

Welcome Building

A net zero workplace heated by the Bristol heat network

A connection to the Bristol heat network has played a pivotal role in enabling Welcome Building, a landmark nine-storey commercial office development in Bristol's Temple Quarter, to achieve net zero carbon in operation and multiple sustainability awards and accreditations.



Project overview



Welcome Building is one of only three buildings in Bristol to **achieve a 'Design For Performance' NABERS UK target rating of 5 stars.**



Located within Bristol Temple Quarter, it is **connected to the Bristol heat network's water source heat pump** at Castle Park Energy Centre. **This generates 975 kW of low carbon heat to the building.**



The building, delivered in a joint venture between EPISO 5, a fund managed by Tristan Capital Partners and Trammell Crow Company, **offers 207,000 sq ft of best-in-class workspace** with occupiers including DAC Beachcroft and Unite Students. It has set a new benchmark for sustainable office development in Bristol.

The challenge

1

Coordination with the construction programme to ensure timely integration

2

Requirement for a zero-combustion, all-electric heating solution

3

Space optimisation for plant and infrastructure

4

Delivering high energy performance while maintaining design flexibility

The low carbon heating solution

- Welcome Building extracts 100% of its heat load from the low carbon water source heat pump at Castle Park Energy Centre. It is also the first commercial office in Bristol to fully utilise this heat source.
- The connection provides renewable heat without combustion, aligning with the building's all-electric design.
- Roof-mounted solar panels complement the heat network connection, further reducing reliance on grid electricity and enhancing the building's renewable energy profile.
- Enabled flexible, all-electric design with no fossil fuel infrastructure.
- Heat network substation is discreetly located in a small plant room in the basement.



The results

1

The building is forecast to be net zero carbon

in operation when tested after a year of occupied operation in 2026.

2

40% forecasted reduction in CO₂ emissions

compared to traditional gas boiler heating systems detailed in the Part L baseline.

3

Building achieved its targeted **EPC A grade**

4

Targeting **BREEAM Outstanding and WELL Platinum**

Toby Pentecost, Senior Vice President & head of UK offices at Trammell Crow Company commented:

“Office buildings have the potential to be better linked to the cities in which they are located, not just in terms of design and placemaking, but also in the sustainability of their operational performance. Welcome Building® is one of the first schemes to tap into the Bristol heat network, operated by Vattenfall Heat UK, to deliver its entire energy load.

We are proud to be an early adopter of an initiative that delivers a city-wide heat network to provide low carbon, reliable heat to the community. It's a crucial step in achieving Bristol's goal to become a carbon neutral city by 2030 and, for Welcome Building®, it ensures electricity and heat used within the building is renewably sourced, while delivering greater energy security for occupiers at the same time. It has enabled us to set a high bar for sustainability for others to follow, targeting optimal energy efficiency while creating a healthy environment.”

