

هيئة كهرباء ومياه دبي Dubai Electricity&Water Authority



Al Masdar Issue 63 - June 2017 www.dewa.gov.ae

Page 8

DEWA wins 5 awards at the 20th DGEP

Page 10

HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum honours 10 winners at Mohammed bin Rashid Al Maktoum Global Water Award

DEWA to build pumped-storage hydropower plant in Hatta

Page 16

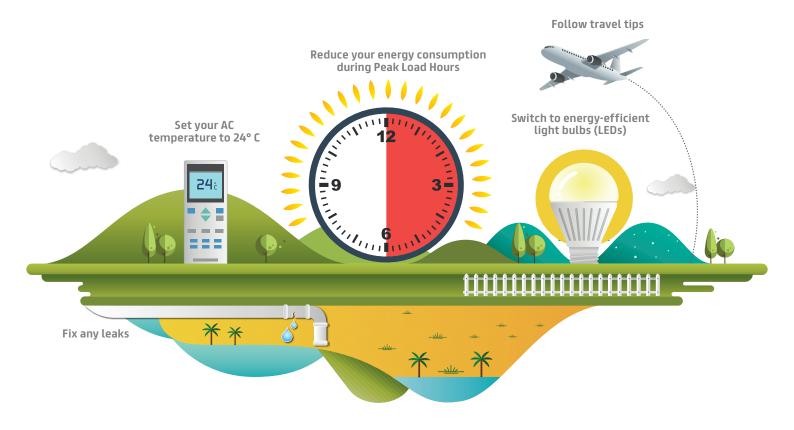
Page 48

Interview with Minister of Climate Change and the Environment



هيئة كهرباء ومياه دبي Dubai Electricity&Water Authority

Save electricity and water. Let's make this summer green.



You can easily reduce your electricity and water consumption and help to preserve our natural resources, for generations to come.

For more information, download the DEWA smart app or visit www.dewa.gov.ae

For generations to come

DEWAOFFICIAL

F 🞯 🚨



CALL US 04 6019999 www.dewa.gov.ae





UAE youth represent the potential of our nation and are the source of its wealth. Today, we are drawing the future of our nation; we are investing our wealth and directing our efforts and plans towards developing the skills and expertise of our youth as they will drive our progress.

HH Sheikh Mohammed bin Rashid Al Maktoum

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







Our Vision

A sustainable innovative world-class utility.

Our Mission

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

Our Values

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

Our Motto

For Generations to come.

MD & CEO Message



SAEED MOHAMMED AL TAYER MD & CEO OF DEWA

Success that heartens us

On behalf of everyone at DEWA, I am honoured to extend my sincere gratitude and appreciation to His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, on DEWA's winning five awards at the 20th Dubai Government Excellence Program (DGEP), the most prominent being Leading Government Entity. DEWA also won Best Entity in Innovation, and three individual awards.

The fact that His Highness personally presents the awards to the winners of DGEP every year, encouraging and motivating them, emphasises the importance of excellence as a key tool to transform to the government of the future. Excellence is the way to achieve the nation's ambitious strategies and plans, and the objectives of the UAE Centennial Plan 2071, which is a longterm government plan to prepare the UAE and young Emiratis for the future.

HH Sheikh Mohammed bin Rashid Al Maktoum has devised unprecedented criteria for government work. These have made the government sector not only compete with the private sector but surpass it as well. Government operations in the UAE have become a benchmark for competitiveness around the world. DEWA's winning the Leading Government Entity Award shows that we are on the right path to fulfil the vision of our wise leadership in line with the Dubai Plan 2021. At DEWA, we develop plans and strategies, follow up on implementation, evaluate achievements and results based on the approved technical and administrative criteria and performance indicators, and measure the feedback of our partners and stakeholders. These plans and strategies, as well as their effective implementation, contribute to achieving the three aspects of sustainability. We are keeping pace with global developments and smart technologies to enrich customers' experiences and provide seven-star services, according to the fourth-generation government excellence system.

I also extend my thanks and appreciation to the DGEP for its role in developing the performance of government organisations through continuous training and engagement. And of course, I commend DEWA's staff for this achievement and for winning the grand prize in the DGEP for the fourth time and the second consecutive year, and urge them to continue their hard work to sustain DEWA's excellence.

We promise HH Sheikh Mohammed bin Rashid Al Maktoum that we will continue our journey towards excellence, to maintain our lead, and work hard to develop government services to the highest international levels and contribute to the happiness of society.





June 2017 - Issue 63

Editor in Chief HE Saeed Mohammed Al Tayer Managing Editor Khawla Al Mehairi Deputy Managing Editor Khulood Khalid Al Ali

Arabic Editors Ribal Dayekh Sami Samir Georgy

English Editor Jonathan Howell-Jones

Photographers Mohammad Abdullah John Eric Rivera

Art Directors Shaikha Awad Al Ayali

Coordinators Iman Saeed Al Marri Mosaad Abdulrahman

Dubai Electricity and Water Authority

Main Office - PO Box 564 Tel: +971 4 324 4444 Direct: +971 4 515 1784 Fax: +971 4 324 8111 Website: www.dewa.gov.ae Email: media@dewa.gov.ae

DEWAOFFICIAL





Cover Story



DEWA wins 5 awards at the 20th Dubai Government Excellence Program

10

22

24

29

Main events



HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum honours 10 winners at Mohammed bin Rashid Al Maktoum Global Water Award



- Solar Power: Our path to a sustainable future
- Under patronage of HH Sheikh Hamdan bin Rashid Al Maktoum DEWA celebrates marriages of 62 staff at 10th mass wedding
- DEWA organises 8th annual gala dinner with theme 'Be Proud. We Are One World' launched





20

31

8



DEWA to build pumped-storage hydropower plant in Hatta



- Solar projects around the world
- HH Sheikh Mohammed bin Rashid Al Maktoum reviews DEWA's clean energy projects at DIGAE 2017
- DEWA receives 7-Star rating from DGEP's Superiority Makers programme

Interview

48



HE Dr Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment



Sugia reviews achievements in Q2 of 2017



DEWA Women's Committee organises free check-ups as Golden Sponsor of 7th Pink Caravan Ride

Interview



54

36

HE Shamma bint Suhail Al Mazrui, Minister of State for Youth Affairs, and Chairperson of Emirates Youth Council





