

Connecting

SUSTAINABILITY REPORT 2014

About this report

Welcome to KAHRAMAA's second sustainability report. This year we have focused even further our reporting efforts, by adopting for the first time the Global Reporting Initiative (GRI) G4 framework, and discussing the topics that matter most to our stakeholders.

Our key message "Connecting" reflects our continuous, active stakeholder engagement process, both internal and external, and working together to contribute to the delivery of Qatar's National Vision (QNV) 2030. Our stakeholders help us prioritize key issues and develop our approach to sustainability. Communicating and listening to them is important to help us understand their views and explain our perspectives.

This report has been prepared to be 'in accordance' with Core option of the GRI G4 guidelines. We have also used the G4 Electric Utilities Sector Disclosures document where data permits. As this is only our second report, and as our internal data gathering systems and processes are still evolving, we felt 'core' is a suitable option for us at the moment.

Boundary and scope

This report covers our Headquarters, own operations and the activities of transmission and distribution of electricity and water in Qatar only. The generation of electricity and water are not in the scope of our operations. In the future, we will look to expand the boundary to capture the bigger picture of our value chain. This report covers KAHRAMAA's operations and activities only, and these are corresponding to the information presented in our Annual Performance Report (available on our website). KAHRAMAA is a governmental organization and no other entities fall under its scope. In this report, we focus on Economic Performance in relation to sustainability.

Reporting period

We are committed to publish our sustainability report annually and therefore the information in this report covers data and activities for the calendar year 2014 (January - December). Where data permits, historic trends have been also presented and comparative analysis has been conducted.

Sustainability assurance

The information in this report has been internally reviewed to ensure its accuracy. As our sustainability practice matures, we aim to seek external verification of our performance in the near future.

Engagement

We hope this report will continue to enhance the communication with all of our stakeholders. Please connect with us to share your thoughts, feedback, or questions: Dalia Abdelhalim Al-Toukhy, Advisor - Conservation & Energy Efficiency Department at deltoukhy@km.com.qa or visit us at:



www.km.com.qa



@kahramaa



KAHRAMAA



kahramaa-qa



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HE Dr. Mohammed Bin Saleh Al-Sada
Minister of Energy and Industry

Sustainability is the key in a changing world

Let us not forget here, that this landscape is not static, but rather a very dynamic - and often a turbulent one - in which many places have been exchanged. A good example this year is the fluctuating oil prices and US's growing production of shale gas and crude oil. The US Energy Information Administration (EIA) says "this growth will reshape the U.S. energy economy", when crude oil production reaches 9.6 million barrels per day by the end of 2016. This energy boom is taking Canada, Australia and others as well.

Besides the changing energy scene, there's the never-ending environmental change as well. According to UN Environment Program we only become sustainable when "our prosperity stems from an innovative, circular economy where nothing is wasted and natural resources are managed sustainably; biodiversity is protected, valued and restored in ways that enhance our society's resilience; and our low-carbon growth has long been decoupled from resource use".

However, it is becoming increasingly clear that incremental improvements will not be enough to meet these goals. The systems which underpin global economy and human well-being will have to change fundamentally, including food, energy and clothing systems, and will need to be developed to new ones that continue to fulfill societal needs but in an essentially sustainable way.

And in that context, no country will be able to reach long-term sustainability alone. Systems of production and consumption are inexorably linked with the rest of the world — through the import and export of resources, goods and services, and through global value chains both for supply and handling waste. Transforming such systems to long-term sustainability will require a good understanding of the systems' dynamics and how they interact with the environment.

Today, the State of Qatar is well placed to meet the increasing demand of its people and communities. And under the wise leadership and guidance of His Highness Sheikh Tamin bin Hamad Al-Thani, the Emir of the State of Qatar, we are also committed to continue meeting our obligations as a reliable

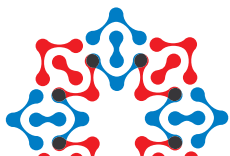
energy producer, as a partner in development, and as an active player in ensuring world sustainability. And I would like to emphasize here the unwavering commitment of the Energy and Industry sector towards Qatar's sustainable development.

The Ministry of Energy and Industry has taken huge steps in terms of human development, resources availability, and suitable know-how adoption to ensure that Qatar can stand up to its global challenges and to become the hub of sustainability in the region. Moreover, aligning with Qatar National Vision 2030, we're committed to comprehensive development. As such, The Ministry has initiated and has moved steps in its Qatar Energy and Industry Sector Sustainability (QEISS) Programme with the purpose of enhancing sustainability in the sector and optimizing its contribution to the State of Qatar.

This programme has become a vital channel for companies within the sector to learn about sustainability management, with the aim of delivering improved performance at a company and sector level.

In this context, I would like to salute "KAHRAMAA" for producing its Sustainability Report 2014 to report its resilient and successful efforts in the electricity and water sectors, particularly in supplying or rather surpassing the demands of an ever growing population and strategic projects needed for sustainable development.

This is done with highest quality and at lowest costs to satisfy KAHRAMAA stakeholders while assuring health, safety and environment risks in the electricity and water industry, are regulated and controlled.





HE Eng. Essa Bin Hilal Al-Kuwari
President, Qatar General Electricity
and Water Corporation

Connecting with all our stakeholders is the essence of our sustainability approach

KAHRAMAA managed, thanks to the wise leadership of H.H. Sheikh Tamim Bin Hamad Al-Thani, the Emir of Qatar and His reverend government represented especially in the Ministry of Energy and Industry, to complete vital electricity and water projects, while investing in infrastructure to cope with the comprehensive development and the increasing demand. This comes within KAHRAMAA's national responsibility as a leading State corporation aligning business strategy to meet customer needs, while minimizing environmental impact and advancing social development.

We are committed, since KAHRAMAA's inception in 2000, to provide high quality and sustainable electricity and water for better living in Qatar following in this the best international and local standards in the field. This coincides with Qatar National Vision QNV 2030 mandating: "Management of the environment such that there is harmony between economic growth, social development and environmental protection".

Connecting enthusiastically with all our stakeholders is the essence of our sustainability approach embedded in the way we deal with our staff, customers, suppliers and investors; the technology we create; and the partnerships we enter and value.

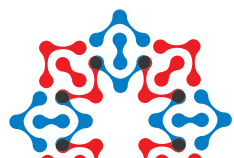
KAHRAMAA not only provides electricity and water services; rather it works towards maintaining these resources and ensuring sustainability. It has been promoting the culture of conservation among all sectors, by launching the National Program for Conservation and Energy Efficiency "Tarsheed" for these generations and the ones after.

As for our staff, KAHRAMAA provides employment, education, training and development opportunities to involve in technical jobs by introducing several incentives. Women have equal opportunities as their fellow male employees and assume several

leadership posts. Our people are the most valuable investment we have. They are the main component of KAHRAMAA's successful story thanks to their efforts and teamwork spirit. In KAHRAMAA, we stress and reiterate our commitment to serve our customers, as we are an effective and key partner in all plans and programs of comprehensive development the State witnesses while assuming our social responsibility.

As such, our Sustainability Report 2014 is trying to shed light on a number of areas where KAHRAMAA is focusing its performance and initiatives to deliver what it promises its stakeholders. These areas include, among others: our Governance policies; our People, Energy and Water conservation; Environment and Safety Performance; our Economic operations, and, our community development efforts.

KAHRAMAA's second Sustainability Report presents our corporate sustainable development framework and approach, which is focusing on electricity and water sustainability strategy creation, national and international alignment, policy enhancement and performance assessment and benchmarking. While achieving this, we are constantly developing ways of balancing economic growth with human development, environmental protection, and social advancement.





Eng. Ali M. Al-Ali

Customer Services Department Manager
Conservation & Energy Efficiency Department Manager

Introduction to this report

Achieving Sustainability while “Connecting” with our Partners

KAHRAMAA has aspired to develop a Sustainability Report aligned with internationally recognized Global Reporting Initiative Guidelines (adopting for the first time the G4 framework), Ministry of Energy and Industry requirements and international best practices to achieve the following:

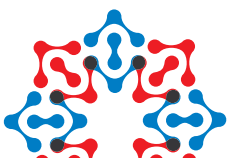
- Report and highlight our performance in 2014 being the leader in the Power and Utility Sector in Qatar
- Communicate it to all our stakeholders, discuss our challenges and share topics that matter to them
- Demonstrate our progress in contributing to Qatar’s social, economic and environment development
- Benchmark with similar corporations in the region and internationally
- Set the roadmap for the Power and Utility Sector sustainability reporting

At the Conservation and Energy Efficiency (CN) Department, we are proud to be mandated with the production of KAHRAMAA’s sustainability report in its second year, based on credible and transparent information of 2014 so as to deliver it to all our customers and stakeholders.

Our main objective has been to emphasize our “connecting” and engagement with all our stakeholders who are our partners in development and in achieving Qatar’s National Vision 2030. This is done through publishing KAHRAMAA’s non-financial performance covering all its environmental, social and economic aspects which correspond to the key issues prioritized during our engagement workshops we organized to develop the materiality matrix of this report.

The report has been developed as a result of working collaboratively with various KAHRAMAA’s internal and external stakeholders whom we wish to thank for their valuable contribution to this report especially our government officials, top management, customers, investors, partners; KAHRAMAA directorates and department’s managers and mostly to our KAHRAMAA focal-point champions.

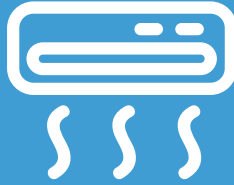
Finally, we are proud of the KAHRAMAA Sustainability Taskforce established this year from a number of departments representatives who’ve went through GRI G4 Training and acquired its certificates.





Balanced Scorecards introduced

improving performance management



District Cooling proposed regulations



76%

customer satisfaction from customer care and

95%

from call center by the end of 2014



59,700 training hours provided to employees

50 strategic and scientific collaborations especially through Tarsheed



Indirect economic impact

98%

of goods & services sourced locally

2014
in figures



Real water losses reduction from

12% to 6%

between the year 2009 and 2014



Online Helpdesk and Online Contractors Forms introduced, contributing to our paperless ambition



8.2 million

work-hours without lost time injury

11%

reduction in water consumption levels per capita

11%

reduction in electricity consumption levels per capita



Overall water quality reached high levels at

98.5% YTD



Advanced Metering System pilot project launched



New ISO certification for the General Services Department and Conservation & Energy Efficiency Department



10 times increase in social investment spending in 2014 due to substantial partners' support

12%



increase from 2013 to 2014 in the energy exported to the grid for our customers

Risk heat map and Risk Register generated for the first time

First solar power plant to be opened in Qatar by 2016

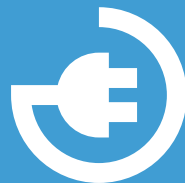
ZERO employees fatalities



Launched long-term strategy up to 2030



Renewal of ISO certification for Electricity Network Planning Department



Connection of electricity & water to land lot vouchers

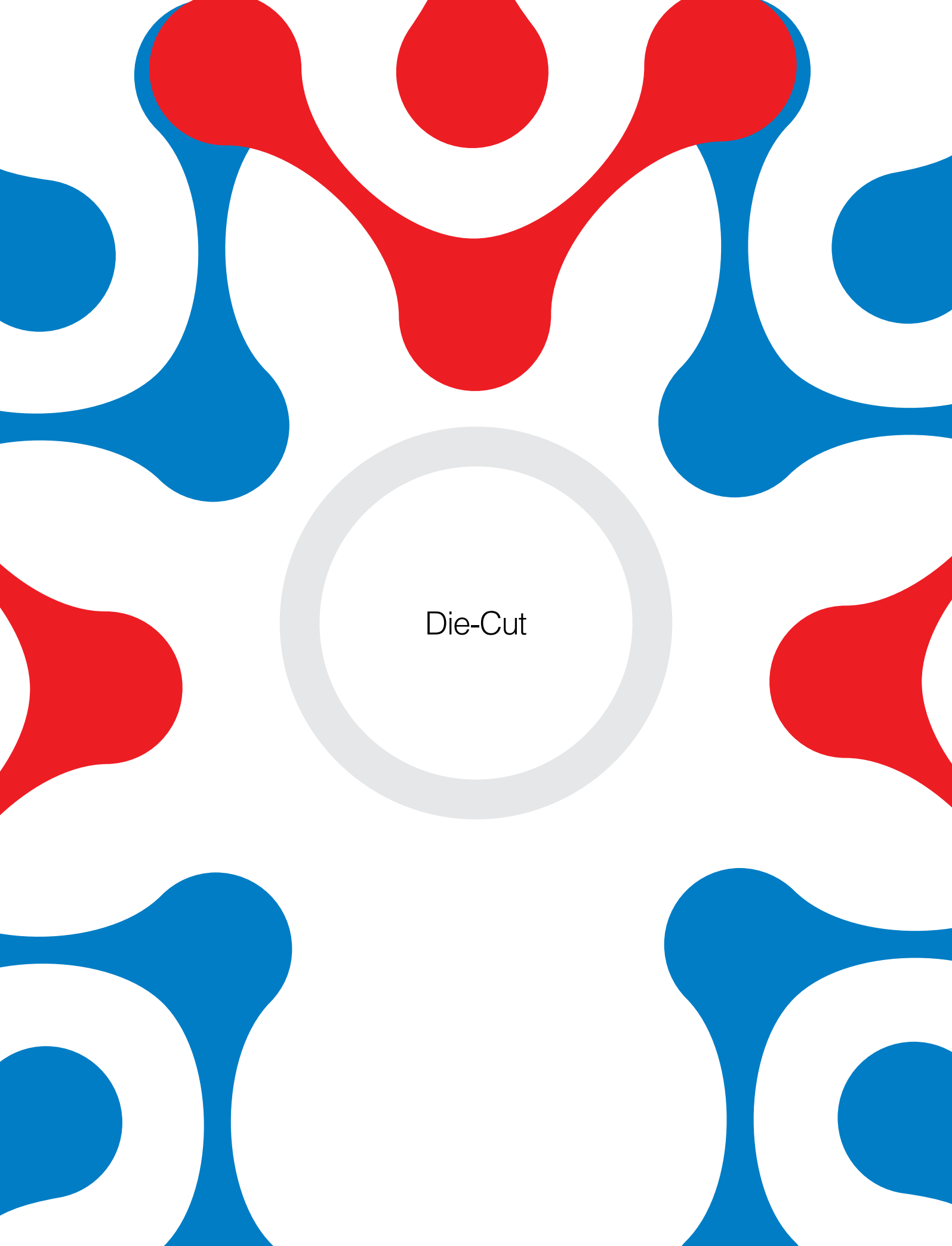
37% Qatarization rate



Launched strategic water security projects



Best "Strong & Good Quality" Sustainability Report for first time participation at Ministry of Energy & Industry program for sustainability development



Die-Cut

2014 Selected Achievements

Electricity Network Affairs (DE)

Online processing of Damage Claim
ERP replaces paper forms for Equipment checklist and Maintenance Quality
100% achievement of Transmission & Distribution condition monitoring and maintenance activities

Corporate Services (DC)

Addition of 69 Qatari employees to the workforce
Occupational Safety & Health Administration (OSHA) certification for 15 Qatari employees
Hosted Disaster Recovery IT infrastructure
Cultural Season workshops

Health, Safety & Environment (HS)

Transformation of 90% external environment permit into electronic system
KAHRAMAA worked 5.4 million safe man hours
KAHRAMAA contractors worked 13.2 million safe man hours

District Cooling (CD)

Integrating Chilled Water Services Corridor in Coordination with Ministry of Municipality and Urban Planning (MMUP)
"Towards Cooperative Society "District Cooling stakeholders Workshop
Incorporating potable water demand for cooling in Bulk customer application

Customer Services (CS)

Electronic cheque printing system – testing completed
Alert messages incorporated in customer care application for missing customer's information

Legal Affairs (LA)

Awarded the KAHRAMAA Legal Panel consultancy services tender
MoU for Advanced Desalination technology pilot project with Mitsubishi

Technical Affairs (DT)

Two contracts awarded for Electricity & Water projects
44 contracts awarded by the Materials Department
Contingency plan under discussion for the provision of a temporary mobile reverse osmosis (RO)

Water Networks Affairs (DW)

ISO 9001:2008 first surveillance audit successfully completed
Advanced action initiated with regards to demand optimization

Planning & Quality (PQ)

Planning Forum conducted for five year business plan 2015-2019
ISO 27001: The implementation of Information Security Management System (ISMS) has been awarded
Re-introduction of an improved web service tracking for customers

Conservation & Energy Efficiency (CN)

MarCom International Award for Tarsheed's energy saving bulbs campaign Better light, Better living
Innovation Award for ongoing National Program (Tarsheed) - Ministry of Energy & Industry
Unilever Sustainability Award for Water Conservation Plans 2014 MENA region
Consultancy services for solar projects have been awarded

Finance (FN)

Created detailed asset capitalization policy for KAHRAMAA assets
Completed implementation of ISO 9001:2008

Public Relations (PR)

Arab Water Conference 2014

Internal Audit (IA)

Completed 83% of planned audits

Connecting with stakeholders

We highly value our stakeholders and their opinion. Hence, in 2014 we have taken our engagement approach a step further. Internal and external view-points are critical for the success of our sustainability program and reporting.

