



DEWA SUSTAINABILITY REPORT 2017



OUR VISION

A sustainable innovative world-class utility.

OUR MISSION

We are committed to the happiness of our stakeholders and promoting Dubai's vision through the delivery of sustainable electricity and water services at a world-class level of reliability, efficiency and safety in an environment that nurtures innovation with a competent workforce and effective partnerships; supporting resources sustainability.

OUR MOTTO

For generations to come.





Sheikh Zayed bin Sultan Al Nahyan
Founder of UAE, 1918-2004



We cherish our environment because it is an integral part of our country, our history and our heritage. On land and in the sea, our forefathers lived and survived in this environment. They were able to do so only because they recognised the need to conserve it, to take from it only what they needed to live, and to preserve it for succeeding generations.





His Highness

Sheikh Khalifa bin Zayed Al Nahyan

President of the United Arab Emirates



Environmental effort is a collective responsibility which requires the participation of everyone who lives in a civilised society. Each individual is an ambassador for the environment and should be keen on ensuring its cleanliness, its sustainability, and work on reducing emissions of polluting gases.





His Highness

Sheikh Mohammed bin Rashid Al Maktoum

Vice President and Prime Minister of the UAE and Ruler of Dubai



Clean and renewable energy is key to sustainable development and the UAE has set an example for its rapid adoption. We have developed a sustainable infrastructure that will serve new generations. This infrastructure has been built by young Emiratis who will lead our country through the next phase of growth. We are proud of our nation's advancements in clean energy and green economy. The country is reaping the fruits today of the strong planning that we initiated years ago.





His Excellency
Saeed Mohammed Al Tayer
Managing Director and Chief Executive Officer
Dubai Electricity and Water Authority

MESSAGE FROM THE MD & CEO OF DUBAI ELECTRICITY AND WATER AUTHORITY

Dear Stakeholders,

Dubai Electricity and Water Authority is working to achieve the leadership's vision to make the UAE the best country in the world. This is why, we have many federal and local strategies in place, including the UAE Centennial 2071, UAE Vision 2021 and Dubai Plan 2021. DEWA is the first government organisation to adopt sustainability as part of its vision. Our strategy has evolved to embed the triple bottom line approach to sustainability, with economic, social and environmental goals to give us a fully-integrated sustainable business strategy.

We strive to become a role model in the world in energy efficiency, reliability, green economy and sustainability. We are securing our supply by implementing the Dubai Clean Energy Strategy 2050, launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to transform Dubai into a global hub of clean energy and green economy, and provide 75% of Dubai's total power output from clean energy by 2050. In addition, we work to achieve and support Dubai's Demand Side Management Strategy, to reduce energy and water demand by 30% by 2030, and the Dubai Carbon Abatement Strategy to reduce carbon emissions by 16% by 2021.

We have obtained many local and international achievements. The UAE, represented by DEWA, ranked first globally for getting electricity, as per the World Bank's Doing Business 2018 report. DEWA also won the Global Excellence Award from the European Foundation for Quality Management (EFQM), as the first organisation outside Europe and the first to win as a first-time applicant of this prestigious award. As a result, DEWA is now in the platinum category, which is the highest international rank in the Global Excellence Index.

Recognising the substantial role played by the UN in encouraging sustainable progress, in 2017, DEWA became a member of the United Nations Global Compact (UNGC), the world's largest sustainability initiative and is actively supporting the 2030 UN Agenda with its 17 Goals.

DEWA's global achievements confirm its success in implementing effective and sustainable practices to improve energy efficiency on both supply and demand. DEWA achieved the lowest Customer Minutes Lost per year (CML) in the world at 2.68 minutes, compared to around 15 minutes by leading utilities in the European Union and the USA. DEWA reduced losses in power transmission and distribution networks to 3.3% compared to 6-7% in Europe and the USA, and water network losses decreased to 7.1% compared to 15% in North America. DEWA has succeeded in enhancing the efficiency of fuel use to approximately 90%, while improving production efficiency by 28.87% between 2006 and 2017.

DEWA has been issuing sustainability reports since 2013 based on the world-class GRI Standards. DEWA is a member of GRI Gold Community and part of the Standards Pioneers Programme, being one of the first 100 organisations in the world to adopt the new standards for the 2016 report.

This report records our major achievements, progress and our journey towards our goal of making the UAE one of the best countries in the world by the time we celebrate our Golden Jubilee in 2021, marking our long-term quest to ensure that future generations will enjoy a sustainable living on planet Earth.



مركز شحن السيارات الكهربائية



ELECTRIC
VEHICLE
ONLY

TABLE OF CONTENTS

CHAPTER 1: ABOUT DUBAI ELECTRICITY AND WATER AUTHORITY.....	14
Case Study: First in the World: UAE represented by DEWA ranks first in the world for getting electricity as per World Bank 2018 report.....	36
CHAPTER 2: SUSTAINABLE DEVELOPMENT.....	38
Case Study: In Support of EXPO: The Countdown to 2020.....	62
Case Study: A Sustainable Hatta.....	63
CHAPTER 3: ENERGY & CLIMATE CHANGE.....	64
Case Study: Mohammed bin Rashid Al Maktoum Solar Park-Inauguration of 200 MW Phase 2.....	75
Case Study: Solar Panels for three EXPO substations.....	87
CHAPTER 4: WATER.....	88
Case Study: Together, we can end the water crisis.....	102
CHAPTER 5: CUSTOMERS.....	104
Case Study: DEWA honours top energy-efficient customers as part of its pilot project.....	118
CHAPTER 6: EMPLOYEES.....	120
Case Study: Estiharati-Employees Assistance Programme.....	139
CHAPTER 7: SOCIETY.....	140
Case Study: DEWA receives Gold medal for its Excellence in Social Responsibility.....	151
GRI Content Index.....	152
Appendix 1 -Material Topics and Boundaries.....	154
Content Index.....	155
Assurance Statement.....	162
Acronyms List.....	164

The image shows the cover of a report. The background is a light blue sky with soft, white clouds. A large, solid green triangle is positioned on the left side, pointing towards the top right corner. The title of the report is written in white, uppercase, sans-serif font, centered on the green triangle. The text is arranged in three lines: 'ABOUT', 'DUBAI ELECTRICITY', and 'AND WATER AUTHORITY'.

ABOUT
DUBAI ELECTRICITY
AND WATER AUTHORITY



ABOUT THIS REPORT

This is DEWA's fifth annual sustainability report. It summarises the materially relevant economic, environmental and social facts and reflects the ways in which we are fulfilling our long-term commitments towards sustainability, enabling us to communicate our sustainability to our stakeholders and to further enhance our dialogue with them.

SCOPE

The data and statements contained in this report relate to and include all of DEWA's core operations and processes under DEWA's management control unless otherwise stated. Data from joint ventures and sub-contractors is not reported unless otherwise stated.

The performance data provided in the report covers the reporting period from January 1st to December 31st 2017. Ongoing initiatives commenced in earlier years as well as information deemed significant from our previous reports have also been included in this report. Note that there have not been any restatements or major changes to data measurement used compared to those employed in the previous report.

DEFINING THE CONTENT

DEWA's 2017 Sustainability Report provides information on our sustainability performance and it is aimed at all of our organisation's stakeholder groups. DEWA is committed to reporting on its sustainability performance annually, and this report follows the 2016 Sustainability Report. This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. GRI provides the world's most widely used standards on sustainability reporting and disclosure, enabling organisations around the world to communicate their sustainability performance and impacts. The process for defining the report's content was based on the new GRI Standards as well as GRI G4 Electric Utilities Sector Disclosures. The principles of inclusiveness, materiality, sustainability and completeness were implemented as well as those of the Accountability AA1000 Standard on inclusiveness, materiality and responsiveness.

Believing that transparency is the result of providing comprehensive, credible and comparable information, we have again submitted the 2017 Sustainability Report for external assurance (at a limited level of assurance) to an independent assurance provider in accordance with the International Assurance Standard 3000 (ISAE 3000).

COMMENTS

At DEWA, we constantly seek to evolve and improve our sustainability performance. Therefore, we greatly value feedback from our stakeholders, so please send your comments, questions, or suggestions for improvement with regards to our fifth sustainability report at: sustainability@dewa.gov.ae

Please note that an electronic version of this report can be found on our website: <http://www.dewa.gov.ae>

DUBAI BEFORE POWER AND WATER

Prior to the introduction of electricity to the Emirate of Dubai during the 1950's, the people of the Emirate depended on candles and kerosene lanterns, locally known as 'Fanar' for lighting their homes. Their homes utilised thatched palm leaves, silt from salt marshes located near the creek, and coral stones. They also used the wind tower, locally known as 'Barjeel' for air ventilation and indoor cooling. These wind towers became a distinctive feature of the Emirate and allowed the people of Dubai to avoid the high temperatures of the summer months. For fresh water, the local people would draw water from wells found across Dubai. Additionally, the creek provided the inhabitants of Dubai with a main port that had a strategic position on the old commercial road between Europe and India. This turned Dubai into a water and supplies station for ships, which eventually developed into a commercial centre in the Gulf, where goods such as gold, pearls, and spices were traded. Due to the increasing prosperity, there was a greater need for water and electricity to meet the needs of the growing population.



HISTORY OF DEWA

The rapid development of Dubai as an expanding port city during the 1950's required a specialised authority for potable water production and power generation. Therefore, the Dubai Electricity Company and the Dubai Water Department were formed respectively in 1959 and 1961. The Dubai Electricity Company established its first two generating stations 'A' and 'B' between 1961 and 1973, to supply electricity through a modest distribution network. These stations depended on diesel fuel to run and had a total

capacity of 60 MW. The early presence of these electricity and water services, led to the rapid modernisation of Dubai. One of the first 360KW Diesel Engine-Alternator sets from 'A' station is displayed in our current headquarters, in Dubai. In 1992, the late Sheikh Maktoum bin Rashid Al Maktoum, Ruler of Dubai issued a decree for the institution of Dubai Electricity & Water Authority (DEWA) as an independent public authority to be fully owned by the government and responsible for electricity and water production in Dubai. Since then our generation capacity has expanded to 10,200 Megawatts (MW) and our water production capacity to 470 Million Imperial Gallons per Day (MIGD), as of the year 2017.

DEWA AT A GLANCE

Dubai Electricity and Water Authority (DEWA) is a Dubai government owned utility with the responsibility for supplying electricity and water to the Emirate of Dubai. DEWA owns, operates and maintains power stations and desalination plants, aquifers, power and water transmission lines and power and water distribution networks in Dubai. Our power generation and water desalination stations are mainly fuelled by natural gas. We buy gas exclusively from the Dubai Supply Authority (DUSUP), which is responsible for procuring, transmitting, storing and delivering to end customers all natural gas in the Emirate of Dubai. DEWA operates as an independent authority regulated by the Dubai Supreme Council of Energy. The Supreme Council of Energy is responsible for energy policy development, planning and coordination in Dubai and has broad regulatory powers including the power to set the water and electricity tariffs charged by DEWA.

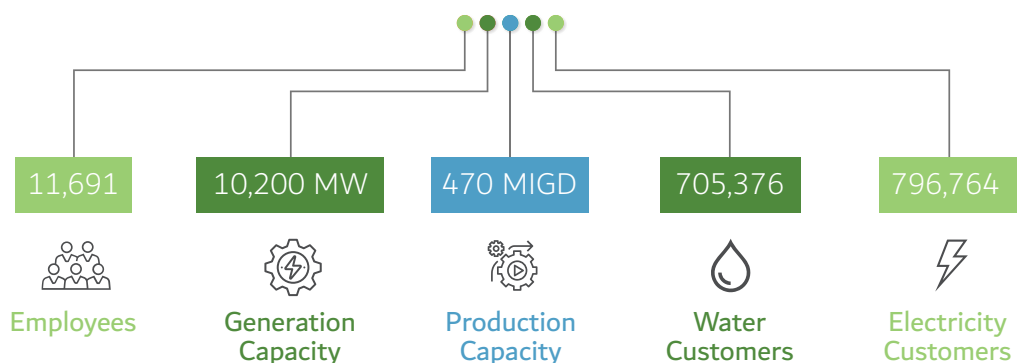


Although our main business activities are in the production and supply of electricity and water, we also have a number of other related business interests:

<p>DUCAB-HV manufactures and supply high-voltage cables and was established as a joint venture of DUCAB (50%), DEWA (25%) and ADWEA (25%).</p>		<p>DEWA owns 70% of EMPOWER, a major provider of district cooling services (DCS) in the region. Its activities include management, operation and maintenance of central cooling plants and related distribution networks.</p>
<p>Mai Dubai is a water bottling factory, fully-owned by DEWA. The company distributes bottled water within the UAE and export markets.</p>		<p>Dubai Carbon Centre of Excellence is an energy projects consultancy with a focus on renewable energy and carbon credits trading. DEWA has a 36% effective share in the company.</p>
<p>ETIHAD ESCO provides buildings energy efficiency services and is fully-owned by DEWA.</p>		<p>Innogy International Middle East (previously known as RWE Power International Middle East) is an energy projects consultancy owned 51% by DEWA and 49% by Innogy Consulting, the subsidiary of Innogy, a leading German energy company.</p>
<p>Jumeirah Energy International, Shuaa Energy 2 Holdings and Hassyan Energy Holdings are Special Purpose Vehicles owned 100% by Jumeirah Energy International Holdings LLC, which is DEWA's arm for investments in IPPs.</p>		<p>Data Hub Integrated Solutions is a wholly-owned subsidiary of DEWA that was formed to provide Data Center space, Cloud solutions, Managed Business Solutions and Managed IT services for DEWA and for external public and private entities.</p>
<p>Shuaa Energy 1 was established in 2015 under the Independent Power Plant model to complete the 2nd phase of the Mohammad bin Rashid Solar Park and produce 200MW of solar power. 51% belongs to Jumeirah Energy International and 49% to ACWA Power Solar Limited.</p>		<p>Noor Energy 1 Holdings, also owned 100% by Jumeirah Energy International Holdings LLC, was created in 2017 in order to hold 51% of Noor Energy 1, which is going to be the first CSP project company intended to generate 700MW of energy.</p>
<p>Shuaa Energy 2 is the new 800MW solar power plant established in 2016 to complete the 3rd phase of the Mohammad bin Rashid Solar Park with 60% belonging to Shuaa Energy 2 Holdings and 40% to Emirates Solar Power Company.</p>		<p>Jumeirah Energy International Silicon Valley Company (JEI Silicon Valley) a wholly-owned investment subsidiary of DEWA. It primarily looks for opportunities linked to R&D and innovation.</p>
<p>Hassyan Energy Phase 1 is the region's first clean coal IPP. It was created to provide 2,400 MW of power to DEWA's grid and contribute to Dubai Clean energy Strategy 2050 (DCES) target 51% is owned by Hassyan Energy Holdings and 49% by ACWA Power Harbin Holdings Limited.</p>		

The above related business interests are excluded from the reported data found within this report.

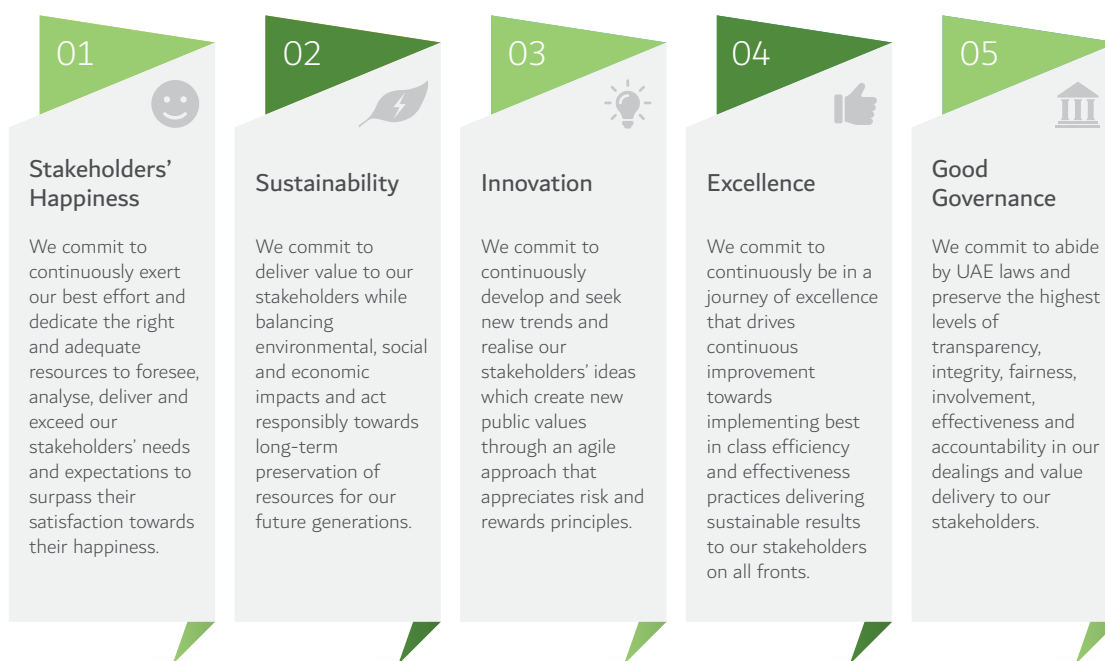
Key Facts About DEWA



OUR VALUES

At DEWA, we have defined a set of corporate values that clearly represent what we stand for. They serve as a road map for how we interact within the organisation and with others. Each value has a detailed definition, key behaviours and actions, to enable our people to incorporate those values in their daily work. These corporate values are reflected in our Code of Conduct, which is shared with all our employees in their employee handbook upon joining. The handbook is also accessible through our internal portal.

The importance of applying our values in practice is frequently emphasised by senior management as we firmly believe in leading by example. This is further supported by formal communications and feedback systems which enable our people to voice their opinions and provide feedback related to breaches of the Code of Conduct, the work environment and customer service, among others.



CORPORATE GOVERNANCE

DEWA has implemented the best principles of Corporate Governance for State Owned Enterprises in line with the recommendations of the OECD 2015. The guidelines of the World Bank and best practices of electricity and water providers worldwide have also been adapted and adopted. There is a comprehensive Governance Framework, Governance Policy and Governance Charter that has already been implemented.

DEWA is 100% owned by the Government of Dubai. Its nine-member Board is appointed by the Government of Dubai by a legal statute issued by the Ruler of Dubai. Eight of the members are independent and non-executive. The Managing Director and CEO is also appointed by statute. The MD & CEO is authorised to manage all the activities and functions of DEWA. The Board members declare any conflicts of interest / related parties. The Executive Regulations of the Board detail the scope and functions of the Board. The Board may also set up permanent or temporary committees whenever there is a need.

The Governance Framework includes the classic components of governance such as board oversight, a clear organisation chart and span of control, a well-documented strategy and proper delegation of financial and administrative authorities. There are a full suite of management level committees and comprehensive policies covering all functions. A Code of Conduct and Ethics and an Employee Handbook aid in dissemination of good governance elements within DEWA. In keeping with international guidelines, DEWA adopts the three lines of defence model with management and supervision being the first line; risk, compliance, legal and governance being the second line and internal audit as the third line. The external auditors and the government audit also enable a broad based control review system.

The Governance in DEWA also incorporates technology governance, project governance, procurement governance, sustainability governance and water governance.

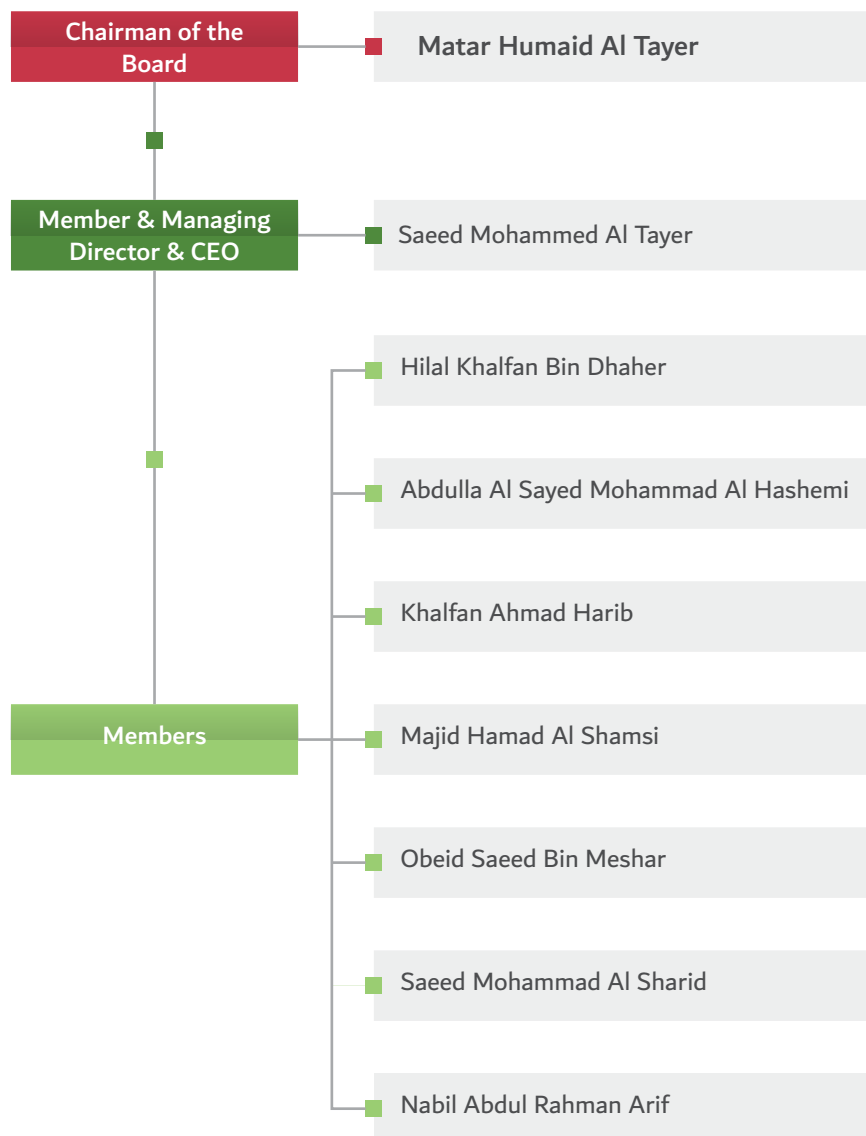
DEWA's Governance is certified compliant under British Standard BSi 13500 on Corporate Governance. DEWA has also won recognition and several awards for its good governance.



BOARD OF DIRECTORS

The Board of Directors of DEWA monitors all corporate activities, serving as the top decision-making body. The fundamental roles of the Board are to ratify DEWA's annual budget, approve electricity and water supply services, authorise and enter into agreements with external parties. The Board furthermore approves administrative, financial and technical affairs and issues governing regulations. As Dubai Government is DEWA's sole owner, the Board and its top officials are appointed directly by government decree. The current Board was appointed in 2015 and consists of 9 Members. Matar Humaid Al Tayer currently serves as Chairman of the Board, while Saeed Mohammed Ahmad Al Tayer is DEWA's Managing Director & Chief Executive Officer and a Member of the Board.

DEWA'S BOARD OF DIRECTORS



DEWA'S ORGANISATIONAL CHART

DEWA operates through both primary and supportive specialised divisions, and each sector includes its own organisational departments, sections and units that manage the sector's operations in accordance with key performance indicators, objectives and plans which support DEWA in delivering its services competently and efficiently.



COMMITTEES

The Management team is supported in its activities by a range of other committees, which consist of either Management team members or other individuals from DEWA's divisions. There are a number of other committees in DEWA such as the Grievance Committee, Personnel Committee, Women's Committee, DEWA Youth Council, Investment Committee, Tender Opening Committee, Local Purchase Committee, Corporate Risk Management Committee, Takaful and Theqa Committee, Admin Violation Committee, Scrap Verification Committee, Liquidated Damage Committee, DEWA Excellence Award Committee, Crisis Management Committee, Operation Committee, Engineering Committee, Enterprise Risk Management Committee, Health, Safety & Environment Committee, Corporate Governance Committee, Cyber Security Emergency Response Committee, ISO 50001 Energy Management System-Top Management Committee and others.

ASSOCIATIONS/ORGANISATIONS

DEWA is part of various national organisations, councils and committees that lead to fruitful partnerships in the energy and industrial sectors. These collaborations aim to further ensure best sustainability practices. These organisations include but are not limited to:



STRATEGICALLY DRIVEN

OUR STRATEGY

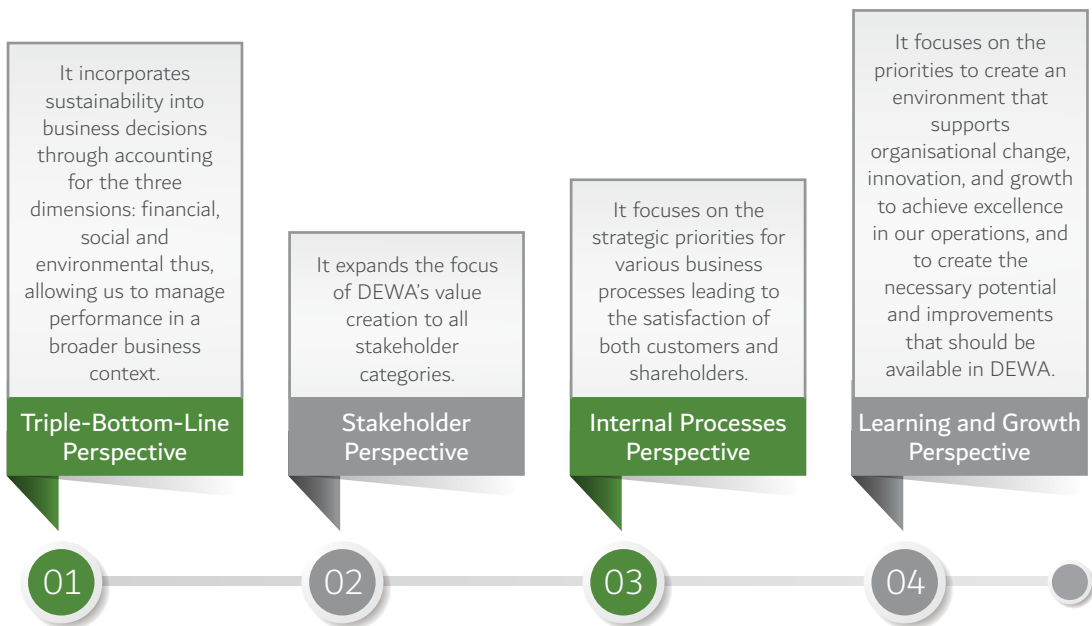
DEWA is strategically driven, continuously aligning itself to national and international strategies and goals. With new trends emerging in innovation & technology, customer service and excellence, sustainability remains at the heart of our business. It is the core of our strategy, vision and mission. Our understanding of sustainability extends beyond our own operations, into our supply chains, our communities, the wider society and Dubai's economy. This reflects the views of our stakeholders, who expect DEWA to lead as a responsible corporate citizen.

With an agile strategy in play, we continue to update and improve our strategy map to keep pace with the evolving agendas of Dubai and the UAE. We have accordingly adapted our strategy to include more focus on agility & governance, excellence and innovation, to enable us to look ahead for a sustainable future.

OUR STRATEGY MANAGEMENT SYSTEM

At DEWA, our strategy management process is implemented on an annual basis which is broken down into strategic objectives, corporate Key Performance Indicators (KPIs) and initiatives split across the four perspectives. Our strategy map is annually updated to keep pace with Dubai's ever growing and expanding plans and objectives. In 2017, we refined our strategic themes, perspectives and objectives to transform into an agile innovative organisation, adopting a comprehensive security model and commitment towards the happiness of our employees and stakeholders, while maintaining our commitment to achieve the Dubai Plan 2021. This 2017 update of our strategy also includes an optimised version of our corporate Balanced Scorecard that enhances focus on measuring progress towards achieving crucial strategic targets. At DEWA, we acknowledge that achieving our strategic objectives requires an agile strategic management for optimal decision making that focuses on top priorities.

The four perspectives which ensure that our strategy has a balanced focus on both enablers and results are:



STRATEGIC PLANNING APPROACH

At DEWA, we understand that sustainability is a journey, not a destination. As part of our strategic planning approach, we conduct thorough research and analysis which provides us with a holistic inside-out view of our operational context that delivers a sustainable roadmap of the organisation. We examine major emerging political, social, environmental, technological, legal, industry and market trends as well as our historical performance to identify our strengths, weaknesses, threats and opportunities. We consider a number of scenarios based on emerging trends and underlying drivers. We then identify the strategic implications over the specified time frame.

Two major contributing factors that play a critical role in formulating our strategy are:

1. Alignment with Dubai and UAE strategies to help achieve the vision of Dubai and the nation, and with international initiatives supported by the UAE.
2. Alignment with external and internal developments and uncertainty to ensure that DEWA is future-proof in order to achieve its objectives.



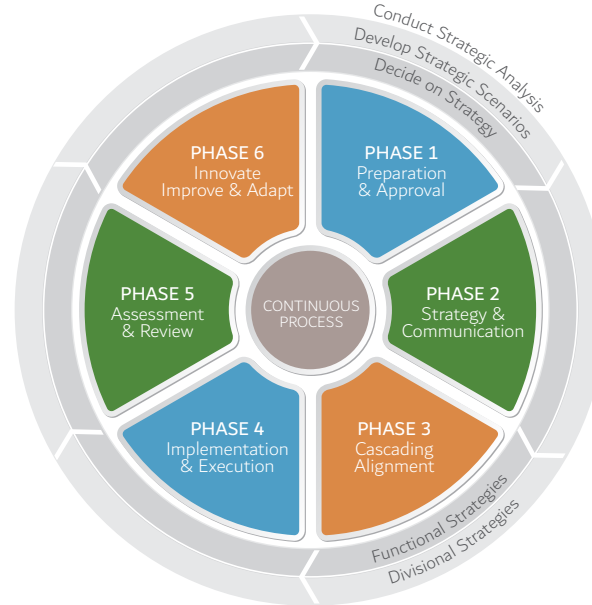
STRATEGY FORMULATION AND EXECUTION FRAMEWORK

DEWA applies an international best practice framework for developing, updating and executing its strategy. This approach ensures compliance with the five principles of a strategy-focused organisation:

- 01 Translate the strategy into operational terms
- 02 Align the organisation to the strategy
- 03 Ensure employees can relate these strategic objectives to their work
- 04 Continuously improve strategy
- 05 Mobilise change through strong, effective leadership

DEWA uses these principles as a foundation to develop its own tailor-made strategy process consisting of six phases, including two innovative elements: Strategic Scenarios and Functional Strategies.

Figure: DEWA's Strategy Formalities & Execution Framework



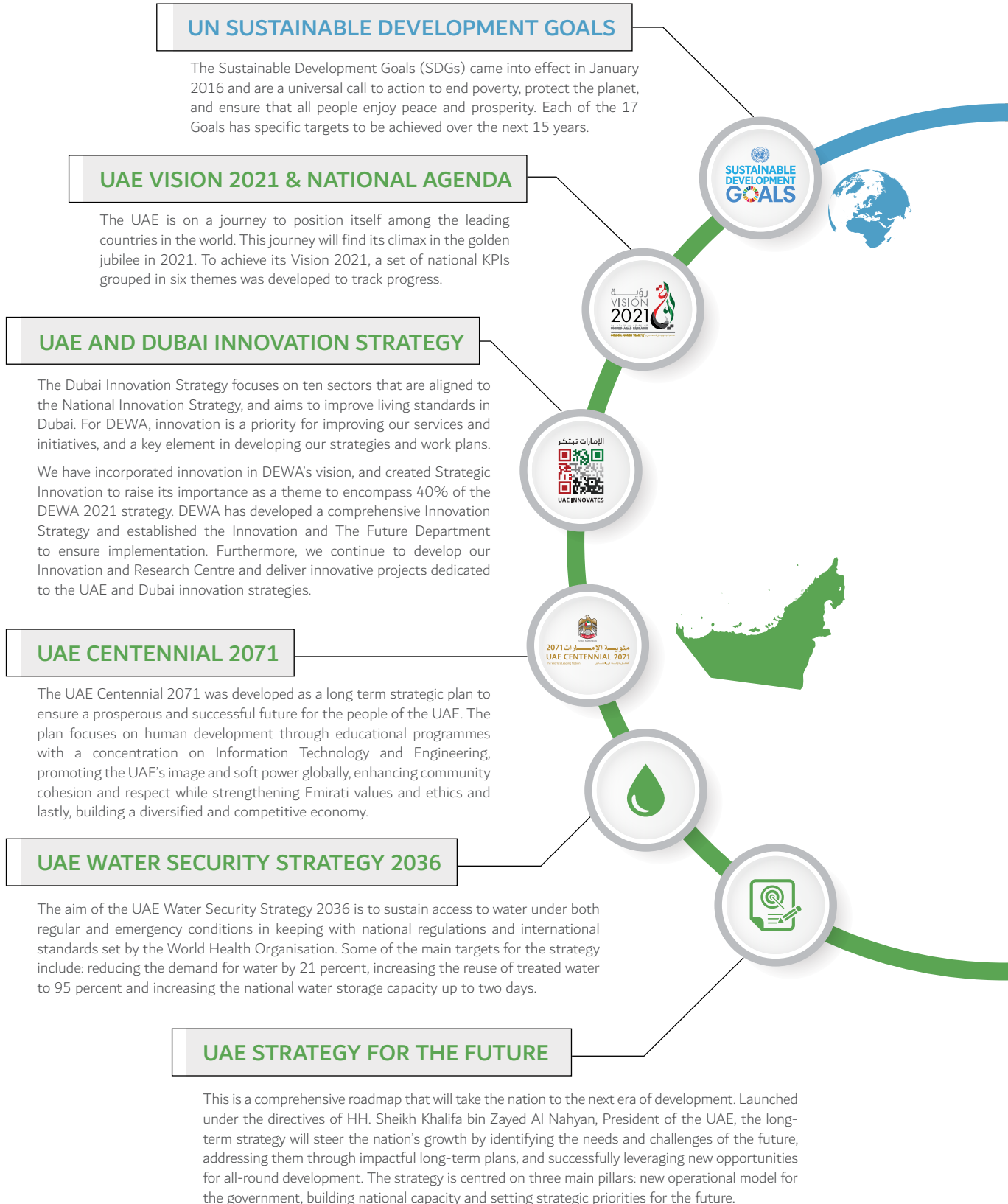
STRATEGIC AMBITIONS INTO 2021

There are five themes in our 2021 strategy through which DEWA will achieve its long-term sustainability goals:

- **Sustainable Growth:** Our strategy is rooted in reinforcing sustainability in all of DEWA's activities. Sustainable growth is our higher order goal that will allow us to mobilise our capabilities to contribute to the ambitious local and federal development plans, conserve our natural capital and ensure our lasting economic prosperity.
- **Operational and Smart Service Excellence:** Through our commitment to continuously improve Enterprise Asset Management, diligently work on safeguarding individuals through world-class health and safety practices and continuously improve the quality and values of the services we provide, we aim to deliver services that surpass the expectations of our stakeholders.
- **Agility and Governance:** We aim to support the transformative journey of DEWA2021 and its strategic direction by capitalising on our well-established good governance practices and further develop our corporate resilience framework.
- **10X the Future:** In the fast-moving energy and water sector, our ability to innovate is critical for preparing DEWA and Dubai for the future. This theme of our strategy will keep us focused on finding enduring and more appropriate solutions to the current and future challenges facing our business by investing in research & development and innovation.
- **Enablers of Success:** Underlying our entire strategy are our people and capabilities—these are the foundations upon which we implement our strategy. We remain committed to investing in our people and ensuring a happy, safe and productive work environment to support our business growth and success, while reinforcing and safeguarding the national identity of the UAE.

DEWA STRATEGY ALIGNMENT

Our strategy and roadmap are aligned to plans at a global, UAE federal and Dubai Emirate level.



SMART DUBAI

Smart Dubai is a strategy for transforming Dubai into the smartest city in the world by 2021 marking the nation's golden jubilee. It includes 100 initiatives transforming 1,000 government services into smart services. DEWA as a key stakeholder actively participated in the development of Dubai's Smart City vision and has launched three Smart initiatives: Shams Dubai, Smart Applications via Smart Meters and Grids, and Infrastructure and Electrical Vehicles Charging Stations.



DUBAI CLEAN ENERGY STRATEGY & DEMAND SIDE MANAGEMENT STRATEGY

The Dubai Clean Energy Strategy (DCES) 2050 sets targets for 7% of clean energy in the generation mix by 2020, 25% by 2030 and 75% by 2050, while the Demand Side Management Strategy 2030 aims to reduce energy and water demand by 30% by 2030. DEWA plays an essential role in achieving these goals by reinforcing the renewable energy sector and fuel diversification to meet the objectives of the DCES 2050, which maps out Dubai's energy sector over the next three decades.



CARBON ABATEMENT STRATEGY 2021

This Strategy sets the course of actions to be adopted by Dubai Government in order to manage Dubai's GHG emissions until 2021. It aims to reduce carbon emissions by 16% by 2021. DEWA covers power and water contributing to overall reduction target by 8% in 2021, equivalent of 5.15 MtCO₂e.



DUBAI GOVERNMENT EXCELLENCE PROGRAM

DGEP creates an environment that encourages government organisations to adopt excellence and innovation, respond to the challenges and enhance performance. Towards that, DEWA provides world-class government services and adopts international best practices. In 2017, DEWA won 5 awards during the 20th DGEP ceremony, including the "Leading Government Entity" category.



UAE AND DUBAI HAPPINESS

The UAE launched the visionary ambition of becoming happiest country in the world. The Happiness ambition is reflected both in the UAE Vision 2021 as well as Dubai 2021 Plan. DEWA is among the first government organisations to apply the Happiness Meter launched by HH Sheikh Mohammed bin Rashid Al Maktoum by launching a set of eight initiatives.



DUBAI PLAN 2021

Dubai Plan 2021 describes the future of Dubai through holistic and complementary perspectives that were divided into six themes. Each highlights a group of KPIs for Dubai that are aligned with DEWA's 2021 Strategy.



