

Tabreed Extends Partnership with ENGIE Digital, Introducing Bespoke AI to Downtown Dubai District Cooling Network

• Collaboration is part of Tabreed's Big Data strategy

• Software will fully automate operation of the world's largest district cooling scheme

Abu Dhabi, United Arab Emirates – 24 May 2022: Tabreed, the UAE's pioneering District Cooling company, and ENGIE Digital, have extended their partnership with the implementation of Nemo, ENGIE's operations software, in the 235,000 refrigeration ton (RT) capacity Downtown Dubai network.

In recent years, Tabreed has invested heavily in revamping its IT infrastructure as part of the company's digital transformation and big data strategy and is capitalising on data generated over decades of operating district cooling plants and networks. Thanks to state-of-the-art IT infrastructure and the vast amounts of data readily available, Tabreed is able to achieve what is considered a breakthrough in district cooling by setting up a fully autonomous operation in the Downtown Dubai District Cooling Scheme, which is the largest of its kind anywhere in the world.

Data driven intelligent algorithms are able to forecast customer demand and make all operation related decisions, such as chilled water flow, temperature set points, equipment sequencing and network mix, optimising energy and water consumption and removing human error from operations.

In addition to the environmental benefits of this project, early testing has proved a remarkable decline in equipment downtime and improved cooling supply security. These improvements result from early failure detection and swift action of artificial intelligent algorithms that are able to divert flow and change mix on chilled water networks in a fraction of a second.

Atef Al Breiki, Senior Vice President of Operations at Tabreed, explained that one of the main factors that positions the company as the region's leader in district cooling is that it has been operating longer than anyone else. "Over the past decades, Tabreed has accumulated unparalleled district cooling engineering and operations expertise, generating massive amounts of OT and business process data," he said. "Tabreed has implemented a digital strategy, investing in its IT infrastructure and OT side systems to unlock value from its legacy and long track record in the business. The collaboration with ENGIE Digital and success of Nemo integration is a direct result of this strategy."



Al Breiki added: "This project is the first of its kind, designed to ensure that our business model is future proof. With such programmes we continue to create value for all stakeholders and benefit society at large, further solidifying Tabreed's position as the region's leading district cooling provider."

Igor Rocca, Nemo Project Lead at ENGIE Digital, agreed, saying: "This partnership with Tabreed is a phenomenal milestone for Nemo, ENGIE's digital DHC-dedicated platform, and we are honoured to be supporting Tabreed in their drive for continuous improvement and operational efficiency at the Downtown Dubai cooling network. The successful implementation of Nemo has propelled us and given us motivation to keep on enhancing our platform and better supporting our partners. All Nemo teams are fully committed to bring the maximum value possible to Tabreed."

Tabreed acquired an 80% stake in the Downtown Dubai district cooling network from Emaar Properties in April 2020. The world's largest district cooling network, it comprises four interconnected district cooling plants with a combined connected supply of 160,145 RT of cooling connected to 80 buildings. Through its energy efficiency, the network prevents 205,000 tons of CO₂ from entering the atmosphere each year – equivalent to removing 44,500 cars from the roads.

Tabreed's Downtown Dubai network supplies cooling to many of the world's most iconic buildings and venues, including the Burj Khalifa, The Dubai Mall, Dubai Opera and other landmark residential, commercial and hospitality developments.

For more updates from Tabreed, visit <u>www.tabreed.ae</u>

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About National Central Cooling Company PJSC (Tabreed)

Tabreed provides essential and sustainable district cooling services to iconic developments such as the Burj Khalifa, Sheikh Zayed Grand Mosque, Louvre Abu Dhabi, Ferrari World, Emirates Towers, Yas Island, Al Maryah Island, The Dubai Mall, Dubai Opera, Dubai Metro, Bahrain Financial Harbor and the Jabal Omar Development in the Holy City of Makkah. The company owns and operates 86 plants in its portfolio across the GCC, including 75 in the United Arab Emirates, three in the Kingdom of Saudi Arabia, seven in Oman and one in the Kingdom of Bahrain, in addition to other international projects and operations.



Tabreed is a leading driver of progress for people, communities and environments around the world towards a more sustainable future. Founded in 1998 and publicly listed on the Dubai Financial Market, it is one of the UAE's strongest growth companies. Through its extensive regional and international operations, industry-leading reliability and efficiency, R&D programmes and investment in AI technology, Tabreed further solidifies its position as the industry's global leader. In addition to district cooling, Tabreed's energy efficiency services extend the company's sustainability impact, helping businesses and organisations to improve their overall energy consumption, in turn reducing CO₂ emissions and assisting in the achievement of carbon neutrality objectives.