SECTOR ANALYSIS

Hiperpile is a low-carbon foundation system, enabling efficient, reliable, and sustainable thermal energy for all - reducing overall energy system costs while enhancing efficiency.

Lower Carbon Footprint – our piled foundation system cuts embodied carbon in deep foundations by 20-30% and optimises the substructure to further reduce carbon impact.

Energy Flexibility & Efficiency – we enable energy storage in the ground, balancing heating and cooling cycles to enhance performance whilst reducing operational carbon and costs.

Innovative Thermal
Pile System – our nextgeneration thermal energy
pile eliminates traditional
issues by separating pipe
installation from piling and
groundworks, ensuring a
reliable and fully functional
thermal foundation system.

Local & District Heat Networks

Government initiatives are ensuring heat networks become increasingly common throughout the UK. Within a heat network, individual premises or whole buildings developments share heating and cooling from various sources through centralised (4th generation) or decentralised (5th generation) energy systems. Heat networks are key drivers in decarbonisation and the ability to deliver Net Zero City masterplans.

Hiperpile is an attractive addition for developments connecting to heat networks. Besides supporting building structures geotechnically and structurally, our solution functions as a thermal energy pile and geothermal source with the added benefit of being a highly efficient thermal energy store. Waste energy can be stored within the water void for hourly and intra-day use, and within the ground array for weekly and monthly use.

Key Benefits:

- 1. A low embodied carbon piled foundation system
- 2. A reliable geothermal energy source providing the network with heating and cooling at high coefficients of performance
- 3. A large thermal store, providing a mechanism to store waste energy for readily available use when demand is high
- 4. Suitable for connection into 4G and 5G heat networks
- 5. Added system flexibility to alternative energy sources
- 6. Saves costs and carbon through efficient operation of the network
- 7. Reduces the size of energy centres in centralised systems
- 8. Reduces alternative thermal store requirements



