



IceBat brings batteries back to UK

ENERGY STORAGE

France-based energy storage firm Fafco's cold thermal energy systems have returned to the UK as fluctuating energy costs continue to drive demand.

Pure Thermal will act as Fafco's exclusive sales and technical partner for the UK and Ireland. Garry Broadbent, founder of the low-carbon heating and cooling specialist, said he is seeing increasing requirements for load-shifting and capacity management.

"Even though cold thermal batteries have not been a mainstream selection choice in the UK for over 20 years, it's really encouraging to be able to demonstrate current use at scale in Europe," he said.

"With our grid constraints and the opportunities to utilise low-cost, low-carbon electricity in the UK, we're actually now in a period where cold thermal batteries can be applied to provide real benefits," Mr Broadbent added.

The IceBat range provides single unit batteries from 650 kWh to 20,000 kWh, which leverage low-cost, off-peak electricity to create and store cooling energy as an alternative to conventional electrical battery storage.

Pure Thermal said Fafco last provided equipment to the UK market in 2003, and the growing need to increase energy storage had led to the decision to return.

A government review of thermal energy storage technology in the UK in 2016 indicated that a poor understanding of the technology and high upfront costs were the main causes of low uptake.

Pure Thermal responded, saying the products use low-cost electricity, enable carbon reductions, provide cooling system resilience and reduce the size of cooling plant installations by working alongside installed chillers.

Epta makes history with propane in Paris

RETAIL

Epta has worked with a France-based retailer to provide a range of propane cooling systems to meet the specific needs of a Parisian store in a historic building in the centre of the French capital.

The cooling specialist says it has provided its Bonnet Névé brand refrigerated cabinets to a new Intermarché store on Paris' Rue Etienne Marcel to provide energy-efficient cooling functions to a converted historic post office building.

One of the main features of the project was to provide cooling functions as part of a store conversion, while also maintaining the building's original architecture.

Epta says that its work with the retailer allowed it to customise the cabinet technologies, as well as balance consumer convenience of easier product access with the unique space challenges of a busy store expected to serve tourists and residents in the city.

Another feature was to provide a

system that makes use of a built-in refrigerated unit that is designed for the efficient use of propane, which is classed as a natural refrigerant with a low GWP.

Epta says the system has a modular design that can support an improved level of energy performance.

Cécile Marty, trade marketing manager for Epta, says the project posed a number of challenges as it needed to ensure more efficient cooling within a historic Parisian building that was not originally designed for modern retail use.

The company's experts were able to meet the retailer's specific needs for the store's development.

"The two-level layout of the 840 m² sales area, the reduced ceiling height on the second floor

"One of the main features of the project was to provide cooling functions as part of a store conversion"

and the absence of a machine room naturally led to the choice of relying on the extensive range of Integral solutions by Bonnet Névé," added Ms Marty.

"This proved to be perfectly suited to this type of application, further supported by the contribution of Epta's energy management division".

The range of technologies deployed to develop the store included systems from Bonnet Névé's SkyEffect range, which are used to display a range of fresh produce and other goods for sale.

The range features an 'urban version' of each unit, which offers transparent doors and a compact design suited for small retail spaces.

Meanwhile, frozen foods will be housed in the company's negative vertical SkyLight Integral Perform units, alongside Eyris Integral refrigerated display units.

The store also makes use of vertical open unit systems, which have been designed specifically to provide an increased display size with transparent side panels.