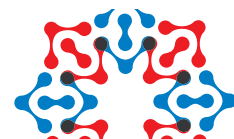
We have therefore involved key internal and external stakeholders in helping us shape the content of this second report and to guide us in the further development of our sustainability efforts. We are connecting with different

representatives to understand their point of view and thus to make this publication more focused, valuable, and impactful.

Sustainability is a complex matter requiring a collaborative effort and dedication. We, at KAHRAMAA, see our role as a driver for Qatar's sustainable future through providing high quality and sustainable electricity and water for better living in Qatar. This future could only be achieved by working together

and partnering with each other. Therefore, the theme of this second report – Connecting – aims to reflect exactly this – our strong commitment to working together towards responsible and transparent operations, and Qatar's enhanced socio-economic development.

FROM INFORMING - TO PARTNERING FOR ACTION



Our organization

Who we are

Qatar General Electricity & Water Corporation – KAHRAMAA – is the sole transmission and distribution system owner and operator for the electricity and water sector in Qatar, while the production of electricity and desalination of water have been outsourced.

KAHRAMAA's core areas of business include:

- a Formulates Power & Water Purchase Agreements (PWPA) and provide necessary technical and corporate support for establishment of generation & desalination ventures
- b Owns, constructs and operates electricity & water transmission and distribution networks in the State of Qatar.
- c Sets-up plans and programs for development of electricity & water transmission and distribution networks,

- d Lays out regulations, standards and codes of practices for electricity & water supplies to buildings and facilities
- e Provides consultancy services related to its activities and operations.

KAHRAMAA's primary market of operations is Qatar.

What do we stand for

Our Mission

Providing high quality and sustainable electricity and water for better living in Qatar

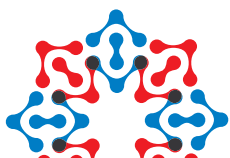
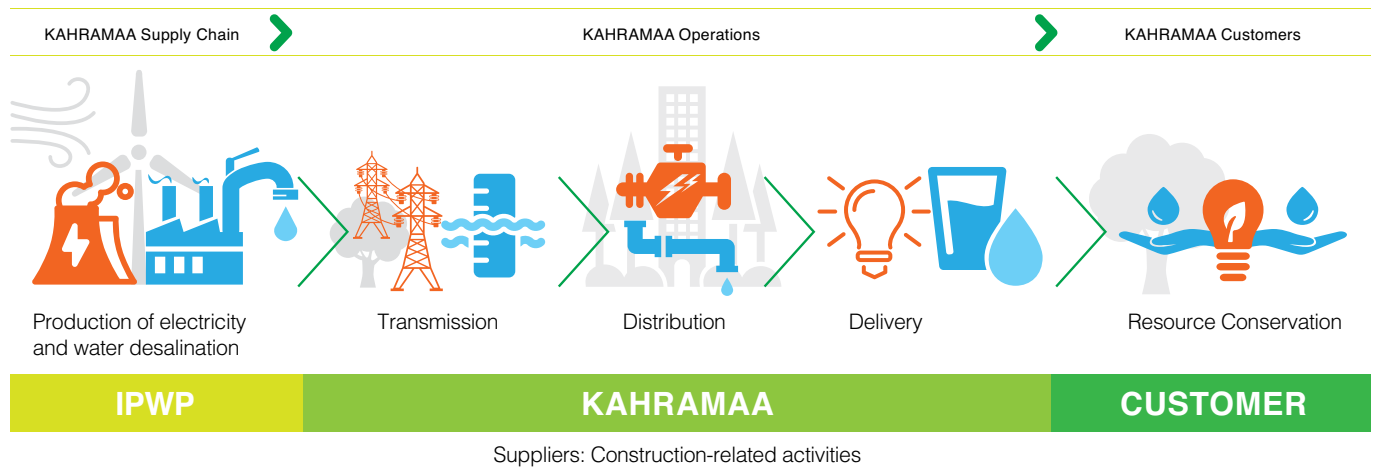
Our Vision

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.



In 2014, KAHRAMAA launched its long-term business strategy, representing the first step of the organization's strategic transformation, and describing mechanisms for integrating sustainability-related performance indicators across all functions.


Our value chain



KAHRAMAA faces numerous challenges ahead. It is the only organization in Qatar responsible for the transmission and distribution of water and electricity. With constantly growing population rates, advanced socio-economic development and FIFA 2022 on the horizon, KAHRAMAA has a critical responsibility to deliver high quality and safe water and electricity to its customers.

Faced with all these challenges, KAHRAMAA is preparing and have launched its long-term business strategy to 2030 committing to its vision:

- 1 Deliver high standards of health, safety and social responsibility
- 2 Attract and retain talent, and support Qatarization
- 3 Emphasis on customer services
- 4 Addressing regulatory changes in the energy, water and district cooling markets
- 5 Provide high quality and reliable supply of electricity and water
- 6 Focus on cost reduction and operational efficiency

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

Living our values



Customer Centricity

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



Transparency

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



Performance and Responsiveness

High standards of efficiency and effectiveness to meet the needs of KAHRAMAA and its stakeholders



Loyalty

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

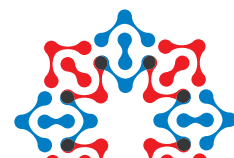


Teamwork

Working with colleagues in an open, collaborative and trusting way to deliver corporate objectives

Our Corporate Objectives

1	Excel at Customer Services	Stakeholder
2	Provide High Quality Water and Electricity	
3	Increase Social Advocacy and Environmental Compliance	
4	Promote Regulatory changes in the Energy, Water and District Cooling Markets	
5	Strengthen Financial Performance	Finance
6	Improve Corporate Governance and Risk Management	Internal and Sustainability
7	Enhance Processes and Systems	
8	Optimize Asset Performance	
9	Ensure a Safe and Healthy Working Environment	People
10	Attract, Develop and Retain a High-Performing Workforce and Support Qatarisation	



Governance and management systems



In 2014, KAHRAMAA successfully transitioned towards a Balanced Scorecard approach for performance monitoring and improvement. Our Planning & Quality Department has played a key role in this transition to happen in a period of six months.

Management approach

KAHRAMAA's overall strategic direction was set by defining its mission, vision & values. The balanced scorecards were then structured around four perspectives:

Stakeholders - This perspective includes KAHRAMAA's customers (end users of electricity and water), government authorities, agencies, and the general public. KAHRAMAA exists to provide electricity and water services that meet the needs of its stakeholders (i.e. customers, suppliers, Qatar government). It is therefore critical that we have a clear strategy for meeting stakeholders' current and future needs and, in turn, have performance indicators that will help us assess stakeholders' expectations, perceptions and levels of satisfaction.

Financial - Even though KAHRAMAA's main target is not purely financial, it does require key financial performance indicators and budget control that need to be directly linked to the overall corporate objectives. This is in line with Qatar National Vision (QNV) 2030 mandate related to the economically managing natural resources.

Internal & Sustainability - In order to provide quality and cost-effective electricity and water services, KAHRAMAA must identify the key business processes it needs to excel at and then measure its performance in undertaking those processes in a sustainable way.

People - To achieve continuous improvement in delivering electricity and water services to stakeholders, KAHRAMAA's employees need to learn and to improve from both an individual and team standpoint.

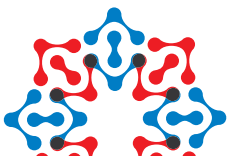
In the actual formulation step, key objectives at both corporate and directorate level were identified. Overall, corporate strategic plan formulation and refinement included the following key activities:

- Reviewing country-level objectives
- Assessing KAHRAMAA's external and internal environment
- Developing future scenarios in order to challenge and refine the assumptions
- Determining/refining corporate objectives, targets and related KPIs
- Identifying and prioritizing corporate initiatives
- Review, update, and refine the 5-year rolling plan

Key Performance Indicators (KPIs) and related targets were set. The top-down alignment followed by bottom-up adjustments methodology was adopted for fine-tuning of initial assumptions. These objectives were cascaded down from corporate to directorate level and then from directorate to department level. Appropriate initiatives were chosen at all the levels to achieve the desired objectives.

The next step was to establish a mechanism for performance monitoring and tracking. Quarterly and monthly performance review templates were developed to track the performance and initiative progress.

This balanced scorecard approach proves to be an effective way of performance monitoring. The Performance Review meetings we have conducted so far, were more focused, performance driven and presented KPI owners with a clear responsibility and accountability for their performance at corporate, directorate and department levels.



Our governance structure

KAHRAMAA's overall strategic direction is formulated and agreed with the Minister of Energy and Industry, with our President carrying out the ultimate responsibility for managing the organization.

As per the new balanced scorecard approach implemented, and following the element Internal & Sustainability, we are integrating sustainability thinking, practice and action within all departments. In this way, we spread the responsibility and get everyone on board with new suggestions for improvement.

In 2014, we have formed a Sustainability Task Force – consisting of various departments such as HR, Internal Audit, Customer Services, Conservation & Energy Efficiency, PQ, Health & Safety, Water Networks,

and Electricity Networks. The Task Force received an initial three-day GRI G4 - certified training in sustainability and reporting, following the GRI G4 guidelines.

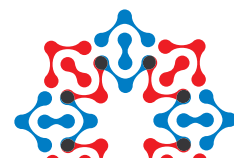
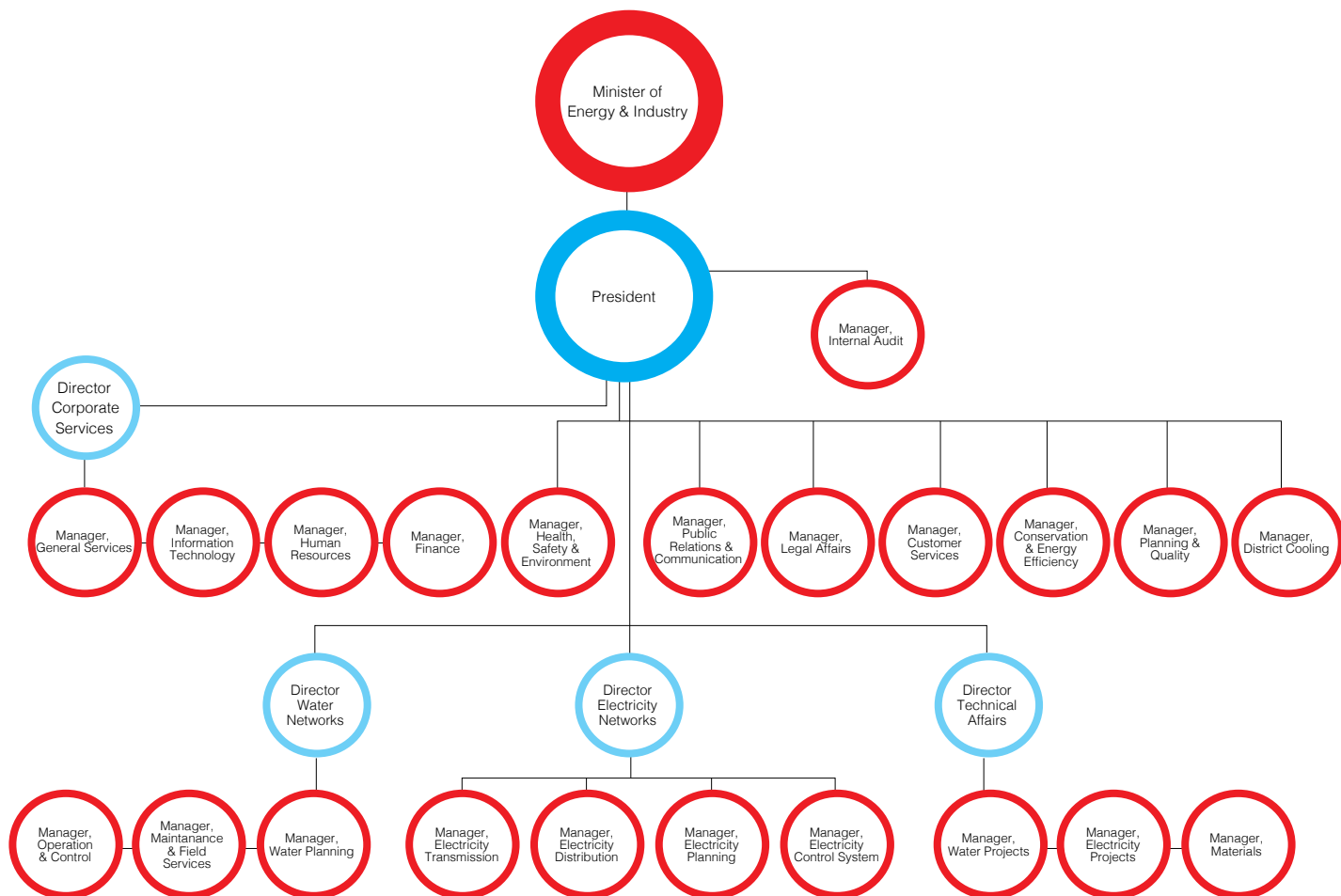
Code of Business and quality measures

KAHRAMAA's Code of Business Conduct guides us in our day-to-day operations by focusing on areas such as conflict of interest, gifts and hospitality, sensitive information, non-discrimination, customer relationships, health & safety, and diversity.

Our Legal Affairs Department at KAHRAMAA is responsible for tracking any conflict of interests violations that may arise.

Committees and functions in place:

- Internal Audit function
- A two-tier Tender Committees
- Business Conduct Committee
- A corporate Quality Management System Electricity Networks Affairs (ENA) Safety Rules Committee
- Qatarization Committee
- Research & Development (R&D) Committee
- Smart Network Committee
- Network Security Committee
- Work Safety Assurance Committee
- Emergency Committee
- Information Security Steering Committee
- Grievances Committee
- Faults Follow-up Committee
- Tarsheed Facilitation Committee



In 2014, Legal Affairs (LA) department recorded one conflict of interest incident, reviewed and closed by the Conflict of Interest Committee. The issue was dealt with in line with Qatar's HR Law and KAHRAMAA's Code of Business Conduct.

At KAHRAMAA, we value quality. Our ISO certification continued in 2014 as well with some new departments being certified (e.g. General Services, Conservation & Energy Efficiency) while for others, the certification was renewed (e.g. Electrical Networks Planning, Water projects).

Human rights

Although we don't have a formal human rights policy, we acknowledge the importance of the topic particularly in the Middle East & North Africa (MENA) region. We are particularly strict when it comes to working with our contractors, and in this regard in 2014 we had couple of occasions where we have terminated certain contracts resulting of non-compliance. Our Health, Safety and Environment Department conducts regular audits at sites and looks for compliance not only with KAHRAMAA's own requirements, but also with Qatar's Labor Law and Qatar's Environmental Law.

Risk management

In 2014, KAHRAMAA established a risk management strategy to ensure the effective management of strategic, operational, financial, and compliance risks. KAHRAMAA's risk management policy focuses on the identification and assessment of risks, as well as the proactive implementation of mitigation strategies.



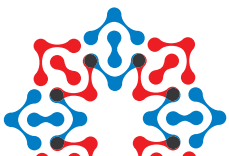
Responsibilities and appropriate risk management governance structure was set, and the development of Corporate Risk Register has been completed. The risk register has listed the top 26 risks facing KAHRAMAA – including diverse risks such as the talent war, loss of power supply, inadequate IT structure, lack of systems to innovate, unavailability of alternative water resources, environmental hazards, and others. Identified risks were analyzed, evaluated and prioritized according to their likelihood and potential impact.

The Strategic Planning Section of the Planning & Quality department is responsible for the risk management function and for the development and coordination of risk management systems within KAHRAMAA. Risk Officer and Risk Management Committee have been formed, with KAHRAMAA's President overseeing the process. Beyond this structure, all KAHRAMAA employees have the responsibility for identifying and managing potential risks including the Internal Audit Function, Risk Owners (Director and Manager level), as well as the Departments Risk Leaders.