- DEWA participates in 'For your sake, Somalia' and donates 20,000 water cartons from Mai Dubai
- DEWA sends two staff to University of Rochester 37 for Science and Technology in New York
- DEWA briefs a delegation from Saudi Electricity
 Company on its best practices and latest technical innovative solutions
- Technical Committee of 3rd Emirates Energy Award (EEA) holds its 1st meeting to review participations
 39
- DEWA supports Emiratis in Dubai through 'Caring 42 for the Bereaved' initiative
- DEWA launches 'Let's Make this Summer Green' 43 media and social media campaign for 2nd year running
- 800MW third phase of Mohammed bin Rashid Al Maktoum Solar Park reaches financial close
- WGES 2017 starts on 24 October
 46

AL MASDAR | ISSUE 63

Main events



DEWA wins 5 awards at the 20th Dubai Government Excellence Program



HH Sheikh Mohammed bin Rashid Al Maktoum. Vice President and Prime Minister of the UAE and Ruler of Dubai. has honoured DEWA with 5 awards at the 20th Dubai Excellence Government Program (DGEP) Awards, the most prominent being Leading **Government Entity. DEWA also** won Best Entity in Innovation, and three individual awards for Innovative Employee, Supervisory Employee, and Unknown Soldier.

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, on behalf of DEWA staff, thanked HH Sheikh Mohammed bin Rashid Al Maktoum, HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai, HH Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of DEWA, and HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, for their continuous support for excellence and leadership within government, to help it achieve world-class standards. Al Tayer also thanked DGEP for its role in developing the performance of government organisations through continuous training and engagement. He also commended DEWA's staff for this achievement and winning the grand prize in the DGEP awards for the fourth time. Al Tayer commended the DGEP for its contribution to the positive environment that motivates government organisations to adopt excellence and creativity. This enables the government sector to keep pace with significant technological developments by providing a stimulating environment to innovate the best creative solutions.

Cover story

HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum honours 10 winners at Mohammed bin Rashid Al Maktoum Global Water Award

جائزة محمد بن راشد آل مكتوم العالمية للمياه ammed bin Rashid Al Maktoum Global Water Award

جائزة الإبتكار في البحث والتطوير - الجهات الوطنية Innovative Researc and Development Award - Nationg stitutions

HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, honoured 10 winners at the Mohammed bin Rashid Al Maktoum Global Award, which is worth USD 1 million. Also present was HH Sheikh Mansoor bin Mohammed bin Rashid Al Maktoum. The Award was launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to encourage research centres, individuals and innovators from around the world to find innovative and sustainable solutions for clean-water scarcity around the world, using solar power. The award is overseen by the UAE Water Aid Foundation (Suqia), under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives. It has three main categories: Innovative Projects Award, Innovative Research and Development Award, and the Innovative Youth Award. The first round of the award received 138 applications from 43 countries.



The first place in the Innovative Research and Development Award – National Institutions category, was jointly-shared by Khalifa University for a dual-disinfection-modified biosand filter, coupled with a solar pasteuriser system, and Masdar Institute at Khalifa University for a solar desalination process using a perforated black fabric under a solar collector.

First place in the Innovative Research and Development Award - International Institutions category, went to the Netherlands Organization for Applied Scientific Research (TNO) for a solarpowered desalination technology based on TNO's high-efficiency membrane distillation concept.

First place in the Innovative Projects Award went to the Elemental Water Makers from the Netherlands, for a solar-powered Reverse Osmosis (RO) plant to produce drinking water.

Dr Marta Vivar from Spain won the Innovative Youth Award for a hybrid solar photovoltaic-photochemical system for water disinfection and electricity generation.

"The Mohammed bin Rashid Al Maktoum Global Water Award, which bears the name of a person whose generosity is not just for the people of the UAE, but also helps those in need anywhere in the world, is another significant milestone in the UAE's humanitarian efforts. It supports international efforts by providing drinking water to the needy by devising practical and sustainable solutions to water scarcity. At the UAE Water Aid Foundation (Sugia), we are committed to achieving one of the key objectives set by the Mohammed bin Rashid Al Maktoum Global Initiatives foundation, which is to combat poverty and disease by contributing to finding permanent and sustainable solutions to water scarcity around the world. We do this by conducting research and studies to develop innovative and affordable technologies to help millions of people around the world who suffer from shortages, scarcity, or pollution of drinking water. We are also committed to providing water to millions of disadvantaged and needy people around the world, without any discrimination based on race, colour,

religion, or culture," said HE Saeed Mohammed Al Tayer, Chairman of the Board of Trustees of Suqia.

"In the words of His Highness Sheikh Mohammed bin Rashid Al Maktoum, "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,"" said HE Saeed Mohammed Al Tayer, Chairman of the Board of Trustees of Suqia.

Al Tayer thanked Emirates Red Crescent for its cooperation, noting Suqia's work with the charity has exceeded the goal set by HH Sheikh Mohammed bin Rashid Al Maktoum, when he launched Suqia to provide water for 5 million people around the world. "By the end of last year, our projects provided potable clean water to over 8 million people in 19 countries worldwide. Suqia also collaborated with the Ministry of Foreign Affairs and International Cooperation to provide relief to Yemen, helping over a million people, according to the Ministry's report.

Main events

DEWA Infrastructure Projects and Initiatives



DEWA has allocated AED 4.26 billion to support the world's most prestigious infrastructure of electricity, water and renewable energy projects to contribute to the organisation of Expo 2020 in Dubai and to demonstrate to the world its excellence in the public utilities sector and its focus on exploring renewable and clean energy sources.

DEWA's efforts in infrastructure development are in line with the vision of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai to transform Dubai into the smartest and most successful city in the world. DEWA is ready to turn this vision into reality through new initiatives and services including Shams Dubai to connect solar panels in buildings to DEWA's network, the Smart Applications via Smart Grids and Meters initiative, and the Mohammed bin Rashid Al Maktoum Solar Park, water and power stations.

DEWA has transformed all its independently-operating power stations into a network of smart-grid-enabled

smart power plants. This is a step forward for DEWA's clear and integrated innovation-based strategy to adopt new initiatives, plans and technologies, and it supports the UAE National Innovation Strategy, to make the UAE one of the most innovative countries in the world. It also supports the Dubai Innovation Strategy to make Dubai the most innovative city in the world.

