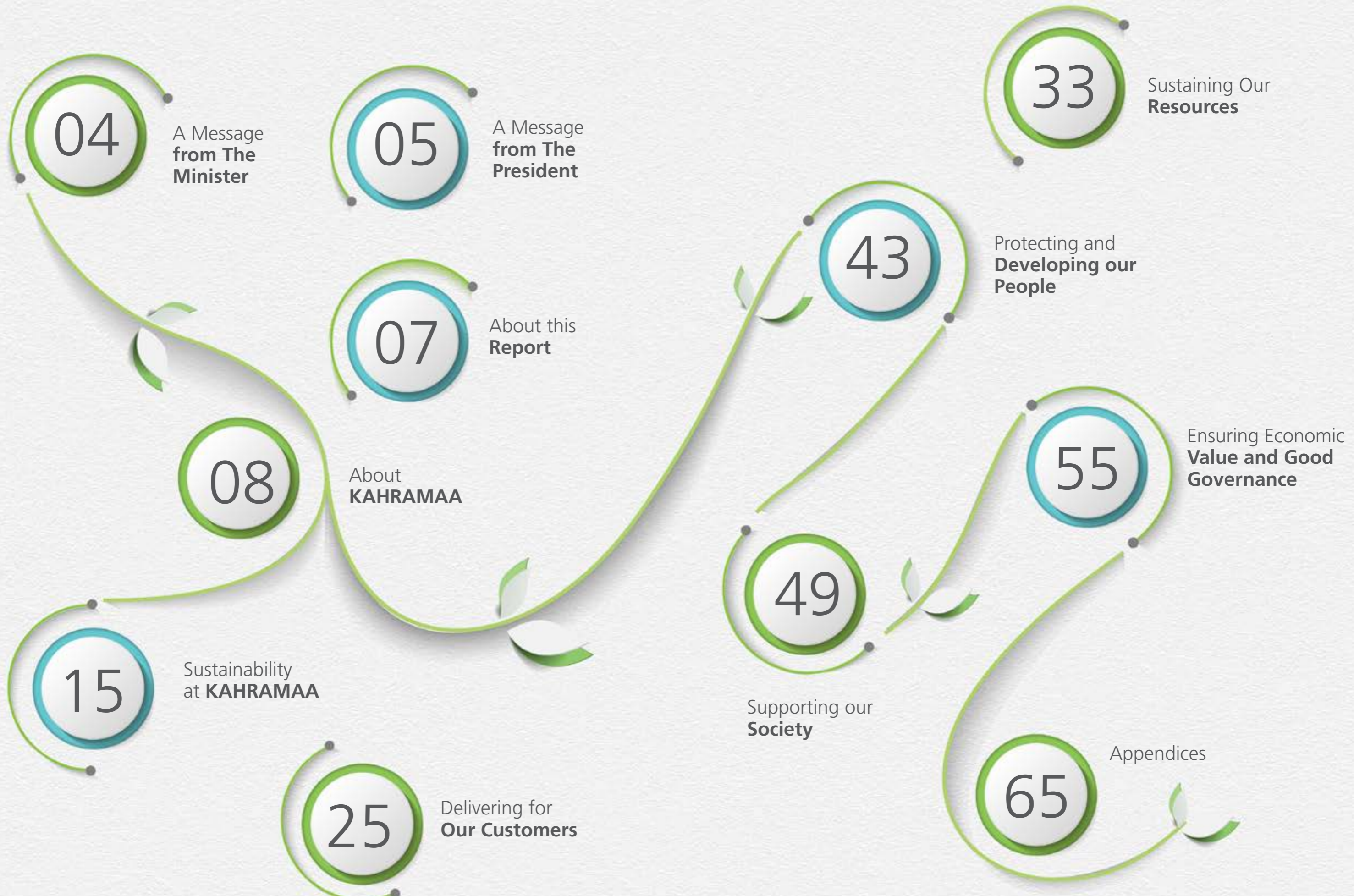


**THE FUTURE
IS OURS**

Sustainability
Report
2018 & 2019





A Message from **The Minister**



Welcome to KAHRAMAA's 2018-2019 sustainability report.

We are proud to deliver this report at a time when Qatar has continued to rise as a dynamic and rapidly growing economy. Qatar's demand and consumption of its key resources is projected to increase due to the multi-layer development of the nation towards self-sufficiency, and it is KAHRAMAA's mission to meet these demands by providing high quality and sustainable electricity and water for better living in Qatar.

KAHRAMAA seeks to achieve its mission through implementation of strategic planning underpinned by its transformation program. The goal is to enhance customer services, meet demand growth, improve business efficiency and strengthen the workforce. This underpins KAHRAMAA's vision is to transform itself into a self-sustaining business, providing high quality and sustainable electricity and water by diversifying its energy sources, such as through solar energy.

The Ministry of Energy and Industry understands the importance of sustainability when it comes to achieving our ambitious long-term development goals. It is therefore critical that we stay current with global trends in sustainable development, environmental preservation and the proper management of wealth and vital resources, including water and energy.

The Qatar National Strategy QNSII 2018-2022 mandates KAHRAMAA through the National Program for Conservation and Energy Efficiency "Tarsheed" to reduce CO2 emission by 7 million tons by 2022, and in 2019, 100MW of the energy generated came from renewable sources. KAHRAMAA is successfully continuing to merge the Tarsheed Vision and the KAHRAMAA sustainability vision into one clear focus.

The State of Qatar is committed to its far-reaching development strategies, laid out in the four pillars of the Qatar National Vision 2030 and the National Development Strategy 2018-2022. In support of this, KAHRAMAA extends its expertise and cooperation to all stakeholders and institutions operating in Qatar with one goal: to support sustainable development across the state. This sustainable development will involve implementing strategic projects and developing services under the Smart Enterprise System to ensure the provision of a stable supply of water and electricity for the nation. KAHRAMAA's development strategies will contribute towards the organization's long-term aim, and by 2030, KAHRAMAA's people, assets, systems and processes will set a global benchmark for performance, technological innovation, environmental sustainability and social responsibility in the electricity and water sector.

As always, we are grateful for the wise leadership of H.H. the Emir Sheikh Tamim bin Hamad Al-Thani, under whom Qatar continues in its pursuit of becoming a modern, outward-looking state, capable of rising to the challenges of the modern era. I also extend my gratitude to the talented workforce and the wider KAHRAMAA family.

I hope this report continues to highlight KAHRAMAA's commitment to meeting the needs of its stakeholders and to add to value to the State of Qatar. We welcome your feedback on our sustainability performance.

H.E. Saad Bin Sherida Al-Kaabi
Minister of State for Energy Affairs

A Message from **The President**



It is with great honor that I welcome you to KAHRAMAA's 2018-2019 sustainability report, highlighting our performance concerning the environment, health and safety, workforce management, customer service, community support and economic productivity.

Qatar continues with its sustainable development strategy, balancing effective management of its natural resources alongside the needs and rights of future generations. KAHRAMAA is aware of the importance of rationalizing electricity and water consumption, and our efforts in the field of conservation and sustainable development are in line with national and international best practices for the management of these key resources.

KAHRAMAA supports Qatar's movement toward its Smart energy approach through the installation of Smart grid projects. These projects also enable KAHRAMAA to optimize energy consumption and promote energy efficiency. Now celebrating its seventh year, Tarsheed's successful strategies to reduce water and electricity losses and improve energy efficiency are based on three pillars: awareness, education and community development.

As a customer centric organization, our development efforts are based on stakeholder materiality studies, engagement activities and considered initiatives. In 2018-19, KAHRAMAA has focused on many customer-specific improvements, and we have seen the customer call response time and pick-up rate improve from 70% to over 95%. Furthermore, the customer base for electricity and water services has increased by 9% and 10%, respectively.

At the environmental level, KAHRAMAA is committed to diversifying its sources, and we have made significant progress in the field of renewable energy. Utilizing solar power in the water and electricity sector helps improve efficiency and reduce fuel consumption, and we are committed to developing comprehensive renewable energy and water technology strategies, to be implemented across Qatar. As testament to our efforts, Qatar ranked 16th globally for Integrated Water Resource Management by the United Nations.

To align with the Qatar National Vision (QNV 2030) and Qatar National Development Strategy-II (NDS2 2018-2022), KAHRAMAA continues to pursue its vision to become a world class utility. To meet this external objective, we focus internally to deliver high standards of health, safety and social responsibility, attracting and retaining talent, supporting Qatarization and addressing regulatory changes in the energy, water and district cooling markets. To ensure a high quality, reliable and sustainable supply of electricity and water, we focus on cost reductions, operational efficiency, resource conservation, diversification of sources and implementation of new technologies.

By 2030 our people, assets, systems, and processes will set a global benchmark for performance, technological innovation, environmental sustainability and social responsibility in the electricity and water sector. We hope this report will further inform our valued stakeholders how KAHRAMAA's sustainability management supports the efficient delivery of essential resources across the state.

KAHRAMAA's strategy combines harmonized economic and environmental policies as per the QNV 2030 with the wise leadership of H.H. Sheikh Tamim bin Hamad Al-Thani, the Emir of Qatar and our revered government.

H.E.Eng. Essa Bin Hilal Al-Kuwari
President, KAHRAMAA

The Ministry of Energy and Industry understands the importance of sustainability when it comes to achieving our ambitious long-term development goals. It is therefore critical that we stay current with global trends in sustainable development, environmental preservation, and the proper management of wealth and vital resources, including water and energy.

KAHRAMAA is proud to publish its fourth annual sustainability report as part of our commitment to ensure transparency and credibility to our stakeholders. This report seeks to provide Qatari government institutions, investors, the academia, our suppliers and the general public with relevant information on our sustainability approach and our performance in 2016. It also provides the end-user with an understanding and appreciation of the development of electricity, water and district cooling sectors in Qatar.

About this Report

Qatar General Electricity and Water Corporation (KAHRAMAA) is pleased to present its 5th sustainability report for the years of 2018 and 2019 which highlights the impacts of KAHRAMAA's operations on the environment, society, and Qatar's economic development.

We understand that the scale and the complex nature of sustainability challenges often require an integrated approach involving various stakeholder groups. By providing a clear and transparent picture of where we are today and what our future commitments are, this report aims to engage our customers, partners, suppliers, employees, and other stakeholders in a discussion about the role we all have in the delivery of the Qatar National Vision 2030 (QNV2030) and the Qatar National Development Strategy II (QNDS2 2018-2022).

Boundary: KAHRAMAA – Qatar General Electricity and Water Corporation – represents the sole transmission and distribution system owner and operator for the electricity and water sector in Qatar. Therefore, the information provided within this report's boundaries covers only our activities of transmission and distribution and excludes the generation of electricity and water.

Scope: The report focuses on KAHRAMAA's own framework, procedures, and processes in place to drive sustainability and elaborates further on the sustainability initiatives implemented both within KAHRAMAA and on a nationwide level.

Reporting period: This report covers the calendar years from 1 January 2018 to 31 December 2019, unless stated otherwise.

Reporting Guidelines: This Report has been prepared in accordance with the GRI Standards: Core Option as well as the GRI Electric Utilities Sector Supplement. Appendix ii contains the GRI Standards Content Index.

Feedback: We welcome your feedback on this report and our performance. Please send your comments to Dalia Abdelhalim Al-Toukhy, Advisor - Conservation & Energy Efficiency Department at del-toukhy@km.com.qa. Or through the following channels:

-  www.km.qa
-  @kahramaa
-  KAHRAMAA
-  kahramaa-qa

Cautionary Statement

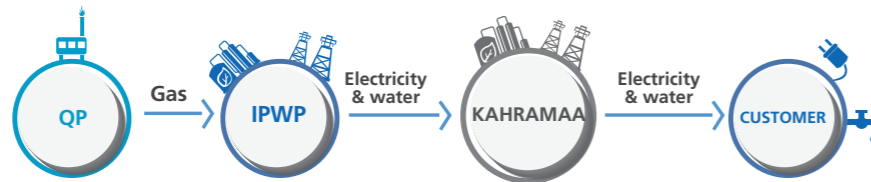
KAHRAMAA's 2018-2019 sustainability report contains certain forward-looking statements. All statements, other than statements of historical fact, are or may be deemed to be, forward-looking statements. By their nature, forward-looking statements involve known and unknown risks and uncertainties that could materially affect expected results of operations, cash flow, and business prospects, because they relate to events and depend on circumstances that will or may occur in the future. Readers should not place undue reliance on forward-looking statements, which speak only as of the date of this report.

About KAHRAMAA

Who we are

Qatar General Electricity and Water Corporation “KAHRAMAA” located in Doha, Qatar, is the sole transmission and distribution system owner and operator (TDSOO) for the electricity and water sector in Qatar, established in July 2000 through Law #10 by royal decree to regulate and maintain the supply of electricity and water to customers. Since then, KAHRAMAA has been operating as an independent corporation with a focus on the transmission and distribution of electricity, where the production of electricity and desalination of water are outsourced.

QP (Qatar Petroleum) is the sole source of natural gas as fuel for the Power & Water Production facilities run by the IPWP’s (Independent Power and Water Producers). As KAHRAMAA directly interfaces with consumers, we forecast the electricity and water demand in Qatar, in addition to being intensively involved in initiating and negotiating with IPWP developers for the construction of new power stations and desalination plants. Meanwhile, QP is responsible for forecasting the oil and gas and fuels consumption.



Core Areas of Business

KAHRAMAA’s central focus is to achieve the highest performance rates for the provision and distribution of electric energy and potable water to supply the country’s needs on a permanent and regular basis. As such, our core areas of business consist of:

- Owning, establishing, operating, and maintaining facilities for the transmission, and distribution of electricity and water.
- Transmission, distribution, and sale of electricity and water.
- Connecting electricity and water to users and consumers.
- Implementing the necessary plans and programs to develop stations, facilities, and networks.
- Setting the rules governing the work of electrical connections and water extensions to various places, buildings and facilities, monitoring their implementation, and granting the necessary licenses.
- Proposing the standards and specifications of materials, electricals and, water devices.
- Providing services and consultations.
- Establishing companies alone or with others, or owning existing companies or participating in them, after obtaining the approval of the Council of Ministers
- Contracting, assisting or participating with companies or entities that engage in similar activities.
- Planning and managing water resources, implement, and monitor well projects, and issue licenses.
- Issuing licenses related to groundwater resource management and inspection.
- Issuing licenses to establish electricity-generating stations and desalinate water and conduct transportation and distribution activities for electricity and water.
- Preparing studies and research of the uses and development of new and renewable energy.

Memberships & Associations



KAHRAMAA is an active member in a number of national and international organizations and industry associations. We perceive these associations as platforms connect with other entities and peers, learn from best practices and collaborate towards a sustainable future:

National:

- Arab Union of Electricity
- GCC CIGRE – (Secretary-General on CIGRE GCC)
- GCC Benchmarking Committee
- Arab Union
- Permanent Water Resources Committee
- Conservation Media Committee
- Renewable Energy Committee
- Experts Municipality Follow-up Committee
- Gulf Cooperation Council Interconnection Authority (GCCIA)
- GCC Electricity & Water Conservation and Customer Service Committee
- Arab Renewable Energy & Energy Efficiency Committee
- General Security Committee, Cyber Security Committee

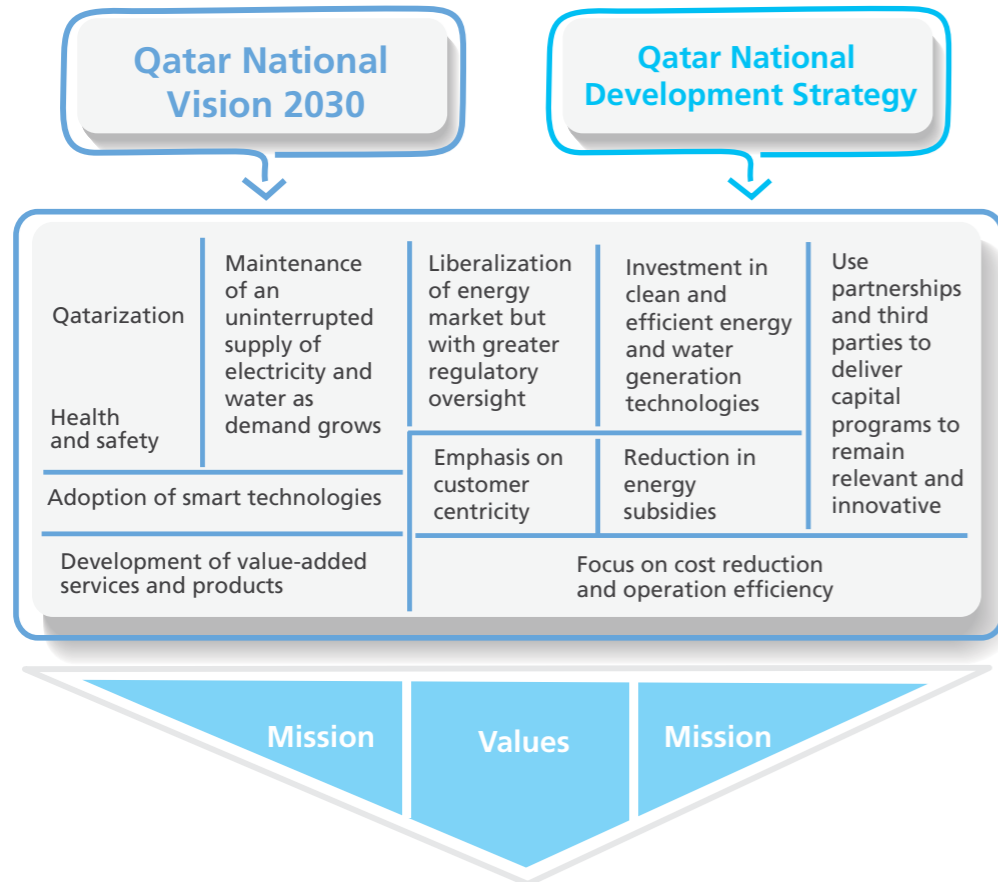
International:

- International Council on Large Electric Systems (CIGRE)
- Water Museums Global Network through KAP



Our Corporate Strategy

Our strategy at KAHRAMAA aims to support the short and long-term objectives of the Qatari government by aligning our endeavors to the QNV2030 and the QNDS2 2018-2022, and other strategic objectives of national importance. We have a commitment to stay true to our mission of providing safe, high quality, and efficient electricity and water supply to the people of Qatar. We believe that our long-term strategy would help us aspire towards our vision of transforming ourselves into a customer-centric, dynamic, and self-sustaining organization.