Memberships & Associations:

KAHRAMAA is a key member of several national and international organizations, sharing the sector's best practice and promoting the concept of sustainable business:

- Arab Union of Electricity
- Gulf Cooperation Council Interconnection Authority (GCCIA)
- Standing Committee of Water Resources (GCC & Qatar)
- International Council on Large Electric Systems (CIGRE)
- Secretary-General on CIGRE GCC
- Active participant in UN COP events
- GCC Electricity & Water Conservation and Customer Service Committee
- Arab Renewable Energy & Energy Efficiency Committee
- GCC Benchmarking Committee
- Experts Municipality Follow-up Committee



Dialogue

Partnering for
sustainable future



Transition towards GRI G4

In the preparation of our first sustainability report published in 2014 we have utilized the Global Reporting Initiative (GRI) G3.1 Guidelines as well as the GRI Electric Utilities Sector Supplement, as a guidance only. This year, we are undertaking a more ambitious journey to respond to the GRI G4 framework requirements by focusing this report on the key material topics identified throughout an extensive stakeholder engagement process. The GRI G4 framework allows us to streamline our disclosure efforts on the topics that matter most to our stakeholders.

Identifying material sustainability issues

We engage with our stakeholders on various sustainability topics on an ongoing basis.

In 2014, we have strengthen our efforts even further. At the beginning of our report development process we have conducted a formal materiality assessment. Our aims were to initiate the conversation with our various stakeholder groups around what matters to them and what they would like to see from KAHRAMAA, and to identify, filter, and prioritize our key sustainability aspects.

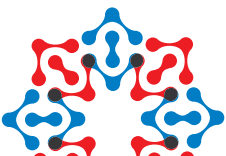
Our process

The content of this report has been compiled through discussions with KAHRAMAA's senior management and decision-makers, as well as through two materiality workshops - one for internal stakeholders, including representatives from various departments, and another for our external stakeholder groups. During these workshops we were able to capture key feedback on our first sustainability report, and to hear directly from our audiences on their future expectations from KAHRAMAA. We have reviewed our most material issues already identified in the previous report to assess their continuous relevance to both our organization and the stakeholders. We have also considered the GRI G4 Aspects list and have benchmarked peers to understand what they considered material and how they report on these topics.

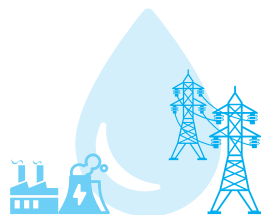
G4-18



In determining and prioritizing these areas, we considered whether they reflect KAHRAMAA's most significant economic, environmental and social impacts, and substantially influence our stakeholders' assessments and/or decisions about our organization.



STEP 1 > Preparing our assessment



- Most material topics identified in our 2013 report
- Benchmarking with peers
- GRI G4 Aspect list
- KAHRAMAA 2030 Long-term strategy and 5-year strategic business plan (2014-2018)
- Global trends analysis

STEP 2 > Collecting stakeholder feedback



- Internal & external workshops
- Additional internal interviews with various management levels
- GRI G4 Training for Sustainability Task Force

STEP 3 > Updating the list of our material topics



- Keeping the most material aspects from 2013 report and mapping the new additions
- Identifying aspects' boundaries in & outside of our organization
- Alignment with KAHRAMAA's 2030 Long-term strategy and 5-year strategic business plan (2014-2018)

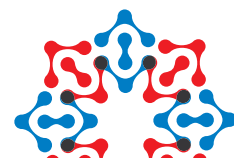
Stakeholder inclusiveness

We strive to build lasting relationships based on trust through an open and constructive dialogue and by considering our stakeholders' views when preparing for this second sustainability report. We acknowledge the wide range of stakeholders across our value chain who are influenced directly or indirectly by our services and operations. The relationships with all these groups are presented in this section of the report.









During the report preparation process, we have specifically engaged a number of internal and external stakeholders as part of the materiality assessment. Our intent was to invite their perspectives and recommendations on our report and to hear from them regarding our most material sustainability aspects. The feedback was positive and our effort for the first sustainability report was highly appreciated. Further recommendations for improvement include:

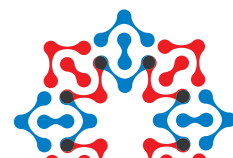
- To connect the report with KAHRAMAA's 5-year strategic business plan (2014-2018)
- To highlight more of our health & safety indicators
- To expand data coverage and discussion
- To present a balance between qualitative and quantitative information
- To include contact details for feedback
- Include a summary page
- Stronger focus on community development
- To present progress on our renewable energy projects

We have addressed these and other comments received during the preparation stage of this publication as much as possible this year and in regards to the timings expected for this report. However we are constantly working towards improving our reporting efforts on a year by year basis and would be considering all feedback provided to help focus and strategically position our future reports.



Our stakeholders are diverse and we engage with them on various topics not only for our sustainability report but on an ongoing basis.

Stakeholder group	How we engage	Why we engage	Importance for KAHRAMAA	Topics we discuss	Our response – see section:
Policy makers and government agencies 	<ul style="list-style-type: none"> • Direct meetings • Participation in government initiatives, regulation and policy working groups • Key national and international events 	<ul style="list-style-type: none"> • To help shape regulation and understand the issues that may impact our business, our customers and the local communities 	<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"> • Regulation development • Resource conservation • Product quality • Innovation • Health & Safety • Customer needs 	<ul style="list-style-type: none"> • Creating value for our people • Creating value for Qatar • Creating value for our customer • Creating value for the environment
Customers 	<ul style="list-style-type: none"> • Direct meetings • Customer surveys • Call centers 	<ul style="list-style-type: none"> • To understand our customers' needs and get their feedback on our performance 	<ul style="list-style-type: none"> • Achieving high level of satisfaction from our customers and building a long-lasting trust 	<ul style="list-style-type: none"> • Quality of service • Transparency • Pricing • Service access • Reliability of service 	<ul style="list-style-type: none"> • Creating value for our customer • Creating value for the environment
Business partners 	<ul style="list-style-type: none"> • Direct meetings • Conferences • Other events 	<ul style="list-style-type: none"> • To exchange knowledge and support local communities 	<ul style="list-style-type: none"> • Influence our reputation Focus on partnerships/ collaborations	<ul style="list-style-type: none"> • Local communities • Qatar's socio-economic agenda 	<ul style="list-style-type: none"> • Creating value for Qatar • Creating value for our communities
Suppliers (incl. contractors) 	<ul style="list-style-type: none"> • Direct meetings • Procurement policy 	<ul style="list-style-type: none"> • To involve suppliers in exceeding clients' expectations and to deliver on responsible organizational operations 	<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"> • Health & safety • Operational excellence • Working conditions 	<ul style="list-style-type: none"> • Creating value for our people • Governance and management systems
Employees 	<ul style="list-style-type: none"> • Surveys and other feedback mechanisms • Internal communications, events, publications • Intranet • Training & development opportunities 	<ul style="list-style-type: none"> • Engage employees in shaping KAHRAMAA's future direction 	<ul style="list-style-type: none"> • Enhance productivity, quality and leadership • Enhance image & reputation to attract prospective employees 	<ul style="list-style-type: none"> • Health & safety • Working conditions • Career development • Operational excellence 	<ul style="list-style-type: none"> • Creating value for our people • Creating value for our communities
Local communities 	<ul style="list-style-type: none"> • Formal and informal group and targeted meetings • Community programs • Publications/online • Events • Social media channels 	<ul style="list-style-type: none"> • To understand our communities' needs and expectations, and create a long-lasting positive value 	<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"> • Education and awareness • Community support • Environment 	<ul style="list-style-type: none"> • Creating value for our communities • Creating value for the environment
Academia 	<ul style="list-style-type: none"> • Research • Publications • Local and international conferences & symposiums • Training & education 	<ul style="list-style-type: none"> • To explore potential partnerships and innovative solutions 	<ul style="list-style-type: none"> • Influence our reputation • Partnering opportunities • Enhancing expertise 	<ul style="list-style-type: none"> • Education • Research & Development • Innovation • Technological advances 	<ul style="list-style-type: none"> • Creating value for Qatar • Creating value for our customer • Creating value for the environment
Media 	<ul style="list-style-type: none"> • Local newspapers 	<ul style="list-style-type: none"> • To raise awareness among the general public about KAHRAMAA conservation activities 	<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"> • Creating value for Qatar • Creating value for our communities • Creating value for our customer



Our material topics

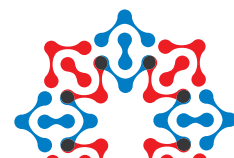
Each of the material topics identified relates to one or more GRI G4 aspects. We have assessed the limitation of each aspect by analyzing its relevance

to our stakeholders, the importance of each aspect to our organization, and determined whether the impacts occur within or outside our organization, or

both. We have also mapped our key material sustainability aspects across our defined corporate level objectives.

KAHRAMAA material theme	KAHRAMAA material aspect *	Corresponding GRI G4 aspects/Electric Utilities Sector Disclosures (where applicable)	Link with KAHRAMAA's corporate objectives	Material within KAHRAMAA (our employees) **	Material outside KAHRAMAA**	Relevance outside KAHRAMAA
Customer	Customer value creation	Customer health & safety; Customer privacy; Product and service labelling; Provision of information; Availability and Reliability; Demand-Side Management	Customer Excellence – Excel at customer service	●●●	●●●	Policy-makers and government agencies; Customers; Business partners; Suppliers
			Operational Excellence – Enhance processes and systems			
Environment	Resource conservation	Energy; Water; Emissions; Effluents & waste; Biodiversity	Operational Excellence – Enhance processes and systems Community and Social Excellence – Increase social advocacy and environmental compliance	●●●	●●	Policy-makers and government agencies; Customers; Business partners; Suppliers; Local communities; Academia
	Technology innovation	Research and Development	Asset Excellence – Provide high quality water and electricity Operational Excellence – Enhance processes and systems	●●●	●	
Stakeholder engagement	Collaborations and partnerships	No specific GRI aspect to cover this impact area, though it affects many aspects	Asset Excellence – Provide high quality water and electricity People Excellence – Ensure a safe and healthy working environment Community and Social Excellence – Increase social advocacy and environmental compliance Customer Excellence – Excel at customer service Commercial – Promote regulatory changes in the energy, water, and district cooling markets	●●●	●●	Policy-makers and government agencies; Customers; Business partners; Suppliers; Local communities; Academia; Media
	Local community awareness	Local communities; Marketing Communications	Community and Social Excellence – Increase social advocacy and environmental compliance	●●	●●●	
Responsible business	Governance and transparency	No specific GRI aspect to cover this impact area, though it affects many aspects and is covered by the GRI G4 General Standard Disclosures	Operational Excellence – Improve corporate governance and risk management	●●●	●●●	Policy-makers and government agencies; Customers; Business partners; Suppliers; Local communities; Academia; Media
	Labor/Human rights	Employment; Training and Education; Diversity and Equal opportunity; Non-discrimination	Operational Excellence – Enhance processes and systems	●●	●●●	
Our people	Occupational health & safety	Occupational health and safety	People Excellence – Ensure a safe and healthy working environment	●●●	●●	Suppliers
Qatar's socio-economic growth	Direct & indirect economic impact	Economic performance; Indirect economic impacts Market presence	Commercial – Strengthen financial performance People Excellence – Attract, develop and retain a high-performing workforce and support Qatarization	●●●	●	Policy-makers and government agencies; Local communities
	Supply chain management	Procurement practices	Operational Excellence – Enhance processes and systems People Excellence – Ensure a safe and healthy working environment	●●	●●●	

* All material aspects and data are related to KAHRAMAA's operations unless otherwise specified. As our reporting process evolves, we are committed to expand the boundary and scope of our sustainability impact measurement and performance in the future. **Our key material issues have various level of importance inside and outside the organization. We have therefore mapped the potential degree of this importance ● – being low importance and ●●● – being high importance.






Mr. Abdulla Anbar Al- Jassim
Public Relations & Communication Manager
KAHRAMAA

“Sustainability has apparently become now the inevitable part of KAHRAMAA’s identity.

Our sustainable report helps us in strategic and decision- making process we undertake at KAHRAMAA for the well- being of customers, stakeholders and local communities. It also helps us assure that KAHRAMAA’s activities keep pace with the rising demands and expectations of our valued customers and all other stakeholders.”

Strengthening our commitment: engaging our people

Engaged employees understand KAHRAMAA’s sustainability approach and feel a sense of ownership, supporting and actively contributing towards continuous improvements in areas such as customer value creation, resource conservation, economic performance, and community partnerships.

 **In 2014, our second year of sustainability reporting, we engaged employees from various departments to understand what sustainability means to them and how they could convey the importance of sustainable development to our customers and the larger community.**

We aim to continuously raise sustainability awareness, to identify our internal champions over time, and thus to help drive further commitment to achieve our organization level goals.



Dr. Omar Ahmad Mohammed AlAwad
Sr. Development Counsellor Management & Soft Skills, KAHRAMAA HRD

“I understand sustainability as the ability to retain present performance standards and keep improving them continuously to cope with the environmental changes and developments in order to satisfy the ever-changing demands.

Efficient usage of the other resources, innovation, & excellence can only be achieved by capable & highly motivated & devoted workforce.”



Ms. Dalia Abdelhalim Al-Toukhy
Advisor - Conservation & Energy Efficiency Department

KAHRAMAA’s mandate is meeting customer satisfaction and promoting QNV2030 through supply of electricity and water services at a world-class level of reliability, efficiency and safety by skilled workforce and active partnerships; supporting resources sustainability.



Mr. Mohamed Abdullah
Senior Auditor, Internal Audit Department

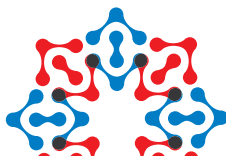
“Sustainability is a journey that requires a long view, a broad stakeholder perspective, collaboration and perseverance.

The more important an issue is to our stakeholders and to our business success, the more it matters to us.”



Mr. Hipolito N. Manila
Advisor - Engineering Contracts, Contracts and Agreements Section, KAHRAMAA Legal Affairs Department

“As a Contracts Specialist, I can contribute to KAHRAMAA’s sustainability vision by promoting KAHRAMAA’s sustainability program down the supply chain through innovative contracts that incentivizes contractors to implement sustainability programs in KAHRAMAA projects and suppliers/manufacturers to produce goods that adhere to sustainability standards.”





Eng. Gayasuddin Mohammad
KAHRAMAA Safety Engineer

“Sustainability is an ability or capacity of something to be maintained or to sustain itself. It’s about taking what we need to live now.

Sustainability is important because all the choices we pursue and all the actions that we make today will affect everything in the future. Sustainability and conservation have a great impact on the environment. We might not feel it now but the future generations will be thankful for our actions in making their environment more green.”



Dr. Mohammad Imad Raouf Al-Naimi
Research & Development Committee

“Sustainability is endurance of the system and the system processes of KAHRAMAA to supply high quality water and electricity for high social satisfaction, this can be achieved by optimization on the economic and environmental factors and using optimized solutions driven by advanced technologies and innovative way of thinking.”



Ms. Nouf Abdulla M S Al-Sulaiti
KAHRAMAA Planning & Quality Department

“KAHRAMAA plan to achieve prosperity for the people of Qatar by meeting the needs of present and future of electricity and water in line with the Qatar National Vision 2030 and the need to secure them for future generations while maintaining sustainable development pillars of economic growth, social development, environment and natural resources wealth to protect.”



Mr. Santhiyau Salam
KAHRAMAA Planning & Quality Department

“Every day is a sunny day in Qatar. Qatar should utilize the power of the sun to become a world leader in sustainable energy usage.

We can encourage this via comprehensive and creative re-thinking of our fossil generation and use of energy and scarce water resources via education, new technologies and new innovations. We shall become more environmentally aware and reduce fossil fuels for generation, and reducing our carbon footprint.”



Mr. Dominador Jain Sunga
KAHRAMAA Planning & Quality Department

“In the context of KAHRAMAA’s Business Mandate the bottom line objectives of sustainable development in the simplest terms are:

- 1) Sufficiency of water and electricity supply in Qatar now and in future generations, and 2) Continuity of E&W network services where and when needed. To achieve these objectives KAHRAMAA must develop sustainability strategies, adopt world’s leading utilities practices and E&W technologies, including transformation of business organization and culture that can meet current and future challenges.”



Eng. Maytha Al-Naimi
Renewable Energy Technology Section,
Conservation and Energy Efficiency Department

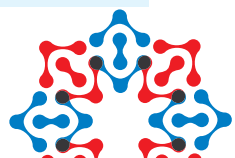
Sustainability is based on a simple principle: Our survival well-being depend on our natural environment. Sustainability creates and maintains life to fulfill economic, social and all other requirements in the future. I honestly believe that it is all about green energy and renewables for wiser energy choices that maintain cleaner and safer world.