The project involves the development of information systems at each station to transmit joint performance data, as well as the development of the one-way data diode (ODD) and using it to protect each station from cyber-attacks. Designed in 2014, DEWA's Smart Power Plant system has transformed its existing power station data into a series of reports that can be used by DEWA specialists to support their decision-making, and transform the huge amount of data into an innovative graphic display. This provides a comprehensive and transparent realtime view of the status of stations, so that staff can analyse problems such as technical failures, and support rapid and accurate decision-making, especially

during emergencies.

The Smart Meter initiative

The smart meter initiative focuses on using smart applications through smart meters and grids, and provides many smart features and applications for customers. The benefits of smart meters include providing automatic and detailed readings for consumers to monitor actual consumption for a specific period of time to better understand and manage their bills.

Smart meters help identify energy efficiency solutions. They send readings automatically using advanced communication media such as fibre-optic cables and storing the entire history of all consumption indicators and customerrelated operations. Additionally, smart meters will support renewable sources of energy in residential, commercial, and industrial sectors by comparing supplies from consumption and generation sides.

The Smart Applications and Smart Meters initiative supports DEWA's efforts to transform Dubai into a smart city. Dubai is building a smart grid that is the first



network in the world to cover generation, transmission, and distribution systems to customers. The smart grid includes demand-side management, asset management, distribution automation, substation automation, system integration, and smart meters.

DEWA will install over one million Dubai smart meters by 2020; covering all of Dubai and replacing all mechanical and electromechanical meters.

Shams Dubai

Shams Dubai smart initiative is one of the ambitious initiatives aiming to install photovoltaic panels on rooftops to produce solar energy and connect it to DEWA's grid. The initiative supports DEWA's strategy to diversify Dubai's energy mix and its efforts to promote the use of renewable.

To date, DEWA has connected solar systems at 432 buildings to its grid, for a total of 15.5 MW, and much more connections are expected in the future, also on the back of the strong interest expressed by customers. A number of projects are currently under construction, and the total pipeline of NOCs applied to DEWA is in excess of 170MW.

This solar capacity is able to generate electricity equivalent to the requirements of about 30,000 Dubai households, with about 120,000 tonnes of CO2 emissions savings per annum, which is equivalent to planting 3 million new trees every year.

The initiative implements council resolution number 46 of 2014, issued by

HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai, to regulate the connection of solar power to Dubai's power grid.

To promote the National Innovation Strategy and the Dubai Innovation Strategy to make the most innovative city in the world, DEWA recently organised the Shams Dubai Solar Rollers competition for high school students in cooperation with American company Solar Rollers. As the first event to be held outside the United States of America, the competition encourages UAE students to design, build, test, and race solarpowered and remote-controlled cars.

Students who registered for the competition underwent a two-month online tutoring session to help them design and build their race cars while the actual race took place in April 2017.

Mohammed bin Rashid Al Maktoum Solar Park

The Mohammed bin Rashid Al Maktoum



Solar Park is the largest single-site solar park in the world, in line with Dubai Clean Energy Strategy 2050 launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, for clean energy to generate 7% of Dubai's total power output by 2020, 25% by 2030, and 75% by 2050 with a planned capacity of 1,000 MW by 2020 and 5,000 MW by 2030, with a total investment of AED 50 billion. It will eventually save approximately 6.5 million tonnes per annum in emissions.

In addition, DEWA is working to build the biggest CSP project in the world based on the Independent Power Producer (IPP) model. The 200MW CSP plant will be operational by April 2021, with other CSP projects eventually generating a total of 1,000MW by 2030.

DEWA has received the lowest international bid of USD 9.45 cents per kilowatt hour (kW/h) for the 200MW Concentrated Solar Power (CSP) plant that is the fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park.

The bids from 4 international consortiums were opened at DEWA head office. The Mohammed Bin Rashid Al Maktoum Solar Park will cater to the needs of Dubai Expo 2020 by directly allocating 400MW of clean energy.

DEWA's clean coal power plant at Hassyan

DEWA signed a Power Purchase Agreement (PPA) and a Shareholders Agreement (SHA) with the consortium led by Saudi Arabia's ACWA Power and China's Harbin Electric. The agreement aims to implement the project to produce 2,400 megawatts (MW) of electricity using clean coal. The Hassyan clean coal power project uses the Independent Power Producer (IPP) procurement model on a Build Own Operate (BOO) basis.

DEWA has awarded a contract for the supply, construction, installation and commission of a 400 kilovolt (kV) substation with related works, worth AED197 million, at the Hassyan clean coal power plant. DEWA has awarded RWE Power International ME the contract to conduct a comprehensive study on the uses of all by-products from using clean coal at the Hassyan power plant. RWE was awarded the contract to conduct a comprehensive study on the use of clean

Main events



coal ash in cement, building materials, industries, and road works, based on local and international standards. DEWA completed the financing arrangements for the project.

DEWA has joined the International Energy Agency (IEA) clean coal centre as a sponsor, which will help develop and internationally-promote DEWA's clean coal power plant at Hassyan.

Power and Water Stations

DEWA currently serves 808,556 customers, and achieved a 95% rating for customer happiness during 2016. There are now 225 132/11kV substations with 16 commissioned out of 224 in 2016. DEWA will establish other 113 substations over the next 3 years, with a total investment of AED 10 billion.

When establishing new substations, DEWA works according to the highest safety and quality standards, while adopting the latest and most advanced technology, to efficiently achieve Dubai's economic objectives, and promote the sustainable development of the Emirate.

Expansion of M-Station Power and Water Desalination Plant

Since 2015, DEWA has worked with Siemens on the construction of the Jebel Ali M-Station expansion, as the total cost of M-Station construction along with the expansion project reaches AED 11.5 billion.

The station's total capacity will reach

2,885MW when the project is completed in 2018. The expansion project includes the provision of new power generating units adding a further 700MW to the installed generating capacity of M-Station.

DEWA appointed Mott MacDonald as the project consultant. The expansion project includes the addition of two dualfuel gas turbine generators, two heat recovery steam boilers, and one steam turbine with 90% fuel efficiency.

This will increase the plant's thermal efficiency from 82.4% to 85.8%, which is one of the highest thermal-efficiency

rates in the world.

DEWA succeeded in enhancing the efficiency of fuel use between 84-90%, while improving production efficiency by 25.47% in 2016, compared to 2006, by deploying highly-efficient technologies to generate electricity and desalinate water.

