

Tabreed Green Financing Framework

March 2022



1. Introduction

1.1 Background

National Central Cooling Company PJSC (“Tabreed”, or the “company”) was established in 1998 when it commissioned its first district cooling plant in Sweihan, Abu Dhabi. Tabreed’s headquarters is situated in Khalifa City, Abu Dhabi, UAE. Its business activities involve providing innovative cooling solutions that support the nation’s sustainable development. Some of Tabreed’s notable work includes providing these services to Dubai Metro, Aldar HQ, Burj Khalifa, Dubai Mall and the Yas Island attractions, etc. Built on a successful track record acquired over the last 22 years, the company now has 86 Plants across the GCC.

1.2 Tabreed’s commitment to sustainability

Sustainability is at the core of Tabreed’s operations. It reflects the company’s commitment to energy efficiency, to the environment, to its customers and to the sustainable socio-economic development of the region. This commitment guides Tabreed’s day-to-day work, through environmental and governance practices as well as social initiatives.

In order to further its commitment to sustainability and demonstrate the role Tabreed plays in the sustainability of its environments and communities it operates in, Tabreed published its first ever Environmental, Social and Corporate Governance (ESG) report in 2021. Tabreed is also committed to supporting the GCC communities in transforming into flourishing knowledge economies through technology, knowledge sharing and partnerships that meet ours and our customers’ environmental goals, deliver cleaner energy, increase efficiency and reduce energy in our operations.

Tabreed’s sustainability priorities encompass three main pillars, which are aligned with their values and the national agendas and energy strategies of the region: **People, Community, and Environment**.



Community



People



Environment

Tabreed is the first district cooling company in the region to receive the International Organization for Standardization (ISO) 50001 and ISO 45001 certification. ISO certifications underline Tabreed’s commitment to its stakeholders, in particular its employees and environment.

Environmental Protection & Compliance

Tabreed understands the inherent risks of climate change and is taking bold and consistent steps to minimize our environmental footprint. Tabreed is a member of the Cool Coalition - a United Nations initiative, which it has supported since inception. As set out in its inaugural ESG Report, Tabreed's operations and targets are also aligned with the following United Nations Sustainable Development Goals (SDGs).



Energy efficiency:

District cooling of modern, high density and large infrastructure facilities is inherently more efficient than other conventional forms of cooling. District cooling utilises approximately 50% of the energy required for other forms of cooling and therefore significantly reduces CO₂ emissions. Over the years, Tabreed has intensified its efforts to reduce energy consumption further through improved operational efficiencies. The company constantly monitors the operational efficiencies of its plants. Given the volumes involved in Tabreed's operations, even small improvements can have a significant environmental benefit. Electrical efficiency is a measure of a unit of electricity used in kwh over a unit of sold cooling (RTH). From 2017 to 2020 electrical efficiency improved by approximately 5%.

Thermal Energy Storage (TES) systems enhance Tabreed's ability to manage peaks in district cooling demand and bridge the gap between energy supply and demand. TES systems store chilled water in large tanks, available to use when cooling demand increases. The peak load demand for energy to generate the cooling can be shifted to off-peak by utilizing stored energy from TES units. In this manner, no additional production must be started during times of peak cooling demand, which decreases total energy that would otherwise be consumed at the plants and also reduces costs. Tabreed uses thermal energy storage technology in many of its plants to help achieve larger savings in electricity consumption.

Effective water utilization: Tabreed also measures water utilization through a water efficiency metric, which is a measure of a unit of water consumed in imperial gallons over a unit of sold cooling (RTH). Since 2017 water consumption has declined approximately 2%.

Tabreed is one of the pioneers in the use of Treated Sewage Effluent (TSE) in district cooling plants, which enhances the sustainability of resources by recycling sewage water, which would otherwise be discharged into the environment, to replace potable water. TSE can result in up to 35% savings over conventional potable water systems as it is more cost effective to use TSE and consumes less energy when compared to grid water. Tabreed currently uses TSE in its six plants across its operations with a view to expand across other plants in Dubai and Abu Dhabi.

Tabreed also operates one of the only district cooling plants utilizing sea water in the world. Located in Bahrain this plant has saved over 700 million IG's of potable water since it commenced operations in 2011.

CO₂, NO_x, SO_x and other emissions: Tabreed has commissioned Intertek, a British multinational assurance, inspection, product testing and certification company that maintains extensive global accreditations and recognitions for testing and certification services. As a part of Tabreed's environmental compliance and to avoid or reduce business disruptions Intertek carries out semiannual stack emissions monitoring of Tabreed's engine generators at Al Maraya Island, Abu Dhabi, for oxygen (O₂), carbon

monoxide (CO), carbon dioxide (CO₂), Sulphur dioxide (SO₂) and oxides of nitrogen (NO_x), smoke density, Ambient temp, and Stack gas temp.