“In line with QNV 2030 to reduce energy conservation thereby conserving precious natural resources and finding Energy efficient solutions:

KAHRAMAA has set its vision as ‘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’. KAHRAMAA is targeting reduction in per capita E & W consumption, reduction in losses, reduction in per unit cost for E & W etc.”



Mr. Harish Shriram Modak
KAHRAMAA Planning & Quality Department



What do our external stakeholders say

In 2014, we continued to engage with our external stakeholders on various sustainability topics. We value external opinion and have welcomed feedback on our performance and reporting efforts. We believe that by knowing our stakeholders better, we will be able to anticipate potential issues, and to understand how to achieve the right balance between our performance and stakeholders' expectations in the future.

“Environmental sustainability is at the core of the National Tourism Sector Strategy 2030, and we are committed to ensuring that developments in the tourism sector are aligned with the objectives of the National Program for Conservation and Energy Efficiency, Tarsheed,”

Eng. Issa Bin Mohammed Al Mohannadi
Chairman of Qatar Tourism Authority

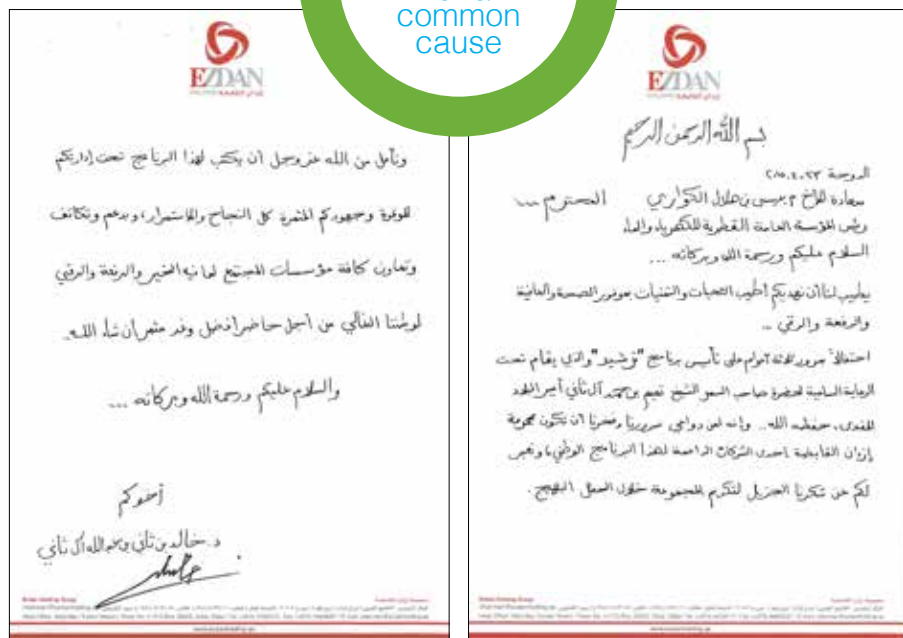
“Sustainability has always been one of the foundations of the work of the Supreme Committee for projects and inheritance in all fields ranging from stadium projects to community programs and initiatives. We aim through the “Tarsheed 22” initiative to invest the positive energy of football in educating school students the importance of the preservation of resources.”

Mr. Hassan Thawadi
General -Secretary of the Supreme Committee for Projects and Inheritance

“IBERDROLA, is proud with its collaboration with KAHRAMAA in implementing a smart grid system in Qatar. This initiative is part of our mutual commitment to innovation and development.

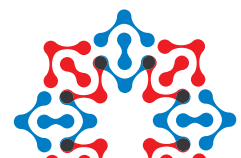
During the first stage, we studied the country's environment, its strategic energy objectives, the infrastructures that will be upgraded and the available technologies related to smart grids, in order to choose the most suitable option for KAHRAMAA. Currently we are in the second stage executed over a period of two years, involving the implementation of a pilot project to enable the results of the study to be checked and the preparation of the final deployment of smart grids in Qatar.”

Dr. Agustin Delgado
Ibredrola Chief Innovation Officer



“Tarsheed's noble goals of providing a better future and environment to our children motivated us to provide our support to this programme until it changed from a nascent idea to a huge programme, whose third anniversary we are celebrating today. The programme slogan, 'Keep Qatar pulsing. Consume wisely' is the goal for all of us as we all want to protect our environment and energy sources and conserve our consumption to give Qatar's citizens and residents a future full of hope. Our support for Tarsheed is part of the efforts we exert in various initiatives to help build an environment-aware society that conserves the energy sources, reflects Qatar's cultural and environmental sophistication and guarantees a bright future for our children,”

Sheikh Dr. Khalid bin Thani bin Abdullah Al Thani
Chairman, Ezdhan Group





Special Feature

Delivering Sustainability
Through District Cooling





Eng. Ibrahim Mohammed Al Sada
Manager District Cooling Department

“District cooling touches on the three pillars of sustainability - economic, social, and environmental - and has the potential to bring a positive impact in all of them.

Using treated sewage effluent (TSE) in district cooling systems has worthy benefits in terms of monetary, CO2 emissions and environmental protection. Replacement of fresh water with TSE has the advantage of saving in fresh water, can help to recover TSE equipment cost within three years, and after that operators can enjoy up to 80% savings in cooling makeup cost over all the remaining years of a plant.”

The importance of district cooling in Qatar

District Cooling is a prominent cooling solution in Qatar, with high impact on people’s lives, the economy and the environment.

The District Cooling solution has inherent advantages for high cooling density areas - high population density areas with considerable demand for air-conditioning - this is mainly achieved through economies of scale.

Some of its advantages which contribute to Qatar’s sustainability ambitions, include:

- Up to 40% higher efficiency in terms of electricity consumption
- Savings in electricity generation and distribution capacity

- Savings in natural gas consumption for power generation
- Savings in potable water by promoting alternative resources for make-up water to District Cooling plants, such as Treated Sewage Effluent (TSE)
- Reduced GHG emissions and lower Qatar environmental footprint
- Reduced cooling infrastructure costs thanks to economies of scale
- Enhanced customers’ experience through reduced noise
- Improved reliability and cooling service performance levels
- Optimal space allocation for cooling infrastructure



Currently District Cooling shares up to 12% of total cooling load in Qatar. This load is estimated at 0.5 million TR. It is expected to potentially grow to 1.5 million TR by 2023, contributing to 24% of the total cooling load in Qatar.

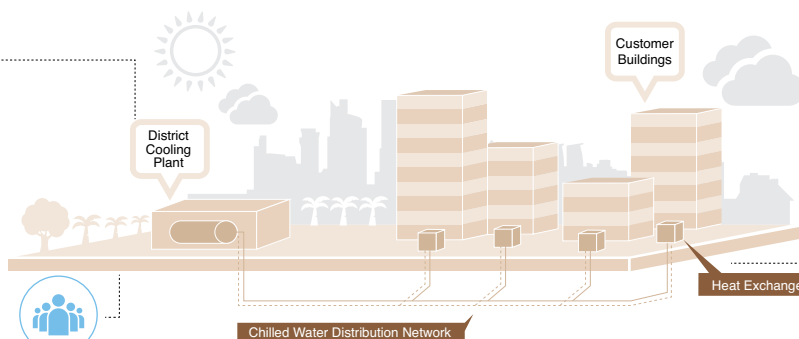
District cooling will contribute to Sustainable Development in Qatar

The District Cooling Services department at KAHRAMAA has identified the following benefits for Qatar:



Economic benefits

- 30-40% energy saving – for cooling purposes
- Saving of potable water and associated energy (through use of TSE)
- Saving in Electricity Generation capital investment
- Saving In Electricity Infrastructure Capital Investment
- Enhanced energy management
- Better utilization of space
- Lower maintenance cost
- Optimal use of chemicals
- Encourage technology transfer



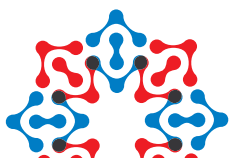
Social benefits

- Increased energy availability
- Enhanced water security (through use of TSE)
- Better space availability and landscape
- Lower exposure to environmental emissions
- Reliability of services supply
- Enhanced quality of life.
- Enhanced services sustainability
- Increased cooling services reliability
- Enhanced city view outlook



Environmental benefits

- Lower air pollutions
- Lower refrigerant emissions
- GHG emission reduction
- Noise reduction
- Lower heat generation
- Global Warming Enhanced Records
- Lower environmental footprints.



District cooling at KAHRAMAA

In the early days of its establishment, the District Cooling Services department has initiated a dialogue with the Ministry of Municipality and Urban Planning (MMUP) to obtain the Qatar National Master Plan (QNMP) to serve as a guide on the district cooling market structure and management in Qatar.

Key challenge in district cooling is the use of potable water in district cooling plants leading to wastage of precious resource. Currently, majority of the plants are using potable water.

In 2013, KAHRAMAA has started the coordination in association with ASHGAL (Qatar's Public Works Authority) and is currently working on a master plan to ensure the availability and quality of TSE that could be potentially used in district cooling plants. Early in 2014, a directive of the Permanent Water Resources Committee (PWRC) was approved, on prohibiting the use of potable water for cooling purposes in Qatar and approving the use of TSE or other suitable sources of cooling makeup.

We have also started in early 2014 the process of district cooling market surveys, advising all cooling plants operators on the prohibition directive and to appropriately convert to use TSE for cooling purposes.

Since its inception, DCSD has conducted various department and DC market stakeholders workshops. The latest in date, April 2015, was part of the regulatory framework project and was covering various technical

District Cooling Services department so far has achieved

3%

reduction of potable water usage for cooling through TSE, although is expected to reach over

15%

of potable water saving by 2022.



District Cooling Services department is currently preparing the regulatory frameworks structure and has appointed international recognized consultant for this purpose. The regulatory framework structure is scheduled to be ready by mid of the 4th quarter of 2015.

aspects of DC. Subjects such as, TSE availability, guidelines, plant KPIs and polishing solutions were discussed in presence of more than 50 stakeholders.

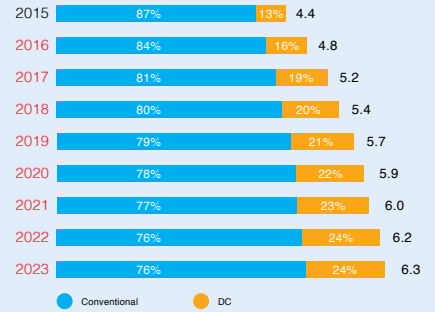
In 2014, the department hold a District Cooling Workshop, involving various stakeholders and representatives from ASHGAL and Ministry of Environment. The aim of the workshop was to strengthen the cooperation and coordination among all concerned stakeholders and to discuss collective strategies in the arena to help implement QNV 2030 and QNDS (2011-2016).



The workshop had four specific sessions followed with lectures and presentations on role of KAHRAMAA's District Cooling Services department, district cooling related challenges in Qatar, TSE Network in Qatar, cooling plants' discharge, and experience and expansion plans of two service providers.

Cooling capacity in Qatar is expected to reach ~6.3 mln TR in 2023

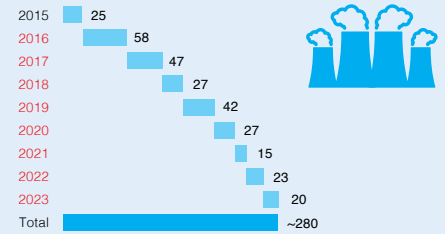
Potential Cooling Capacity Forecast In Million TR, 2015-2030



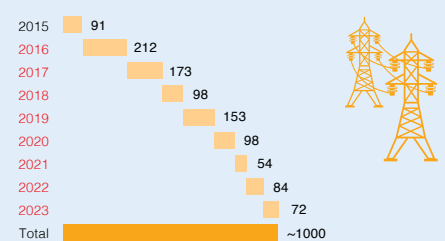
Note: Based on 50% DC penetration on incremental cooling load. Assumed 80% of projects under design/construction will materialize by the announced start-up date

Savings of ~280 MW of generation capacity and ~1,000 MW of distribution capacity can be reached through 2023...

Savings in Generation Capacity In MW, 2015-2030



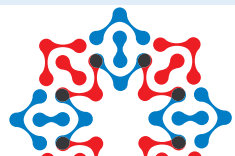
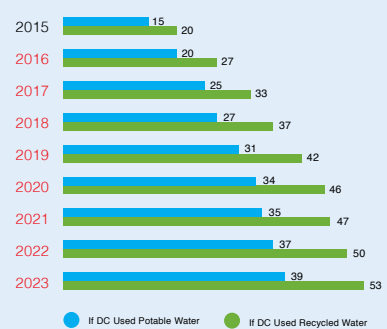
Savings in Distribution Capacity In MW, 2015-2030




Note: Based on 50% DC penetration on incremental cooling load

If all DC plants used TSE, in 2023 savings of up to 39 Mm³/year of potable water can be potentially reached

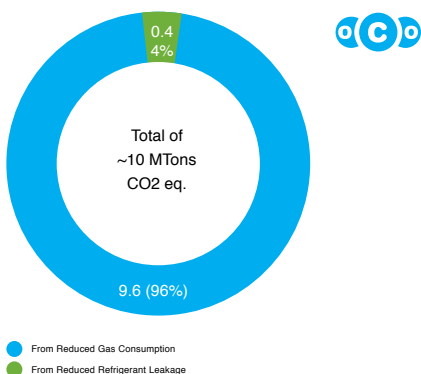
Water Demand for District Cooling In Mm³, 2015-2023




 District Cooling department seeks to develop, in partnership with all stakeholders, an innovative formula (CD=Electricity + Water + TSE/other sources of water + Environment) , which is best fit for Qatar considering the biggest challenge in water use. Our aim is to create district cooling sector that contributes to sustained growth, a better environment and economic benefits to country.

Estimated savings of ~10 Mtons of CO2 eq. emissions due to district cooling


Cumulative Savings in CO2 Eq. Emissions
In Mtons, 2015-2030



Our 2014 major accomplishments


 **Implementing potable water prohibition directive for cooling make up water:** We have conducted meetings with all DC plant operators and informed them about the compliance procedure for cooling plant operation.


96% of cooling plants had been contacted by ASHGHAL for TSE supply connection and started necessary modification in plant for TSE operation: Musherib Downtown Doha Project started cooling plant operation using TSE; West bay cooling plants (Qatar Cool 1 & 2) will start TSE operation on Q2- 2015.

 **Regulatory procedures introduced for cooling plant operators:**

- New regulatory procedure introduced for bulk customer application with cooling water demand requirement. Accordingly, all the applications have to be reviewed and approved by CD.
- Separate Water meter for cooling plant make up line is introduced. In the event of TSE supply failure, Potable water backup supply provision will be ensured. The procedure is agreed and to be formalized.
- Limited duration potable water waiver issue for cooling plants, if no TSE network availability.
- Monitoring all new DC Service connection by DC provider .

 **Consultancy Services for District Cooling Services Department (GTC 636/2014) project awarded.**

 **Developed Exhaustive Database for all water cooled central plants.** Complete database is created for all users of water cooled central cooling plants with all information are such cooling load, phasing plan etc.

 **Conducted District Cooling Workshop with all stakeholders' participation.**

 **Strengthened stakeholder engagement in DC activities.** Improved participation from all stakeholders - more than 60 meetings conducted with DC plant operators & regular coordination with ASHGHAL & MOE to strengthen their engagement in regulatory process.

In a fifteen-year timeframe, KAHRAMAA CD will strive to become a world-class DC Regulator

2030 DC Regulator's Strategic Roadmap

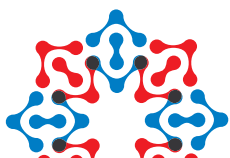
2016-2020	Interim Regulator
2020-2025	Full-Fledged Regulator
2025-2030	Regional DC Champion
2030 and beyond	DC World-Class Regulator

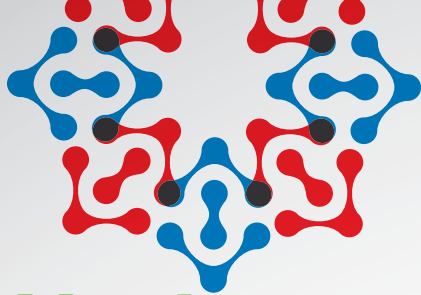
Planning for the future

We measure a variety of KPIs, among which are: percentage reduction in potable water consumption for cooling, percentage reduction in GHG emissions, number of new pricing and policy framework development, number of new regulations implemented, percentage progress towards DCS operating model and process development. For the near future, we have set ambitious targets to help grow the district cooling market in Qatar.

