

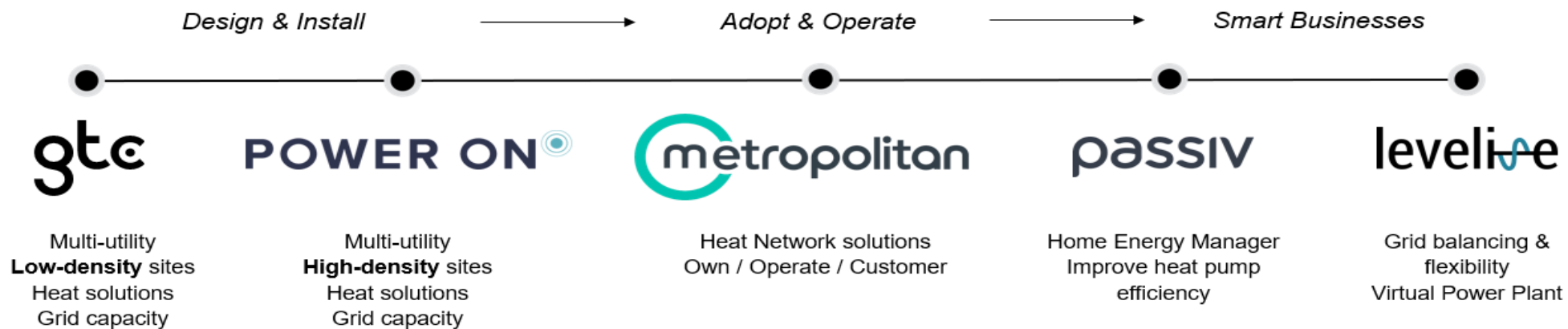
Networked Heat Pumps



The solution for housebuilder's electricity grid capacity constraints

gtc | Quick Recap

- GTC build & own **regulated** utility last mile networks for new homes - Over 3 million connections.
- Owned by Brookfield Asset Management >\$825bn assets worldwide.
- Financial strength underpins approach to investment – Baa2 credit rating.
- Providing utility **solutions** to housing market for over 30 years.
- Market leaders and influencers in a complex sector.
- **True** multi-utility / one-stop shop **Heat** – **Electricity** – **Fibre** – **Water** – **Wastewater** – Gas.
- Regulation and consumer protection is paramount.
- Building for a smarter future.



gtec | A problem shared

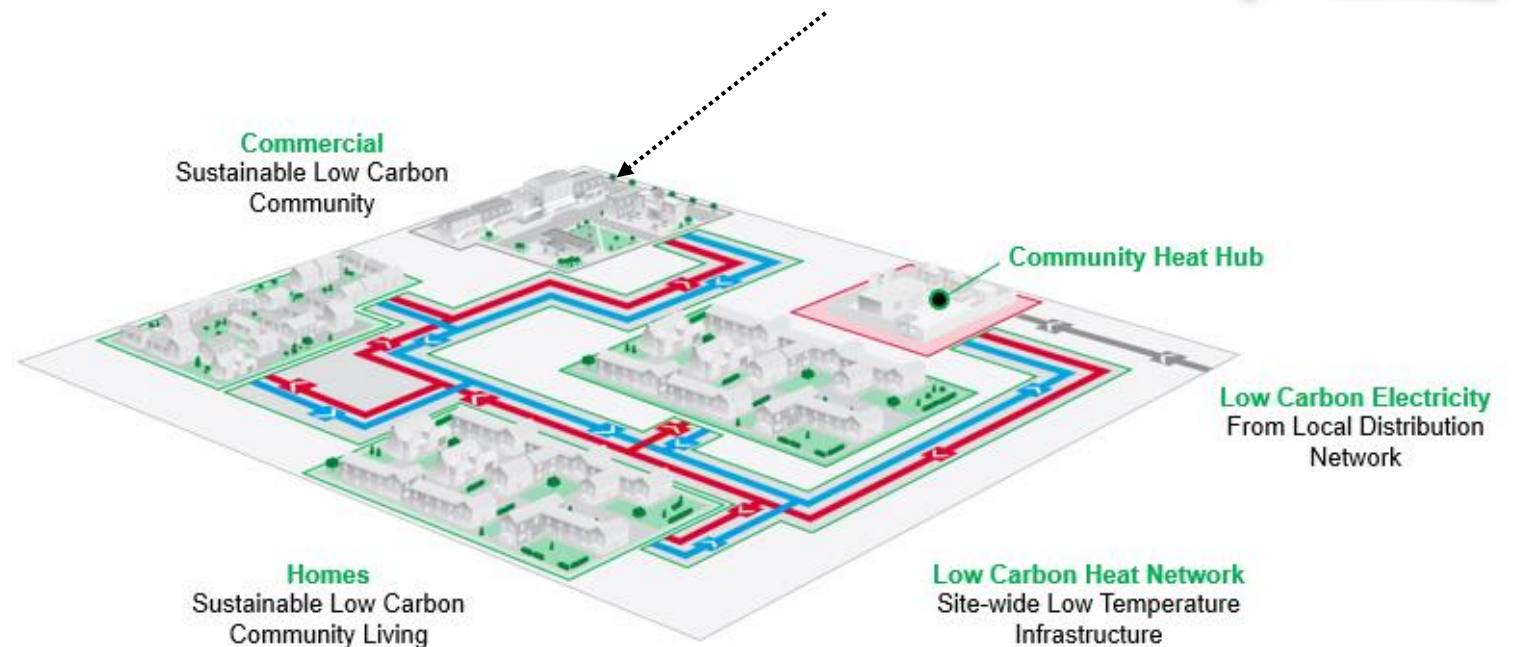
- ✓ **Low Cost** - alternative to gas that is affordable for you and your customers.
- ✓ **Low Carbon** – solution that satisfies compliance and a joint commitment to a more sustainable future.
- ✓ **Lower Capacity** – smart solutions that minimise unnecessary system reinforcement on new and transitional projects.