Led by DEWA's long-term strategic planning, investments in staff, and the deployment of the latest technologies, DEWA has achieved impressive results in the standards of services it provides to its partners and customers.



The project included adding three isolation switches connected to the 400/132kV main substation, at a total cost of AED 60 million.

In April 2016, DEWA commissioned one of the largest single-rooftop arrays in the region, a 1.5 megawatt direct current (MWdc) photovoltaic generation project at Jebel Ali Power Station, and successfully connected it to DEWA's grid.

This supports the Shams Dubai initiative, which encourages building owners to install photovoltaic panels on their rooftops. These panels will generate electricity from solar power, and help to engage the community in producing electricity from solar power.

The project, which is one of the largest single-rooftop arrays in MENA for generating electricity from solar energy, aims to preserve the environment, and lower the country's carbon footprint, while also encouraging the development of a green economy, to achieve sustainable development.

DEWA installed 5,240 photovoltaic panels on the 23,000 square-metre roof of the water reservoir at M-Station.

The modules will produce 1.5MW by converting solar energy into electricity, which will be used to meet the station's energy needs, and will generate 2,666 MW/h of clean electricity annually.

The project aims to increase dependence on renewable energy, and reduce the carbon emissions produced by different operations at the station by reducing about 1,500 tonnes of carbon dioxide annually.

Surplus energy will be exported to an internal power network at DEWA's Jebel Ali Power Station.

Projects and preparations for Expo 2020

In line with the Dubai 2021 Plan to enhance Dubai's status as a smart, integrated, and connected city with a high-tech infrastructure to support social and economic development in a manner comparable to the best in the world and a reaffirmation of its commitment to sustainability, DEWA has launched a number of successful initiatives and has allocated AED 4.26 billion to support the world's most prestigious infrastructure of electricity, water and renewable energy projects to help organise the Expo 2020 in Dubai.

This will also demonstrate to the world DEWA's excellence in the public utilities sector and its focus on exploring renewable sources of energy to promote the Green Economy for Sustainable Development initiative. This fully supports the theme of 'Connecting minds, creating the future' and its three sub-themes of Sustainability, Mobility and Opportunity.

DEWA is managing the expansion of the Mohammed Bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world.

DEWA is building three 132/11kV substations with 45km of high-voltage (132kV) cables. DEWA is also building water transmission networks with pipelines that are 600mm and 1,200mm in diameter, pumping stations, and distribution stations.

These projects will increase water-flow rates and ensure an adequate water supply to meet increasing demand.

DEWA is contributing to the development of all Expo 2020 facilities and services through its smart initiatives.

DEWA has assigned part of the budget to support the leadership's drive to promote initiatives in smart services, to make Dubai the smartest city in the world. This supports the Smart Dubai initiative launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum.

DEWA is one of the leading government organisations in terms of adopting and launching smart initiatives and services.

DEWA is supporting the Smart Dubai initiative, with Shams Dubai contributing power from solar arrays installed at Expo 2020's buildings.

The Expo will also have three different types of electric vehicle charging stations from the Green Charger initiative.

As part of the Smart Applications and Smart Meters initiatives, DEWA is building a smart grid to become the first network in the world to provide th entire value chain of generation, transmission, and distribution systems to the Expo.

The smart grid includes demand-side management, asset management, distribution automation, substation automation, system integration, and smart meters.

DEWA has allocated AED 7 billion worth of investments to the development of smart grids.

This will contribute to achieving the Smart Dubai initiative, and DEWA's Shams Dubai initiative to generate electricity from solar power in buildings, and connect them to DEWA's grid, as well as other infrastructure and electric vehicle charging stations.

DEWA is establishing a hydroelectric powerplant in the mountains near Hatta Dam, in addition to other development projects that will be completed within 5 years.

The project is the first of its kind in the GCC, with a total capacity of 250MW with a lifespan of 60-80 years.

DEWA's Smart Grid initiative will oversee the installation of smart meters at buildings in Hatta, according the highest international standards.

DEWA will also establish the infrastructure for electric vehicle charging stations through the Green Charger initiative

Work has begun on DEWA's new headquarters, which is called Al-Sheraa. This will be the tallest, largest and smartest building in the world to achieve zero-carbon emissions after the installation of photovoltaic panels.

The total built-up area of Al-Sheraa will be over 1 million square feet. The building will have over 16,500 square metres of photovoltaic solar panels to produce over 3,500kW.

There will be over 2,000 square metres of Building Integrated Photovoltaics (BIPV). Total renewable energy generated by the building will be 5,400 megawatt hours (MW/h) annually.

The building will have an Energy Utilisation Intensity (EUI) of 60 kW/m2 per year. The building will be completed and inaugurated by the end of 2019.

Main events

DEWA to build first pumped-storage hydropower plant in the region at Hatta



Hydropower, which is the generation of power by harnessing energy from moving water, is one of the main sources of renewable and clean energy in the world. In recent years, there have been significant developments in hydropower globally. The total installed capacity has grown by 39% from 2005 to 2015, with an average growth of about 4% per year. The rise has been concentrated in emerging markets. In 2016, hydropower installed capacity reached 1,064 gigawatts (GW) globally, generating 71% of all renewable electricity, and 16.4% of the world's electricity. In 2015, China accounted for 26% of global hydropower installed capacity with 319GW, compared to the USA (102GW), Brazil (92GW), Canada (79GW), India (52GW), and Russia (51GW). These are the world's leading countries in using hydropower. The most prominent Arab countries using hydropower are Egypt (2,800MW), Iraq (2,753MW), Sudan (2,250MW), and Morocco (1,770MW).

Hydropower is one of the most flexible and sustainable renewable energy sources. It can be operated to provide base-load power, as well as peak-load supply through pumped-storage. However, estimates indicate the availability of approximately 10,000TWh year of unutilised hydropower potential worldwide.

Types of hydropower

In addition to the developing technologies that use the power of currents or waves, tidal barrage, and tidal stream to generate electricity from seawater, hydropower plants can be broadly categorised into three main categories:

1. Storage hydropower

A facility that uses a dam to impound river

water, which is then stored for release when needed. Electricity is produced by releasing water from the reservoir through operable gates into a turbine, which in turn activates a generator. Storage hydropower can be operated to provide base-load power, as well as peak-load through its ability to be shut down and started up at short notice according to the demands of the system.