Management of hazardous waste: To ensure appropriate disposal of general and hazardous waste, Tabreed has engaged Environmental Services Providers (ESP's) authorized by UAE Federal and Local waste management authorities for the collection, loading and transportation of hazardous used oil, batteries, empty chemical cans and oil drums from various plants operated by Tabreed and its affiliates.

1.3 Sustainability Governance

Tabreed maintains the highest standards of corporate governance and conducts its business with integrity, accountability, and transparency. The company is committed to continuous improvement and monitoring to enhance its corporate governance structures, processes, and practices. Every year Tabreed produces a corporate governance report which comprehensively addresses governance in Tabreed. The reports are available at the Company's website¹.

During 2020 the Company formed an **ESG Committee** to monitor compliance and disclosure with regards to ethics, CSR compliance, and corporate, social, and environmental responsibility. The committee is chaired by the CFO.

The company also instigated a **COVID-19 Committee** to provide guidance and to oversee the implementation of necessary actions to safeguard employees and maintain business continuity during the current COVID pandemic. The committee is chaired by the COO.

2. Tabreed Green Financing Framework

In order to meet the commitments described above, and finance projects that will deliver benefits to support Tabreed's business strategy and vision, Tabreed has elected to create a Green Financing Framework (the "Framework"), under which it can issue Green Financing Instruments. This Framework is in accordance with the ICMA Green Bond Principles (GBP) 2021² and the Loan Market Association (LMA) Green Loan Principles (GLP) 2021³.

In alignment with these Principles, for each Green Financing Instrument issued, Tabreed asserts that it will adopt the GBP's/GLP's four core components as well as its recommendation for external review, as set out in this Framework:

- 1) Use of Proceeds
- 2) Process for Project Evaluation and Selection
- 3) Management of Proceeds
- 4) Reporting

Bond(s), loans and sukuk issued under this Framework may take the form of public transactions or private placements, in bearer or registered format, and may take the form of senior unsecured or subordinated issuances. Such bonds, loans and sukuk entered into under this Framework will be standard recourse-to-the-issuer obligations and investors will not bear the credit risk of the underlying allocated eligible asset exposures.

¹ Tabreed Corporate Governance Reports - <http://www.tabreed.ae/investor-relations/governance/corporate-governance-reports/>

² ICMA's Green Bond Principles, June 2021 - <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp>

³ LMA's Green Loan Principles, February 2021 - <https://www.lsta.org/content/green-loan-principles>

2.1 Use of Proceeds

An amount equivalent to the net proceeds raised from any Tabreed Green Financing Instrument issued under this Green Financing Framework will be allocated, in part or in full, to finance the following 'Eligible Green Projects':

| Alignment with the GBP | Alignment with the UN SDGs ⁴ | Eligibility criteria |
|--|---|--|
| Energy Efficiency |  | Investment in District Cooling (DC) projects including: <ul style="list-style-type: none"> • Construction of new DC plants, for both existing and new buildings • Acquisition of existing DC assets Investing in solutions leading to an increase in operational energy efficiency by at least 20% |
| Sustainable Water and Wastewater Management |  | Investments, upgrading and maintenance of infrastructure and water systems with at least 20% increase in water efficiency Investments into infrastructure and systems that reduce freshwater consumption, such as using TSE or seawater |
| Green Buildings |  | Investing in buildings that have a minimum green building certification of: <ul style="list-style-type: none"> • LEED Gold • Estidama 3 Pearls (with a minimum 20% improvement in energy performance over ASHRAE 90.1 2007) |
| Renewable Energy |  | Research & Development, investments and expenditure including construction, operation and transmission from renewable energy sources, including: <ul style="list-style-type: none"> • Solar PV • Geothermal facilities with direct emissions intensity of $\leq 100\text{gCO}_2/\text{kWh}$ |

2.2 Project Evaluation and Selection Process

The Project Evaluation and Selection Process will ensure that the proceeds of any Green Financing Instrument are allocated to finance or refinance Eligible Green Projects that meet the criteria set out above in section 2.1 Use of Proceeds.

Tabreed will establish a will set up a Green Finance Group (GFG), which will be made up of representatives from the below departments:

- Finance / Treasury
- Operations
- Asset Management
- Business Development
- Legal & Compliance

⁴ UN Sustainable Development Goals: <https://sustainabledevelopment.un.org/?menu=1300>

The GFG will be chaired by the CFO and will meet on a semi-annual basis.