gtc | Solution 1 – Community Heat Hub

- Centralised Air Source Heat Pump (ASHP), heat network and thermal storage.
- Suitable for projects >150 units.
- System operates like a gas boiler / instantaneous heat and hot water.
- Developer still trenches and provides civils for Community Heat Hub.
- No external ASHP unit or cylinder required on the property.
- HIU size of gas boiler – significant space saving benefit.
- GTC install infrastructure and free issue HIU.
- All infrastructure including HIU owned and operated by Metropolitan.

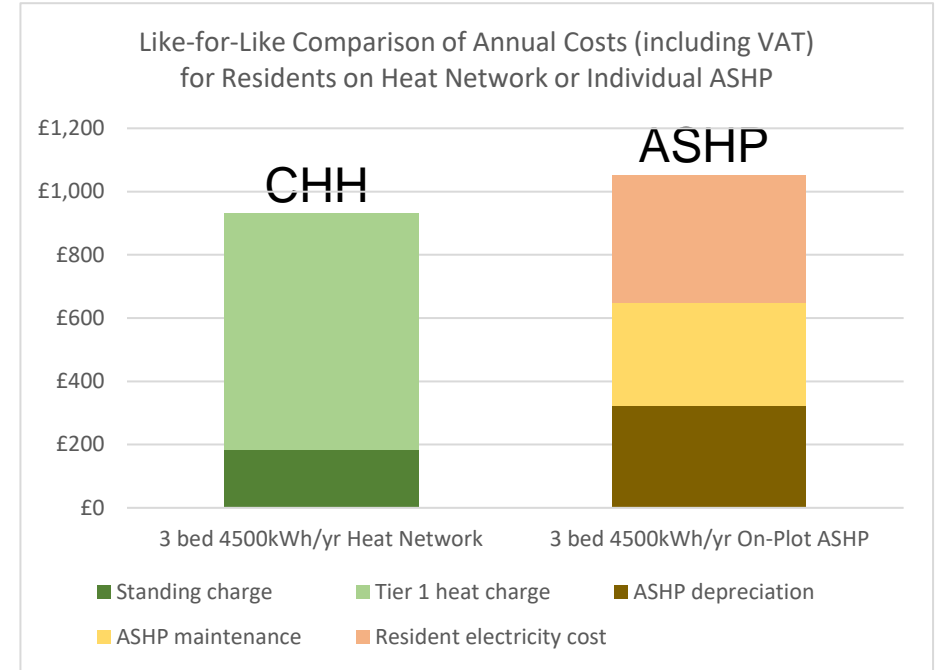


Heat Interface Unit



gtc | Community Heat Hub cont.....