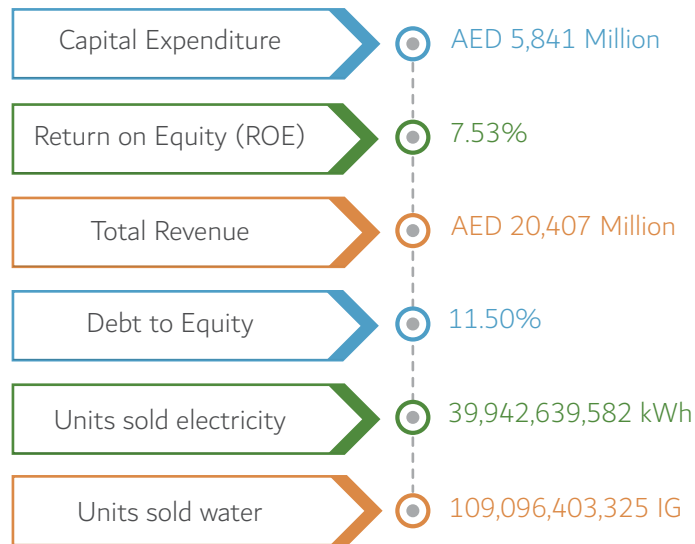
UAE STRATEGY FOR ARTIFICIAL INTELLIGENCE

The strategy is the first of its kind in the region and the world and it aims to achieve the objectives of the UAE Centennial 2071; boost government performance at all levels; use an integrated smart digital system that can overcome challenges and provide quick efficient solutions; make the UAE the first in the field of AI investments in various sectors; and create a new vital market with high economic value.

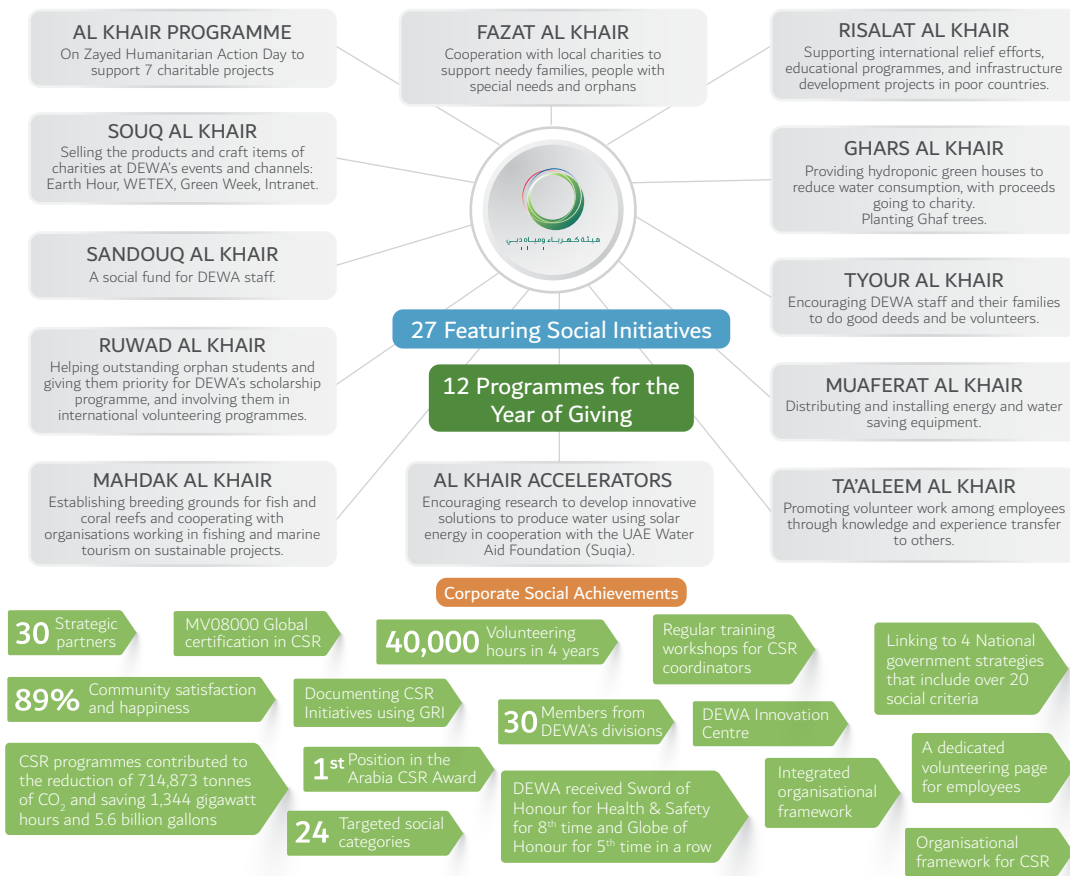


OUR ECONOMIC PERFORMANCE

DEWA is committed to long-term financial sustainability which is evidenced by our continuous efforts to optimise costs and investments, generate a consistent return for our sole shareholder, the Government of Dubai. In line with the UAE Vision 2021 and Dubai Plan 2021, DEWA has rolled out several initiatives to invest in a green economy, promote an innovative and knowledge-based environment and establish a smart and connected city. DEWA has achieved great success in attracting international investment into Dubai in its solar power projects through the IPP model. DEWA leads international benchmarks in technical, operational and financial sectors and it is among the select few utilities in the region with investment grade ratings from Moody's and Standard and Poor's in recognition of its strong financial profile, progressive management approach, consistent growth and focus on efficiency improvement.



YEAR OF GIVING



In line with the declaration of HH Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE that 2017 would be the Year of Giving, DEWA adopted 12 main programmes to implement 27 social and humanitarian initiatives. The Year of Giving focuses on three main themes aimed to enhance cohesion within the society, encourage social responsibility among the private sector and promote volunteerism among the various sectors of society.

A Higher Committee, chaired by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA was established for the purpose of approving and monitoring the progress of all programmes for the Year of Giving at DEWA.

The initiatives are implemented in cooperation with prominent local and international humanitarian organisations and government entities. To support our initiatives and promote volunteerism among our employees, DEWA launched a volunteerism website where employees can keep up to date with the latest initiatives and volunteering opportunities. The site provides a dedicated page for each volunteer that calculates their volunteering hours.

The social and volunteering programmes include: 'Risalat Khair' to support international relief efforts, educational programmes, and infrastructure development projects in poor countries. 'Souq Al Khair' sells the products and craft items of charities at DEWA's events and channels, such as Earth Hour, WETEX, Green Week, and through the employee intranet. 'Tyour Al Khair' distributes birdfeeders to DEWA staff and the people of Hatta. 'Sandouq Al Khair' is a social fund for DEWA staff.

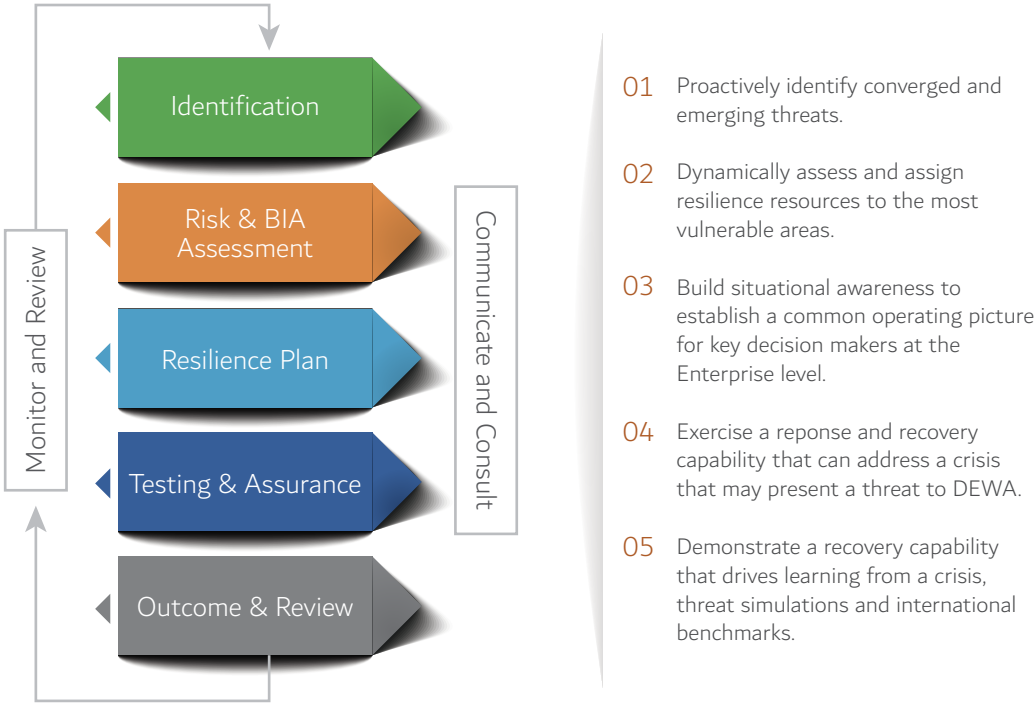
RISK & RESILIENCE

In a period of increasing complexity and uncertainty in the Power & Utilities sector, DEWA recognises the need to adapt to disruptive threats and challenges to continue to deliver its vision. This is DEWA's approach to Resilience.

Given the nature of DEWA's operations and environment, a converged approach to Resilience has been adopted and is being implemented across the organisation. This involves the convergence of Enterprise Risk Management (ERM), Business Continuity Management (BCM) and Crisis Management (CM) to optimise its resilience capabilities and absorb new types of converged risks.

DEWA has developed a Resilience Framework that defines its approach to resilience at an Enterprise level and provides a platform for sustainable and world-class implementation in readiness for the future. The adoption of the Resilience Framework will enable the following five leading capabilities in resilience:

Figure: DEWA's Resilience Framework



Enterprise Risk Management (ERM)

Enterprise Risk Management involves systematically understanding the risks appropriate to DEWA's activities and operating environment. The approach is consistent and compliant with the principles and guidelines set out in ISO 31000; the international standard for Risk Management. Progress on the status of mitigation plan development and implementation for the top corporate and strategic risks facing DEWA are reported to the Group Risk & Resilience twice a year.

Business Continuity Management (BCM)

DEWA's Business Continuity Management System seeks to identify the critical processes, associated risks and the impact they could have on critical operations. All of this information is determined when performing the Business Impact Analysis (BIA), which acts as the foundation in which Divisional Business Continuity Plans (BPS) are developed.

DEWA is compliant with National Emergency Crisis and Disasters Management Authority (NCEMA) 7000:2015; the National Standard for Business Continuity and is the first power & utility entity in MENA to be certified in ISO 22301: 2012. Certification is on track for the third consecutive year.

Crisis Management

Closely aligned to BCM is DEWA's Crisis Management system. DEWA has developed contingency plans to reduce the impact of a number of scenarios. Periodic audits and mock drills are performed to stress test and, where required improve performance and operations. DEWA is in the process of demonstrating compliance with BS 11200; the leading standard in crisis management practices.

INNOVATION & THE FUTURE

DEWA has adopted innovation as one of its five core values and embedded it within its vision and mission. In 2016, DEWA established its Innovation and The Future Division that merged two operating branches, the Creativity and Innovation Department and Information Technology. Creativity and Innovation at DEWA mainly revolve around three function areas: Innovation Planning and Relations, Innovation Facilitation, and Innovation Administration.

DEWA has obtained the European Specification Certificate on Innovation Management Systems (CEN / TS 16555-1-2013), since 2016 from British organisation Lloyds Register, for its preparation and application of an integrated system for innovation management. DEWA is one of the first government entities to adapt and acquire this accreditation. It provides guidance on establishing and maintaining an Innovation Management System (IMS) and further strengthens DEWA's commitment towards promoting innovation and creativity in adherence with the directives of the wise leadership, national objectives, and its vision to become a sustainable innovative world-class utility.

DEWA launched a 10-week programme to build internal capacity and empower its employees with the necessary skills to foresee changes in the energy and water sector. The programme is the first of its kind in the region and is delivered in collaboration with ExO-Works. Through the programme, DEWA's top management team worked with consultants from ExO-Works to enhance the understanding of disruptive technology and evaluate its use to develop proactive plans and strategies.

DEWA is inspired by the words of HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Board of Trustees at Dubai Future Foundation, who said:

“The future belongs to those who affect radical changes, not those who make minor, gradual improvements. The future will not be as patient with us as the present. Today, I am calling on all government leaders and employees to embrace disruptive innovation and find new, creative and truly disruptive approaches and technologies to delivering their mission rather than incremental and minor improvements. We are a young and energetic government who want to be leaders in disruptive innovation and technology.”



INNOVATION MAIN INITIATIVES & PROGRAMMES

AFKARI

This is the official creativity and innovation scheme in DEWA. It gives all employees an opportunity to contribute to the success of DEWA with their ideas.

Innovation Forces

It is a project that recognizes the creative minds in DEWA and inspires others to innovate. 5 DEWA innovators series of videos were released.

DEWA Innovation Portfolio

DEWA developed its first innovation portfolio to capture and identify the innovative projects across the entire organisation.

Free Electrons

This is a global energy startup accelerator programme to connect the world's most promising startups with leading utility companies to co-create the future of energy and innovative customer solutions.

Innovation Talk

I-Talk creates an environment that enables and encourages creative thinking, conducted by an innovative and high profile guest speaker for DEWA employees and the public. It spreads the culture of innovation and presents real experiences in many fields such as science, technology, business and, culture. This experience ensures employees get a critical insight in how innovation is planned and executed.

Shams Dubai Solar Roller

This challenge encourages students to design and race solar-powered remote control cars. It will infuse clean energy learning in the younger generation in a highly engaging manner.

DEWA Future Utility Cup

DEWA Future Utility Cup is a global competition to identify start-ups that provide innovative solutions for DEWA and possible business collaboration and partnerships.

Innovation Tool Kit

Innovation Department has created video tutorials for the different techniques of brainstorming to be used by all employees in DEWA and the public; in order to make meetings and brainstorming sessions more effective and engaging.

DEWA Hackathon

This is a competition based on ideas generation. Participants gain a number of proven practical tools to support creativity and innovative problem solving. The first Hackathon was conducted for DEWA employees to encourage them to create new ideas to develop DEWA's services and achieve the happiness of its customers and the second Hackathon was for university students.

DEWA Robotics Competition

This Build It Yourself Robotics kit project is for students from the ages 6 to high school level. These kits are also used in DEWA's Innovation Centres for employee training as they include the usage of light, IR and ultrasound sensors.

Ebtikari Platform

This is an open online competition platform which runs specific challenges on areas which are strategic for DEWA. Ebtikari aims to encourage inventors and designers from around the world to present their innovations using our smart platform.

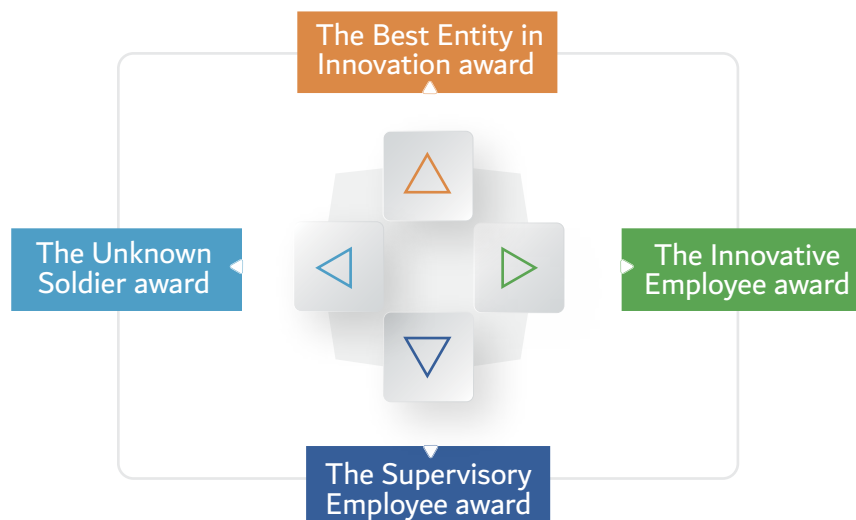
PIONEERS IN EXCELLENCE

Aligning with the directives of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to take the government performance to higher levels and supporting our vision to be a sustainable, innovative world-class utility, DEWA works within the main three themes of the Fourth Generation of Dubai Government Excellence Program (DGEP), to encourage and motivate employees and emphasise the importance of excellence as one of the most important ways of transforming the government of the future. DEWA adopted the Balanced Scorecard (BSC) and DGEP principles and guidelines. DEWA has adopted a clear and integrated approach to innovation, creativity, and the development of renewable energy technologies, as well as benefiting from the most successful experiences and the best international experiences in energy and water. This reinforces our leadership in the use of disruptive technologies, and in keeping pace with the Fourth Industrial Revolution, as well as the latest advances in the Internet of Things (IoT), Artificial Intelligence (AI), and robots; all of which are interconnected and closely linked to sustainable development.

The Fourth Generation of the DGEP aims to gauge maturity level reached by government entities in the journey towards leadership, and identify areas of improvement as well as opportunities to help them achieve ambitious goals. The implementation of the Fourth Generation has helped to motivate government organisations and encourage them to adopt excellence and creativity to develop government work in Dubai to the highest international standards, to achieve the happiness of customers and society in general.

DEWA's achievements have become a role model for excellence, locally and regionally. These achievements have contributed to DEWA receiving over 170 local and international awards and certificates over the past three years.

In 2017, DEWA won the leading Government Entity award at the 20th DGEP Awards. DEWA also won:





CASE STUDY

FIRST IN THE WORLD: UAE REPRESENTED BY DEWA RANKS FIRST IN THE WORLD FOR GETTING ELECTRICITY AS PER WORLD BANK 2018 REPORT

The UAE, represented by DEWA ranked first in the world in getting electricity, as per the World Bank's Doing Business 2018 report. The extensive report uses multiple criteria to measure the ease of doing business in 190 countries around the world.

This unprecedented achievement has been earned locally and globally, due to our adoption of an integrated strategy that makes the future a central focus of government work, to develop our services and initiatives as a basis for the development of strategies

and action plans. We have adopted innovation as a cornerstone for continuous improvement to enhance DEWA's competitiveness in all areas. DEWA adopts the best global research and development practices for the generation, transmission and distribution of electricity and water at the highest world class levels of efficiency, reliability, and availability, in order to achieve its vision of becoming a sustainable innovative world-class utility. We strive to consolidate the concept of integration, partnerships and cooperation between public and private organisations, in line with the efforts being exerted at all levels to achieve the objectives of the UAE to take the lead in the region and the world.

The contractors and consultants who actively participated in our innovation labs and seminars have played a key role in our development initiatives and for making recommendations for continuous improvements that facilitate and accelerate the mechanism of access to electricity services, in accordance with the highest international standards and practices. All this has contributed to the World Bank's assessment process.

DEWA's Al Namoos service is tailor-made to provide consultants and contractors with electricity connections of up to 150 kilowatts (kW) in just two steps from the earlier three within 10 days. The first step now only takes 8 days, and includes the application for electricity connections through low-voltage cables, with the first monthly bill postponed till after the electricity is connected. The second step only takes two days which includes technical inspection and operation of the final service.



SUSTAINABLE DEVELOPMENT





17 PARTNERSHIPS FOR GOALS

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

11 SUSTAINABLE CITIES AND COMMUNITIES

15 LIFE ON LAND

1 POVERTY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



7 AFFORDABLE AND CLEAN ENERGY

14 LIFE BELOW WATER

13 CLIMATE ACTION

5 GENDER EQUALITY

10 REDUCED INEQUALITIES

8 DECENT WORK AND ECONOMIC GROWTH

MANAGEMENT APPROACH

Sustainability is a crucial part of our identity as a leading utility in the region. It is reflected in our operations and strategy and is embedded into our workforce. With sustainability at our core, we continue to play a proactive role in aligning our strategic plans and operating model with the latest industry and market trends. We also continue to align and update our strategies to meet local and federal plans and strategies such as the Dubai Clean Energy Strategy 2050, the UAE National Agenda 2021, Dubai 2021, the National Innovation Strategy and, HH Sheikh Mohammed bin Rashid Al Maktoum's initiative, 'A Green Economy for Sustainable Development'. This commitment will lead to the long-term success of our organisation and ultimately the prosperity of Dubai.

Being the sole provider of electricity & water in Dubai, we acknowledge the responsibility that our organisation has in supporting all national and local development strategies and the impact that our operations have towards the success of these strategies. As such, we undertake all necessary steps towards making DEWA an industry leader by creating an equilibrium between our financial results, environmental performance, and our commitment to the wellbeing of the community of Dubai and the UAE, thus creating sustainable value for all.

At DEWA, Emiratisation is one of our vital strategic objectives. It not only contributes to the economic and social security of the UAE but also forms an integral part of our commitment to the community to achieve the strategic objectives of the Government of Dubai.

As one of Dubai's larger employers, we are committed to supporting and advancing the sustainable development of the UAE and therefore increase participation of Emirati nationals in this endeavour. In 2017, approximately 85.45% of our top management and leadership positions were held by UAE nationals. DEWA recruits, trains, and integrates UAE nationals at all levels of our organisation in an effort to enhance Emirati skills and ensure their continuous development.



SUSTAINABILITY GOVERNANCE

Our commitment to sustainability comes from the top of our organisation. The Climate Change & Sustainability Department under the Business Development & Excellence Division manages DEWA's corporate sustainability programme. The department works to align DEWA's strategy & objectives with international goals to reflect DEWA's journey towards achieving sustainable development.

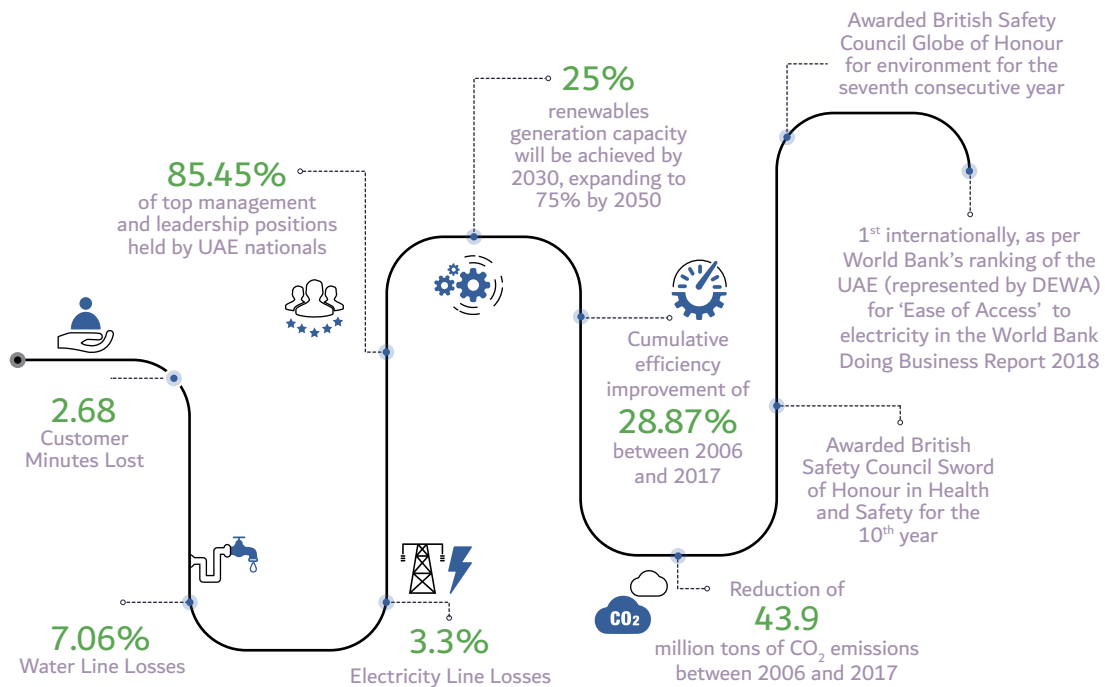
It also manages and implements DEWA's sustainability reporting, stakeholder engagement, national and international benchmarks relating to sustainability & climate change, awareness campaigns, DEWA's Emissions Reduction Programme, Carbon Offsetting, Climate Change Risks, Impacts on DEWA's operations and relevant Climate Change Resilience Plans, Mitigation and Adaptation Programmes within the Power and Water Sector and ISO 50001 Energy Management System (EnMS) of DEWA.

DEWA's Sustainability Leading Team (SLT) was established in 2013 to coordinate with other departments & divisions to obtain, review and verify data and information. The members of the SLT are composed of representatives from every division in DEWA and nominated by their respective Division Heads. Their role also complements the Climate Change & Sustainability (CC&S) team in raising awareness about the importance of sustainability, the effects of climate change and our mega projects. The SLT is chaired by the Climate Change and Sustainability Senior Manager.

DEWA's management team receives updates regarding sustainability issues from the Executive Vice-President of Business Development & Excellence, who is also a member of DEWA's management team.



2017 SUSTAINABILITY MANAGEMENT HIGHLIGHTS



OUR SUPPLY CHAIN

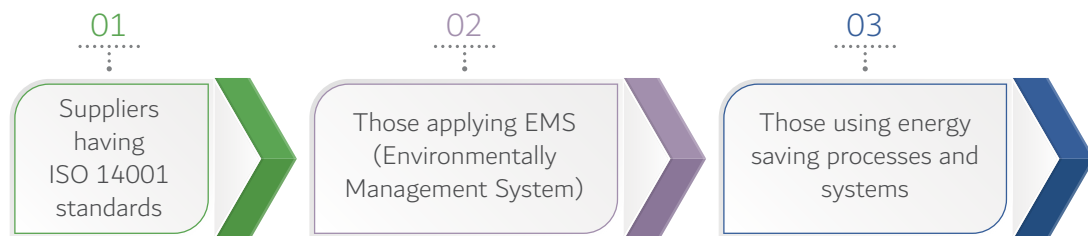
At DEWA, we understand that our overall environmental and social impacts extend beyond our own direct operations. Therefore, we have implemented a policy of procuring Plants and Systems which have minimum or no environmental impact and which are of a higher efficiency. During 2017, we worked with a total of 2,597 suppliers, of which 28 are strategic suppliers, 229 core suppliers and 2,270 basic suppliers. Thus, we consistently strive to involve local businesses in our operations and supply chain, which helps build capacity locally and fosters economic growth in Dubai and the wider region. We also have a policy of fostering young entrepreneurs and local business. During 2017, we conducted 12,178 local transactions, equivalent to approximately AED 5 billion which is 84% of the total spending. In DEWA, we consider local companies as companies which are physically located in UAE and have a valid trade license.

We aim to roll out our Green Procurement Programme throughout our supply chain. The programme aims to assess the environmental consequences of the products purchased by DEWA at the various stages of the product's lifecycle to minimise procurement of products with adverse environmental impacts. We are also interested in purchasing products that reduce energy, contain recycled materials, are less toxic, help conserve water and address social impacts. At DEWA, we are committed to business practices that adhere to international standards. Well defined strategies and commercial terms and conditions are in place to eliminate, mitigate or transfer procurement related risks. To reduce vulnerability and ensure continuity of our key suppliers, DEWA has developed a Supply Chain Risk Management Framework, in line with ISO 31000, which identifies and analyses exceptional risks along our supply chain based on continuous risk assessment.

For ease of operation and accessibility, all interactions with the suppliers have been made online and through smart devices. Few examples are:

- Development of smartphone application for suppliers that provides them with instant and real-time access to Supplier Relations Management (SRM) data and services.
- Introduction of Bidaya initiative to qualify Small & Medium enterprises (SMEs) and uplift their performance.
- Adoption of Advanced Shipping Notification (ASN) and Online Service Entry (SE).
- Provision of a platform for suppliers to log & track their invoices through DEWA's SRM Portal.

We screen green suppliers based on their environmentally friendly products and energy saving concepts on the following criteria:



We have an annual KPI which is the percentage of green suppliers out of the total registered suppliers. While our target in 2017 was 10%, our actual achieved was 6%.

STRATEGIC PARTNERSHIPS ALONG THE VALUE CHAIN

Partnerships have been a fundamental pillar to the success of our organisation in service delivery, achieving strategic objectives and contributing to the implementation of our strategic plan. DEWA engages in strategic relationships with suppliers, customers and other business partners. Such strategic partnerships help reduce transaction costs by building trust, enabling economies of scale, supporting risk management and fostering the exchange of knowledge, technology and best practices. DEWA has signed more than 27 MoUs during 2017. In addition, the average of effectiveness of the signed MoUs reached 93%.

DEWA categorises its partners as either strategic or main based on their degree of importance and the intensity of their impact on DEWA. Through our dedicated Partnership Portal, we have further enhanced and strengthened relationships with our partners, while achieving integration with other government organisations within the UAE. Our partner's happiness rate increased by 4.8% compared to 2016. This is reflected by continuously engaging with our partners through a number of workshops organised annually.

Each year, we sign MoUs for new partnerships with businesses, academic institutions and other organisations to further promote DEWA's economic, social and environmental responsibility and operations. For continuous improvement, 4 new initiatives will be implemented in 2018, which will contribute to improve partnership performance and increase their happiness.

RESEARCH AND DEVELOPMENT

In line with our vision to be a sustainable, innovative, world-class utility and strengthen the efficiency and reliability of electricity generation, distribution and transmission, DEWA is developing world-class Research and Development facilities, initiatives and capabilities.

The R&D centre aims to support DEWA's vision to promote sustainability in energy supply, diversify energy sources, and create a business environment that encourages innovation. It also aims to support Dubai's strategy to build a knowledge-based economy by improving efficiency standards and supporting renewable energy initiatives. The Centre will contribute to strengthening Dubai's position as a global hub for Research and Development in renewable energy, clean technologies and sustainability related initiatives. DEWA R&D will also enhance capacity building in these areas to enable Dubai to meet the requirements of sustainable development in the Emirate.



Currently, we are completing the R&D facilities at the Mohammed bin Rashid Al Maktoum Solar Park, with a total investment of AED500 million up to 2020. Infrastructure includes a state-of-the-art 4,000 square metre R&D centre that will host most of the R&D activities (operational by end of Q1 2018); an Outdoor Testing Facility for studying solutions and equipment under the harsh and hot environmental conditions of the UAE (operational since 2015), and the first-ever 3D-printed lab for R&D on Drones, Robotics and Artificial Intelligence (commissioned in Q3 2017 and currently operational).

Additionally, we are developing the Smart Grid Integration lab, which will be equipped with a grid simulator capable of testing up to six energy storage systems in parallel, each with a power rating up to 250 kW. At present, in our Outdoor Testing Facilities we are testing and benchmarking the performance of different commercial PV (30 panels of different technologies at different tilt-angles, produced by different manufacturers)



and Building-Integrated Photovoltaics (BIPV) technologies, suitable procedures and solutions for O&M efficiency in PV plants, Reverse Osmosis for water desalination (100 kW system) and Atmospheric Water Generation solutions.

The R&D department can count on a strong and diverse team (international and national scientists and engineers), with a great balance of experienced hires and university graduates from global and regional institutions. DEWA R&D's comprehensive projects portfolio is organised across 5 areas, namely (a) solar, (b) water, (c) energy efficiency, (d) smart grid integration & energy storage, (e) robotics & AI. These R&D areas and related programmes have been developed in alignment with the DEWA strategy, as well as national strategies including Dubai Clean Energy Strategy 2050, UAE National Agenda 2021, UAE Energy Strategy 2050 etc.

Examples of ongoing projects include soiling mitigation for solar panels, Virtual Power Plant (VPP) pilot development, testing of components and development of interfaces and intelligence for smart grid applications, development of drones and AI / advanced-analytics solutions for different utility applications, and 3D printing of components and facilities for our core operations. Additionally, we are exploring opportunities for engagement in R&D activities and providing internal consultancy and due diligence services on topics spanning from solar-to-chemicals hydrogen electrolysis and fuel cells, to wind, autonomous vehicle etc.

Finally, DEWA R&D is organising two editions of the Solar Decathlon Middle East, one in 2018 and one in 2020. Projects will be focused on solving the issues and needs for sustainable living in this region.

Additionally, DEWA is building a strong network of local and international partnerships and collaborations with industry and academia. The quality of DEWA's work has already been recognised internationally, through contributions to international conferences, publications in international journals and involvement in world-class collaboration networks. The knowledge and IP generation within R&D will contribute to sustaining innovation

and excellence at DEWA for years to come. This will provide the UAE with opportunities for further home-grown development and commercialisation of technologies, as well as for the development of the future generations of scientists and engineers for DEWA and UAE.



DEWA SUSTAINABILITY WEEK 2018

To continuously improve and evolve, we have expanded our Sustainability Leadership Conference into a Sustainability Week. The main objectives of DEWA's Sustainability Week includes knowledge sharing, awareness building and comprehensive involvement of all our employees. It also has an array of cross-cutting sustainability topics from perspectives across various sectors and disciplines as well as key issues that call for urgent action at all levels covered by multiple experts. The participants range from CEOs, specialists, DEWA employees, youth and volunteers.

Sustainability Leadership Conference-Leadership Summit

The week started with a two-day conference in collaboration with the University of Cambridge Institute for Sustainability Leadership. The first day was dedicated to strategic priorities and decisions and was available to CEOs, heads of institutions, operational heads and operators. The overall aim of the programme was to support the adoption of sustainable and innovative practices in DEWA and key organisations in Dubai and the region. The key theme for this year was 'The new drivers of security, stability and prosperity'.

Executive Masterclass: DEWA and the Sustainable Development Goals

The second day of the conference was designed for DEWA Vice Presidents, Senior Managers and practitioners across different divisions. The conference provided participants with common messages, new knowledge and insights, and the employees learned more about how their division can align with the SDGs and how to develop and operationalise strategies to implement them.

Youth Sustainability Forum

This day marked DEWA's First Sustainability Youth Forum, which was designed for the youth in both government and private sectors, including DEWA's employees. It was organised in collaboration with DEWA Youth Council and Dubai Youth Council. The forum hosted youth and leading experts from various sectors in the UAE to discuss topics on sustainable development, innovation, as well as, to engage in interactive sessions aimed at finding sustainable solutions to global challenges.



Sustainability Initiatives Day

This day was dedicated to DEWA's Sustainability Leading Team Members (SLTs) who have taken part in a competition for the best Sustainability Engagement Initiative. DEWA employees were asked to vote for the best initiative that increased knowledge on sustainability & climate change and encouraged employee engagement within the division. The top 3 winners of the best engagement initiatives were from Distribution Power Division, Power & Water Planning Division and Water & Civil Division.

DEWA Volunteering Day

In line with the Year of Zayed, the last day of the week was dedicated to volunteerism. DEWA employees volunteered at a beach clean-up in Jebel Ali Marine Sanctuary. The event concluded the first Sustainability Week where DEWA employees collected litter and cleaned mangroves trees at the Jebel Ali Marine Sanctuary. The aim was to promote environmental awareness and instill the values of volunteerism among the staff, as well as, to encourage our employees to make a conscious effort to preserve natural resources.

STAKEHOLDER'S ENGAGEMENT

At DEWA, we cherish our stakeholders, and ensure that they have the maximum level of satisfaction starting from our employees and ending with our customers, government, society, suppliers and partners. Our stakeholders include group of individuals, or institutions that contribute vitally in achieving DEWA's mission. Therefore, we ensure that our stakeholder's happiness is set through the core strategy in terms of providing reliable electricity and water infrastructure that is needed to ensure sustainable economic growth in Dubai.

There are different channels that we aim to connect with our stakeholders and those include satisfaction surveys and road-shows, joint ventures and collaboration with government authorities on regulatory priorities as described throughout this report. To ensure effective communications, these channels occur on a regular basis.

Through our stakeholder management framework, we aim to identify the methods of delivering the best and most inclusive engagement to ensure valuable outcomes, in alignment with the principles of both the AA1000 Stakeholder Engagement Standard 2015 and the Global Reporting Initiatives' Sustainability Reporting Standards.

Our key strategic objectives relating to our stakeholders include:



DEWA STAKEHOLDERS 2017

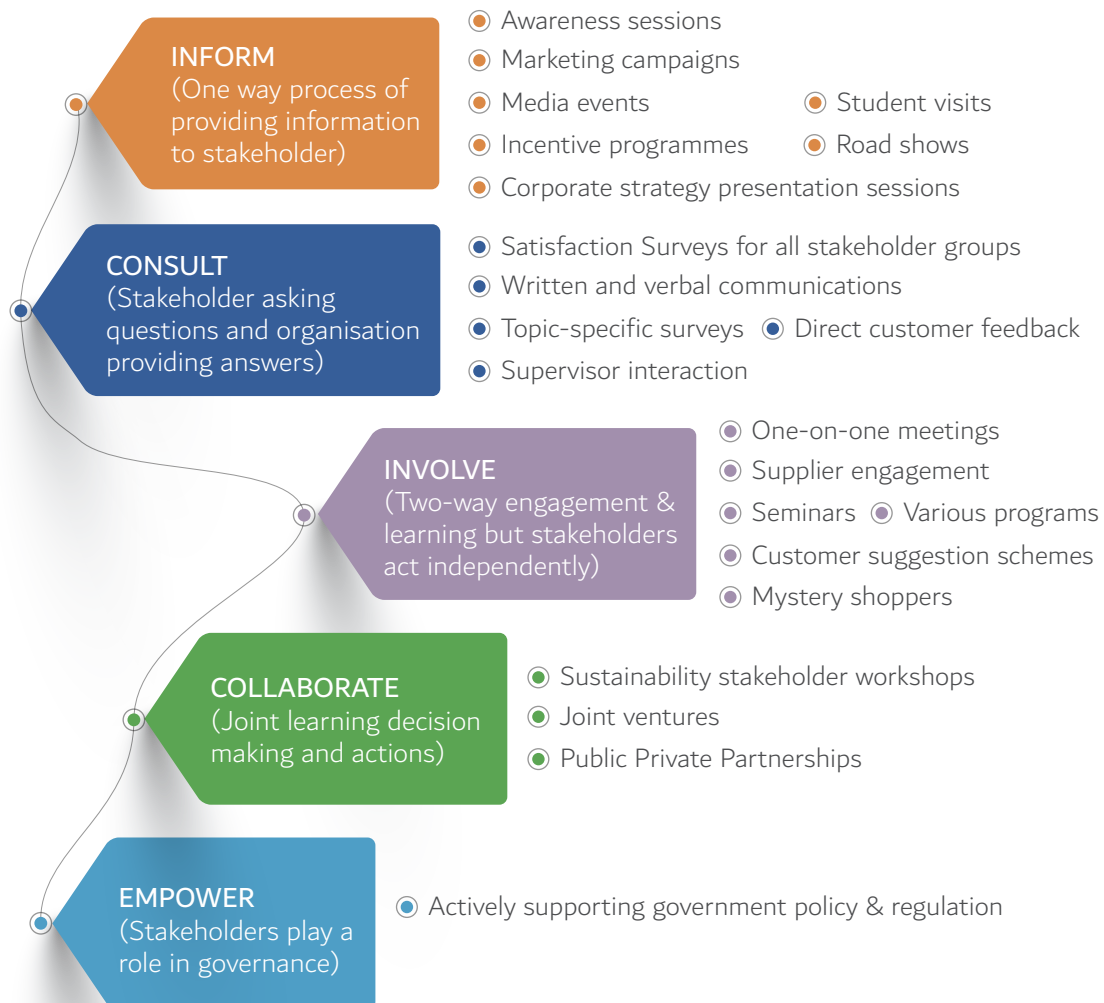
DEWA's stakeholders have been identified through a stakeholder prioritisation exercise, ranking them in terms of 'power' and 'interest' for each one of DEWA's activities. The Strategy Department is responsible for reviewing the list on an annual basis and updating it if necessary as well as ensuring that DEWA's strategic plan includes fulfilling the needs and expectations of prioritised stakeholder groups.

