



hiperpile™

# 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 next-generation thermal energy pile eliminates traditional issues by separating pipe installation from piling and groundworks, ensuring a reliable and fully functional thermal foundation system.

## Commercial and Residential

Hiperpile is a next-generation thermal energy pile, providing structures with a highly efficient foundation system, resulting in whole-life, embodied, and operational carbon savings. In commercial, residential, and mixed-use developments, it serves as both a thermal source and store as well as providing foundation support.

Savings in embodied carbon and costs are achieved through reduced concrete use in foundation design, while operational savings come from a highly efficient geothermal system. This system harnesses stable ground temperatures and the latest ground source heat pump (GSHP) technology to provide year-round heating and cooling.

Hiperpile represents a significant step towards net zero, transforming foundation systems into renewable and reusable assets. Additionally, the technology benefits the construction process by adopting a DfMA approach, enhancing health and safety, quality, and sustainability within piled foundations.

### Key Benefits:

- Savings in material quantities and associated embodied carbon
- Highly efficient ground source energy system with COPs between 4.0 & 6.0
- Operates as a standalone system delivering peak-load demand or as part of a supplementary system for daily base-load requirements
- Operational cost and carbon savings compared to alternative energy systems
- Reduced noise, increased space and longer design life system than an equivalent air-source system
- Planning application advantages, including reduced Section 106 carbon offset payments
- Enhances the local environment by reducing vehicle movements during construction
- A circular economy product with potential for extension and re-use







**hiperpile™**

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**CONTACT US**

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