- All heat charges will be fully regulated by OFGEM from April 2025.
- 80% reduction in carbon.
- **30-40% reduced capacity requirement.**
- c£1800 per plot saving vs single ASHP solution
- Consumer Saving, excluding flexibility



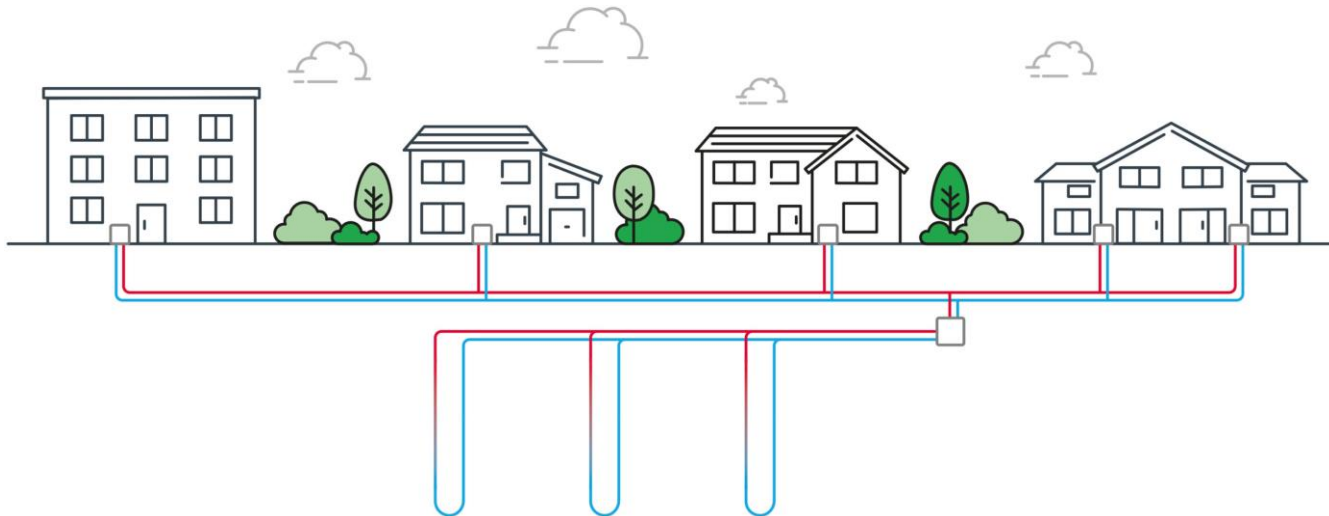
Estimates for 3-bed house with annual consumption 4,500Wh heat and hot water

- Opportunity to further enhance in-home optimisation with PV/Battery.

Heat Network Charges including VAT	
Standing Charge	£15.35 per month
Heat Charge	16.6 pence per kWh
Total Monthly Cost	£77.56

gtec : Solution 2 – Networked GSHP

- Formal partnership with Kensa UK.
- Suitable for projects >10 units.
- Boreholes and pipework to property installed by Kensa and GTC teams.
- GTC free issue Shoebox Kensa heat pump.
- All infrastructure, including heat pump, owned and operated by Metropolitan – 365 days, with 24/7 cover.
- No external ASHP unit required - internal space saving
- Add PV/Battery to further enhance optimisation.

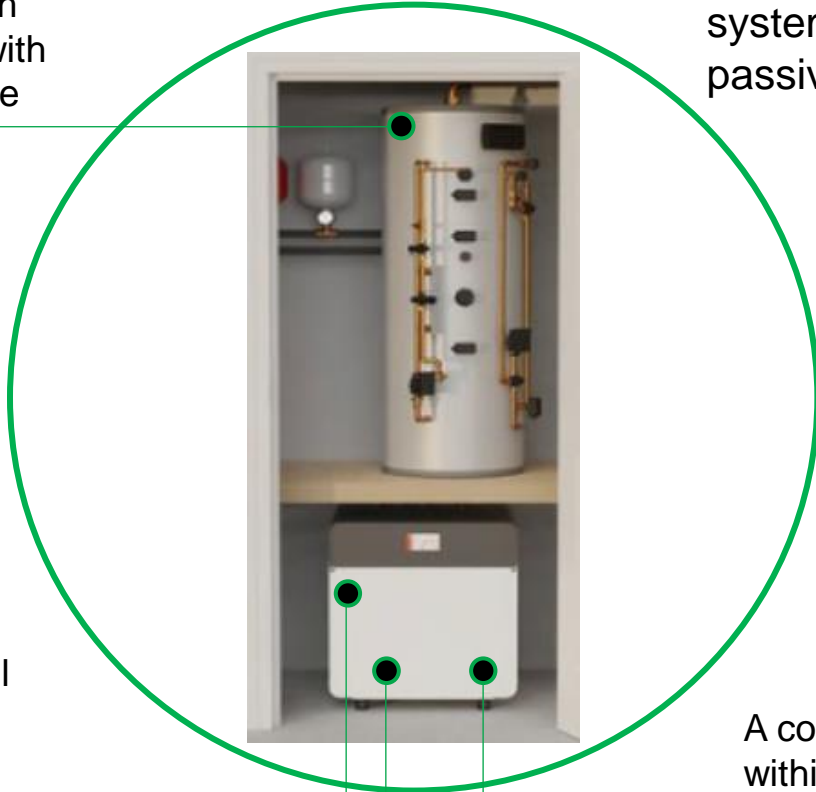


- No maintenance or replacement costs for homeowner.
- System more efficient than ASHP.
- Heat pump comes with Passiv Smart Thermostat for smarter controls.
- Passiv Cooling option.