	Stakeholder Group	Stakeholder Sub-group
	Providers of Capital/ Investment	Institutional investors, local and foreign banks, financial services
	Government	Federal, Local
	Society and Future Generations	Environmental entities, general public, media
	Customers	Residential, commercial, industrial
	Partners	Strategic partners, main partners
	Suppliers/ Sub-contractors	Strategic, basic, core
	Employees	Top management, middle management, non-supervisory





DEWA STAKEHOLDERS ENGAGEMENT ACTIVITIES



STAKEHOLDER NEEDS & EXPECTATIONS

At DEWA, we aim to adopt both a consistent and transparent approach when engaging with our stakeholders. Therefore, we engage with our stakeholder groups in a variety of ways. For every category of stakeholder, the following table shows the most important needs expressed during our engagement activities.

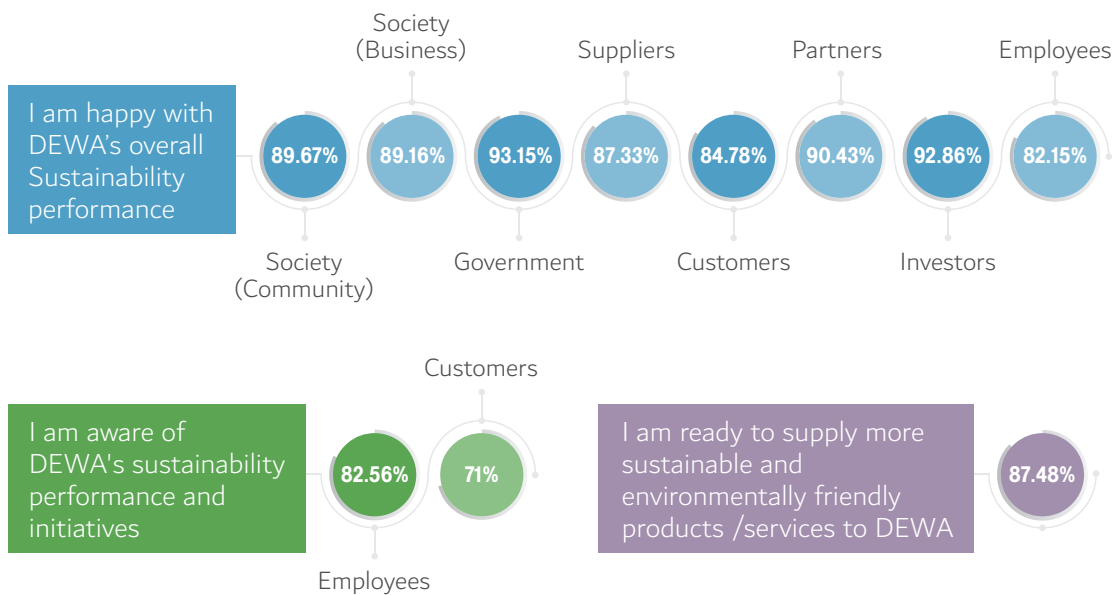
STAKEHOLDER CATEGORY		NEEDS & EXPECTATIONS
Government		<ul style="list-style-type: none"> ▶ Aligning with national development plans & programmes ▶ Commitment to good citizenship ▶ Regulatory compliance
Customers		<ul style="list-style-type: none"> ▶ Quality safety and cost - effectiveness of service ▶ Ethical business ▶ Reducing the environmental impact of organisation activities
Employees		<ul style="list-style-type: none"> ▶ Secure working environment ▶ Competitive salaries ▶ Ethical behaviour ▶ Career progression & recognition ▶ Non-discrimination & equal opportunities ▶ Investment in professional development
Partners		<ul style="list-style-type: none"> ▶ Sharing best practices ▶ Continuous and systematic dialogue and engagement ▶ MoUs to collaborate on issues
Society and Future Generation		<ul style="list-style-type: none"> ▶ Transparency and effective communication ▶ Raising awareness on sustainability issues ▶ Supporting social and cultural initiatives ▶ Management of environmental impacts of organisation activities
Suppliers		<ul style="list-style-type: none"> ▶ Supplier qualification based on cost and quality including environmental and social assessment ▶ Transparent procurement processes ▶ Profitability
Providers of Capital / Investors		<ul style="list-style-type: none"> ▶ Creating value in the short & long term ▶ Reliability, Profitability, Transparency

STAKEHOLDER HAPPINESS

Our annual Stakeholder Satisfaction Survey addresses our stakeholder's expectations regarding several issues related to DEWA and each respective stakeholder group. Stakeholder happiness is an important part of our strategy at DEWA and it is embedded in our vision, mission, motto, and corporate values. As such, through the Stakeholder Satisfaction Survey, we aim to capture the effectiveness of our initiatives and efforts to raise awareness around sustainability practices. The survey addresses key issues relating to sustainability overall, including specific questions addressed to each stakeholder group. The outcomes from the survey are used to analyse gaps in our approach to Stakeholder Happiness and evaluate areas for further improvement.

The results of our 2017 stakeholder satisfaction survey reveal that the majority of our stakeholders were happy with our sustainability performance while the majority of our suppliers are ready to promote more environmentally-friendly products as a result of DEWA's focus to manage and improve sustainability performance throughout its supply chain.

RESULTS OF STAKEHOLDER SUSTAINABILITY SATISFACTION SURVEY 2017



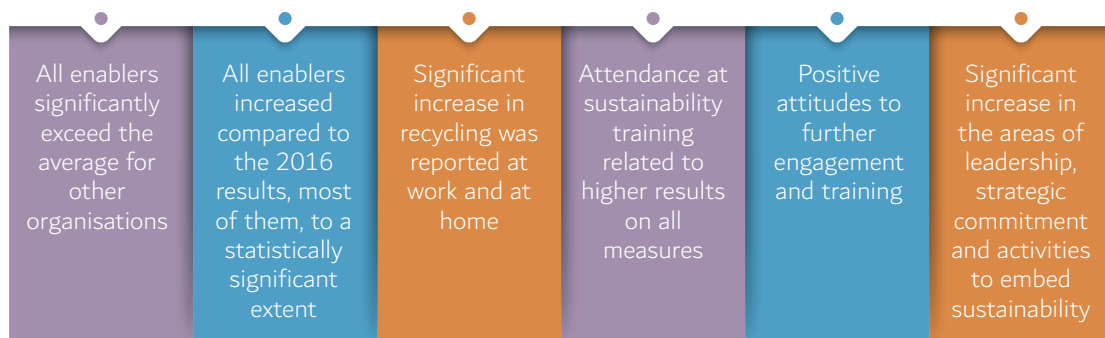
SUSTAINABILITY CULTURE INDICATOR

In an effort to further track our progress in embedding sustainability in our organisational culture and evaluate the effectiveness of our various engagement activities, DEWA utilised the Sustainability Culture Indicator (SCI) for the 4th consecutive year. The SCI is a third-party produced employee survey, which measures the extent to which sustainability has been embedded within the culture of an organisation, including factors that measure organisational enablers, individual enablers and behaviours inside and outside the organisation.

DEWA's effort with regards to sustainability was rated 88.83% exceeding the average of all other organisations who have completed the SCI (62%). It has become evident that DEWA's employees have more knowledge about sustainability and that they are actually practicing it at work and in their communities. This knowledge has increased as a result of the intensive awareness campaigns conducted by the Climate Change & Sustainability team throughout 2017 with the support of the Sustainability Leading Team members.

For 2017, we had more than 3,000 employees participating in our campaigns, compared to 2014, which had only 400 employees. This consistent increase indicates that sustainability is steadily becoming more strongly integrated into the culture of DEWA.

The following main areas of strength have been identified for DEWA:



DEWA'S STAKEHOLDER ENGAGEMENT WORKSHOP ON SUSTAINABILITY

Stakeholder Engagement is vital in our approach to sustainability and a cornerstone in DEWA's Corporate Sustainability Programme. For the year 2017, the Sustainability and Climate Change department organised specialised stakeholders' engagement workshops for the fifth consecutive year.

Engaging with our stakeholders is essential for understanding their expectations, needs and concerns. Throughout the sustainability session, we invited stakeholders' feedback on our sustainability approach and our Sustainability Report. We discussed their concerns and expectations and finally ranked each topic on importance considering the key impact areas to our stakeholders.

In line with our continuous efforts to improve our internal processes by adopting first new trends as per international best practices for this year, we have used a new innovative online platform called 'ThinkTank' for participants to raise their concerns, vote on material topics and interact in real time.

Overall, the stakeholders' engagement sessions covered the three main points below:



Our stakeholders' feedback was utilised as a basis for the 2017 materiality process and has also been acknowledged in decisions about the review of the annual corporate strategy planning.

MATERIALITY ASSESSMENT

One of the fundamental guidelines of the Global Reporting Initiative is the concept of materiality. An organisation is required to report on those matters which have the most significant economic, environmental and social impact, or those matters viewed as most significant by its internal and external stakeholders. Within this context, and in order to ensure that we have identified the topics that affect our stakeholders, we have conducted a materiality analysis in line with the GRI Standards. Materiality is the process of identifying the most important sustainability topics for DEWA. It helps us identify and prioritise the issues we should focus on, in our strategies and programmes and report on, in this edition of our Report. In selecting and ranking our material issues, we have used a detailed procedure based on the principles of relativity, importance, and ranking, as seen below:



Determination and understanding of the issues deemed significant to our stakeholders, through a process of research and focus groups made up of employees, government, society, suppliers, partners and customers, through benchmarking in the electricity and utilities sector, and through alignment with UAE Federal and Dubai Emirate sustainable development objectives.



Identification and understanding of significant issues, as these arise from the corporate strategy of DEWA, through internal procedures. For issues which can be measured in quantitative terms, such as greenhouse gas emissions, there are recognised methods of determining their materiality. For issues of a qualitative nature, various methods were used to assess their materiality, with the involvement of stakeholders and also through a benchmarking process.

 STEP 3

Bringing together of the results into a matrix, an evaluation of each issue was conducted on the basis of its social, environmental and economic impact. Each issue was evaluated and given a materiality ranking in accordance with its impact to our stakeholders and to the organisation's impact on the environment, the society and economy of the area it operates. Subsequently, the final materiality matrix was reviewed and approved by DEWA's Senior Management, with the issues located in the top right corner of the matrix regarded as the most material.

 STEP 4

Subsequently, the report included all issues with the highest level of materiality. Issues of less materiality are mentioned only if they are affected by or dependent on issues of greater materiality.

 STEP 5

DEWA obtained independent limited assurance from an external third party provider, KPMG, who reviewed selected performance areas disclosed in this report. (Please refer to the assurance statement at the back of this report)



The results of our 2017 materiality assessment process are illustrated in the materiality matrix below. This shows the relative importance of each issue for DEWA's performance and for our stakeholders. The boundaries for each material aspect can be found in Appendix 1.



ECONOMIC

- 1. Economic Performance
- 2. Procurement Practices
- 3. Innovation
- 4. Availability and reliability
- 5. Demand side management
- 6. Research and development
- 7. System efficiency

ENVIRONMENTAL

- 8. Energy
- 9. Water
- 10. Emissions
- 11. Effluents and waste
- 12. Environmental Compliance
- 13. Supplier Environmental Assessment

SOCIAL

- 14. Employment
- 15. Occupational health and safety
- 16. Training and education
- 17. Diversity & Equal Opportunity
- 18. Non discrimination
- 19. Local Communities
- 20. Disaster/Emergency Planning and Response
- 21. Customer Health and Safety
- 22. Customer Privacy
- 23. SocioEconomic Compliance
- 24. Access
- 25. Provision of information
- 26. Stakeholders Happiness



DEWA & THE SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Goals (SDGs) represent a global strategy for achieving economic growth that is consistent with the planet's carrying capacity, society's basic needs and priorities, and the capabilities and stability of the economy. Achieving them will be both a unique opportunity and a profound challenge. With businesses contributing nearly 60% to global GDP the transition will be impossible without their active participation.

A strong commitment to sustainability was also clearly articulated by His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai when he set out the UAE Centennial 2071 plan in early 2017. He noted: "Establishing a long-term strategy based on a vision for happy future generations will guarantee sustainable development and lasting joy for decades in our country."

It is clear that a long-term vision has been set out for the UAE to ensure that the country can achieve a sustainable trajectory in all aspects of its development and expansion. This vision has been encapsulated in a number of documents and plans, such as: the UAE Vision 2021, the Dubai Plan 2021, and the Dubai Clean Energy Strategy 2050.

DEWA's vision is well aligned with the aspirations set out in the SDGs. Our support for the Sustainable Development Goals (SDGs) includes incorporating them internally and communicating them to its primary stakeholders.

Our Top Management holds in-depth internal discussions, including workshops and awareness campaigns where all DEWA employees learned about the SDGs and their importance to our business. For DEWA to successfully implement the SDGs; we had to prioritise the goals that are aligned with our core business without neglecting the rest.



Through our internal platform Afkari ('My Ideas'), we invited our employees to post their ideas on the SDGs and how DEWA can make the greatest contribution. We are using the different opinions, perceptions and ideas to find new ways to be sustainable.

We have communicated our sustainability progress and SDG contribution in our 2016 Sustainability Report and since 2017 we have started aligning DEWA's Corporate Strategy and main strategic goals with the Global Goals, identifying both our short and long-term goals and areas of opportunity.

As the majority of DEWA's projects and initiatives are already consistent with the SDGs, we consider that all the SDGs are relevant to DEWA's operations to varying degrees and we are already contributing to many of these goals. In 2017, we prioritised six of the goals that have particular significance for DEWA across our operations.



The below goals are also considered an important priority for us :

 GOALS 5 Gender Quality	 GOALS 11 Sustainable cities and communities	 GOALS 14 Life below water
 GOALS 16 Peace, justice and strong institutions	 GOALS 17 Partnerships	

These priorities go beyond what a water or electricity utility would see as directly material and instead reflect our status as a major employer, community partner and player in the country and markets within which we operate.

Our primary contribution to the above SDGs is highlighted throughout this report.

OUR COMMITMENTS FOR A SUSTAINABLE FUTURE

At DEWA, we are committed to improving our sustainability performance and therefore we have set the following commitments for sustainable development:

- 01 To ensure sustainability is fully embedded into our business strategy.
- 02 To ensure our constant alignment with national and international strategies and best practices.
- 03 To increase our direct and indirect economic contribution to the Dubai economy.
- 04 To maintain world-class standards of quality, reliability, efficiency, availability of electricity and water supply for Dubai.
- 05 To invest and develop renewable energy technologies.
- 06 To continue to improve our stakeholders' happiness.
- 07 To minimise our environmental footprint and ensure that our operations satisfy all environmental regulatory controls.
- 08 To increase solar capacity to 7% by 2020 and 25% by 2030.
- 09 To contribute to the Dubai Carbon Abatement Strategy that targets the reduction of CO₂ emissions by 16% in 2021.
- 10 To improve water efficiency within our production and distribution networks.
- 11 To reduce our employee turnover rate and increase the proportion of UAE nationals in our workforce.
- 12 To further integrate green procurement into DEWA's entire supply chain.
- 13 To further implement new CSR projects to create shared value and assess the social impact.
- 14 To contribute to Dubai's Smart City Initiatives with:
 - "Shams Dubai" (Connecting solar energy in houses and building)
 - Smart Applications via Smart Grid and Meters
 - Infrastructure and Electric Vehicles Charging Stations



In 2017, DEWA became a signatory of the UN Global Compact, which constitutes the world's largest corporate sustainability initiative with 13,000 corporate participants over 170 countries. The Global Compact is based on ten fundamental principles relating to human rights, labour, environment and anti-corruption. We are committed to these principles, which are integrated in the policies and processes of the organisation.

DEWA uses the 2017 Sustainability Report as its Communication on Progress for the UN Global Compact (UNGC). Throughout the report there is information related to our social and environmental practices which underline our commitment to the Global Compact.

The following table lists the compliance of DEWA with the ten Global Compact Principles, by making reference to the relevant chapters and GRI indicators of the Sustainability Report.

The Ten Principles of the UN Global Compact	Reference on the Sustainability Report or Description of the Management Approach	GRI Standards Indicator
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	Chapter 1 Full compliance with relevant federal and local legislation and international conventions. Social Accountability policy, Governance policy	102-8 102-16 102-41 403-1
Principle 2: Businesses should make sure that they are not complicit in human rights abuses.	Chapter 1 Full compliance with relevant federal and local legislation and international conventions. Social Accountability policy, Governance policy	102-8 102-16 102-18
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Chapter 1, Chapter 6 Full compliance with relevant federal and local legislation and international labor standards worldwide. Social Accountability policy	102-41 403-1
Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labor.	Chapter 1 Full compliance with relevant federal and local legislation and international labor standards worldwide. Social Accountability policy	419-1
Principle 5: Businesses should uphold the effective abolition of child labor.	Chapter 1 Full compliance with relevant federal and local legislation and international labor standards worldwide. Social Accountability policy	419-1

The Ten Principles of the UN Global Compact	Reference on the Sustainability Report or Description of the Management approach	GRI Standards Indicator	
Principle 6: Businesses should uphold the elimination of discrimination in respect to employment and occupation.	Chapter 1, Chapter 6 Full compliance with relevant federal and local legislation and international labor standards worldwide. Social Accountability policy	404-1 405-2 406-1	
Principle 7: Businesses should support a precautionary approach to environmental challenges.	Chapter 3 Full compliance with relevant federal and local legislation. Sustainability policy	102-11	
Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility	Chapter 3, Chapter 4 Full compliance with relevant federal and local legislation. Sustainability policy	201-2 302-4 303-3 305-5 306-3	306-5 307-1 308-1 308-2
Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies	Chapter 3, Chapter 4 Full compliance with relevant federal and local legislation. Sustainability policy	201-2 DSM R&D 302-4	303-3 305-5 306-2
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery	Chapter 1 Full compliance with relevant federal and local legislation Whistle Blowing policy, Conflict of Interests and Non-Disclosure of Information Regulation, Code of conduct	102-16 102-18	

CASE STUDY

IN SUPPORT OF EXPO: THE COUNTDOWN TO 2020

DEWA continues to play a supportive and leading role in driving the city of Dubai towards sustainable development. With the countdown to EXPO 2020 approaching, DEWA has established an effective partnership with EXPO 2020 Dubai to ensure the latest best practices in sustainability. As the official Sustainable Energy Partner for EXPO, DEWA is supporting EXPO's sustainability goals whereby 100% of the energy used during EXPO 2020 will come from renewable sources. This includes building a smart grid network to provide an entire value chain of generation, transmission and distribution systems to the EXPO.

The partnership in numbers:

- DEWA's Mohammed bin Rashid Al Maktoum Solar Park will provide EXPO 2020 Dubai with a dedicated capacity of 464 megawatts of renewable energy.
- DEWA is also building three 132/11kilovolt (kV) substations, called Opportunity, Mobility and Sustainability-named after EXPO's three subthemes-with 45 kilometres (km) of high-voltage (132kV) cables.
- DEWA is investing AED 4.26 billion in electricity and water infrastructure projects to support EXPO 2020 Dubai.

Believing that people are the main drivers of sustainability, DEWA is working closely with EXPO to train and build an internal workforce towards a sustainable EXPO 2020. In addition, DEWA is developing a number of initiatives and projects to meet EXPO's sustainability needs, which include:



Sustainable Energy Partner

Developing a smart customer service centre at the EXPO site

Hosting the Solar Decathlon Middle East 2020 in collaboration with EXPO 2020

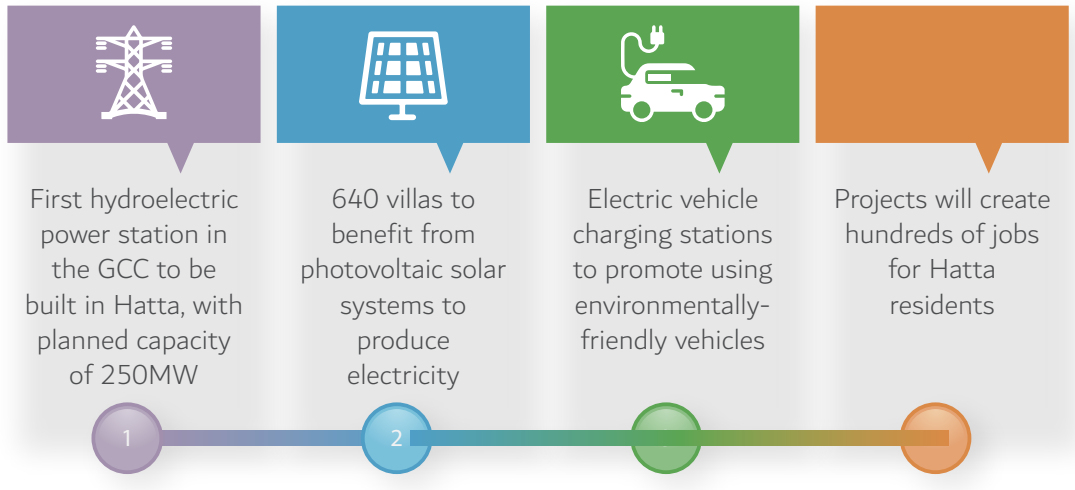
Promoting EXPO 2020 at national and international platforms

Investing in research & development projects for a sustainable EXPO

Not only is the partnership supporting Dubai's plans to become a smart and sustainable city, but it works to achieve the UAE's strategy to increase the use of clean and renewable energy. This supports Dubai's targets of having the lowest carbon footprint in the world, and works towards advancing its position as a smart, competitive, integrated and inter-connected city.

CASE STUDY

A SUSTAINABLE HATTA




DEWA has adopted several projects and initiatives in support of the Hatta Comprehensive Development Plan, which was launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai. DEWA's projects include developing the first hydroelectric power station in the GCC, installing photovoltaic panels on rooftops to produce electricity from solar power and installing smart meters in buildings and installing electric vehicle charging stations in Hatta.

DEWA aims to achieve its initiatives in Hatta by engaging the community and providing leading and innovative job opportunities. The projects will create 200 permanent technical, administrative and operational jobs in Hatta. Another 300 jobs are expected to be created by the Visitor Centre, and other outdoor activities and tourist facilities associated with the project. Over 2,000 jobs will be available during the implementation phase. The hydro-electric power station, will increase the share of clean-energy use, support the sustainable development of Hatta, and enhance its position as a prominent tourist attraction in the Emirate.

DEWA has adopted several quality initiatives to achieve sustainable development in Hatta and protect the environment.

In addition to the hydroelectric power station, DEWA is contributing to the sustainable development of Hatta through its initiatives in support of Smart Dubai. These will include the Shams Dubai Initiative, Electric Vehicles Charging Stations, and Smart Applications via Smart Grid and Meters.

The AED 1.3 billion Hatta Comprehensive Development Plan aims to boost the area's social and economic attractiveness as a world-class environmental tourist destination. It covers three key areas including economic and service sector, tourism and sports, and culture and education. A dedicated board will oversee the plan and co-ordinate with various government organisations. The board comprises people from Hatta who are major stakeholders in the development of a sustainable Hatta.



ENERGY & CLIMATE CHANGE

- 63% improvement in NO_x Emission Levels in 2017 with respect to 2007
- 75% clean energy generation capacity will be achieved by 2050
- Cumulative efficiency improvement of 28.87%, equivalent to 43.9 million tons of CO₂ emission reduction between 2006 and 2017
- 10,200 MW generation capacity for 2017
- 3.3% electricity line losses for 2017, 30% improvement since 2007

KILIMANJARO NATIONAL PARK
TANZANIA

LAVA TOWER CAMP
ELEVATION: 4600M ^{amsl}
VEGETATION ZONE: ALPINE DESERT
FROM LAVA TOWER CAMP TO:
- ARRON CLACIER CAMP: 1KM (0.5HRS)
- MANDO CAMP: 3KM (2HRS)
- MANDA CAMP: 2KM (1HRS)
- MANDA CAMP: 13KM (10HRS)
EAK: 18KM (17HRS)



MANAGEMENT APPROACH

The UAE has taken great strides towards addressing climate change and mitigating its impact on the environment and economic sectors. Climate change remains a priority on the UAE Federal agenda. This is reflected in the launch of the Ministry of Climate Change and Environment in 2016, underlining the importance of protecting the environment from the effects of the change in global climates.

The UAE has always been at the forefront of climate action, being one of the first countries to support the Kyoto Protocol in 2005, which set out to limit greenhouse gas emissions by mandating emission reduction targets in industrialised countries.

In 2015, the UAE was among the key players in the negotiations that led to the monumental Paris Agreement, at the International Conference of the Parties (COP21), in Paris. This is the first voluntary agreement of its kind, representing a truly global commitment from countries towards climate action, and a pledge to keep the global temperature rise below 2 degrees Celsius. By the end of 2017, 174 countries had ratified the agreement.

In 2017, the Emirate of Dubai was certified by the C40 Cities Climate Leadership Group, a leading global network of cities committed to tackling climate change and protecting the planet. This confirms Dubai has an advanced role in environmental protection, and an acknowledgement of its plans and programmes to reduce Green House Gas (GHG) emissions that pose a threat to the climate worldwide.

Climate change is not only an environmental challenge, but also poses social and economic risks that directly affect sustainable development.

Three main challenges for the UAE to mitigate the increasing effects of climate change include: population growth, urban and industrial development, and limited natural resources. These factors have resulted in increased greenhouse gas (GHG) emissions, especially carbon dioxide.

The UAE is vulnerable to a number of climate-related risks, including warmer weather, minimal precipitation, droughts, higher sea levels and more storms. As sea water temperature is a critical factor for the operation of DEWA's coastal power generation and water desalination facilities, these events could severely affect DEWA's coastal power and water generation plants.

In 2017, The UAE Federal Government introduced a National Climate Change Plan, as a roadmap mitigate and adapt to climate change in the UAE until 2050.

The Government of Dubai has set its own ambitious strategies, such as the Dubai Carbon Abatement Strategy, with a target to reduce carbon emissions by 16% by 2021. This supports the UAE Vision 2021 and the Dubai Demand Side Management strategy to reduce consumption of electricity and water by 30% by 2030. It also supports the Dubai Clean Energy Strategy 2050, and the Green Economy for Sustainable Development Initiative launched by His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai.

DEWA recognises the impact of its operations, and we acknowledge our role in realising these strategic objectives by minimising our environmental footprint, while still maintaining reliable delivery of electricity and water services to our customers.



Prior to the construction of any new DEWA project, independent consultants conduct an environmental impact assessment based on international standards. DEWA also implements innovative solutions to improve supply side efficiency, reduce transmission and distribution losses and diversify energy sources to support sustainable economic growth without damaging the environment and natural resources.

In line with ISO 31000:2011 standard for Risk Management, business risks are identified and managed through our Governance, Risk & Control system at the corporate level. Mitigation plans and related records are maintained in line with our Risk & Emergencies Management Approach. Asset & Treatment registers are prepared based on asset risk assessments conducted for all critical generation assets, in line with our Enterprise Risk Management framework. Business Impact Analysis is also carried out for major processes and activities as part of our Business Continuity Management System that is developed according to the ISO 22301:2012. This includes identification of business impacts covering Financial, Operations, Health & Safety, Environment, Objectives and Reputation, IT Services, Resources & Process Flows.

Crisis management and contingency plans are also developed as part of disaster recovery, focusing on minimising impact on safety, reliability, availability and ensuring availability of proper backup facilities, wherever applicable. This includes a climate change resilience plan to assess, understand and project the real climate sensitivity of DEWA assets and operations. DEWA will be the first utility in the region to initiate a low carbon transformation based on climate change resilience planning.

ENVIRONMENTAL PROTECTION AND COMPLIANCE

At DEWA, we have embedded our commitment to the environment into our strategy, and continuously strive towards environmental excellence, which is reflected in all our operations. By reducing our air emissions, minimising our waste, and our compliance with UAE federal and Dubai level legislations, regulations and policies, we are actively mitigating our environmental impacts.

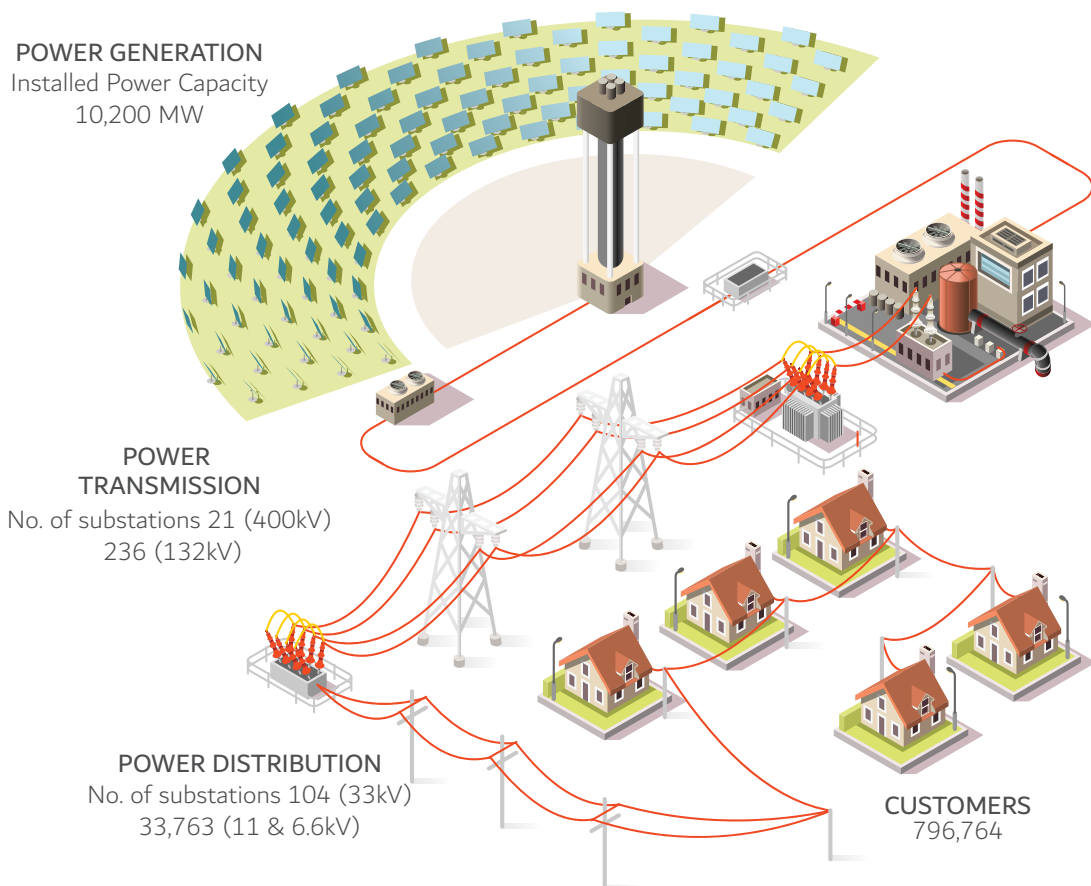
DEWA abides by the precautionary principle with regards to the environment and has implemented corporate level policies and procedures that meet or exceed world class levels to ensure continuous monitoring of operations and guidance on preventative measures and corrective actions to eliminate any potential non-conformities, defect, or other undesirable situations in order to avoid the occurrences and related environmental impacts.

To meet legal and industry standards, we have implemented a certified environmental management system (EMS) in line with ISO-14001 standard, maintained in our Generation division since 1998, and on a corporate level since 2006, which allows us to continually improve our environmental performance and control the environmental impact of our operations and services.

DEWA's efforts have earned international recognition in the environmental community. DEWA has maintained the Five Star Environmental Audit from the British Safety Council (BSC) since 2011. In 2017, DEWA was also awarded the BSC Globe of Honour for the sixth consecutive year since 2012, making DEWA one of seven international organisations to receive this prestigious award.

DEWA remains compliant with all UAE Federal and Dubai Municipality environmental legislations and regulations, which govern aspects of health, safety, security and environmental quality and impose civil and criminal penalties for any violations.

In 2017, DEWA was not in violation of any environmental regulations nor did it receive any complaints relating to environmental matters.





POWER GENERATION

As the sole utility in the Emirate of Dubai, ensuring the availability and reliability of electricity and water services to our current and future customers remains our top priority. DEWA's power stations and desalination plants are operated by our Generation division according to the highest standards of reliability, efficiency, quality and environmental safety. DEWA also owns and operates aquifers and power and water distribution networks in Dubai, ensuring the uninterrupted supply of services to our customers.

Natural gas is the primary fuel for our power generation and water desalination operations. DEWA purchases natural gas from the Dubai Supply Authority (DUSUP), which runs gas importation and distribution infrastructure for the Emirate of Dubai. In 2017, our total gross generation was 45,162,014 MWh, which was produced mainly through the usage of natural gas.

Table: Net Energy Output Broken Down By Primary Energy Source

Year	Total Gross Generation (MWH)	Natural Gas		Diesel Fuel Oil		Medium Fuel Oil		Solar	
		Generation (MWH)	% of total generation	Generation (MWH)	% of total generation	Generation (MWH)	% of total generation	Generation (MWH)	% of total generation
2012	36,297,050	36,238,642	99.84	58,242	0.16	167	0.0005	-	-
2013	37,478,845	37,393,705	99.77	79,641	0.21	177	0.0005	5,322	0.01
2014	39,516,459	39,431,699	99.79	56,202	0.14	147	0.0004	28,411	0.07
2015	42,006,335	41,942,125	99.85	36,729	0.09	1	0.00003	27,479	0.07
2016	43,091,953	43,034,528	99.87	28,389	0.07	86	0.0002	28,951	0.07
2017	45,162,014	44,669,687	98.91	30,225	0.07	25	0.0001	462,077	1.02

Note: Diesel fuel oil and medium fuel oil are backup fuels used only during emergency (i.e. interruption of gas supply). The consumption during the year is due to testing and commissioning purposes.

DEWA'S INSTALLED CAPACITY

Table: DEWA's installed capacity for 2017

DEWA Installed Capacity		
Site	Station	Power Installed Capacity
		at 50°C & 30% R.H
Jebel Ali, Dubai	D	1027
	E	616
	G	818
	K	948
	L	2,401
	M	2,185
Aweer, Dubai	H	1996
Seih Al Dahal, Dubai	Mohammed bin Rashid Al Maktoum Solar Park	210
Total		10,200

Recognising that securing the supply of electricity and water, and ensuring their long-term sustainability is critical to achieving the vision of the wise leadership, DEWA has embarked on an expansion of its M-station, adding 700MW to its installed capacity. This will increase the plant's thermal efficiency from 82.4% to 85.8%, which is one of the highest thermal efficiency rates in the world. Upon completion of the expansion, planned for the third quarter of 2018, the M-stations total capacity will reach 2,885MW.

POWER TRANSMISSION & DISTRIBUTION

We strive to minimise interruptions and transport electricity to our customers in a reliable manner through our transmission and distribution (T&D) network. Our transmission line availability is typically above 99%, reflecting world-class standards of performance.

Table: Total number of Transmission and Distribution substations, 2017

Voltage Category (kV)	Number of Substation
400	21
132	236
33	104
11 & 6.6	33,763

DEWA's commitment to meet the growing energy demand is reflected in the 97 new 132/11 kilovolt (kV) substations which are planned to be built over the next three years, at a projected cost of AED 10 billion. The new substations will be located at Hassyan, the Mohammed bin Rashid Al Maktoum Solar Park, and other locations to support the expansion of other power plants in Jebel Ali and Al Aweer.

DEWA continuously works to improve operational efficiency of its T&D network. Through our Intelligent Metering System and Smart Grid, our continued efforts have resulted in our 2017 electricity line losses being 3.3%, a 30% improvement since 2007.

Table: Length of Transmission and Distribution Lines, 2017

Type	Voltage Category (kV)	Length of Transmission and Distribution lines (km)
Overhead Lines	400	1125
	132	413
	33	113
Underground Lines	400	23
	132	1867
	33	2075
	6.6 & 11	30,917

DEWA is currently retrofitting HVAC packaged units of its substations, replacing all packages operating with Refrigerant 22 (R-22) with a more eco-friendly R407c, expansion valves, compressor oils and drier filters. 117 packaged units have been replaced, with the full phase out of R-22 and retrofitting of 910 units to be completed by 2027.

