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APRIL 2019

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DEWA organises '50 Years to the Nation' Forum 50

to the

Groundbreaking of Green Hydrogen Project, first of its kind in the region

DUBAI SHARES ITS
EXPERIENCE IN
WATER SECURITY AND
SUSTAINABILITY AT
WORLD GOVERNMENT
SUMMIT 2019





The new economy is based on innovation and the new world is on the lookout for new talents with fresh perspectives.

#### **HH Sheikh Mohammed bin Rashid Al Maktoum**

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

#### **Our Vision**

A globally leading sustainable innovative corporation.

#### **Our Mission**

We are committed and aligned to Dubai's 8 Principles and 50-Year Charter supporting the UAE's directions through the delivery of global leading services and innovative energy solutions enriching lives and ensuring the happiness of our stakeholders in a sustainable manner.

#### **Our Values**

Stakeholders' Happiness, Sustainability, Innovation, Excellence, and Good Governance.

#### **Our Motto**

For generations to come.



# **WELCOME MESSAGE**

#### SAEED MOHAMMED AL TAYER MD & CEO OF DEWA

The wise leadership of the UAE works hard to ensure that its people are the happiest in the world. Our nation's priority is the happiness of our citizens, residents, and visitors, and makes every effort to do so. We have strategies in place to achieve this, and we are measuring happiness scientifically, to make the UAE a role model for this.

This supports the vision of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to position Dubai as a global model by raising the living standards, happiness and prosperity of its citizens and residents.

The announcement of 2019 as the Year of Tolerance shows the commitment that His Highness has instilled in the hearts of the nation's people and residents over the past decades. We continue to become even more tolerant, generous, and kind as shown by the example of the late Sheikh Zayed bin Sultan Al Nahyan, the Founding Father of the UAE. We are guided by our wise leadership to achieve the UAE Vision 2021 and the UAE Centennial 2071 to become the best nation in the world.

The Eight Principles of Governance in Dubai, the 50-Year Charter, and the Ten Rules of Leadership detailed by His Highness in his book 'My Story... 50 Memories from Fifty Years of Service' are the principles of DEWA's strategies. We are effectively applying them in DEWA's mission, corporate values, and key performance indicators.

DEWA was the first government entity to reformulate its corporate vision based on these directives, principles, and rules, to make DEWA a globally leading sustainable innovative corporation.

We set specific goals, clear performance indicators, and targets within our strategy to achieve these directives. We are incorporating them into all the relevant procedures, processes, and systems at DEWA to keep pace with the rapid developments. Examples of this include The Fourth Industrial Revolution, with disruptive technologies such as Artificial Intelligence, Unmanned Aerial Vehicles, energy

storage, blockchain technology, and the Internet of Things.

We also set the Ten Rules of Leadership detailed by His Highness in his book as guidelines for government administration and good governance that will shape our strategies and processes.

DEWA is proceeding according to a clear vision and strategy to conserve natural resources, promote clean energy, and implement green development plans to support the United Nations Sustainable Development Goals 2030. DEWA is working hard to promote the transition to renewable energy, paying close attention to resource sustainability, carbon footprint reduction, and increasing the efficient use of energy and water.

To achieve the objectives of the Dubai Clean Energy Strategy 2050, launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum to diversify energy and provide 75% of Dubai's total power output from clean energy by 2050, we initiated many green programmes, initiatives, and projects, including the Mohammed bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world with a capacity of 5,000 megawatts by 2030 at a total investment of AED 50 billion. When completed, the complex will help reduce over 6.5 million tonnes of carbon emissions annually.

Over the past 10 years, DEWA's rationalisation programmes and initiatives have achieved significant savings in the consumption of electricity and water within the target groups. The cumulative savings between 2009 and 2018 were about 2 terawatt-hours of electricity and 7.4 billion gallons of water, equivalent to AED 1.2 billion in the residential, commercial, and industrial sectors as well as in educational institutes and government and semi-governmental organisations. These savings contributed to the reduction of one million tonnes of carbon emissions.

We will continue to launch initiatives, programmes, and projects to achieve the vision of our wise leadership to create a brighter, happier, and more prosperous and sustainable future for generations to come.

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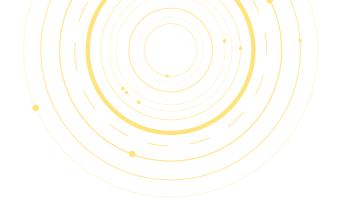
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# **COVER STORY**

#### **'50 Years to the Nation'** Forum



▶ DEWA organised the '50 Years to the Nation' forum to introduce the 50-Year Charter, 8 Principles of Governance in Dubai, and the Ten Rules for Leadership launched by HH Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai. The forum, which celebrated the 50th anniversary of His Highness ∮ objectives of the UAE National Agenda serving the nation, was inaugurated by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, at Dubai World Trade Centre, Zabeel Hall 3. HE Lieutenant General Dhahi Khalfan Tamim, Deputy Chief of Police and Public Security in Dubai: HE Sultan Ahmed Bin Sulavem. Group Chairman and CEO of DP World: HE Abdulla Al Basti, Secretary General of the Executive Council of Dubai; also attended, along with DEWA's Executive Vice Presidents and Vice Presidents; and over 1,000 DEWA employees.

In his speech at the forum, Al Tayer expressed his pride in discussing the worthy directives, principles, and rules launched by HH Sheikh Mohammed bin Rashid Al Maktoum, which have defined DEWA's direction.

"His Highness Sheikh Mohammed | DEWA's leadership team, included foundations and important principles that will help to achieve his vision to strengthen Dubai as a global model of a futuristic city, raise its quality of life, and achieve the happiness of its citizens and residents, which accomplish the 2021 and UAE Centennial 2071. We learned from these directives and, with

bin Rashid Al Maktoum laid the them in its mission, strategy and corporate values, and strategic key performance indicators; and started applying them effectively. DEWA is the first government organisation to reformulate its vision based on these directives, principles, and rules, to become a globally leading, sustainable, innovative corporation," said Al Tayer.





#### Solar panels on 5,000 homes

Article seven of the 50-Year Charter | homes (10% of citizen's homes) and | stipulates developing a comprehensive | link them to the DEWA's grid, replace system that allows at least 10% of our citizens' homes to be self-sufficient in terms of water, food, and energy. DEWA and its supporting entities were tasked to achieve this goal. As soon as these were announced, we directly formed a special team from DEWA's relevant divisions to develop an integrated plan to implement the directives of His Highness to achieve energy selfsufficiency in 10% of citizens' homes, changing their lifestyles and protecting the environment. DEWA is the first government department to implement the articles of the 50-Year Charter. Under the directives and follow-up of His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, we launched a series of initiatives and projects to achieve these objectives, which are: Install solar panels in 5,000

traditional lightbulbs with energy-saving LED bulbs in target homes, and provide and install water-saving devices in these houses. DEWA awarded the photovoltaic of 2019," said Al Tayer. solar panel installation project to six

contractors who have already started work. Etihad ESCO is supervising the project to install energy-saving LED lightbulbs and water-saving devices. The project will be completed before the end

#### A treasure of ideas

"I would like to reiterate that the 8 Principles of Governance in Dubai, the 50-Year Charter, and the 'My Story... Memories from Fifty Years of Service' book, including the Ten Rules for Leadership, are a treasure trove of ideas, lessons, and proverbs. I invite you to read them thoroughly and apply them in your personal and professional lives. I urge you to continue your efforts to maintain your achievements, and accomplish even more, in line with the vision of our wise leadership to create a brighter, happier, and more prosperous and sustainable future for generations to come," Al Tayer concluded, addressing the employees.



# MAIN STORY



Breaking ground for

MENA's first solar-powered

Green Hydrogen Project

at Mohammed bin Rashid

Al Maktoum Solar Park

HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, Chairman of the Expo 2020 Dubai Higher Committee, has broken ground for the first solar-driven hydrogen electrolysis facility in the Middle East and North Africa (MENA).

The ceremony was attended by HH Sheikh Zayed bin Sultan bin Khalifa Al Nahyan, Chairman of the Board of Trustees of HH Sheikh Sultan bin Khalifa Al Nahyan Humanitarian & Scientific Foundation; HE Saeed Mohammed Al Tayer, MD & CEO of Dubai Electricity and Water Authority (DEWA); HE Suhail Farai Al Mazroui, Minister of Energy and Industry; HE Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and the Environment; Joe Kaeser, President and CEO of Siemens AG; HE Ahmed Al Muhairbi, Secretary General of the Dubai Supreme Council of Energy; HE Saif Al Falasi, CEO of ENOC; HE Ahmad bin Shafaar, CEO of Empower; HE Mohammad Abu Nayyan, Chairman of Acwa Power; HE Najeeb Mohammed Al-Ali, Executive Director of Dubai Expo 2020 Bureau; Dietmar Siersdorfer, CEO of Siemens in the Middle East, and other officials from the government and private sectors.

The project will be implemented in collaboration between DEWA, Expo 2020 Dubai and Siemens. It will be built at DEWA's outdoor testing facilities in the Research and Development (R&D) Centre at the Mohammed bin Rashid Al Maktoum Solar Park in Dubai. The move supports a green economy in the UAE.

"DEWA, Expo 2020 Dubai and Siemens are working together to help realise His Highness Sheikh Mohammed bin Rashid Al Maktoum's vision to identify new energy resources and provide sustainable power as part of a balanced approach that prioritises the environment. Our aim is to make Dubai a model of energy efficiency and safety," said HH Sheikh Ahmed bin Saeed Al Maktoum.

"In line with its theme of 'Connecting Minds, Creating the Future', Expo 2020 Dubai will continue to work with its partners to create long-term benefits for the UAE, the wider region and the rest of the world. Breaking ground on this innovative project represents an important milestone in bringing to life Expo's key subtheme of Sustainability, as well as its mission to create a meaningful legacy for generations to come," His Highness added.

'The Green Hydrogen project is part of our efforts to support the vision and directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to promote sustainability and innovation, and lead the transformation towards a greener economy. This pilot project is the first of its kind in the MENA region to produce hydrogen using clean energy. It supports DEWA's efforts in innovation, research, and development in energy storage and sustainability, which is one of the themes of Expo 2020 Dubai. The project also supports DEWA's efforts to contribute to hosting one of the most

sustainable World Expos in history in line with DEWA's role as Expo 2020's Official Sustainable Energy Partner," said Al Tayer.

"This pioneering project is a role model for strategic partnerships between the public and private sectors. It will contribute to developing the green economy concept in the UAE and explore the potential of green hydrogen technology. The hydrogen produced at the facility will be stored and deployed for re-electrification, transportation and other uses," added Al Tayer.

"Along with our partners DEWA and Expo 2020 Dubai, we made the commitment less than a year ago to bring green hydrogen to Dubai. With this ground-breaking ceremony, we are inching closer to making this a reality. Siemens has pioneered this space globally, generating green hydrogen from renewable energy using Proton Exchange Membrane electrolysis. This project will be an important contribution to the evolving energy mix in Dubai and the UAE," said Kaeser.