Challenges still exist in the district cooling market in Qatar.

Current DC services with the absence of well-established regulatory environment makes it difficult to recognize and capitalize on district cooling benefits. Market conditions make traditional air-cooling technologies appear more competitive. Thus, for district cooling to properly achieve its full potential, Qatar's government would need to address these structural issues over time.





Update

Our Performance

This section focuses on our five key performance areas - customer, our people, local communities, environment, and Qatar's socio-economic development





Creating value for our customer



Eng. Ahmed Al-Nasr
Technical Affairs Director

“The customer is the top of KAHRAMAA’s priorities. All our projects aim to upgrade our supply and services to increase customer satisfaction. While the network is expanding in all directions, from generation to customer home appliances, implementation range is broad as well.”

Customer centricity is one of our core organizational values. We aim to deliver high quality service while listening to our customers to understand their needs.

In 2014, KAHRAMAA launched Phase I of its transformation to a smart organization project. As such, we aim to revamp the entire customer experience over time and ensure expectations are met and our customers are highly satisfied with KAHRAMAA’s products and services.

Why it matters? Mapping global and local trends

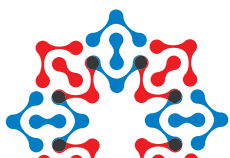
Well-informed and equipped with a pool of social media channels, the new customers today place high expectations from all industries, including the Power & Utilities. They expect more, better and faster services, transparent and competitive pricing, and the power to control their own choices by proactively engaging with their provider.

Meeting these needs presents a significant challenge for the sector globally however a critical one that must be met if utilities companies are about to survive the growing competition. Some global utilities have already started exploring potential changes. Putting the customer at the center of their decision-making, helps build trust and seeking ways to excel in customer service.

Other trends that are changing the sector as we know it, include technology innovations, digitization of services, customer interaction and data analysis, tracking behavior patterns, and tailoring services to individual customers. In our region, although the efforts to develop differentiated customer experience have been initiated, largely speaking the region is still developing in this direction.

For KAHRAMAA, all these trends present an opportunity to fundamentally re-think our overall approach to customer management, the integration of customer management data and systems, connect better with the customer, and identify new value-added potential services. It wouldn’t be enough anymore to just improve our current offer. It would need to be re-designed to meet the needs of the new customer of tomorrow.

Various reasons exist as to why KAHRAMAA should look into this overall customer services transformation – potentially increasing competition, expansion into regional markets – to name the few.



Planning for the future – our milestones

Customer Excellence Our commitment : Emphasis on customer services	
Phase 1 (2014-2018): Corporate Objectives	<ul style="list-style-type: none"> Excel at customer services
2018 Milestone	Customers receive consistently high standards of service from Kahramaa
Phase 2&3 (2019-2030): Potential Corporate objectives	<ul style="list-style-type: none"> Differentiate Kahramaa customers experience and increase value added service offerings. Anticipate, influence and respond to the changing customer needs
2022 Milestone	Customers perceive Kahramaa as highly responsive to their changing needs and preferences
2028 Milestone	Customers trust Kahramaa and their preferences and behaviours are shaped by it.

Managing the overall customer experience – approach and initiatives

KAHRAMAA's Customer Services Department (CSD) consists of six sections discussed in more detail in our first report:

- Customer Care & Call Center
- Bulk customer
- CS installations
- Accounts
- Meter monitoring
- Automated Meter Recording (AMR)

Our customer base – both water and electricity customers – continued to increase and in 2014. We have therefore been investing in both developing further our technology capabilities and the skills of our customer team representatives.

Managing customer privacy is crucial for us and we have a policy not to share customer records with anyone but the customer if appropriate authorization letter is not available. No complaints have been received in 2014 with regards to data privacy.

We have also started electronic archiving of documents to ensure customer data integrity and to ease traceability. This archiving project aims to record electronically all customer related data going back to the very first KAHRAMAA customer

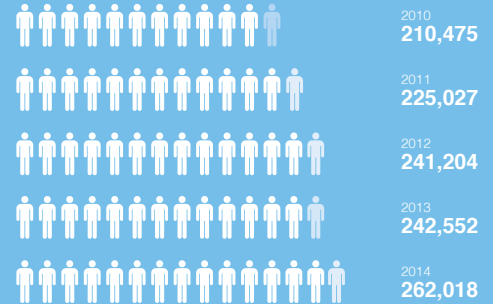
With the official launch of the Phase I of our transformation project, KAHRAMAA also launched a new website with improved navigation and easy access for customers.

The website includes various e- services; electronic certificates, service tracking, tariff details, tenders, auctions, awards, a separate portal for the ongoing National Program for Conservation and Energy Efficiency, as well as Tarsheed's children site. With KAHRAMAA's app for smart phones, both iPhone and Android, customers can now issue their own consumption bills by taking photo of meter reading and submitting it to the app.

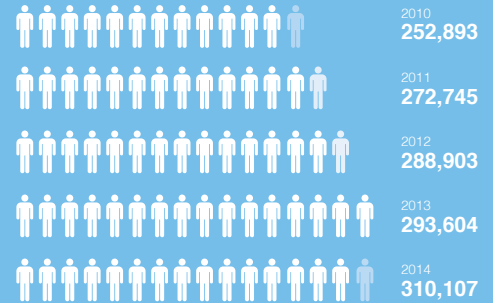


In 2014, our Planning & Quality Department organized and conducted a customer satisfaction survey. The results demonstrated 76% satisfaction from the customer care and 95% from the call center. The percentage answered call rate has recorded high figures across 2014 however we believe further improvements could help us perform even better.

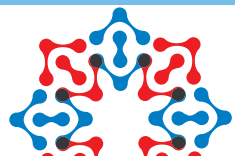
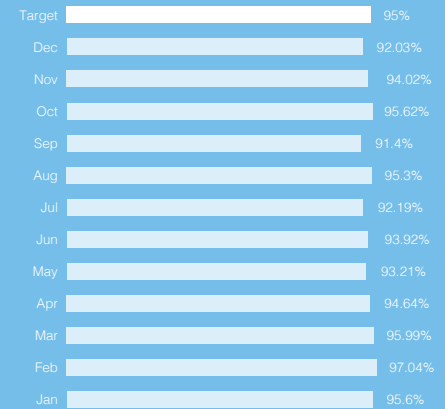
Number of water customers



Number of electricity customers



CSD - % answered call rate in 2014





In our customer services branches, we are also introducing new interiors, more user-friendly and in line with customers' expectations. A new hall at the main Customer Service branch in Al-Hilal has already been launched with latest technological developments.

Following the growing number of KAHRAMAA's customers, our customer care centers are found everywhere in the country. It reflects KAHRAMAA theme 'Customer-oriented utility' and its endeavor to ensure satisfaction for its customers and all other visitors.

Social media plays a critical role in the way we manage our customers relations. When developing our strategy for social media program, we have conducted a research to analyse trends in the industry, evaluate experiences (in Qatar and in the region), find out which platforms KAHRAMAA customers' use, and monitor what they are saying about our brand. More detail is discussed in the Creating value for our communities section of this report.

 Case Study



KAHRAMAA Advanced Metering Infrastructure (AMI) pilot project

KAHRAMAA AMI pilot project scope involves around 10,000+ water and 15,000+ electric customers who reside across two zones (Westbay, Al-sadd) in Doha, Qatar. AMI project is expected to cover all over the state by 2016.

AMI Pilot project Major elements include Smart Meters, Data concentrators, Head End System (HES), Meter data Management System (MDMS).

Smart Meters are capable of recording consumption in detail in comparison with the electro mechanical meters. They are capable of recording more than 25 parameters which can be reported and stored in a centralized Meter Data Management System (MDMS) enabling

KAHRAMAA to analyze the detailed consumption data and power quality data for better forecasting and optimization of energy use which helps to achieve energy saving targets and reduce carbon footprint.

Smart meters are capable of recording reading according to Time Of Use (TOU) and to share these details through web portals to customers. This allows customers to plan their usage resulting in changing customer consumption pattern.

Remote connect/Disconnect, On-demand read helps KAHRAMAA to meet customer's expectations in terms of eliminating unnecessary administrative delays.

 Case Study

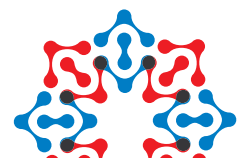
e-services for business organizations

KAHRAMAA has announced the launching of its new e-service exclusively catering to the needs of companies and business organizations.

Through this facility, a company can buy tender documents online by getting itself registered at KAHRAMAA 's website (<http://www.km.qa>).

This service facilitates interested companies to buy the tender documents online, furnishing salient information such as name of the company, e- mail, phone & fax, Commercial Registration (CR) number and its expiry date among others.

KAHRAMAA adopts transparency and endeavors to increase customers' satisfaction by applying continual development and improvement mechanism.



Providing high quality water

The HSE Department at KAHRAMAA has the responsibility for the review and analysis of water quality, and it also conducts regular sanitary inspection and audits to all water facilities, desalination plants, and tankers. Our Water Quality Lab has received ISO 17025:2005 quality certification.

KAHRAMAA's policy and strategy dictate that water quality should not only be safe to drink but also it should be reliable, sustainable and of high aesthetic quality.

➤ Accordingly KAHRAMAA developed and published in 2014 its own Drinking Water Quality Requirements & Conditions, providing an authoritative reference to the water supply industry on what defines safe, good aesthetic quality water and how it can be achieved, controlled and be assured.



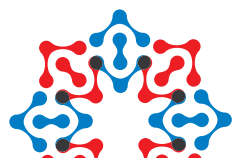
The requirements are part of a framework for good management of drinking water supplies from source until customer tap. The requirements address both the health and aesthetic aspects of supplying good drinking water quality.

For most water quality parameters, two requirements are set by KAHRAMAA :

- Water quality requirements at treatment outlet : these are the water quality targets for water at the point at which it leaves the water treatment plant. (These requirements are part of water quality management requirements set by KAHRAMAA for water producers to adhere with, such as water safety plan implementation, intake water monitoring and etc.)
- Water quality requirements at entry point-to-property : these are the water quality targets in distribution system until the entry points of KAHRAMAA's water supply system to properties.

Looking ahead

Beyond simply improving our customer services experience, we have started exploring other mechanisms and technological advancements to redesign our customer services offering. We belong to a sector best placed, both technically and in terms of capacity, to capitalize on the new customer opportunities. Through transformation we need to do so to move beyond utilities supply to anticipate the customer, understand the really empowered customers, innovate and capitalize on already existing technological advances.





Creating value for our people



Eng. Nasser Al-Mohannadi
Corporate Services Director

"Our people are the greatest asset for our organization. They are the main pillars for KAHRAMAA's growth and success."

At KAHRAMAA, we want our employees to feel valued and engaged. Our core values – customer centricity, performance & responsiveness, teamwork, transparency, and loyalty, form the basis for how we behave towards each other and how we would like our customers and all other stakeholders to perceive us.

In 2014, we have continued to focus on Qatarization – initiative by the Qatar Government, supporting the continuous development of our people, creating new opportunities, and enabling safe and ethical working environment.

We believe that only by developing a strong and capable workforce, KAHRAMAA will be able to deliver on its ambitious new long-term strategy.

Why it matters? Mapping global and local trends

On a global scale, skills shortages are fast increasing due to globalization levels and enhanced corporate competitiveness, leading to a complex war for talent across sectors.

The global Power & Utilities industry is not an exception. Legacy utility knowledge developed over years belongs now to employees who will soon be leaving the workforce.

In the same time, the industry faces a new set of market challenges and opportunities – for example technology shifts, new regulations, and the smart grid, are all requiring completely new skills to deliver on needs such as IT, distributed resources, and continuous customer dialogue.

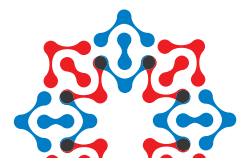
In the context of the Qatari market, this competition for talent is even more fierce today, resulting from small indigenous population and limited skilled resources available in the country. As KAHRAMAA currently faces an increasing competition from other organizations in Qatar and the region, the employment and retention of highly-skilled professionals is recognized as a top priority for our Management in line with QNV 2030 national priorities.

Another critical aspect of managing our workforce includes KAHRAMAA's health & safety practice. Globally, health & safety in the Power & Utilities

industry has been rapidly evolving to include today the broader notion of employee wellbeing, public safety, and interactions with the community. In Qatar, occupational health & safety is currently a significant national priority, deeply rooted in the QNV 2030 human development pillar.

Moreover, in relation to the war for talent, it is well-known today that the young generation proactively seeks responsible employers; these who undertake their corporate social responsibility commitments seriously and deliver.

KAHRAMAA places utmost importance to its health & safety practice, measuring strictly its performance, setting targets, and identifying areas for further improvements. Our efforts in this area are strongly connected to growth in operations and further infrastructure development.



Planning for the future – our milestones

People Excellence Our commitment : Attract and retain talent and support Qatarization	
Phase 1 (2014-2018): Corporate Objectives	<ul style="list-style-type: none"> Ensure a safe and healthy working environment Attract, develop and retain a high-performing workforce and support Qatarization
2016 Milestone	Workforce is stable and people are highly satisfied
Phase 2&3 (2019-2030): Potential Corporate objectives	<ul style="list-style-type: none"> Become a leader in safe and healthy working environments within Qatar Improve the capabilities of KAHRAMAA workforce and strengthen Qatarization Become a leader in safe and healthy working environment within GCC Become an employer of choice in Qatar
2021 Milestone	Workforce aligned with and capable of delivering all of KAHRAMAA's business and customer needs
2026 Milestone	Workforce is predominantly Qatari, highly motivated and capable of delivering all business and customer needs

Our people – overview

In line with the QNV 2030 human development pillar and our long-term strategy, the Human Resources (HR) Department at KAHRAMAA follows its strategic plan for employment, capacity building, skills advancement, and retaining employees. Our HR processes, procedures and policies are also in line with Qatar's HR Management law.

Examples of key current and potential operational initiatives include:

- Qatarization plans
- Development of job descriptions
- Benchmark of compensation and benefits
- Qatari Internship Program
- Scholarship Program
- Improve employee engagement

A robust performance management system is in place where direct supervisors evaluate all their reporters across a number of elements and rate them on a scale of 100%. Internal management procedures such as the individual development plans (IDPs) are developed by line managers and counselors, with the President overseeing the process.

Qatarization

KAHRAMAA's Qatarization policy is in line with the Government's policies and the QNV 2030 expectations. An internal Qatarization Committee consisted by senior management representatives and headed by our President, oversees the Qatarization process at KAHRAMAA and is tasked with the development of mechanisms to support the Qatarization, Training and Development Team.

We offer three types of training for our Qatari employees:

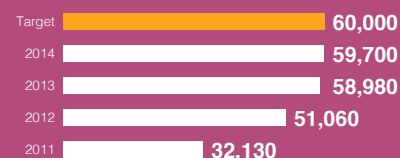
- **Secondary School graduate Training Programs** - Clerical Preparation Program (CPP)
- **Graduate Training Programs** - Graduate Engineering Training (GET) and Graduate Management Training (GMT)
- **On the job training**

We also support our Qatari employees with a variety of development initiatives. Each Qatari employee has its own IDP - a competency based training plan in line with international standard ISO 10015. To help advance the English language level proficiency we provide English Language training courses for our staff based on the international standard of the Common European Frame of Reference.

Steady Qatarization (%) over the last 5 years



Total hours of training provided to employees (full-time)



11%

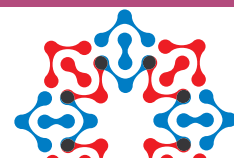
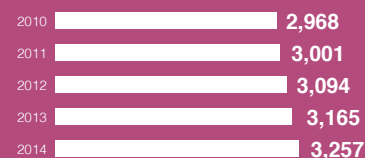
Female employment (full-time)

<5%

Employee Turnover (%) in 2014

**Number of employees who leave the organization voluntarily or due to dismissal, retirement, or death in service*

Full-time employees





KAHRAMAA Scholarship Program – 2014 Open Day

KAHRAMAA 's Scholarships Program, initiated in 2007, aims to allow fresh Qatari talents to complete their graduates and undergraduate studies in different engineering and business disciplines at the best higher education institutions locally and globally. This program is designed to encourage Qatari male and female to join an equal education program. The Scholarship unit of the Qatarization, Training and Development section guides students on financial and academic procedures, coordinating the process, and keeping in contact with the respective universities.

Health and safety

KAHRAMAA has demonstrated a good record of its health and safety performance over the years although we believe there is always a space for further improvement.