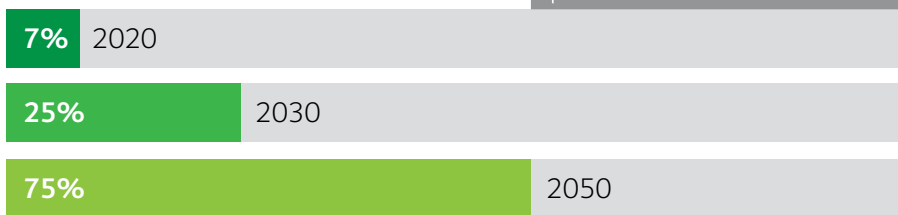


ENSURING LONG TERM AVAILABILITY & RELIABILITY

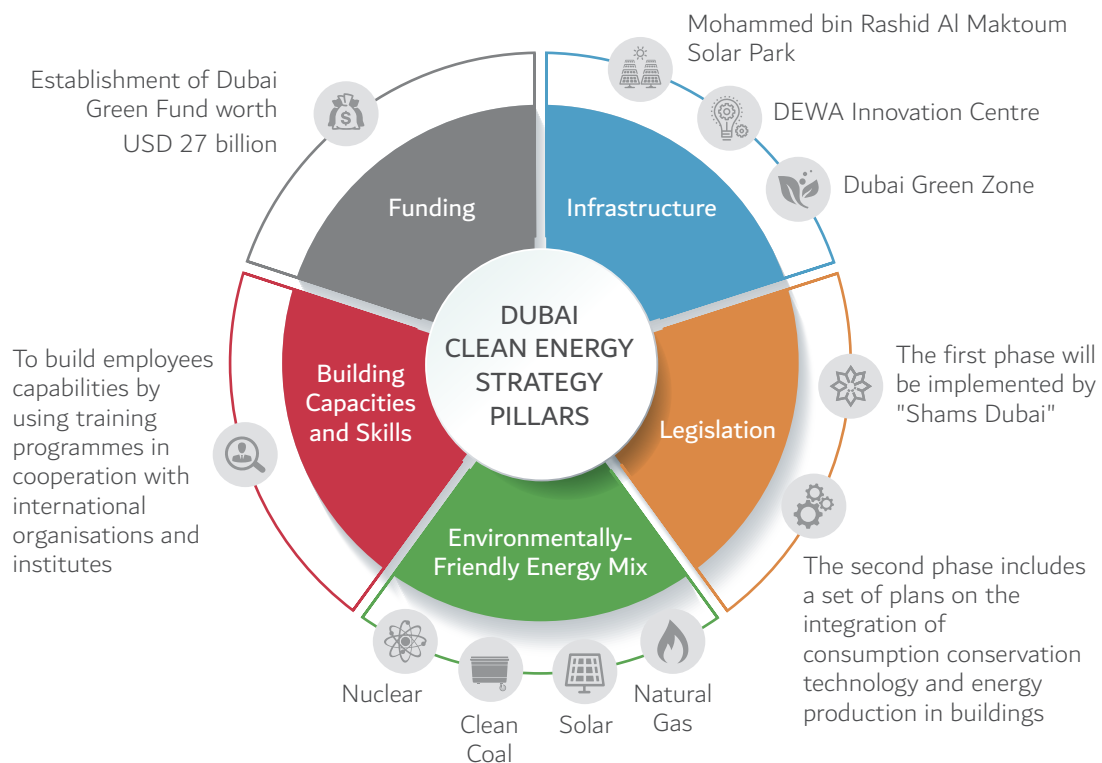
Natural gas is the primary fuel source for our operations, making us prone to shortages and future commodity price fluctuations. Responding to the growing demand in Dubai, DEWA diversified its energy sources as part of its long-term strategy. DEWA plays a key role in achieving the targets set out by the Dubai Clean Energy Strategy 2050, which seeks to transform Dubai into a global hub of green energy, and diversify its energy sources to generate 7% of Dubai's total power output from clean resources by 2020, 25% by 2030, and 75% by 2050. By reinforcing the renewable energy sector to meet the objectives of the Dubai Clean Energy Strategy 2050, DEWA supports the UAE's ambitions towards sustainable development, meeting the continuously rising demand without diminishing natural resources and preserving the environment.

DUBAI CLEAN ENERGY STRATEGY 2050

Dubai will be the city with the lowest carbon footprint in the world by 2050 and a global centre for clean energy and green economy



CLEAN ENERGY SOURCES IN DUBAI

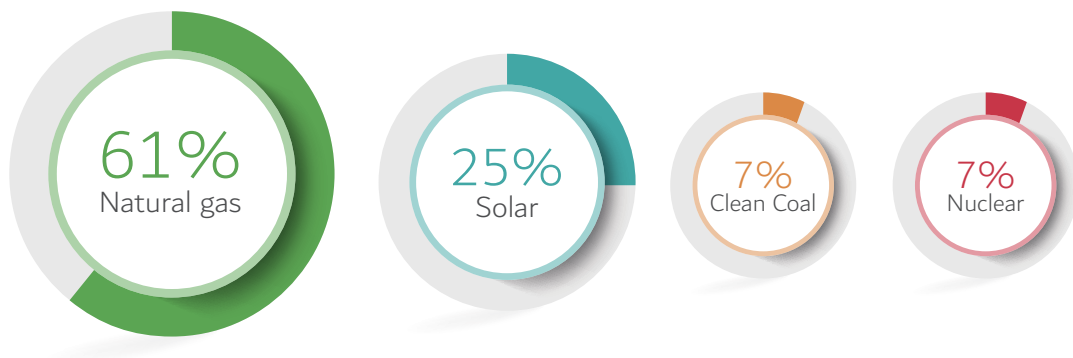


DIVERSIFICATION OF FUEL MIX

Keeping with the goals of the Dubai Clean Energy Strategy (DCES) 2050, DEWA is committed to diversifying its energy mix to both meet the growing demand in Dubai while minimising its impact on the environment.

Some of our key initiatives towards achieving DCES 2050 include the Mohammed bin Rashid Al Maktoum Solar Park, the Hassyam Clean Coal Plant, the Hatta Hydroelectric Plant, in addition to the Shams Dubai initiative and our Demand Side Management Strategy 2030 initiatives.

Diversification of Dubai's Energy Mix by 2030



SOLAR ENERGY

The utilisation of solar energy constitutes an essential pillar of the Dubai Clean Energy Strategy 2050.

The Mohammed bin Rashid Al Maktoum Solar Park is one of the major projects that DEWA implements to achieve this promising strategy, as well as the Shams Dubai initiative.

Mohammed Bin Rashid Al Maktoum Solar Park

The Mohammed bin Rashid Al Maktoum Solar Park, is the largest single site solar park (in terms of capacity) in the world, and is based on the Independent Power Producer (IPP) model. The park will combine both photovoltaic and concentrated solar power (CSP) technologies to achieve a total planned capacity of 5,000MW by 2030. Located in Seih Al Dahal, Dubai, the solar park will reduce over 6.5 million tons of carbon dioxide emissions every year starting from 2030.

The solar park not only combines the efforts of the public and private sectors in solar energy, but will also be home to one of the largest Research & Development centres in the region, and includes a photovoltaic solar testing facility.

Operation of the park began in 2013, with the launch of the first phase of the project, having a capacity of 13MW generated by photovoltaic technology.

2017 was a landmark year of achievements for the solar park. The second phase of the solar park was successfully inaugurated in April 2017, ahead of schedule, with a total capacity of 200 MW. In regards to future expansions, DEWA awarded the Abu Dhabi Future Energy Company (Masdar) led consortium as the selected bidder for the

800MW third phase of the solar park. The third phase will be implemented in stages until 2020 (200MW by 2018, 300MW by 2019, 300MW by 2020). The fourth phase, the 700MW Concentrated Solar Power (CSP) plant, has received the lowest international Levelised Cost of Electricity (LCOE) bid of USD 7.3 cents per kilowatt hour (kWh), and was awarded to a consortium comprising Saudi Arabia's ACWA Power and the Silk Road Fund, along with China's Shanghai Electric as the main EPC contractor. The fourth phase will feature a 260 meter solar tower, the tallest of its kind in the world, and will roll out in stages, starting from the second quarter of 2021. The Mohammed bin Rashid Al Maktoum Solar Park will generate 1,000 megawatts using CSP technology by 2030.

Shams Dubai

As part of the Smart Dubai Initiative goal to make Dubai the smartest and happiest city in the world, DEWA has launched the "Shams Dubai" initiative to connect solar energy to buildings and households.

The initiative encourages household and building owners to install PV panels to generate electricity, and connect them to DEWA's grid. Owners use the electricity on site and export the surplus to DEWA's grid, which is deducted from the customers' future bill. Shams Dubai supports the Dubai Clean Energy Strategy 2050, and establishes a sustainable model for providing clean energy and supporting Dubai's economy without harming the environment and natural resources.

As of the end of January 2018, about 40MWp have been installed, with solar systems in 613 buildings connected to DEWA's grid.

CLEAN COAL ENERGY

Hassyan Clean Coal Power Project

DEWA launched the Hassyan Clean Coal Power Plant, the first plant of its kind in the region to produce electricity using clean coal based on the Independent Power Producer (IPP) Procurement model. It will begin operations in 2020 and by 2026 total clean coal-fired capacity will be 3,996 MW. The plant will adopt the use of ultra-supercritical technology in its operations, in full compliance with set international standards. The plant also meets flue gas emission limits more stringently than emission limits of both the Industrial Emissions Directive of the European Union and the International Finance Corporation Guidelines.

NUCLEAR ENERGY

By 2030, nuclear energy will generate 7% of Dubai's energy mix.

HYDROELECTRIC POWER STATION IN HATTA

DEWA will build a hydroelectric power station in Hatta that will make use of the water stored in the mountains next to Al Hattawi dam. This project is the first of its kind in the GCC, and will produce 250MW with a lifespan of 60-80 years.

In 2017, DEWA awarded Électricité de France with an AED 58 million consultancy contract which covers design, hydro-geological, geological, environmental, geotechnical, and deep excavation studies. 14% of the studies have been completed so far.

CASE STUDY

MOHAMMED BIN RASHID AL MAKTOUM SOLAR PARK INAUGURATION OF 200 MW PHASE 2

In April 2017, coinciding with the International Day of Happiness, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of UAE and Ruler of Dubai, inaugurated the 200 megawatt (MW) second phase of the Mohammed bin Rashid Al Maktoum Solar Park. The project reflects a new era in the excellence and leadership of the UAE, as it increases the share of clean and renewable energy and supports the Dubai Clean Energy Strategy 2050 target of providing 75% of Dubai's total power output from clean resources by 2050.

The project was accomplished through a partnership between DEWA and a consortium led by ACWA Power from Saudi Arabia, the main developer of the project, and TSK from Spain, the main contractor, with an investment of AED 1.2 billion. This phase will generate clean energy for 50,000 residences in Dubai, and will reduce 214,000 tonnes of carbon emissions annually. This phase installed 2.3 million photovoltaic solar panels over 4.5 square kilometres with 1.5 million Safe Man Hours without Lost Time Injury during project execution. DEWA and the consortium led by ACWA Power and TSK, established Shuaa Energy 1 to complete and manage the project.

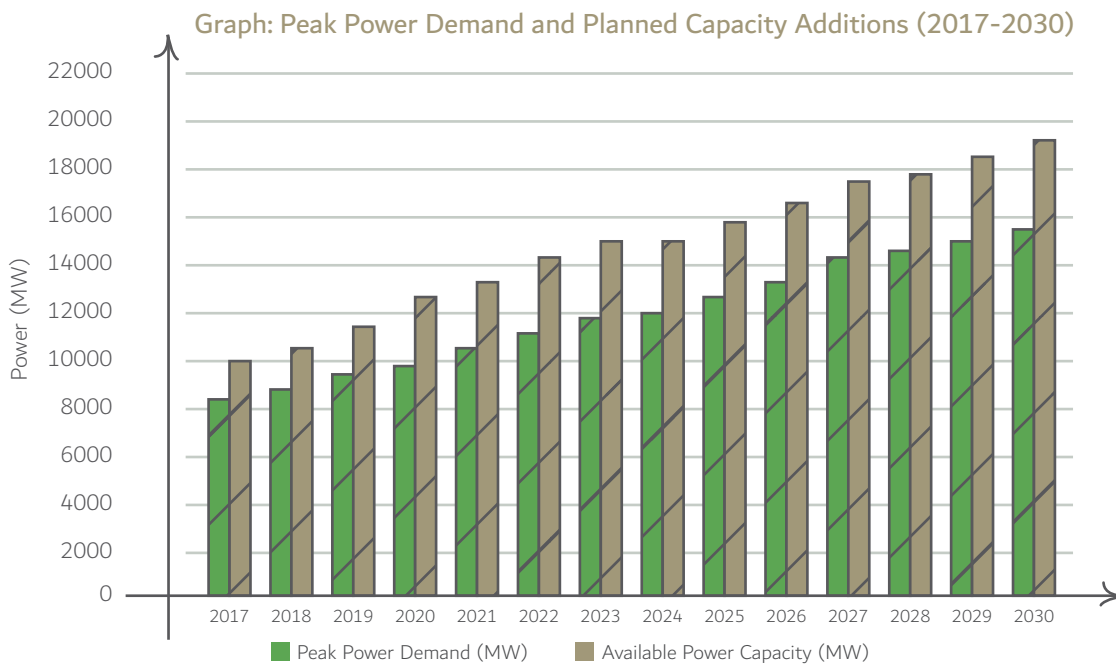


MEETING FUTURE DEMAND

At DEWA, we are committed to maintaining world class delivery, reliability and availability of electricity and water to our customers not only to meet current needs, but to meet future demand considering the rising urbanisation and growth in Dubai.

DEWA's Power and Water Planning (P&WP) division is responsible for the short and long-term demand plans and forecasts through 2030. P&WP updates these plans every year according to world's best practices and scientific models, factoring in population and economic growth and fuel forecasts. This ensures that DEWA maintains its world-class level of reliability, efficiency and safety and optimises its resources. Based on demand forecast, DEWA develops all its Master Plans.

Master Plans set the course for the technical planning of future infrastructure expansions of electricity and water production, transmission and distribution systems. These include generation and desalination capacity expansion plans up to 2030, power and water transmission network expansions up to 10 years and power distribution network up to 5 years. DEWA updates these Master Plans annually to meet Dubai's power and water demands on time with a reserve margin minimum of 15%. DEWA also identifies any additional resource requirements for future power and water infrastructure expansions for the Master Plans on an annual basis and budgets for them accordingly, to ensure demand is accurately forecast until 2030.



DEMAND SIDE MANAGEMENT

DEWA continues to support the Demand Side Management (DSM) 2030 strategy, launched by the Dubai Supreme Council of Energy in 2013, with a focus on improving energy efficiency, reducing energy consumption and contributing to the sustainable

development of Dubai. The strategy has defined 8 main programmes in line with international best practices and similar programmes implemented globally, with a target to reduce electricity and water demand in Dubai by 30% in 2030, compared to the business as usual scenario. These include green-building regulations, retrofitting of existing buildings, district cooling, wastewater reuse, energy-efficient street-lighting, and the Shams Dubai initiative to enable building owners to install photovoltaic panels to generate electricity and connect it to DEWA's grid.

DSM Programmes and Initiatives



ACTIVITIES UNDER DSM

Awareness campaigns

Educate the public on conservation and best practices in electricity and water consumption and usage

- Programmes for educational institutions, government departments, commercial establishments, residents, neighbourhoods etc.
- Integrated media campaigns, road shows, workshops etc.
- DEWA website (conservation tips), social media
- Broadcast email and SMS messages
- Leaflets, brochures
- Recognition schemes (Best Consumer Award, Conservation Award - For a Better Tomorrow).
- Site Tours of Al Quoz Sustainable Building.

Electricity and water audits

Identify ways for our customers to conserve electricity and water

- Electricity and water audits cover governmental buildings, office buildings, hotels, shopping centres, factories and warehouses.

Energy saving equipments

Provide energy / water-saving devices

- Freely distributing to the audience, during society- engagement drives, efficient homes devices such as energy-saver lamps, water-flow reducers/aerators etc.
- Smart eco-friendly home appliances awarded winners in DEWA's environmental events.

Changing behaviours







Assist our residential customers to understand their consumption

- Monthly tracking of consumption through customer e-services portal.
- Recognising monthly consumption slab-wise
- Benchmarking consumption customer CO₂ footprints

ENERGY MANAGEMENT OF DEWA PREMISES AND ASSETS

DEWA is committed to the efficient, effective and economical management of our energy use and consumption, and continuously seeks to improve energy efficiency within its premises. In 2017, DEWA's Head Office and Customer Happiness Centres located at Al Hudaiba, Umm Ramool, Al Wasl and Burj Nahar used 10,278,866 kWh of electricity.

In line with DEWA's Energy Management Policy, and in order to support Demand Side Management Strategy 2030, several energy efficiency initiatives have been implemented in DEWA premises under the Committee for Energy Management of DEWA Premises. These include: conservation measures, retrofittings, light replacements and reuse of Treated Sewage Effluent (TSE) water for irrigation.

 <p>Conservation measures implemented in 5 main buildings</p>	Head Office, Hudaiba, Umm Ramool, Wasl and Burj Nahar
 <p>Lighting replacement ESCO project</p>	Phase-1 Jebel Ali Power Station (JAPS) complex and Phase-2 have been completed, and phase-3 is in progress
 <p>Replacement of outdoor lights with equivalent LED lights</p>	Pumping stations and reservoirs 75% completed
 <p>Retrofitting ESCO project for 7 office buildings</p>	Head Office, Hudaiba, Umm Ramool, Wasl, Burj Nahar, L-Admin and G-Admin
 <p>Retrofitting of 4 old buildings</p>	H-Station Accommodation, Al-Quoz Office, Store, Accommodation & Mosque, Al-Quoz BSD, Water Maintenance & Mosque, and Warqa-1 Office and Store
 <p>Connection of Treated Sewage Effluent (TSE) water for irrigation purposes</p>	Warsan Central Store

The overall savings achieved in 2017 from these initiatives are 19 GWh (52%) and 6 MIG (39%), which correspond to AED 8.6 million in financial savings and 8,462 tonnes of CO₂ reduction.

DEWA has established a LEED initiative under its Transmission Power Division to support and comply with green building criteria for its electrical substations. The purpose of the initiative is to enhance energy and water consumption savings in DEWA's substations in accordance with the requirements and standards of the LEED certificate. The LEED Certification is a green building rating system used to measure human and environmental, health, sustainable site development, water savings, energy efficiency, materials selection, indoor environmental quality, etc. DEWA became the first in the Middle East to obtain LEED Gold Certification for a transmission substation by achieving Gold LEED certificate for our 132/11 kV Burj Khalifa substation.

DEWA is also currently developing a comprehensive Energy Management System that meets the ISO 50001 standard. This system will periodically review the energy performance, and identify and implement energy conservation opportunities with cost benefits within a defined boundary of its operations that would include customer happiness centres and administration buildings, generation plants, substations and fleet.

DEWA'S SUSTAINABLE BUILDINGS

Al Quoz Sustainable Building

DEWA inaugurated its Sustainable Building in Al Quoz in 2013. It is the first sustainable government building in the UAE, and the largest government building in the world to receive a Platinum Rating for green buildings from Leadership in Energy and Environmental Design (LEED). The building uses 66% less energy, and includes an on-site 660 kilowatt (kW) solar power plant. It also reduces water consumption by 48%. In addition, 36% of construction material was from recycled materials.



Al-Sheraa, DEWA's New Headquarters



Construction is underway on Al-Sheraa (*Arabic for sail*) building, DEWA's new headquarters in the heart of the Cultural Village in Al Jadaf. When completed, the building will be the tallest, largest, and smartest net Zero Energy Building in the world; with the annual total energy consumed by the building equal to or less than the renewable energy produced on site in the same year. It will also incorporate the latest technologies such as Internet of Things (IoT), Big Data and Open Data, and Artificial Intelligence (AI). DEWA's new headquarters is targeted to receive a Platinum Rating by LEED (Leadership in Energy and Environmental Design), where Platinum is the highest certification, and WELL Certification, which focuses mainly on health and well-being of building occupants addressing 7 concepts, namely: air, water, nourishment, light, fitness, comfort and mind.

SUPPLY SIDE ENERGY EFFICIENCY

DEWA produces electricity and water mostly by cogeneration. This is a process where Heat Recovery Steam Generators (HRSG) use waste heat from burning natural gas to produce steam without using any fuel. The HRSGs generate additional free electricity through back pressure steam turbines to power water desalination by multistage flashing. Over a number of years, DEWA has invested in efficiency improvements including converting many simple cycle gas turbine plants into more efficient combined cycle plants and installing cooling systems in gas turbines. In 2017, our gross power generation efficiency and combined power and water generation efficiency were 42.06% and 37.10%, respectively. Overall, between 2006 and 2017, we have achieved a cumulative efficiency improvement of 28.87%, equivalent to 43.9 million tons of CO₂ emission reduction. This has been achieved through a combination of optimum power plant design, power augmentation, innovative upgrades for gas turbines, optimised operations and optimised outage planning. In addition, we produce our own auxiliary power which is the electricity we consume to support primary electricity generation operations. By enhancing supply side efficiency, we reduce our auxiliary power requirements thus reducing the carbon intensity of generation. We are proud to report a continuous year on year improvement on the amount of carbon saved through efficiency measures.

Optimum power plant design

For DEWA, deciding on the optimum design depends on the power to water requirements. In general, the optimum power and water production design is achieved in a hybrid system where water production is shared between several technologies-multi-stage flashing desalination and reverse osmosis, which will result in the minimum cost and highest efficient throughout the lifecycle of the plant.

Power augmentation

During the summer months, ambient temperatures in Dubai can be as high as 45°C. The high temperature affects the performance of our gas turbines, as generation capacity typically drops by around 20%, which reduces power output and efficiency, and increases emission intensity and costs. The recovery of this power loss and efficiency is possible using several cost effective and proven power augmentation options. Through the use of these technologies, DEWA has cost-effectively increased capacity by over 650 MW by 2017 with respect to 2006 and improved efficiency in the process, which reduced our emission intensity.

Innovative upgrades for gas turbines

After installing any gas turbine, DEWA continuously follows up with the original equipment manufacturers with regards to any new proven and cost-effective technologies and upgrades that have become available during the lifecycle of the gas turbine, which will increase capacity and/or improve efficiency and reliability. An example of this would be one of our key projects, the Thermal Energy Storage and Turbine Inlet Air Cooling (TESTIAC) located at Jebel Ali, Dubai. TESTIAC improves the efficiency of three gas turbines by implementing an inlet air chilling system. This generates electricity while using less fossil fuels, thereby reducing GHG emissions.

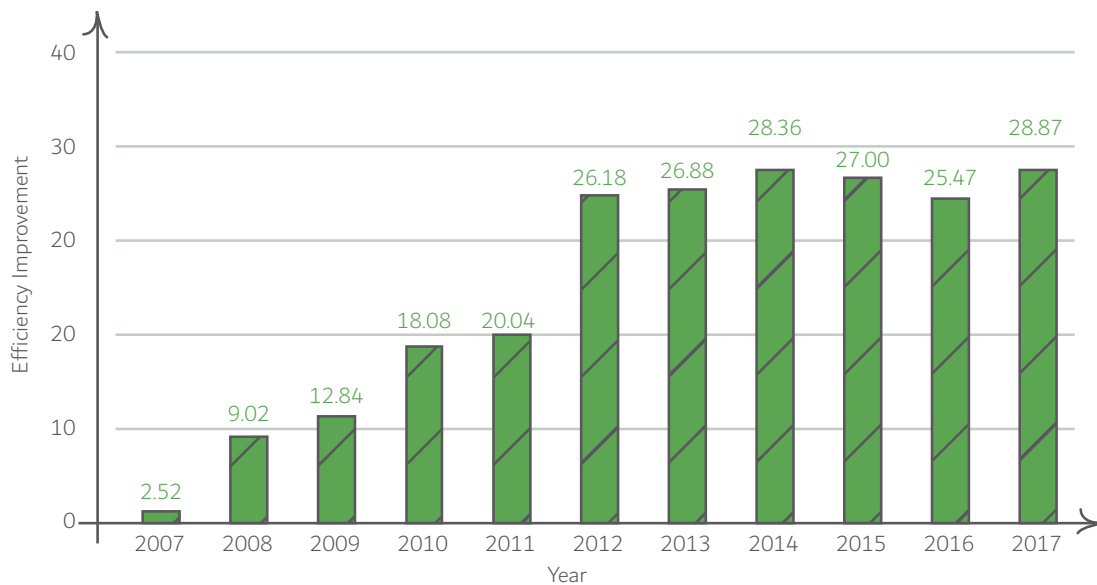
Optimised operation

During times of low demand, some electricity generation units are shut down to avoid running inefficiently at low load levels. In DEWA, cyclic operation of units is completed on the basis of less efficient units being shut down first in order to permit operation of the remaining units at higher loads and improved efficiency.

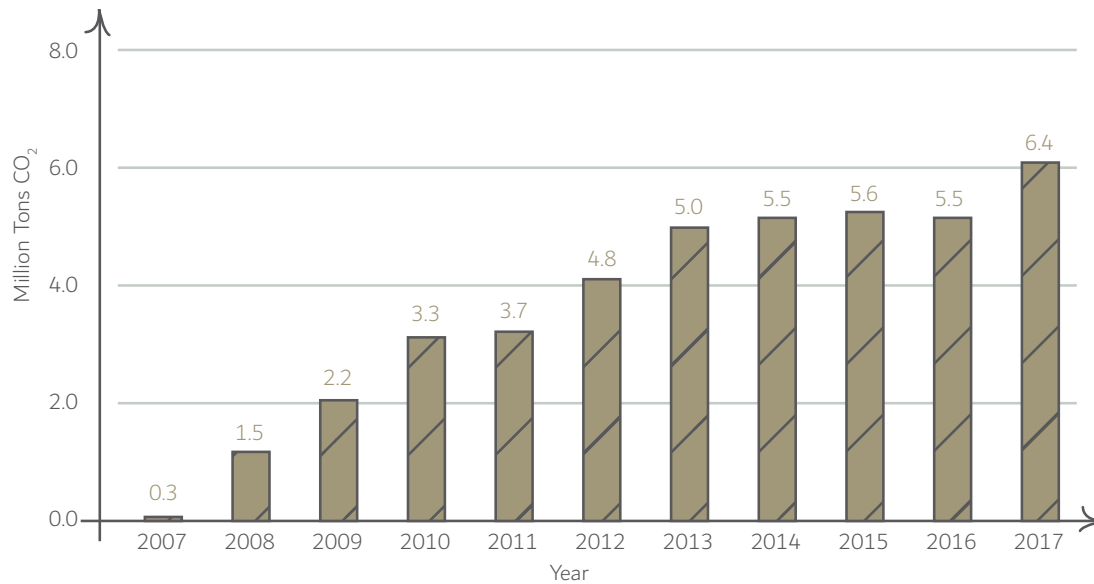
Outage planning

DEWA uses a management tool that coordinates all maintenance outage requests to minimise outages and meet demand with the highest efficiency and minimum fuel cost.

Graph: Efficiency Gains from improvement in Gross Heat Rate 2007-2017 with respect to 2006



Graph: Carbon reduction (Million Tons CO₂) due to efficiency with respect to 2006





CO₂ EMISSION REDUCTION PROGRAMME

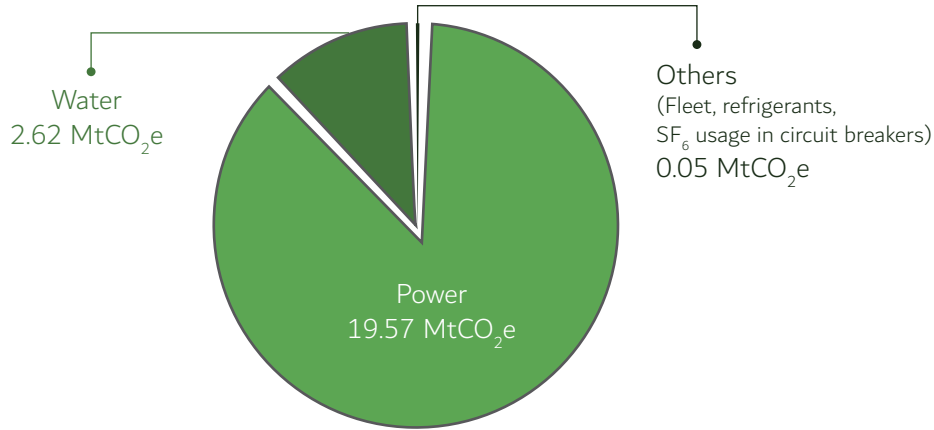
DEWA launched its Carbon Dioxide Emission Reduction Programme in 2012, which creates a roadmap for short, medium and long-term emission reduction actions up to 2030. The CO₂ Emission Reduction Programme takes several key factors into account: Dubai's rising demand for electricity and water, existing rationalisation initiatives, DEWA's supply side efficiency improvements and the diversification of its energy mix. In 2017, DEWA's Emission Reduction Programme received the Gold Award in the best initiative category at the International Corporate Social Responsibility (CSR) Excellence Awards. We have also developed a comprehensive Monitoring, Reporting and Verification (MRV) framework of our Greenhouse Gas (GHG) emissions. The MRV framework allows us to report on our emissions through our Carbon Footprint Report, which we prepare in accordance with the Greenhouse Gas (GHG) Protocol, the most widely used international carbon calculation methodology, compatible with the ISO 14064-1, which also allows for integration with national and international GHG registries. Our 2017 Carbon Footprint Report was finalised using data management processes within the monitoring, reporting and verification framework across all DEWA's divisions. DEWA also intends to introduce Electronic Emission Reporting System to automate the data collection process and to detect in advance emissions trends to mitigate adverse environmental impacts.

The Carbon Footprint Report is intended to quantify and calculate DEWA's annual GHG emissions, which include CO₂, CH₄, N₂O, SF₆, HFC and PFC. DEWA follows an operational control approach in consolidating, monitoring and reporting on its GHG emissions, quantifying them in terms of CO₂ equivalent.

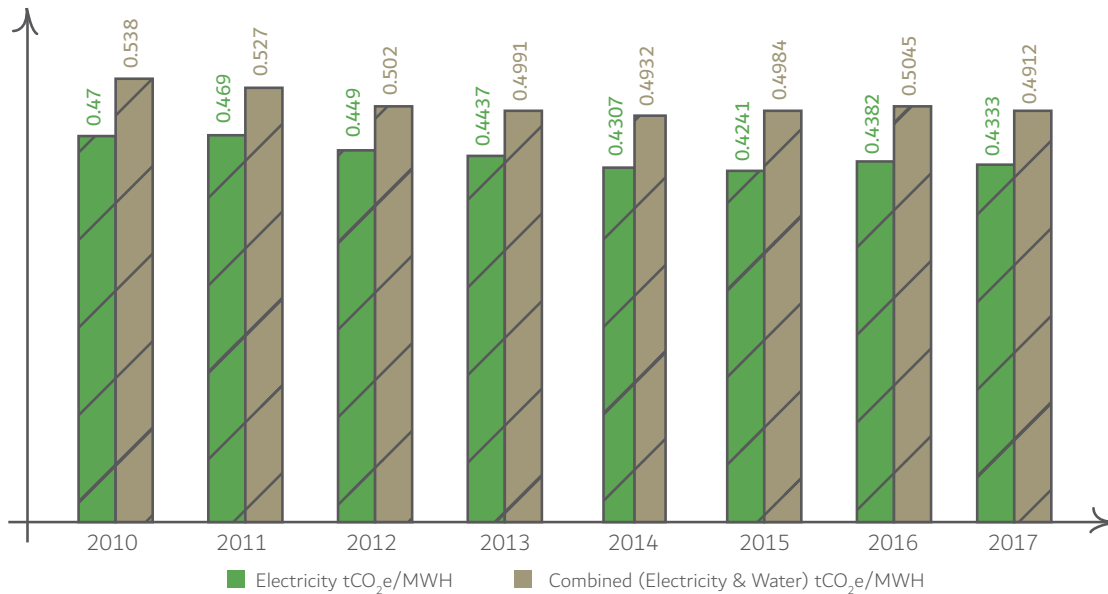
In 2017, DEWA's total carbon emissions were 22.23 million metric tons of CO₂ equivalent (MtCO₂e) compared to 25.97 MtCO₂e business as usual estimate based on our 2015 Emission Reduction Programme targets. The majority of our carbon emissions emitted comes from the combustion of natural gas to generate power and desalinated water. Carbon emissions also come from refrigerants, sulfur hexafluoride (SF₆) usage in circuit breakers and

fuel combustion from DEWA's fleet vehicles. Along with generation, the transmission and distribution of electricity needs to be included as a considerable means of reducing emissions. DEWA is also meeting environmental and operational goals through cost-effective solutions to manage SF₆ in high voltage circuit breakers and phase out restricted refrigerants.

Graph: Mt of CO₂e and percentage of CO₂e emissions by source, 2017



Graph: Carbon emission intensity, tCO₂e/MWH of electricity generated, 2010-2017



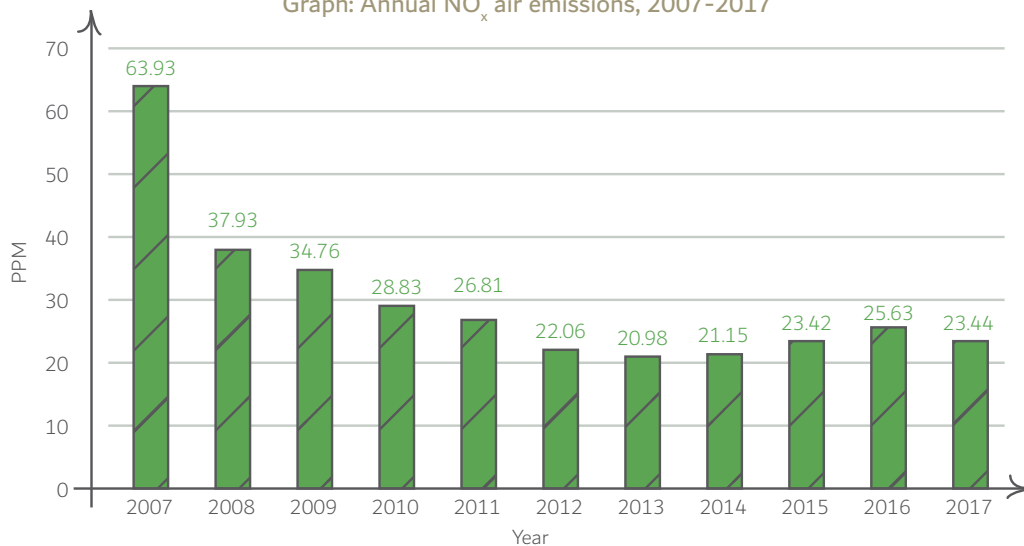
MINIMISATION OF AIR EMISSIONS

Air emissions have damaging impacts on our local climate, ecosystems, human health and air quality. DEWA abides by the Dubai regulations for air quality, which set limits for the emission of harmful air pollutants such as nitrogen oxides (NO_x) and sulphur dioxide (SO₂) emissions. Through strategic planning and continuous efficiency improvements of our plants, we have achieved excellence in NO_x and SO₂ emission reduction. Stringent NO_x emission limits for gas turbines are set early on in the design stage of any power and water plant. In 2017, our average annual NO_x emissions from all units was 23.44ppm, inclusive of all fuel types, gas turbines, and boilers, which is below the UAE Federal Government requirement of 37ppm and the European Union Requirement (Large Combustion Plant Directive 2001 for Plant Built After 2003) of 27ppm. With regards to SO₂ emissions, DEWA has maintained

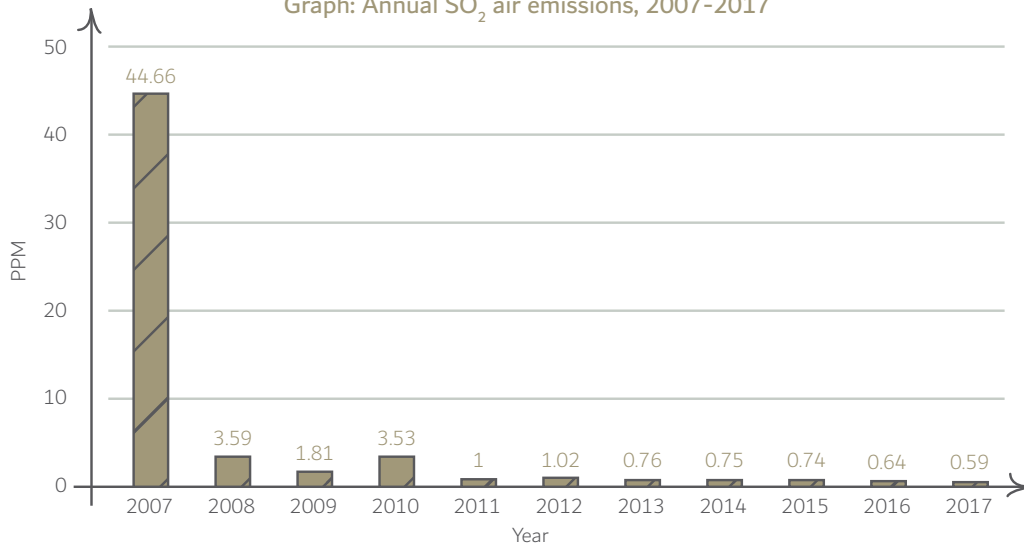
very low emissions due to the burning of sweet natural gas. Regarding the stand-by diesel fuel, DEWA has started procuring diesel fuel with ≤ 10 ppm sulphur content instead of ≤ 500 ppm sulphur content, in line with the 2014 UAE Government Federal Regulations.

In 2013, DEWA also set an action plan in place to phase out all Ozone Depleting Substances (ODS) by 2020, an investment of approximately AED 11.66 million, in line with both the Montreal Protocol and the Dubai Municipality Technical Guideline #7, which seeks to phase out ozone depleting substances completely by the year 2030. Since its implementation, by 2017, we have achieved a 76.05% phase out of the R-22 refrigerant. In addition to our major initiatives for reducing greenhouse gas emissions from our production facilities, we have also focused on a number of smaller-scale initiatives for reducing the leakage of a potent greenhouse gas called SF₆ from switch gears used to control, protect and isolate electrical equipment. SF₆ (Sulphur Hexafluoride) has a global warming potential of 22,800 times that of carbon dioxide and so any leakage could be significant. All SF₆ gas leaks from 132 & 400 kV Gas Insulated Switchgears (GIS) are promptly attended by our maintenance team with the aim of achieving 100% rectification of identified SF₆ gas leaks.

