

Press Release

Ahmad Bin Shafar: Sustainable district cooling systems underpin Dubai's new vertical expansion

Dubai, UAE, 23 December 2025: Dubai continues to consolidate its position as one of the world's most advanced cities in urban planning, guided by a comprehensive vision that extends beyond constructing skyscrapers to encompass smart infrastructure designed to support growth efficiently and sustainably. As vertical expansion accelerates, district cooling systems are emerging as a critical component in keeping pace with this transformation and enhancing the efficiency of Dubai's urban economy.

With the Council on Tall Buildings and Urban Habitat (CTBUH) unveiling a list of the 10 tallest skyscrapers under construction between 2026 and 2030, this ambition is reflected in mega-projects rising hundreds of metres into the skyline. These developments underscore the emirate's rapid urban expansion, driven by a strong economy, attractive investment opportunities, and growing demand for advanced urban lifestyles. Within this context, district cooling stands out as a vital pillar of this expansion, serving as an indispensable sustainable solution for future cities, capable of efficiently and reliably supporting ultra-high-rise towers, in line with Dubai's vision of a low-carbon economy.

In this context, H.E. Ahmad Bin Shafar, CEO of Empower, Chairman of the District Cooling Operators Association, Special Advisor on District Cooling to the global initiative of United Nations Environment Programme (UNEP), and Member Emeritus of the Board of Directors of the International District Energy Association (IDEA), said the growing reliance on district cooling systems in Dubai's new skyscrapers reflects the emirate's vision of developing an integrated infrastructure that supports both urban and economic growth. He explained that Dubai's vertical expansion is guided by clear principles that combine energy efficiency, resource sustainability, and enhancement of the long-term competitiveness of real estate projects, noting that district cooling is a fundamental element in achieving this balance.

He added that nine of the ten towers listed among the tallest skyscrapers under construction in Dubai rely on sustainable district cooling systems, underscoring the growing alignment between architectural ambition and environmental sustainability requirements. He noted that this trend reflects increasing awareness among real estate developers of the importance of selecting infrastructure solutions capable of efficiently supporting vertical expansion, particularly in the UAE's climate, where mixed-use residential and hotel developments require systems that ensure long-term operational efficiency while minimising environmental impact.

Bin Shafar noted that the adoption of district cooling systems by ultra-high-rise skyscrapers demonstrates that the future of urban development in Dubai is built on integrated foundations that combine sustainability and innovation. He expressed pride in the contribution of district cooling operators in the UAE to supporting this direction, which reinforces Dubai's position as a global

leader in sustainable urban development. He added that district cooling is no longer a limited-impact technological option, but has become a strategic element that enhances energy efficiency, reduces carbon emissions, and improves quality of life within the landmark buildings shaping the emirate's skyline.

Bin Shafar further affirmed that the District Cooling Operators Association continues its role in enhancing coordination and integration among real estate developers, operators, association members, and decision-makers to ensure the adoption of global best practices in this vital sector and supports Dubai's ability to achieve an effective balance between urban growth, environmental responsibility, and the efficiency of the urban economy. He noted that district cooling is a cornerstone in achieving national sustainability goals and supporting the emirate's initiatives in energy efficiency, resource management, and reducing the carbon footprint of the urban sector, in line with the UAE's Net Zero 2050 Strategy and the Dubai Net Zero Carbon Emissions Strategy 2050.

He noted that six of the tallest skyscrapers under construction in Dubai will be supplied by Empower: Binghatti Jacob & Co. Residences, Tiger Sky Tower, Al Habtoor Tower, Bayz 101, Six Senses Residences, and Franck Muller Aeternitas, in a clear confirmation of the pivotal role that district cooling operators play in supporting the emirate's mega-projects and future infrastructure.

Additionally, the District Cooling Operators Association affirms that district cooling is the most suitable solution for the UAE's local climate, offering higher operational efficiency than conventional air conditioning systems, as well as the ability to operate reliably in high-rise buildings and mixed-use developments. The association further underscores that this approach helps reduce pressure on electricity grids, enhances energy efficiency across cities, and improves quality of life within buildings. This aligns with Dubai's progression towards a more sustainable urban future, integrating urban development with environmental responsibility and offering a model applicable to cities worldwide.

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