2. Run-of-river hydropower

A facility that channels flowing water from a river through a canal or penstock to drive a turbine. Typically, a run-of-river project will have short term water storage. Run-of-river hydro plants provide a continuous supply of electricity, and are generally installed to provide base load power to the electrical grid.

3. Pumped-storage hydropower

This provides peak-load supply, harnessing water which is cycled between a lower and upper reservoir by pumps, which use surplus energy from the system at times of low demand. When electricity demand is high, water is released back to the lower reservoir through turbines to produce electricity.

Main source for energy storage

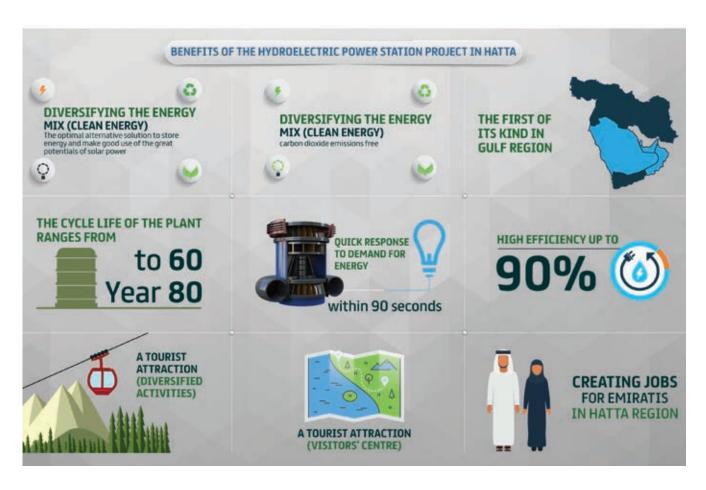
In addition to being a low-cost reliable and efficient source of clean energy, hydropower is the most important source for energy storage. It is estimated that storage hydropower represents 99% of the world's operational electricity storage. Other benefits include water security, flood control, drought management, irrigation, and recreation.

Integration of pumped-storage hydropower with renewables

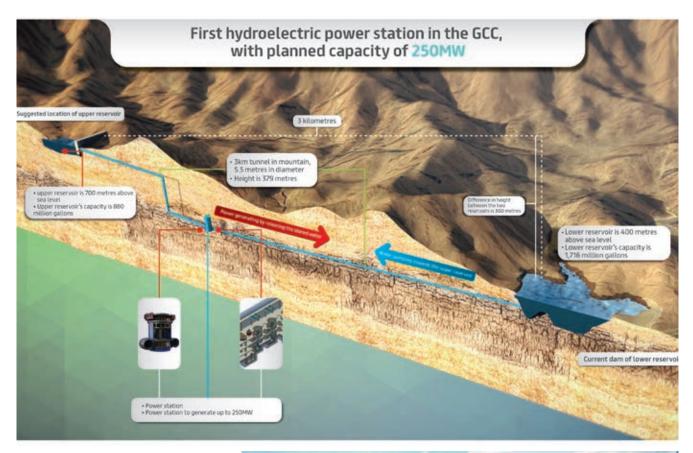
One key advantage of pumped-storage facilities is that they integrate with different renewable energy sources such as wind and solar power, which are non-flexible power supply options as they are affected when the wind drops or the sun is covered by clouds. This makes pumped-storage hydropower an important source for energy storage as water is stored when excess energy is produced, and then used when energy demand is at its highest during peak hours.

Global hydropower capacity

In 2015, pumped storage hydropower installed capacity worldwide was 144,465MW. East Asia is the region that uses this technology the most with installed capacity of about 58,000MW. Japan's



Main events



installed capacity is 27,637MW and China's installed capacity is 23,060MW.

The Middle East's pumped storage installed capacity is just 1,744MW.

In the Arab World only Morocco (464MW) and Iraq (240MW) use pumped storage.

Dubai first in region to use pumped-storage

DEWA has approved a number of leading projects to be implemented in Hatta to achieve Dubai's development plans, and the Comprehensive Development Plan for Hatta. HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has ordered the plan to boost the area's social and economic capabilities and enhance its attractiveness as a world-class tourist destination. DEWA's projects in Hatta include a 250MW pumped-storage hydroelectric power station.

This will make use of the existing water stored in the Hatta Dam, which can store up to 1,716 million gallons, and an upper reservoir that will be built in the mountain and can store up to 880 million gallons. The horizontal distance between the two reservoirs will be about



3 kilometres with 300 metres difference in height.

Integration with solar power

Turbines that use clean and cheap solar energy will pump water from the dam to the upper reservoir. During peak-load hours, when production cost is high, turbines that are operated by the speed of waterfall from the upper reservoir, will be used to generate electricity and connect it to DEWA's grid. The efficiency of power production will reach 90% with response to demand for energy within 90 seconds.

The hydroelectric power station has an estimated cost of AED 1.92 billion. The project is the first of its kind in the GCC and will provide other services including irrigation, flood control, and fresh water storage.

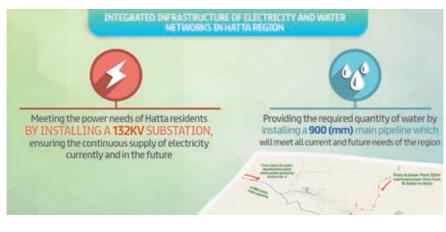


HE Saeed Mohammed Al Tayer, MD & CEO Of DEWA, said that DEWA has awarded the AED 58 million consultancy contract for the hydroelectric power station at Hatta Dam to France's EDF.

"DEWA's initiatives in the Hatta Development Plan involve the citizens of Hatta in our projects, and provide leading and innovative job opportunities. The projects will create 200 permanent technical, administrative and operational jobs."

"Another 300 jobs are expected to be created in the Visitor Centre, outdoor activities, and the tourist facilities associated with the project. Over 2,000 jobs will be required





during the implementation phase," added Al Tayer.

"The hydroelectric power station will increase the share of clean-energy use, support the sustainable development of the region, and enhance the position of Hatta as one of the most prominent tourist attractions in the Emirate," said Al Tayer.

"This supports the Dubai Plan 2021 to make Dubai the preferred place to live, work, and visit," concluded Al Tayer.

Report

ないことの

Solar projects around the world

Lef Int.

hely Margar 11



In light of climate change and the need for sustainable natural resources, many countries around the world have realised the importance of investing in renewable energy resources to ensure a sustainable and secure future for future generations. The following is a brief summary of three projects in the UAE, Morocco, and Germany.