Graph: Annual NO_x air emissions, 2007-2017

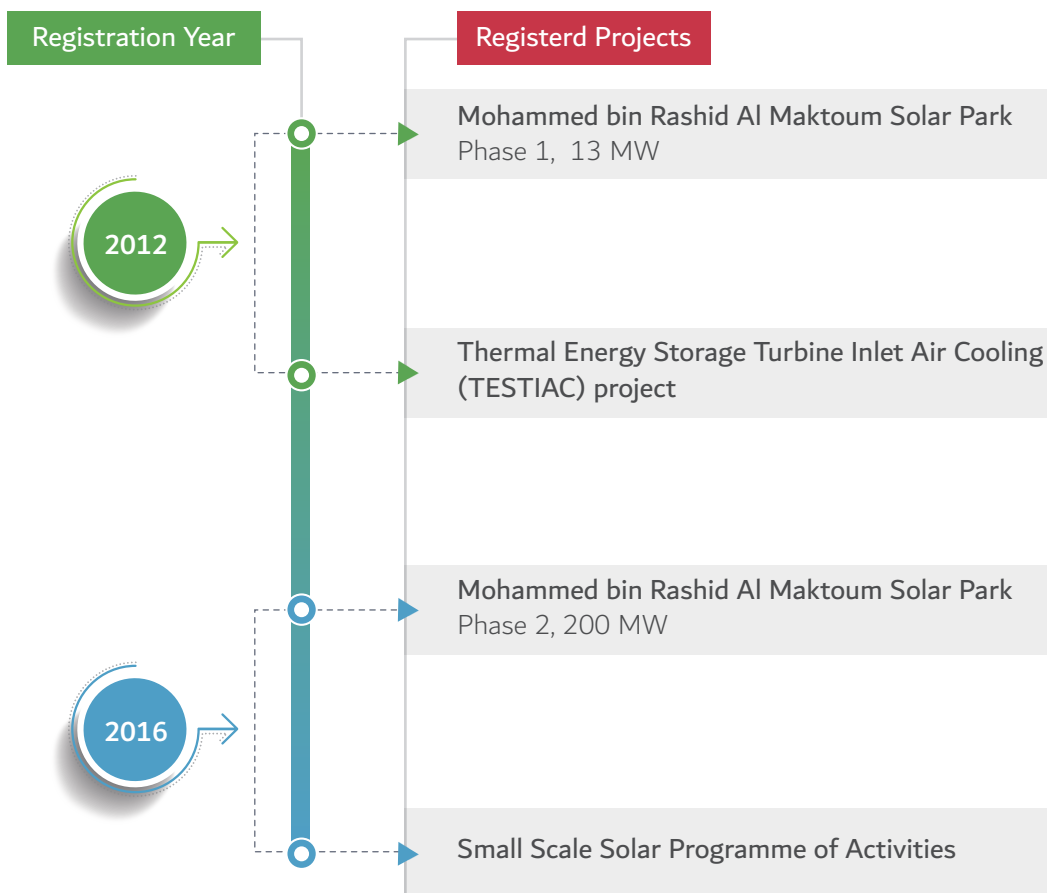


Graph: Annual SO₂ air emissions, 2007-2017



EMISSION REDUCTION AND RENEWABLE ENERGY CERTIFICATES

DEWA is fully committed to achieving overall sustainable development, having registered several of its projects as Clean Development Mechanisms (CDMs) projects under the United Nation's Framework Convention on Climate Change for Climate Change (UNFCCC). Registration of these projects signifies the use of innovative renewable energy and energy efficiency solutions, and allows DEWA to monetise Certified Emission Reduction (CER) credits, also known as carbon credits, as an additional form of revenue over the next years.



The CDM Executive Board of the United Nations Framework Convention on Climate Change has awarded DEWA with 10,635 and 95,197 carbon credits for the first phase of the Mohammed bin Rashid Al Maktoum Solar Park and Thermal Energy Storage Turbine Inlet Air Cooling (TESTIAC) project, respectively.

Under the Clean Development Mechanisms Framework, DEWA also initiated the UAE Small Scale Solar Programme of Activities (PoA) to facilitate financing of projects and environmental programmes through certifying emission reductions by owners and developers of solar projects in the UAE. The PoA will also officially support Shams Dubai, which is one of the eight programmes to drive sustainability that is part of the Demand Side Management Strategy launched by the Dubai Supreme Council of Energy.

in 2017, DEWA became the first entity in the MENA region to acquire International Renewable Energy Credits, or i-RECs. The i-REC is a voluntary system for international trade in renewable-energy certificates. The system was created to encourage utilities around the world to increase the amount of renewable or clean energy in their supply mix relative to fossil fuels. This move supports DEWA's commitment to the environment and its adherence to increase the share of clean energy in the energy mix. It also underlines DEWA's efforts to encourage the use of clean energy and promote environmental sustainability and a green economy.

DEWA has acquired i-RECs equivalent to 25,000 megawatt hours of annual net electricity supplied to the grid from the 13MW Mohammed bin Rashid Al Maktoum Solar Park power plant for the year 2017.

ACCELERATING CLIMATE ACTION

Countries across the globe adopted the historic international climate agreement at the UNFCCC COP21 in Paris in December 2015. The UAE has submitted its Intended Nationally Determined Contribution (INDC), demonstrating its strong commitment to tackle the issue of climate change and achieve the long-term goals of the Paris Agreement.

DEWA has been a part of the UAE delegation to both the annual pre-COP and COP negotiations since 2012, and is a trusted partner of the Ministry of Climate Change and Environment, to lead technical negotiations on the matters related to the Clean Development Mechanisms and Mitigation under the Kyoto Protocol and the Paris Agreement, Article 6. As with many other organisations worldwide, DEWA has systematically worked on cutting its emissions to support the global goal of avoiding the 2°C increase in the Earth's temperature through our Carbon Dioxide Emission Reduction Programme.

CLIMATE CHANGE RISK AND RESILIENCE

The power and water sector in the UAE are extremely vulnerable to the effects of climate change. DEWA understands that climate change can have both a physical impact on its operations, and an economic impact on its business. Extreme weather events that exceed design parameters of our processes can hinder the performance of our plants. Thus, we are planning to enhance our adaptive capacity and to develop a climate change resilience plan to assess, understand and project the real climate sensitivity of our assets and operations. This project will begin in the first quarter of 2018, making DEWA the first utility in the region to initiate a low carbon transformation via climate change resilience planning. The plan is expected to be completed by end of 2018, and will project climate change trends up to 2050, allowing us to prioritise hazards, vulnerabilities, risks, and opportunities from projected climate change scenarios.



CASE STUDY

SOLAR PANELS FOR THREE EXPO SUBSTATIONS

As the Official Sustainable Energy Partner, and to demonstrate our support to elevate EXPO 2020 Dubai to be the best World EXPO, DEWA has invested AED 140 million to build three 132/11kilovolt (kV) substations. The substations, called Opportunity, Mobility and Sustainability-named after EXPO's three subthemes - with 45 kilometres (km) of high-voltage (132kV) cables reflects our commitment to provide a unique energy infrastructure that meets all the needs of sustainable development in Dubai. The substations are expected to be completed in record time by early 2018 - two years before the official inauguration of the exhibition.

Each of the three substations will be fitted with solar panels, which will supply with 63kW of power during the day for each substation, absorbing the partial requirement of the average daytime power needed to operate the substations' HVAC units.

This initiative comes in line with DEWA's aim to supply the needs of EXPO 2020 exhibition with clean and renewable energy as required from the Mohammed bin Rashid Solar Park, to promote sustainability, which is a key pillar of the exhibition.

WATER

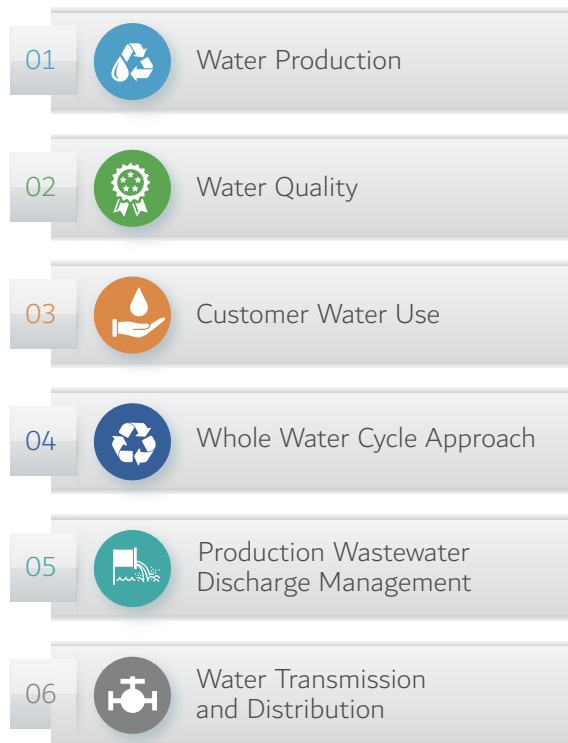
- During 2017, we reduced our water losses to 7.06%, one of the lowest worldwide
- DEWA met 100% of Dubai's water needs in 2017
- 489,729 smart water meters were installed in Dubai as of 2017



MANAGEMENT APPROACH

Water is one of the most important resources of our planet. In DEWA, we commit ourselves to maximise our water efficiency in all our operations and continuously encourage our customers to minimise their water consumption by raising awareness on the importance of rational use, protecting the environment and conserving natural resources. To reduce adverse impact on fresh water as well as on marine environment and avoid water shortages, we have set long-term strategies and adopted various initiatives and projects such as the 'Be Water Smart' campaign that supports Dubai's vision and DEWA's strategy. We continuously strive to maintain the quality of water delivered to our customers without affecting fresh and marine water resources.

There are six focus areas identified in our water management approach which are:



WATER POLICIES AND REGULATIONS

We have a set of policies and regulations to maintain the quality of water we provide and to optimise and reduce our water consumption. These policies form part of our commitment to the happiness of our stakeholders and promotes Dubai's vision by providing innovative sustainable world-class level systems and services.

In this framework, we are committed to develop, build, and maintain world-class electricity and water infrastructure in order to meet all power and water demands of Dubai round the clock, provide sustainable electricity and water supply according to best international practices of reliability, efficiency and safety and establish effective and reliable service performance measures.



We protect our water network by aligning with federal and local laws as well as following a set of policies and regulations, which include but are not limited to: the WC Asset Management Mechanism, the Electricity and Water supply policy, the Jebel Ali Power Station (JAPS) potable water specification, the GSO 149/2014 drinking water specification (Standardization Organisation for GCC), the World Health Organisation (WHO) drinking water specification and the National Electronic Security Authority (NESA) standards.

WATER PRODUCTION

DEWA has adopted a clear strategy to ensure that by 2030, 100% of desalinated water will be produced by a mix of clean energy that uses both renewable energy and waste heat. By 2030, our Reverse Osmosis installed capacity will be 41% of total installed desalination capacity & cumulative savings due to New R.O plant will be 13 BAED. We continuously keep up with the recent innovative technologies that are cost effective in terms of water production. In 2017, DEWA launched an innovative initiative to study the possibility of injecting and storing desalinated water within subterranean water basins and to pump it back into the water network when needed. Studies have shown that it is possible to store 5,100 million gallons of water that can be retrieved when needed.

Currently, 70% of DEWA Water production is fuel free as waste heat from cogeneration plants is utilized to produce water in MSF plants. The seawater is chlorinated in our Jebel Ali Power and Desalination Complex and then used for water production or for cooling the power plant equipment. In DEWA, we mostly produce water using the multi-stage flash (MSF) technology and a small portion using RO technology. MSF distills seawater by flashing a portion of the water into steam in multiple stages of what are essentially counter-current heat exchangers. RO is a water purification technology that removes ions, molecules, and large particles from drinking water.

In 2017, our installed capacity from our desalination plants was 470 MIGD with a total seawater withdrawal of 5,741.5 Million cubic meter at a daily average flow of 3,460.6

MIGD. Seawater desalination requires an intake system that is capable of providing a reliable quantity of clean seawater with a minimum ecological impact. The seawater intake volume is calculated based on pump capacity and operating hours. Furthermore, we met the peak daily and monthly demand for 2017, with substantial reserves. The peak daily water demand of 372 MIGD was on 13 August 2017, an increase of 4.33% growth compared to 2016. The average daily water demand in 2017 was 330.987 MIGD compared to 319.298 MIGD in 2016, which is an increase of 3.66%. The peak monthly average of 362 MIGD occurred in August 2017, an increase of 4.39% growth compared to 2016.

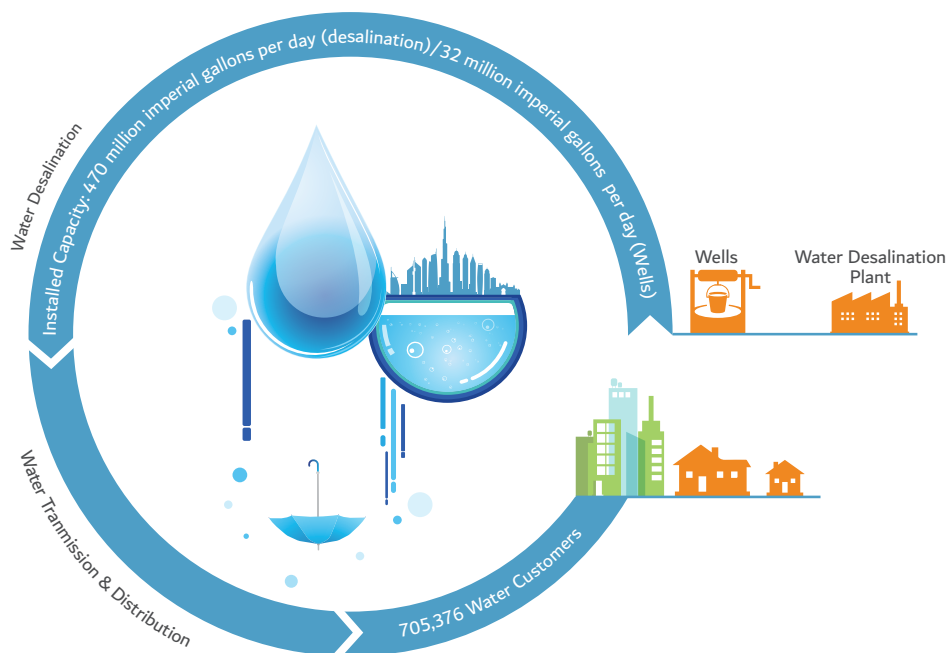
Our installed capacity from underground wells was approximately 32 MIGD. However, this is reserved for contingencies. During 2017, we utilised approximately 1.266 MIGD from underground wells. The underground water production is measured through meter readings on the respective pumps.

For the underground wells situated in Hatta, our installed capacity is approximately 0.35 MIGD and the water from these wells is also reserved for contingencies. During 2017, we utilised approximately 2.654 MIG. In Hatta the well water is used as feed for Hatta’s RO plant which is a secondary source of potable water for local communities. In 2017, the total RO permeate production was 0.546 MIG.

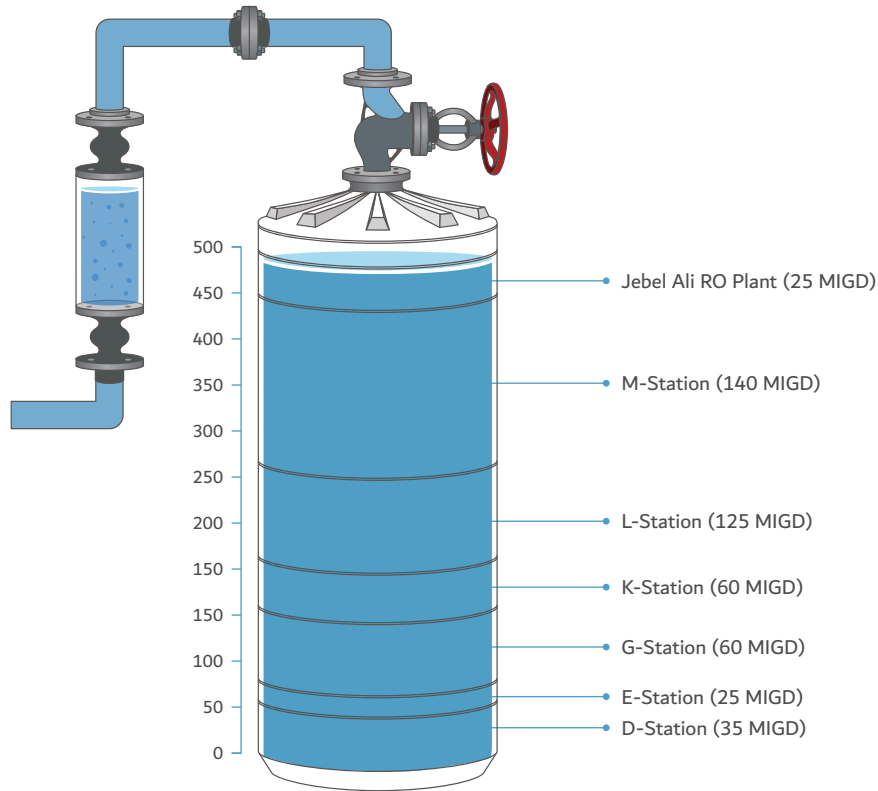
In 2017, total reject water released from Hatta RO Plants was 2.11 MIG (the difference in total amount of well water pumped, 2.654 MIG and the permeate production from the RO plant, 0.546 MIG). This reject is released from RO units and transported through pipelines to local UAE local farms in the Hatta area for irrigation/agricultural purposes.

In the UAE, the abstraction of groundwater from underground wells is driven largely by agriculture, which leads to the depletion of the groundwater reserves. At DEWA, we are aware that the underground wells need to be managed carefully so we ensure that it is mostly used during emergencies to serve people who live in areas where water networks are unavailable.

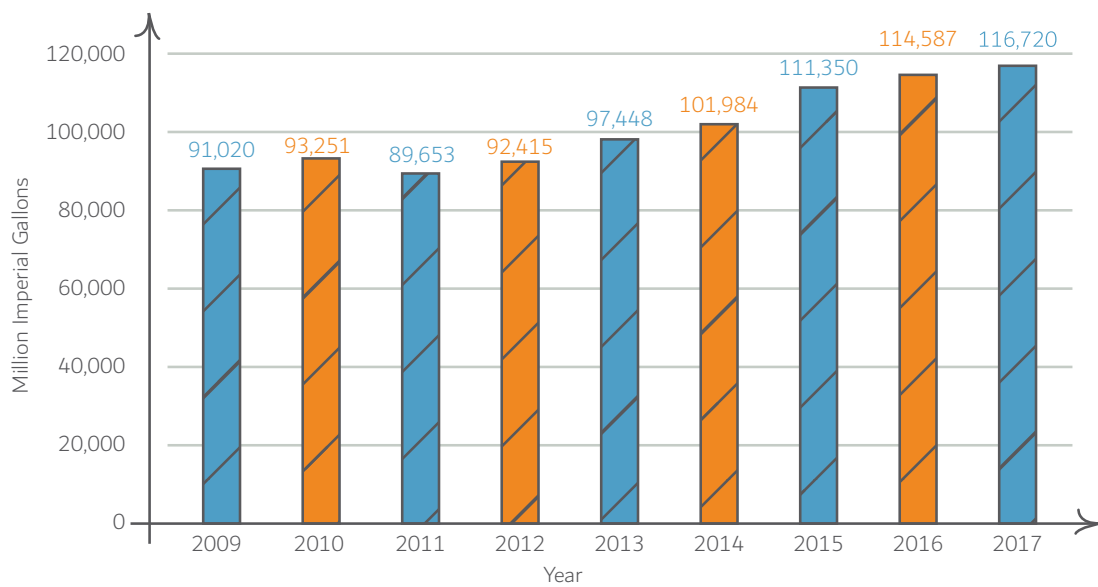
Graph: Water Production Cycle



Graph: Total water production capacity in 2017 (Million Imperial Gallons per day)



Graph: The total water produced from 2009 to 2017 (Million Imperial Gallons)





WATER TRANSMISSION AND DISTRIBUTION

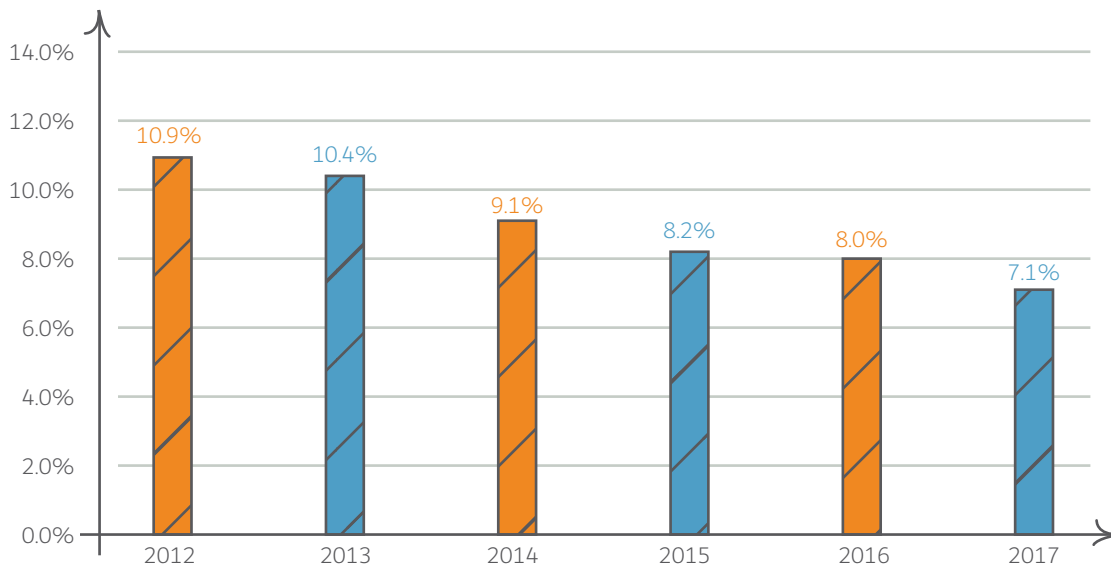
We commit ourselves to enhance the efficiency and reliability of our water networks by meeting the basic needs and expectations of our customers. In 2017, we made significant progress on the extension of 25km of major water transmission pipelines across various parts of Dubai which enabled a comprehensive development of electricity and water for the 2021 Dubai Plan. We also continued our efforts to replace Dubai's entire water network by replacing old connections with new ones, replacing water meters, and developing new transmission and distribution networks that conform to the highest international standards.

We strive to achieve operational efficiency and anticipate water shortage emergencies by storing water in our reservoirs to satisfy approximately 2 days of peak demand. The water drawn from reservoirs is distributed to our customers through a network of pipes. We manage our water pipelines to minimise losses of water. We monitor leakages and unbilled meters by using our Unaccounted for Water (UFW) metric. We are proud to announce that during 2017, we reduced our water losses to 7.06% one of the lowest worldwide, compared to approximately 11.95% representing the top decile of utilities in 2016 as reported by Global Water Intelligence and 21% in New York as reported by Mckinsey & Co. for 2016. This achievement was possible through the launch of major projects that improves our water transmission and distribution networks. One such project is the Aquifer Storage and Recovery (ASR) Project. In terms of security of supply, and specifically water storage, DEWA takes this matter with utmost importance, given the scarcity of water resources, and has embarked on building a cost-effective Aquifer Storage and Recovery (ASR) system, to store desalinated water into groundwater aquifers. This technology is more cost-effective than the conventional way of storing

water in concrete reservoirs. Around 5 billion gallons will be stored underground ready to be recovered when needed. ASR will enhance the water system strategic storage, and provide around 50 MIGD for a period of 75 days in the event of emergency. This is in addition to providing flexibility in optimising water supply system. The first phase of this innovative technology-based project is currently underway.

In addition, we continued the adoption of the Supervisory Control and Data Acquisition (SCADA) to survey the water network and identify and remotely-manage potential leaks in the system and continued scanning the transmission and distribution networks through the adoption of modern technology in order to prevent cracks from causing leaks in the system.

Graph: Annual Unaccounted For Water (UFW) as percentage of total water supplied



WATER QUALITY AND AVAILABILITY

Globally, water demand is predicted to increase significantly over the coming decades. The safety and quality of potable water is of the utmost importance to DEWA. Our water quality specifications are more stringent than the World Health Organisation's Drinking Water Guidelines and it is our responsibility to ensure that the quality of water from our production facilities meet our specifications. We also ensure a full compliance through our Integrated Management System (IMS) which is certified by external auditors.

We manage our potable water resources by monitoring water quality across our network, and collecting water samples from pumping stations, reservoirs, and well fields across Dubai. We test our water samples by using portable equipment on site to measure the turbidity, pH, residual chlorine dioxide, and electrical conductivity while the remaining sophisticated testing is performed in DEWA's central laboratory to check conformance to DEWA's specifications. We also strive to ensure that our potable water is nearly 100% free from bromate.

Table: DEWA potable water specification with typical parameters

Sl. No.	Particulars Of Analysis	WHO Guideline Value(Max)	DEWA	
			Specification	Typical Figure
1	pH value at 25°C	6.5 ~ 8.5	7.9~8.5	8.29
2	Total Dissolved Solids mg/L	1000	100~450	197
3	Carbonate as CaCO3 mg/L	-	0~10	0.3
4	Bicarbonate as HCO3 mg/L	-	30~75	58.7
5	Total Hardness as CaCO3 mg/L	500	40~120	62.5
6	Calcium as Ca mg/L	-	10~25	17.7
7	Magnesium as Mg mg/L	-	2~20	4.4
8	Chloride as Cl mg/L	250	25~250	70.6
9	Sulphate as SO4 mg/L	250	2~35	7.8
10	Fluoride as F mg/L	1.5	≤1.5	0.04
11	Sodium as Na mg/L	200	10~200	42.2
12	Nitrate as NO3 mg/L	50	≤50	0.08

Note: DEWA typical figure is the average of individual station averages during the year 2017.

W.H.O. guideline values is based on W.H.O drinking water guidelines values 4th Edition with Addendum 1 of 2017.

WASTEWATER DISCHARGE MANAGEMENT

Wastewater discharge is the effluent discharged from power and desalination processes, water treatment plants and treated sewage to marine/land environment as per Dubai Municipality Wastewater Discharge Permit issued to DEWA. In DEWA, we strive to provide an effective wastewater management system by following the appropriate standards in order for us to protect the environment and the public health. In Dubai, we are responsible for the management of the wastewater generated from our desalination and power production plants while Dubai Municipality is responsible for the wastewater treatment.

In 2017, the wastewater from our power and desalination plants that was discharged to the Arabian Gulf had a total volume of 5,212.9 million cubic meters. We also produced smaller volumes of effluent from our water treatment plants (80,174 m³) and on-site treated sewage effluent (223,603 m³), out of which 93,362 m³ was discharged to land for landscape irrigation inside the premises and the remaining 130,241 m³ of treated sewage was discharged to the sea along with other process wastewater.

A total of 87.2% of the total wastewater (process wastewater and treated sewage effluent) generated was reused in the Jebel Ali Power Station Complex.

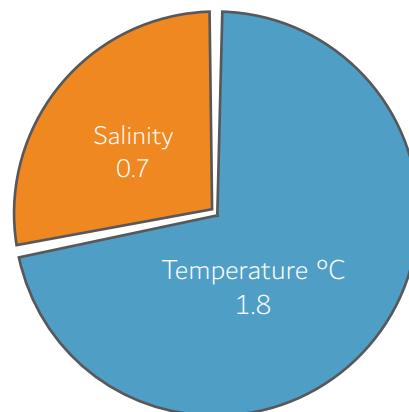
Table: Volume of waste water discharge (million m³) by source 2017

Type of effluent	Total volume (m ³) discharge
Process water from Power plant	1,778,970,917
Process water from Desalination plant	3,433,625,000
Water treatment plant effluent	80,174
Treated sewage water (to land)	93,362
Treated sewage water (to sea)	130,241
Treated sewage water	223,603
Waste Water Discharged to Marine and Land	5,212,899,694

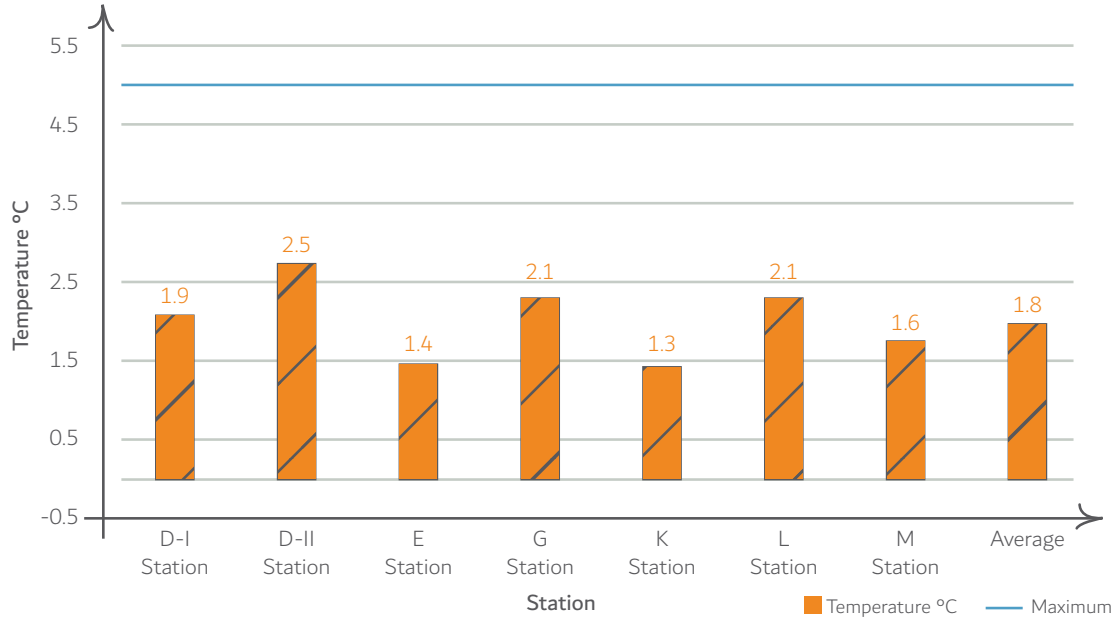
We recognise the outfall of a highly concentrated salt known as brine that has the potential to affect our environment. We collaborate with regulators and monitor our wastewater discharges monthly not to exceed the permissible limits for wastewater discharge quantity and quality. We have installed a continuous monitoring system at 500m, 1km, and 1.5km away from the discharge points for which real data accessibility was given to Dubai Municipality.

As per the requirements of the wastewater discharge permit issued to DEWA by Dubai Municipality, bimonthly and quarterly ecological assessments (phytoplankton/ zooplankton and macro benthos respectively) are carried out at 300m and 1.5km away from the discharge points by a specialist environmental service provider. We also measure the temperature and salinity difference between the mixing zone and ambient seawater on a monthly basis. In 2017, the temperature and salinity measurements were within the maximum allowed limits of 5°C and 2ppt (parts per thousand) respectively.

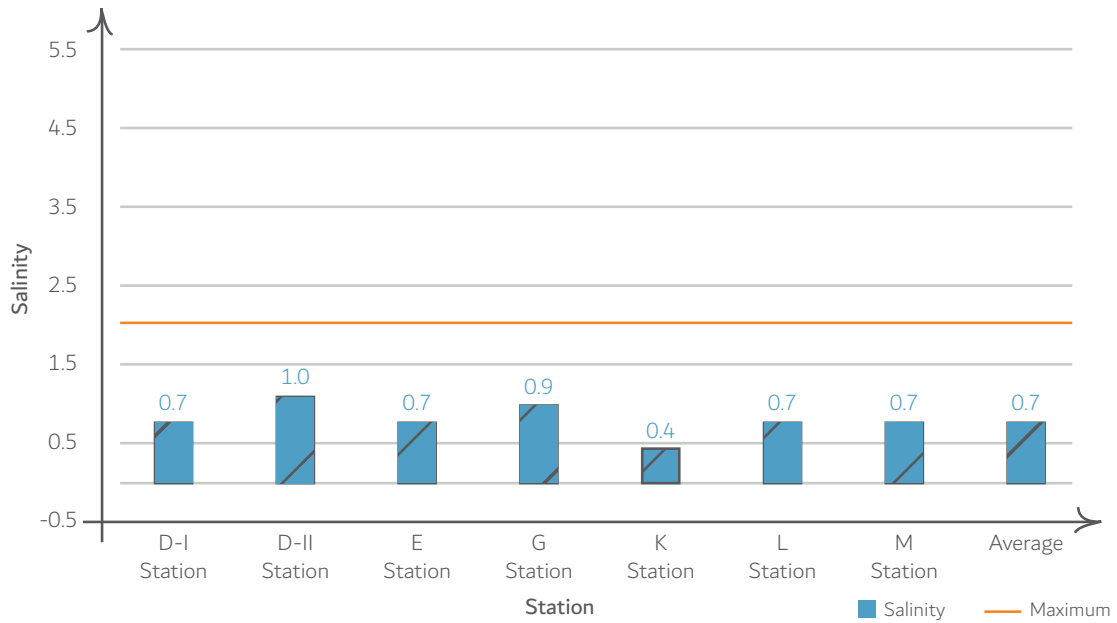
Graph: The average of temperature and salinity difference between the sea water at mixing zone and ambient sea water 2017



Graph: Temperature difference between the seawater at mixing zone and ambient seawater 2017



Graph: Salinity difference between the seawater at mixing zone and ambient seawater 2017



WASTE MANAGEMENT

Waste management varies from region to region and from country to country. In DEWA, we aim to reduce the amount of solid and liquid waste produced by using resources efficiently, recycling, or recovering where possible. We have implemented an effective waste management system that allows us to be completely compliant with all relevant national and international regulations, policies, and procedures. We also benchmark our waste management system with other organisations internationally. We benchmarked our waste management system with other organisations internationally, including the French company Suez, a worldwide leading company in the field of water, electricity, natural gas, and waste management.



We also ensure that all divisions in DEWA adopt best practices for waste management through internal benchmarking done by our own environment department. Through benchmarking, we identify best practices, innovative ideas and highly effective operating procedures within DEWA. After comparing how well different divisions within DEWA manage their waste, we implement the best practices across various divisions when applicable.

Reducing waste has a great effect on cost savings not just on the environment. In 2017, we earned AED 2,082,714 from selling scrap waste materials from our Jebel Ali Power Station Complex. We significantly reduced our consumption of new oil and minimised our waste and the associated costs for waste disposal by using recycled oil in our Jebel Ali Power Station Complex. One example is to recycle waste oils from the lubricant, transformer and hydraulic oils in boiler furnaces when oil firing is required. In 2017, we recovered 16,900 litres of oil for reuse. We also recover and reuse wastewater from our power stations. During 2017, we recovered approximately 195.97MIG of wastewater.

Table: Waste from DEWA power station complex, 2013-2017

Waste Figures	Unit	Year				
		2013	2014	2015	2016	2017
General waste sent to landfill	Tons	1,534	1,599	2038	1,386	2,341.20
Hazardous waste disposal	Tons	57.9	71.2	264	20.35	138.75
Wooden packing reused	Cubic Foot	5,958	5,297	6,608	9,471	14,629.00
Waste water recovered	MIG	209	266	183.4	215.0	195.97
Waste oil recovered for use	Liters	126,421	19,143	6,025	4,700	16,900.00
Recycled wastepaper	Tons	-	34	35	36	39
Spill pallet made of IBC drums	No.	-	77	137	95	83
Segregation of waste bins made of IBC drums	No.	-	-	-	54	14
Reusing of hazardous waste by minimising the GRP drums waste & converting it into plantation usage	No.	-	-	-	-	200.00
Revenue from scrap/waste materials sold	AED	1,396,910	830,020	960,146	4,063,158	2,082,713.95
Savings from selling waste oil	AED	513,538	228,771	161,866	53,851.2	16,560.00

WATER CHALLENGES

We continuously commit ourselves to overcome water challenges, our major one being the increase in water consumption. In 2017, the number of water consumers reached to 705,376 consumers with the consumption of 120,810 MIG of desalinated water and 460 MIG of ground water compared to 666,430 consumers, 116,863 MIG, and 466 MIG respectively in 2016. To improve the operational efficiency and increase the flow of water to meet the rapid growth in water demand in various parts of Dubai, we developed water distribution networks in Al Khawaneej 2, TechnoPark, and other new areas in Dubai.

We seek to achieve Dubai's Demand Side Management (DSM) target to reduce demand by 30% compared to the Business As Usual (BAU) scenario by 2030. In 2017, the overall demand side management initiatives at Dubai level have succeeded in achieving about 4 BIG of water reduction.

We also introduced a slab tariff structure in 2008 and a surcharge component in 2011. In the slab structure, tariff rates change depending on the volume of water consumed and this involves a driver for water conservation. In addition, we implemented the smart network and meters project as part of the Smart Grid initiative through which all mechanical and electromechanical meters are replaced with smart meters. The meters will provide customers with detailed information on their consumption, so they can identify the best ways to reduce both water and electricity use and reduce their bills as well.

Due to the industrial development, we faced another water challenge, which is the quality of the seawater intake that is impacted by the rise in seawater temperature, oil spills, algal blooms, seasonal seaweeds, and high turbidity. In the pre-treatment and desalination processes, a high amount of energy is required when the quality of seawater intake is low. We have overcome this challenge by continuously monitoring the intake water quality situation.

Finally, we recognise the impact that climate change has on our water resources and we commit ourselves to continuously raise awareness on this issue through various initiatives. In 2017 we conducted a workshop on Climate Change & Research in Fujairah, in partnership with Emirates Wildlife Society and WWF for 22 of our employees. The programme consisted of scientific research on the impact of climate change on fresh water ecosystems and the UAE's biological diversification through a number of lectures, panel discussions, and field research activities, under the supervision of environmental experts.



We also continued to implement various initiatives to promote water conservation among our customers such as the Best Consumer Award, neighborhood awareness campaigns and the Ideal Home initiatives. Each year, DEWA organises events for the UN World Water Day in collaboration with Dubai Municipality and other community organisations, to raise awareness about water efficiency. We target all educational institutions through the Conservation Award that was first launched in 2005 to raise awareness among students on the rational use of resources, and celebrate best practices in reducing electricity and

water consumption; as we believe that educational institutions are the best breeding grounds to cultivate the seeds of conservation until it grows and thrives in the community. As a result, students and institutions participating in the award have come up with water solutions that have achieved a reduction of not less than 15% in water consumption.

INNOVATION & WATER

Innovation plays a major role in the water sector and can make a difference in addressing water challenges. In DEWA, we recognise that innovation is important at all stages of sustainable development. In November 2017, we organised a Digital Day workshop for our employees to discuss the future of digital technologies, Artificial Intelligence and robotics in water and energy sector. Experts from international organisations including Microsoft, SAP, Ernst & Young, and Navigant took part. We aim to become one of the most prominent digital utilities in the world, in line with the Fourth Industrial Revolution that the world is experiencing. Our strategies are also aligned with the UAE Centennial 2071 that focuses on an advanced technology to guarantee a sustainable development for the long-term future in the UAE.