Expo 2020 Dubai intends to showcase hydrogen mobility by powering a number of fuel-cell vehicles with the hydrogen generated at the facility, and transport Expo 2020 Dubai visitors to the Mohammed bin Rashid Al Maktoum Solar Park. Live data of the green hydrogen electrolysis will be displayed at Expo 2020 Dubai.

# MAIN STORY

### **DEWA's Smart Grid Station** inaugurated in Al Ruwayyah



➡ HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, inaugurated DEWA's Smart Grid Station (SGS) The inauguration ceremony was also in Al Ruwayyah, Dubai, attended by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA. The SGS was built in partnership with the Korea Electric Power Corporation (KEPCO) as a result of a fruitful exchange of best practices and experiences in the latest international smart city and smart grid standards. The construction of the SGS is part of DEWA's efforts to implement technologies which link smart buildings

for the exchange of information, improve energy and water efficiency, and optimise renewable energy in smart cities.

attended by HE Ahmed Buti Al Muhairbi, Secretary General of the Dubai Supreme Council of Energy, and Jonghwan Lee, Executive Vice President and Chief Technology Officer at KEPCO.

His Highness was briefed by Al Tayer on the various sections of the SGS, which uses a variety of smart grid technologies to generate power through renewable sources, such as solar and wind power, and maximise energy efficiency through real-time monitoring and control systems. The SGS also allows for the reduction of loads, especially at peak times; peak shift, and the reduction of water consumption. His Highness was also briefed on the components of the SGS, which highlight the Smart City model through three concepts or systems: the smart office, smart building, and smart factory. The SGS concept is scalable and allows for the development of individual smart buildings, groups of smart buildings and smart areas, which ensures the efficient reduction of



electricity and water consumption as well as carbon emissions, thereby becoming a smart city.

The SGS comprises a 200-kilowatt (kW) photovoltaic solar power production system; a 9-kilowatt (kW) wind turbine; and a 500-kilowatt hour (kWh) lithiumion battery energy storage system, which stores energy for later use. The station also includes over 2,000 sensors based on the Internet of Things (IoT) technology, and smart meters distributed throughout the facility to monitor power and water demand data in real-time for the purpose of improved energy and water management, with the potential to reduce demand when required by eliminating non-critical loads through smart lighting, smart power outlets, and smart air conditioning system. The SGS is also integrated with a smart chiller system through a building management system, and a 100-tonne thermal energy storage system, which stores surplus cooling energy to be used when required, thereby reducing the demand on the smart chiller system.

DEWA signed a contract with KEPCO in November 2015 for the development of the SGS at DEWA's green vehicle workshop in Ruwayyah. The contract

was an outcome of the MoU signed between the two parties in 2014 to collaborate and exchange information on various topics, including smart grids, smart cities, demand side management, asset management, distribution automation, substation automation, workshops to raise awareness. advanced metering infrastructure,

telecommunications, systems integration, IT infrastructure, renewable energy, electric vehicles, micro grids, energy sector databases, investment participation opportunities, performance benchmarking, and organising joint



# MAIN STORY

# DEWA was Efficiency Partner of WFES 2019



DEWA participated in the 12th World Future Energy Summit (WFES) as its Efficiency Partner. WFES was organised by Abu Dhabi Future Energy Company (Masdar) from 14-17 January 2019 in Abu Dhabi.

"Today, the UAE is a global role model for the transition to a green economy thanks to the vision and directives of the wise leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE; His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai; and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces. At DEWA, we work to achieve this vision by anticipating the future of energy and launching quality projects to increase the percentage of renewable energy in the energy mix. We were pleased to once again sponsor the World Future Energy Summit as Efficiency Partner to share our experiences and expertise, and highlight our innovative initiatives and efforts to develop disruptive technologies in renewable and clean energy. This is to keep up with the Fourth Industrial Revolution and promote research and development to develop innovative and sustainable solutions and unify efforts to address the challenges facing the energy sector," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

Al Tayer noted that WFES is a global platform that brings together experts and specialists to share expertise and best practices and explore the growing investment opportunities in the Middle East, which is one of the world's most promising renewable energy markets. WFES also highlights the UAE's leading role in the transition to the energy of the future. He emphasised that DEWA's sponsorship of WFES is in line with its efforts to invest in renewable energy through major initiatives and projects that support the Dubai Clean Energy Strategy 2050 to produce 75% of Dubai's total power output from clean energy sources, and make Dubai the city with the lowest carbon footprint in the world by 2050.

HE Suhail Al Mazroui, the UAE's

Minister of Energy and Industry, visited DEWA's stand where he was briefed on DEWA's latest projects and efforts to promote sustainable development and develop the energy sector. HE Dr Abdul Hussain Mirza, Minister of Energy of the Kingdom of Bahrain, also visited DEWA's stand, where he was briefed on DEWA's latest projects and efforts to promote sustainable development and develop the energy sector. Emphasising the role played by DEWA in supporting creative young talents and minds, Alia Al Mansouri, the Emirati student and the winner of NASA's 'Genes in Space' competition, also stopped by. Al Mansouri praised DEWA's innovation, saying that DEWA consistently launches new innovative initiatives and projects that ensure continuous improvement and development of its operations and

At WFES 2019, DEWA highlighted a number of its key projects and initiatives in clean and renewable energy, including the Mohammed bin Rashid Al Maktoum Solar Park, which is the largest single-site solar park in the world. It will produce 5,000 megawatts

(MW) by 2030 with investments up to AED 50 billion. DEWA also highlighted its Shams Dubai initiative to connect solar panels on buildings to DEWA's grid; and the Green Charger initiative to build the infrastructure and electric vehicle charging stations. DEWA's stand also featured a model of its new headquarters named Al-Sheraa, which will be the tallest, largest, and smartest government net zero-energy building in the world. DEWA also displayed a model of the smart grid station.

DEWA's stand also hosted the Dubai Supreme Council of Energy; the UAE Water Aid Foundation (Suqia) under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives; and some of DEWA's companies including the Dubai Carbon Centre of Excellence (Dubai Carbon); MORO data hub that offers data centre services and business solutions for public and private companies in the UAE and the region; Emirates Central Cooling Systems Corporation (Empower); innogy International Middle East; Mai Dubai; and Etihad Energy Services Company (Etihad ESCO).



#### Dubai shares its experience in water security and sustainability at World Government Summit 2019



Water is at the centre of the economic, social and environmental development. The 6th goal of the UN Sustainable Development Goals (SGDs) 2030 is to 'ensure access to water and sanitation for all.' Water security is one of the key challenges worldwide especially with the population and economic growth. More than two billion people lack access to safe drinking water, and the world is expected to face a 40% shortfall between forecast demand and available water supply by 2030. The Middle East and North Africa (MENA) is the most water-scarce region in the world, where over 60% of the region's population live in areas with high or very high surface water stress, compared with a global average of about 35%.



#### **Water Security**

At the 7th World Government Summit in Dubai, HF Saeed Mohammed Al Tayer, MD & CEO of Dubai Electricity and Water Authority (DEWA), discussed a number of factors that contribute to ensuring water security. Al Tayer noted that managing water security in the region requires developing and implementing the strategies and policies that will increase integrated management to ensure account the available resources, billing, evaluating consumption, and to users.



whether surface water, groundwater, increasing users' awareness of their or desalinated water. Water should own consumption. Smart metering also be fully recycled using available also helps water service providers technologies. Smart metering identify leaks, reduce operating costs, sustainability. This should take into contributes to improving accuracy in and communicate the value of water

#### Water challenges in the UAE

The Arabian Gulf region, including the UAE, is one of the regions that face challenges in rainfall. The UAE produces 14% of global desalinated water, and the average per capita water consumption in the UAE is 360 litres daily, which is one of the world's highest. That's why, the UAE places great importance to water security. It is one of the seven strategic sectors of the National Innovation Strategy, and one of the main pillars of UAE Vision 2021. The UAE Water Security Strategy 2036 aims to ensure sustainable access to water during both normal and emergency conditions.



#### **Turning challenges into opportunities**



"In the UAE, as we have learned from our wise leadership, we transform challenges into opportunities. HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, once observed. "Challenges and obstacles are not the end of the road, but a pathway to new and creative solutions." In Dubai, we have a comprehensive approach to ensure the sustainability of water resources in line with the Dubai Integrated Water Resource Management Strategy, which focuses on enhancing water resources, rationalising water consumption, and using cutting-edge technologies and innovative solutions to reduce water consumption by 30% by 2030. Dubai also has the necessary legislation to ensure water security. For example, groundwater consumption has been reduced from 100% in the 1980's to 0.4% currently for drinking water. To keep pace with Dubai's growing demand and prosperity, DEWA's installed capacity has increased from 65 million imperial gallons per day (MIGD) in 1992 to 470 MIGD currently," said Al Tayer.

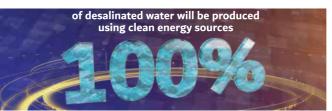
#### 3 pillars for the sustainability of water production

Dubai adopts three pillars to ensure the sustainability of water production. These are based on using clean solar energy to desalinate seawater using the latest Reverse Osmosis (RO) technologies. Excess water is stored in aquifers and pumped back into the water network when needed. This integrated innovative model protects the environment and represents a sustainable economic solution. It also emphasises Dubai's ability to anticipate and shape the future.





#### Water desalination using clean energy sources



According to DEWA's strategy, 100% of desalinated water will be produced by a mix of clean energy that uses both renewable energy and waste heat by 2030. This will allow Dubai to exceed global targets for using clean energy to desalinate water. Increasing the operational efficiency in decoupling sustainable development, and have also achieved substantial savings desalination from electricity production will save around AED 13 billion and reduce 43 million tonnes of carbon emissions by 2030. In order to achieve

further integration, DEWA launched a geophysical and hydro-geological field study and digging exploration and monitoring wells to study the possibility of injecting and storing desalinated water from solar-powered reverse osmosis plants into aquifers and pumping it back into the water network when needed. Currently, DEWA is building an aquifer to store 6,000 million gallons of water that can be retrieved when needed.

This will provide the Emirate with a strategic reserve of over 50 million gallons of water per day in emergencies, while ensuring the quality of the stored water remains unaffected by external factors. These two integrated initiatives have managed to raise the level of efficiency and effectiveness in the production of water by adopting the latest techniques to achieve without affecting the quantity or the quality of the water. These initiatives will help to integrate the considerable electricity generated by solar power.

#### **AED 500 million for Research & Development**

DEWA seeks to make Dubai a global model for clean energy and green economy by adopting the technologies of the Fourth Industrial Revolution and disruptive technologies, including artificial intelligence (AI), unmanned aerial vehicles (UAVs), energy storage, blockchain, and the internet of things (IoT) among others. DEWA's R&D investments amount to AED 500 million until 2020. The R&D Centre at the Mohammed bin Rashid Al Maktoum Solar Park, the largest single-site solar project in the world, focuses on four major operational areas: electricity generation from solar energy, integration of smart grids, energy efficiency, and water.