Our Health, Safety and Environment policy developed in line with international standards, and which we follow strictly, sets also expectations from our contractors to implement and adopt the HSE standards required by KAHRAMAA. The HSE Department has the responsibility to ensure compliance with the policy, and reports directly to our President.

The HSE management approach at KAHRAMAA is based on risk management including but not limited to risk assessment, setting regulation and requirements, inspection, and training & awareness.

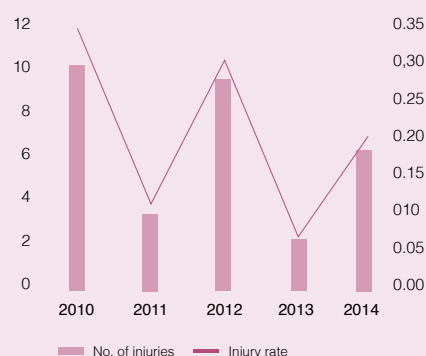
Potential HSE related risks with contractors are managed by regular site inspections, conducting risk assessments, conducting safety meetings, job safety analysis, evaluating of effective actions taken, and evaluating safety performance.

We aim to continuously improve our lost time to injury measures and so our health & safety initiatives include not only our employees but contractors as well.

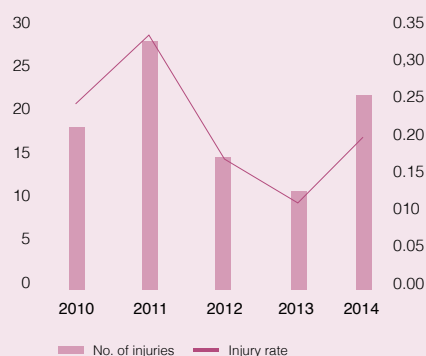
Safety incidents investigation is conducted where required. In 2014, the injury frequency rate saw a slight increase compared to 2013 and we have conducted five investigations. All of them have been completed and further actions recommended and implemented.

The HSE department also provides training to KAHRAMAA employees upon request from the relevant department or HR.

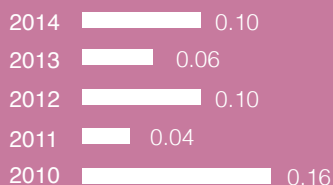
Total number of reportable injuries & injury frequency rate for our employees (per 200,000 hours worked)



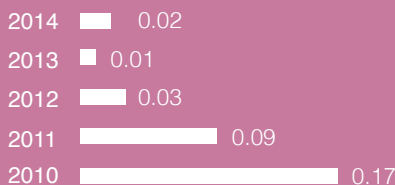
Total number of reportable injuries & injury frequency rate for our contractors (per 200,000 hours worked)



Lost Time Injury Frequency Rate - Our employees (per 200,000 hours worked)



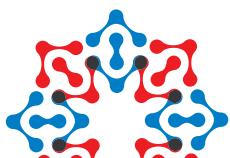
Lost Time Injury Frequency Rate - Our contractors (per 200,000 hours worked)



Lost Time Injury Frequency Rate (LTIFR) represents the number of injuries which has resulted in an employee or contractor being away from work for at least one day after it occurred, per 200,000 hours worked (The factor 200,000 is derived from 50 working weeks @ 40 hours per 100 employees).

	2010	2011	2012	2013	2014
Employee fatalities	0	0	0	0	0
Contractor fatalities	0	2	1	0	1
Employee occupational illnesses	0	0	0	0	0
Heat stress events	0	0	0	0	0

	2010	2011	2012	2013	2014
Safe work hours (Employees)	6,105,920	5,606,880	6,244,432	6,255,440	5,400,862
Safe work hours (Contractors)	12,039,258	14,917,888	15,046,268	18,064,361	13,248,620



HSE Incident Breakdown (in numbers)	2010		2011		2012		2013		2014	
	Operator	Contractor	Operator	Contractor	Operator	Contractor	Operator	Contractor	Operator	Contractor
Confined Space	-	-	-	-	-	1	-	-	-	-
Cut, Puncture Scrap	2	4	-	2	1	-	-	-	-	1
Explosion / burn	-	1	-	2	1	-	-	-	-	-
Exposure: electrical	1	2	1	3	1	1	1	-	2	1
Falls from height	1	1	-	1	-	1	1	-	-	-
Slips and Trips (at the same height)	1	1	-	1	-	-	-	-	-	-
Vehicle Accident	-	1	-	-	-	-	-	1	1	1



Employee engagement, talent retention and recognition

KAHRAMAA's long-term strategy aims at boosting employees' skills and developing a strong workforce for the future.

In 2014, KAHRAMAA held a session on Employee's Personality Development – helping our people to embrace basic life skills, techniques of making workplace lively, etiquette learning.

Numerous training and development opportunities exist at KAHRAMAA and the need for a particular training is determined through a multi-channel procedure including:

- The IDPs
- Performance appraisal feedback
- Gaps identification by individual departments

Each employee received an average of 18 hours of training during the 2014.

Various financial and non-financial rewards and recognition mechanisms are in place at KAHRAMAA. Monetary awards are given to employees for outstanding performance and recommended by their department Manager. Employee of the Month is a non-financial reward, recognizing hard work and job dedication.

Looking ahead

We recognize there are a lot of challenges – both local and global - ahead of us in relation to attracting, development, and retaining talent. And while in the short term Qatar will still continue to rely on skilled expatriate workforce, we are transforming KAHRAMAA to become a world-class working place with a strong culture of health, safety and mutual respect.

Case Study

Promoting the use of effective safety monitoring systems on project sites

Monitoring safety on construction sites is a particular challenge compared with permanent workplaces, as the sites and conditions change constantly. We carry out periodic measurements which allows performance to be measured over time. Our monitoring system looks into areas such as:

- working habits
- scaffolding
- gangways and ladders
- machines and equipment
- protection against falling
- lighting and electricity
- order and tidiness

This is an effective use of an occupational health & safety monitoring system specifically designed for construction which helps workers and management to measure and compare performance.

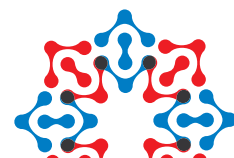
Employee wellness

An established wellness culture in the workplace contributes to the physical, mental, and emotional well-being of all employees. Same as in last year, particular occupational related illnesses were not recorded however work-related stress remained a key concern. The Cultural Season at KAHRAMAA organized by the Employee Relations section of the HR Department in 2013 and continuing through to 2014, therefore focused on the development of personal skills and abilities to prepare employees for work and fulfilling the job duties flexibly.

The program included speakers and experts from across the region and focused on: knowing the rise and types of pressures; worry and its reasons, work – emotion relationship and the balance process between them, therapy plan to control negative feelings as per the Cognitive Behavioral Theory. Other sessions included How to Live a Stress and Dealing with Depression.

Diversity and equal opportunities

Although we do not have a formal diversity policy, KAHRAMAA is increasingly pioneering employment of women in field jobs traditionally falling under male domination. We are diversifying our workforce and in 2014 no discrimination accidents have been recorded.





Creating value for our communities



Eng. Ali M. Al-Ali
Customer Services Manager and Conservation
& Energy Efficiency Manager

“Change starts from us. The concept of social responsibility is deeply entrenched in all of KAHRAMAA’s business activities, under the guidance of senior management. Instilling a culture of conservation in our children from an early age would help us create a generation capable of achieving the targeted development and sustainability.”

To be partner of choice, it is important that we maintain positive relationship with the community in which we operate. Our social license to operate depends on how we communicate and work together with all our stakeholders and the community at large.

At KAHRAMAA, we strongly believe that we have an essential role to play in raising local knowledge and awareness about the rational use of natural resources but also in actively promoting an integrated social development approach.

Why it matters? Mapping global and local trends

Corporate social responsibility (CSR) has been evolving rapidly in the last decades. And while its roots could be found back in the pure philanthropic activities, today CSR is a better understood concept; one that presents numerous opportunities for partnerships and collaborations.

Globally, community engagement today is seen as a strategic mechanism to build people’s trust and to establish the basics of responsible operations. It is about a two-way dialogue, feedback exchange, and mutually identifying potential areas for organizational improvement. The global citizen today is better informed and more vocal than ever before. And with social media on the rise, it has never been easier to reach out to the wider public.

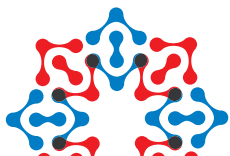
At KAHRAMAA, our CSR approach is in line with QNV 2030 and QNDS 2011-2016, supporting the national agenda for sound social development and environmental management. Qatar’s social development policy requires integration of several aspects: family cohesion and women’s empowerment, social protection, public safety and security, and sports and culture. We believe engaging with the Qatari community plays an important role in how we plan our operations for the future and the results we achieve for example in Tarsheed.



2014 total social investment spending

6 QARm

Voluntary contributions and investment of funds in the broader community (includes donations)



Planning for the future – our milestones

Community and Social Excellence Our commitment : Deliver high standards of health, safety and social responsibility	
Phase 1 (2014-2018): Corporate Objectives	<ul style="list-style-type: none"> Increase social advocacy and environmental compliance
2017 Milestone	Society see KAHRAMAA as a leading organization for environmental and social advocacy
Phase 2&3 (2019-2030): Potential Corporate objectives	<ul style="list-style-type: none"> Become a leader in safe and healthy working environment within Qatar Improve the capabilities of KAHRAMAA workforce and strengthen Qatarization
2022 Milestone	Society see KAHRAMAA as a leader in environmental and social change
2027 Milestone	Society see KAHRAMAA as a source of national pride with a global reputation for environmental and social sustainability

Our community engagement approach


Three departments at KAHRAMAA share the responsibility for community engagement – the Conservation & Energy Efficiency Department, the Public Relations & Communications Department, and the Health, Safety and Environment Department.

The PR & Communications Department:

- coordinates** with various departments across KAHRAMAA and with other external organizations the set-up of events, activities, workshops, seminars, and other community-related initiatives.
- facilitates** other departments to develop measures for tracking community satisfaction in terms of products and services. For example in 2013, the department coordinated with the Department of Quality and Continual Improvement to conduct a community-based survey, to understand the level of satisfaction. The results were announced in a press conference with the declaration of some e- services and announcement of IT applications to make our services more efficient and quick.
- informs** our community members about ongoing KAHRAMAA's projects, operational and maintenance activities, timings and locations, ways and means to boost quality in our products.

- talks** with the wider society through various social media channels. For safety reasons, we keep our community members updated on safety and security tips. For example, we tweeted 'Limit the number of appliances plugged into a socket. An overloaded circuit creates a fire hazard'.

Case Study



Engaging through social media

Every day, we inform our community members about system demands on electricity and water through our twitter handle. We also inform them about upcoming events and activities, and request their suggestions to make our campaigns successful by engaging them in various ways.

For example, through our twitter account, we replied to 155 queries in the month of September 2014 which is an average of 5 replies per day. The percentage of replies to queries was 46%, 22% up as compared to the preceding month of August 2014.

KAHRAMAA's approach to managing local community engagement activities is reviewed periodically and discussed during Corporate Performance Reviews (CPR) and Planning Forum's meetings. The PR & Communications department also issues a monthly report compiling all activities which helps to monitor the effectiveness of the engagement process.

Tarsheed plays an important role in our CSR programs. Update on this initiative has been discussed in the Managing environmental impacts section of this report.

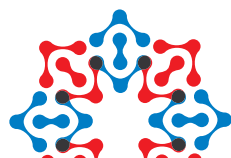
Case Study

Preventing negative impact on local communities

Our facilities have a potential health, safety and environmental impacts on local communities. We have a number of policies, procedures, technical measures in relation to our operational activities which mitigate potential safety, health and environmental impacts. The PR & Communications Department coordinates with other departments at KAHRAMAA and other Qatar- based organizations to inform our local communities about the actions which could be done periodically to avoid any possible negative impacts related with our services and products.

For example, recently, the department has coordinated media campaigns to clean water tanks for health safety and let our local communities know about the quality of water being supplied to them.

We also informed our communities about KAHRAMAA's plan to dismantle overhead lines and that OHL does not have any radiation effect on them if passing through their locations.



 Case Study

KAHRAMAA's i-agent system

KAHRAMAA has an internal system for escalating public grievances to the concerned departments.

We receive a number of complaints and comments on a daily/ weekly/monthly basis related to our services, quality, projects and future planning. These issues are raised through channels like newspapers, magazines, letters, e-mails, live radio programs, satellite TV news channels, SMS, social media and high level government offices among others.

We follow the below steps to address these concerns:

- a First, we assess the nature of the concern. If it is related to KAHRAMAA in any way, we get it systemized and it is transferred to the concerned department. We
- b get a number after systemizing the complaint to follow up with responsible departments.
- b The responsible department writes its comments in the system and the PR & Communications Department informs the concerned community member if more detail would be required from them.
- c Finally, after receiving the replies from the department within certain number of days depending on the nature of the issue, the PR & Communications Department informs the concerned person.
- d If the department does not provide any comments, PR & Communications follows up with them and if needed, management gets involved as well.

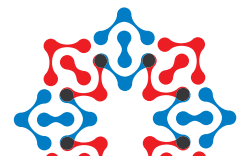
2014 community engagement initiatives

 Case Study



Supporting Qatarization

Continuing our yearly practice to support young Qatari graduates, we hold an open recruitment day in 2014. The event aimed to attract engineering university graduates as well as secondary graduates to qualify as per Clerical Preparation Program CPP to work as customer care clients, or clerks.



Case Study



KAHRAMAA organizes lectures on water quality

Representatives from the Conservation & Energy Efficiency Department and Water Laboratory visited a number of schools in 2014 to educate students about the quality of water provided by KAHRAMAA.

The lectures were in line with KAHRAMAA's role to educate students of the water quality from desalination plants to the customer, and raise awareness about the responsibility we all have.

Case Study



"Summer full of culture"

In cooperation with the Children's Literature Center, the Conservation & Energy Efficiency Department participated in a four-day event "Summer full of culture", to promote Tarsheed's values.

Visitors were informed about the Qatar's water consumption levels, rising carbon emissions, global warming, alternative energy sources, and other environmental concerns.

Update on our strategic partnerships

To add to our diverse list of partnerships we presented in the 2013 report, in 2014 we have signed Memoranda of Understanding (MoU) with:

- **Ezdan Holding** to support and promote Tarsheed's values. The MoU aims at achieving cooperation between the two organizations to facilitate Qatar's transformation into a modern state as envisaged in Qatar National Vision 2030. In accordance with the agreement, KAHRAMAA will help Ezdan Holding with its expertise and technical advice in all installations, real estate projects and green projects.
- **Doha Film Institute (DFI)** for creating Tarsheed awareness among the public.
- **50 MOUs & Scientific partnerships** - and in 2014, we have continued to expand our partnerships both local and international.

Looking ahead

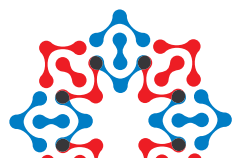
We actively engage with our community members because we understand the value of this mutual dialogue. We look forward to continue working together and shape the future of Qatar as one community.

Case Study



2nd Arab Water Conference 2014

KAHRAMAA hosted the 2nd Arab Water Conference in May 2014. The conference presented an opportunity to collectively discuss the rising water challenges in the region and to emphasize the crucially important role of national conservation efforts.





Creating value for the environment



Eng. Fahad Tolefat
Water Networks Director

“Sustainable use and protection of water resources is extremely important in Qatar. KAHRAMAA's target is not to provide any single drop of water if it is not for drinking purpose.”

Qatar is among the countries in the world with the highest per capita consumption of water and electricity. In the same time, the state faces a very unique set of water scarcity challenges due to a shortage of reliable surface and fresh water sources.

With this statistics in mind, KAHRAMAA's role in managing the supply and demand of natural resources becomes critical. In addition, partnerships that harness both local and global expertise, will be key to solve these current and near future challenges.

Why it matters? Mapping global and local trends

The depletion of natural resources globally has emerged as the dominant environmental concern over the last years. Trends like rapid urbanization and population growth, have placed immense pressure on the environment. Competing demands on land and water today lead to resource overexploitation, posing serious questions with regards to energy security, food supply, and water availability.

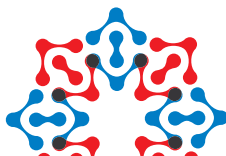
With technological advancements taking place around the globe, many utilities companies have started exploring ways to develop resilient infrastructure, manage consumer's demand levels, and improve efficiency of the supply.

The concept of “smart cities” has emerged where the smart grid plays a central role by providing modernization of the traditional power systems, by providing a safe and reliable mechanism for the integration of distributed and renewable resources, and finally, by educating the consumer.