CASE STUDY

TOGETHER, WE CAN END THE WATER CRISIS

Water is a basic human right and a driver for sustainable growth and development, yet 663 million people lack access to this basic need. To help respond to this water crisis, the UAE Water Aid Foundation (Suqia), an entity under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives Foundation, was established to provide humanitarian aid around the world and help communities that suffer from water scarcity by providing them with potable water. Suqia has been annexed to DEWA, to support the Foundation with any budget and operational requirements needed. In 3 years, Suqia has positively influenced the lives of over 8 million people in 25 countries up to the end of 2017.



DEWA launched a joint volunteering and humanitarian initiative in cooperation with Suqia and Mohammed bin Rashid Al Maktoum Humanitarian and Charity Establishment with the aim to promote humanitarian development and sustainable work outside the UAE in line with the Year of Giving.

In 2017, we sent our employees to participate in a volunteering trip under the name of 'Risalat Khair' to the Republic of Tajikistan. The trip included several charitable initiatives such as the 'Al Khair Truck' to support under privileged families by providing them with trucks so that they can get a steady income; 'Al Khair Hives', for families to produce natural honey, in addition to distributing school bags to help students, and sewing machines for widows and orphans. Moreover, our employees participated in different projects in that region that included the establishment of 'Zayed Alkhair' medical clinic. A total of 15,000 people benefited from 'Risalat Khair' in Tajikistan.



Suqia and DEWA's second volunteering trip in 2017 was to Upper Egypt for eight days where the team worked on the installation of clean water distribution networks, in the governorates of Qena, Aswan and Luxor. It also included several operational projects, by Mohammed bin Rashid Al Maktoum Humanitarian and Charity Establishment. These consisted of distributing fishing boats and yarn for fishing, as well as sewing machines and blankets for villagers. A total of 170,000 people benefited from these programmes.

Finally, we are proud to announce that by the end of 2017, we have achieved the objectives of the Year of Giving and we will continue our efforts in the Year of Zayed 2018. Our commitment to help the world to be a better place is inspired by His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, who once observed "Real giving is making a difference.... difference in a man's life, society or the progress of a country." We believe that by helping others we can create an impact and promote the spirit of volunteering among the different segments of society.




CUSTOMERS

- In 2017, we served 796,764 electricity customers and 705,376 water customers
- The UAE represented by DEWA was ranked 1st in the MENA region and 1st internationally as per World Bank's ranking of the UAE for 'ease of access' to electricity in the World Bank Doing Business Report 2018
- In 2017, Customer Minutes Lost from unplanned outages was 2.68 minutes, compared with approximately over 14 minutes recorded by counterparts in Europe and the US



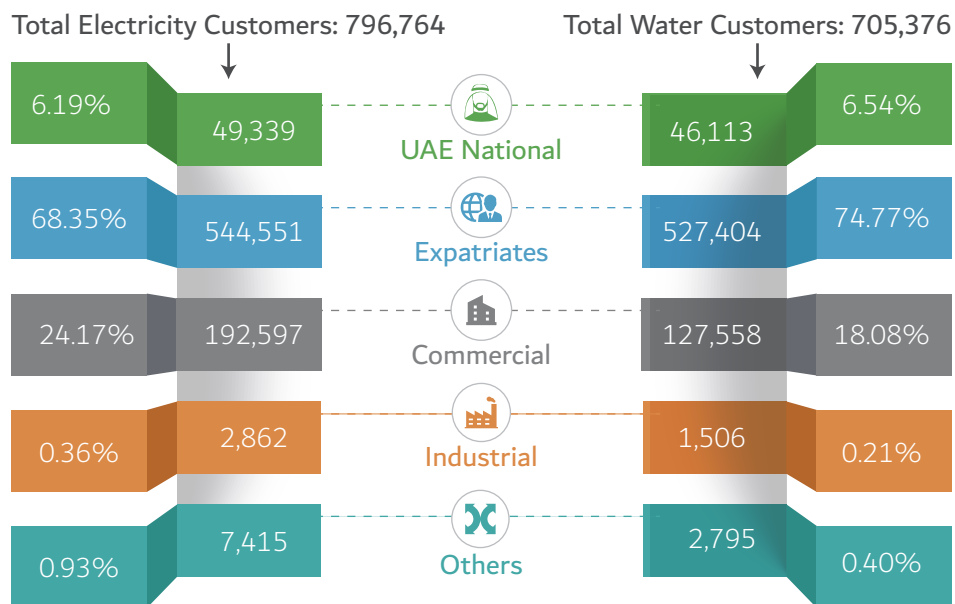
MANAGEMENT APPROACH

As the main providers of water and electricity in the Emirate of Dubai, we are committed to sustaining customer happiness by continuously exerting our best efforts and dedicating adequate resources to foresee, analyse, deliver and exceed our customers' needs and expectations. There are three main key areas to achieve customer happiness, which are:

- 
Excellence in customer service
 - Provide an optimised service journey that reflects in a happy experience for customer
 - Listening and responding to customer feedback, needs and expectations
- 
Smart technology for more effective customer service
 - Providing our customers with accurate, comparable and timely information through e-services and smart services
 - Smart services powered by AI
- 
Access to electricity and water services
 - Ensuring easier connections
 - Providing access to services for customers with language barriers and physical challenge
 - Sustaining global rankings in World Bank Doing Business Report where we achieved 1st place globally for 2018

DEWA'S CUSTOMERS

DEWA's customer base continues to grow effectively to meet the growing demands of the increasing population and economy in Dubai. It sets high standards to surpass customers' satisfaction in the successful development of the city.





OPERATIONAL EXCELLENCE

Seeking to constantly improve the effectiveness in all our services and operations by following the latest advancements in technology, DEWA remains one of the pioneers worldwide in system availability, sustainability, and reliability.

We achieved 28.87% Efficiency improvement in 2017 with respect to 2006 primarily through optimising the design and utilisation of power and water co-generation plants. Our transmission line availability is typically above 99.9% reflecting world class standards of performance. Our operational management approaches adhere to our Integrated Management System (IMS), as per universally recognised standards for health, safety, environment, and quality (ISO 9001, ISO 14001 and OHSAS 18001).

Our divisions know how to operate to fulfill DEWA's expectations for operational excellence. To measure our overall performance in providing energy, we observe three key indicators: System Average Interruption Frequency Index (SAIFI), Customer Minutes Lost (CML) and Availability Factor (AF). The SAIFI is a reliability indicator that is used to measure the average number of interruptions experienced by each customer over one year. In 2017, our SAIFI was approximately 0.100, continuing the downward trend since 2012.

In addition, CML (Customer Minutes Lost) measures our ability to restore power if the power supply is interrupted due to a fault or during unplanned outages (in emergencies). During 2017, our CML from unplanned outages was 2.68 minutes, which met our target of 3.00 minutes, compared with approximately over 14 minutes recorded by counterparts in Europe and the US. Finally, the Availability Factor (AF) is a measure of the percentage of time that our plants are available to produce power. During summer, AF is essential because of the enormous increase in the demand of electricity.

We are proud to report that in 2017 the summer availability factor was 99.16% and the annual availability factor was 91.29% due to maintenance conducted in the winter period.

Graph: System Average Interruption Frequency Index (SAIFI) Target and Actual, 2017



Graph: CML unplanned, Target and Actual, 2017

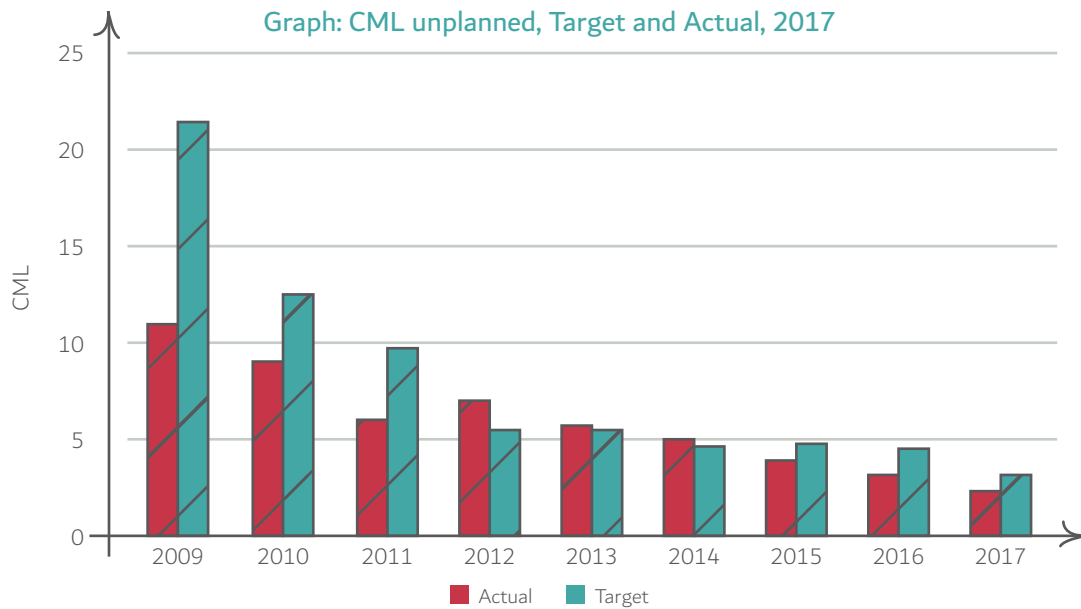


Table: Availability Factor (Summer), Target and Actual, 2017

Year	Availability Factor (Summer) Target	Availability Factor (Summer) Actual
2009	98.00%	98.75%
2010	98.00%	98.70%
2011	98.00%	98.15%
2012	98.00%	95.63%
2013	98.00%	98.14%
2014	98.00%	99.23%
2015	98.00%	98.61%
2016	98.00%	97.39%
2017	99.16%	98.5%

TURNING INTO AN INCLUSIVE ORGANISATION

In line with the National Policy to Empower People of Determination launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to create an inclusive community that ensures empowerment and a decent life for people of determination and their families, and “My Community... A City for Everyone”, initiative launched by HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council, to transform Dubai into a disability friendly city by 2020, DEWA commits to exerting all efforts to become an inclusive organisation.

DEWA started this journey in 2015 and has accomplished much in regards to access and employment for people of determination.

We have recruited and empowered people of determination, and implemented several inclusive services including smart device, website and smart app access, and easy physical access in accordance with the Dubai Universal Design Code, to ensure a seamless and integrating environment for people of determination, including redesigning its Customer Happiness Centres to be easily accessible for them. These include free valet parking across all its centres, wheelchair service, dedicated parking spaces, directional tactile paving for visually-impaired, staff who can use sign language, dedicated comprehensive service desks, customer guides and conservation-tip booklets in Braille, as well as other facilities. 90.7% of our customers with determination are happy based on happiness survey 2017.

In addition, we continuously express our support for customers of determination, through our inclusive service such as Ash'ir initiative (Arabic for signal), which is a service with a live video chat using sign language that enables hearing-impaired customers to directly communicate with DEWA's call centre staff through DEWA's smart app. We provide Braille versions of our Customer Guide Booklets created in coordination with the Emirates Association for the Blind. In cooperation with the Community Development Authority (CDA), DEWA launched a series of initiatives to reduce the burden of electricity costs for residents with low-income jobs, this also includes people of determination who hold low-income jobs or come from less fortunate families. We also support those who have the Sanad cards from CDA to provide people of determination with priority services, including discounts for service registrations, bill payment, and subscriber information charges.

DEWA, in cooperation with the UAE Deaf Association, provided electronic equipment and devices to 30 families of people with determination to help them in their daily lives. The smart devices included alarm devices to help them communicate with others, vibration devices to help them wake up, and other notification and vibration tools to support doorbells, telephones, fire alarms, security equipment, childcare, and others.

For our elderly Emiratis customers who are aged 60 and above, we continued providing them with 'Thukher' discount cards for all DEWA services.

SMART INITIATIVES

In order to transform Dubai into the smartest, most sustainable, and happiest city in the world, HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai launched the Smart Dubai Initiative. In DEWA, we seek to bring digital innovation and customer engagement to the next level by incorporating smart services in all our operations to increase the energy and water efficiency, upgrade government work to the highest standards, enhance customers' experience, and achieve happiness for everyone.

We also commit ourselves to keep up with the latest sustainable developments and follow recent strategies in the region. One of the strategies that DEWA developed is the implementation of smart water and electricity infrastructure to revolutionise the electricity and water distribution infrastructure of the future with a view to offer advanced capabilities and include automated decision-making and interoperability throughout the electricity and water network. In 2017, we introduced the Block Chain for Green Charger in line with Dubai Block Chain strategy, the first of its kind in the world that aims to achieve significant advances in supporting technological and digital transformation in Dubai. The Block Chain for Green Charger strategy provides customers and service providers with services such as facilitating the registration of electric vehicles, ensuring more secure transactions, and accurately locating electric vehicle charging stations.

The Smart Grid strategy defines ten programmes that will be completed over the short, medium and long term (2014-2035):



01

Advanced Metering Infrastructure for Electricity



06

Information Technology Infrastructure



02

Advanced Metering Infrastructure for Water



07

Security



03

Asset Management



08

Substation Automation



04

Big Data and Analytics



09

System Integration



05

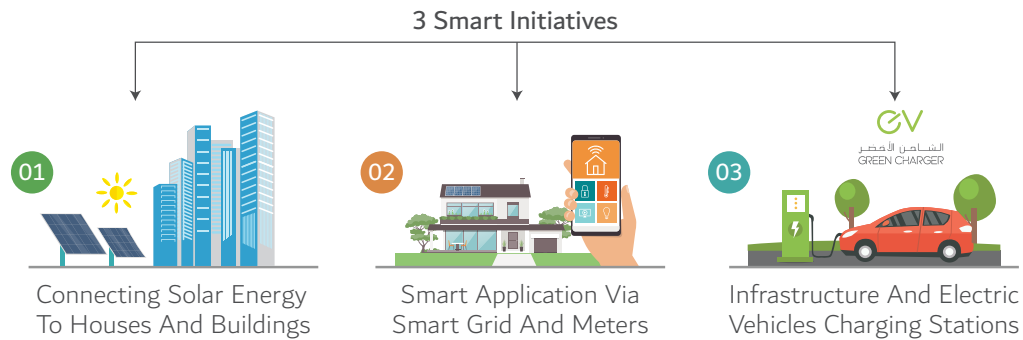
Distribution Automation



10

Telecommunication

DEWA has also launched three smart initiatives to support the Smart Dubai initiative:



FIRST INITIATIVE-‘SHAMS DUBAI’

Shams Dubai encourages DEWA customers to install photovoltaic panels at their premises to generate electricity from solar power. The electricity is used onsite and any surplus is exported to DEWA’s grid. An offset between exported and imported electricity units is conducted and the customer account is settled based on this offset. This is also referred to as ‘net-metering’. Apart from enabling DEWA customers to generate their own green electricity and save on DEWA bills, Shams Dubai supports a number of strategic objectives. These include the UAE National Agenda, namely the UAE Vision 2021 objectives to increase the share of clean energy and improve air quality; the Dubai Clean Energy Strategy, with its objective to diversify the electricity mix, reducing dependence on gas; the Dubai Demand Side Management Strategy, to rationalise energy use while ensuring environmental sustainability; the Dubai Carbon Abatement Strategy, to reduce the carbon footprint in the Emirate; and the Green Economy for Sustainable Development initiative, aiming at making UAE a global hub and a successful model of green growth.

Customers have shown a strong interest in Shams Dubai, and as of the end of January 2018, about 40MWp have been installed, with solar systems in 613 buildings connected to DEWA’s grid. DEWA is also leading by example in this area: solar panels have been installed on rooftops and carports across a number of DEWA buildings, and we have also sponsored a number of solar PV projects for other Dubai Government entities to show our commitment to this initiative, and to ensure cooperation and mutual support on sustainability.

DEWA also provides regular Solar Photovoltaic Certification Training sessions and has an enrolment scheme for consultants and contractors companies. This is to ensure that they comply with its high standards of quality and safety, and only engage qualified professionals in solar photovoltaic work and projects. By the end of 2017, 78 solar photovoltaic consulting and contracting companies had enrolled with DEWA, and more than 400 solar engineers had successfully completed the Solar Photovoltaic Certification Training. This shows how Shams Dubai is contributing to the creation of green jobs in the Emirate.

DEWA has also established a photovoltaic equipment eligibility scheme for manufacturers, based on the technical standards developed for Shams Dubai. By the end of 2017, more than 100 solar equipment manufacturers had registered with DEWA for their products (panels, inverters, interface protections), creating a competitive equipment market with clear benefits for customers.

SECOND INITIATIVE-SMART APPLICATIONS VIA SMART GRID AND METERS

The Smart Applications through Smart Devices provides various benefits and new features to our customers, enabling them to have detailed information about their current and historical consumption, along with predictive analysis. The data obtained automatically through smart devices will be available for our customers to monitor and compare their actual consumption patterns for specific periods of time that will help them to ensure more sustainable consumption. Smart meters communicate remotely with DEWA systems and provide consumption information at regular time intervals. DEWA has installed over 300,000 smart electricity and water meters by December 2017, with over 1,500,000 such meters to be installed by 2020.

THIRD INITIATIVE-THE EV GREEN CHARGER

The Electric Vehicle (EV) Green Charger Initiative was launched in support of H.H. Sheikh Mohammed bin Rashid Al Maktoum's vision to make Dubai the smartest and happiest city in the world and promote green transportation in the city. The aim of this project was to set up an electric vehicle charging infrastructure for the public across Dubai. At the time of the launch of the initiative, there were limited electrical vehicles in Dubai because of the limited EV charging infrastructure. DEWA's aim was to encourage the people to use sustainable transport comprising hybrid and electric vehicles and to help reduce carbon emissions in the transport sector. Hence DEWA, as the electricity provider for Dubai, took the lead in setting up an EV charging infrastructure thus contributing to Dubai's Carbon Abatement Strategy with the target of reducing carbon by 16% by 2021.

DEWA has successfully installed 100 electric charging stations by December 2015, in different areas of Dubai such as government offices, airports, gas stations, shopping malls, commercial offices, clinics and hospitals, residential complexes and tourist attractions as part of the Green Charger initiative. Furthermore, DEWA has announced plans to increase the number of charging stations to 200 stations in 2018. DEWA also announced various incentives like free charging for electric vehicle owners registered in the Green Charger initiative from 1 September 2017 to 31 December 2019.

SMART SERVICES FOR CUSTOMERS

DEWA continuously seek to identify ways that enhances the customers' services by ensuring that all the provided services reduce operational costs and expedite the customer's ability to get the information they need easily and directly.

The UAE launched the visionary goal of becoming the happiest country in the world. It currently ranks in 20th place in the UN World Happiness Report 2018. DEWA has dedicated special attention to Customer Happiness and was the first government organisation to implement the Happiness Meter launched by HH Sheikh Mohammed bin Rashid Al Maktoum since the beginning of 2015.

DEWA also achieved an 80% adoption rate in August 2017, ahead of the deadline set by HH Sheikh Mohammed bin Rashid Al Maktoum to reduce the number of visitors to government offices by 80% by 2018.

SMART MOBILE APPLICATION

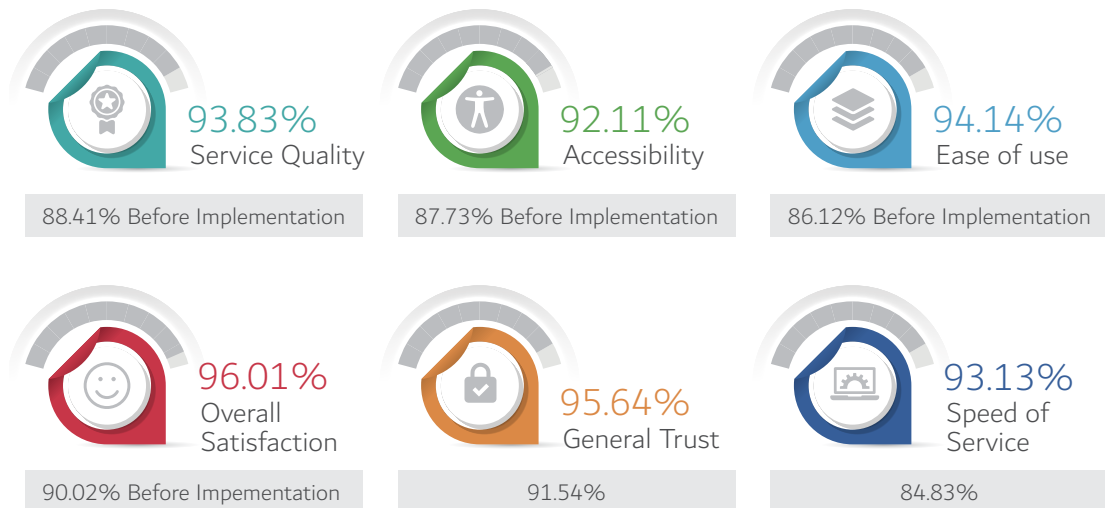
DEWA's smart mobile application added 29 services to make customers' life easier. The smart application introduces a new and innovative concept in the way it delivers services seamlessly on the home page, avoiding the hassle of searching and browsing. The mobile application is compatible with iOS and Android, as well as on Internet of Things (IoT) which places customers at the forefront of in accordance with best global solutions and practices.

ONE STEP INITIATIVE

DEWA also launched the One Step Initiative, where customers can activate, deactivate their electricity and water services and pay their bill in one single step.

- Customers can get their electricity and water connected after registering their contract with Ejari at any of the 800 certified real estate companies and certified typing centres without needing to visit DEWA. DEWA has connected its system to the Real Estate Regulatory Agency (RERA), saving customers time and effort.
- Customers can deactivate their electricity and water services and get their final bill through DEWA smart app and website, as well as request to receive their security deposits refunded by bank transfer to their account via the local IBAN number or as cheque by courier within the UAE without any need to visit DEWA.
- To pay bills, customers can conveniently pay through the smart self-payment kiosks available at DEWA's Customer Happiness Centres.

As a result, the smart / online adoption for activation of supply service (move-in) increased from 47% in June 2017 to 74% in Dec 2017.



TRANSFER OF ELECTRICITY AND WATER SERVICE

This is a new service to facilitate the transfer of customers from one property to another within Dubai (for all types residential, commercial and industrial), by transferring all current account information to their new accounts and transferring the security deposit, without the need to visit DEWA's Customer Happiness Centres.

RAMMAS

RAMMAS is DEWA's virtual employee making DEWA the first government organisation to launch an online chatbot in both Arabic and English, to communicate with customers and respond to their enquiries. This initiative supports the directives of the wise leadership, to reduce the number of visitors to DEWA offices by 80% in 2018, and further encourage the use of smart channels to support the Smart Dubai initiative. It also supports DEWA's efforts to enhance artificial intelligence, in adherence with the UAE AI strategy. Rammas is available on Dewa's website, smart app (iOS and Android), Facebook, and Amazon's Alexa service.

DEWA FUTURE HAPPINESS CENTRE

This is the first integrated smart customer happiness centre in Dubai, which relies on Artificial Intelligence (AI) and Robotics, and provides smart and innovative services to all stakeholders. HH Sheikh Hamdan Bin Mohammad bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai inaugurated it in September 2017. The centre contributes to achieve customer happiness and to ensure that the government environment is completely paper free by 2021, granting customers with seven-star quality services. It relies on the latest technologies and smart self-service booths to help customers complete their transactions with ease.

DEWA also converted two centres in Discovery Gardens and Jebel Ali Free Zone to smart service centres. These have contributed to achieving a growth in smart adoption reaching 79.57% in 2017, with DEWA's overall customer trust level reaching 92.77%. The following are the list of services provided at these centres:



14 Customer Happiness Centres

To facilitate customer convenience our centres are available and spread all of Dubai.



Green Bill

For a fast, secure and eco friendly monthly consumption bill sent to customer's registered email.



Smart Services

The gateway through the DEWA portal, www.dewa.gov.ae for customers and stakeholder to enjoy a variety of general, customer and business-related services.



Multiple Ways to Pay

To provide added convenience to customers, multiple methods of payment were developed.



24/7 Customer Care Centre

Our customers can contact us with their queries about DEWA's services.



Mobile Services

With our smart applications available customers can efficiently transact; do business with DEWA.



This is a unified, decentralised electronic system in coordination with The Executive Council and Smart Dubai Government that enables DEWA to highlight all innovative ideas submitted by customers and ensures the implementation of all feasible ones.

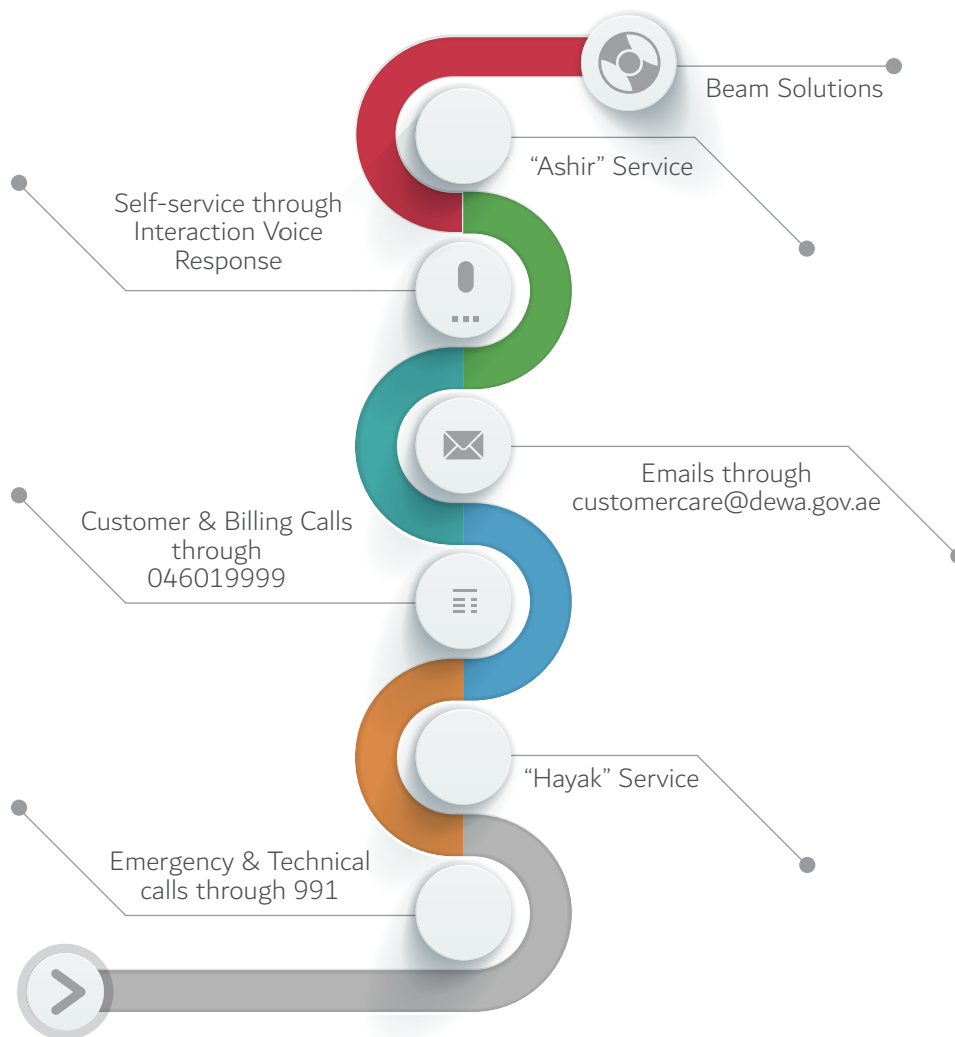


This is a unified and decentralised system in coordination with The Executive Council and Smart Dubai Government that enables DEWA to handle and track customers complaints and converts this feedback into areas for improvement.

DEWA'S CUSTOMER CARE CENTRE

DEWA's customer care centre is always available to answer the customer enquiries. In 2017, our Customer Care Centre received over 1.47 million calls, 45% of which were handled by Interactive Voice Response System (IVR), enabling our customers to make use of our services smartly and efficiently (Self-Service). DEWA's Call Centre, the Customer Care Centre's Service Star has also handled 704,208 calls professionally achieving 6 seconds Alert Time. We have also received over 134,810 emails from different customers with varying requests and requirements. In addition, we have received 21,282 online chats through 'Hayak', an online text, video and audio chat system.

With the launch of DEWA's first Future Happiness Centre, we started to use Beam solutions which is transforming the human interaction into virtual world. Customer Care Centre Agents control the beam robots from the office, assist and guide our customers in the Future Happiness to complete their queries or transactions online. DEWA's Customer Care Centre operates 24/7, with a variety of touch points meeting customers' needs. These include:





EXCELLENCE IN CUSTOMER SERVICE

In DEWA, excellence in customer service is a journey not a destination. We continuously strive to achieve the highest standards of excellence, professionalism and competence in the field of world class services, and promote a culture of excellence and innovation within the public sector. In 2017, we won the Best Innovation and Best Customer Focus award at the UK's Best Business Awards 2017. The award recognise DEWA's achievements in implementing the best international standards for monitoring customer happiness to maintain continuous improvement and exceed their expectations. We have also received the highest grade in The International Standard for Service (TISSE 2012) certification from The International Customer Service Institute (TICSCI) after 7 of our centres received a five-star marked with a score of 98%, the highest score to date globally, for making our customers happy. We also obtained the ISO 10001:2007 for Quality Management in Customer Satisfaction and Codes of Conduct for Organisations, the ISO 10002:2004 for Quality Management in Complaints Handling Process, and the ISO 10004:2012 for Quality Management in Monitoring and Customer Satisfaction.

In addition, we always commit ourselves to provide customers with services that exceed their expectations. We launched the fifth phase of 'Beyond Customers Expectations Programme' that provides staff with a comprehensive framework to ensure the highest quality standards in service provision and customer happiness for 131 employees from various Innovation and The Future Division's departments and sections. The programme promotes happiness through refined customer skills and instilling a culture of customer happiness among employees. It focuses on dealing with customers efficiently and professionally, providing services in a timely manner, and enhancing teamwork and communication strategies. On completion, the participants undergo an examination to attain credit for the Certified Business Professional (CBP). In 2017, the Service Feedback Section managed to resolve 98% of complaints received within 3 working days.

CUSTOMER HAPPINESS

We continuously seek to improve our services for Dubai's residents and all our other customers. In 2017, DEWA was 1st in the Customer Happiness Index 2017 as per the Happiness Meter of Smart Dubai Government. We also won 1st place in Customer Happiness among large entities in the Dubai Government Excellence Program (DGEP) in 2018.

We also gain feedback from the annual DGEP Customer Happiness and Mystery Shoppers Studies which results in a 'Customer Happiness Index' for DEWA. We conduct annual Customer Happiness Surveys such as: a daily customer happiness index, mystery shopper studies (Direct Interaction & Mystery Calling), people of determination study, Customer Experience Study, Key Account Management (KAM) study, in addition to customer complaints and suggestions to identify our current and future customers' needs and expectations and to improve DEWA's customer experience. Beyond ratings, these surveys also allow us to gather feedback on how we can improve our customer services and processes. Based on previous customer feedback channels, we have increased our focus on improving our turnaround times in responding to information requests, customer complaints and queries, enhancing the accessibility of information and improving the customer happiness journey.

DEWA is committed to protect customer data privacy through adopting best the practices in information security. DEWA has implemented generally accepted standards of technology and operational security, which ensures confidentiality, integrity and privacy of customer data. DEWA's Security & Privacy policy addresses DEWA's practices related to information collection and usage of the customers' personal information while using DEWA's Smart Services. Furthermore, DEWA Information Security Management System helps with identifying and implementing the controls required for the compliance with the data protection and Privacy legislation. Regular reviews and audits of DEWA security practices are conducted to check the compliance with DEWA Information Security Policy and Procedures.



CASE STUDY

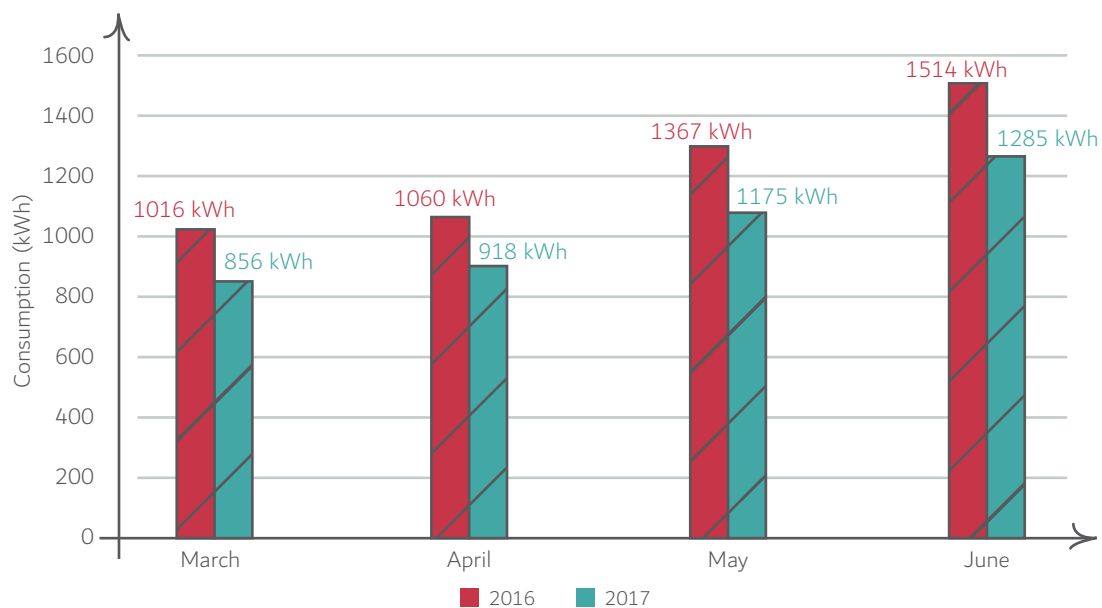
DEWA HONOURS TOP ENERGY-EFFICIENT CUSTOMERS AS PART OF ITS PILOT PROJECT

In line with Dubai's Demand Side Management Strategy, to reduce energy and water demand by 30% by 2030, DEWA introduced a new behavioural efficiency platform that brings digital innovation and customer engagement to the next level. The platform aims to motivate residential customers to increase their energy and water efficiency, and their overall happiness by comparing the customer's electricity and water consumption against the consumption of similar homes, and nudging the customers with relevant consumption reduction tips through SMS and email.

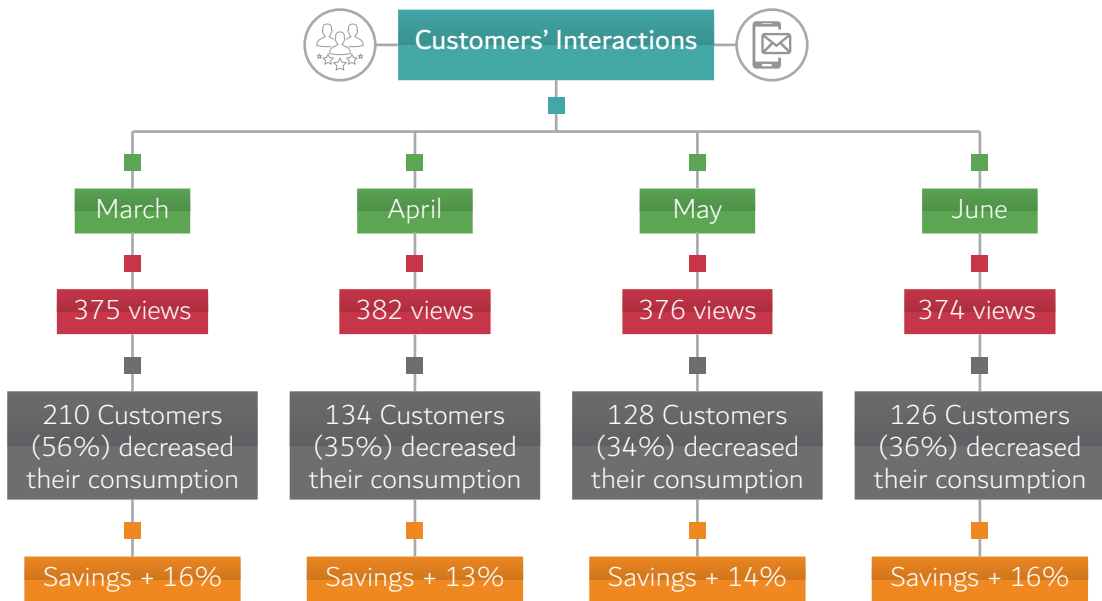
In February 2017, the initiative started as a pilot project covering 600 customers in Shoroq and Ghoroub residential areas to give them behavioural insights on their consumption from March to June 2017. The pilot project showed an average of 152 customers (25%) who reduced their consumption by an approximate average of 15% compared to last year.

The following is a comparison of our customer's consumption in 2016 vs 2017:

Graph: Electricity Average Consumption in 2016 vs 2017



During the period between March and June 2017, we noticed that 63% of our customers had interacted with the pilot project. The following is a summary of our customer's interaction and consumption of each month:



To further motivate our customers to reduce their consumption, the MD and CEO of DEWA awarded 10 customers who participated in the pilot project. This highlights DEWA's efforts to transform Dubai into the smartest, most sustainable, and happiest city in the world in cooperation with our partners from the public and private sectors in line with the UAE and Dubai strategy and vision.



EMPLOYEES

- Awarded British Safety Council Globe of Honour for environment for the 6th consecutive year during 2017
- 78.53% decrease in accident incident ratio between 2009-2017



MANAGEMENT APPROACH

Over the past years we have firmly supported our employees who have performed and done their work efficiently and effectively, by providing a healthy and positive environment and making their wellbeing and happiness as our highest priority. We do this because we want DEWA to continue to be the best employer of choice in Dubai. Our leadership and management are devoted to enhancing the success and growth of our employees and have continuously introduced different programmes and platforms to listen to and recognise our staff. At DEWA, we continually strive to understand and respond to our employees' needs and expectations, which include employee welfare, reward, development, security, happiness and positive work environment.