#### Major Operational Areas for Research & Development Centre



Electricity generation



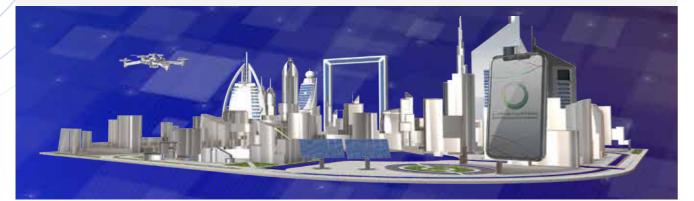
Integration of smart grids



ديــو|القمية digitaldewa

#### Disrupting business model of utilities

Through Digital DEWA, the digital arm of Dubai Electricity and Water Authority, DEWA is implementing a pioneering model for utilities that is based on innovation in renewable energy, energy storage, artificial intelligence, and digital services. DEWA will disrupt the entire business of public utilities by becoming the world's first digital utility to use autonomous systems for renewable energy and storage as well as expanding the use of artificial intelligence and digital services.



#### **Global achievements**

DEWA's efforts in R&D, and using the latest global technologies, allowed it to reduce losses in water transmission and distribution networks from 42% in 1988 to 6.5%.

This is one of the lowest worldwide, compared to 15% in North America.



#### State-of-the-art infrastructure

As part of its efforts to provide state-of-the-art infrastructure and manage all facilities and services in the Emirate through smart and connected systems to make Dubai the smartest and happiest city in the world, DEWA is working to convert all water meters across Dubai to smart meters by end of 2019. In addition to their role in the smart transformation, operational efficiency, and reducing water losses, smart meters provide many benefits to customers and help them monitor their consumption accurately and instantaneously, anytime, anywhere. This contributes to promoting the responsible use and sustainability of resources. DEWA's advanced smart water meter infrastructure has so far identified 37,000 water leakage cases, 5,000 faults, and 1,700 high-demand cases. This contributed to reducing water losses as well as achieving big financial savings. The High Water Usage Alert system provided by DEWA's Green Dubai, helps customers discover possible leaks in their water connections. It sends instant notifications to the customers if there is any unusual increase in usage, so they can check their internal plumbing and repair any leaks. This helps reduce incurred costs by limiting water wastage.

#### Conservation, a way of life

Throughout the year, DEWA launches a comprehensive set of conservation initiatives, programmes, and awards that aim to make electricity and water conservation a way of life in the residential, commercial, industrial, government, and educational sectors. Between 2009 and 2017, DEWA's customers saved over 1.677 terawatt hours of electricity and 6.66 billion gallons of water, totalling over AED 1 billion. The savings resulted in offsetting around 900,000 tonnes of carbon emissions. DEWA's efforts helped reduce water consumption by 27% in the residential sector, 29% in the commercial sector, 29% in the industrial sector, 24% in educational institutions, and 21% in government and semi-governmental organisations.





Offsetting 900,000
Tonnes of carbon emissions



Electricity and Water saving

1 Billion

Dirhams



Water Savings **6.66**Rillion Gallons

Electricity Savings
1.677

95%

#### A government whose aim is to achieve happiness

"His Highness Sheikh Mohammed bin Rashid Al Maktoum once said, "Every challenge is an opportunity for learning, a chance to test our capabilities and knowledge." In Dubai, we have learnt important lessons from the challenges we faced over the past years in our journey towards excellence. This contributed to DEWA achieving the top position at 95% in the 2018 Happiness Index for large government entities in Dubai. We are part of a government that aims to achieve the happiness of people," said Al Tayer.

#### **Lessons** learned

During his session at the World Government Summit, Al Tayer shared some of the lessons learned related to water security during DEWA's journey.

#### These include:

- Support of the leadership that played a key role in DEWA's achievements
- Sustainable water resource management and the development of strategies and policies to ensure their long-term sustainability, taking into account the population growth, rapid urbanisation, and climate change factors
- Developing innovative solutions that benefit from remarkable technological developments
- Integration of clean energy and water production
- The rational consumption to conserve resources
- Engaging the private sector in developing innovations to enhance water supply and improve the
  efficiency and quality of water services

# **NEWS**

# Dubai saves **267MW** in electricity consumption during **Earth Hour 2019**





Dubai achieved significant | results in reducing electricity use during Earth Hour 2019. DEWA recorded savings of 267 megawatts (MW) in electricity consumption in the Emirate, equivalent to a reduction of 114 tonnes of carbon dioxide emissions. These results underline the joint efforts by society, including the public and private sector to protect the environment and reduce our carbon footprint. People in Dubai joined millions of people around the world in expressing their solidarity with efforts to address the threats posed by global warming and climate change, by turning off unnecessary lights and electrical devices during Earth Hour,





# Festive atmosphere at Marasi Promenade

DEWA organised special activities to celebrate Earth Hour under the umbrella of the Dubai Supreme Council of Energy; and in partnership with the Emirates Wildlife Society (EWS) in association with the World Wide Fund for Nature (WWF), and with the support of Dubai Holding. The activities at Marasi Promenade, Business Bay were organised from 4 to 10 pm. 15 government departments and 20 private companies took part in the activities. There were Emirati, Saudi and Chinese traditional bands; highlighting the cultural diversity of the UAE, especially in the Year of Tolerance, with its logo formed with candles at the event. Participants enjoyed various family and entertainment activities that aimed to raise environmental awareness. DEWA's stand included a photography corner, an interactive games corner, and a corner for Noor and Hayat, the conservation mascots. Many government organisations had stands that displayed their key environmental initiatives.

For the 4th consecutive year, DEWA offset the carbon emissions resulting from Earth Hour 2019 activities, with Certified Emission Reductions (CERs) credits from its projects. This will be based on the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC).





#### **▶ Earth Hour Walk**



The most prominent activity during the event was the Earth Hour Walk, which started at 8:30pm. HE Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment; HE Saeed Mohammed Al Tayer, MD and CEO of DEWA; HE Ahmed Abdul Karim Julfar, Director General of Dubai Community Development Authority (CDA); HE Khalifa Al Darrai, Executive Director of the Dubai Corporation for Ambulance Services; HE Dherar Belhoul Al Falasi, Director General of the Watani Al Emarat Foundation; HE Saeed Hareb, Secretary General of Dubai Sports Council; HE Saif Al Falasi, CEO of Emirates National Oil Company (ENOC); Abdulnasser Bin Kalban, Chief Executive Officer of Dubal Holding; Dr. Essa Bastaki, President of the University of Dubai; Habiba Al Marashi, Chairperson of the Emirates Environmental Group; Khalid Al Malik, Managing Director of Dubai Holding; and a large number of officials from the public and private sectors took part in the walk.

#### **▶** Appreciation and Praise

HE Saeed Mohammed Al Tayer thanked the officials who took part in the Earth Hour Walk along with thousands of people of all ages and nationalities who carried candles and eco-friendly lanterns to express their solidarity with global efforts to protect Planet Earth. At the end of the activities, Al Tayer honoured the government departments and private organisations that took part in the event.

"Under the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum. Vice President and Prime Minister of the UAE and Ruler of Dubai, and under the patronage of His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council, DEWA has been organising Earth Hour annually since 2008. Dubai was the first Arab city to organise Earth Hour activities to highlight sustainable achieved by Dubai this year emphasise the important role, society members can play in rationalising energy consumption and reducing their carbon footprint to protect the environment and natural resources



in climate action. The significant results ∮ development. The purpose of Earth Hour is to urge everyone to adopt a conscious and responsible lifestyle in electricity and water consumption and to make sensible use of Tayer, MD & CEO of DEWA. resources and environmental protection a daily practice to combat climate change, and

practices that lead to positive change | as well as contribute to sustainable | support national efforts in reducing carbon emissions, conserving natural resources, and ensuring their sustainability for generations to come," said HE Saeed Mohammed Al

#### **₩** Recognition

Al Tayer honoured around 40 public and private partners and supporters of Earth Hour, as well as media personalities, during the activities organised by DEWA at Marasi Promenade. Al Tayer also thanked all the customers who observed Earth Hour by switching off their lights and unnecessary electrical appliances for an hour.

"I thank everyone who contributed to the savings in electricity consumption during Earth Hour 2019, including individuals and public and private organisations. This emphasises their knowing the importance of the rational use of resources. The purpose for observing Earth Hour is more important than the savings made during that hour. Nonetheless, our main goal is to encourage all our customers to adopt a conscious and responsible lifestyle regarding electricity and water, and make conservation a daily practice to contribute to tackling climate change and supporting national strategies to reduce carbon emissions. These include the Dubai Clean Energy Strategy 2050 to make Dubai the city with the lowest footprint in the world and the Dubai Carbon Abatement Strategy to reduce emissions by 16% by 2021. The results that Dubai achieved during Earth Hour each year underscore the important role that all society members can undertake to rationalise energy use and reduce the carbon footprint to protect the environment and natural resources, ensuring their sustainability for generations to come," said Al Tayer.

Partners and supporters of Earth Hour 2019 who were honoured during the event include HE Ahmed Abdul Karim Julfar, Director General of Community Development Authority (CDA); ); HE Khalifa Al Darrai, Executive Director of the Dubai Corporation for Ambulance Services; HE Dherar Belhoul Al Falasi, Director General of the Watani Al Emarat Foundation; HE Saif Al Falasi, CEO of Emirates National Oil Company (ENOC); Abdulnasser Bin Kalban, Chief Executive Officer of Dubal Holding; HE Saeed Hareb, Secretary General of Dubai Sports Council; Dr Essa Bastaki, President of the University of Dubai; Habiba Al Marashi, Chairperson of the Emirates Environmental Group; and Khalid Al Malik, Managing Director of Dubai Holding.

Al Tayer also honoured representatives of the Ministry of Climate Change and Environment; the Dubai Office of the Ministry of Foreign Affairs; Dubai Police; Dubai Municipality; the General Directorate of Residency and Foreigners Affairs (GDRFA); the Roads and Transport Authority (RTA); the General Directorate of Civil Defence in Dubai; Dubai Public Prosecution; the Islamic Affairs and Charitable Activities Department; Dubai Economic Development Department; Dubai Land Department; the Dubai Civil Aviation Authority; Dubai Culture & Arts Authority; Dubai Silicon Oasis Authority; Dubai Airports Free Zone Authority; the Mohammed Bin Rashid Al Maktoum Knowledge Foundation; the Mohammed Bin Rashid Housing Establishment, Emirates Wildlife Society in association with the World Wide Fund For Nature; UAE Youth Hostel Association; Majid Al Futtaim Group; Union Co-op; Mai Dubai; as well as a number of media personalities and social influencers for their role in promoting Earth Hour.