National priorities

Trends impacting KAHRAMAA

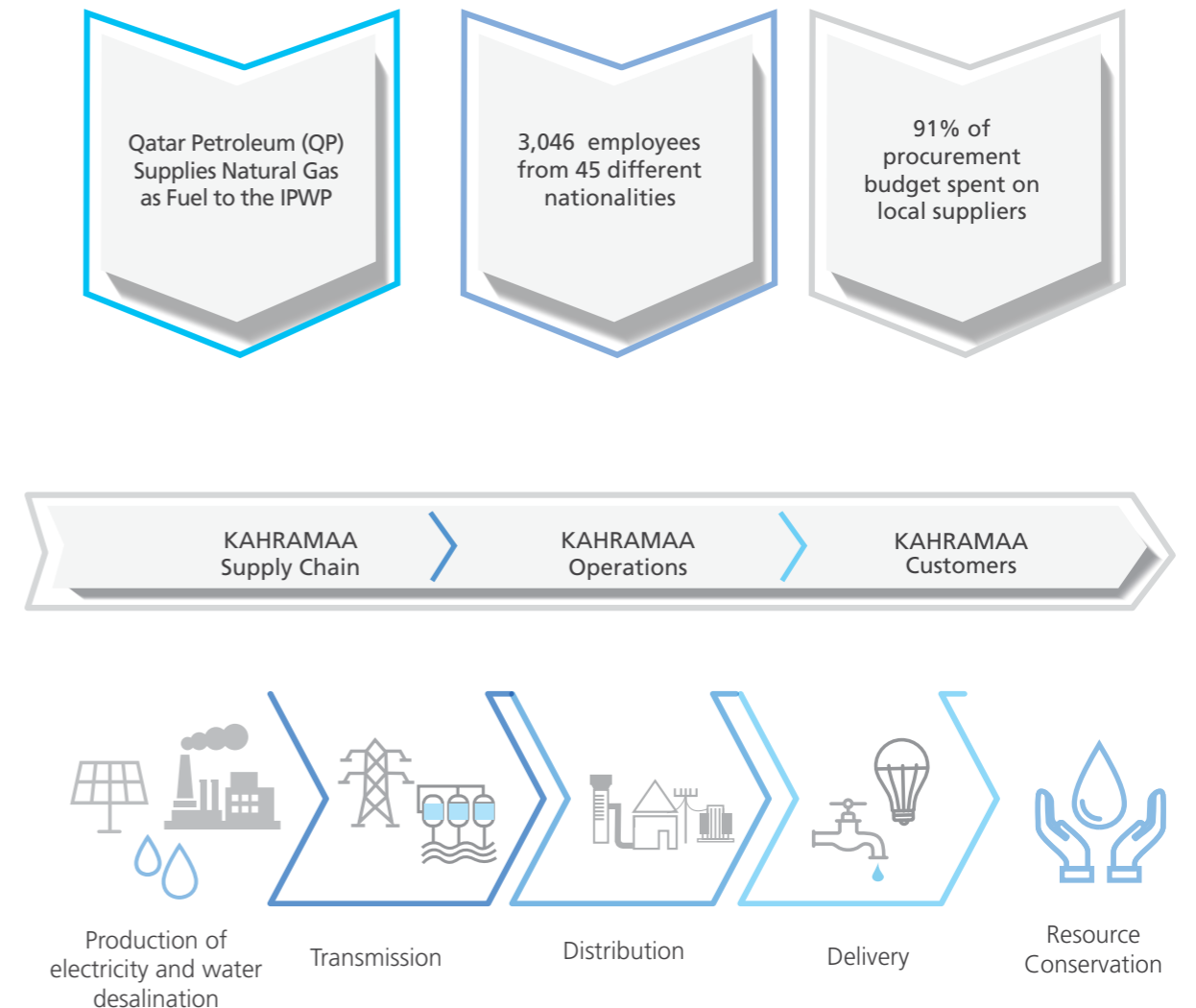
Our aspirations

| | |
|---|-----------------------------|
| Excel at customer services | Stakeholder |
| Provide high quality water and electricity | |
| Increase social advocacy and environmental compliance | |
| Promote regulatory changes in the electricity, water, and district cooling markets | Finance |
| Strengthen financial performance | |
| Improve corporate governance and risk management | Internal and sustainability |
| Enhance processes and systems | |
| Optimize asset performance | |
| Ensure a safe and healthy working environment | People |
| Attract, develop, and retain a high – performing workforce and support Qatarization | |

Corporate objectives

Our Value Chain

KAHRAMAA is responsible for forecasting electricity and water demand in Qatar and plays a key role in regulating water and electricity consumption in the country, through regulations, standards, and codes of practices. In 2019, there has not been a significant change in the size or structure of KAHRAMAA's operations and our supply chain.





Vision

Providing High Quality and Sustainable Electricity and Water for Better living in Qatar

Mission

By 2030 our people, assets, systems and processes will set a global benchmark for performance, technological innovation, environmental sustainability and social responsibility in electricity & water sector

Values

Customer Centricity: Placing the customer at the heart of decision making to ensure a relentless focus on the customer's needs.

Performance and Responsiveness: High standards of efficiency and effectiveness to meet the needs of KAHRAMAA and its stakeholders.

Teamwork: Working with colleagues in an open, collaborative, and trusting way to deliver Corporate Objectives.

Transparency: Undertaking business activities in an open and transparent manner that fosters trust.

Loyalty: Remaining faithful to KAHRAMAA, supporting its objectives, and being proud of its achievements.

Awards and Recognition

Awarded the "National Purchases Award" at the Moushtarayat 2019 Exhibition by Qatar Development Bank

Awarded the Corporate Sustainability Initiative award for the Power Synergy Project in collaboration with Shell and Gasal: a tripartite power agreement designed to transfer clean electrical power to our main building.

Received two international awards in different categories at the fifth Global Good Governance (3G) awards for sustainability and innovation. The awards were granted for our Conservation and Energy Efficiency program "Tarsheed", and the iconic KAHRAMAA Awareness Park (KAP)

Participated in the "Qatari Success" 2019 exhibition, where we announced plans to launch pre-paid services for our customers

Awarded the Qatar IT Business Award for 2018 in the smart environment solution category in recognition of our projects in water loss control and detecting leakage using smart technology solutions.

The State of Qatar is listed in the top 20 countries in reforming regulations to encourage investments and facilitate business activities, based on the "Ease of Access to Electricity" in the Doing Business 2020 report issued by the World Bank.

The performance indicators of the power grid are exceptional in terms of reliability, keeping pace with urban development and providing an attractive infrastructure for investment.



Sustainability at **KAHRAMAA**

The State of Qatar places a high demand on natural resources and thus faces challenges related to the availability and sustainability of these resources. The demand on water and electricity is increasing due to a rising population, economic growth, modernization, urbanization, as well as the current infrastructure projects related to the FIFA World Cup 2022.

Qatar recognizes these challenges as highlighted in the QNV2030 and the QNDS2 2018-2022. Environmental preservation and sustainable

consumption of scarce natural resources have been placed as key national objectives for the state of Qatar. Conserving resources alongside implementing innovative technologies will guarantee the availability and sustainability of water and energy for future generations.

KAHRAMAA plays a significant role in achieving Qatar's sustainability objectives by committing to providing efficient energy and water generation technologies while keeping up to date with the latest smart technologies to

optimize the distribution network. Our national program, 'Tarsheed', is a testament of our endeavors in this domain, as it works towards the standardization of energy and water saving technologies, legislates laws and regulations, spreads awareness for the rational use of electricity and water resources, and promotes renewable green energy and resource conservation across all sectors in Qatar.



Sustainability Framework

Our sustainability framework is the cornerstone of our sustainability program and highlights our efforts and performance with a focus on the business opportunities in this realm. We have identified 5 pillars for our sustainability framework:



Delivering for our Customers

Environmental Management

Supporting & Developing our People

Supporting our Society

Ensuring Economic Value & Good Governance

Sustainability Governance

Our Sustainability Taskforce consists of representatives from the various departments within KAHRAMAA and is responsible for the collection of performance data on KPIs in line with GRI Standards. The Conservation and Energy Efficiency Department, acting on behalf of H.E. the President, is responsible for the review of the reported content in this report with final sign-off by KAHRAMAA's President. We then have various committees and functions within KAHRAMAA which actively manage and provide oversight on sustainability related risks and opportunities within our value chain. Some of these include:

| Functions | Committees | | |
|---|------------------------------|-----------------------------------|---|
| - Internal Audit function | - Smart Network Committee | - Tarsheed Facilitation Committee | - Information Security Steering Committee |
| - Corporate Quality Management System Electricity | - Network Security Committee | - Inspection & Pricing Committee | - Work Safety Assurance Committee |
| | - Emergency Committee | - Disciplinary Committee | - Qatarization Committee |
| | - Grievances Committee | - Smart Grid Committee | - A two-tier Tender |
| | | - Research & Development (R&D) | |

Stakeholder Engagement

Our stakeholders are our partners who help us identify the material topics that are most important to KAHRAMAA and the improvement opportunities which enable us to achieve our strategic objectives. Thus, we seek to maintain trust via open communication channels with our stakeholders and promote transparent business activities.

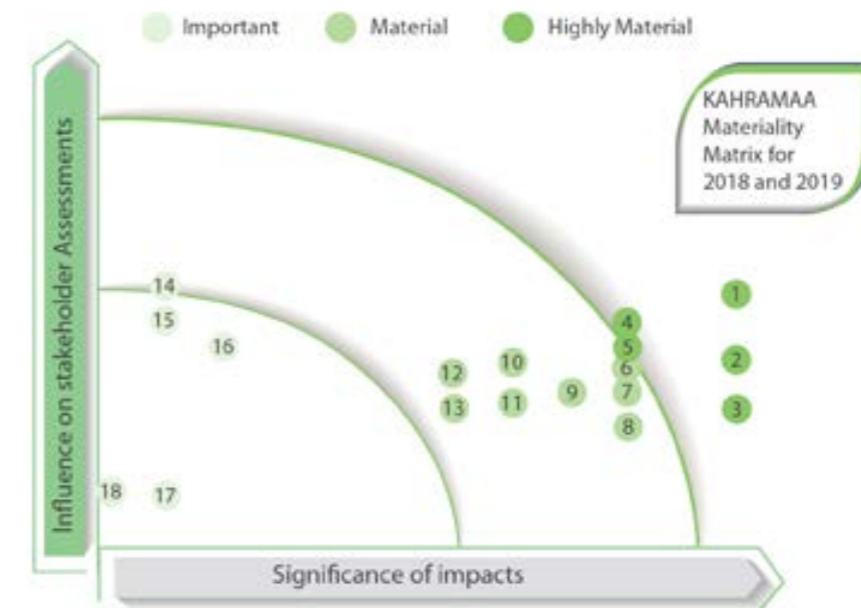
We have identified eight key stakeholder groups who are influenced directly or indirectly by our services and operations across the value chain, listed here and further explained in Appendix i:

- Policy Makers & Government Agencies
- Customers
- Business Partners
- Suppliers & Contractors
- Employees
- Local Communities
- Academia & Research
- Media

Materiality Assessment

Through engaging with our internal and external stakeholders, we were able to prioritize the most important sustainability issues for KAHRAMAA that are relevant both to the sector and to the company. We have identified 18 material topics and categorized them as per their importance and impact on KAHRAMAA:

| Highly Material | | Material | | Important | |
|-----------------|--|----------|---|-----------|--|
| 1 | Reliable, Efficient and Safe Supply of Water and Electricity | 7 | Efficient Water Management | 13 | Recognizing and Developing our Talent |
| 2 | Improving Customer Services | 8 | Efficient Electricity Management | 14 | Educating the Community on Environmental Compliance and Resource Use |
| 3 | Strengthening Financial Performance | 9 | GHG Emissions and Air Quality | 15 | Efficient Waste and Wastewater Management |
| 4 | Governance and Business Model Resilience | 10 | Qatarization, Diversity and Equal Opportunity for All | 16 | Access and Affordability |
| 5 | Developing Innovative Smart Technologies | 11 | Protecting Health and Safety | 17 | Sustainable Procurement |
| 6 | Public Policy Involvement | 12 | Risk Management | 18 | Community Engagement and Investment |



Contributing to National and International Sustainability Goals

The nation of Qatar recognizes that sustainable development can only be realized when there is social progress, economic growth, and environmental change. Through the QNV2030 and the QNDS2 2018-2022, Qatar focuses on eight priority areas: Economic Diversification, Environment Sustainability, Education, Healthcare, Social Protection, Public Safety and Security, Culture and Sports, and International Technical Cooperation.

KAHRAMAA, as the national electricity and water company in Qatar, align our efforts in all business sectors with the QNV2030 and the QNDS2 and

works to integrate the 17 SDGs within its sustainability strategy towards achieving the corporate objectives and the national sustainability ambitions of Qatar.

Our electricity and water sectors work in line with Qatar's sustainability objectives by promoting energy efficiency and adopting 'excellence' as the slogan for our operations. We are taking measures to reduce water and electricity production costs, wastage, and price along with the economic costs after verifying the operational efficiency of all independent producers, to ensure an efficiency-based economic operation.

The national program for Conservation and Energy Efficiency 'Tarsheed', supports the efforts of preserving and sustaining natural resources for future generations through setting a target of decreasing the per capita consumption by 6% for electricity and 10% for water by 2022, while reducing harmful carbon emissions. Tarsheed aims to develop a culture of awareness and rational use of natural resources through its campaigns and general awareness guides for the public on how to use water and electricity efficiently.

Our District Cooling (DC) program is also contributing to the Economic, Environmental and Social development of Qatar and the QNV2030. By 2030, DC is expected to reach its full potential with the following benefits for Qatar:

| Economic | Environment | Social |
|---|--|---|
| <ul style="list-style-type: none"> ✓ 100% usage of non-potable water in DC plants, saving 520 Mm³ of potable water. | <ul style="list-style-type: none"> ✓ Increase DC capacity to 1.6 million TR, saving 380 Bcf of natural gas. | <ul style="list-style-type: none"> ✓ Enhance standards of living. |
| <ul style="list-style-type: none"> ✓ 10% savings in potable water capital demand. | <ul style="list-style-type: none"> ✓ 550 MW savings in the power generation capacity. | <ul style="list-style-type: none"> ✓ Improve reliability and availability. |
| <ul style="list-style-type: none"> ✓ 2,000 MW savings in electricity distribution infrastructure. ✓ Increase Real-Estate value. | <ul style="list-style-type: none"> ✓ 30 MT of CO₂ equivalent emissions due to lower natural gas consumption and lower refrigerant leakage. | <ul style="list-style-type: none"> ✓ Upgraded user experience. |

These initiatives and programs, covered more extensively in this report, demonstrate KAHRAMAA's efforts in achieving our internal sustainability objectives and in supporting Qatar in its national and regional future plans.