The exploration of renewable energy sources is also on the rise to help meet the global carbon targets and establish a transition from fossil fuel dependency. At KAHRAMAA, our key mandate is the provision of high quality and reliable supply of electricity and water. This supply also needs to be executed with a high level of efficiency which includes

looking into mechanisms to reduce losses as well as diversification of the supply.

Qatar sees a huge potential in realizing solar energy projects and KAHRAMAA is committed to support 200MW solar power installations by 2020. As a first step, KAHRAMAA is investing into a 10MW PV solar project in its Duhail facility - a stepping stone to attract more investment in the sector. KAHRAMAA is also working on innovative technologies with its partners to overcome the challenges specific to the region, such as dust issue in solar projects, to make this initiative a success.



Planning for the future – our milestones

Asset Excellence Our commitment : Ensuring high quality and reliable supply of electricity and water	
Phase 1 (2014-2018): Corporate Objectives	<ul style="list-style-type: none"> • Provide high quality supply of water and electricity • Optimize asset performance
2017 Milestone	Assets are fit for purpose to achieve government expectations of reliability and efficiency
Phase 2&3 (2019-2030): Potential Corporate objectives	<ul style="list-style-type: none"> • Create value added services by leveraging leading asset technologies and practices • Optimize asset management delivery model • Leverage asset management capabilities as the source of competitive advantage • Deploy smart technologies and integrate renewable sources
2022 Milestone	Assets are designed, built and managed effecently and include some market leading technologies
2029 Milestone	Assets are designed, built and managed in a leading practice manner and include many best in class technologies.

Approach and management

Everyone at KAHRAMAA is involved in one way or another in working towards and supporting the wise use of natural resources. Several departments work collaboratively to establish a more formal approach:

- **Conservation & Energy Efficiency Department** – tasked with understanding of resource conservation best practices, advancing regulation, loss reduction, demand side management (DSM), and energy source diversification.

 In 2014, the Conservation & Energy Department obtained the international accreditation for good management practice ISO 9001/2008.

- **Planning & Quality Department** – tasked with ensuring the supply of water and electricity, identifying new opportunities, improving internal processes.

- **Water Network Affairs (WNA) and Electricity Network Affairs (ENA)** – improving the functions and activities related to planning, transmission & distribution of water and electricity, as well as field services
- **District Cooling Services Department** – tasked with the regulation and promotion of district cooling related activities in Qatar in line with QNV 2030 and QNDS.
- **Technical Affairs Directorate** – focusing on project planning and execution with its three departments – Electricity Projects, Water Projects, Materials and one section – Power & Water Production Projects.

Research & Development

Research & Development (R&D) is essential to understand all the elements impacting our performance. KAHRAMAA's R&D Committee is led by the Conservation & Energy Efficiency Department Manager however consisting of representatives from diverse teams across the organization. Our Planning & Quality Department also conducts local and regional market research, in collaboration with other departments.

Our R&D Committee aims to:

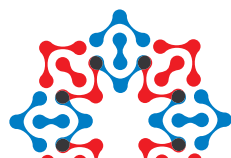
- Support Qatar's R&D strategy in relation to energy and water
- Supervise and coordinate with internal and external organizations potential research opportunities related to KAHRAMAA's operations
- Develop and set R&D procedures within KAHRAMAA
- Create and maintain R&D project database
- Attract high level collaborations institutes and researchers.

Our R&D activities fall under three categories: local – within the individual departments; internal – within KAHRAMAA; and external – within Qatar. Activities cover various areas such as: transmission, distribution, energy conservation, renewable energy, recycling, health & safety, quality, smart grid, customer services, etc.

We are looking into awarding Masters and PhD degrees through local and international universities to support our R&D work. Currently, we work on several proposals that could potentially accommodate around ten Masters degrees. There are also more than ten research activities at the moment in process with local universities

In 2014, Texas A&M University in Qatar launched its new research center – Smart Grid Center – aiming to integrate electricity, information, and communications, to develop innovative energy technologies in Qatar. KAHRAMAA will work in close partnership with the center and with the Qatar Environment and Energy Research Institute (QEERI), to research and develop smart grid solutions for the state.

In relation to this research, we have already partnered with one of the world's leading utilities in the smart grid field (Iberdrola, the Spanish utility) as a pilot project to analyze KAHRAMAA's network and study the opportunity in applying smart grid.





In collaboration with scientists and engineers from around the world, KAHRAMAA aims to be at the forefront of technological advances in the business of water and electricity.

Case Study



Quick scan for paleo-groundwater potential and utilization in Qatar

A project funded by Qatar Foundation, this work examines the potential presence of fresh-to-brackish groundwater resource in Qatar coastal zones.

Working with a consortium of companies from the Netherlands, the work is expected to be completed in three phases including desktop research field surveys.

KAHRAMAA partners with Qatari-based institutes to build the knowledge and expertise in this field.

Case Study



Wind measurement pilot project

This project will evaluate the wind potential in the north of Qatar by using Sodar equipment that measures wind speed and wind direction up to 200 meters.

Water update

KAHRAMAA's integrated water strategy includes the following priority areas:

- Increasing water storage reserve to 7-8 days
- Maintaining 24hour uninterrupted supply to customers
- Reduction of real, technical water losses
- Study and development of underground reservoirs
- Revisiting Qatar's water infrastructure, especially underground pipes, on regular basis for timely refurbishment/replacement to help reduce water losses
- Studying/implementing alternative energy source for water production specifically nuclear and solar
- Promoting conservation awareness

KAHRAMAA has set up a long list of waterworks programs that address the needs of residential areas; the new bulk customer applicants comprising of commercial, small to heavy industries and the recreational areas. These fall under the following categories:

A. Building the state of Qatar

Water Network Extension Projects – the "Early Connections Campaign" - more than 2.35 million population have already been served from mere 0.6 million in 2000. A total of 6,231km of additional pipelines have been added since then.

Other related projects include:

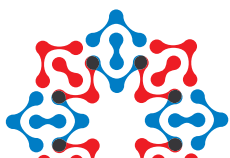
- Water Network Replacement Projects
- Upgrading & Development of Head-works Projects

B. Providing reliability & contingency during emergency

Several projects are included under this headline:

Water loss reduction campaign

KAHRAMAA has put in place a comprehensive water loss reduction program in the water transmission and distribution network.





Between the year 2009 and 2014, the real water losses (leakages and bursts) have been brought down significantly from a high of

12% to around 6%.

Some of the major leak detection projects in the water network include:

- 1 Leak detection in large diameter water mains of 600mm to 1600m diameter using Smart Ball – a specially patented freely traversing acoustic device.
- 2 Permanent noise loggings and correlating activities on the webserver using Cloud computing and GSM network.
- 3 Water balance and leak detection activities in DMA (district metered areas) inclusive of rezoning and ZPT (zero pressure tests) activities

The aim of these initiatives is to limit the transmission and distribution losses including reservoir losses to 5% within the next 5 years which will be benchmarked to the world's best standards.

Case Study

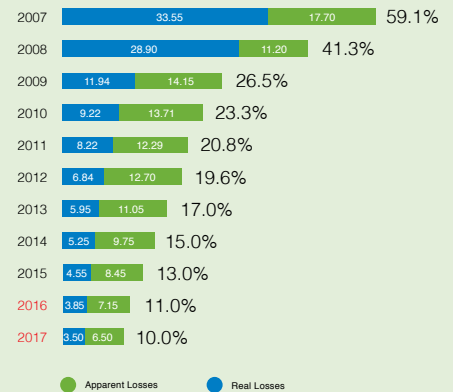


PRPS (Primary Reservoir & Pumping Station) - MEGA RESERVOIR Project

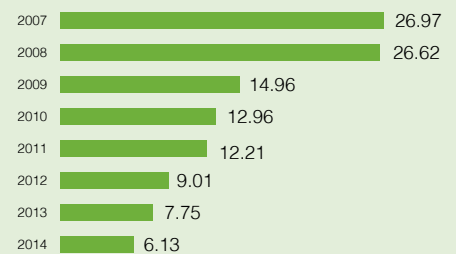
The highlight of this project is the on-going construction of the mega-reservoir that will attain the target minimum 7-days usable stock at KAHRAMAA side (2 days min. at the SRPSs and 5 days min. at the PRPSs).

This is, by far, the most ambitious water project at KAHRAMAA, equally beneficial in the interest of national security, contingency and reliability in ensuring uninterrupted water supply in the country even on extreme interruptions of supply from the source.

We Plan, We Do and We Achieve Water Loss (NRW)



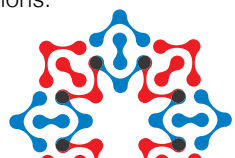
The Results No of Bursts per 100 km



C. Safeguarding Health, Safety and Protection of the Environment

We have placed an ambitious goal to upgrade our Water Quality Laboratory to a new Water Quality Assurance Laboratory – to be located in Al Thumama complex and to cover all drinking water analysis, acting as a drinking water quality reference for the entire GCC region.

With regards to protecting the environment, we are also looking into potential installation of Radiation Monitoring Systems in the sea front of desalination plants. The purpose of this project is to give an early warning and analysis whenever the sensors detect the presence of unacceptable radiation level in the sea so that the desalination plants and all the concerned agencies in Qatar can take early actions.



Case Study



DMA Motorized Valve and SCADA Integration Project

In line with the Smart Water Network concept, it is planned to monitor and control the entire transmission and distribution network with sophisticated real time online flow, transient pressure and water quality sensors/transmitters.

Remote operated motorized valves for DMAs will help in emergency isolation and water loss. Advanced Water SCADA - Data Management & Analytics software integrated with GIS and AMI, will monitor entire water network through the pressure transients and provide Network Demand & Pressure Management solutions, Water Quality Management Solutions and Active Leakage Management Solutions for on-line real-time leak detection & localization of damaging pressure transients/ burst events as well as deliver effective pipe failure prediction.

The system shall be monitored and controlled remotely from National Water Control Center and provide analytical tools to various end users.

Energy update

The expansion of the electricity distribution network continued and in 2014. Currently, there are 11,932 substations in comparison with 11,362 in 2013 and 10,818 in 2012. And although the demand for electricity in the summer of 2014 increased more than 12% comparing with the same period in 2013, KAHRAMAA managed to keep high quality performance indicators of the electricity network. The production surplus ensured the needs of the electricity network as well as the GCC interconnection commitments.

An update on our expansion and solar projects is discussed within the Creating value for Qatar section of this report. The energy exported to the grid refers to the amount of energy utilized by customers after transmission & distribution (T&D) losses – approximately 6.7% till 2013 (4.5% distribution losses and 2.2% transmission losses). In 2014, distribution losses were estimated to 4.5% while transmission ones dropped to 1.98%. KAHRAMAA is targeting to reduce overall T&D losses to around 6.3% by 2019.

In 2014, we have also launched the redesign and replacement of some constructions at Souq Waqif distribution substations. The project is in line with KAHRAMAA's plans for the development and upgrade of the electricity sector to ensure the highest safety and security standards.



The project consists of three phases including ten substations. The first phase has been already initiated where readymade elements have been installed for basements, ceilings and walls.

Tarsheed update

Tarsheed is Qatar's National Program for Conservation and Energy Efficiency launched by KAHRAMAA in 2012. The prime goal of Tarsheed is decreasing per capita consumption of electricity by 20% and water by 35% by 2017. The reductions in consumption so far are presented in the below graphs:

Water per capita consumption 2012 to 2014

1st Quarter



2nd Quarter



3rd Quarter



4th Quarter



* Cubic Meter/P/Quarter

Yearly (Actual)



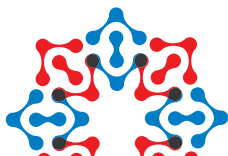
* Cubic Meter/P/Year

Case Study

Demand side management (DSM)

KAHRAMAA has partnered with CHUBU Electric Power Company of Japan for several years now to exchange knowledge and ideas in the field of resource conservation.

In 2014, under the partnership project, CHUBU has conducted an on-site study for Al Khor Hospital, and has provided energy saving recommendations for improvement such as energy saving equipment as well as operational improvements.



Electricity per capita consumption 2012 to 2014

1st Quarter



2nd Quarter



3rd Quarter



4th Quarter



*KWh/P/Quarter

Yearly (Actual)



*KWh/P/Year

On the supply side, we introduce efficient and environment friendly technology. Our various projects are described throughout this report – from R&D initiatives, to solar energy capacity exploration, and numerous awareness programs. In 2014, Tarsheed recorded several key achievements captured in the table below.



Tarsheed's Conservation Building Competition – an annual competition for various building sectors in Qatar – included a new sector in 2014, Sports Venues. And in 2015, Tarsheed will introduce the competition for the Tourism sector.



Tarsheed branding and media was launched in six languages in 2014 – including Arabic, English, Hindi, Tagalog, Nepali & Urdu – and a successful campaign for labor camps, industrial areas (cinemas, malls) and state mosques was introduced. As part of our Qatar-wide resource conservation efforts, we aim to reach out to the broader community, realizing that lots of our customers may not speak the local language.

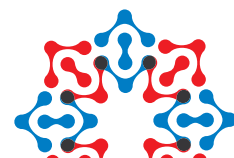
Case Study



Tarsheed 2022 (T22)

A collaborative agreement was signed and is currently under implementation with the Supreme Committee of Delivery & Legacy to retrofit, train, educate and establish 22 models of sustainable & conservation schools in Qatar by mid-2015. T22 is targeted at primary school level students (ages 6-12), staff and teachers, parents and families. They are reached through conservation and energy efficiency curriculum and sports activities that teach and reinforce conservation behavior at school, which will carry over into home. An energy audit of all 22 schools is currently underway. This will provide a baseline for each of the participating schools, identifying conservation and efficiency opportunities via retrofit of lights with dimmable LED lamps and lux controllers, presence detector controllers for meeting rooms, toilets with delay timing and water efficient aerators on faucets.

Cooperating with Unilever – Together with Unilever we have distributed 4000 water conservation gifts & awareness tips to 40 schools to promote water saving among students.





Qatar's Energy Efficiency Roadmap

Tarsheed has partnered with Japan-based Mitsubishi Research Institute to prepare the roadmap for Qatar.



Air Conditioning Energy Efficiency

Tarsheed has issued regulations with the Ministry of Environment to have the Energy Efficiency Ratio (EER) at a minimum of 8.5. Standardization of other appliances will follow in 2015.



Phase Out Inefficient Lighting

Tarsheed issued a regulation with the Ministry of Environment to phase out Tungsten high glow lamps of 75 watt & 100 watt. 40 and 60 watt sizes to follow in 2015.

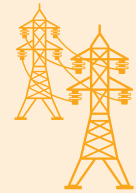


Demand side management – water conservation

With KAHRAMAA's efforts, treated water is used in district cooling and public parks irrigation.

KAHRAMAA Regulations for electricity & water conservation

- **Thermal insulation:** Issued standards. Also, working to issue a law with Ministry of Municipality and Urban Planning.
- **Retrofit Project:** Retrofit conventional plumbing and lighting fixtures with efficient ones (200 schools, 1000 mosques).
- **Conserving Building Competition:** Introduced Sports Sector in 2014. The Tourism Sector will follow 2015. All sectors to be represented by 2017.



Power factor correction

KAHRAMAA set a minimum power factor for bulk consumers at 0.9 lag to increase energy efficiency of the network and reduce loads.

Future technical projects

- Implementation of ISO 50001 for industrial & commercial bulk consumers.
- LED street lighting with ASHGAL: to be applied in 2015.



Law enforcement

- Implementation of Law no. 26 for the year 2008.
- Lectures about the law & its violations.

Branding & Awareness

- National conservation campaigns
- Increase energy efficiency in schools
- KAHRAMAA awareness park
- Religious Awareness Program with AWQAF (1000 mosques)
- 6 major events annually including World Water Day and Gulf Rationalization Week.
- 36 strategic and scientific collaborations in Qatar and abroad.



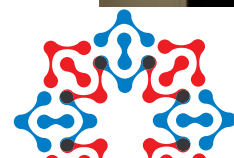
Renewable energy (solar in particular)

- Plan to produce 200 MW of solar power by 2020.
- In line with the QNV 2030, KAHRAMAA through the Renewable Energy Technologies Section in the CN Department, plans to introduce the renewable energy technologies for power generation & water production technologies in the State of Qatar.