Mohammed bin Rashid Al Maktoum Solar Park

The Mohammed bin Rashid Al Maktoum Solar Park in Dubai is the largest singlesite solar project in the world, based on the Independent Power Producer (IPP) model. It will produce 1,000MW by 2020 and 5,000MW by 2030, with a total investment of AED 50 billion. Upon completion, the solar park will contribute to reducing over 6.5 million tonnes of carbon emissions annually.

Noor Solar Plant

Morocco has started operation of the Noor 1 solar power plant, while construction of Noor 2 and Noor 3 - all in the Ouarzazate region - is ongoing. Construction of Noor 4 is expected to be completed by the end of 2018. Morocco aims to produce 582 megawatts from the Noor project. This will enable the country to secure about 52% of its electricity needs from clean energy sources by 2030, as well as reducing carbon dioxide emissions by 4 million tonnes each year.

Neuhardenberg Solar Plant

Neuhardenberg solar power plant was developed on a former military airfield in Germany. With an installed capacity of 145MW, the plant provides renewable electricity that is sufficient for 48,000 homes. It is expected to offset approximately 12,700t of carbon-dioxide emissions per year.

Opinion

Solar Power: Our path to a sustainable future



By HE Saeed Mohammed Al Tayer, MD & CEO of DEWA

Between 11am and 2pm on 11 March, utilityscale solar generation in the territory of the California Independent System Operator (CAISO) accounted for almost 40% of net grid power produced. On 26 May at lunchtime, solar power accounted for almost 25% of electricity generated in the UK, exceeding the combined output of the country's eight nuclear power stations. When wind, biomass and hydro were added, almost 40% of UK electricity came from renewables on that sunny spring day.

Many governments have realised the importance of making use of solar power, especially with the low costs and major advances in technology. The combined installed global solar power capacity is now 301 gigawatts (GW), an increase of 74GW in 2016 alone. The installed capacity is expected to reach 983GW by 2030.

Every hour the sun sends more energy to Earth than all the world countries need in an entire year. In the Arabian Gulf, we are blessed with sun that shines all year round. That's why making use of this renewable clean energy to provide most of our needs has become a strategic necessity, to achieve sustainable development. The UAE has established its leading global position in the renewable energy sector, by implementing quality solar-power projects. This is based on the vision of our wise leadership to prepare to bid farewell to the last drop of oil.

Dubai has become one of the pioneering cities in innovating new techniques and practices to improve energy efficiency while rationalising its use and finding alternative solutions for conventional energy. The Dubai Clean Energy Strategy 2050 intends to provide 7% of 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 strategy, with set goals and timelines that map the future of energy until 2050.

DEWA is spearheading ambitious initiatives to increase the share of solar power to achieve the vision of our wise leadership, who realised early the importance of renewable energy in achieving a balance between development and the environment to protect the right of future generations to enjoy a clean, healthy, and safe environment. We continue to build renewable and clean energy projects in Dubai, most notably the Mohammed bin Rashid Al Maktoum Solar Park, which will generate 5,000MW by 2030. The 200MW second phase was inaugurated last March by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai. It provides clean energy to about 50,000 residences

in Dubai, contributing to the reduction of 214,000 tonnes of carbon emissions annually. DEWA also launched Shams Dubai to install solar panels on buildings to produce electricity and connect them to DEWA's grid. The generated electricity is used onsite and surplus is then exported to DEWA's network. Eventually, Dubai will have solar panels installed on all building roofs by 2030.

DEWA pays great attention to research and development to develop the next generation of photovoltaic solar panels. We collaborate with the biggest research institutions in the world to develop innovative solutions and technologies to mitigate the effect of dust on photovoltaic equipment and enhance the efficiency and performance of photovoltaic panels. With the rapid growth of the solar sector in the region and the success of the first Dubai Solar Show, DEWA is organising the second Dubai Solar Show from 23-25 October, in conjunction with the 19th Water, Energy, Technology, and Environment Exhibition (WETEX). Dubai Solar Show will be a key platform for the public and private sectors to make deals, build partnerships, review the latest solar-power technologies, learn about current and future projects in the region and market needs, and explore opportunities to take part in solar-power projects and programmes.

As the governments of the UAE and the region seek to increase their use of renewable and clean energy, the exhibition will be the region's leading regional trading platform for solarpower production and storage products, solutions, and technologies.

I invite companies and organisations working in the solar sector to take part in the Dubai Solar Show and explore the various investment opportunities offered by this promising sector. I also invite everyone who is interested and members of society to visit the exhibition and learn about the latest solar technologies to achieve our objective of transforming energy consumers into producers, and maintain a balance between development and the environment to protect the rights of future generations to live in a clean, healthy, and safe environment, and ensure a sustainable future for us, and for generations to come.



Under patronage of HH Sheikh Hamdan bin Rashid Al Maktoum DEWA celebrates marriages of 62 staff at 10th mass wedding



Under the patronage and in the presence of HH Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance of the UAE and President of DEWA, DEWA held 10th mass wedding Anwar Dubai as part of its corporate strategy and commitment to the happiness of its employees.

The wedding took place in a joyful and festive atmosphere at Zabeel Park for 62 of its employees. Since 2007, 438 staff have married through Anwar Dubai. His Highness was welcomed by HE Matar Humaid Al Tayer, Chairman of DEWA, HE Saeed Mohammed Al Tayer, MD and CEO, Board Members, Directors and VIPs.

The ceremony was attended by HE Dr Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and the Environment, HE Saeed Al Kindi, and HE Mohammed KhalifaAlHabtoor, MohammadAbunayyan, Chairman of ACWA Power, Saif Humaid Al Falasi of ENOC Group, HE Ahmad Shafar, CEO of Emirates Central Cooling Systems Corporation (Empower) were also present. HE Abdulnasser Bin Kalban, CEO of Dubal Holding, Abdullah Al Mana, General Manager of Etisalat in Dubai, Qadhi Al Murooshid, Essa Al Maidoor, and senior officials and staff from DEWA, and families of the brides and grooms also attended.

Saeed Al Tayer congratulated the brides and grooms and wished them happiness, asking God to help them fulfil their goals and aspirations for a healthy and stable family life.