In 2017, KAHRAMAA established its state-of-the-art green building KAHRAMAA Awareness Park (KAP) in Doha, Qatar, which is a water and electricity awareness museum to educate the public about water and electricity consumption, use, and production as well as the latest technologies in this domain. KAP museum is a member of the Water Museums Global Network, which is a global initiative to encourage people to use water – the most precious liquid element on Earth – responsibly and with respect of the Sustainable Development Goals (SDGs) framework



Key figures & achievements



39 District Cooling Plants

18 using Non-Potable (TSE) Water

99.40% Water Biological Compliance



Total number of customers

Electricity – **410,661**

Water – **363,338**

Best year performance on **SML, SAIDI, SAIFI**

11

EV Charging Stations Completed



39% Qatarization



24 Employees with Disabilities

3,046 Employees

480KQAR Social Investment Spending

2.76% Turnover Rate



Tarsheed won 2 Global Good Governance (3G) Awards for Sustainability and Innovation



ISO 9001: QMS awarded for Technical Affairs Department

7 7th year of Tarsheed

16

Qatar ranked the 16th on the world for Integrated Water Resource Management as per the UN



3.6 Billion QAR Total Revenues

Zero LTIR, TRIR for Employees



5.6 days of Water Storage Capacity in reservoirs

100%

Recycling of Generated Waste



Tarsheed Carnival at KAP



Partnership Renewal between KAHRAMAA & Japan's Chubu

Completed all the stations for FIFA WC 2022 stadiums
5 stations = 800M QAR

100%

Qatarization of Senior Management Positions



65% Reduction in Potable Water Usage

"The Future of Electrical Power and Smart Grids" Conference in partnership with Texas A&M University



Completion of the Doha Metro Power Station



15% Female Employment

91%

of Goods and Services Sourced Locally

15 Internship Opportunities

33,625 Hours of Training

Participation in Qatar Sustainability Summit



Um al-Hul station: Increased the state's electricity production capacity by ~30

32M

Safe Working Hours (Employees & Contractors)

21 Emergency Response Drills

5.97%

Grid Loss (Technical)



Automation of Warehouse Manual Processes

99% of Employees Trained as their IDPs

Zero

Incidents of Discrimination



1,130 Hours of HS Training

60K Visitors for KAP

"Up to the top – 7 steps for excellence and innovation" Training for Senior Management Members



Contracts signed for development project

| Corporate objectives | Alignment with Qatar National Vision (QNV) | Alignment with National Development Strategy 2 (2017-2022) | Alignment with Sustainable Development Goals (SDGs) |
|--|---|--|---|
| Optimise asset performance | Responsible exploitation of hydrocarbon resources Preserving and protecting the environment including Water | Sector 2: Environment sustainability, natural resources and built environment | 6 CLEAN WATER AND SANITATION, 7 AFFORDABLE AND CLEAN ENERGY, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION |
| Provide high quality supply of water and electricity | Responsible exploitation of hydrocarbon resources Building environmental awareness among the population Encouraging sustainable technologies | Sector 2: Environment sustainability, natural resources and built environment | 6 CLEAN WATER AND SANITATION, 7 AFFORDABLE AND CLEAN ENERGY, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION |
| Enhance processes and systems | Knowledge based economy characterised by innovation A world class infrastructural backbone The efficient delivery of services | | 9 INDUSTRY INNOVATION AND INFRASTRUCTURE |
| Improve corporate governance and risk-management | Knowledge based economy characterised by a transparent and accountable government | | 16 PEACE AND JUSTICE STRONGER INSTITUTIONS |
| Ensure a safe and healthy working environment | Participate in a wide variety of cultural and sports activities | Sector 7: Culture and sports | 3 GOOD HEALTH AND WELL-BEING, 8 DECENT WORK AND ECONOMIC GROWTH |
| Attract, develop and retain a high performing workforce and support Qatarisation | Increased and diversified participation of Qataris in the workforce through investment in training programs and incentives for Qataris to enter professional and management roles | Sector 3: Education and training | 8 DECENT WORK AND ECONOMIC GROWTH |
| Increase social advocacy and environmental compliance | A proactive & significant regional role in assessing the impact of climate change and mitigating its negative impact | Sector 2: Environment sustainability, natural resources and built environment Sector 5: Social protection | 9 INDUSTRY INNOVATION AND INFRASTRUCTURE, 12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 13 CLIMATE ACTION, 4 LIFE BELOW WATER, 15 LIFE ON LAND |
| Excel at customer service | Provide high quality services that respond to the needs and the desires of individuals and businesses | Sector 6: Public safety and security | |
| Promote regulatory changes in the energy, water and district cooling markets | A comprehensive urban development plan for Qatar that adopts a sustainable policy with regards to urban expansion and population distribution | Sector 2: Environment sustainability, natural resources and built environment | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION, 17 PARTNERSHIPS FOR THE GOALS |
| Strengthen financial performance | Open and flexible economic structures capable of competing in a changing world | Sector 1: Economic diversification and development of private sector | 8 DECENT WORK AND ECONOMIC GROWTH, 17 PARTNERSHIPS FOR THE GOALS |

Future Plans

Long Term Strategy

Our Long-Term Strategy for 2030 is to be implemented through three key phases, driven according to six dimensions of business excellence, in order to accomplish 18 corporate ambitions. We are currently in Phase 2: Consolidating efficiency and regional growth (2019-2023). The focus of this phase is to drive continuous operational and cost efficiency improvements and expand service offerings to become the leading regional power and utilities organization.

Kahramaa Transformation Program 2020

In 2019, KAHRAMAA launched a comprehensive "Transformation Program" which encompasses eight key objectives. The program will be implemented in 2020 onwards with the following objectives:

- Exploit business opportunities and vigorously pursue KM vision and strategic roadmap for transformation.
- Enhance KM business processes and services with focus on customer centricity.
- Pursue operational excellence with efficiency and sustainability



Transformation Program (2020-2022)

8 Key Objectives:

1. Superior Customer Experience
2. Boosting digitalization of customer services
3. Reducing Losses
4. Improving Electricity & Water Efficiency
5. Improving Accounts Receivables Turnover
6. Increasing Tariffs Gradually & Enhancing Tariff Slabs
7. Increasing Tarsheed Ambition, revisiting its Scope & Governance
8. Enabling Initiatives

Delivering For Our Customers

KAHRAMAA lives its vision and mission to provide a customer centric culture. We place the customer at the forefront of our planning and activities while providing high value services. Our Customer Service Department (CSD) are working to ensure our customers have access to professional, reliable support whenever they need us.

2019 Highlights:

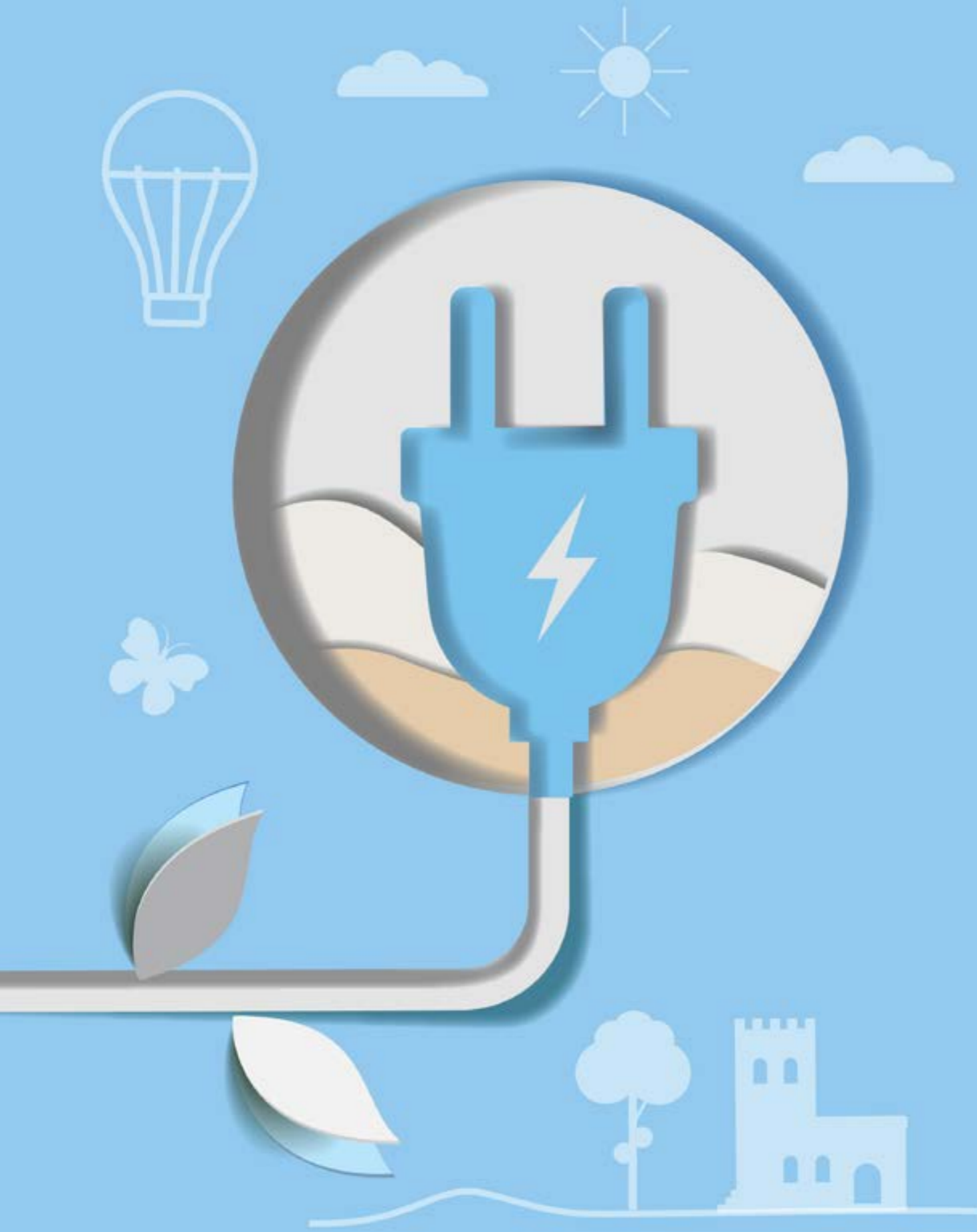
- Response time and pick-up rate improved from 70% to over 95%
- Customer base for electricity and water services increased by 9% and 10%, respectively
- Customer satisfaction was 72% this year, a 7-percentage point increase over last year
- Moving to paperless services to improve customer experience and efficiency through various digitized systems

There have been ongoing improvements in the quality of our services and customer service processes in recent years and in 2018 we outsourced our call center to improve response times. This improved our pick-up rate from 70% in 2018 to 95% in 2019 and the call center now operates 24/7.

Our customer base, in both water and electricity sectors, continued to increase in 2019 to include 34,025 new electricity customers and 33,506 new water customers. We believe we must invest in people and technological developments to meet the growing demands whilst enhancing customer engagement. We are now moving towards smart and time-efficient processes and services through automation to allow customers to track their applications and pay bills online, along with other services such as

reporting service interruptions, calculating tariffs, inputting self-meter readings, and moving-in/moving-out processes, among others.

The increasing number of customers comes with a greater need for reliable data management and privacy policies. Our customer privacy policy protects customer data losses and prohibits the sharing of customer records with anyone other than the customer, unless supported with a letter of authorization. In 2019, we were glad to report zero data privacy complaints from our customers. We have also initiated a Data Cleansing project in collaboration with the finance department to streamline customer data management and improve its accuracy.



| KAHRAMAA customers | 2017 | 2018 | 2019 |
|---------------------------------|---------|---------|---------|
| Number of Water Customers | 316,838 | 329,832 | 363,338 |
| Number of Electricity Customers | 364,597 | 376,636 | 410,661 |
| (%) Satisfied Customers | 61% | 65% | 72% |

As part of our journey to deliver a world-class customer experience, we conduct regular internal audits and customer satisfaction surveys. In 2019, customer satisfaction improved by 7 percentage points to average 72%. Our CSD team are working hard to achieve our set targets of 92% for customer satisfaction, 12 minutes for average call center waiting time, and 10 minutes service time for customer-care agents by the close of 2020.

We also plan to launch a Customer Relations Management and Billing (CRM & Billing) project (2020-2022) with a 60% completion target in 2020, and 20% and 20% for 2021 and 2022, respectively. Professional consultants will be appointed on this project to help KAHRAMAA in the study, selection, and implementation. Furthermore, we are working to change the design of our bills in 2020 to become more informative and customer friendly.

We hold the Global Quality Certificate ISO:9001/2008 from Global Accredited TUV Company for recording quality and other administrative management systems, complying with all procedures and instructions of work.

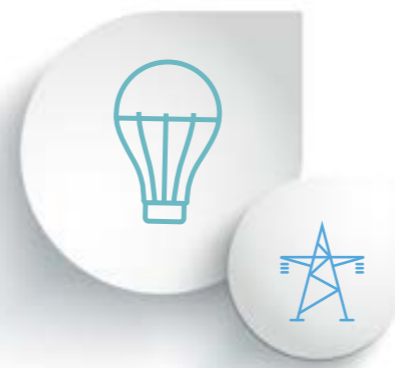
Reliable, Efficient and Safe Supply of Water and Electricity

2019 Highlights:

- 6 MOUs were signed with government and private entities with a focus on achieving sustainability through the Tarsheed program. The MOUs establish sustainability agreements with the Qatar Foundation, Shell and Gasal, Marubeni, HAMAD International Airport and Qatar Airways, and the Ministry of Transport and Communications
- 1000 MWh of electricity savings in 20 schools as part of Tarsheed program
- 5830 MWh of electricity savings by the Bulk Customers Energy Surveillance
- 299,000 MWh of electricity savings as a result of MEPS

Under KAHRAMAA's mission to provide high quality and sustainable electricity and water, we continue to ensure adequate and high-quality supply is provided to our customers. Various projects are underway to secure the future demand of electricity and water in Qatar, including additional capacity projects, solar independent power producers (IPP), and a water database. The "Tarsheed 2022" program further supports our aim with awareness campaigns, lectures, trainings, and publications of the efficient and responsible use of water and electricity.

Reliable and Efficient Supply of Electricity



The electricity sector in Qatar has seen remarkable developments in recent years with a growing demand representing a 3% increase of electricity per capita consumption in 2018 and a further 3.5% increase in 2019. The annual rate of increase in electricity demand in Qatar is among the highest growth rate in the world. Thus, KAHRAMAA works continually to meet this challenge by forecasting the demand for the next 5 years, reviewing annually and ensuring our systems can deliver.

The reliability and quality of electricity supply at KM are measured by 3 main KPIs:

- Response time and pick-up rate improved from 70% to over 95%
- Customer base for electricity and water services increased by 9% and 10%, respectively
- Customer satisfaction was 72% this year, a 7-percentage point increase over last year
- Moving to paperless services to improve customer experience and efficiency through various digitized systems

In 2019, KAHRAMAA saw the best performance in our history for these SAIDI, SAIFI and SML indicators. Furthermore, we ensured the reliability of our 220kV overhead lines by completing RTV silicone coating for all lines, and the Annual Outage Maintenance Planning Application was implemented.

| Reliability and Quality of Electricity | 2017 | 2018 | 2019 |
|--|-------|-------|-------|
| SAIDI (Minutes) | 28.54 | 42.88 | 15.66 |
| SAIFI (Minutes) | 0.30 | 0.29 | 0.19 |
| SML (Minutes) | 0.24 | 0.54 | 0.18 |

In 2019, we conducted Condition Monitoring (CM) across 6,908 distribution substations, and corrective action was taken for 593 of those substations, which led to a calculated net saving of 50 MQAR. That equates to 14.95 million QAR transmission savings for CM activities. In addition, maintenance and replacements were carried out for 1,199 substations.

Although Qatar is the world's largest exporter of liquefied natural gas (LNG) - the cleanest hydrocarbon fuel, it is aiming to include more renewable energies in the local energy mix in response to the state's aim for sustainability.

KAHRAMAA is responsible for the Transmitting and distributing drinking water supply in Qatar. Drinking water is produced by desalinating seawater and groundwater. There are eight thermal seawater desalination plants, seven of which use thermal Multi-Stage-Flash (MSF) and one which uses a Multi Effect Distillation (MED) process. Our strategy for the future is to expand the use of Reverse Osmosis (RO) technology. The overall production capacity is around 476 million gallons per day distributed to a population of approximately 2.8 million, which represents 99.9% of Qatar's water demand, and the

remaining 0.06% of water is supplied from groundwater through our North Camp and Abu Samra RO stations.

A safe drinking water supply is a fundamental requirement of public health. Thus, we are committed to providing safe, clean and high-quality water. The Water supplied to consumers is regulated to meet KAHRAMAA Drinking Water Quality Requirements (2016), which is also ensuring strict compliance with national and international standards such as the World Health Organization (WHO) Drinking Water Quality Guidelines and the GSO

standard No. 149/2014 for Un-Bottled Drinking Water Quality

Moreover, KAHRAMAA Water Quality Management Framework is based on quality assurance measures and risk control and management. The framework consists of developed standards and water quality regulations, as well as strict monitoring programs and tools such as the Supervisory Control and Data Acquisition (SCADA) systems, and accredited labs (KAHRAMAA Water Quality Labs) for analyzing water quality with the latest testing technologies. KAHRAMAA continuously updates its water quality requirements, taking into account:

1. Advances that are being made internationally in the management of drinking water quality, specifically the risk-based approach to water quality management.
2. The local conditions that are unique to Qatar, including environmental, legal, and economic conditions.