To support the UAE National Sports Day, DEWA organised the DEWA Cycling Challenge in cooperation with the Dubai Sports Council, with support from Trek Bicycles Store. The event is part of DEWA's strategy to encourage employees to pursue healthy and vibrant lifestyles and make physical activities part of their daily lives. The race, which spanned 26 kilometres in Al Qudra, Dubai, witnessed the participation of 120 DEWA employees.

DEWA, praised the efforts of the Dubai Sports Council in supporting sports and encouraging society members to exercise and engage

in physical activities by organising various activities and races. He also commended their participation in organising the DEWA Cycling Challenge. "At DEWA, we provide a positive and motivating work environment that helps employees balance their professional and social lives, and encourages them to participate in various sports activities. This is important for promoting a healthy and active lifestyle. The physical activities DEWA participates in or organises, including the Cycling Challenge, HE Saeed Mohammed Al Tayer, MD & CEO of ∮ contribute to developing the participants' physical and mental capabilities, enhancing their self-confidence, and stimulating positive competition. This is done in the framework of

the sporting spirit that characterises the events held in Dubai," said Al Tayer.

Dr. Yousef Al Akraf, Executive Vice President of Business Support and Human Resources and Chairman of the Sports Committee at DEWA, praised DEWA's senior management for encouraging employees to participate in various sports tournaments and to practice physical activities. This contributes to a healthy lifestyle, stimulates positive energy, and enhances communication, social cohesion, and teamwork. He noted that DEWA's sports teams participate in several sports championships and have achieved great results.

#### **DEWA and BSI launch** world's first business agility standard and develop risk management standard for energy and utilities sector



This took place at a ceremony at the Churchill hotel in London during DEWA delegation' visit headed by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA. Waleed Salman, Executive Vice President of Business Development and Excellence. Abdulrahman Al Jamea, Vice President of Corporate Risk and Security Governance, and Ali Almuwaijei, Vice President of Governance & Compliance, also attended.

"On behalf of DEWA, it is an honour to be here today for the launch of the PAS

1000:2019 (Business Agility Concept and Framework) which is the first Business Agility Standard in the globe. Since the dynamics of the global market are fastchanging, public and private organisations are increasingly paying attention to business agility for sustainability and growth. This standard will be beneficial to, and can potentially be adopted by any organisation in any sector. DEWA took the lead initiative to develop this world standard and partnered with the British Standards Institution (BSI) in London, the world-leader in standards development," said Al Tayer in his speech at the launch

"DEWA and BSI are working together to develop the first risk management standard that is especially designed for the energy and utilities sector. We are also committed to cooperate with other regional and international leading organisations to support efforts and adopt the standards once it's developed and published. We have approved the number 60518 for the new standard as it refers to the birthdate of

the late Sheikh Zayed bin Sultan Al Nahyan (6 May 1918). This is in recognition of his role in laying the foundations for the UAE's leading role in all development areas and his vision, which guides us in achieving success and excellence. The standards implemented by UAE government are benchmarks for organsations around the world. DEWA started preparations for the standard in the Year of Zayed 2018, which marked the centennial birth of the late Sheikh Zaved" said Al Tayer.

'The agreement between DEWA and BSI shows our commitment to cooperate to develop leading international standards by developing the PAS 60518:2020 (Risk Management in Power & Utilities Sector) Standard. DEWA is the Middle East's first organisation to implement the SAP Risk Management 10.1 and adopt best international practices based on the ISO 31000 certificate. DEWA also received the Business Continuity Management System (ISO 22301) for its integrated operations and is the first utility in the Middle East and North Africa to do so," said Al Tayer.

#### 50 DEWA employees take part in Desert Warrior Challenge



50 DEWA employees took part in the Desert Warrior Challenge organised in Al Qudra at the Al Marmoom Conservation Reserve in Dubai

"At DEWA, we are committed to providing a positive and motivating work environment that helps employees balance their professional and social lives. We also encourage staff to participate in various sports activities both as individuals and as teams. Endurance races like the Desert Warrior Challenge contribute to the physical and mental development of participants, provide them with teamwork and self-confidence skills develop leadership skills, and motivate positive competition among teams and individuals as part of the sportsmanship activities organised in Dubai. Organising races in places such as Al Marmoom Conservation Reserve contributes to promoting sustainability through environmental awareness as well as highlights Dubai's unique natural landscape," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

The Desert Warrior Challenge included a variety of obstacles designed to suit different fitness levels for participants who seek to face difficult challenges to test their physical and mental strength, teamwork, and overall fitness skills. The participants had to run, crawl, jump, carry, climb, and slide all the way to the finish line.

#### **DEWA launches Governance & Compliance** Champions programme



DEWA launched the Governance and Compliance Champions (G&C) programme to achieve its updated vision to become a globally leading sustainable innovative corporation. DEWA organised a workshop for the G&C champions nominated by all divisions in DEWA. Robert Papp, Chief Compliance Officer at General Electric (GE), gave a lecture during the workshop, where he explained the implementation of governance and compliance in GE.

"Effective governance is key to realising DEWA's vision to become a globally leading sustainable innovative corporation. We are committed to implementing the best corporate governance practices based on an integrated framework that covers all its activities and operations. DEWA follows the Organisation for Economic Co-operation and Development (OECD) guidelines on Corporate Governance for State Owned Enterprises, World Bank guidelines, and other international standards such as BS 13500. DEWA's governance model is based on the four pillars of Trust, Accountability, Transparency and Fair Practices. Implementing effective governance practices has helped DEWA achieve global competitive results in various areas," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

In 2018, DEWA fulfilled the requirements for the British Standard (BS 13500:2013) Code for Practice for Delivering Effective Governance, becoming the first utility in the world to implement this global standard. DEWA received the certification after a thorough auditing process by the British Standards Institute (BSI) to ensure DEWA's processes are in line with effective governance standards.

DEWA participates in **UAE Innovation Month 2019** 

As part of its participation in UAE Innovation Month announced by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, under the theme UAE Innovates, DEWA organised a number of activities to showcase its futuristic projects, inventions and innovations by its staff, and innovations from a number of university students, DEWA's partners, and local and international start-ups as well as lectures and workshops provided by DEWA's staff and a number of experts and specialists. DEWA also organised its 8th Annual Innovation and the Future Conference with the participation of a group of innovators.





#### Activities at DEWA's Head Office

The projects displayed at DEWA's head office included autonomous inspection drones to detect solar panel failures; an energy recycling system that converts infrared, light, and sound from appliances into electricity for low-energy devices; an HD camera with Artificial Intelligence that builds 3D models for DEWA's projects and monitors their progress; an air conditioner that uses 70-80% less energy compared to conventional units; a re-engineered gas turbine that has broken a world record for working with the least amount of stoppages; a device to detect cracks in photovoltaic panels, and other projects in DEWA's areas of work.





#### 8th Annual Innovation and the Future Conference



DEWA organised the 8th Annual Innovation and the Future Conference. A number of innovators discussed topics related to the Fourth Industrial Revolution, disruptive technology, and blockchain. The conference was attended by HE Lieutenant General Dhahi Khalfan Tamim, Deputy Chief of Police and Public Security in Dubai; HE Saeed Mohammed Al Tayer, MD & CEO of DEWA: HE Abdulla Al Basti. Secretary General of the Executive Council of Dubai; DEWA's Executive Vice Presidents, Vice Presidents and staff as well as other government employees. Speakers at the conference included Alex Tapscott, writer, speaker, and advisor on emerging technologies; Fatima Al Kaabi, the youngest Emirati inventor; Gus Takkale who talked about innovation and change; and Beau Lotto, a neuroscientist.

Al Tayer affirmed that the UAE is one of the pioneering countries in innovation. The wise leadership is transitioning the country to a knowledge-based economy by encouraging

innovation, research and development, launching strategies and initiatives to develop and institutionalise government innovation, and developing professionals capable of innovation and creativity across all areas.

"At DEWA, we place innovation at the top of our priorities, and we are keen to include it in all our strategies and initiatives as part of our efforts to achieve government plans and strategies. These include the UAE Centennial 2071, which is a long-term government plan to prepare the UAE and young Emiratis for the future; the UAE Strategy for Artificial Intelligence, which creates an innovative and highly-productive environment by investing in AI and its applications across multiple domains; the UAE Future Strategy to seize sectors and analyse them and set long-term proactive plans for them; the UAE Strategy for the Fourth Industrial Revolution to strengthen the UAE's position as a global hub for the

economy that depends on innovation and future technological applications; and the Dubai 10X Initiative, which mandates the Government of Dubai to be a global leader that is 10 years ahead of all other cities through government innovation and reformulation of traditional work mechanisms. DEWA has adopted innovation in its main operations, clean energy projects, R&D, smart city services, supporting emerging tech start-ups, and cyber security. DEWA is using state-ofthe-art technologies in Artificial Intelligence, Unmanned Aerial Vehicles, energy storage, data protection, blockchain, and Big Data to achieve this", added Al Tayer.

contribution to a knowledge-based national

opportunities and anticipate challenges in all • "At DEWA, we are committed to providing a motivating environment that encourages creativity and innovation. We welcome the ideas, opinions, and feedback of our customers, staff, partners, and stakeholders Fourth Industrial Revolution, and increase its | that help us develop innovative initiatives and

creative ideas that contribute to exceeding customers' expectations and ensuring their and improvement," added Al Tayer.

happiness. We believe in the importance of innovation in creating sustainable solutions initiatives, diversification of income, digital  $\oint$  to the challenges and transform them into opportunities as well as develop services that ensure people's happiness and contribute to building a better future for generations to come. DEWA won the gold award for Best Deployments in Europe, Middle East and Africa (EMEA) for changing innovation culture at the USA Golden Bridge Awards 2018 for its Afkari platform, launched in 2015 for employees to share their innovative ideas and foster a culture of innovation. Afkari has been a central repository for the innovation, ensuring DEWA's continuous development



#### **DEWA's stand at City Walk**

DEWA's stand at City Walk displayed innovations by its staff and local and international start-ups, as well as DEWA's projects. These included the Green Hydrogen project, the first solar-driven hydrogen electrolysis facility in the MENA region, which is currently being built at the Mohammed bin Rashid Al Maktoum Solar Park. The hydrogen produced at the facility will be stored and deployed for re-electrification, transportation and other uses. DEWA also highlighted the High-Water Usage Alert system by DEWA's Green Dubai, which helps customers discover possible leaks in their water connections. The system sends instant notifications to the customer if there is any unusual increase in usage, so they can check

their internal plumbing and repair any leaks. DEWA's stand also included Rammas, DEWA's virtual employee that uses Artificial Intelligence to answer customers' queries in Arabic and

Staff innovations included DEWA Submarine, which is used to detect water leakages; Tawaf Robot Metro Piping, which is a robotic system that can be programmed by smart phones to inspect water pipes; 3D Printing Robot, which is a 3D-printed robot used to study the robotic system as well as 3D printing; Smart Controller, which is a control and monitoring device powered by super-capacitors instead of batteries; Design & Fabrication of Ferrule, to replace pressurised

water pipes without interrupting the water supply; and the Autonomous Soiling Detector on Photovoltaic Panel, which works on solar power to send alerts for solar panel cleaning, and sending the data to the control system for

Innovations presented by start-ups included the CableWalker which is a drone to monitor and inspect power cables. The GreenBird is a platform to demonstrate data from utilities and the power grid. The Verv is a home energy monitoring system on actual appliances. The Gridwatch monitors the electricity grid. The Smart IOT is an Internet of Things advanced platform.