The objectives of the GFG are:

- To review all projects presented to Tabreed's Investment Committee to assess eligibility for Green financing in accordance with the pre-determined Eligibility Criteria set out in Section 2.1 Use of Proceeds of this Framework
- To ensure all Eligible Green Projects have been assessed from an Environmental and Social Risk standpoint
- To oversee the arrangements established to ensure the Green Financing Instruments remain in alignment with the GBP/GLP
- To oversee the arrangements established to ensure Green Financing Instruments proceeds are utilised in accordance with the uses specified in the Framework; and,
- To oversee the introduction and operation of arrangements to generate the information required to produce periodic Reports, in accordance with the Framework and the Green Financing Instruments issued

2.3 Management of Proceeds

The net proceeds of each Tabreed Green Financing Instrument will be deposited in Tabreed's general funding accounts and earmarked towards eligible green projects as stated in section 2.1 Use of Proceeds of this Framework.

Tabreed will also create a Green Finance Register to track the earmarking of funds towards eligible projects, which will contain the following information:

- I. Green Finance Instrument (Sukuk/Bond/Loan etc.) details: pricing date, maturity date, principal amount of proceeds, coupon, ISIN number, etc.
- II. Allocation of Proceeds:
 - i. The Eligible Green Projects List, including for each Eligible Green Project, the Eligible Green Project category, project description, project location, Company's ownership percentage, total project cost, amount allocated, settled currency, etc.
 - ii. Amount of unallocated Proceeds

In the event that funds cannot be immediately and fully allocated, or in the event of any early repayment, proceeds will be held in line with Tabreed's general liquidity guidelines until allocation to Eligible Green Projects.

Tabreed intends to allocate the proceeds of a given Green Financing Instruments to Eligible Green Projects originated no more than three years prior to the issuance. The proceeds will be fully allocated within three years from the date of issuance.

2.4 Reporting

On an annual basis, Tabreed will publish an allocation report and an impact report on its Eligible Green Projects Portfolio, as detailed below. This reporting will be updated annually until full allocation of the net proceeds of any Green Financing Instruments issued, or until the Tabreed Green Financing Instruments is no longer outstanding.

2.4.1 Allocation Reporting

Tabreed will provide information on the Eligible Green Projects Portfolio on the Tabreed's website. The information will contain at least the following details:

- I. The total amount of proceeds allocated to the Eligible Green Projects
- II. Breakdown of allocation by project category
- III. Breakdown of allocation by project location / geography
- IV. Refinancing versus new financing
- V. The balance of unallocated proceeds

2.4.2 Impact Reporting

Tabreed will provide reporting on relevant green impact metrics including:

- Energy Efficiency:
 - Amount of energy saved (% and MWh)
 - Estimated amount of CO2 emissions avoided / reduced (tCO2e)
- Sustainable Water and Wastewater Management:
 - Amount of water / sewage water recycled (litres)
 - Savings / reduction in water use (%)
- Green Buildings:
 - Level of green building certification
 - Estimated amount of CO2 emissions avoided / reduced (tCO2e)
- Renewable Energy:
 - Amount of renewable energy capacity purchased or generated (MW)
 - Estimated amount of CO2 emissions avoided / reduced (tCO2e)

3. External Review

3.1 Second-Party Opinion (SPO)

Tabreed has appointed Sustainalytics to provide an external review of the Tabreed Green Financing Framework and confirm its alignment with the ICMA GBP 2021 and the LMA GLP 2021. This Second Party Opinion document will be made available on Tabreed's website.

3.2 Post issuance external verification

Tabreed's annual reporting will also be subject to external verification by an independent third party, which will verify:

- the compliance of assets financed by the Green Financing Instruments proceeds with eligibility criteria defined in the use of proceeds section in this Framework.
- allocated amount related to the Eligible Green Projects financed by the Green Financing Instruments; and,
- the management of proceeds and unallocated proceeds amount.

The external verification report will be published on Tabreed's website.

4. Amendments to this Framework

Tabreed will aim to adhere to best practices in the market and will review the Framework's alignment to updated versions of the Principles as and when they are released. As such, this Framework may be updated and amended from time to time. Any such updated and amended Framework will either keep or improve the current levels of transparency and reporting disclosures, including the corresponding review by an External Reviewer, be published on Tabreed's website and replace this Framework. Any green bonds/sukuk/loans subsequently issued will be subject to the updated and amended Framework.