

Mitie cuts Lloyds Banking Group's carbon impact with new electric heating system in Halifax

2 years ago



Mitie has worked with Lloyds Banking Group (LBG), the UK's largest financial services organisation, to decarbonise the heating of its Trinity Road office in Halifax. The new ground source heat pump system is projected to eliminate up to 6,292,112 kWh of gas consumption and up to 1,164 tonnes of carbon emissions per year - equivalent to the CO₂ produced from the annual energy use of 143 homes¹.

The site's main heating source needed an upgrade to replace the building's three 2200kW gas boilers which were energy intensive and beyond end-of-life. In addition, the Trinity Road site is a Grade-II listed building built on top of an old brewery which meant the Mitie team had to consider the historical and heritage constraints that come with refurbishing such heavily restricted buildings.

The project involved replacing the old gas boilers with a new electric open-loop ground source heat pump system to provide the building with renewable heating and cooling and removing the need for gas-powered heating. In addition to the three existing boreholes which had previously been used by the old brewery for beer-making, the process required the drilling of two new ones to facilitate the 1400kW of renewable electricity required to heat the entire building. The boreholes were required at a depth of 300m - nearly as far below ground as the height of The Shard². Despite the complexities of the project, the building remained operational throughout the works, with minimal disruptions to business operations for almost 3,500 colleagues working in the building.

This decarbonisation project builds on Mitie's decade long partnership with LBG, covering energy services

that support LBG's investment in decarbonising its estate and reaching its target of net zero operations by 2030. This includes a recent project in which Mitie upgraded the external decorative lighting display of LBG's iconic Edinburgh office, The Mound, to a more sustainable alternative. This helped LBG to optimise its energy consumption and reduce carbon emissions saving 251,000 kWh of energy a year, a 73% reduction.

Pradyumna Pandit, Managing Director, Sustainability and Energy Services, Mitie, said: "Having worked closely with Lloyds Banking Group to support the decarbonisation of its estate and achieve its wider net zero goals, this was a challenging and interesting project which required an innovative approach. For the UK to reach its net zero targets, there is an increasingly urgent need to retrofit existing buildings, including historically important sites, so we're proud to have delivered such a complex project whilst ensuring minimum disruption."

Matteo Deidda, Senior Sustainability Manager, Lloyds Banking Group said: "The successful installation of the ground source heat pump at our Trinity Road office is a milestone project in decarbonising our buildings and reaching net zero operational emissions by 2030. We know that collaboration is key to achieving our net zero ambitions and we're grateful to Mitie for their partnership in delivering this important and innovative project."

1. The average carbon footprint per household in the UK is 8.1 tonnes of CO₂. Source: [Heatable](#)
2. The Shard, London, is 310m tall <https://www.the-shard.com/shard-quarter/>