#### Jebel Ali power and desalination complex

DEWA organised an Innovation Exhibition in | During the tour, Al Tayer was also briefed | During the tour, Al Tayer reviewed the the solar garden at the Jebel Ali power and desalination complex. Al Tayer toured the exhibition, and was briefed about the solar water desalination device that was implemented in collaboration with Desolenator, which is one of the most important projects that DEWA adopted as part of the Future Accelerators Programme 10X. It only uses solar power to and water production at its Generation per day. The device is easy to operate and ♦ power plants through the application of the maintain, and can be transported anywhere, Predix cloud-computing platform to provide especially areas affected by water scarcity. Other innovations on display included the use of big data to develop the work mechanisms in the sector, which contributed to the establishment of a Smart Power Plant for effective monitoring of the stations. It provides decision makers with all the timely data needed to make a decision.

on the cloud-based Predix, which connects machines, data, and people to support DEWA's digital capabilities and collects and analyses data in real time, enhancing the speed and efficiency of its operations. The move is part of DEWA's asset management innovation programme in DEWA's electricity the asset's lifecycle and prevent future malfunctions by using a continuous assetmonitoring service to pre-identify and analyse the root causes.

Smart Supervision System, which was designed and developed entirely by DEWA's Generation division. It is a smart system based on AI and digital transformation technologies. Al Tayer also reviewed the sustainable bus station made from recycled materials, which is easily transported from one place to another by generating its own produce up to 2,200 gallons of drinking water | division, where assets will be integrated into | electricity through solar energy to run its devices. Al Tayer was also briefed on the latest innovations presented by DEWA's analytical solutions for big data. Applications | strategic partners, including Dubai Police, include automated learning techniques and • Siemens, General Electric (GE), and ABB. He built-in artificial intelligence (AI) to predict | also listened to a detailed explanation from officials in various sections of the exhibition about their innovations and how to harness them to serve power production to support DEWA's strategic approach.

Savings of **AED 1.2 billion** in water and electricity consumption over the last decade thanks to conservation programmes

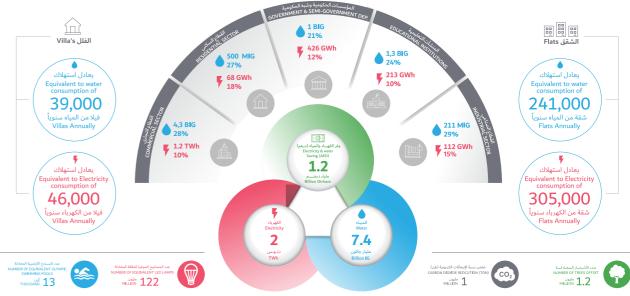


DEWA announced that its conservation programmes and initiatives over the past 10 years have achieved significant savings stakeholder groups. Cumulative savings between 2009 and 2018 reached 2 terrawatthours (TWh) of electricity and 7.4 billion gallons of water, equivalent to AED 1.2 billion. These savings were achieved in the residential, commercial, and industrial sectors, educational institutions, governmental and semi-governmental organisations.

Over the past decade, savings in the commercial sector amounted to 1.2 TWh of electricity (10%) and 4.3 billion gallons of water (28%). in electricity and water use within various 1 The residential sector achieved savings of 68 gigawatthours (GWh) of electricity (18%) and 500 million gallons of water (27%). The industrial sector achieved savings of 112 GWh of electricity (15%) and 211 million gallons of water (29%). Government and semi-government organisations achieved savings of 426 GWh of electricity (12%) and 1 billion gallons of water (21%). Educational institutions achieved savings of 213 GWh of electricity (10%) and 1.3 billion gallons of

water (24%). These savings are equivalent to an annual electricity consumption from approximately 305,000 apartments and annual water consumption of 241,000 apartments. This has contributed to reducing one million tonnes of carbon emissions equivalent to planting 1.2 million trees and the consumption of 122 million LED lights, while water saving was equivalent to filling up 13,000 Olympic swimming pools.

#### الوفر الـتراكمي للفئات المستهدفة من خلال برامج الترشيد Accumulated saving for targeted categories through conservation programme



#### **DEWA** celebrates National Environment Day 2019

**DEWA has celebrated National Environment** Day with the theme 'Sustainability is our Past and Present' at its head office. National Environment Day is observed every 4 February, with this year's theme being 'Sustainable Production and Consumption.' The activities included an awareness exhibition that highlighted sustainability in the UAE between the past and the present. HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, inaugurated the celebrations along with DEWA's Executive Vice Presidents and Vice Presidents, staff, and customers.





**DEWA** emphasises importance of saving water

DEWA organised awareness activities to | mark World Water Day, which is observed on 22 March, with this year's theme being 'Leaving no one behind.' This is part of DEWA's strategy to promote awareness of the need to conserve natural resources. inform customers and employees about the importance of following a sustainable lifestyle by using electricity and water

wisely. DEWA also organised an awareness activity at the Global Village in Dubai that targeted visitors from different age groups. The activity included a video of the Adventures of Noor & Hayat, the two conservation mascots, prizes for Activities at DEWA's offices aimed to • competitions, as well as distributing gifts to children and participants.

### DEWA sponsors and organises Zayed Al Khair camp in Bangladesh to treat eye-related diseases for 5,000 people, in cooperation with Noor Dubai



DEWA organised a medical camp in Bangladesh in cooperation with Noor Dubai. The Zayed Alkhair camp treated around 5,000 elderly people for cataract and other eye-related diseases. The programme includes early screening for children and distributing school bags to orphans. This is part of DEWA's humanitarian and voluntary efforts during the Year of Tolerance. There were 12 male and female volunteers from DEWA taking part in the seven-day camp at Narain, Khulna District, in Bangladesh. This is the second international voluntary project organised by DEWA. The first one took place last year in Tajikistan.

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, commended Noor Dubai's efforts to implement pioneering projects to treat eye diseases for the needy around the world. He also praised DEWA's employees who volunteered for the camp.

"The UAE continues its focus on generosity and philanthropy that was established by the late Sheikh Zaved bin Sultan Al Nahyan, may his soul rest in peace, whose helping hands supported the poor all over the world. Our wise leadership has followed in his footsteps, making the UAE the world's largest donor of official development aid. DEWA is sponsoring and organising the treatment camp in Bangladesh to treat eye-related diseases in collaboration with the Noor Dubai Foundation. Organising this camp in the Year of Tolerance with volunteers from DEWA staff, is part of our efforts to promote social responsibility among staff and encourage them to dedicate part of their time for voluntary work. This achieves their happiness and





society's happiness, locally and globally," said Al Tayer.

"The 50-Year Charter launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, states that 'charity is indeed a major factor in the happiness of societies and the continuity of progress and prosperity.' We are pleased to see how many DEWA staff wanted to take part in this programme. This is part of an integrated social work system that underlines DEWA's efforts

to promote social responsibility, and I encourage employees to take part in charitable and humanitarian initiatives and programmes. A large number of DEWA's female staff participated in these initiatives, showing the leading role of Emirati women in local and international humanitarian and development activities. This also supports the vision of our wise leadership to empower women in all areas." added Al Tayer.

"Globally, around 253 million people suffer from visual impairment, 80% of

it is curable or avoidable. About 750.000 people in Bangladesh are suffering from blindness. Around 1.5 million children in Bangladesh are suffering from low vision, which can be treated. Around 250,000 people in Bangladesh risk losing their eyesight because of chronic illnesses such as diabetic retinopathy. Cataracts are the most common causes of curable blindness worldwide followed by refractive errors. We can perform surgery to remove cataracts in our eye camp, reversing visual impairments." said Dr Manal Tarvam, CEO of Noor Dubai Foundation.





#### DEWA inaugurates DEWA Happy Café and launches Happiness Charter in the Work Environment on **International Day of Happiness**

DEWA organised activities across its branches to celebrate | distributing gifts to customers and staff including T-Shirts the International Day of Happiness, which takes place every 20 March. This is part of DEWA's commitment to the happiness of its customers and employees, and society as a whole. As part of the celebrations, HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, inaugurated DEWA Happy Café, part of the international Happy Café network adopted by the Action for Happiness. This is a global non-profit organisation founded in 2011 that seeks to help people and communities around the world promote the concept of happiness in the family, work environment, and society. DEWA is the first government organisation in Dubai to adopt this concept, which has identified 10 keys to happier living. DEWA has a work plan to promote each of these keys on a monthly basis, including initiatives, activities, and panel discussions. DEWA's Happy Café will be an interactive platform for staff, customers, society, and stakeholders in general. Al Tayer also launched the Happiness Charter in the Work Environment to promote the happiness of employees.

During DEWA Happiness Day, employees signed the Happiness Charter in the Work Environment. Activities included with happiness-related phrases and logos printed on them, as well as happiness flowers. An artist was also available to paint caricatures of people's faces. DEWA's divisions also highlighted the initiatives they launch around the year for the happiness of their staff.

#### **DEWA tops Happiness Index in large Dubai government** entities category

DEWA has maintained its top position in the Happiness Index in the large Dubai government entities category, for the second consecutive year with a 95% happiness level. This was according to Smart Dubai's Happiness Index that monitors happiness levels among the people of Dubai, and contributes to enhancing the efficiency, measurement and enhancement of smart services in Dubai, to achieve the highest levels of customer happiness. More than 8 million votes were collected through 172 organisations, including 43 government entities for the Smart Dubai Happiness Index 2018. This new achievement confirms DEWA's pioneering position as a model for excellence, and recognises its efforts to ensure customer happiness.