DEWA strives to create a working environment that:

- 01 Values the individual differences and cultural diversity of employees
- 02 Provides equal development opportunities based on performance related feedback
- 03 Is fair, equitable and free from discrimination

DEWA upholds the values of diversity and being fair to all employees without discriminating against them in any manner, whether based on sex, race, nationality age, citizenship, religion, creed, social status, social class or disability. This complies with the laws and regulations of the UAE and the Emirate of Dubai as well as the strategic direction of DEWA and international treaties and conventions.

We have embedded this within a number of DEWA policies, such as DEWA's policy for valuing and managing HR diversity, Human Resources Policy as well as Policy for Support and Empowerment of Women.

A WORLD-CLASS WORKFORCE

In 2017, our total employee count reached 11,691 employees; making us one of Dubai's largest employers. Our organisation is an important hub for engineers in the UAE. Engineering is an important profession and an important source of innovation

and creativity for DEWA. We are also committed to recruiting different people in other highly qualified positions in diverse fields including management, business modelling and finance. Our employees have a wide range of skills, and we are taking strategic measures to develop and enrich their skills and career path through training and development. To ensure the sustainability of our organisation, we are also taking the necessary measures to monitor the retiring rate of our employees to be able to replace their specialised proficiency with trained new joiners.

Table: Total number of employees by employment contract, by region 2017

Status	Region							Total
	Africa	Asia	Europe	Middle East	N. America	Oceania	S. America	
Permanent	181	7,342	60	3,889	32	6	2	11,512
Temporary	8	161	-	10	-	-	-	179
Total	189	7,503	60	3,899	32	6	2	11,691

Table: Total number of employees by employment contract (permanent and temporary) by gender

Status	Gender		Total
	Female	Male	
Permanent	1,894	9,618	11,512
Temporary	22	157	179
Total	1,916	9,775	11,691

Table: Total number of employees by employment type, by gender

Category	Female	Male	Total
Full Time	1,916	9,775	11,691
Part Time	0	0	0
Grand Total	1916	9,775	11,691

Table: New employee hires by age group, gender, and region, 2017

New employee hires 2017*	
Category	Number of New Hires
By Age	
Under 30	412
30-50	300
Over 50	11
By Gender	
Female	144
Male	579
By Region	
Africa	3
Asia	290
Europe	18
South America	0
North America	8
Oceania	0
Middle East	404
Total	723

*Special contracts category has been included in 2017 calculations

Table: Employee turnover by age group, gender, and region, 2017

Employee turnover 2017**	
Category	Number of employees
By Age	
Under 30	50
30-50	214
Over 50	29
By Gender	
Female	245
Male	48
By Region	
Africa	26
Asia	182
Australia	1
Europe	6
North America	3
Middle East	75
Total	293

**Special contracts category has not been included in 2017 calculations

Table: Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region, 2017

Region	Retirement after 5 years			Grand Total
	Leadership	Management	Non-supervisory	
Africa				
Asia		31	87	118
Europe		1		1
Middle East	1	11	8	20
North America				
Grand Total	1	43	95	139

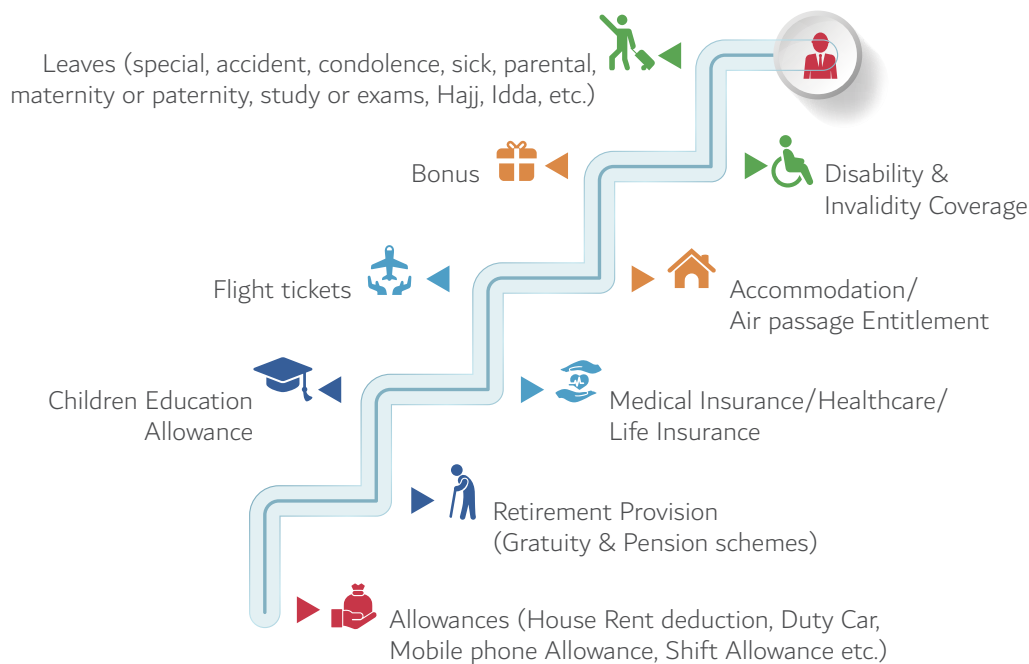
Region	Retirement after 10 years			Grand Total
	Leadership	Management	Non-supervisory	
Africa	-	1	1	2
Asia	-	8	104	112
Europe	-	2	-	2
Middle East	2	13	16	31
North America	-	2	1	3
Grand Total	2	26	122	150

EMPLOYEE BENEFITS

At DEWA, we take pride on our employees and aim to reward them fairly and generously, based on their performance. To do so, our Personnel Committee reviews employee performance appraisals, promotions, salary increments and other personnel matters. We also review and analyse job roles, matching them with people that have the talents, skills and academic qualifications and provide equal opportunities to fill the job requirements. All of our employees from grade 7 onwards can review their performance and career development through SAP in my portal page. They can also view related details regarding their performance awards, training, and Knowledge Management related learning and others. We apply remuneration based on DEWA policies for the grade and position of employees and not their gender. As a result, there is no difference between male and female employees at our organisation. To maintain a happy and healthy working



environment for our people, and to strengthen the engagement and the performance, we offer our permanent employees a broad range of benefits listed below including medical insurance, leave, allowances, and accommodation entitlement.



DEWA ensures that our employee’s benefits plans are in line with our main strategy. We have also introduced other programs and initiatives that benefits the employees and increases our communication with them too:

WAFFER PROGRAMME

This programme provides special discounts and competitive offers for DEWA employees on various restaurants, gyms, hotels, and other services.

WASAL INITIATIVE

DEWA sends text messages and emails to employees to celebrate personal occasions such as graduations, marriages, new births etc.

TEJORI AL SAADA

This programme motivate employees by immediately recognising and rewarding exceptional performance and behaviour that reflects our corporate values, with rewards such as such a day off work, 1 month’s parking, or breakfast with a divisional head.

AL KHAIR FUND

This fund is open only to DEWA employees and was launched in 2009 under the name of Takaful Social Fund to provide financial support in case of emergencies. In 2017, we renamed the fund to Al Khair Fund to commemorate 2017 as the Year of Giving. In 2017, we were able to provide more than AED 5 million to help approximately 515 of our employees in their times of need.

EXCELLENCE AWARD & RECOGNITION PROGRAMME

This recognises and rewards employees (individual or groups) who have excelled in their achievements.

To further support our world-class workforce, our employees are entitled to parental leave. In 2017, 393 of our employees used parental leave. All of these employees resumed work after their leave ended.

Table: Employee Parental Leave and Resumed Duty, 2017

Leave Type	Availed Leave	Resumed Duty	Percentage
Paternity Leave	393	393	100%
Maternity Leave	164	141	85.98%
Total	557	534	95.87%

Table: Total number of Employees entitled to Parental Leave by gender, 2017

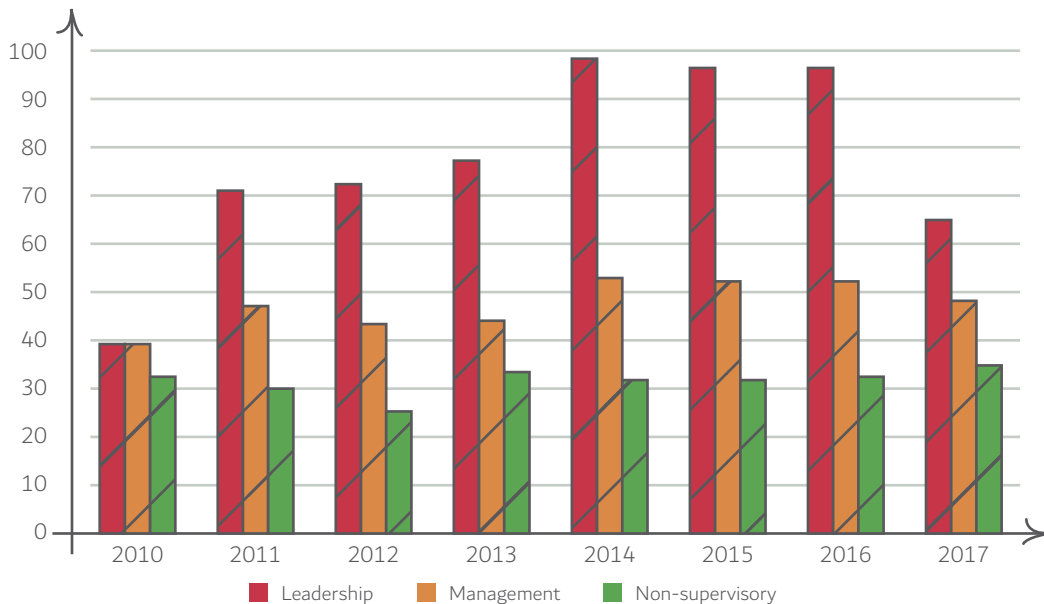
Gender	Total
Female	1,023
Male	7,693
Total	8,716



TRAINING & DEVELOPMENT

We are dedicated to the training and development of our people. For that, we constantly support learning and developing of our leadership and employees skills through effective training programmes. In 2017, we revised and met our targets for this. To further develop and preserve our world-class workforce, we provide all possible support in career building opportunities to our employees in order to achieve a high level of talents and skills, and strengthen social cohesion. As a result, we run a career development and succession-planning programme, which the employees from grade 7+ can review through SAP in the My Portal site or through SAP Journey. In 2017, we also developed and updated our technical and behavioural competency frameworks. Succession management is equally critical in order for us to ensure continuity, retain and develop knowledge and intellectual capital for the future and encourage individual employee growth and development.

Graph: Average Training Hours by Grade, 2017



CAREER DEVELOPMENT

At DEWA, we continuously seek to promote our workforce and hire talented and capable employees who can contribute to the success of our organisation. We are committed to help in the development of our employees on both levels personal and professional. From job-focused trainings to general management trainings, our employees have the opportunity to develop their careers further. DEWA also conducts competency based programmes and trainings for skill management and lifelong learning based on 9 behavioural competencies. These were determined in 2014 by an Assessment and Development Centre for 887 employees, based on their proficiencies. We are currently building in-house capabilities to handle the next cycle, as a project cycle is from 18 months to 3 years. Performance appraisal is equally important, as it helps us evaluate in a systematic manner the performance of the employees, while also allowing us to understand their abilities to develop them further.

EMPLOYEE HEALTH AND SAFETY

The HSE culture of DEWA is an exemplary approach of integrating Quality, Health, Safety and Environment standards known as “Integrated Management Systems”. The positive culture in HSE has ensured zero fatality with many awards. This would not have been possible without the positive approach of our stakeholders. To name a few of DEWA’s main achievements:

An intricately written and endorsed QHSE policy by the top management that is cascaded into approaches, processes, procedures and performance indicators in a Balanced Score Card (Kaplan & Norton).

ISO-9001, ISO-14001 and OHSAS-18001 certified enabling continuous improvement and management of our systems.

DEWA has twice won the DGEP Awards for Best Utility and HSE has been always scored above par (i.e. 98%).

DEWA has always been scored a safe organization by Dubai Civil Defence for its firefighting systems and control mechanisms.

DEWA has maintained the British Safety Council’s Health and Safety Management 5-star certification since 2002.

DEWA has been winning the Sword of Honour (for H&S) and Globe of Honour (for Environment) since last 10 and 6 years respectively. We are proud to be the first utility in the MENA region to achieve this award.

We have a Risk Management Policy which has been developed in compliance with ISO 31000. This policy is the framework of HSE risk management across DEWA (i.e. both dynamic and consultative).

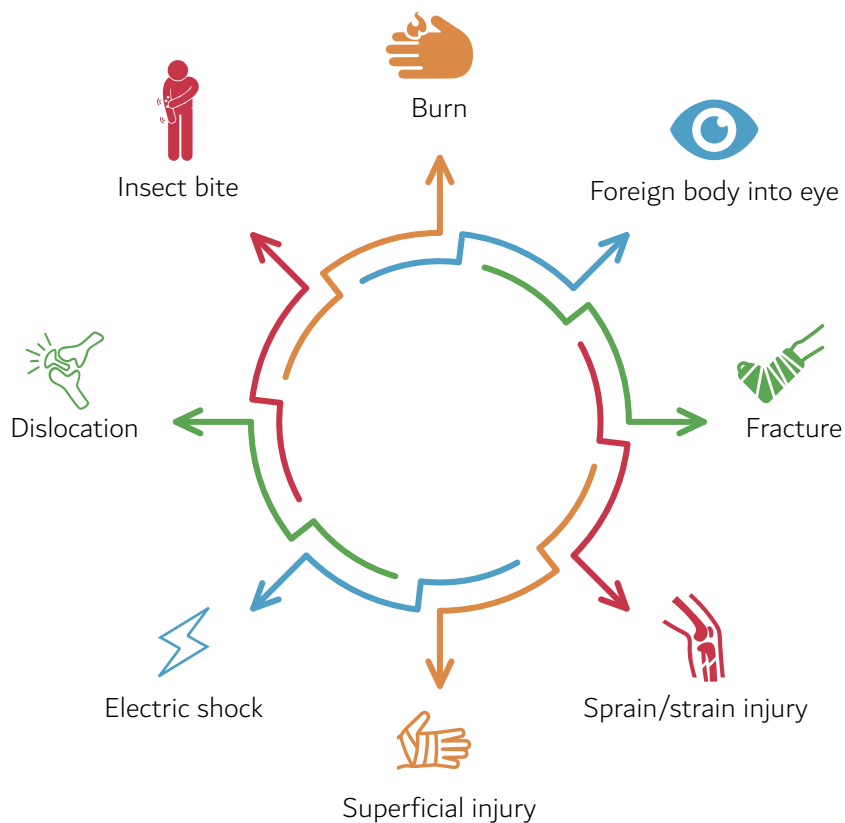
DEWA has been a pioneering organisation towards bringing stress management and ESTISHARATI (counselling services) to DEWA employees linked to health screenings, to improve health and wellbeing.

DEWA’s Health and Safety Committee involves representatives from DEWA and is headed by the EVP of Business Support and Human Resources. The committee plays an important role in avoiding work-related injuries and accidents in all our divisions and maintaining occupational health and safety procedures in the workplace as per the procedure (IMSP01-16) with assigned KPIs that have Target Achievement Levels (%TAL) apart from actual ones that make it more robust. It also ensures that measures

to assist and retain health and safety rules, standards and procedures are carried out. The committee representatives meet at least once a month for high-risk departments, every two months for medium risk departments, and at least quarterly or when it is required for low risk departments.

We have an obligation to our contractors, subcontractors and vendors, and we comply with OHSAS 18001 and 18002 to ensure that we observe health and safety measures. In addition to this, our dedicated SP06 Health and Safety Procedure for Contractors and Consultants is also in place to promote a culture of health and safety and to improve the standards in all our projects, activities, and operations. We regularly audit our operations to assess how well we are performing to health and safety requirements. At DEWA's 8th annual Internal Health and Safety Week, we celebrated our achieving a five-star rating in Security and Safety standards exceeding 98% with a 'non-existent' rate of accidents in our organisation's projects.

The Health and Safety at Corporate Level has categorised injuries into 'Major' and 'Minor.' A Major injury is, "a non-fatal injury that does not result in permanent total disability or permanent partial disability, but results in more than 7 lost workdays." Injury types are as under:



Injury Rate (IR) by Gender, 2017



Injury Rate (IR) =
Total Number of Injuries (male staff) x 200,000 / Total Hours Worked

$$61 \times 200,000 / 21,356,250 = 0.57$$



Injury Rate (IR) =
Total Number of Injuries (female staff) x 200,000 / Total Hours Worked

$$4 \times 200,000 / 21,356,250 = 0.03$$

Lost Day Rate (LDR) by Gender, 2017

In calculating 'lost days' (* 'days' means 'calendar days', the lost days' count begins from the day after the accident)



Lost Day Rate (LDR) LDR =
Total Number of Lost Days (by male staff) X 200,000 / Total Hours Worked

$$675 \times 200,000 / 21,356,250 = 6.32$$



Lost Day Rate (LDR) LDR =
Total Number of Lost Days (by female staff) X 200,000 / Total Hours Worked

$$21 \times 200,000 / 21,356,250 = 0.19$$

Occupational Disease Rate (ODR) by Gender, 2017

Occupational Disease Rate (ODR) experienced during the reporting period 2017 is ZERO

Occupational Diseases Rate (ODR) =
Total Number of Occupational Diseases Cases X 200,000 / Total Hours Worked

$$0 \times 200,000 / 21,356,250 = 0$$

Absenteeism rate, 2017

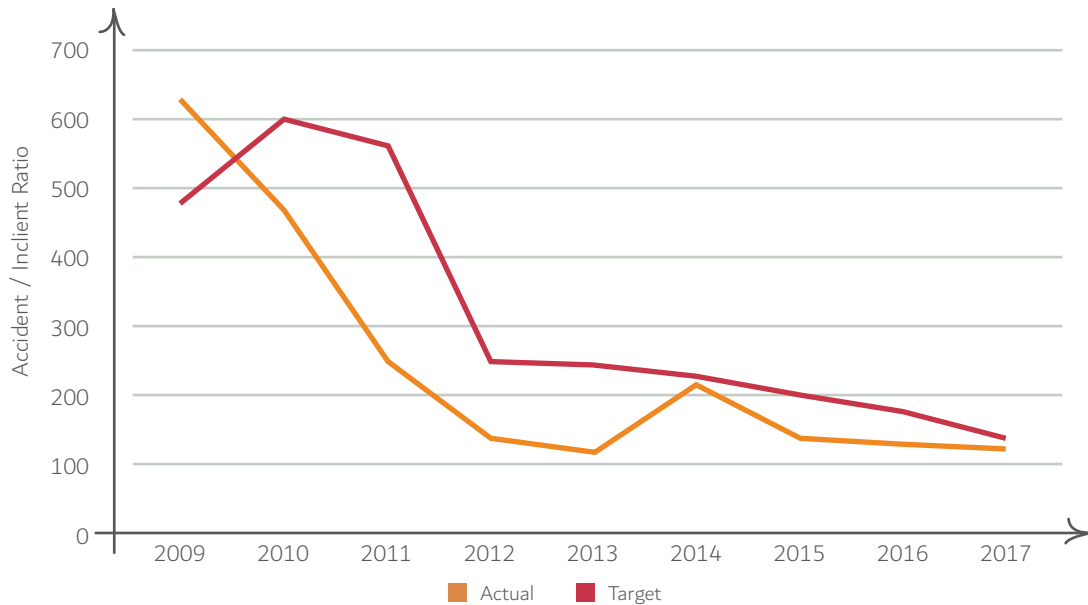
Absenteeism Rate (AR) = Number of Absentee / Average Number of Employees

$$3,680 / 11,399 = 0.32$$

2017 Absent Percentage				
Division Name	Number of absentees	Number of working days	Average number of employees	Average number of absences per employee
Billing Services	1,046	251	916	1.14
Business Development & Excellence	94	251	177	0.53
Business Support & Human Resources	535	251	752	0.71
Distribution Power	435	251	3107	0.14
Finance	23	251	132	0.17
General Management	0	251	22	0.0
Generation	242	251	2,117	0.11
Innovation & The Future	711	251	720	0.99
Internal Audit	3	251	54	0.06
Legal Affairs	0	251	20	0.0
Power & Water Planning	3	251	181	0.02
Strategy & Government Communications	160	251	131	1.23
Transmission Power	165	251	1,647	0.10
Water & Civil	263	251	1,423	0.18
TOTAL	3,680	251	11,399	0.32

One of the key indicators of our safety performance is the Accident/Incident Ratio (AIR), which we have successfully reduced by approximately 78.53% between 2009 and 2017. We are also pleased to state that we suffered no work-related fatalities during 2017.

Graph: Accident/incident Ratio (AIR), 2017



Note: (Number of RIDDOR Accidents x 100,000 / Total number of staff)

Injury rate experienced during 2017



Injury Rate (IR)=
Total Number of Injuries (male staff) x 200,000 / Total Hours Worked

$$61 \times 200,000 / 21,356,250 = 0.57$$



Injury Rate (IR) =
Total of Injuries (female staff) x 200,000 / Total Hours Worked

$$4 \times 200,000 / 21,356,250 = 0.03$$

Percentage of reduced accident/ incident ratio (AIR) between 2009 and 2017 is AIR. 78.53%

DEWA SPORTING CHALLENGES AND COMMITMENTS

In October 2017, His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai invited Dubai Government agencies and private organisations to join the Dubai 30x30 Challenge. This initiative motivated people to boost their physical activity, to create a healthy positive lifestyle and make Dubai one of the most active cities worldwide. To support the government's directions and drives, DEWA announced its full support to the initiative by being a main exclusive partner in the Dubai Fitness Challenge to encourage our employees further. DEWA installed a portable gym to support the initiative. It organised several activities and events, which include walking each morning for half an hour from 7:30 AM to 8:00 AM, gym classes for DEWA's female employees, a photography competition, table tennis competition, boxing, as well as a kid's play area. DEWA dedicated five main electrical transformers to provide electricity for five fitness festivals in various locations

throughout the city during the consecutive weekends in the month. There were also some additional power adapters to keep pace with the large number of participants in the events. We also promoted the event to our customers with the challenge and slogan printed on our Green Bill. This was very successful, attracting several public and private organisations to exercise. There were 786,000 participants from the beginning until its completion.

As well as the Dubai 30x30 Challenge, our employees took part in different sport challenges and competitions across the year such as Sandstorm Marmoum, xDubai Spartan Race Hatta, and Sheikha Hind Women's Sport Tournament. Our leadership supports and encourages this positive competitiveness among our staff as it develops their physical and mental capabilities and maintains sports as a part of the UAE culture. Many of our employees participated in these challenges, and 50 employees represented DEWA at xDubai Spartan Race, with 59 female staff taking part in the Sheikha Hind Women's Sport Tournament.



DEWA YOUTH COUNCIL

To support the vision of the UAE's wise leadership in empowering and supporting youth, DEWA has launched its Youth Council in January 2017. DEWA has always believed in investing in youth, as we believe in their essential goal of accomplishing our future developments and their vital ability in succeeding our strategic goals, vision, and plans. The council has been active throughout the year to achieve their main goals and tasks, such as organising its first Youth Cycle at Dar Al Etihad in Dubai, called Youth 10x. The event was held in the presence of HE Shamma Al Mazrui, Minister of State for Youth Affairs and HE Saeed Al Tayer, MD and CEO of DEWA and 150 DEWA scholarship students and DEWA staff.



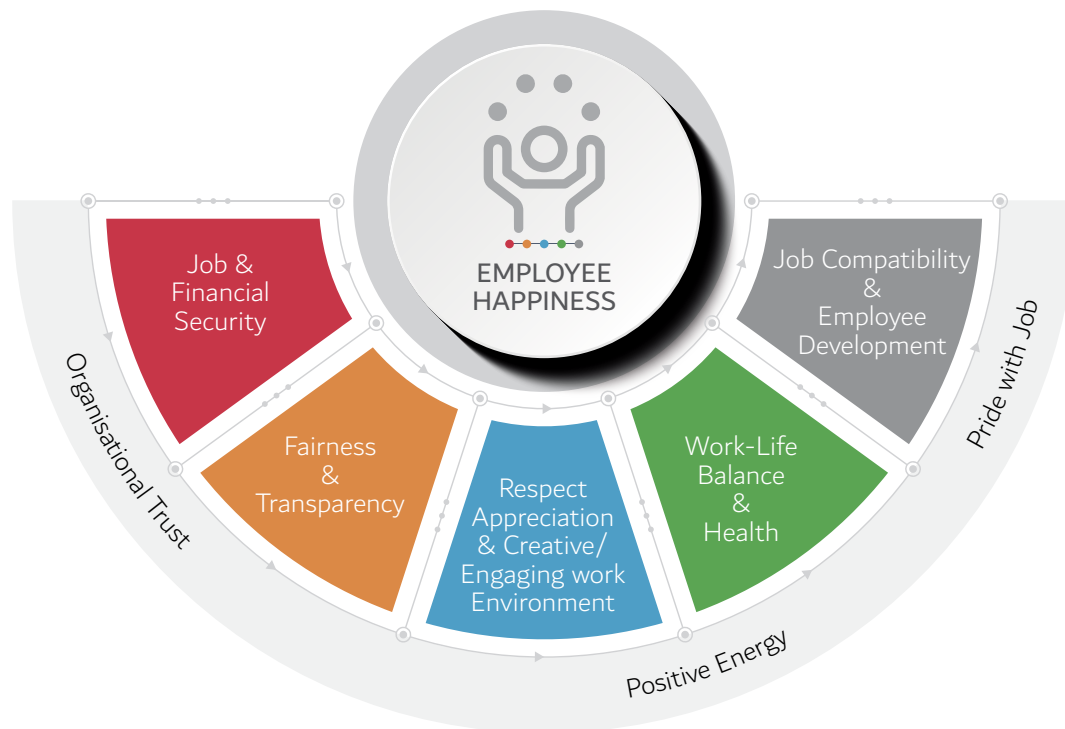
The council members volunteered with other youth representing DEWA to clean solar panels on rooftops in Hatta. The initiative started with a visit to the houses in the village to clean the panels installed by DEWA for Emiratis free of charge.

DEWA Youth Council organised a youth circle to establish a connection between DEWA and People of Determination, as part of DEWA's strategy to empower them. Throughout the year, the council raised awareness and organised different activities including visits to DEWA branches so that the members of the council could introduce themselves to DEWA employees, and present the council's goals and objectives. The members of the council also ensure listening to the youth and acknowledging the challenges they are facing, dreams they want to achieve in the organisation, and suggestions to build stronger communications between the youth and the management of DEWA through the Youth Council. This reflects our continuous support for youth.

EMPLOYEE HAPPINESS

Our employees being one of our most important stakeholders, we continuously aim to create and maintain a work environment full of happiness and positivity. In 2014, we launched our Happiness department to support our strategic objective and goals to achieve the happiness of all our stakeholders, including our employees. Our goal is to drive our people to adopt a happy and healthy environment that will eventually ensure the efficiency of our organisation. Our guiding principle of happiness revolves around our employees and focuses on satisfaction, happiness, and engagement. For that reason, we conduct surveys such as the Happiness Survey, which is one of our tools to understand and meet our people's expectations regularly and to measure our employees' overall happiness regarding their work in DEWA.

Our happiness model consists of five main happiness keys which are: Job and Financial Security, Job Compatibility and Employee Development, Work-Life Balance and Health, Respect, Appreciation & Creative and Engaging Work Environment, and Fairness and Transparency.



Our employee happiness and communication programmes are key to achieving a sustainable, productive, motivating and collaborative work environment. The Employees Happiness survey is one of our tools to understand and meet our people’s expectations. In 2017, our overall happiness score reached 83.22%. We analyse the results of this study to benchmark and realign DEWA’s initiatives to meet employees’ expectations. To support and improve the physical working environment of our people, we have introduced the Happiness Lounge and Creativity Rooms to promote an encouraging and a positive work environment. The Happiness Lounge, located at our Head Office, and the Creativity Rooms at Al Warsan provide services from online booking for workshops and brainstorming sessions for various activities, which encourage our employees to excel in a positive and high-quality work environment.

Other initiatives that aims to create a happier environment for employees are listed below:

PARKING WITH SOLAR PANEL SHADES

As part of Shams Dubai initiative and increase the reliance on clean energy, in 2017 we launched carports at our headquarters with a total of 902 parking spaces and a capacity of 1,780 kilowatts (KW).

INTERNATIONAL DAY OF HAPPINESS

In celebration of the International Happiness Day that takes place on 20 March, the Employee Happiness department celebrates the day annually with an open invitation to all employees to enjoy the different activities taking place at the event.

ESTISHARATI(EMPLOYEEASSISTANCEPROGRAMME)

The Happiness Department conducts various employee counselling sessions to support and meet the demands of the employees and workplace. Such sessions include the Employee Assistance Programme that includes circulating a Stress Test Survey for employees, conducting Stress Management workshops, and providing individual counselling sessions.

DIFFERENT ANNUAL GATHERINGS

DEWA conducts various events such as the Gala Dinner, Barzatna Programme gathering, and a Suhoor gathering in Ramadan to bring its staff together as one family.

ANNUAL STAFF WEDDING

As part of our commitment to our corporate strategy to the happiness of our employees, we annually organise and celebrate a group wedding for our employees. In 2017, we celebrated our 10th mass wedding celebration. 438 employees have got married since 2007.

DEWA is a Government entity aligned with Dubai Government and regulations. Therefore, with regards to significant operational changes affecting our employees, while a specific notice period is not included in our standard employment contract, a sufficient notice period has historically been given when significant operational changes have been implemented. We also aim to create an environment that supports our employees' lifestyles. Part of this is achieved by encouraging gender diversity in our workforce. We have put the following initiatives in place for this purpose:

WOMEN'S COMMITTEE

The Committee encourages women expanding their creative roles and supports women's insights into decision making to increase DEWA's female employee satisfaction in different aspects such as sports, social, and fashion.

DEWA CHILD CARE CENTRES

Our Child Care Centres, located in the Head Office, Al Quoz and Al Warsan were created to provide care during the working hours for our employees' children. This initiative has been an outstanding success in helping employees to balance family and work duties.

PROMOTING EMIRATISATION

In DEWA, we have always emphasised our support of Emiratisation by increasing the employment of Emiratis and helping the upcoming generation in developing their careers as it contributes to the UAE's vision. Our strategy is actively focused on investing in our future Emirati workforce and we are committed to increasing the percentage of Emirati youth and to develop their skills and training across the years. Of the new hires during 2017, approximately 46.71% were UAE nationals. Furthermore, within our organisation UAE nationals made up 85.45% of our top management and leadership positions, 49.87% of our middle management positions, and 36.21% of our nonsupervisory positions. We continuously strive to recruit qualified and talented young Emirati professionals and focus on developing and strengthening their skills by providing them with scholarships and training courses at the top universities, colleges and institutes around the world. We launched a scholarship programme to educate Emirati students abroad on renewable energy. We also launched the DEWA Academy, accredited by the Business and Technology Education Council (Pearson BTEC) in the UK, to raise a new generation of Emiratis both academically and vocationally. Additionally, we provide a number of scholarships for local high school engineering students to train the next generation of our workforce, mainly in relevant technical qualifications. Sponsorships for study and research projects connected with the nature of our work are also available to UAE nationals.

RECOGNISING AND REWARDING EMPLOYEES

In our continuous effort to recognise and reward our exceptional and remarkable employees, we ensure to honour them through the annual Internal Excellence Award and Recognition Programme. The award recognises the outstanding groups and individuals on their performance and achievements during their duties across the year. It also promotes a culture of excellence and encouraging positive competitiveness among the staff. In 2017, DEWA honoured 2,428 of its employees and rewarded 69 teams across DEWA. We have also implemented the Special Act award for those employees who help to conserve DEWA's resources and make savings in costs. In 2017, we have rewarded 482 employees for their special acts during the year to conserve DEWA's assets and budgets.

FOSTERING INNOVATION

Employees are encouraged to provide us with their innovative ideas on how to improve our working environment and services through our highly interactive platform known as Afkari. A number of ideas suggested by our employees have had an impact on our triple bottom line. In 2017 a number of 2,484 participants used the Afkari platform, generating 7,528 proposed ideas. These innovative ideas saved 809 million to date, so we rewarded 949 creative idea owners, with awards totalling AED 1,256,741 this year. We also launched a Trend explorer as per International Standard successfully integrated to the AFKARI System where participants can think and generate ideas on the latest technology. DEWA's employees can also access Afkari through the Smart Office application, enabling them to send, interact and collaborate on their ideas from the palm of their hands.

CASE STUDY

ESTISHARATI-EMPLOYEE ASSISTANCE PROGRAMME

DEWA is committed to investing in their employees and ensuring their wellbeing and happy lives. In December 2016, DEWA introduced Estisharati, an employee-assistance pilot project with workshops, awareness sessions, and one-to-one individual counselling support by qualified professionals. Following the success of the initiative and the high engagement, in December 2017, the management approved the initiative to be an ongoing service to its employees.

The programme includes different activities such as Stress Screening in partnership with the Health Department. Screening identifies if an employee needs immediate assistance. Stress Bio Screening also monitors different factors including blood pressure, pulse rate, blood flow, BMI and radio frequency waves that results in alerting mental stress level, and lastly counselling supports for different cases such as employees with determination and employees referred by the disciplinary committee.

The initiative benefitted over 1,466 employees in 2017, while the outcome was that 92% of the employees are happy and satisfied with the service. We have also conducted different workshops on different topics throughout the year such as divorce, parenting, happiness, coping with depression, and stress management. We also celebrated important relevant events worldwide such as World Mental Health Day.

After the success of the programme and the sessions we held, we intend to link Estisharati in 2018 with the annual Employee Appraisal System, so that will refer employees with poor performance scores for counselling as a corrective action plan and employees with exceeding performance will be given executive coaching to improve their behavioural competencies.





SOCIETY

- Rolled out 27 social and humanitarian initiatives in 2017
- 45,000 volunteering hours
- DEWA's CSR efforts over the last few years have contributed to an increase in community satisfaction and happiness levels, from 82% in 2013, to 92% in 2017
- DEWA wins four categories at Gulf Sustainability & CSR Awards

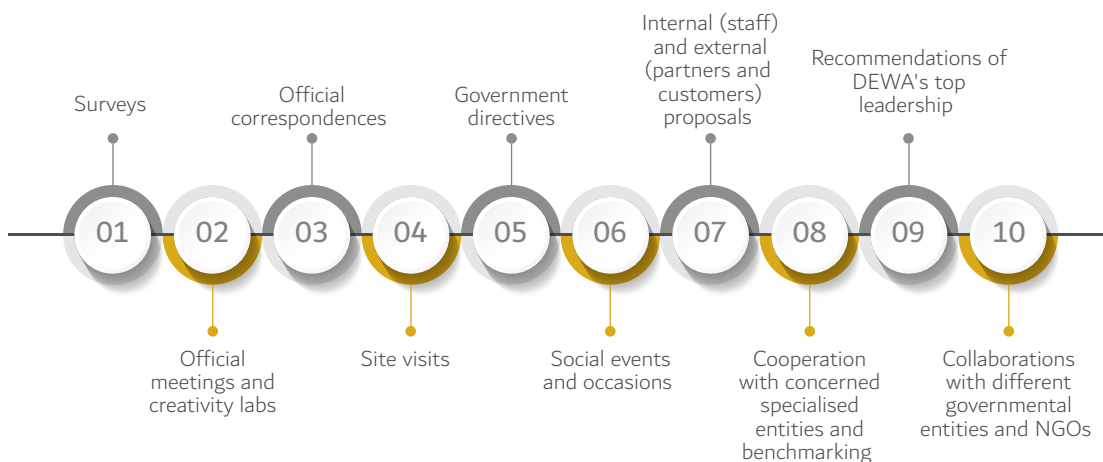


MANAGEMENT APPROACH

DEWA is committed to giving back to society and communities in Dubai and abroad. From an early stage, we have adopted an explicit policy for Corporate Social Responsibility (CSR) aligned with international best practices. We have also set an integrated framework that meets CSR standards and requirements recognising that our support and contribution towards the local communities is primary and fundamental. This framework includes social initiatives that are aligned with the Year of Zayed and the Year of Giving, the UAE Vision 2021, the Dubai Plan 2021, and the DEWA Strategy 2021. In order to develop and implement our CSR Strategy, we have set an action plan based on studying the actual needs of our stakeholders and the community in relation to sponsoring, implementing and assessing our internal and external CSR initiatives to ensure they are meeting our stakeholders' and community's needs. Our corporate social responsibilities initiatives are an integral part of our strategy plan, based on an integrated organisational approach to serve society.

2017 has been designated as the "Year of Giving" by HH Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE. 'Giving' is a cherished value in Emirati society, not just limited to charitable work, but rather in making a positive difference in society and the nation. In mid-2017, the government announced 2018 as the "Year of Zayed" marking 100 years since the birth of the founding father of the UAE. From its side, DEWA has approved 12 main programmes to provide 27 social and humanitarian initiatives that adopt the theme of Zayed's national and humanitarian legacy. These initiatives are aligned to promote the values of tolerance, progression, environmentalism and leadership as well as charity. A great number of the initiatives implemented during the "Year of Zayed" have continued on from the "Year of Giving".

