

Press Release

Empower strengthens its Guinness World Records achievements with two new world records for its Business Bay project, bringing the project's total to four Guinness World Records.

Dubai, UAE, 21 October 2026: Emirates Central Cooling Systems Corporation (Empower), the world's largest district cooling services provider, has broken two new Guinness World Records for its Business Bay district cooling project in the field of thermal energy storage. The company received the certificates from Guinness World Records officials on the sidelines of its participation in the 28th Water, Energy, Technology and Environment Exhibition (WETEX 2026), organised by Dubai Electricity and Water Authority (DEWA) at the Dubai World Trade Centre.

Empower achieved the records of 'The largest cumulative thermal energy storage tank capacity at a single district cooling facility' with a capacity of 94.65 MW (154,000 RTh) and 'The most thermal energy storage tanks in a single district cooling facility', 6 with six tanks for its Business Bay District Cooling system in Dubai. These two achievements reflect the exceptional scale of the thermal energy storage capabilities Empower has developed within the project, bringing the total number of Guinness World Records held by the Business Bay project to four.

The certificates reflect the advanced engineering and technical capabilities Empower has developed in large-scale district cooling projects, particularly in deploying thermal energy storage (TES) technology, which allows chilled water to be stored during the most efficient periods and used to meet demand at peak times. This contributes to reducing electrical loads on power grids during peak hours, raising the operational efficiency of cooling plants, and enhancing the optimal use of energy and infrastructure, in support of resource sustainability and greater resilience in cooling operations.

The Business Bay project had previously set two world records in Guinness World Records: the 'Highest Capacity District Cooling Plant', with a current total connected capacity of 293,862 refrigeration tons (RT), and the 'Largest Cooling Plant Coverage (Number of buildings)', currently serving 211 mixed-use buildings, including residential, commercial, hospitality and service buildings, among others.

The Business Bay district cooling project is one of the largest district cooling projects in the world, with an ultimate capacity of 451,540 RT. The project comprises nine district cooling plants, including four currently in operation and two under development, supported by a pipeline network exceeding 53 kilometres in length with a total of 325 buildings committed to receiving district cooling services from the project.

These achievements come as Empower continues to expand the Business Bay project. In 2026, the company signed a contract for the design of the fifth plant in the area, with a production capacity of up to 44,000 RT, with construction works set to begin in the fourth quarter of the year, as part of its plans to keep pace with the growing demand for high-efficiency district cooling services in Dubai.

“The achievement of two new Guinness World Records for the Business Bay project is a significant milestone, further strengthening the track record of both Empower and Dubai in the district cooling sector. It demonstrates that leadership is defined not only by the scale of projects, but also by the ability to deploy advanced technologies that enhance efficiency and deliver sustainable long-term value. This global recognition reflects the engineering and operational expertise we have built in thermal energy storage technologies, and our ability to develop major projects that respond to the growing demand for cooling efficiently, reliably, and sustainably,” said **H.E. Ahmad Bin Shafar, CEO of Empower.**

“Thermal energy storage technologies play an important role in enhancing the operational efficiency of the district cooling sector by managing energy demand more effectively and making optimal use of plant capacities at different times of the day. We are proud that the Business Bay project has become a global model that combines large capacity, technical efficiency, and sustainability, and that it has achieved four Guinness World Records reflecting Dubai’s leadership and its ability to develop advanced infrastructure that supports its urban and economic growth. We will continue to invest in innovative technologies and solutions that contribute to energy efficiency, reduce carbon emissions, and strengthen Dubai’s position as a global capital for the green economy and sustainable development,” he added.

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