KAHRAMAA collaborate with the Health, Safety & Environment (HSE) Department on regular sanitary inspections, auditing, and verifications on all our water facilities, desalination plants, reservoirs, tanker filling stations and tankers. The HSE team advise on quality, health, design, technology, chemicals, and materials used to ensure water safety.

In year 2019, we achieved 99.4% of water quality in terms of biological compliance, surpassing the WHO target of 95%. We continuously implement innovative and technological developments in the fields of water treatment, distribution, and monitoring, to ensure water quality according to both our standards and WHO standards.

District Cooling

District Cooling (DC) is a centralized solution that provides chilled water to multiple buildings through a network for cooling purposes. It has three core objectives:

1. Protect consumers and foster economic development
2. Enable full reliance on non-potable water for cooling
3. Contribute to government objectives for energy and water sustainability and environmental protection



DC results in a reduced energy load and an increase in efficiency, in addition to numerous benefits to government, developers, and end-users. It contributes to conserving natural resources through reducing greenhouse gas emissions by using 40-50% less energy and fuel than conventional systems.

By the end of 2019, the total installed DC plant capacity reached 0.92 million tons of refrigeration with a major potential for growth in the future. DC systems represented 17% of the total cooling capacity provided by 39 District

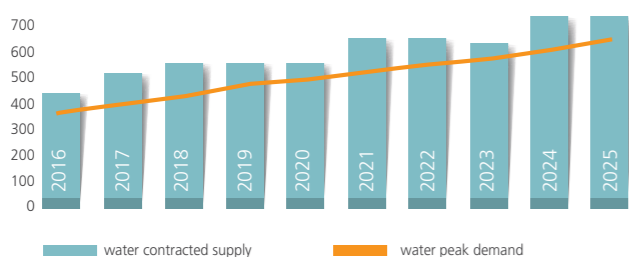
Cooling Plants (DCP) in operation. 6 of these operating plants are commercial DCPs and 33 plants are private.

By 2030, DCPs will have a massive impact on preserving natural resources, enhancing the economies of scale, and enhancing our operational efficiency. It is expected to save a total of 2550 MW of electricity, 300 Bcf of natural gas, 30 Mtons of CO2 equivalent emissions and 520 Mm3 of potable water consumption.

| District Cooling: Estimated 2019 Savings Compared to Conventional Cooling Systems | |
|---|-------|
| Area of Saving | 2019 |
| Annual saving In electricity Consumption (Gwhr) | 2,409 |
| Money saved in installation of electrical generation capacity due to DC (million QAR) | 97 |
| Money saved in installation of electrical distribution capacity due to DC (million QAR) | 447 |
| CO2 emissions reduction due to DC (million tons of CO2) | 1,732 |
| Natural Gas saved volume (Bcf - Billion standard cubic feet) | 27 |

| IPP Contracted Capacity | | |
|-------------------------|---------------------------|-------------------|
| Station | Contracted Capacity, MIGD | Desalination Type |
| UHP | 136.5 | MSF + SWRO |
| RAF A1 | 44.31 | MSF |
| RAF A2 | 35.14 | MSF |
| RAF A3 | 35.14 | SWRO |
| RAF B | 33 | MSF |
| RAF B2 | 29.14 | MSF |
| RL A | 40 | MSF |
| RL B | 60 | MSF |
| RL C | 63 | MED |
| Total | 476.2 | |

MEETING WATER DEMAND



Access and Affordability

Staying Connected With Our Valued Customers

With nearly half of the world's population using social media platforms nowadays, they are becoming the obvious arena for business outreach and market penetration. We at KAHRAMAA always strive to connect with our customers, understand their needs and concerns and provide prompt services with high quality. We are present on all major social media platforms and offer a wide range of electronic services via our website. These tools enable us to be closer to our customers, provide an 24/7 online service and enhance customer satisfaction. Our growing network on social media currently consists of 43.6K followers on Twitter, and 10.6K followers on Facebook.

Affordable Services

The Materials subsection of the Technical Affairs department is profoundly committed to ensure procurement and timely delivery of materials with the most economical prices through adhering to government regulations and compliance to health, safety and environment.

Fast-Track Service for Customers

As a responsible corporate citizen and to reduce customer waiting time, KAHRAMAA launched a fast-track service for the elderly, women, and people with special needs at the main office's customer service center in Al Hilal.

Ezab: Electricity Connection to Livestock Farms

To support regional farmers specifically, and improve customer satisfaction generally, we work in partnership with the government to identify initiatives that will improve livestock farm management.

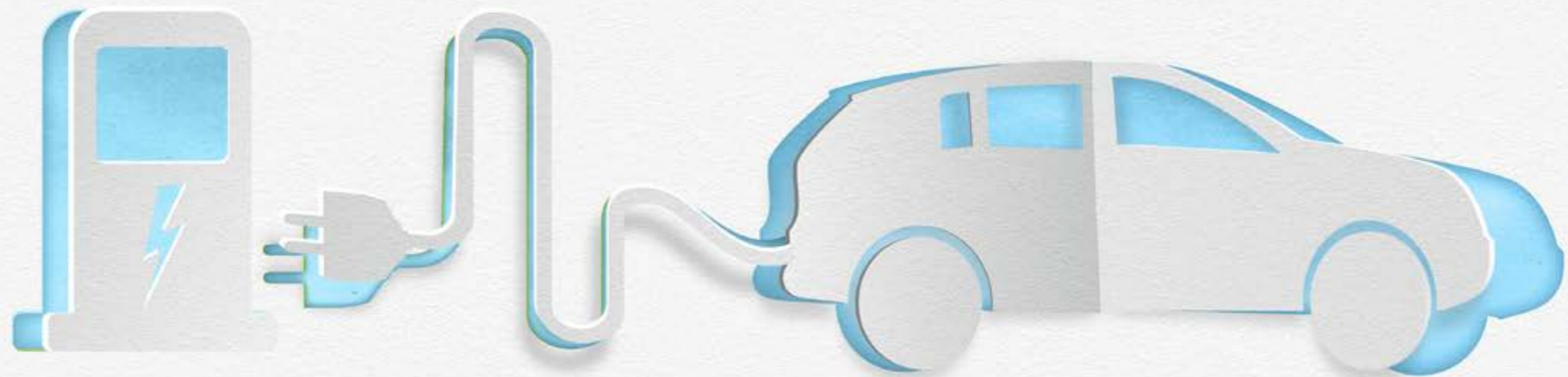
The Qatari government has instructed that farms connected to the electricity network are to be identified under the "commercial" category, which has significant cost benefits for farmers. Specifically, it means that livestock farms can connect to the network with an initial investment of 4,410 QAR, far lower than the initial fee of 44,350 QAR for the same under the previous 'entertainment' category.

Customers and Ezab owners can find an authorized electrical contractors list on the KAHRAMAA website. We began receiving applications for an electricity connection to Ezab as of 8th August 2019 in 6 livestock farm complexes

including more than 5000 blocks through different substations, costing 250 million QAR.

In 2018 we held two workshops at KAHRAMAA main building for authorized electrical contractors on application requirements and procedures of electricity connection to livestock farms (ezab).

The project reflects our endeavor to achieve our mission of providing high quality and sustainable electricity and water for better living in Qatar. As one of our e-services, customers can complete their requests online and at their convenience without visiting any of KAHRAMAA service centers.



Sustaining Our Resources



The complex pressures on the environment and natural resources are increasing. Qatar faces many challenges in securing energy, food, and water while avoiding resource overexploitation and misuse. According to the QNDS2, "Qatar's natural resource endowment creates a unique mix of benefits and stresses. Significant wealth in hydrocarbons has generated one of the world's highest per capita incomes, but extreme scarcity in water and arable land has created equally unusual vulnerabilities and deficits."

The Health, Safety and Environment Department (HSE) is committed to service excellence in the areas of water quality and environmental management while maintaining value-adding relationships with all stakeholders. As per KAHRAMAA's Quality, Health, Safety and Environment Policy (QHSE) – which falls under the responsibility of the Electricity Transmission Department – it is our policy to:

- Protect the environment, prevent pollution and reduce and recycle waste.
- Set QHSE performance objectives and targets through the use of an effective management system.
- Comply with legal and other requirements of the State of Qatar.
- Promote QHSE awareness among employees, customers and the general public.

Environmental Management

KAHRAMAA's long-term strategy for 2030 and corporate objectives enable a sound sustainability management approach that preserves the environment, invests in clean technologies, and maintains asset excellence. Qatar National Strategy QNSII 2018-2022 mandates KAHRAMAA through the National Program for Conservation and Energy Efficiency 'Tasheed' to bring down CO2 emission by 7 million tons by 2022. In 2019, 100MW of energy generated came from renewable sources.

As per receipt of Consent to Operate (CTO) bestowed by the Ministry of Municipality and Environment (MME) in Qatar, we operate in line with the

environmental requirements and laws established by the Ministry. Under legal and regulatory responsibility for environmental impact, and under national law, KAHRAMAA's employees are to monitor for violations of the law and are eligible to control and prove the violations that occur. In order to do so, they may enter similar commercial, industrial, and public facilities, conduct inspections and inspections of internal electrical and water extensions, and control and prove violations of the waste of electricity and water stipulated in this law. KAHRAMAA's CEO may issue announcements for the sake of executing this law's provisions.

Efficient Water Management

2019 Highlights:

- KAHRAMAA and Um al-Houl energy sign agreement to increase desalination capacity
- Qatar ranked 16th globally for Integrated Water Resource Management by UN
- 5 water projects completed in year 2018, 1 project completed in 2019
- KAHRAMAA Inaugurates 3 Water Tank Stations to support livestock in the country near Camels Ezab

Qatar experiences high levels of water stress, and high rates of water consumption. This is a result of a growing population, the blockade on Qatar and infrastructure expansions, food production, and agriculture. As such, the per capita consumption of water in 2019 was 242 m³/capita/year, and 99% of this high water demand is covered by sea water desalination. We align our efforts with QNV2030 and SDG6 'Clean Water and Sanitation' and are the sole TDSOO for electricity and water in Qatar. As such, we are responsible for the implementation and execution of all water projects including pipelines, transmission, and district distribution of ground water, treated sewage effluent (TSE), and recycled water. We have 40 stations and 150 pumps in Qatar.

Water demand has grown considerably in 2019 with 5% increase in the average per capita consumption. Similarly, our water supply from desalination plants increased at almost the same rate with 668 Mm³ in 2019, thanks to our accurate forecasting strategies. Our water-customers network expanded 10% last year to include 363,338 customers. We place high importance on the recycling and efficient use of water, with 99.84% of water stored in reservoirs representing a storage capacity of 9.7 Mm³, along with a water loss reduction of 3.97% in 2019.

In 2019, our Tarsheed Program contributed to water savings of 33.76 Mm³. We implemented a Water

Conservation Regulation this year, under which we saw water savings of 15% in the residential sector, 25% in the governmental sector and 30% in the commercial sector. In addition, several surveys and analyses were conducted to identify violating water customers, identifying 1,673 high consumers. Thorough monitoring and physical inspections, 191 customers reduced their average consumption and saved about 57,893 m³ of water. The Conservation and Energy Efficiency (CN) Department also initiated an auto generated service of sending alert message for high consumption residential customers. The impact of this initiative has saved 1.95 Mm³ of water as well as 16.59 Million QAR.



| Water Production and Consumption | 2017 | 2018 | 2019 |
|--|---------|---------|---------|
| Average Water per Capita consumption (m ³ /Capita/Year) *Based on Total Water Production | 224 | 231 | 242 |
| Water Loss (%) | 4.01% | 3.98% | 3.97% |
| Water quality/Biological Compliance (%) | 99.70% | 99.70% | 99.40% |
| Water Production (Mm ³) | 603 | 634 | 668 |
| Water Production Growth | +7.7% | +5.1% | +5.4% |
| Maximum Production (Mm ³ /Day) | 1.78 | 1.84 | 1.98 |
| Number of Water customers | 316,838 | 329,832 | 363,338 |
| Number of water tankers | 2,524 | 2,431 | 1,829 |

Within the scope of the Initiative "Promoting the use of Non-potable water for various applications", 3 parks under the government category using potable water were identified as located near a TSE water network. In 2019 they were switched to TSE water instead, saving 114,000 m³ of potable water.

District Cooling (DC)

DC is further helping KAHRAMAA in achieving its water sustainability ambitions by implementing new absorption chilling systems to increase efficiency as well as utilizing residual heat sources from industry and bio-heat from underground sources. In 2019, there were a total of 39 plants spread across Qatar with a total cooling capacity of 5.4 Ton of Refrigeration (TR). District Cooling has offered numerous benefits and savings in both water and electricity, with a cumulative saving of 5 billion QAR by 2019.

Although the TSE network is not available in all of Qatar areas, Ashghal, who is responsible for TSE, has been expanding its network to increase TSE recycling and usage for DC. Currently, most of our DC plants are using an Ultra-filtration Reverse Osmosis (UF-RO) system for TSE conditioning. In 2019, we reduced potable water usage for DC by 65% with a target reduction of 85% in 2020. In parallel, TSE utilization increased this year with a percentage of 67% compared to 60% in 2018.

| District Cooling | 2017 | 2018 | 2019 |
|---|------|------|-------|
| Total make up Water Demand for Cooling (Mm ³) | 8.54 | 9.10 | 12.30 |
| Potable water consumption in DC (Mm ³ /year) | 4.23 | 3.70 | 4.1 |
| Recycled Water Usage in DC Plants (Mm ³) | 4.31 | 5.45 | 8.2 |
| Total Operational DC Plants | 27 | 31 | 39 |
| Number of Operational DC Plants Using Non-Potable Water (TSE /Sea water) for Cooling Purposes | 9 | 12 | 18 |
| Number of Operational DC Plants Using Potable Water | 18 | 19 | 21 |

We are relentlessly improving water storage capacity, rehabilitating natural water sources and seeking non-traditional and sustainable sources of water in Qatar. To achieve these aims, different projects were initiated and completed this year by the Water projects Department which budgeted 2.6 billion QAR for 2019 projects. We recently conducted several projects to improve the groundwater storage zones and increase the recharge to groundwater water aquifer system. To achieve these objectives, different projects were initiated and completed by Water Operation and Control Department, such as:

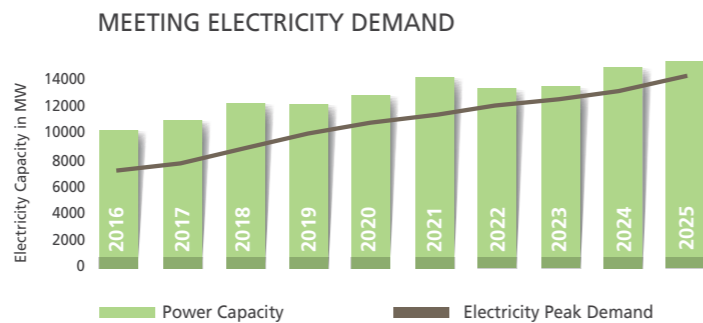
- Completion of the rehabilitation of 5 well field stations.
- Concluded the design and development of Rain Harvest wells in Bu Thalia.
- Rehabilitation of existing Groundwater Recharge wells (Harvest wells).
- Development of Rainfall Harvest (Groundwater Recharge wells) in Potable Wellfield stations.



Efficient Electricity Management

2019 Highlights:

- An initiative for the conservation and reuse of the energy generated by the 8 operating cranes at Hamad Port was launched in partnership with Q-Terminals, with an average savings of 2,588 MWh/year
- Savings of 1,000 MWh of electricity in 20 schools, as part of 'Tarsheed' program
- MOU signed with Ashghal for electricity activities and betterment projects
- Completed Ras Abu Abboud 2 station for the FIFA World Cup
- Completion of the Doha Metro Power Station



Electricity Sector in Qatar

Qatar has the largest Electricity Backup in the Arab World
 Production Capacity: 10,578 MW
 Top Load: 8475 MW
 2019 per capita consumption of electricity: 17.98 MWh/capita/year

| Electricity Consumption | 2017 | 2018 | 2019 |
|---|---------|---------|---------|
| Grid loss (%) (Technical) | 6.20% | 6.18% | 5.97% |
| Electricity per capita consumption (kWh per person, per year) *Based on Total Energy Generation (IPPs) incl. auxiliary consumption | 16,869 | 17,376 | 17,979 |
| Electricity Generated (GWh) | 45,555 | 47,913 | 49,873 |
| Electricity Production Growth | +7.7% | +5.2% | +4.1% |
| Electricity Sent Out (GWh) | 42,806 | 44,655 | 46,435 |
| Maximum Demand (MW) | 7,855 | 7,875 | 8,475 |
| Number of electricity customers | 364,597 | 376,636 | 410,661 |

Since our inception in 2000, we have been working to develop and upgrade the electricity sector. The increasing population and major industrial and agriculture boom have led to a rapid inflation in electricity demand. Electricity per capita consumption in 2019 increased by 3% over 2018 to reach 17.98 MWh/Capita/year, yet we decreased our grid loss (technical) to 5.97%. The generated electricity also increased 4% compared to 2018, which enabled us to again meet demand in 2019. Our base of electricity customers increased by 9% compared to 2018.