DEWA to build 3 new 400kV substations over next 3 years worth AED 1 billion

DEWA unveiled its plans to build 3 new 400 kilovolt (kV) substations over the next three years, with an allocated budget of AED 1 billion. The 3 substations will be added to DEWA's already existing 21 substations.

"We work to raise the capacity and efficiency of electricity grids, by developing worldclass infrastructure to contribute to the sustainable development of the Emirate. These ambitious plans will strengthen DEWA's ability to produce energy. DEWA's total production capacity reached 10,000 megawatts (MW) during 2016, while the peak demand for electricity was recorded at 7,982 MW, compared to 7,696 MW in 2015, reflecting a growth of 4%. The three 400 kV substations will greatly contribute



to DEWA's efforts to meet the increasing demand for water and electricity in Dubai. We have allocated a total investment of AED 65 billion towards Dubai's energy sector over the next five years, which will play a major role in supporting the growth of a green economy, and enhancing the UAE's level of competitiveness in energy efficiency, and energy technologies," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

"We plan to increase our total production capacity by establishing power plants in Hassyan, and at the Mohammed bin Rashid Al Maktoum Solar Park, and expanding our power plants in Jebel Ali and Al Aweer. Sixteen 132/11 kV substations were established in 2016, totalling 224 that year. We will establish other 113 substations over the next 3 years, with a total investment of AED 10 billion," concluded Al Taver.

HH Sheikh Mohammed bin Rashid Al Maktoum reviews DEWA's clean energy projects at DIGAE 2017



HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, visited the stand DEWA at the 5th Dubai International Government Achievements Exhibition (DIGAE), which was held from 2-4 April 2017 under the theme 'National Governments... Global Achievements

HH Sheikh Mohammed bin Rashid Al Maktoum reviewed the latest developments in clean energy projects, including the Mohammed bin Rashid Al

Maktoum Solar Park, which is the largest single-site solar project in the world. His Highness also reviewed DEWA's projects that support the Hatta Comprehensive Development Plan. These include the first hydroelectric power station in the GCC. The 250MW power station will be completed within five years. Other projects include installing photovoltaic panels on the rooftops of 640 villas to produce electricity from solar power.

At DIGAE. DEWA showcases the Hassvan clean coal power plant, which adopts the latest technologies and is fullycompliant with best international standards. DEWA is also highlighting its three smart initiatives to support the Smart Dubai initiative. These include connecting solar energy to houses and buildings through the Shams Dubai initiative, smart applications through smart meters and grids, and building the infrastructure and electric vehicle charging stations through the Green Charger initiative. DEWA is increasing the number of charging stations in Dubai to 200 in the second phase of the project. DEWA also showed a model of its new headquarters called Al Sheraa Sail in Arabic. The building is being constructed at the Heritage Village in Al Jaddaf, Dubai. After installing its photovoltaic solar panels, it will be the tallest. largest, and smartest government net-Zero Energy Building (ZEB) in the world.

In addition to highlighting its innovative projects and initiatives, DEWA organised lectures, awareness workshops, and discussion forums at the Knowledge Corner at its stand. These were presented by specialists, experts, and media figures on topics such as Youth and Digital Media, Year of Giving, and Happiness. The activities attracted a large number of visitors.

UAE Water Aid and Dar Al Ber Society sign MoU to achieve mutual humanitarian objectives

The UAE Water Aid Foundation (Sugia). which was launched under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives, signed a Memorandum of Understanding (MoU) with Dar Al Ber Society (DABS) to exchange knowledge and expertise, and enhance cooperation. The MoU aims to facilitate strategic partnerships between government and private organisations in the UAE and Dubai. The MoU was signed by Mohammed Abdulkareem Al Shamsi, Acting Executive Director of Sugia, and Abdulla Ali bin Zayed Al Falasi, Executive Director of DABS.



"We are pleased to be cooperating with need all over the world," said HE Saeed Dar Al Ber Society, to enhance our efforts to tackle international water scarcity and providing potable water to those in

Mohammed Al Tayer, Chairman of the Board of Trustees of Sugia.

Jebel Ali M-Station is largest power production and desalination plant in the region



DEWA is one of the biggest contributors towards Dubai government's vision to achieve the highest quality life for citizens and residents in Dubai, while working to ensure sustainable development and the happiness of the current and future generation. The M-Station is a new national landmark, and adds to DEWA's growing list of achievements over the last five decades.

The M-Station was opened in Jebel Ali in April 2013, as part of DEWA's efforts to enhance its total production capacity, which is currently10,000 MW of electricity and 470 million imperial gallons (MIGD) of desalinated water per day.

"M-station is the largest power production and desalination plant in the UAE, with a current total capacity of 2,185MW of electricity and 140 MIGD. The station adopts the highest levels of availability. reliability, and efficiency, using the most advanced technologies in the world. It is equipped with the latest smart devices and sophisticated heavy-duty technological systems. M-Station was built at a cost of AED 10.15 billion. AED 6.2 billion was invested in the generation of 2,185 MW of electricity from 6 gas turbines from Siemens (F-model) with a capacity of 255MW for each unit, 6 boilers for wasteheat recovery and 3 steam turbines, with capacity of 218MW each. The project has been implemented in phases since

mid-2010. Water desalination systems costing AED 3.95 billion use 8 desalination units, deploying Multi-stage flash (MSF) distillation technology, with a capacity of 17.5 MIGD each and totalling 140 MIGD, two dual-fuel-fired auxiliary boilers of 390 tons per hour, and 16 fuel-oil storage tanks: each with capacities of 20,000 cubic metres, with total fuel oil storage of 320,000 cubic metres. M-Station's current thermal efficiency is 82.4%," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

Since 2015, DEWA has worked with Siemens on the construction of the Jebel Ali M-Station expansion, as the total cost of M-Station construction along with the expansion project reaches AED 11.5 billion. The substation's total capacity will reach 2,885MW when the project is completed in 2018. The expansion project includes the provision of new power generating units adding a further 700MW to the installed generating capacity of M-Station. DEWA appointed Mott MacDonald as the project consultant.

The expansion project includes the addition of two dual-fuel gas turbine generators, two waste-heat recovery steam boilers, and one steam turbine with 90% fuel efficiency. This will increase the plant's thermal efficiency from 82.4% to 85.8%, which is one of the highest thermal-efficiency rates in the world.