Sugia Board approves projects during Year of Tolerance and discusses 2nd round of Mohammed bin Rashid Al Maktoum **Global Water Award** 



The Board of Trustees of the UAE Water Aid Foundation (Sugia), under the umbrella of the Mohammed Bin Rashid Al Maktoum Global Initiatives, held its second meeting for 2019 to discuss its projects during the Year of Tolerance and details of the second Mohammed bin Rashid Al Maktoum Global Water Award. The meeting was chaired by HE Saeed Mohammed Al Tayer, MD & CEO of Dubai Electricity and Water Authority (DEWA) and Chairman of the Board of Trustees of Sugia. The meeting was attended by HE Sultan Al Shamsi, Assistant Minister of Foreign Affairs and International Cooperation for International Development Affairs: HE Fahad Abdelrahman bin Sultan, Deputy Secretary-General for International Aid in the UAE Red Crescent Authority: Nasser Lootah, Executive Vice President of Generation at DEWA; Waleed Salman, Executive Vice President of Business Development & Excellence at DEWA; Mohammed Abdulkareem Al Shamsi, Acting Executive Director of Suqia; and Fahad Abdullah bin Afira Al Falasi, Secretary of the Board of Trustees of

"Sugia's projects and initiatives are particularly important during the Year

of Tolerance 2019 that was announced | and Charity Establishment and Dar Al by HH Sheikh Khalifa bin Zayed Al Nahvan. President of the UAE. The Year of Tolerance is an extension to the Year of Zaved 2018 as it continues the values of the late Sheikh Zaved bin Sultan Al heart of Emiratis. At Sugia, we continue to implement the projects and initiatives that aim to provide safe drinking water to the less privileged around the world, regardless of religion, race, culture, or nationality. This implements the directives of HH Sheikh Mohammed bin Rashid Al Maktoum. Vice President and Prime Minister of the UAE and Ruler of Dubai, who once said, 'UAE Water Aid will not differentiate between one person and another, so are all of our humanitarian works, such as the UAE's humanitarian mission that lies in helping the afflicted, the needy and disadvantaged people all over the world without any distinction. Based on the UN's report about the progress of Goal 6 of the Sustainable Development Goals 2030, which highlights countries most in need of clean water, Sugia aims to implement development projects in a number of African countries this year. This will be done in cooperation with the Mohammed Bin Rashid Al Maktoum Humanitarian

Ber Society. These projects will focus on supporting sustainable development and infrastructure in these countries," said Al

Nahyan that has been instilled in the • Mohammed Abdulkareem Al Shamsi noted that the Board meeting also discussed details of the second Mohammed bin Rashid Al Maktoum Global Water Award, which is supervised by Suqia. It will include new categories and standards based on best international practices. Al Shamsi said that Sugia will organise a number of international volunteering visits this year in cooperation with DEWA and Mohammed Bin Rashid Al Maktoum Humanitarian and Charity Establishment to implement sustainable projects and follow up on the projects that were implemented last year. Sugia will also continue its Ramadan campaign this year in cooperation with Mai Dubai to provide water to those fasting, through a number of local charities in different countries around the world in cooperation with Mohammed bin Rashid Al Maktoum Humanitarian and Charity Establishment.



# **FEATURE STORY**

#### Mohammed bin Rashid Al Maktoum Solar Park a leading project that promotes sustainability in the UAE

Dubai has become an international pioneer in developing the clean and renewable energy sector. It has developed enhance the efficiency of the energy sector while rationalising consumption and finding alternative solutions to conventional energy. This supports the sustainable development of the Emirate. The Dubai Clean Energy Strategy 2050, which was launched by HH

Sheikh Mohammed bin Rashid Al Maktoum, | infrastructure, legislation, funding, Vice President and Prime Minister of the UAE and Ruler of Dubai, aims to provide 7% of a number of techniques and practices to  $\phi$  Dubai's total power output from clean energy by 2020. This target will increase to 25% by 2030 and 75% by 2050. Dubai is the only city in the region to have launched such a promising  $\frac{1}{2}$  solar energy project in the world, with a strategy, with set goals and timelines planned total production capacity of 5,000 that map the future of energy until 2050. The strategy consists of five main pillars:

building capacities and skills, and having an environment-friendly energy mix. The infrastructure pillar includes initiatives such as the Mohammad bin Rashid Al Maktoum Solar Park, which is the largest single-site megawatts (MW) by 2030, and a total investment of AED 50 billion.

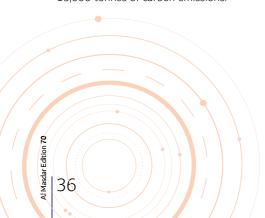
SOLAR PARK



In January 2012, HH Sheikh Mohammed bin Rashid Al Maktoum announced the launch of the Mohammed bin Rashid Al Maktoum Solar Park in Dubai.

#### First Phase (13MW using photovoltaic solar panels)

The 13MW first phase became operational on 22 October 2013, comprising around 152,000 photovoltaic cells, connected to 13 transformers in inverter buildings. The output is transformed to 33 kilovolts (kV). and generates nearly 28 million kilowatthours (kWh) of electricity annually. The first phase contributes to an annual reduction of about 15.000 tonnes of carbon emissions.



#### Second Phase (200MW using photovoltaic solar panels)

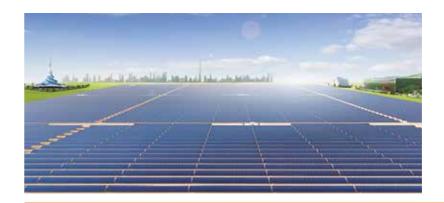
On 20 March 2017, HH Sheikh Mohammed bin Rashid Al Maktoum launched the 200MW photovoltaic second phase of the solar park, which is the largest and first project of its kind in the region, based on the IPP model. DEWA implemented the project in partnership with a consortium led by ACWA Power from Saudi Arabia as the main developer, and Spain's TSK as the main contractor, with an investment of AED 1.2 billion. The efforts of Shuaa Energy 1, which was established by DEWA and the consortium led by ACWA Power and TSK, were vital in completing the work efficiently and professionally, with over 1.5 million Safe Man Hours without Lost Time Injury.

The 200MW second phase of the solar park will provide clean energy to 50,000 residences in the Emirate, reducing 214,000 tonnes of carbon emissions annually. This phase installed 2.3 million photovoltaic solar panels over an area of 4.5 square kilometres. DEWA set a world record by obtaining the lowest price globally at USD 5.6 cents per kWh for the second phase of the park at the time of the tender.



#### Third Phase (800MW using photovoltaic solar panels)

In June 2016, DEWA announced the selection of the Masdar-led consortium as the best bidder to develop the 800 MW third phase of the solar park. DEWA also set a world record by obtaining the lowest price of USD 2.99 cents/kWh for the third phase of the park, based on the IPP model. The first 200 MW project became operational on 1 May 2018, with the second project to be implemented in 2019 and the third in 2020. To implement the project, DEWA established Shuaa Energy 2 in partnership with the Masdarled consortium, and Électricité de France (EDF), through its subsidiary EDF Energies Nouvelles. DEWA owns 60% of the company, and the consortium owns the remaining 40%: Masdar owns 24%, and EDF Energies Nouvelles owns 16%. The international consortium led by the renewable energy contractors GranSolar and Acciona from Spain and Ghella from Italy are handling engineering, procurement, and construction (EPC).



#### Fourth Phase (950MW of CSP and PV)

On 16 September 2017, HH Sheikh Mohammed bin Rashid Al Maktoum launched the fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park. It is the largest single-site Concentrated Solar Power (CSP) project in the world, based on the IPP model. The project was awarded to a consortium comprising Saudi Arabia's ACWA Power, The Silk Road Fund, and China's Shanghai Electric as the main contractor. The consortium bid the lowest Levelised Cost of Electricity (LCOE) of USD 7.3 cents per kWh. On 3 November 2018, DEWA signed an amendment to the Power Purchase Agreement (PPA) to add 250MW of photovoltaic solar panels, increasing the total capacity of the fourth phase from 700MW to 950MW with a total investment of AED 15.78 billion. The fourth phase will use three technologies to produce clean energy: 600MW from a parabolic basin complex, 100MW from a concentrated solar tower, and 250MW from photovoltaic panels.

#### Financial Closing on Fourth Phase

On 24 March 2019. DEWA and the consortium led by Saudi Arabia's ACWA Power and Silk Road Fund, which is owned by the Chinese Government, announced the financial closing of the 950-megawatt fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park. The announcement was made by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, and Mohammad Abdullah Abunayyan, Chairman of ACWA Power, at a press conference that was attended by HE Tan Li, Consul General of the Republic of Chinese in Dubai, and Erik Rovina, Commercial Counselor to the Spanish Embassy in the UAE. Paddy Padmanathan, President & CEO of ACWA Power, Abdul Hamid Al Muhaidib, Executive Managing Director of Noor Energy 1, Waleed Salman, Executive Vice President of Business Development and Excellence at DEWA, and a number of officials from the UAE, Saudi Arabia, and China were present.

"The 8 Principles of Governance in Dubai launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum that Dubai is global hub that focuses on

creating economic opportunities, and that Dubai's growth is driven by three factors: a credible, resilient and excellent government; an active, fair and open private sector; and public and government-owned flagship companies that compete globally and move the economy locally. At DEWA, we work in line with these principles in the solar power projects that are implemented based on the IPP model. Through this model, we achieved several world records in solar electricity prices through competitive bids that contributed to reducing its costs globally and attracted large investments to the UAE from the private sector and foreign banks. Since its inception, the Mohammed bin Rashid Al Maktoum Solar Park's projects have received considerable attention from global developers. Financing the fourth phase of the solar park is the largest equity bridge loans in the region, in cooperation with a number of leading local and international banks. This reflects the confidence of financial institutions in the major projects adopted by the Government of Dubai, especially in light of the regulatory framework that stimulates innovation and

attracts investments and the transparency we deal with in all our projects, as well as DEWA's strong financial position," said Al

"Since the beginning of our partnership with DEWA, the Noor Energy 1 project has grown in both scale and in its ability to revolutionise the global energy landscape. The successful closure of the project with renowned international players corroborates the potential of Noor Energy 1 and also maintains our reputation as a partner of choice, delivering projects that contribute to the growth and development of vibrant economies such as that of Dubai. It is an honour to help fulfil the ambitious vision of Dubai's leadership and to work with DEWA in their admirable efforts to serve the community in which they operate," said Abunayyan.

# FEATURE STORY

#### **Record numbers**

The fourth phase of the solar park has achieved many world records. It will have the world's tallest solar tower, at 260 metres, and the largest thermal energy storage capacity in the world of 15 hours, which allows for energy generation round the clock. It also achieved the lowest Levelised Cost of Electricity (LCOE) of 2.4 US cents per kilowatt-hour (kW/h) for the 250MW photovoltaic solar panels technology and USD 7.3 cents per kW/h for the 700MW CSP technology, the lowest worldwide.

# Fifth Phase (900MW using photovoltaic solar panels)

DEWA recently issued a Request for Qualification (RFQ) for developers to build and operate the fifth phase of the Mohammed bin Rashid Al Maktoum Solar Park, with a capacity of 900MW. The phase will use photovoltaic solar panels based on IPP model. It will be commissioned in stages starting from Q2 of 2021.

#### Triple-Bottom Line Sustainability



The solar park implements the triple-bottom line (TBL) related to sustainability in DEWA's strategic map. These include the three key dimensions of sustainability: economic, environmental, and social. DEWA's long-term priorities include:

**Environmental:** The solar park will contribute to enhancing the efficiency of using the natural resources and reducing the carbon footprint.

**Social:** The solar park supports DEWA's commitment to governance, work ethics, and Corporate Social Responsibility (CSR). It also provides job opportunities to citizens and residents by 2020.

**Economic:** The solar park will play a role in improving the efficiency of costs and outcomes. It attracts investments, while supporting economic sustainable growth in Dubai and diversifying the local supply chain.