Water Tank Stations



KAHRAMAA inaugurated 3 Water Tank Stations in 2019 to support livestock in the country near Camels Ezab. These stations were distributed geographically near Al Karaana area, Salwa Resort and Al Ramzani Petrol Station, and they operate automatically when any water tank enters. Water tanks meet the demand for water with more than 100,000 camels, sheep and goats, which previously relied on water wells and remote tank stations.

The reliability and quality of our electricity service is always a top priority for us. Electricity Network Affairs (ENA) conduct regular audits on our electricity network and work to reduce interruption time by adapting to changes promptly. This had substantially positive impacts across the 3 KPIs of electrical reliability (SAIDI, SAIFI, and SML). This year, ENA took the following measures to enhance the reliability and quality of our network

- Decentralization of workshops, and minimizing supply interruption time by decreasing fault repair time.
- Procurement of 15 diesel generators with 200 Kilovolt-Ampere (kVA) and 5 diesel generators with 250 kVA, to connect consumers during Low Voltage (LV) fault repair to reduce the supply interruption time.
- Repair and refurbishment of transformers in Qatar to overcome short supply during the blockade period.
- Cyber Security implementation for National Control Center (NCC), Emergency National Control Centre (ENCC) and Distribution Control Center (DCC).
- Implementation of multi-excavation processes to reduce customer complaints.

Tarsheed

plays a significant role in energy conservation and implementation of innovative ideas to better manage our electricity consumption. In 2019, KAHRAMAA witnessed savings in the electricity sector of 7,651 GWh thanks to several targeted initiatives, including such programs as:

- Enhancing the Minimum Energy Performance Standards (MEPS) and labeling for Air Conditioners Phase-I (ACs-I), resulting in an overall electricity savings of 29,9000 MWh.
- Continuing to phase out incandescent lamps, which resulted in a saving of 7,324,000 MWh.
- Sending SMS alert messages for high consumption residential customers enabled us to save 20,300 MWh.

Solar Energy at KAHRAMAA

Generating renewable power, especially from PVs, is at the top of our ongoing projects list for working towards the sustainable supply of energy. The Conservation and Energy Efficiency department, in partnership with the Ministry of Transport and Communication, is planning to build 75 Electric Vehicle (EV) charging stations through solar power by 2022. 11 stations have been implemented as of the end of 2019, and the project is due to be finalized at the start of the FIFA World Cup 2022.

Marubeni PV Station at Mesaimeer



In November 2019, KAHRAMAA launched its Tarsheed Photovoltaic Station for energy storage and electric vehicle charging in partnership with Marubeni Power Company. This station is the first of its kind in Qatar, charging vehicles with electricity produced from solar energy via 216 photovoltaic panels with a total power production of 72 KW at its peak.

The aim of this station is to reduce the harmful carbon emissions by encouraging the usage of the solar energy, as well as disseminating the use of electric cars in Qatar. It provides a unique infrastructure for electric charging stations, to achieve sustainability in line with QNV2030.



The Large-Scale Solar PV Power Plant 2021

KAHRAMAA signed a 25-year Power Purchase Agreement with Siraj1 for the Large-Scale Solar PV Power Plant that will be located at Al-Kharsa'ah area west of Doha on a 10 km² land plot. It will be one of the largest Solar PV power projects in the region and the first of its kind in Qatar. The construction duration is expected to be 2 years starting in May 2020, with a total construction cost of 1.7 billion QAR.

The total capacity of the project is 800 MW/peak which represents 10% of peak demand for electricity. By Q1 2021, 350 MW will be connected to the grid and the commercial commissioning of the total capacity will start in Q1 2022.

Single-axis tracking Photovoltaic Panels will be used in this PV power plant with new solutions and innovations in solar energy technology such as: Dual panels that save space, automated systems to track the sun, robots for the continuous cleaning of solar panels to ensure efficiency, and reduce plant operating costs, and live monitoring systems and production forecasting.

The plant will contribute to reducing 26 million tons of CO₂ and will reduce Qatar's dependency on gas, thus reducing the natural gas used in traditional power generation and preserving the environment. At the economic level, the project will provide competitive power generation prices.

GHG Emissions and Air Quality

2019 Highlights:

- 73,602 mcf of natural gas and 4,401 million kgs of CO₂ emissions saved by the Tarsheed program
- 6,538 million tons of CO₂ saved by District Cooling
- Tripartite power synergy agreement signed by KAHRAMAA with Qatar GTL and GASAL QSC to start producing electrical energy from steam

At KAHRAMAA, we aim for sustainability on all levels including, most importantly, the environmental impact of our operations. As our main responsibility is to generate electricity and water supply for Qatar, we place substantial pressure on the natural gas resources that are used as a main source of fuel for its power and water production.

We are working to reduce our dependence on fossil fuels through diversifying our energy sources, switching to more sustainable and reliable equivalents. Our various efforts in the Tarsheed program, district cooling, and Solar

PV stations, are all pursuing this aim while reducing CO₂ and GHG emissions. Within our transmission and distribution networks, we use SF₆ as an insulating gas in substations. We realize that SF₆ is the most potent of the six GHGs according to the IPCC and we are working towards reducing and controlling SF₆ gas emissions by implementing various initiatives. Examples include installing alarm system in substations for observing potential SF₆ leakages, changing defective equipment and transmitters, and safe handling of SF₆ to restrict releases.

| Emissions & Air Quality | 2017 | 2018 |
|--|---------------|----------------|
| Total emissions (tons) | 5,318,907 | 14,105,094 |
| Direct GHG Emissions - Scope 1 (tons of CO ₂ e) | 95,237.47 | 95,237.47 |
| Indirect GHG Emissions - Scope 2 (tons of CO ₂ e) | 4,915,290,326 | 13,039,072,598 |
| All Other Indirect GHG Emissions – Scope 3 (tons of CO ₂ e) | 403,521,235 | 1,065,926,620 |

Within our Tarsheed program, an electric vehicle policy has been launched along with new schemes to encourage electric vehicles across Qatar. Total savings of 73,602 mcf from natural gas consumption was achieved this year through Tarsheed contributing to a reduction of 4,401 million kgs from CO₂ emissions. District Cooling also had a major impact on CO₂ emissions with a total reduction of 6,538 million tons.

Looking forward, smart meters play an important role in KAHRAMAA's efforts to help customers monitor and reduce water and electricity consumption. By 2019 KAHRAMAA had installed a total of 70,882 electricity meters and 290,576 water meters.

Efficient Waste and Wastewater Management

2019 Highlights:

- 18 DC plants using non-potable water for cooling operations
- 100% of generated waste recycled.
- TSE usage rate in our DC plants doubled, to 54%
- Automation of warehouse manual processes

As part of having efficient and sustainable operations, KAHRAMAA places great importance on waste and wastewater management throughout all our workstreams. We work to minimize waste generation by upgrading our operations to paperless and digitizing our services. In 2019, we had a 5% drop in total waste generated with 5,664 tons, with 99.76% non-hazardous. 100% of our waste was recycled this year, representing a 36% increase on the waste recycled in 2018.

In addition, our average waste intensity has decreased year on year by 60.32% from 4,055 Kg/million USD revenues

| Waste | 2017 | 2018 | 2019 |
|---|--------|-------|-------|
| Total Waste Generated (Tons) | 14,000 | 5,957 | 5,664 |
| Non - Hazardous waste Generated (Tons) | 4,200 | 5,957 | 5,651 |
| Hazardous waste Generated (Tons) | 9,800 | 0 | 13.6 |
| Total waste recycled (Tons) | 12,600 | 4,179 | 5,651 |
| Waste intensity (kg/million USD revenues generated) | 4,055 | 1,924 | 1,609 |

In wastewater management, we are working with our stakeholders to maximize treatment and use of wastewater, most notably in our DC plants. In 2019, there were 21 district cooling plants using non-potable water out of the 39 DC plants operating in Qatar. We increased usage of the Treated

generated in 2017 to 1,609 Kg/million USD revenues generated in 2019.

Furthermore, our Materials Department has completed the transformation of our warehouse as per the requirements of International Standards for Warehouse Layout and Design, and implemented a barcoding system on warehouse items while automating all manual processes, such as: Material Inspection Report, Materials Transfer from Project Site, Material Write-Off Approval, and a Set-up Inventory Dashboard.

Sewage Effluent (TSE) water by 54% compared to 2018. All our DC plants were inspected for compliance with the DC code and TSE utilization. In addition, an online system was developed for Emergency Potable Water requests and DC plant performance reporting.

Public Policy Involvement

KAHRAMAA works closely with the government to identify the best solutions for all stakeholders and are involved in the development of public policy. For District Cooling, we are publishing the DC Law – an expansion on the DC code - anticipated for the end of 2020, which will guide pricing and management, licensing, and energy efficiency.

Government subsidies continued to decrease this year to 5,231bn QAR, and KAHRAMAA continues its efforts to reduce our reliance on government contributions and improve revenue generation. Although increased tariffs and reduced subsidies may have helped to lower demand for electricity and water per capita, Qatar is still looking to build more capacity to help power economic diversification and expansion.





Protecting and Developing Our People

At KAHRAMAA, we believe that superior customer service and brilliant business results cannot be achieved without adequate personnel who are qualified and well-trained to deliver the best quality of work, contributing to KAHRAMAA's growth and success and realizing the QNV2030 of human, social, and economic development. As such, we strive to provide our people with a comfortable, safe environment that complies with the highest levels of human and labor rights. We invest in our employees by developing their skills and nurturing their knowledge through training sessions, performance reviews, educational support, and promotion opportunities.

Diversifying our workforce is one of our top priorities at KAHRAMAA. We work to accommodate people from all walks of life, aligning our efforts with the QNV2030 and the UN-SDGs. Female employment and promotion are an important focus, along with creating accessible and fulfilling job opportunities for people with disabilities. We work to attract young Qatari talents, by providing training and internships, followed by employment opportunities.

At the working level, we perceive transparency and trust as pivotal factors for KAHRAMAA's success. As such, we maintain open and transparent communication channels between employees and managers.

Recognizing and Developing Our Talent

2019 Highlights:

- 2019 turnover rate improved by 1.4% from 2018
- Employees satisfaction maintained at 61%

Recently, Qatar has witnessed a spike in its population, accompanied by substantial growth in infrastructure, industries, and services. The marketplace in turn demands new talents and skills to accommodate this expansion. We have acknowledged these changes in the marketplace and responded by creating opportunities to Qatari and non-Qatari populations with competitive compensations, while aligning with international standards to ensure compliance with Human Rights laws. Our Human Resources department was certified with ISO:9001/2008 for its

excellent Quality Management System (QMS). The total number of KAHRAMAA employees has been mostly steady over the years. In 2019 we had 3,046 employees, which is a 1% increase over last year, distributed across the business sectors as follows: 50% in the Corporate business, 32% in the Electricity sector and 18% in the Water sector. Retaining our talent and appreciating their effort with financial and non-financial rewards had a positive improvement on our turnover and employee satisfaction rates this year, equating 2.76% and 61%, respectively.



| Workforce Profile | 2017 | 2018 | 2019 |
|---|-------|-------|-------|
| Total number of employees | 3,054 | 3,027 | 3,046 |
| Males | 2,699 | 2,615 | 2,595 |
| Females | 388 | 412 | 451 |
| Female employee % | 13% | 14% | 15% |
| Full Time Employees | 3,087 | 3,011 | 3,022 |
| Part Time Employees | 0 | 0 | 0 |
| Electricity Business Employees | 959 | 961 | 955 |
| Water Business Employees | 589 | 585 | 582 |
| Corporate Business Employees | 1,506 | 1,481 | 1,509 |
| Turnover (total number of employees who left) | 166 | 126 | 84 |
| Turnover rate | 5.44% | 4.16% | 2.76% |
| Employees Satisfaction | 62% | 61% | 61% |

Training and Development

2019 Highlights:

- Organized "Up to the Top – 7 steps for Excellence and Innovation" training sessions for employees
- 70,585 training hours delivered
- 4 employees were supported to complete their education
- Agreement with Qatar Leadership Center for implementation of the "KAHRAMAA Excellence" program
- 15 internship opportunities opened

KAHRAMAA considers capacity building as a key driver in achieving its mission and vision. Accordingly, we invest highly in the training and development of our workforce while actively attracting new talent to join our family.

To achieve these objectives, we have developed various programs to upgrade the skills and capabilities of our employees through internal and external training sessions. This is supported by the Individual Development Plan (IDP) program: a tailored training program for each employee based on their competency and improvement opportunities. In 2019, 99% of employees were trained as per their IDPs. We also signed a cooperation agreement with Qatar Leadership center to implement the "KAHRAMAA Excellence" institutional program for enhancing the leadership skills of senior management members. We also provide an English Language program for our employees who wish to enhance their English language skills. This program utilizes the best English language training providers in Qatar and is based on the international standard of the Common European Frame of Reference.

We are always on the hunt for qualified people through effective talent management and competency development programs. KAHRAMAA offers various types of training for both secondary school and university graduates. For school graduates we offer the Clerical Preparation Program (CPP), Technician Preparation Program (TPP), and Security Preparation Program (SPP). University Graduates are offered the Graduate Engineering Training (GET) and Graduate Management Training (GMT). Our new hires are provided with an "On the Job Training" program designed to train them while performing their daily work tasks.

In 2019, we delivered a total of 70,585 training hours at a cost of 82 QAR per employee, guided by policy from the Ministry of Labor. Through our internship and education programs, we had 15 internships as well as 4 employees benefiting from the education support program. The cost of supporting Qatari students and employees in their education reached 913,365 QAR this year.

| Training & Development | 2017 | 2018 | 2019 |
|--|-----------|-----------|-----------|
| Total number of training hours delivered | 84,346.00 | 60,870.00 | 70,585.00 |
| Male employees | 53,138 | 38,620 | 44,469 |
| Female employees | 31,208 | 22,250 | 26,116 |
| Average hours of training per employee | 28 | 20 | 23.17 |
| Average hours of training for females | 42.4 | 48.4 | 20.2 |
| Average hours of training for males | 10.4 | 14.9 | 9.4 |
| Total cost of external training delivered (cumulative) (m. QAR) | 4.2 | 4.9 | 6.6 |
| Average cost of training per employee (QAR) | 1375 | 1620 | 2156 |
| Number of trainees and interns * | 45 | 32 | 15 |
| Number of employees supported to complete their education** | 18 | 11 | 4 |
| Total cost for supporting Qatari students and employees in their education (QAR)** | 5,294,657 | 2,357,484 | 913,365 |

*Internship Program is handled by the Ministry of Administrative Development, since 2015

**Qatari student programs are now handled by the Ministry as a unified source for the Government Sector

Qatarization, Diversity and Equal Opportunity for All

2019 Highlights:

- 100% consistent Qatarization at senior management positions
- 37% Qatarization rate for the organization
- 15% female employment rate
- 7% senior management positions held by females
- 50% increase in the employment of people with disabilities

Qatarization

One of our key objectives is to attract, train and retain Qatari workers aligned with the QNV2030 and our own internal Qatarization target of 38%. We are committed to transforming the national workforce into productive assets who will contribute to the social, economic, and environmental sustainability of Qatar. This year, our Qatarization rate was 37%. We are proud that our senior management positions were held 100% by Qatari employees, with 87% Qatarization in middle management.



| Qatarization | 2017 | 2018 | 2019 |
|-----------------------------------|--------|--------|---------|
| Employees by nationality | 3,055 | 3,027 | 3,046 |
| Qatari | 1,138 | 1,160 | 1,199 |
| Expatriates | 1,917 | 1,867 | 1,847 |
| Qatarization Rate | +36.6% | +36.7% | +37.04% |
| Qatarization at Senior Management | 100% | 100% | 100% |
| Qatarization at Middle Management | 87% | 87% | 87% |
| Qatarization at Staff | 37% | 37% | 37% |

2019 Highlights:

- 32 million safe working hours for employees and contractors
- An automated incident investigations workflow system was developed for more efficiency

We believe in the importance of diversity in our workforce, and strive to provide equal opportunities and adhere to human rights, to protect the rights of each person to pursue fulfilling careers and succeed on their merit regardless of gender, race or physical ability. In 2019, female employment improved by 3 percentage points from 12% in 2017 to 15% in 2019, with females representing 7% of senior management and 13% of middle management.