✓ Same capacity requirement as a gas connection.

gtc : Networked GSHP cont....

A hot water cylinder is required, which can be located with or separate to the heat pump.

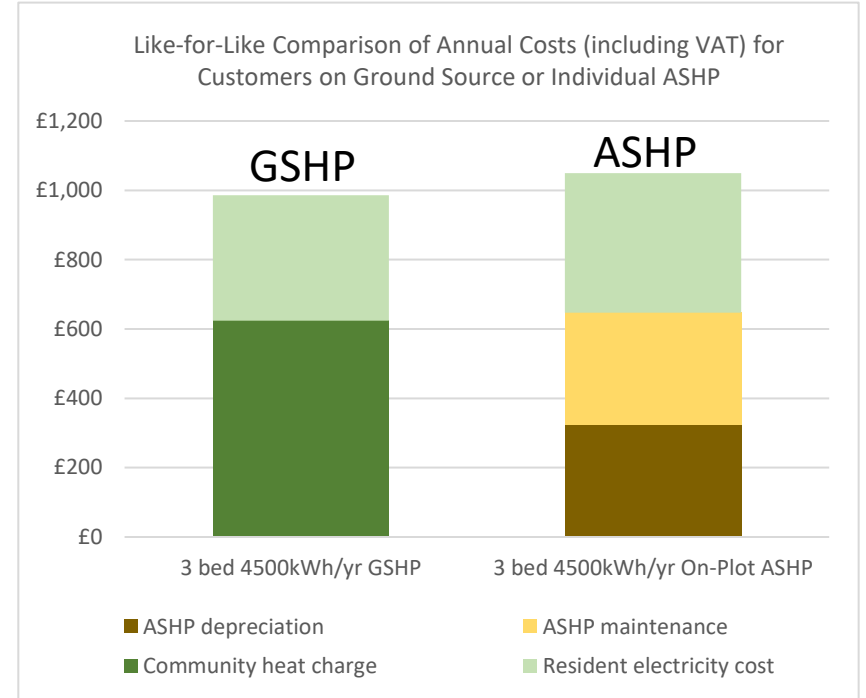


With the addition of a fan cool unit, the system can provide passive cooling.

The pump is compatible with all heating and control systems.

The heat pump can fit in a cupboard or under a sink, no vents required.

A compact heat pump within each home connected to an ambient loop delivers space heat and hot water at c. 60°C (with lower temperature if required).



Property Type	Community Heat Charge Per month excl. VAT
1 Bed Flat	£39.64
2 Bed Flat	£42.15
2 Bed House	£45.53
3 Bed House	£49.52
4 Bed House	£63.32
5 Bed House	£67.68
6 Bed House	£72.67

gtc | Solution 3 – Smart Grid: Smart Home

Virtual Lead Party (VLP – Levelise)

- Trades energy appliances on grid wholesale and flexibility markets.
- Grid pays VLP for balancing the grid.

Home technology integrations

- Integration and smart optimisation of PV, battery storage and EV chargepoint.
- Maximise self-consumption of PV energy.



Passiv Smart Thermostat

- Heat pump optimisation.
- 0.5 improvement in COP.
- 30% saving on annual heating bill.

Time of use tariff optimisation

- Heat pump optimised to time of use tariffs.
- Saving a further £100 on heating costs.
- Battery storage and EV charging also optimised.



Grid - Demand side response

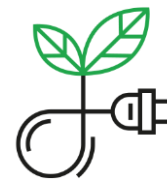
- Aggregated volumes can provide flexibility to energy suppliers, network operators and aggregators.
- Ability to manage local grid and capacity constraints.

The Passiv Smart Thermostat

The Passiv Smart Thermostat is the first smart thermostat designed specifically for controlling heat pumps and is the result of over 10 years of R&D in low-carbon heating.

- Easy to Install & Commission
- Simple for Homeowner
- Improves Heat Pump Efficiency by 17% (EST)
- Energy Tariff Optimisation
- Access to flexibility Markets

- Compatible with all GTC solutions.



Thank You

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