DEWA uses various channels of communication and cooperate to determine our stakeholders' needs for CSR initiatives through:

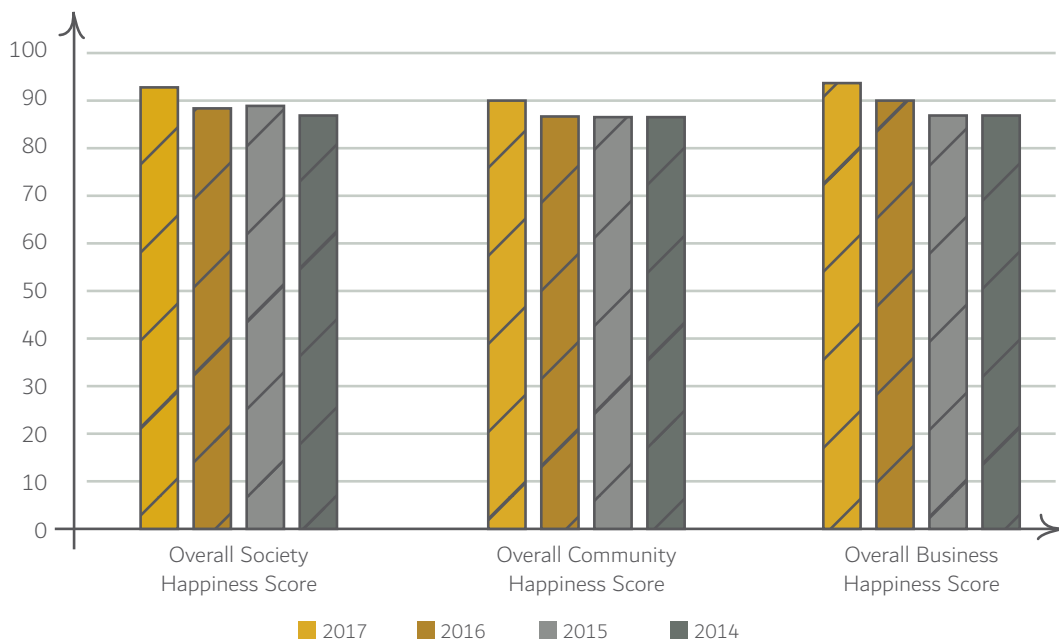


In addition, we value the input from our stakeholders especially that of the society, as it helps us continuously develop our social initiatives and projects. All departments in DEWA are supporting the management directives and contributing to the implementation of the common programmes related to society. We encourage internal volunteering participation on various CSR initiatives in the UAE and abroad through incentives and award programmes for all DEWA's employees.

OUR INITIATIVES

During 2017, none of our large projects physically or economically displaced people within our operational boundaries. Moreover, our Corporate Social Responsibility (CSR) Programme coordinates a network of 24 divisional representatives responsible for coordinating the social and community initiatives related to their respective division. Initiatives vary from local community development programmes such as awareness programmes in schools and among the community, charitable programmes abroad, and Ramadan campaigns. We are proud to announce that during 2017, 100% of our social initiatives have been successfully implemented, exceeding our target. Adding to the objectives of the 'Year of Giving' and our social responsibility, DEWA has exempted UAE citizens from paying any electricity connection fees for condolence tents, as well as providing one complimentary water tank every day for the three-day mourning period. All of these have increased community satisfaction and happiness level. The constantly increasing trend of DEWA's overall society happiness score, reaching 92% for the year 2017 is a clear proof of a wisely chosen and executed CSR plan.

Graph: Society Happiness





“WATER: THE GLOBAL PASSPORT” PROGRAMME

DEWA is committed to educating future generations about the global water crisis and water scarcity, as well as educating youth about sustainability and rationalisation of resources. In these efforts, DEWA and UAE Water Aid Foundation (Suqia) collaborated with Surge Middle East to design “Water: The Global Passport” programme. The programme aims to take the students on a virtual trip around the world to recognise the problems of water shortage and the challenges millions of people face to obtain clean water. During the programme, each student received a passport, which gets stamped after the completion of each platform in the event. The activities include understanding the water footprint, water competitions, seeds of hope, and others. We are proud to announce that the programme reached 1,400 students in 2017 covering the first term of the academic year, aiming to reach 3,000 students by the end of the academic year 2017-2018. This compares to approximately 900 students in 2016. Our employees played a huge role in achieving these results, as 60 trainees from DEWA volunteered to deliver the programme throughout the year.

SOLAR PANELS INITIATIVE IN HATTA

Dubai Youth Council, with the support and sponsorship of DEWA, launched a youth volunteer initiative, to clean solar panels on rooftops in Hatta. 50 volunteers participated in the initiative. They visited houses in Hatta to clean the solar panels installed as part of DEWA's project to install solar panels on the roofs of villas for Emiratis in Hatta, free of charge based on the regulations of the Shams Dubai initiative. Production capacity of the solar panels is increased four times compared to their capacity when panels are dirty. This initiative contributes directly in promoting to a sustainable environment as well as supporting the Shams Dubai initiative and Hatta Comprehensive Development Plan.

In addition, in September 2017 DEWA ensured the installation of solar panels on the rooftops of 640 villas of Emiratis free of charge. The project was completed by February 2018.



PROMOTING THE USAGE OF LED LIGHTS

DEWA has joined efforts with Mohammed bin Rashid Housing Establishment (MBRHE) to replace conventional light bulbs with LED light bulbs. The cooperation between DEWA and MBRHE, resulted after the signing of a Memorandum of Understanding (MoU) in 2015. In cooperation with Etihad Energy Service Company (ESCO), DEWA replaced traditional light bulbs with LED light bulbs in approximately 1,700 villas, located in Al Barsha, Al Warqa, and Oud Metha.

The project aims to reduce the demand for energy, and raise awareness in regard to LED light bulbs. DEWA allocated 6 teams to replace the bulbs, based on the highest standards of accountability, reliability, and safety. This supports DEWA's efforts to involve the community in the production of clean and renewable energy, enabling members of the community to reduce their energy bills, and protect the environment. It also encourages the culture of volunteering among our employees as 80 DEWA employees were involved in the implementation of the project.



HOLY MONTH OF RAMADAN

DEWA maximises its efforts to unite its staff in a multi-national environment. In this regard, we annually organise various charitable and Islamic activities during the Holy Month of Ramadan to enhance brotherhood and the spirit of giving, in an environment that reflects the UAE heritage and traditions, as well as Islamic values. The Ramadan Tent is an annual initiative to support the unity between our employees and society. The tent serves the basic meal of Iftar to employees from different departments whose shifts begin after Iftar. During 2017, DEWA provided over 2,000 meals every day in different locations in DEWA. The Ramadan Tent also serves members of the public from all nationalities. To align with the 'Year of Giving', DEWA also announced 'Umrat Khair' initiative, enabling 70 employees to visit Mecca to perform Umrah during the Holy Month of Ramadan.

TRAINING THE NEXT GENERATION

At DEWA, we are committed to developing and supporting Emirati talent to meet the UAE National Agenda, in line with our strategy to prepare young Emiratis to take the lead in the energy and water sectors. To support and develop young Emirati talent, DEWA, completed its summer training programme this year for 197 school and university students.

The programme included a number of training courses such as 'Sanad Bag', where students were trained on how to deal with people of determination, and to work as a team. DEWA also organised field trips to its plants where the trainees were introduced to the technologies used in electricity production and water desalination.

COMMUNICATION AND AWARENESS

DEWA always strives to raise awareness among society about water and electricity conservation, believing in the importance of reducing the demand side and energy use. This is achieved through integrated marketing communication campaigns and well-planned community outreach activities during the year. To guarantee that our stakeholders do not use too much electricity and water, we undertake energy audits for high-volume commercial customers, so that the finding report will enable us to take necessary remedial measures to reduce how much they use. We also participate in cause-related events such as Earth Hour, World Environment Day, and World Water Day. Likewise, the Holy Month of Ramadan is an important occasion for us to drive home the message of 'responsible utility consumption'.

In summer 2017, DEWA launched a campaign called "Let's make this summer green" focusing on conservation tips including reducing power consumption during peak hours (12 noon to 6 PM), setting the AC to 24C, fixing water leaks before travelling and summer vacation. In addition, and as part of DEWA's efforts to contribute to the overall development plan of the Hatta region, and to commit to a sustainable lifestyle for building an ideal society, DEWA hosted a workshop to introduce the 'Ideal Home' service. The service targeted more than 300 residents from Hatta, in partnership with nine government organisations.



Through the workshop, DEWA encouraged Hatta residents to register and participate and provided advice and guidance that contribute to building a happy and ideal society. It also aimed to spread the concept and culture of the ideal family and motivate other families to build homes that are sustainable and environmentally friendly.

Between 2009 and 2017, our awareness campaigns and efficiency audits achieved electricity savings of 1.7 TWh and water savings of 6.7 billion imperial gallons, which is equivalent to cost savings of approximately AED 1.04 billion.

FUTURE ENGINEERS

DEWA organises many events and initiatives for the younger generation, to prepare them for a brighter and more prosperous future. The Future Engineer camp is held twice a year during the students' winter and summer vacation.

The camp provides an informative platform to develop the student's scientific skills as well as encourages creativity, technology, and innovation. It includes many educational activities for students in engineering and scientific research and educates them about the basics of Robotics, and developing smart phone applications. 62 students participated this year and had the opportunity to learn the basics of electronics and electricity. The overall results of the students' happiness survey during the camp was 100%.



PEOPLE OF DETERMINATION

DEWA has actively contributed to the different initiatives and programmes that support People of Determination, the title awarded to people with disabilities by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai.

We commit ourselves to consolidate the principles of social responsibility by launching social and developmental initiatives and projects, to meet the needs of all society, especially people of determination. We have implemented 6 initiatives and 4 sponsorships worth AED 2.5 million in 2017.

In line with the objectives of the Year of Giving and in cooperation with UAE Deaf Association, DEWA provided different smart electronic devices to 30 families of people with determination to help them with daily lives activities, and other notification and vibration tools to support doorbells, telephones, fire alarms, security equipment, childcare, and others. 90.7% of our customers with determination are happy based on the Happiness Survey 2017.

In December 2017, and in line with the Arab Day for People of Determination, DEWA organised the 2nd Gathering for Happiness and Integration of People of Determination with the participation of a number of public entities as well as different centres for People of Determination across the country. During the event, the participants exhibited their handicrafts, paintings, and some handmade products. The event also supports His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum initiative “My Community.. A City for Everyone” that aims to turn Dubai city into a friendly city for People of Determination by 2020.

DEWA Youth Council organised a Youth Circle under the title ‘Zayed’s approach in supporting people of determination’. It is in recognition of the role of the late Sheikh Zayed in establishing the UAE’s humanitarian journey and supporting people of determination.

DEWA’s offices are also “disability-friendly”, providing wheelchair access at all main entrances. All restrooms, meeting rooms, car parking and other main facilities are emphasised for people of determination.

SOLAR DECATHLON MIDDLE EAST

Solar Decathlon Middle East (SDME) is an international competition created through an agreement between the Dubai Supreme Council of Energy, DEWA, and the US Department of Energy. Through this competition, universities from all over the world compete to design, build, and operate sustainable, cost-and-energy efficient models of solar-powered houses, which will contribute toward protecting the environment and be capable of adapting to the climate problems in the region. DEWA is working to provide all means of support to students in order to achieve the Solar Decathlon’s success, which is in line with our vision, and our strategic directions.

A total of 18 teams from 13 countries have been shortlisted for the final stage of the Solar Decathlon 2018. The winning teams will be awarded cash prizes of over AED 10 million. Dubai will host the first two cycles of the Solar Decathlon, which is to be held for the first time in the Middle East, in 2018 at the Mohammed bin Rashid Al Maktoum Solar Park and again in 2020 to coincide with World EXPO in Dubai.

COLLABORATING WITH EMIRATES MARINE ENVIRONMENTAL GROUP

In October 2017, and in support of DEWA's development plans and strategies to strengthen the foundations of environmental sustainability in Dubai, DEWA signed an MoU with Emirates Marine environmental Group (EMEG) to jointly increase awareness among employees and society to engage in environmental initiatives. Together, DEWA and EMEG have successfully organised a range of activities at Jebel Ali Marine Sanctuary.



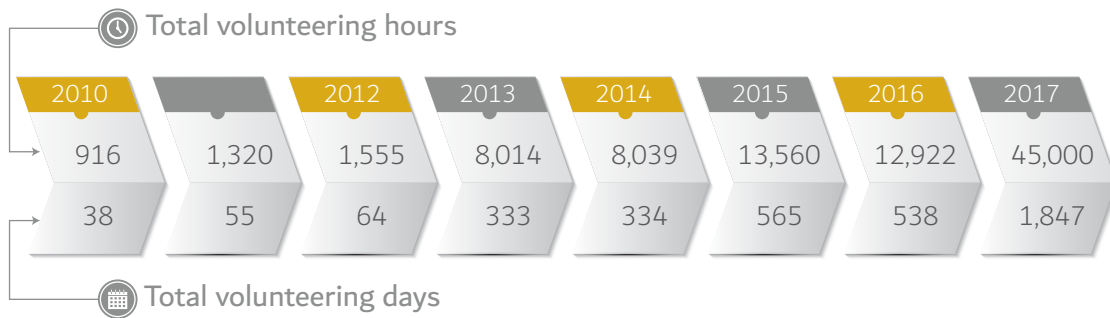
These included: Beach cleanup, mangrove rehabilitation, mangrove planting, turtle conservation, nesting event, Earth Day, and National Environmental day. In addition, we have used DEWA electric vehicles and light buses during all the events in order to reduce the number of cars in the reserve and protect it from pollution.

VOLUNTEERISM

In line with our Corporate Social Responsibility (CSR) programme and alignment with the objectives of the 'Year of Zayed' and the 'Year of Giving', we have launched DEWA Programme for Voluntary Work. DEWA staff and other members of society can record their data on a dedicated website to participate in voluntary work. The system lists initiatives and campaigns that are available to volunteer throughout the year and provides documentary evidence of the numbers of volunteer hours performed by each employee.

The main objective of the programme is to increase the participation of our employees in community services and charitable projects in the UAE and abroad in addition to giving to our people the opportunity to gain confidence, make a difference, meet people, and be part of a community. DEWA is one of the first public entities to develop a website that counts the volunteering hours for each employee registered in the site.

As per the calculation done by DEWA CSR team, in 2017, the number of volunteering hours done by DEWA employees reached approximately 45,000 hours. The total number of beneficiaries from DEWA’s charitable initiatives reached 3 million people around the world.



CASE STUDY

DEWA RECEIVES GOLD MEDAL FOR ITS EXCELLENCE IN SOCIAL RESPONSIBILITY

DEWA has received the Gold Medal of Excellence in the field of Social Responsibility in the Arab world, in recognition of its role in establishing a culture of corporate social responsibility regionally and globally, and supporting the concept of environmental, social and economic sustainability in Dubai and the UAE.

The award was presented by the Arab Organisation for Social Responsibility, at its 12th session, during the ‘Regional Forum of individuals and institutions’ that adopt social responsibility in its corporate activities.





GRI Content Index



Appendix 1 -Material Topics and their Boundaries

Material Topics	Material within the organisation or external	Relevant External Stakeholders					
		Customers	Suppliers	Partners	Society	Government	Investors
Economic							
Economic Performance	Both	√	√	√	√	√	√
Procurement Practices	Both		√	√	√	√	√
Innovation	Both	√	√	√	√	√	√
Availability and reliability	Both	√	√	√	√	√	√
Demand side management	Both	√			√	√	√
Research and development	Within						
System efficiency	Within						
Environmental							
Energy	Both	√	√	√	√	√	√
Water	Both	√	√	√	√	√	√
Emissions	Both				√	√	√
Effluents and waste	Both				√	√	√
Environmental Compliance	Both				√	√	√
Supplier Environmental Assessment	Both	√	√	√	√	√	√
Social							
Employment	Both				√	√	
Occupational health and safety	Both					√	√
Training and education	Within						
Diversity & Equal Opportunity	Within						
Non discrimination	Both		√	√	√	√	
Local Communities	Both				√	√	
Disaster/Emergency Planning and Response	Both	√	√	√	√	√	√
Customer Health and Safety	External	√			√	√	√
Customer Privacy	External	√			√	√	
SocioEconomic Compliance	Both				√	√	√
Access	Both	√				√	√
Provision of information	Both	√	√	√	√	√	√
Stakeholders Happiness	Both	√	√	√	√	√	√

GRI CONTENT INDEX

GRI Standard	Disclosure	Description	Page	SDGs Linkage to GRI
GRI 101:Foundation 2016				
General Disclosures				
GRI 102: General Disclosures 2016	102-1	Name of the organisation	18	
	102-2	Activities, brands, products, and services	18, 19	
	102-3	Location of headquarters	18	
	102-4	Location of operations	17, 18	
	102-5	Ownership and legal form	17	
	102-6	Markets served	19, 106	
	102-7	Scale of the organisation	19, 20, 30	
	102-8	Information on employees and other workers	123, 124	8.5;8.6
	102-9	Supply chain	42, 43	12.7
	102-10	Significant changes to the organisation and its supply chain	No significant changes	
	102-11	Precautionary Principle or approach	67, 68	
	102-12	External initiatives	28, 29	
	102-13	Membership of associations	24	
	102-14	Statement from the MD & CEO	12	
	102-16	Values, principles, standards, and norms of behaviour	20	
	102-18	Governance structure	21-23	16.3
	102-40	List of stakeholder groups	49	
	102-41	Collective bargaining agreements	No CBA in UAE	
	102-42	Identifying and selecting stakeholders	48, 49	
	102-43	Approach to stakeholder engagement	50	
	102-44	Key topics and concerns raised	51	
	102-45	Entities included in the consolidated financial statements	16, 19	
	102-46	Defining report content and topic Boundaries	16, 53-55	
	102-47	List of material topics	56	
	102-48	Restatements of information	16	
	102-49	Changes in reporting	No significant changes	
	102-50	Reporting period	16	
	102-51	Date of most recent report	16	
	102-52	Reporting cycle	16	12.6
	102-53	Contact point for questions regarding the report	16	
	102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: core option	
	102-55	GRI content index	155-161	
102-56	External assurance	162, 163		

GRI Standard	Disclosure	Description	Page	SDGs Linkage to GRI
GRI G4 Sector Disclosures 2013 Electric Utilities	EU1	Installed capacity, broken down by primary energy source and by regulatory regime	68-70	7.2
	EU2	Net energy output broken down by primary energy source and by regulatory regime	68, 69	7.2
	EU3	Number of residential, industrial, institutional and commercial customer accounts	106	
	EU4	Length of above and underground transmission and distribution lines by regulatory regime	70, 71	
	EU5	Allocation of CO ₂ emissions allowances or equivalent, broken down by carbon trading framework	83	13.2
Material Topics				
Economic				
Economic Performance				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	30	
	103-2	The management approach and its components	30	
	103-3	Evaluation of the management approach	30	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	30	7a;8.1;8.2; 9.1;9.5
	201-2	Financial implications and other risks and opportunities due to climate change	32, 33, 66, 67	13.1; 13.2
Procurement Practices				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	42, 43	12.7
	103-2	The management approach and its components	42, 43	12.7
	103-3	Evaluation of the management approach	42, 43	12.7
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	42, 43	
Innovation				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	33	8.3;9.5
	103-2	The management approach and its components	33	8.3;9.5
	103-3	Evaluation of the management approach	33	8.3;9.5
Non GRI DISCL		AFKARI Platform Results	138	
Availability & Reliability				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	72-74	7.1
	103-2	The management approach and its components	72-74	7.1
	103-3	Evaluation of the management approach	72-74	7.1
GRI G4 Sector Disclosures 2013 Electric Utilities	EU10	Planned capacity against projected electricity demand over the long term by energy source	72-74, 76, 107, 108	7.1;9.1; 9.4

GRI Standard	Disclosure	Description	Page	SDGs Linkage to GRI
Demand Side Management				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	76, 77, 100, 101	
	103-2	The management approach and its components	76, 77, 100, 101	
	103-3	Evaluation of the management approach	76, 77, 100, 101	
GRI G4 Sector Disclosures 2013 Electric Utilities		Management Approach: DSM programs	76, 77, 100, 101	7.1;7.b; 8.4;9.4; 12.8;13.2; 13.3
Research & Development				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	44, 45	
	103-2	The management approach and its components	44, 45	
	103-3	Evaluation of the management approach	44, 45	
GRI G4 Sector Disclosures 2013 Electric Utilities		Management Approach: R&D activity & expenditure	44, 45	7.a;9.5
System efficiency				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	70, 71, 80, 81	7.3;8.4
	103-2	The management approach and its components	70, 71, 80, 81	7.3;8.4
	103-3	Evaluation of the management approach	70, 71, 80, 81	7.3;8.4
GRI G4 Sector Disclosures 2013 Electric Utilities	EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	80	7.1;8.4; 12.2; 13.2
GRI G4 Sector Disclosures 2013 Electric Utilities	EU12	Transmission and distribution losses as a percentage of total energy	70, 71	7.1;8.4; 12.2
Environmental				
Energy				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	66-68	8.4
	103-2	The management approach and its components	66-68	8.4
	103-3	Evaluation of the management approach	66-68	8.4
GRI 302 Energy 2016	302-1	Energy consumption within the organisation	78	7.2;7.a; 7.b;8.4; 9.4;12.2
	302-4	Reduction of energy consumption	78	7.2;7.a;7.b; 13.2;12.8
Water				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	90-92	12.2
	103-2	The management approach and its components	90-92	12.2
	103-3	Evaluation of the management approach	90-92	12.2

GRI Standard	Disclosure	Description	Page	SDGs Linkage to GRI
GRI 303 Water 2016	303-1	Water withdrawal by source	91, 92	6.4;6.6; 14.1
	303-2	Water sources significantly affected by withdrawal of water	91, 92	6.3;6.6; 14.1; 14.3
	303-3	Water recycled and reused	99, 100	6.3;12.5; 14.3
Emissions				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	66-68, 82-84	3.9;13.1
	103-2	The management approach and its components	66-68, 82-84	3.9;13.1
	103-3	Evaluation of the management approach	66-68, 82-84	3.9;13.1
GRI 305 Emissions 2016	305-1	Direct (Scope 1) GHG emissions	66-68, 82-83	3.9;12.4
	305-2	Energy indirect (Scope 2) GHG emissions	No power purchased during 2017	3.9;12.4
	305-4	GHG emissions intensity	82, 83	3.9;12.4
	305-5	Reduction of GHG emissions	82, 83	3.9;12.4; 13.2
	305-6	Emissions of ozone-depleting substances (ODS)	83, 84	3.9;12.4; 13.2
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	83, 84	3.9;12.4; 13.2
Effluents & Waste				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	96-100	6.3;6.6
	103-2	The management approach and its components	96-100	6.3;6.6
	103-3	Evaluation of the management approach	96-100	6.3;6.6
GRI 306 Effluents & Waste 2016	306-1	Water discharge by quality and destination	96-98	3.9;6.3;12.4; 14.2
	306-2	Waste by type and disposal method	99-100	3.9;6.3; 12.5
	306-3	Significant spills	In 2017, there were no significant environmental impacts	3.9;6.3;12.4; 14.1;15.1
	306-5	Water bodies affected by water discharges and/or runoff	96-100	6.3;14.1; 15.5
Environmental Compliance				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	67, 68	
	103-2	The management approach and its components	67, 68	
	103-3	Evaluation of the management approach	67, 68	
GRI 307 Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	67, 68	13.2;13.3
Supplier Environmental Assessment				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	42, 43	
	103-2	The management approach and its components	42, 43	
	103-3	Evaluation of the management approach	42, 43	
GRI 308 Supplier Environmental Compliance 2016	308-1	New suppliers that were screened using environmental criteria	42, 43	
	308-2	Negative environmental impacts in the supply chain and actions taken	No such negative environmental impacts in our supply chain has been reported during 2017	12.4; 13.2; 13.3

GRI Standard	Disclosure	Description	Page	SDGs Linkage to GRI
Social				
Employment				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	122, 135-137	8.8
	103-2	The management approach and its components	122, 135-137	8.8
	103-3	Evaluation of the management approach	122, 135-137	8.8
GRI 401 Employment 2016	401-1	New employee hires and employee turnover	124	5.1;5.5; 8.5;8.6
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	125, 126	
	401-3	Parental leave	127	5.1;5.5
GRI G4 Sector Disclosures 2013 Electric Utilities	EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	124, 125	8.3
Occupational Health & Safety				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	129-133	
	103-2	The management approach and its components	129-133	
	103-3	Evaluation of the management approach	129-133	
GRI 403 Occupational Health & Safety 2016	403-1	Workers representation in formal joint management–worker health and safety committees	129-133	8.8
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	129-133	8.8
Training & Education				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	128, 138	
	103-2	The management approach and its components	128, 138	
	103-3	Evaluation of the management approach	128, 138	
GRI 404 Training & Education 2016	404-1	Average hours of training per year per employee	128	4.3;5.1; 5.5;8.6
	404-2	Programs for upgrading employee skills and transition assistance programs	128, 138	4.4;8.6
Diversity & Equal Opportunity				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	125, 135-137	
	103-2	The management approach and its components	125, 135-137	
	103-3	Evaluation of the management approach	125, 135-137	
GRI 405 Diversity & Equal Opportunity 2016	405-2	Ratio of basic salary and remuneration of women to men	125	5.1;5.5; 8.5;10.3
Non Discrimination				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	122, 123	
	103-2	The management approach and its components	122, 123	
	103-3	Evaluation of the management approach	122, 123	

GRI Standard	Disclosure	Description	Page	SDGs Linkage to GRI
GRI 406 Non Discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	No incidents recorded during 2017	5.1;5.5; 8.5;16.3
Local Communities				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	142, 143	
	103-2	The management approach and its components	142, 143	
	103-3	Evaluation of the management approach	142, 143	
GRI 413 Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	142, 143	1.4;9.1; 11.4
GRI G4 Sector Disclosures 2013 Electric Utilities	EU22	Number of people physically or economically displaced and compensation, broken down by type of project	143	1.4
Disaster/Emergency Planning & Response				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	32, 33	
	103-2	The management approach and its components	32, 33	
	103-3	Evaluation of the management approach	32, 33	
GRI G4 Sector Disclosures 2013 Electric Utilities		Management Approach	32, 33	1.5;11.5; 11.6
Customer Health & Safety				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	106-108, 116	
	103-2	The management approach and its components	106-108, 116	
	103-3	Evaluation of the management approach	106-108, 116	
GRI 416 Customer Health & Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No incidents during 2017	3.9;16.3
GRI G4 Sector Disclosures 2013 Electric Utilities	EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	We suffered no work related fatalities during 2017	3.9
Customer Privacy				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	117	
	103-2	The management approach and its components	117	
	103-3	Evaluation of the management approach	117	
GRI 418 Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	There were no complaints received concerning breaches of customer privacy and losses of customer data in 2017	16.3

GRI Standard	Disclosure	Description	Page	SDGs Linkage to GRI
Socioeconomic Compliance				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	21, 41	
	103-2	The management approach and its components	21, 41	
	103-3	Evaluation of the management approach	21, 41	
GRI 419 Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	No significant monetary or non-monetary sanctions for non-compliance with the laws and regulations in the social and economic area	16.3
Access				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	110-115	
	103-2	The management approach and its components	110-115	
	103-3	Evaluation of the management approach	110-115	
GRI G4 Sector Disclosures 2013 Electric Utilities		Management approach: programmes, including in partnership with government, to improve or maintain access to electricity and customer support services	110-115	1.4;7.1; 11.1
	EU26	Percentage of Population unserved in licensed distribution or serviced area.	0%	1.4;7.1; 11.1
	EU28	Power outage frequency	106-108	7.1
	EU29	Average power outage duration	106-108	7.1
	EU30	Average plant availability factor by energy source and by regulatory regime	106-108	7.1
Provision of Information				
GRI G4 Sector Disclosures 2013 Electric Utilities		Management approach: practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services	109, 149	1.4;7.1
Customers Happiness				
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its Boundary	107, 116-117	
	103-2	The management approach and its components	107, 116-117	
	103-3	Evaluation of the management approach	107, 116-117	
NON GRI DISCL		Results of surveys measuring customer happiness	116-117	



Independent Limited Assurance Report to Dubai Electricity and Water Authority

Conclusion

Based on the evidence we obtained from the procedures performed, we are not aware of any material misstatements in the Selected Performance Areas as described below, disclosed in the Dubai Electricity and Water Authority (DEWA) Sustainability Report which is prepared in accordance with GRI Standards Principles for Defining Content and Quality for the period ending 31 December 2017.

Information Subject to Assurance

The Selected Performance Areas as presented in the Dubai Electricity and Water Authority (DEWA) Sustainability Report 2017, subject to assurance, comprise the following:

Selected Performance Area	GRI indicator	Pages
Availability and Reliability of Electricity	EU10 Planned capacity against projected electricity demand over the long term by energy source	72-79 & 111-112
Water Availability and Quality	303-3 Water recycled and reused	95-98 & 102-103
Access to Electricity	EU28 Power outage frequency EU29 Average power outage duration* (if possible)	81 & 108-112
System Efficiency	EU11 Average generation efficiency of thermal plants by energy source and by regulatory regime	69-71 & 80-86
Occupational Health & Safety	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	129-133

Criteria Used as the Basis of Reporting

The GRI Standards Principles for Defining Content and Quality ("the criteria"), as published by the Global Reporting Initiative is the criteria used as the basis of reporting and our audit work.

Basis for Conclusion

We conducted our work in accordance with International Standard on Assurance Engagements ISAE 3000 (Standard). In accordance with the Standard we have:

- used our professional judgement to plan and perform the engagement to obtain limited assurance, where, we are not aware of any material misstatements in the Selected Performance Areas, whether due to fraud or error;
- considered relevant internal controls when designing our assurance procedures, however we do not express a conclusion on their effectiveness; and
- ensured that the engagement team possess the appropriate knowledge, skills and professional competencies.

Summary of Procedures Performed

Our limited assurance conclusion is based on the evidence obtained from performing the following:

- enquiries with relevant DEWA management and staff to understand DEWA's process for determining material issues;
- the process for developing the Selected Performance Areas within the DEWA Sustainability Report 2017

- enquiries with relevant DEWA management and staff to understand the internal controls, governance structures and reporting processes for the Selected Performance Areas;
- analytical procedures over the Selected Performance Areas;
- site visits to DEWA Headquarters;
- walkthroughs of the Selected Performance Areas to source documentation;
- evaluating the appropriateness of the criteria with respect to the Selected Performance Areas; and
- considering that the appropriate indicators have been reported in accordance with the GRI Sustainability Reporting Standards Core level of disclosures; and
- reviewed the DEWA Sustainability Report 2017 in its entirety to ensure it is consistent with our overall knowledge of EGA's sustainability approach.

How the Standard Defines Limited Assurance and Material Misstatements

The procedures performed in a limited assurance engagement vary in nature and timing, and are less extensive than those procedures performed for reasonable assurance. Consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had reasonable assurance procedures been performed.

Misstatements, including omissions, are considered material if, individually or in the aggregate, they could reasonably be expected to influence relevant decisions of the Management of DEWA.

Use of this Assurance Report

This report has been prepared for the Management of DEWA for the purpose of providing an assurance conclusion on the Selected Performance Areas, and may not be suitable for another purpose. We disclaim any assumption of responsibility for any reliance on this report, to any person other than the Management of DEWA, or for any other purpose than that for which it has been prepared.

Management's Responsibility

Management are responsible for:

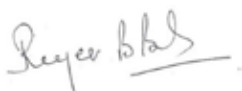
- determining that the criteria is appropriate to meet their needs;
- preparing and presenting the Selected Performance Areas in accordance with the criteria; and
- establishing internal controls that enable the preparation and presentation of the Selected Performance Areas that is free from material misstatement, whether due to fraud or error.

Our Responsibility

Our responsibility is to perform a limited assurance engagement in relation to the Selected Performance Areas for the period end 31 December 2017, and to issue an assurance report that includes our conclusion.

Our Independence and Quality Control

Our work was performed in compliance with the requirements of the International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants, which requires, among other requirements, that the members of the assurance team (practitioners) as well as the assurance firm (assurance provider) be independent of the assurance client, in relation to the scope of this assurance engagement, including not being involved in writing the Report. The firm applies ISQC 1 and the practitioner complies with the applicable independence and other ethical requirements of the IESBA code.



KPMG

Raajeev Batra

Partner

Abu Dhabi

24 July 2018

ACRONYMS LIST

4G	Fourth generation	CEO	Chief Executive Officer
ACWA	Consortium from Saudi Arabia	CERs	Certified Emissions Reductions
ADWEA	Abu Dhabi Water and Electricity Authority	CH ₄	Methane gas
AED	United Arab Emirates Dirhams	CISL	Cambridge Institute for Sustainability Leadership
AF	Availability Factor	CM	Crisis Management
AI	Artificial Intelligence	CML	Customer Minutes Lost
AIR	Accident/Incident Ratio	CO ₂	Carbon Dioxide
Android	Mobile operating system developed by Google	COP	Conference of the Parties
AR	Absenteeism Rate	COP21	2015 Paris Climate Change Conference
ASN	Advanced Shipping Notification	CSP	Concentrated solar power
ASR	Aquifer storage and recovery	CSR	Corporate Social Responsibility
BAU	Business as Usual	DCCE	Dubai Carbon Centre of Excellence
BCM	Business Continuity Management	DCES	Dubai Clean Energy Strategy
BCP	Business Continuity Plan	DCS	District Cooling Services
BIA	Business Impact Analysis	DEWA	Dubai Electricity and Water Authority
BIG	Billion Imperial Gallons	DGEP	Dubai Government Excellence Program
BIPV	Building-integrated photovoltaics	DSCE	Dubai Supreme Council of Energy
BMI	Body Mass Index	DSM	Demand Side Management
BSC	British Safety Council	DUCAB-HV	Dubai High Voltage Cable Systems
BSI 13500	British Standard	DUSUP	Dubai Supply Authority
BTEC	Business and Technology Education Council	EFQM	European Foundation of Quality Management
CAR	Cooling Air Reduction	EMEG	Emirates Marine Environmental Group
CBP	Certified Business Professional	EMPOWER	Emirates Central Cooling Systems Corporation
CC&S	Climate Change & Sustainability Department	EMS	Environmental Management System
CDA	Community Development Authority	ENMS	Energy Management System
CDM	Clean Development Mechanism	EPC	Engineering, Procurement and Construction

ERM	Enterprise Risk Management	JEI Silicon Valley	Jumeirah Energy International Silicon Valley Company
ESCO	Energy Service Company	KAM	Key Account Management
ETIHAD ESCO	Al Etihad Energy Service Company	km	Kilometre
EV	Electric vehicle	KPI	Key Performance Indicators
EWS	Emirates Wildlife Society	KV	Kilovolt
GCC	Gulf Cooperation Council	kW	kilowatt
GDP	Gross Domestic Product	kWh	kilowatt-hour
GHG	Greenhouse Gas	LCOE	Levelised Cost of Electricity
GIS	Gas Insulated Switchgear	LED	Light Emitting Diode
GRI	Global Reporting Initiative	LEED	Leadership in Energy and Environmental Design
GSO	Standardization Organisation for GCC	LLC	Limited Liability Company
GWh	Gigawatt hours	m	Metre
H&S	Health and Safety	M	Million
HFC	Hydrofluorocarbons	m ³	Cubic Metre
HH	His Highness	Masdar	Abu Dhabi Future Energy Company
HR	Human Resources	MBRCHE	Mohammed bin Rashid al Maktoum Charity and Humanitarian Establishment
HRSG	Heat Recovery Steam Generators	MBRGI	Mohammed bin Rashid al Maktoum Global Initiatives
HVAC	Heating, ventilation, and air conditioning	MBRHE	Mohammed bin Rashid Housing Establishment
I-RECs	International Renewable Energy Certificates	MD	Managing Director
IMS	Innovation Management System	MENA	Middle East And North Africa
INDCs	Intended Nationally Determined Contributions	MIG	Million Imperial Gallons
IOS	Operating system used for mobile devices manufactured by Apple Inc	MIGD	Million Imperial Gallons per Day
IoT	Internet of Things	MMBTU	Million British Thermal Units
IPP	Independent Power Producer	MOU	Memorandum of Understanding
IR	Injury Rate	MRV	Monitoring, Reporting and Verification
ISAE 3000	International Assurance Standard 3000	MSF	Multi-Stage Flashing
ISO	International Standards Organisation	Mt	Metric tons
IT	Information Technology	MtCO ₂ e	Metric tons of CO ₂ equivalent
IVR	Interactive Voice Response System	MW	Megawatts
JAPS	Jebel Ali Power Station	MW/h	Megawatt hours

MWp	Mega Watt peak
N2O	Nitrous oxide
NCEMA	National Emergency Crisis and Disaster management Authority
NESA	National Electronic Security Authority
NOx	Nitrogen Oxides
O&M	Operation and Maintenance
ODS	Ozone Depleting Substances
OECD	Organisation for Economic Cooperation and Development
OEM	Original Equipment Manufacturer
OTF	Outdoor Testing Facility
P&WP	Power and Water Planning
PESTEL	Political economic social technological environmental legal
PFC	Perfluorocarbons
pH	Logarithmic scale used to specify the acidity or basicity of an aqueous solution.
PoA	Programme of Activities
POD	People of Determination
ppm	Parts-per million
PV	Photovoltaic
Q2	2 nd Quarter
R&D	Research and Development
R22	Refrigerant 22
R407c	Refrigerant 407c
RERA	Real Estate Regulatory Agency
RH	Relative Humidity
RO	Reverse Osmosis
ROE	Return on Equity
RS	Reduced Swirl
RWE PI ME	RWE Power International Middle East
SAIFI	System Average Interruption Frequency Index
SAP	German- based European Multinational software Company

SCADA	Supervisory Control and Data Acquisition
SCI	Sustainability Culture Indicator
SDGs	Sustainable Development Goals
SDME	Solar Decathlon Middle East
SE	Service entry
SEWA	Sharjah Electricity and Water Authority
SF6	Sulphur Hexafluoride
SLT	Sustainability Leading Team
SMEs	Small and Medium Enterprises
SMS	Short Message Service
SO2	Sulphur Dioxide
SRM	Supplier Relationship Management
SWOT	Strengths, weaknesses, opportunities and threats
T&D	Transmission and Distribution
TESTIAC	Thermal Energy Storage Turbine Inlet Air Cooling
TICSCI	The International Customer Service Institute
TISSE	The International Standard for Service Excellence
TSE	Treated sewage effluent
TSK	Spanish Industrial group specialist on renewable projects
TWh	Tera Watt Hour(s)
UAE	United Arab Emirates
UFW	Unaccounted for Water
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
USD	United States Dollars
VPP	Virtual power plant pilot development
W&C	Water & Civil
WETEX	Water, energy, technology, and environment exhibition
WHO	World health organisation
WWF	World Wide Fund for Nature
ZEB	Zero Energy Building

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Sustainability Report 2017 Highlights



     **DEWA OF I IAL**
customer@dewa.gov.ae | www.dewa.gov.ae



OFFICIAL SUSTAINABLE ENERGY PARTNER

Our Vision
A Sustainable Innovative World-Class Utility
P.O. Box 564, Dubai, United Arab Emirates
T: +971 4 601 9999, F: +971 4 601 9995