Similarly, we increased the employment of people with disabilities by 50%, a total of 24 employees. There have been zero incidents of discrimination reported at KAHRAMAA in 2019, which demonstrates widespread adherence to our Code of Business Conduct.

| Diversity & Equal Opportunities | 2017 | 2018 | 2019 |
|--|-------|------|------|
| Percentage of females in senior management | 7% | 7% | 7% |
| Percentage of females in middle management | 17% | 20% | 13% |
| Percentage of females in staff | 12.2% | 16% | 17% |
| Female employment percentage | 12% | 14% | 15% |
| Female employment rate | +12% | +14% | +15% |
| Number of employees with disabilities | 15 | 16 | 24 |

At KAHRAMAA, we consider the health and safety of our employees and contractors to be a key factor for the success of our business. We have put in place Health, Safety and Environment (HSE) policies that are aligned with our corporate objectives and the QNV2030 for Human Development, to ensure a safe and healthy workplace that complies to the highest standards set for the energy and water industry. This includes Safety Rules for the control, operation and maintenance of the electricity transmission and distribution system of KAHRAMAA, which details the requirements and safety rules for employees and contractors on site.

The Health, Safety and Environment Department (HSE) is committed to service excellence in the areas of occupational health, safety management, and fire prevention and protection. The policy deems our employees to be our most valuable asset and as such, HSE shall provide adequate training in line with organizational needs and objectives. As per KAHRAMAA's Quality, Health, Safety and Environment Policy (QHSE) – which falls under the responsibility of the Electricity Transmission Department – it is our policy to:

- Protect the health and safety of our employees, customers and third parties,
- Set QHSE performance objectives and targets through the use of an effective management system,
- Comply with legal and other requirements of the State of Qatar,
- Plan for, respond to and recover from any emergencies, crisis and Electricity disruption,
- Promote QHSE awareness among employees, customers and the general public.

Our Environmental, Health, and Safety Management System (EHSMS) includes health and safety audits and inspections alongside training sessions and awareness campaigns organized for our employees and their families. In 2019, we organized various HSE awareness activities.

These included a First Aid Training Program, a flu vaccination campaign, a blood donation campaign, a "Save Your Sight... Get Your Eyes Tested" awareness campaign about Glaucoma, and the "World Day of Health and Safety at Work."

Our Safety Performance



We consider employee awareness in health and safety the first line of prevention of harmful incidents. Hence, we place great importance on the health and safety training of our employees and contractors, along with regular HSE inspections to effectively manage our operations and mitigate any potential risks. All our contractors, suppliers and service providers are awarded contracts based on their compliance with our "HSE Requirements for Contractors" policy. Afterwards, they are inspected on a regular basis to ensure their adherence to our HSE standards, in addition to submitting a monthly report that covers all areas of their HSE performance.

In 2019, we accomplished more than the planned HSE inspections, with 50 inspections for occupational health and 52 environmental inspections. We have developed an automated workflow system for incident investigation to improve the auditing process, and we are proud to have achieved 32 million safe working hours for employees

and contractors with no major safety incidents reported this year. This translates to zero fatalities for both employees and contractors with zero employee Lost Time Injury Rate (LTIR) and Total Recordable Injury Rate (TRIR).

In an effort to bring down our LTIR for contractors in line with our LTIR for employees, we are also increasing awareness activities for all workers and implementing stricter rules to ban contractors if safety rules are broken, supported by job specific trainings, tool box talks before all works and permit to work implementations. A Safety Violation procedure has also been developed and implemented in 2019.

We will continue with our stringent HSE measures at KAHRAMAA, to maintain our previous achievements and focus on areas that can be better managed in pursuance of Health and Safety excellence. Furthermore, we have begun the tendering process for ISO certification for our EHSMS system, which we hope to obtain in 2021.

| Health & Safety | 2017 | 2018 | 2019 |
|--|--------|-------|-------|
| Lost Time Injury Rate (LTIR) – employees and contractors (per 1,000,000 hours worked) | - | - | 0.35 |
| Number of Lost Time Injuries - employees | 1 | 1 | 0 |
| Number of Lost Time Injuries - contractors and subcontractors | 4 | 3 | 14 |
| Lost Time Injury Frequency Rate (LTIFR) – employees (per 200,000 man-hours) | 0.031 | 0.03 | 0.00 |
| Lost Time Injury Frequency Rate (LTIFR) – contractors (per 200,000 man-hours) | 0.005 | 0.007 | 0.109 |
| Total Recordable Injury Rate (TRIR) - employees and contractors (per 1,000,000 hours worked) | 0.1 | 0.08 | 0.27 |
| Total Recordable injuries - employees | 1 | 1 | 0 |
| Total Recordable injuries - contractors and subcontractors | 5 | 5 | 14 |
| Total Safe Working Hours (million hours) | 156.39 | 89.32 | 32.07 |
| Safe Work Hours (Employees) (million hours) | 6.27 | 6.72 | 6.47 |
| Safe Work Hours (Contractors) (million hours) | 150.11 | 82.60 | 25.60 |
| Fatalities (Employees) ** | 0 | 0 | 0 |
| Fatalities (contractors and subcontractors) ** | 0 | 0.66 | 0 |
| Health and Safety training hours (hours) | - | 530 | 1,130 |
| Number of Occupational Health Inspections | - | - | 52 |

**fatalities/thousand employees

In 2019, we saw most of our mega reservoir and pipeline projects completed or in their final stages. As such, the total safe man hours have reduced year over year in line with reduced total man hours.

Supporting Our Society

KAHRAMAA recognizes that supporting the communities that we work with is essential in achieving our long-term goals and transforming our nation towards a more sustainable society. In engaging the wider society, we play an essential role in raising local knowledge and awareness that maintains a positive outlook and instils a culture that cares about efficient use of natural resources.

We at KAHRAMAA believe in Qatar's social development policy, which focuses on family cohesion, women's empowerment, social protection, public safety and security, and sports and culture. Investing in these values supports local communities and improves how successful we are in how we plan our operations for the future. The success of our Tarsheed initiatives, for example, relies largely on our relationship with the communities in which we operate.

Community Engagement and Investment

2019 Highlights:

- Increased our 2019 CSR budget to almost double from 300,000 QAR to 526,000 QAR and increased our 2019 CSR spending, which has almost tripled from 100,000 QAR to 280,000 QAR
- Organized the 8th Qatar National Sports day in collaboration with the Qatar Volleyball Federation
- Launched our Ramadan campaign "We Became Closer" for the 2nd year in a row
- Every year, 15 of the 54 public events are dedicated to CSR causes

As part of our commitment to health, we organized the 8th Qatar National Sports Day in collaboration with the Qatar Volleyball Federation, the Qatar Table Tennis Federation and Qatar Women's Sports Committee. The event slogan "Keep it in your mind" encompasses the message that health and wellbeing extends further than the annual sports day, and that being healthy means incorporating many small good habits into everyday life. In December, we celebrated Qatar's National Day in the presence of KAHRAMAA's President H.E Eng. Essa bin Hilal Al-Kuwari, KAHRAMAA's departments managers and heads of sections, employees of the corporation and a selection of Qatar's notable figures. Furthermore, on December 16th, we celebrated the Qatar National Day represented by Tarsheed at KAHRAMAA Awareness Park in the presence of KAHRAMAA representatives and the General Authority for Minors Affairs and their children and families. The activities for the Qatar

National Day celebrations were Traditional Theatre, Performances, Painting workshops, and Traditional Foods among other cultural celebrations.

KAHRAMAA also launched an awareness campaign to coincide with World Cancer Day, and launched our Ramadan campaign "We Became Closer" for the 2nd year in a row, which included a visit to the "Tamkeen" Center and "Ihsan Elderly Caring Center" on Eid Al Fitr. We also organized a blood donation campaign in cooperation with Hamad Medical Corporation, with the intention of saving lives and raising awareness among our employees around the benefits of regularly donating blood.

Various social events and activities were organized by KAHRAMAA in 2019 to support sports and cultural activities. In addition, print and social media were used to highlight various social activities and campaigns initiated by KAHRAMAA. In 2019, 46 media campaigns were launched, with 54 public events and 59 publications.

| Community Investment | 2017 | 2018 | 2019 |
|--|---------|---------|---------|
| Total social investment spending (QAR) | 350,000 | 100,000 | 280,000 |
| Total social investment budget (QAR) | 400,000 | 300,000 | 526,000 |



Educating The Community On Environmental Compliance and Resource Use

2019 Highlights:

- Organized a summer camp "Enjoy Summer with Tarsheed" at KAHRAMAA's Awareness Park
- Held an awareness event for recycling tires in KAHRAMAA's Awareness Park
- Celebrated Arab Water Day and World Water Day, Earth Hour and World Earth Day, World Ozone Conservation Day, and Qatar Environment Day 2019

We take great pride in educating the community on environmental compliance and resource use, and as a growing global issue this becomes a greater responsibility for all utility companies year on year. As such, we have launched many policies and initiatives to further this goal. One of our most exciting initiatives has been the KAHRAMAA Awareness Park (KAP), which serves to Promote Community Development & Sustainability. KAP is a unique Edutainment Center in the Middle East and a member of the UNESCO Water Network of Museums. We host 100,000 visitors, 300 schools and six major events hosting including Tarsheed Carnival every year. In 2019 we also held a special awareness event for recycling tires; a summer camp named "Enjoy Summer with Tarsheed", and an eco-friendly habits initiative to achieve sustainable development and encourage people to reduce electricity and water consumption. in partnership with Qatar Foundation as part of Tarsheed project 22 phase 4. We also launched the "Be a Hero and Plant a Tree" initiative, which saw 21 palm trees planted.

Furthermore, we have aligned our Corporate Social Responsibility (CSR) approach with the QNV 2030 commitment to community and social excellence. To achieve these goals, the Conservation & Energy Efficiency Department operates in collaboration with the Public Relations & Communications Department and the Health, Safety and Environment Department. Tarsheed plays a major role in implementing a wide range of activities and campaigns through which we promote and encourage social responsibility. Because of the free supply of water and electricity for Qatari citizens supported by the government, citizens do not generally appreciate the true value of water and energy. As all Qatari water is desalinated through gas power, the true cost in both resource use and environmental impact is typically higher than other countries. As such, our short-term goal supported by the conservation and energy efficiency department is to educate children of all ages on the real value of water. Our long term is to implement green energy to further underpin efficient use of resources.



The Tarsheed Program



The National Program for Conservation & Energy Efficiency 'Tarsheed' is KAHRAMAA's national initiative launched under the patronage of His Highness Amir of Qatar in 2012. It aims to support Qatar's sustainability plans and environmental compliance through energy efficiency and renewable energy measures and initiatives among different stakeholders. The 3rd phase of the Tarsheed 2022 Project in collaboration with The Supreme Committee for Delivery

& Legacy (SC) for retrofitting no saving lighting and plumbing devices with saving ones and educating school children towards energy efficiency was completed in 2019. Community awareness has been continuous, and two booklets have been published to educate users on Energy Conservation at the office, and for Water Conservation at home. Tarsheed Awareness activities have included 83 training lectures, 7 campaigns and 100,000 visitors to KAP as well.

The goal of Tarsheed is to achieve the following by 2022:

- Optimum utilization of all energy resources
- A well-versed, socially responsible community regarding the importance of natural resources
- Sustainable community development towards energy conservation
- Effective implementation of upgraded conservation laws and regulations
- Establishment of a strong, modern, and energy efficient market

Tarsheed Works Towards Achieving its mission by aligning to the following

- QNV 2030
- QNS 2018 -2022
- Global Context of Sustainability Development Goals of the UN related to KM Business



Tarsheed has five key focus areas, in which we have seen considerable successes year on year including in 2019:

1. Achieve Market Transformation.

Objective: Promote regulatory changes in the energy and water markets

In Achieving Market Transformation, we drove the use of Energy Efficient Devices & Initiatives through the finalization of our air conditioner MEPS (minimum energy performance standards) 2nd phase and labelling. MEPS of other appliances will be announced in 2020. We also saw an Energy Saving of 299 GWh due to enhanced MEPS Standards for Air Conditioners Phase-I, and furthermore we saw continued results from phasing out of incandescent lamps that began in 2017.

We also achieved savings due to the Implementation of Water Conservation Regulation, and under Conservation Law No. 20/ 2015, there were a total of 23,647 identified violations up to November 2019. Surveys and analysis were conducted for identified customers who are violators for water to ensure we can learn why these violations occur and work to reduce them in the future.

2. New Technology/ Process Adoption.

Objective: Improve Customer's Consumption & Demand

In implementing new technology and process adoption to improve consumption and demand, we implemented customer energy surveillance, underpinned by workshops and bulk customer audits. We also implemented the Q-TERMINAL Electricity Regeneration System and engaged the ASHGAL Street lighting LED retrofit followed by the TARSHEED 2022-retrofit of fluorescent lamps with LED. KAHRAMAA also saw water savings due to retrofit projects for masjids and other government facilities, and from switching parks from desalinated water to TSE water.



3. CO2 & Climate Change Combating.

Objective: Reduce CO2 emissions and diversify energy sources

Tarsheed is working with different partners to implement and promote electric vehicle (EV) charging by presenting various prototypes and implementing the first EV charging site for buses in Qatar. We also built the first Photovoltaic Battery Storage EV Station in Qatar for charging electric vehicles with a capacity of 72KwHr, a project which has promising potential to transform the transportation sector towards low carbon development. We are also in the tendering process for the LTC 1514 Renewable Energy Policy and Strategy for the State of Qatar Consultancy, and the tendering process for LTC 1528 EV Charging Stations Strategy for the State of Qatar Consultancy. Furthermore, our ongoing School Project for Renewable energy is now in Phase 2 in 4 QF Schools.

4. Community Development.

Objective: Promote Conservation and Energy Efficiency Culture, and Develop Community Awareness

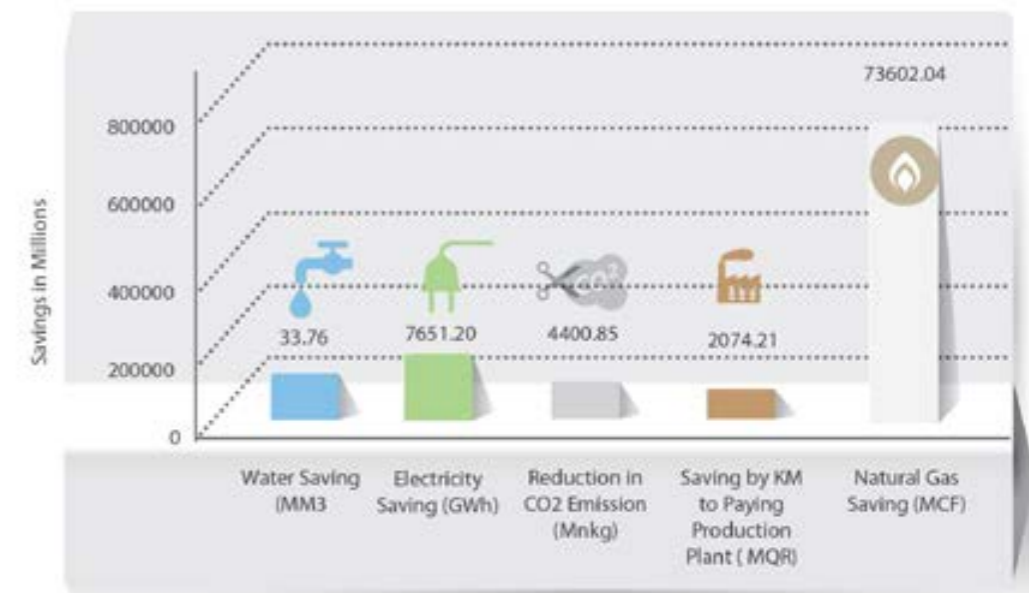
Community development is both a necessity and an outcome of energy conservation and awareness. For the Tarsheed Initiative to produce its strategic road maps, we conducted an impact analysis of high consumption through the SMS Dashboard. The KAP is our most visible initiative developing community awareness, and we internalize this culture by saving electricity through switching off lights in offices outside of working hours.

5. Financial Sustainability.

Objective: Add value to existing business and increase financial savings

For KAHRAMAA's initiatives to have real impact into the future, we must work towards financial stability. There are several aspects to this pillar of the Tarsheed object and in 2019, KAHRAMAA, Qatar Shell GTL Limited, and GASAL Q.S.C. signed a Tripartite Power Synergy Agreement for the production and transfer of surplus electrical power from energy. The agreement enables the transfer of surplus electrical power produced from waste energy by Qatar Shell Pearl GTL plant to be distributed via KAHRAMAA's network to GASAL's new air separation plant in Ras Laffan Industrial City for the purpose of producing and supplying oxygen to Qatar Shell Pearl GTL plant. It is envisaged that the synergy will contribute to reducing the harmful carbon emissions up to 100,000 tons annually and be financially beneficial to Tarsheed in carbon credit monetary value. Furthermore, strategic partnerships support the financing of our initiatives, such as paid pilot projects by partners such as Marubeni who sponsored around 1.8m QAR for our PV Storage EV Station, along with other partnerships that sponsored around 600,000 QAR for KAP. Our initiatives have contributed to significant savings in a variety of areas over the years.