Awards

- Sustainability Innovation for Tarsheed and Best 1st Sustainability Report 2013 – Ministry of Energy and Industry.
- Unilever Sustainability Award for Energy Efficiency Plans 2013 and for Water Conservation Plans 2014 for the MENA Region.
- Fund Award on New Research from QNFR cycle 7-2014 - QF.
- Honorary awards from: Ministry of Interior – Traffic Administration, Qatar Green Council Building (QGCB) for Baytna Project Collaboration – Doha Film Institute Supreme Council of Education.
- Attained ISO 9001/2008 certification in December 2014.
- Platinum International Marcom Awards for Advertising in January 2015 for creating a strategic campaign 'Better light ... Better living.'

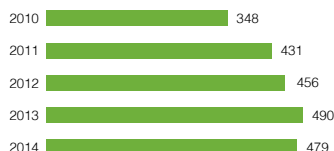


Update on our own environmental footprint

Our efforts of digitizing paper forms and reports, and recycling continued and in 2014. We have put in place yearly targeted reduction to optimize paper recycling.

Waste management

Total waste generated (including domestic type, paper and hazardous material) in tonnes



Targets to optimize paper recycling

2015 / **20 Tons**

2016 / **19.5 Tons**

2017 / **19 Tons**

2018 / **18.5 Tons**

2019 / **18 Tons**

* This weight includes scrapped documents of KAHRAMAA and contractors

GS - Archiving Unit Paper Recycling in Tons 2013 - 2014

Month	Year - 2013	Year 2014
January	3.58	NIL
February	2.63	0.3
March	1.12	NIL
April	1.4	1.5
May	1.96	2.1
June	0.9	1.27
July	0.4	2.25
August	1.12	2.55
September	0.98	2.05
October	1.12	1.87
November	0.51	2.85
December	NIL	2.25
Total TON	15.72	18.99

Currently, with co-ordination from IT department, General Services Department has already implemented the following paperless activities:

- using 'online' helpdesk (called Labeah) to provide our services to the end user
- issuing of tender documents only by softcopy (companies needs to download tender documents 'online')
- implemented 'Online' Contractors' security gates pass system.

We have current plan to replace the Fluorescent Tube Lights, CFL & traditional incandescent Bulbs with LED Lights as follows:

Location	Quantity	Reduction Electricity Consumption	Remarks
KM Main Tower - Floor #10	293	50%	Mockup - Done

Customer Services Dept
D Ring Road

112

50%

Customer Care Centre - Done

Customer Services
- Ind. Area Centre

48

50%

Customer Services
- Musherieb Centre

246

50%

In Progress

Customer Services
- Salwa Rd. Centre

143

50%

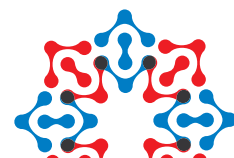
Energy usage and emissions

Our direct energy usage presented here covers only KAHRAMAA's vehicles. The scope 1 emissions then are calculated based on this usage only. Scope 2 emissions are calculated as amount of T&D losses and by using the lasts available Grid Emission Factor of 617.9 tCO₂/GWh for Qatar.

	Direct energy usage (GJ)	Direct GHG emissions (scope 1) (Tonnes CO ₂)	Indirect GHG emissions (scope 2) (Tonnes CO ₂)
2014	65,951	4,570	1,446,442
2013	45,066	3,123	1,334,092
2012	45,761	3,171	1,339,350
2011	45,346	3,142	1,175,036
2010	35,737	2,477	1,092,279

Looking ahead

The conservation challenges we all face as a nation are huge. However, through partnerships, innovative technologies, and strong commitment from everyone, we at KAHRAMAA believe we can ensure a sustainable and balanced resource usage over time. Tarsheed is rapidly gaining speed as well, and now plays a key role as an awareness raising initiative in Qatar.





Creating value for Qatar



Eng. Abdulla Al Theyab
Electricity Networks Director

“Recognizing its leading role in contributing towards the socio-economic prosperity of Qatar, KAHRAMAA has started works on the first phase of developing a wide network of utilities services that are to be implemented under the country’s urbanization program.”

KAHRAMAA plays an integral role in Qatar’s socio-economic agenda. Water and sanitation are fundamental to human existence while affordable and reliable energy is critical to household productivity and the development of most industries.

Providing water and electricity is not only KAHRAMAA’s core competence. It is the most valuable contribution our organization can have to enable Qatar’s human and economic development.

Why it matters? Mapping global and local trends

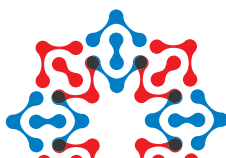
Rapid population growth, urbanization, and growing middle classes, have created an enormous demand for water and electricity, and the resulting from this pressure on natural resources, on a global scale.

Numerous developments associated with these trends impact the global utilities sector. On one hand, regulators and governments are increasingly focusing on solutions to reduce demand and improve efficiency. On the other, the customer today is more informed than ever and is proactively looking to manage their water and electricity demand and consumption. Finally, new technological advancements and improvements are disrupting and transforming the market, presenting a pool of opportunities for the future.

Across the globe, utility companies have already started responding to these new expectations posed on them. They are re-focusing their core expertise and introducing a variety of new value-added products and services such as energy information services, home energy management, energy auditing and consulting, lighting retrofits, and others. With the new concept of the ‘utility of tomorrow’, companies in the sector are diversifying to be able to serve various customers’ expectations.

Qatar has been experiencing a significant water and energy demand in the last years, projected to continue to increase as a result of the country’s booming economic development, growing population, and the preparation for the World Cup events in 2022.

KAHRAMAA’s approach to securing Qatar’s future resource demand, is in line with the Economic pillar of the QNV 2030: *“Development of a competitive and diversified economy capable of meeting the needs of, and securing a high standard of living for, all its people for the present and for the future.”*



Planning for the future – our milestones

Community Excellence Our commitment : Addressing regulatory changes in the energy, water and district cooling markets	
Phase 1 (2014-2018): Corporate Objectives	<ul style="list-style-type: none"> Promote regulatory changes in the energy, water and district cooling markets Strengthen financial performance
2018 Milestone	Commercial implications of investments and low-risk commercial opportunities are given full consideration
Phase 2&3 (2019-2030): Potential Corporate objectives	<ul style="list-style-type: none"> Proactively respond to regulatory and legal changes Realize new commercial opportunities (e.g. regional intergartion, new generation assets, etc.) Create value be leveraging partnerships third parties arrangements Become a commercially driven organization
2023 Milestone	Commercial practices are rigorously followed when engaging with government, customer, and supplier stakeholders
2028 Milestone	Commercial strategies clearly guide all business decision-making

Qatar's national development agenda and KAHRAMAA's crucial role

In 2013, Qatar's GDP growth accelerated to 6.5%, well beyond the initial forecasts. Moreover, this growth is now expected to continue, reaching out 7.8% in 2015, according to Qatar Economic Outlook for 2014-2015.

Mega infrastructure developments, the 2022 World Cup, transport and real estate services, are all contributing to Qatar's extremely rapid national development.

Ranked only second on the Global Infrastructure Investment Index in 2014, Qatar looks into potential USD 200bn investments in infrastructure with Government investments touching potential USD 160bn.



Indirect economic impact:

98%
goods and services
sourced locally.

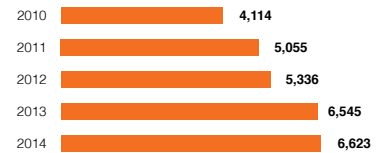
With these developments in mind, KAHRAMAA's role becomes really clear. As the main utility provider in the country, KAHRAMAA contributes by:

- Large investments in building the right electricity and water infrastructure to enable further business growth
- Continuous local hiring, training and education
- Local sourcing
- Active community engagement
- Resource conservation awareness raising

KAHRAMAA's institutional model has been discussed in detail in our first sustainability report. As a fully state-owned corporation, its capital expenditure is 100% Government funded and revenue is generated only through customer revenues. This data has been updated here.

In 2014, KAHRAMAA continued to purchase locally produced supplies. We always consider how we can make use of local suppliers and contractors, helping them to build capabilities to meet on one side our high safety and quality standards, and on the other, to guide them develop their own high standards. For clarification purposes,

Revenues



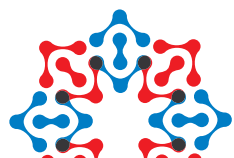
*Total revenues in QARm

QARm	2014
Operating costs	613
Employees wages and benefits	950
Significant financial assistance received from government (subsidies)	3,883

goods sourced locally are here defined as all goods manufactured in Qatar as well as all goods distributed by a local supplier counterpart of a foreign manufacturer.

In our water mega-reservoirs project for example, we have been looking in working predominately with local suppliers, and have broken down the main contract into smaller contracts, accompanied with various packages. This flexibility creates a healthy competitive environment while allowing smaller local contractors to participate.

With regards to local employment, we have made Qatarization one of our key priorities as discussed in the People section of this report. Currently, KAHRAMAA has 28 employees on senior management positions. We define senior management as Manager and Director levels. Out of these 28 positions, 27 are allocated to Qatari employees which demonstrates our strong commitment to hire our leaders from the local community.



Our initiatives

Case Study



Water expansion projects to ensure water security

At official ceremony, KAHRAMAA announced new water expansion projects including five new water reservoirs and pumping stations at Duhail, Umm Qarn, Mesaimeer, south Doha and Muathier, and reservoirs at existing stations at a total value of QR 3.224bn. These major projects are considered the largest so far expansion of Qatar’s water reserves, representing an increase of 126% to a total capacity of 561million gallons (MIG).

The projects have been launched as key to securing Qatar’s water future – increasing water reserves and thus enhancing the water availability in various parts of the country.

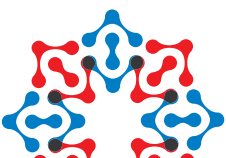
Growing amount of fresh water received from IWPPS (in Million m3)



The Water Networks Affairs (WNA) at KAHRAMAA is in process of examining all current demand and supply pressures in Qatar. Demand pressures include population growth, growing urban, domestic and industrial water usage, and an increase in water-intensive diets as a portion of the population moves into increasingly higher water-consumption behaviors. Climate change plays a role by creating additional water demand for agriculture and for reservoir replenishment. On the supply side, issues such as water transport, availability and variability present challenges, and so is the decline in renewable water resources. Therefore, the WNA Directorate, were able to come up with an integrated solution that would be beneficial for the sustainable requirement of the future generations of Qataris in next 25 to 50 years. The aim is to provide water facilities infrastructures that could serve the future any time they want to tap and harness to ensure continuing life and prosperity in Qatar. The following are selected projects that will be beneficial in the longer-term:

- **Mega-Reservoir Project and Associated Grid Corridor Lines** – the WNA Directorate is banking on the concept of “Laying the Pipelines of the Future”. The concept entails a giant web of pipeline across Qatar that will govern and determine the future main artery of bloodline for the State of Qatar. This project is now on-going under fast phasing and is a top priority for KAHRAMAA.
- **Feasibility Study and Pilot Test on Aquifer Storage & Recovery (ASR)** – ASR has proven to be a cost-effective way to capture and store water when it is available so it can be used during times when it is limited. The purpose of this project is to find a suitable natural aquifer underground in Qatar that can be used as a huge strategic storage for drinking water. Such aquifer will be injected with the surplus desalinated water that will be stored in it underground for a long time and it can be recovered later whenever it is needed for any emergency or urgent situations when the desalination plants are out of service. Such aquifer would tackle both water and the food security problems.

- **Rehabilitation of five Potable Well Fields** - The purpose of this project is to rehabilitate potable water wells, pumps, pipes, storage tanks, tankers fillings points, and all related facilities at five potable well fields. Also, new additional wells will be drilled in order to increase the water production. These wells will be used to supply people with potable water as an alternative water source during emergency situation when the desalination plants are out of service. Meanwhile, these facilities once constructed shall be put on mothball or stand-by with periodic maintenance.
- **Rehabilitation of Non-Potable Well Fields** – This project aims to rehabilitate existing non-potable water wells (with all related facilities) at many location in Qatar, and to install reverse osmosis (RO) units on each location in order to treat the non-potable water and make it potable. phase of this project including activities such as carbon market study for renewable energy projects and preparation of conceptual design, have now been completed.
- **KAHRAMAA has also agreed to assist the Supreme Committee for Delivery & Legacy** in implementing Renewable Energy Projects with capacity of 100 MWac of solar energy.
- **Qatar Smart Grid** – Phase II is projected to include the following: deployment of cyber security analysis, developing a complete technical solution for implementing smart grid, technology field tests, etc.



Case Study



Electricity expansion projects

In 2014, KAHRAMAA signed various electricity networks expansion projects contracts with a number of local and international companies. All of these are considered crucial for Qatar as they include further construction of sub-stations, laying high voltage cables and dismantling overhead lines (OHLs) across Doha and suburbs – e.g. New Doha Ports, Doha Rail and Metro projects, and Qatar 2022 projects. These contracts are seen as vital to meet the growing local demands for energy.

Case Study



Qatar's first major solar power plant to be opened by 2016

Qatar's first major solar power station is set to start operations in the next two years. The pilot facility in Duhail (in northern Doha) would be on a 100,000sqm site and would produce up to 15MW of energy. It will be one of a number of sites mapped throughout Qatar that will be used to help meet the nation's target of producing 200MW of solar energy in the coming six years – enough to power 66,000 homes.

Case Study



Preparing for the World Cup 2022 – Partnering with others

KAHRAMAA dismantles all overhead lines 132 kv between Doha South Super towards the Industrial Area and Saliya. All overhead lines 132 and 220 kv from Abu Fontas generation station to Al-Wakra, Mesaied, and Doha South across Al-Wakra street will be dismantled.

The project is in coordination with other authorities including Ashghal, Qatar Rail, and Ministry of Municipality and Urban Planning and is in line with FIFA 2022 projects.

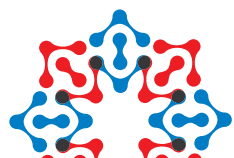
Work has already started to dismantle the OHL to Al-Wakra from Abo Fontas station to Mesaied A to be replaced with ground cables.

Growing amount of electricity received from the power generators (in GWh)



Looking ahead

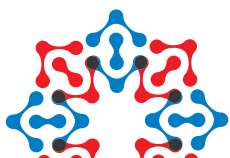
At KAHRAMAA, we acknowledge the role we play in advancing the lives and prosperity of Qatar and its citizens. We actively engage in partnerships and collaborations to develop the next level infrastructure and to ensure energy and water security at home and in the region.



GRI G4 Content Index



General Standard Disclosures				
Disclosure Reference	Definition	Page/Direct Answer	Omission	External Assurance Yes/No
Strategy & Analysis				
G4-1	A statement from the most senior decision-maker of the organization	3		No
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G4-3	Name of the organization	10		No
G4-4	Primary brands, products, and/or services	10		No
G4-5	Location of organization's headquarters	Inside Front Cover		No
G4-6	Number of countries where the organization operates	10		No
G4-7	Nature of ownership and legal form	Inside Front Cover		No
G4-8	Markets served	10		No
G4-9	Scale of the reporting organization	Inside Front Cover, 10		No
G4-10	Number of Employees	33		No
G4-11	Percentage of Employees covered by CBA		Not applicable	No
G4-12	Organization Supply Chain	10		No
G4-13	Significant Changes to the Organization Structure	No significant changes		No
G4-14	Precautionary Approach	14		No
G4-15	Externally Developed Economic, Environmental and Social Charters	14		No
G4-16	Memberships of Associations	14		No
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G4-17	Entities Included in the Organization Consolidated Financial Statements	Inside Front Cover		No
G4-18	Report Content and Aspect Boundaries	Inside Front Cover, 16, 17		No
G4-19	Material Aspects	19		No
G4-20	Material Aspect Boundary within the Organization	19		No
G4-21	Material Aspect Boundary outside the Organization	19		No
G4-22	Effect of Re-Statement from Previous Report	No restatements made.		No
G4-23	Significant Changes in Scope and Aspect Boundaries	No significant changes.		No
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G4-25	Basis for Identification and Selection of Stakeholders	17, 18		No
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Report Profile				
G4-28	Reporting Period	Inside Front Cover		No
G4-29	Most Recent Report	Inside Front Cover		No
G4-30	Reporting Cycle	Inside Front Cover		No
G4-31	Contact Point Regarding the Report	Inside Front Cover		No
G4-32	Report the "In Accordance" Option Chosen	Inside Front Cover		No
G4-33	Policy on External Assurance	Inside Front Cover		No
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Specific Standard Disclosures			
Material aspect	DMA and Indicator Definition	Page/Direct Answer	External Assurance Yes/No
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Economic Performance			
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G4-LA11	Percentage of employees receiving regular performance and career development reviews.	35	No
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Social: Product Responsibility			
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G4-DMA	Reasons for Materiality & its Impacts	28, 29	No
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Conservation and Energy Efficiency Department

Paper

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