



Clockhouse Farm

Providing the UK's leading retailers with the highest quality, energy efficient and sustainably grown fruit.



6 No heat pumps providing a total output of 10.6MW.

River extraction system

1,000,000 Litres heat storage to facilitate demand side response

55,000 tonnes carbon emissions saved

170,000m heat distribution pipe

The Project:

Clockhouse Farm have been growing a wide range of crops / soft fruit in the heart of Kent since 1903. As part of their commitment to Net Zero, they announced a £10 Million renewable energy project that would produce soft fruit outside of the regular growing season and improve the company's environmental footprint.





Ebtech were appointed by Clockhouse Farm to design and build the most energy efficient heating system to assist in their overall aim of providing low-carbon fruit which would meet customers' expectations of reducing the emissions generated in their business.

The project, which uses natural energy from the nearby river Medway, is believed to be the biggest river source heat pump system in the country and the most significant investment in green energy for soft fruit in the UK.

The 10.6MW heat pump system utilises heat extracted from the nearby River Medway. The system was designed to extract up to 5 degrees of solar heated energy from the river via a heat exchanger and transferred through the 6No heat pumps to provide 50-degree water.

One of the notable challenges in this project was obtaining the necessary permits from the Environment Agency to allow the river water to be extracted. Ebtech appointed specialised consultants to complete studies and ensure compliance with environmental standards and relevant authorities.



With the ongoing challenges of electrical grid demand, Ebtech advised on a 1,000,000 Litre thermal store to facilitate demand side response. The thermal store provides approximately 1 hour of storage should the business be required to increase or decrease their electrical consumption to balance the grid.

Ebtech continue to monitor the energy efficiency of the system and assist with system optimisation. An expansion in 2024 to include a further 200 tonnes of strawberries has also been planned and will once more be project managed and delivered by the Ebtech team.

"As growers, extending the season is imperative to our – and other British growers' – success by offering the potential for sales to be spread across a longer time frame and therefore ensure less reliance on imported soft fruit. Of course, ultimately this also helps to reduce the carbon footprint. We are delighted with the support and advice provided by Jonathan and his team and are looking forward to the next stage in 2024".

Oli Pascall MD – Clockhouse