Savings/Reduction due to TARSHEED Program in 2019





Ensuring Economic Value and Good Governance

KAHRAMAA continues to further its financial sustainability, achieved through increased revenues and a reduction in financial support from government. Continual progress is being made to preserve the distinguished position that KAHRAMAA has reached to build the state economy through innovation and transformational initiatives.

The demand for water and electricity continues to grow alongside several upcoming infrastructure projects in the run up to the FIFA World Cup 2022. We realize that long-term financial sustainability will enable us to meet demand whilst playing a key role in achieving the goals of QNV 2030, which aims to diversify the economy away from oil and gas, invest in a knowledge based economy with focus on innovation, and improve the proportion of

Qataris in the workforce. KAHRAMAA contributes to Qatar's national development agenda by hiring locals, providing training and education, investing in building electricity and water infrastructure, local sourcing, active community engagement, and raising awareness about resource conservation.

Sustainable economic growth demands trustworthy governance, and in 2019, KAHRAMAA continued to improve corporate governance in areas such as project management, enterprise risk management, information security management, performance monitoring, organizational structure, customer processes and asset management. Qatar's Minister of Energy and Industry oversees and approves KAHRAMAA's strategic direction as the head of our governance body. Our President is the executive head of our organization and is responsible for the management of the activities of KAHRAMAA.

Strengthening Financial Performance

2019 Highlights:

- Revenue growth of 14% in 2019
- Implementation of New Accounting Standards
- 70% project completion for Billing and Accounts receivable transformation initiative
- 30% project completion in KM Financial Sustainability initiative

In 2019 the State of Qatar, with its safe business sectors, has established monetary segments and strong growth potentials, and remains in the topmost attractive markets for infrastructure investors. Qatar is investing heavily in becoming a commercial and sporting hub in the Middle East and is focusing on attracting more sustainable tourism by improving transport infrastructure and developing attractions. A new port has been developed, in part, to support the import of materials needed to deliver ambitious spending plans that satisfy both the QNV2030 and the more immediate 2022 FIFA World Cup Qatar.

With these developments in mind, KAHRAMAA realizes that to keep pace with the economic growth of Qatar it needs to provide water and electricity in an affordable and reliable manner. Achieving efficiency through energy and water use reductions can reduce cost as well as protect the environment. In line with the QNDS2 targets of phasing in user charges for power, water, and fuel to better reflect the full economic costs of those resources, KAHRAMAA implemented several tariff reforms as part of its financial sustainability initiative along with various other sub-initiatives to support financial sustainability and operational efficiency.

KAHRAMAA's corporate objectives have focused on strengthening our financial condition and ensuring commercial success to generate both direct and indirect economic value for the country by:

- Ensuring resource conservation on the demand side of the market.
- Improving operation efficiencies.
- Enabling business growth by delivering large investments in building electricity and water infrastructure.
- Investing in skill development activities to ensure a smooth transition to a knowledge-based economy.
- Supporting additional economic value generation through local spending; and
- Investing in CSR-related initiatives raising awareness specifically about resource use

In 2018 and 2019 we continued implementing projects with the goal of strengthening our financial performance, with great success. In 2019 we achieved 70% project completion for our Billing and Accounts receivable Transformation Initiative. This project was created to clean up the Customer Master File. The process cleaned up the Meter Master Data, reduced the outstanding receivables, reduced billing estimations for greater accuracy; and created well define policies on policies for billing, receivables, and disconnections. We also reached 30% project completion in KM Financial Sustainability initiative. The focus here is to make KAHRAMAA a sustainable

organization, functioning as a commercial entity. This initiative includes a MOF subsidy agreement, cost rationalization, generation of additional revenues, project financing and capital spending with proper return on Investment. Furthermore, we accomplished implementing new accounting standards based on the guidelines of International Accounting Standards Body (IASB). It supports the assessment of affected reporting areas, perform necessary calculations and reclassification as per the guidelines, and restate balances and disclosures, as necessary.

Implementation of new accounting standards – IFRS 15 and IFRS 16

KAHRAMAA's financial reporting is based on the framework set by the International Accounting Standards Board (IASB). There are constant changes to these standards to give a true and fair view of the financial records.

IFRS 15 - Revenue from Contract with Customers

KAHRAMAA has multiple streams of revenue which include tariffs on consumption, contract with customers, providing service connections, infrastructure development for major clients, among others. As such, the implementation of the revenue recognition method – as per IFRS 15 – presented a healthy challenge for us, whereby all streams applicable to KAHRAMAA were to be assessed and changes were to be implemented accordingly.

All revenue streams were assessed and compared against the guidelines mentioned under IFRS 15. This is a new 5 step model framework-based standard to identify the nature and timing of revenue recognition. The changes were made to the revenue recognition methodology and certain automated processes were updated based on the criteria requirements. Certain liabilities and deferred incomes were impacted because of this change.

IFRS 16 – Leases

Implementation of IFRS 16 was enforced in 2019 which changes the classification of certain leases, impacting the operating leases. IASB has given clear guidelines in this new standard to separate certain types of operating leases which will now be recorded as 'Right of Use' assets rather than simply 'Rental Expenses' in the income statements. KAHRAMAA has lease arrangements for generation power plants and therefore an assessment was necessary to adapt to the changes as per IFRS 16.

All lease contracts were assessed and evaluated to identify potential operating leases that were to be reclassified as Right of Use assets. Significant data points were captured such as dates, time lapsed, and time remaining for such leases. Respective calculations and system adjustments were conducted to reclassify operating leases as Right of Use assets.

Outcome: Our income statements, assets and liability data show true and fair view as per the IASB's guidelines.

Future Commitment: We will continue monitoring under these standards, as per developments by IASB.



Strengthening Financial Performance



Costs and profitability of utility companies – including at KAHRAMAA - are subject to stringent scrutiny. As such, we have an increased focus on improving efficiency especially through smart technologies to assist consumers in tracking their resources use, as well as offering more efficient online application services for companies.

KAHRAMAA is a state-owned organization and our capital expenditure budget depends on government funded subsidies and revenue which is generated entirely from our growing customer base. In 2019, we received 5.2 billion QAR as OPEX subsidies from government. We are implementing new processes and systems which target better control of costs, improve revenue collection efficiency, and help us pursue other revenue streams. This is in line with our focus on operational excellence, aimed at improving the commercial viability of our business.

In 2019, our revenue including net sales and revenue from financial investments totaled QAR 12.84bn, a growth of 14% on 2018. Our operating costs increased from 14.11 billion QAR in 2018 to QAR 14.36 billion QAR in 2019.

| Financial Performance - Overview | 2017 | 2018 | 2019 |
|---------------------------------------|-------|-------|-------|
| Annual Revenue Growth | +33% | -11% | +14% |
| Revenue (bn. QAR) * | 12.66 | 11.28 | 12.84 |
| Operating costs (bn. QAR) | 14.29 | 14.11 | 14.36 |
| Employee wages and benefits (bn. QAR) | 0.93 | 0.96 | 1.02 |

*Net sales plus revenues from financial investments and sales of assets

| Financial Performance - Revenues | 2017 | 2018 | 2019 |
|--|------|------|------|
| Total revenues (Electricity+ Water+ Other) (bn. QAR) | 3.6 | 3.1 | 3.6 |
| Electricity revenue (bn. QAR) | 2.7 | 2.4 | 2.7 |
| Water revenue (bn. QAR) | 0.75 | 0.71 | 0.82 |
| Other revenue (bn. QAR) | 0.17 | 0.26 | 0.78 |
| Subsidies * (bn. QAR) | 1.8 | 6.8 | 5.2 |

*2018 and 2019 figures related to subsidy amount received from MOF: does not include amount received for Qatari Consumption

Asset Management

Significant challenges for utility companies include aging infrastructure and increasingly sophisticated demands from regulators. We at KAHRAMAA take pride in maintaining high standards in our material specifications to ensure longevity of our infrastructure. Our maintenance department ensures best practice is implemented across all processes to ensure the life span of the network, and reviewing condition monitoring through the SCADA system, among other measures. In 2019, we confirmed a clear asset management road map, to further improve asset management over a 3-year project timeline.

KAHRAMAA signs an agreement with TEES Cybersecurity Center

As we become more efficient and apply smarter technology, the risks and potential impacts from cyber-attacks increase. We take this threat seriously, and in 2018, we signed an agreement with TEES Cybersecurity Center at Texas A&M at Qatar. Under this collaboration TEES experts will study the current situation across our grid and give recommendations for current and future development opportunities, with the aim of establishing a pioneering cybersecure grid. The agreement will establish an industry consortium, to study current and future development opportunities for the State of Qatar where needed, and a mechanism to develop and manage projects related to cybersecurity. This agreement will enable sharing expertise and research studies in several critical areas.

Sustainable Procurement



At KAHRAMAA we know that our procurement practices have a profound impact on the societies in which we operate. We put significant effort into ensuring we procure locally produced goods, in line with the QNV2030 and QNDS2. Furthermore, we build the capabilities of the local suppliers and contractors so that they can meet our quality and safety standards. We make sure that all the materials we use comply with our latest specifications alongside all applicable QCS and international codes of practice.

In 2019 we continued to review our procurement practices and made changes as necessary. In 2019 our legal department confirmed an initiative for 2020 to update our standard documents to comply with the new procurement law, which aims to give special preference to local suppliers. Furthermore, in 2017 and 2018 we were only awarding less than 500,000 QAR to foreign suppliers. However, in 2019 we began awarding up to 75 Million QAR to foreign suppliers of major items, for example for PM Transformers and Package Substation. Our local procurement remains above 90%.

| Procurement | 2017 | 2018 | 2019 |
|----------------------------------|--------|--------|--------|
| Procurement from local suppliers | 99.92% | 99.98% | 90.97% |

Furthermore, we are in the process of developing a 'Procurement Customized Application' via our Centralized e-Tendering System through the Ministry of Finance, leading to greater efficiency and access for us and our suppliers.

Developing Innovative Smart Technologies



In our pursuit of efficiency, we rely on developing innovative smart technologies to improve resource use and quickly identify weaknesses in areas of the network. Leak management is an essential aspect of efficiency. 100% of all our networks are covered with a form of smart technology to reduce leaks, and additional technologies such as the Smart Ball - which we began using 6 years ago – travels through our many smaller pipes to find otherwise invisible leaks, and identifies these areas for maintenance. Our average real losses leakage stands at 6% in 2019.

Furthermore, we are executing various initiatives to reduce water losses by improving the transmission and distribution networks and enhancing metering and billing processes with Advanced Metering Infrastructure (AMI) and Billing and Customer Relationship Management (BCRM), which will start in 2020. This initiative began at the end of 2019 with a target of 10% water loss reduction, currently sitting at 7% reduction. Furthermore, our Project Monitoring System for Electricity and Water project was completed in 2019, and implementation of the BCR system automation for Electricity and Water project achieved 70% completion.

We are always in the pursuit of exploring new initiatives and learning from best practice. In 2019, we participated in the 2nd International Conference on Smart Grids and Renewable Energy in Doha. We also presented the first ICSEWEN 2019 (International Conference on Sustainable Energy-Water-Environment Nexus in Desert Climate 2019) in cooperation with Hamad Bin Khalifa University. The conference brings together international experts in the academic field and industry to exchange the latest developments in research, technology, and innovations.

KAHRAMAA awarded at the Moushtarayat 2019 Exhibition

2019 saw the fourth Government Procurement and Contracting Conference & Exhibition 'Moushtarayat 2019', organized by the Qatar Development Bank. The exhibition aims to provide small and medium-sized enterprises (SMEs) access to large procurement governmental projects. It also serves as a platform to grow and develop Qatar's SME sector. KAHRAMAA is proud to participate in such an important event.

In 2019 alone, KAHRAMAA awarded tenders worth QR37 million to national factories in 2019. We also signed a power purchase agreement (PPA) with Qatar General Electricity. In recognition of our commitment to SMEs, we were awarded the National Purchases Award for the government sector.

KAHRAMAA will continue to prioritize local products in accordance with the law, while encouraging SMEs to participate in tenders. We will not stop at simply providing data on tenders, we will also provide technical support to ensure national products can be developed and contribute effectively to the national economy.

Governance and Business Model Resilience

Qatar's Minister of Energy and Industry oversees and approves KAHRAMAA's strategic direction as the head of our governance body. Our President is the executive head of our organization and is responsible for the management of the activities of KAHRAMAA.

Performance Management

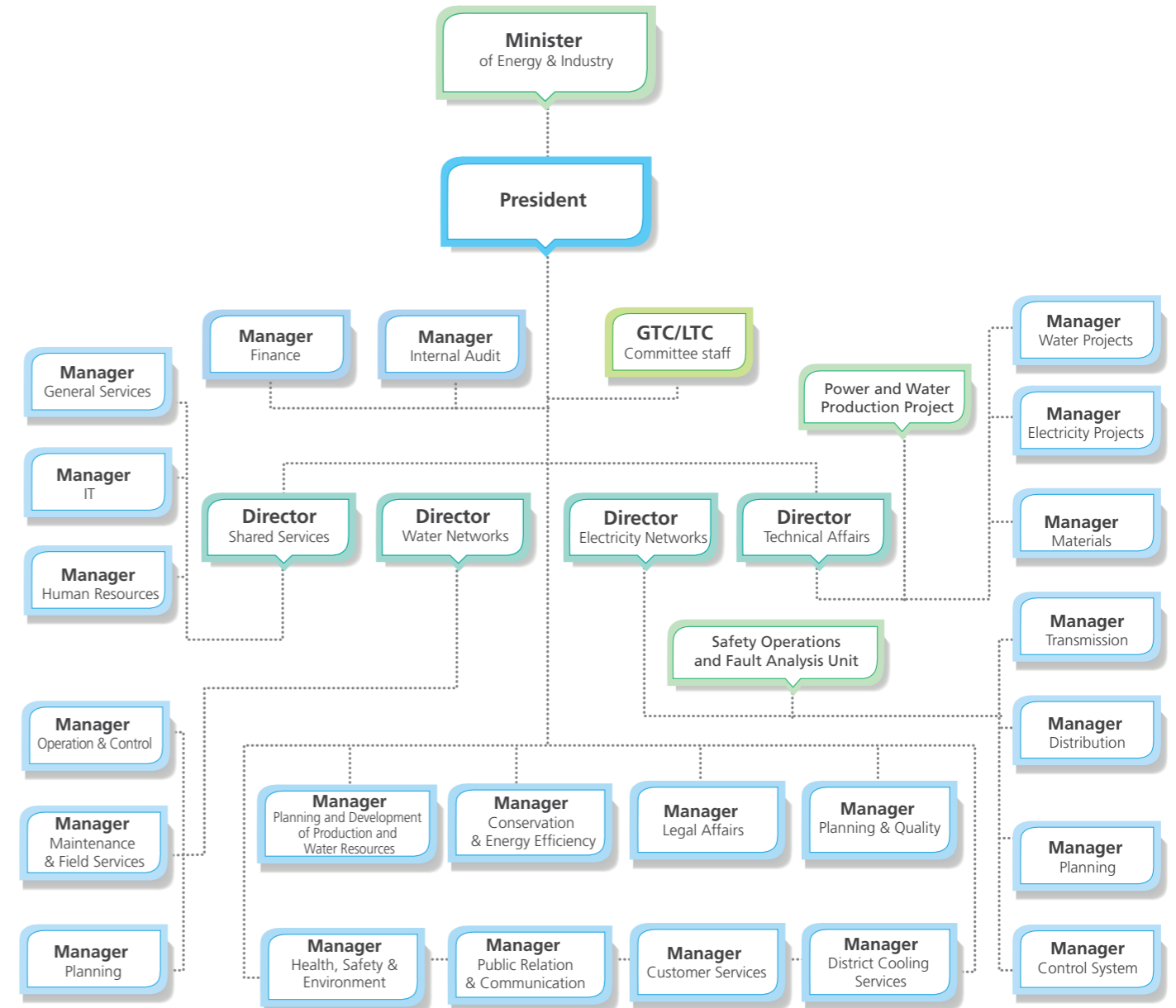
Our overarching strategic direction is defined by our company vision, mission and values. As a performance-driven organization, our balanced scorecard approach enables us to align our processes with our corporate objectives. The balanced scorecard in KAHRAMAA allows the organization to record, monitor and report our corporate, directorate, and department-level performance KPIs, achievements and challenges and is structured around four dimensions: Stakeholder, Finance, Internal and Sustainability, People. KAHRAMAA has initiated different projects to improve the internal processes and capabilities, especially those related to the enhancement of customer services and operational efficiency. All of this improved our performance in 2019.