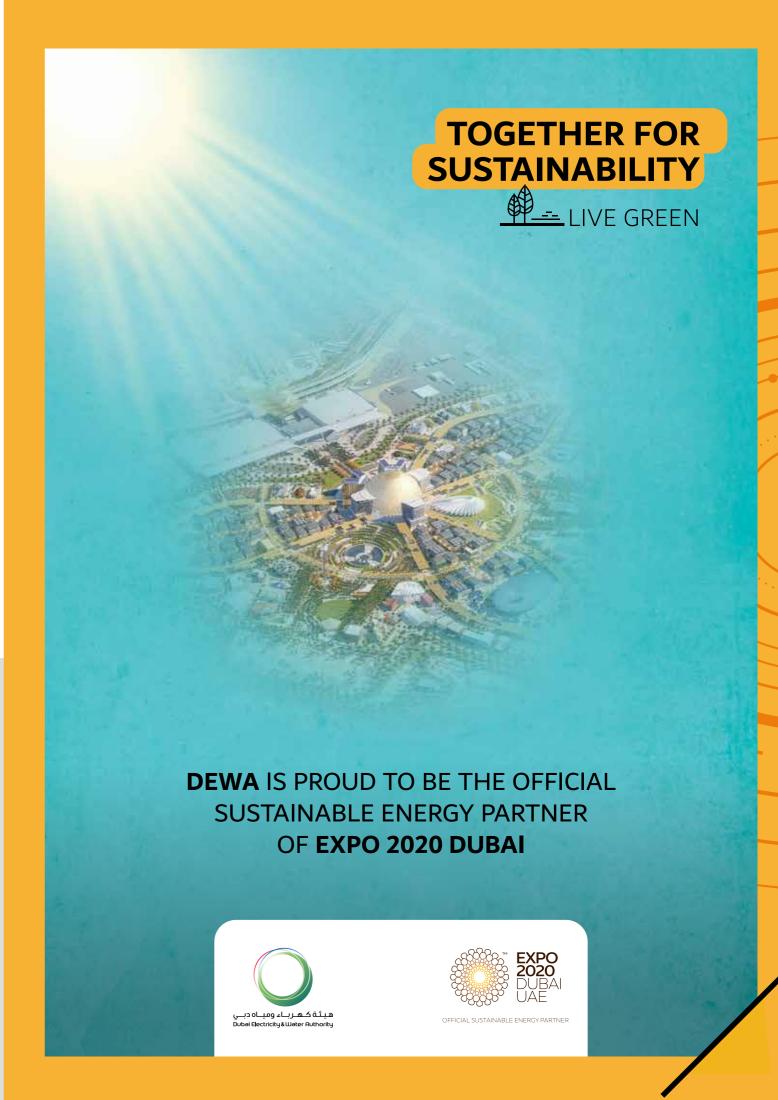
# Dubai contributes to reducing solar energy cost globally



The UAE's interest in producing renewable energy has contributed to a reduction in its global cost, according to a Japanese study published by the Nikkei Asian Review. DEWA's major projects in cooperation with the private sector, based on the IPP model, contribute to the economic growth of the Emirate. Meeting the Dubai Clean Energy Strategy 2050 targets requires a capacity of 42,000MW of clean and renewable energy by 2050. DEWA has attracted huge investments to the UAE from the private sector and foreign banks, resulting in increased cash flows to the economy of Dubai and the UAE. DEWA currently has more than 4,000MW of IPP projects completed and under implementation in partnership with the private sector, with investments of more than AED 30 billion.

The capacity of the solar power projects completed at the Mohammed bin Rashid Al Maktoum Solar Park is 413MW. DEWA has other projects under construction at a capacity of 1,550MW and is working on other projects to increase the solar park's capacity to 5,000MW by 2030.

Companies established by DEWA and its private sector partners focus on employment and knowledge transfer to Emirati employees, thus directly benefiting the local community. DEWA has signed several agreements with local and international bodies, institutions, and companies in research and development to establish the latest developments in energy, water and environment. These include agreements with the National Renewable Energy Laboratory (NREL) of the US Department of Energy, the Spanish National Renewable Energy Center (CENER), Korea Electric Power Corporation (KEPCO), the United Arab Emirates University, and Khalifa University.



# WOMEN'S COMMITTEE



# DEWA female employees value opportunities provided by the UAE to women of all nationalities

On the occasion of International Women's Day, HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, welcomed members of DEWA Women's Committee, headed by Fatima Mohammed Al Jokar. The committee presented its plan for the Year of Tolerance and showed a video for a number of DEWA's female staff from different nationalities expressing their gratitude for what the UAE offers to women of all nationalities. They also thanked DEWA for providing an attractive and motivating environment for women.

Al Tayer praised the UAE's efforts in enhancing the participation of women in various aspects of life since the founding of the UAE. He emphasised that DEWA provides a supportive environment to enhance creativity for all its female employees comprising 40 different nationalities.

"On International Women's Day, which this year, focuses on innovative ways to promote gender equality and women empowerment, we cannot but be proud of what the UAE has achieved in this regard. The UAE has become a global model for the empowerment of society through women, providing a supportive environment for women empowerment and leadership and making full use of their innovative and creative potential. This has contributed to unprecedented achievements among Emirati women, who have taken well-deserved top positions. Emirati women take part in the development process of all growth sectors that are based on creativity and innovation," said Al Tayer.

Women's
Committee
reaches out to
female staff

The Women's Committee at DEWA inaugurated its first activities for 2019 by organising field visits to DEWA's various branches. The committee members met with female employees at DEWA's Head Office, the Sustainable Building in Al Quoz, and DEWA's buildings in Al Hudaiba, Jebel Ali, and Warsan. The Committee organised brainstorming sessions on various topics, including sustainability, empowerment, society, the National Identity, and Year of Tolerance, to hear their feedback, suggestions, and aspirations for the activities that can be implemented throughout 2019 as well as identify their needs and discuss with them challenges they may face in the work environment. Fatima Mohammed Al Jokar, Chairperson of DEWA Women's Committee, emphasised the committee's commitment to organising field visits and brainstorming sessions to promote direct and effective communications with stakeholders.

Al Jokar recently formed the Women's Committee for 2019. Committee members from DEWA's various divisions include Aisha Al Asem, Mahrah Al Marri, Amal Koshak, Hend Al Tamimi, Amal Al Hammadi, Fatma Al Alili, Maryam Salmin, Aisha Haddadi, Noora Alshehhi, Alia Al Suwaidi, and Fatima Al Suwaidi.



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# WOMEN'S COMMITTEE

# Women's Committee organises trip for female employees to Dubai Frame

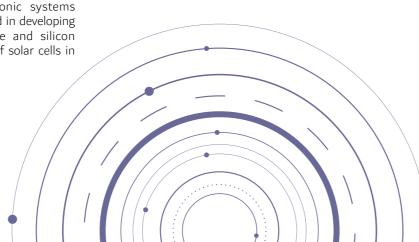
The Women's Committee organised a visit for female staff to Dubai Frame, one of Dubai's key new tourist attractions. This support the committee's efforts to promote positive interaction and social cohesion among female employees. Over 50 female staff from all DEWA's sectors took part in the trip. Those who went on the trip expressed their happiness at visiting such an astonishing cultural and tourist landmark, which introduces visitors to Dubai's history through its three parts: past, present and future Dubai. Participants commended the Committee's efforts in organising activities that enhance so cial interaction with their colleagues from different sectors and departments.

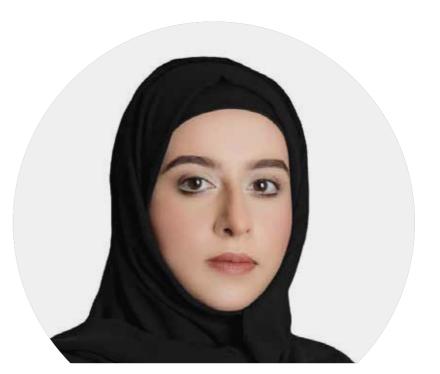


# DEWA female researcher receives Woman of the Year prize at Middle East Solar Industry Association awards

In recognition of her efforts in the solar energy sector, Dr. Aaesha Alnuaimi, Senior Researcher at DEWA, has won the 'Woman of the Year' prize at Middle East Solar Industry Association (MESIA) awards 2019. The award recognises women's outstanding achievements across the solar energy sector in the MENA region.

Dr. Alnuaimi is a senior researcher at DEWA's Research and Development Centre at the Mohammed bin Rashid Al Maktoum Solar Park. Her research focuses on studying the efficiency and reliability of solar panels in the UAE climate, and the use of nanotechnology to develop solar cells and raise their efficiency. She excels in microelectronic engineering and electronic systems design and has succeeded in developing high-efficiency graphene and silicon cells, reducing the cost of solar cells in the process.





# DEWA is an inspiring environment for female employees Fatima Al Jokar

Chairperson of DEWA Women's Committee

DEWA provides a role model for government organisations and large companies in supporting female employees and providing the ideal environment to ensure a balance between their personal and professional lives. DEWA draws inspiration from the directives of the UAE's wise leadership and women leaders in the UAE, represented by Her Highness Sheikha Fatima bint Mubarak, President of the General Women's Union, Supreme Chairperson of the Family Development Foundation. President of Supreme Council for Motherhood and Childhood (Mother of the Nation); Her Highness Sheikha Hind bint Maktoum bin Juma Al Maktoum, wife of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai; and Her Highness Sheikha Manal bint Mohammed bin Rashid Al Maktoum, President of the UAE Gender Balance Council. President of Dubai Women's Establishment and wife of His Highness Sheikh Mansour bin Zayed Al Nahyan,

Deputy Prime Minister and Minister of Presidential Affairs.

DEWA's top management, headed by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, applies these directives to encourage female colleagues, and has provided all the necessary means, to help them record achievements and attain higher positions. The management is also keen to provide female colleagues with opportunities in an ideal environment, motivating them to succeed and excel, so that they may leave a mark on society and achieve sustainable development in the UAE.

DEWA Women's Committee adopts a comprehensive programme of initiatives and events that focus on the happiness of female employees through recreational and community activities, with a full schedule of training sessions and workshops that enhance their skills and competencies to support their professional careers. The first activities this year were field visits to DEWA's

various branches, where committee members met female employees at DEWA's Head Office, the Sustainable Building in Al Quoz, and at DEWA's buildings in Al Hudaiba, Jebel Ali and Warsan. The visits included brainstorming sessions on various topics, including sustainability, empowerment, society, National Identity, and Year of Tolerance.

Involving female employees from different grades and career paths, both technical and administrative, comes in line with DEWA's strategy to empower female staff, strengthen their role in the planning of various activities and events, and provide a positive and happy work environment that supports their ideas and suggestions.

This strategy has helped DEWA become one of the most attractive environments in the UAE to nurture women's skills. Our female colleagues continue to contribute to our successful journey in making Dubai the smartest and happiest city in the world.

