- Compatible with hot water cylinders, low-temperature radiators, and underfloor heating – **delivers heating and hot water just like a traditional boiler**
- Smart thermostat is **simple to install and reduces setup time**
- Electrofusion pipe enables **fast, reliable installation with minimal civils**



Smart controls = reliable commissioning, optimised heat and easy use.



KENSA NX HEAT PUMPS

AWARD-WINNING. UK-MADE.

- **Ultra-quiet, highly efficient, super-compact** heat pumps
- Can be **installed anywhere in the home**, e.g. airing/kitchen cupboard

Construction Process

01 DRILLING

Boreholes drilled early (5 - 10 per week)

02 BOREHOLE PIPES

Pipes left with protective marker posts for clear identification and to prevent damage

03 MAINS

Book mains connection (typically in footway) when kerbs are in – within 10 days

04 SERVICE

Book plot service connections – within 5 days

05 PUMPS

Order free-issued heat pumps and schedule installer training

06 FITTING

Installer fits and commissions using our app – quick setup with no risk or hassle

Find out more at www.gtc-uk.co.uk