Business Conduct

We are committed to conducting our business ethically and legitimately, as conducting our business affairs while observing ethics, honesty, and transparency is a critical component of our Values. Our Code of Business Conduct (COBC) sets the expectations and provides guidance to our employees to ensure they uphold our Values wherever they conduct business. Our Code of Business Conduct guides us in our day-to-day operations by focusing on areas such as conflict of interest, gifts and hospitality, managing sensitive information, non-discrimination, customer relationships, health & safety, and diversity. Our Bribery and Anti-Corruption Code and Conflict of Interest Code further entrenches these values. Our Legal Affairs Department is responsible for tracking any violations related to corruption or conflict of interests.

| Corruption | 2017 | 2018 | 2019 |
|---|------|------|------|
| Actions taken in response to incidents of corruption. | 0 | 1 | 1 |

Our Organizational Structure



Human Rights

We value the rights of our employees and believe that our business partners share the responsibility of protecting the rights of their employees as mandated by national labor laws. We therefore mandate minimum requirements related to labor and human rights compliance within all our contracts with suppliers. Our Health, Safety, and Environment Department conducts regular audits at sites and looks for compliance not only with KAHRAMAA's requirements, but also with Qatar's Labor Law and Qatar's Environmental Law. Although we do not have a human rights policy, we acknowledge the significance of the issue, especially within our value chain. KAHRAMAA complies with the HR policy of the State of Qatar including its requirements for respect of human rights of workers.

Certification and Audits

We strive to ensure quality in every aspect of our business operations. We comply with international management systems to ensure we meet the highest quality standards within our organization. We conduct regular internal audits and carry out process improvements to ensure compliance with ISO 9001:2015 Quality Management System. In 2019, our Internal Audit Committee completed 4 audits. These audits included Risk Management and Performance Management reports, and all KAHRAMAA departments are ISO 9001:2018 certified.

KAHRAMAA continues to focus on strengthening and updating its regulations, policies and procedures. We had several highlights in 2019:

- DC Tariff Regulations: 92% of the progress planned for 2019 was completed, and it will be fully implemented after the DC Law's approval and publication.
- Information Security Management System (ISMS) ISO:27001 was fully implemented.
- Quality audits were conducted with 102% of planned audits for electricity and 97% of those planned for water

Risk Management

Furthermore in 2019, we began laying the groundwork to move away from a government entity to a private entity. This means we will be able to apply the most efficient, effective utilities management, under the regulation of the government. This model provides great value to stakeholders underpinned by reliable and safe supply.

Risk Management is an essential element of good corporate governance practice. We believe that successful risk management allows us to ensure compliance to regulations and internal policies and procedures, provide increased assurance on control effectiveness and enhance decision-making process. KAHRAMAA's risk management policy focuses on identification and assessment of risks, as well as proactive implementation of mitigation measures. Our departmental and corporate risk registers enable us to record and monitor risks which may have a potential impact on our corporate objectives. Our risk register lists the diverse risks facing KAHRAMAA such as availability of talent, loss of power supply, inadequate IT structure, lack of systems to innovate, unavailability of alternative water resources, environmental hazards, and others. The Strategic Planning Section of our Planning & Quality department is responsible for the risk management function and the development and coordination of risk management systems within KAHRAMAA. The Risk Officer and the Risk Management Committee act on behalf of our President to manage all activities related to risk management. Risks are categorized according to five levels ranging from insignificant to catastrophic, organized along the four sections of Strategic, Financial, Operational and Compliance. Our risk register was last revised in December 2019.



Reverse Osmosis Plant Risk Reduction

Our reverse osmosis (RO) plants provide the life source of fresh drinking water, and we place great care and focus on risk management of our plants which span across three different, strategic locations. Using reliable storage facilities, such as reservoirs, we ensure production of potable water aims to provide about 10% above demand. We have always met customer need, and typically produce >8% above demand. Each of our plants has a typical and standby RO system, and we conduct both preventative and corrective maintenance. We maintain SCADA systems and online monitoring from the plant, pumping station and other elements to monitor the processes and quality.

Emergency Preparedness and Response

Emergency preparedness and response takes many forms, as the risks facing the sector are varied. In 2019, we planned 16 emergency response drills, but surpassed our target and conducted 21 drills.

| Emergency Preparedness | 2019 |
|--|------|
| Total Emergency Response Drills Planned | 16 |
| Total Emergency Response Drills Conducted | 21 |
| Number of emergency response drills completed as scheduled | 16 |

Preventing Outages In Qatar

Our systems have the capability to sense conditions beforehand that could make a sudden large-scale power supply disruption possible. This allows for corrective measures to be taken immediately, and a brewing crisis can be averted. These systems represent a pioneering project in the GCC region and consists of condition monitoring for asset management of our Electricity Distribution Network to enhance its performance and reliability. The goal is to have an assessment of the health of the entire fleet of assets and prioritize the interventions based on severity of the condition and criticality of the asset. Each asset is monitored for a set of condition parameters and a quantified scoring system is used to represent the Asset Health.

Fire Safety, Prevention and Protection

Fire Safety is achieved by an integrated approach of fire prevention, fire protection and firefighting. This combination is determined by applied engineering and safeguarding practices, based on the application of appropriate codes and standards.

Periodic independent audits of fire safety at each KAHRAMAA facility are conducted. The purpose of the fire audits should be to assess the effectiveness of fire prevention, fire protection and firefighting at the facility. These audits may be conducted as part of the Technical Safety Audit of the facility or may be carried out by consultants. All new projects are required to prepare a specification to KAHRAMAA HSE fire safety philosophy, a fire system design and materials are approved by our HSE Department.



Appendices

Appendix I – Stakeholder Mapping

| Stakeholder | Importance to KAHRAMAA | Needs and Expectations | Methods of Engagement |
|---------------------------------------|---|---|--|
| Policy makers and government agencies | <ul style="list-style-type: none"> • Set policy and regulatory framework • Influence macroeconomic and political framework within which we operate • Influence our reputation | <ul style="list-style-type: none"> • Investing in our people • Contributing to the local economy • Ensuring value for our customers • Conserving natural resources • Resource conservation • Product quality • Innovation • Proper coordination of project implementation | <ul style="list-style-type: none"> • Direct meetings • Participation in government initiatives, regulation and policy working groups • Key national and international events |
| Customers | <ul style="list-style-type: none"> • Customers are the backbone of KAHRAMAA's business and the center of our decision-making process. | <ul style="list-style-type: none"> • Quality of service • Transparency • Pricing • Service access • Reliability of service • Conserving natural resources • Excellent customer service | <ul style="list-style-type: none"> • Direct meetings • Customer surveys • Call centers |
| Business partners | <ul style="list-style-type: none"> • Influence our reputation • Focus on partnerships/ collaborations | <ul style="list-style-type: none"> • Contributing to the local economy • Supporting our communities • Exchanging knowledge | <ul style="list-style-type: none"> • Direct meetings • Conferences • Other events |
| Suppliers (Including contractors) | <ul style="list-style-type: none"> • Influence change across the value chain • Influence our reputation • Transparent communications with contractors | <ul style="list-style-type: none"> • Involve suppliers in exceeding clients' expectations • To deliver on responsible organizational operations | <ul style="list-style-type: none"> • Direct meetings • Procurement policy • Tenders |
| Employees | <ul style="list-style-type: none"> • Enhance productivity, quality, and leadership • Enhance image and reputation to attract prospective employees | <ul style="list-style-type: none"> • Engage employees in shaping KAHRAMAA's future direction • Health & safety considerations • Good Working conditions • Career development • Operational excellence | <ul style="list-style-type: none"> • Surveys and other feedback mechanisms • Internal communications, events, publications • Intranet • Training & development opportunities |
| Local communities | <ul style="list-style-type: none"> • Influence our reputation/ Maintain license to operate • Build trust with local communities • Identify opportunities for improvement • Partnering opportunities | <ul style="list-style-type: none"> • To understand our communities' needs and expectations, and create a long-lasting positive value • Conserving natural resources • Education and awareness sponsorships • Community support | <ul style="list-style-type: none"> • Formal and informal group and targeted meetings • Community programs • Publications/ online • Events • Social media channels |
| Academia and Research | <ul style="list-style-type: none"> • Influence our reputation • Partnering opportunities • Enhancing expertise | <ul style="list-style-type: none"> • To explore potential partnerships and innovative solutions • Education • Research & Development • Innovation • Technological advances | <ul style="list-style-type: none"> • Research • Publications • Local and international conferences & symposiums • Training & education |
| Media | <ul style="list-style-type: none"> • Influence our reputation | <ul style="list-style-type: none"> • Conservation and environmental management • Partnerships & collaborations • Research & Development | <ul style="list-style-type: none"> • Local newspapers |



Appendix II – GRI Standards Content Index

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report.



| GRI Content Index | | |
|--------------------------|------------|------------------------------|
| GRI Standard | Disclosure | Page number(s) and/or URL(s) |
| GRI 101: Foundation 2016 | | |
| General Disclosures | | |

| | | |
|-----------------------------------|---|--|
| GRI 102: General Disclosures 2016 | Organizational profile | |
| | 102-1 Name of the organization | 8 |
| | 102-2 Activities, brands, products, and services | 8 |
| | 102-3 Location of headquarters | 8 |
| | 102-4 Location of operations | 8 |
| | 102-5 Ownership and legal form | 8 |
| | 102-6 Markets served | 8 |
| | 102-7 Scale of the organization | 8, 20 |
| | 102-8 Information on employees and other workers | 44 |
| | 102-9 Supply chain | 11 |
| | 102-10 Significant changes to the organization and its supply chain | 11 - no significant changes |
| | 102-11 Precautionary Principle or approach | 62 |
| | 102-12 External initiatives | 15, 49, 50, 51, 52, 53 |
| | 102-13 Membership of associations | 9 |
| | Strategy | |
| | 102-14 Statement from senior decision-maker | 4, 5 |
| | 102-15 Key impacts, risks, and opportunities | 17, 18, 62, 63 |
| | Ethics and integrity | |
| | 102-16 Values, principles, standards, and norms of behavior | 12, 60 |
| | Governance | |
| | 102-18 Governance structure | 61 |
| | Stakeholder engagement | |
| | 102-40 List of stakeholder groups | 16 |
| | 102-41 Collective bargaining agreements | Trade unions are legally prohibited in Qatar |
| | 102-42 Identifying and selecting stakeholders | 16 |
| | 102-43 Approach to stakeholder engagement | 16, 17 |
| | 102-44 Key topics and concerns raised | 17 |

| | | |
|---|--|--|
| GRI 102: General Disclosures 2016 | Reporting practice | |
| | 102-45 Entities included in the consolidated financial statements | Annual Report 2019 Link: https://www.qewc.com/qewc/en/annual-reports/ |
| | 102-46 Defining report content and topic Boundaries | 7, 16 |
| | 102-47 List of material topics | 17 |
| | 102-48 Restatements of information | 56 |
| | 102-49 Changes in reporting | 56, 57 |
| | 102-50 Reporting period | 7 |
| | 102-51 Date of most recent report | 2016 |
| | 102-52 Reporting cycle | Annual |
| | 102-53 Contact point for questions regarding the report | 7 |
| | 102-54 Claims of reporting in accordance with the GRI Standards | 7 |
| | 102-55 GRI content index | 66 |
| | 102-56 External assurance | The information in this report has been internally reviewed to ensure its accuracy. As our sustainability practice matures further, we aim to seek external verification of our performance in the future. |
| GRI Standard | Disclosure | Page number(s) and/or URL(s) |
| Material Topics | | |
| GRI 200 Economic Standard Series | | |
| Economic Performance | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 55, 56 |
| | 103-2 The management approach and its components | 55 |
| | 103-3 Evaluation of the management approach | 56 |
| GRI 201: Economic Performance 2016 | 201-1 Direct economic value generated and distributed | 58, 59 |
| | 201-4 Financial assistance received from government | 55 |
| Market Presence | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 45 |
| | 103-2 The management approach and its components | 45 |
| | 103-3 Evaluation of the management approach | 45 |
| GRI 202: Market Presence 2016 | 202-2 Proportion of senior management hired from the local community | 45 |
| Indirect Economic Impacts | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 10, 22, 55, 56 |
| | 103-2 The management approach and its components | 10, 22, 55, 56 |
| | 103-3 Evaluation of the management approach | 10, 22, 56 |
| GRI 203: Indirect Economic Impacts 2016 | 203-1 Infrastructure investments and services supported | 23, 25, 26, 27, 28, 29, 33, 34, 35, 36, 40, 49 |
| | 203-2 Significant indirect economic impacts | 15, 18, 19, 26, 27, 29, 30, 31, 34, 35, 37, 38, 40, 49, 52, 53, 55, 59 |
| Procurement Practices | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 59 |
| | 103-2 The management approach and its components | 59 |
| | 103-3 Evaluation of the management approach | 59 |
| GRI 204: Procurement Practices 2016 | 204-1 Proportion of spending on local suppliers | 59 |

| GRI 300 Environmental Standards Series | | |
|--|---|--------------------|
| Energy | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 16, 51 |
| | 103-2 The management approach and its components | 10, 51 |
| | 103-3 Evaluation of the management approach | 29, 51 |
| GRI 302: Energy 2016 | 302-2 Energy consumption outside of the organization | 36 |
| | 302-4 Reduction of energy consumption | 26, 29, 36, 37, 53 |
| Water | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 34 |
| | 103-2 The management approach and its components | 34, 35 |
| | 103-3 Evaluation of the management approach | 34, 35 |
| GRI 303: Water and Effluents 2018 | 303-1 Interactions with water as a shared resource | 34 |
| | 303-3 Water withdrawal | 34 |
| | 303-5 Water consumption | 34 |
| Emissions | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 39 |
| | 103-2 The management approach and its components | 39, 53 |
| | 103-3 Evaluation of the management approach | 39, 53 |
| GRI 305: Emissions 2016 | 305-1 Direct (Scope 1) GHG emissions | 39 |
| | 305-2 Energy indirect (Scope 2) GHG emissions | 39 |
| | 305-3 Other indirect (Scope 3) GHG emissions | 39 |
| | 305-5 Reduction of GHG emissions | 39 |
| Effluents and Waste | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 33, 40 |
| | 103-2 The management approach and its components | 40 |
| | 103-3 Evaluation of the management approach | 40 |
| GRI 306: Waste 2020 | 306-3 Waste generated | 40 |
| | 306-4 Waste diverted from disposal | 40 |
| GRI 400 Social Standards Series | | |
| Employment | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 43 |
| | 103-2 The management approach and its components | 43 |
| | 103-3 Evaluation of the management approach | 44 |
| GRI 401: Employment 2016 | 401-1 New employee hires and employee turnover | 44 |
| Occupational Health and Safety | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 43, 46, 63 |
| | 103-2 The management approach and its components | 46, 47, 60, 63 |
| | 103-3 Evaluation of the management approach | 47 |
| GRI 403: Occupational Health and Safety 2018 | 403-1 Occupational health and safety management system | 46 |
| | 403-4 Worker participation, consultation, and communication on occupational health and safety | 46 |
| | 403-5 Worker training on occupational health and safety | 46 |
| | 403-6 Promotion of worker health | 46 |
| | 403-8 Workers covered by an occupational health and safety management system | 46 |
| | 403-9 Work-related injuries | 47 |

| | | |
|---|--|----------------------------|
| Training and Education | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 43 |
| | 103-2 The management approach and its components | 44 |
| | 103-3 Evaluation of the management approach | 45 |
| GRI 404: Training and Education 2016 | 404-1 Average hours of training per year per employee | 45 |
| | 404-2 Programs for upgrading employee skills and transition assistance programs | 44 |
| Diversity and Equal Opportunity | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 43, 44, 45, 46 |
| | 103-2 The management approach and its components | 44, 45, 46 |
| | 103-3 Evaluation of the management approach | 44, 45, 46 |
| GRI 405: Diversity and Equal Opportunity 2016 | 405-1 Diversity of governance bodies and employees | 44, 45, 46 |
| Non-discrimination | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 46 |
| | 103-2 The management approach and its components | 60 |
| | 103-3 Evaluation of the management approach | 46 |
| GRI 406: Non-discrimination 2016 | 406-1 Incidents of discrimination and corrective actions taken | 46 |
| Local Communities | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 49 |
| | 103-2 The management approach and its components | 50, 51, 52, 53 |
| | 103-3 Evaluation of the management approach | 53 |
| GRI 413: Local Communities 2016 | 413-1 Operations with local community engagement, impact assessments, and development programs | 26, 33, 36, 37, 38, 39, 51 |
| Marketing and Labeling | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 25, 33 |
| | 103-2 The management approach and its components | 28, 63 |
| | 103-3 Evaluation of the management approach | 27, 34 |
| GRI 417: Marketing and Labeling 2016 | 417-1 Requirements for product and service information and labeling | 27, 28, 34 |
| Customer Privacy | | |
| GRI 103: Management Approach 2016 | 103-1 Explanation of the material topic and its Boundary | 25 |
| | 103-2 The management approach and its components | 25 |
| | 103-3 Evaluation of the management approach | 26 |
| GRI 418: Customer Privacy 2016 | 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data | 25 |