# **APPRECIATION**

# **DEWA** honours its local and international **Strategic Partners**

DEWA honoured its strategic | partners from local and international public and private sectors, in recognition of their efforts and continuous collaboration. DEWA organised a special ceremony at the Armani hotel in Dubai, attended by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA; Executive Vice Presidents and Vice Presidents of DEWA; representatives from DEWA's partners include the Ministry government and private organisations of Foreign Affairs and International and the media.

In his keynote speech at the ceremony, Al Tayer commended the partners' efforts that contributed to DEWA's achievements and its competitiveness as one of the best utilities in the world.

"During the Year of Zayed 2018, which marked the centennial birth of the late Sheikh Zayed bin Sultan Al Nahyan, we accomplished many key achievements that support the vision and directives of the wise leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE; His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime

Minister of the UAE and Ruler of Dubai; | Corporation for Ambulance Services, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces; to encourage cooperation and integration between the government and private sectors," said Al Tayer.

Cooperation; the Ministry of Energy and Industry, the Ministry of Climate Change and Environment, and the National Emergency Crisis and Disaster Management Authority. It also includes the United Nations Development Programme (UNDP), the International Renewable Energy Agency (IRENA), The Executive Council of Dubai, the Supreme Council of Energy, Dubai Municipality, Dubai Police, Dubai Roads and Transport Authority (RTA), The General Directorate of Residency and Foreigners Affairs Dubai, Directorate General of Civil Defence, Dubai Land Department, Dubai Civil Aviation Authority, Dubai Media Incorporated, Dubai Smart Government, Dubai Economy, Dubai

Department of Finance, The Government of Dubai Legal Affairs Department, Expo 2020 Dubai Bureau, Dubai Government Media Office, the Department of Energy Abu Dhabi, the Mohammed Bin Rashid Housing Establishment, the Dubai Future Foundation, Dubai Airports, Dubai Airport Free Zone, the Supreme Legislation Committee, and Dubai Nuclear Energy Committee, as well as the United Arab Emirates University, DP World, Dubai World Trade Centre, Dubai Electronic Security Centre, Dubai Carbon Centre of Excellence, and Emirates Green Building Council. Other partners include Emirates Global Aluminium, Cambridge University, Emirates NBD, French Electricity Company (Électricité de France), Innogy, Dubai Silicon Oasis Authority, TECOM, Siemens, Microsoft, Abu Dhabi Future Energy Company (Masdar), General Electric, ENEL, Nakheel, Emaar, Meeras, Meydan, Emirates National Oil Company (ENOC), ABB Group, Dubai Supply Authority (DUSUP), SAP MENA, Mitsubishi Corporation, Cisco, and IBM Middle East.



#### DEWA organised its annual ceremony to honour its distinguished consultants and contractors

"The 8 principles of governance in Dubai, announced by His Highness Sheikh Mohammed bin Rashid Al Maktoum, state that Dubai extends a hand of friendship to all those who hold good intentions towards Dubai and the UAE, and that the Emirate is a business-friendly global hub that focuses on creating economic opportunities. It also states that Dubai society is a disciplined one. committed to its promises, timelines and covenants. Our society is respectful and orderly, based on tolerance and openness. These principles govern the relationship between DEWA and our partners from the private sector in line with its vision to become a globally leading. sustainable, innovative corporation. We are committed to building strong relations and establish strategic partnerships with local, regional, and international governmental and private organisations and companies. DEWA provides huge and equal investment opportunities for all according to the highest standards of transparency within robust strategic relations. We believe in the importance of these successful partnerships in DEWA's many achievements and successes. positioning it among the most successful organisations worldwide. and surpassing major utilities in Europe and the USA," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA in his speech at the ceremony.

"I'd like to mention one of the most important successes that contractors and consultants have played a role in. This is that the UAE, represented by DEWA, has been ranked first worldwide in all Getting Electricity indicators for the second consecutive year, with scores of 100%. These have

been recorded by the World Bank's Doing Business 2019 Report, which measures the ease of doing business in 190 economies around the world.

DEWA's achievement also contributed to improving the UAE's overall global ranking from 21st place last year to 11th this year, in collaboration with government authorities and organisations. The contributions, feedback, and suggestions from our partners were critical to the launch and development of the Al Namoos service in December 2014 to streamline and † charges are required. They are included accelerate connections to electricity services, according to the best international standards and practices.

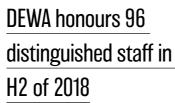
service to meet your requirements and exceed customers' expectations, ensuring their happiness. This also consolidates Dubai's pioneering global role in the ease of doing businesses. We currently provide customers with electricity connections of up to 150 kilowatts, within seven days in just one step. Recently, DEWA waived the new connection charges for industrial and commercial customers for loads of up to 150 kilowatts. For residential customers, no advance connection in the first consumption bill after power connection," noted Al Tayer.

We continuously work to enhance this



# **APPRECIATION**





DEWA held a ceremony to honour its | distinguished staff of the second half of 2018, in recognition of their efforts that contributed to DEWA's excellence locally and globally. HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, honoured 96 employees in the Employee Excellence, Administration Excellence, Customer Happiness, Knowledge Management, Distinguished Cable Jointers, and the Unknown Soldiers categories, as well as winner of the 21st Dubai Government Excellence Program (DGEP) medals.

distinguished staff of the second half of 2018 and recognise their efforts that have contributed to DEWA's many local and international achievements. This in turn, contributed to enhancing the competitiveness of the UAE, which has become a model for governments seeking to improve their performance and achieve the happiness of their

in line with the vision and directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Al Tayer urged the distinguished staff Prime Minister of the UAE and Ruler of Dubai. Over the past year, DEWA has continued to deliver global achievements and results, ranking us as one of the most distinguished organisations worldwide. DEWA has become a role model for efficiency, excellence, and the happiness of customers and society as a whole. DEWA's practices have become benchmarks for global organisations. "Today we recognise DEWA's ∳ Last week, we launched the Business Agility Concept and Framework (PAS 1000:2019) in London, the first-ofits-kind global standard to measure business agility, in cooperation with the British Standards Institution. DEWA and BSI also signed an agreement to develop the PAS 60518:2020 standard for risk management in the energy and utilities sector. This is also the first of its kind in people. At DEWA, we are proud to be | the world and will be a global reference | & Excellence at DEWA.

part of the UAE's global achievements,

for the energy and utilities sector," said Al Tayer in his speech.

to be role models for their colleagues. working together in team spirit to contribute to achieving the vision and directives of the UAE's wise leadership, to ensure the beloved country's top positions in all areas.

"DEWA's top management is committed to providing a positive work environment that contributes to consolidating creativity and innovation as daily practices and a well-established corporate culture. Honouring the distinguished staff is part of DEWA's strategy to recognise excellent and creative staff who contribute to enhancing DEWA's competitiveness and develop services that ensure the happiness of customers and society as a whole," said Waleed Salman, Executive Vice President of Business Development









Under the Patronage of His Highness Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance of the UAE and President of DEWA

#### Part of Dubai Electricity and Water Authority's Green Week Initiative 21-23 October



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# **PARTNERSHIPS**

DEWA is committed to establishing strategic relationships with its partners from the public and private sectors. This supports its vision to become a globally leading sustainable innovative corporation.

DEWA signs MoU
with FEWA for
strategic water
interconnection





DEWA signs MoU with Saudi Aramco on energy, R&D, smart grids and digital transformation

DEWA signs MoU with
TÜV Rheinland to enhance
cooperation and exchange
expertise in the development
of energy sector



DEWA signs MoU with Dubai Future
Foundation to produce renewable
energy at Museum of the Future



Etihad ESCO partners with Vision Invest to establish an Energy Services Company in the Kingdom of Saudi Arabia



WCEO signs MoU with the
UNFCCC to establish a Regional
Cooperation Centre in Dubai

DEWA and Emaar sign MoU to provide exclusive discounts for customers on DEWA Store







RSA provides exclusive discounts to DEWA customers for home and contents insurance through DEWA Store



Agreement with Dubai Islamic Bank to provide preferential profit rates on DEWA

Store for financing electric vehicles



In line with its pioneering role in joint work to support the sustainable development of the UAE, DEWA is committed to building solid relationships and sharing its experiences and expertise with local and international organisations.



MD & CEO meets Italian
Vice-Minister of Foreign
Affairs and International
Cooperation

Receives Italian

Ambassador

to UAE





Receives Deputy
Covernor of JBIC



Strengthens ties with
French Consul General
in Dubai and Northern
Emirates



MD & CEO meets Chairman of GEIDCO



Hong Kong Trade Development
Council reviews DEWA's
experience and projects



DEWA's achievements have become a role model for excellence locally and globally, with DEWA receiving over 190 prestigious local and international awards over the past four years. This affirms its leading position among utilities worldwide.

CSP project at Mohammed bin Rashid Al Maktoum Solar Park

#### wins first place

at 6th International Best Practice
Competition in 'Partnership Category'



#### **DEWA** wins gold

in innovation category at 10th Clobal Continual Improvement & Innovation Symposium & Award 2018



Wins World Finance
Corporate Governance

Award
2018 in UAE





Wins Big Innovation

**Award** 

from US-based Business Intelligence
Group for Rammas Al service



Copenhagen is often ranked as one of the greenest cities on the planet. In 2009, the city set a goal to become the world's first carbon-neutral capital by 2025 as part of its CPH 2025 Climate Plan. Copenhagen has focused on reducing energy consumption in a variety of ways, including using an energy-efficient district heating system that connects to nearly every household and innovative cooling systems saving around 70% of the energy compared to traditional air conditioning.

Thecityhasalsoaimed to reduce emissions and improve the health of its residents by improving mobility, and building what's

known as Cycle Super Highways as well as other bike lanes around the city that have led to 45% of the city's residents commuting by bike every day.

Copenhagen is truly a green city surrounded by water and parks, with climate-friendly citizens to match. Copenhageners excel in combining sustainable solutions with growth and a high quality of life. In fact, Copenhagen was European Green Capital 2014 and aims to become the world's first carbon-neutral capital by 2025.

The Danes are often said to be the happiest people in the world, and Copenhagen among

the world's most liveable cities. Some of the reasons are the large number of green oases and open spaces with fresh air, some of the cleanest water in the world, and a city overflowing with bicycles in addition to high availability and consumption of organic produce.

In Copenhagen, buying organic produce is not considered a luxury, but merely logical. Thus organic food makes up 24% of the total food sale in Copenhagen, which is the highest in Denmark. Even better, 88% of the food consumption in the City of Copenhagen's public institutions, such as day-care centres, nursing homes and schools, is organic.

Whether it is new bike routes, urban parks or new residential areas, Copenhagen is constantly preparing for a more sustainable future. Water, light, open spaces, sustainability, and quality of life seem to be the key elements in the capital's architectural development. It's most ambitious urban planning project so far is the development of a new district in the city's northern harbour, Nordhavn. This is the largest urban development project in Northern Europe with state-of-the-art knowledge from all over the world contributing to Nordhavn becoming the sustainable city of tomorrow.