DEWA has succeeded in enhancing the efficiency of fuel use to between 84-90%, while improving production efficiency by 25.47% in 2016, compared to 2006. The project included adding three isolation switches while connecting to the 400/132kV main substation, at a total cost of AED 60 million.

In April 2016. Al Taver inaugurated one of the largest single-rooftop arrays in the region, a 1.5 megawatt direct current (MWdc) photovoltaic generation project at Jebel Ali Power Station, and connected it to DEWA's grid. This supports the Shams Dubai initiative, which encourages building owners to install photovoltaic panels on their rooftops to generate electricity from solar power, and engages the community in the production of electricity from solar energy. The project is one of the largest single-rooftop arrays in MENA for generating electricity from solar energy.

DEWA installed 5,240 photovoltaic panels on the 23,000 square-metre roof of the water reservoir at M-Station. The modules will produce 1.5MW by converting solar energy into electricity, which will be used to meet the station's energy needs, and will generate 2,666 MW/h of clean electricity annually, while reducing about 1,500 tonnes of carbon dioxide annually.

DEWA launches Tayseer to facilitate bill payments via Emirates NBD cheque deposit machines



DEWA's Tayseer service will make it easier to pay bills by cheque that issued from all banks, by using more than 200 of Emirates NBD's cheque deposit machines, which are now available for all DEWA customers who own one or more accounts. Customers simply can provide their account number, or create a reference number via DEWA's website or smart application for multiple accounts. This supports DEWA's efforts to develop its services and reduce the need to visit DEWA offices.

"We are pleased to announce the Tayseer service to facilitate bill payments by cheque using Emirates NBD's cheque deposit machines, for all residential and commercial customers with one or more accounts. Tayseer supports the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to upgrade government services by simplifying procedures to save customers time and effort, and make them happier. It also supports the Smart Dubai initiative to transform Dubai into the smartest and happiest city in the world" said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

For more information on the Tayseer service, please visit its website: www.dewa.gov.ae/tayseer

Customers can also call 04 601 9999.

Al Tayer welcomes Michael Dell, Founder and CEO of Dell, to promote collaboration in digital technologies

HE Saeed Mohammed Al Tayer, MD and security, big data, Internet of Things (IoT), CEO of DEWA has received a delegation from Dell headed by Michael Dell, the company's founder and CEO. The American company is one of the leading companies in manufacturing and trading personal computers. The visit is one of several visits by international companies and organisations to DEWA.

The visit enhanced mutual cooperation and exchanged expertise and international best practices in smart networks, information

and Artificial Intelligence (AI).

The Dell delegation highlighted Dell's latest solutions, technologies, and developments of the research and development that the company is implementing. The delegation showed interest in contributing to DEWA's projects and initiatives, to promote the sustainable development of Dubai and the UAE.



DEWA issues Regulations for Electrical Installations 2017 booklet

DEWA has issued its Regulations for Electrical Installations 2017 booklet to provide dealers, consultants, electrical engineers and technicians with a guide for the installation and checking of electrical connections, ensuring full protection for properties and people. This shows DEWA's efforts to adhere to technical requirements and the latest safety guidelines for installing electrical connections, to ensure the efficient installation of integrated systems to ensure the best standards in health and safety.



MD & CEO breaks ground of Mai Dubai expansion project



HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, has officially led the groundbreaking of Mai Dubai's new expansion project in Yalayis off Al Qudra road in Dubai. Jay Andres, CEO of Mai Dubai, Mai Dubai staff, DEWA's Executive Vice Presidents and senior officials from Archcorp, Amana and Tebodin, the companies working on the project, also attended.

The project is the first of its kind for the bottled water industry in the region, and consists of 2 phases that will be completed by mid-2018. It more than doubles the current production capacity of Mai Dubai, and improves, fully-automated warehouses for finished goods and raw material. The project will also include a 1km-long monorail to transport goods, one of the longest-ever built in the region and in the industry.

"After three years since the launch of Mai Dubai, it has become a very popular brand and one of the leading bottled drinking water companies in the UAE in record time. This ground-breaking represents another significant milestone in Mai Dubai's journey, which will promote our success and help us attain our future ambitions. The project will allow Mai Dubai to raise the level of competition and increases, efficiency through in the bottled water industry, locally and

globally, by implementing best practices and the latest technologies in this field," said Al Tayer.

Mai Dubai's commercial production began in March 2014. The factory has received FDA. HACCP. ISO22000. and Emirates Quality Mark (EQM) certifications. The factory currently applies the certified policies and procedures according to OHSAS 18001 Occupational Health and Safety Management, and ISO 14001 Environment Management Systems.

The factory produces low-sodium water with a balanced blend of minerals.

DEWA first public body in UAE to launch Rammas on Amazon's Alexa



DEWA has announced the launch of the Rammas AI service on Amazon's Alexa smart voice system. DEWA has become the first government body to add its virtual employee to this innovative technology, in adherence with the directives of the wise leadership to reduce the number of visitors to government establishments by 80% and encourage the public to use smart services. This supports the Smart Dubai initiative, to transform Dubai into the smartest and happiest city in the world.

Rammas acts as a virtual employee, making use of artificial intelligence technology to answer customer enquiries. Rammas is characterised by its ability to learn and understand the needs of customers, according to their enquiries. Rammas analyses these based on available data and information, and takes action to accurately answer all queries.

Rammas responds to enquiries in both English and Arabic through a 24 hour chatbot. Rammas is available 7 days a week via DEWA's website, on DEWA's Facebook, through iOS and Android platforms, and Amazon's Alexa service.

DEWA organises 8th annual gala dinner with theme 'Be Proud. We Are One World.'

Ladies and Gentlemen,

The UAE is a unique example for promoting the values of tolerance, cooperation, and accepting on another, and a role model for the world in peaceful co-existence. In 2014, the UAE ranked first globally in acceful co-existence among residents, according to a report issued by the UN International Organisation r Peal Care and Relief. His Highness Sheikh Mohammed bin Rashid Al Maktoum emphasised that the UN is a cooperation of the units of the uni

DEWA has organised its 8th annual gala dinner, under the theme 'Be Proud. We Are One World.' This is part of DEWA's efforts to support the vision of the wise leadership to promote the values of tolerance, cooperation, and coexistence, which characterise the UAE. The theme also underlines DEWA's commitment to enhancing communications with its staff. The event was attended by HE Matar Humaid Al Tayer, Chairman of the Board of Directors of DEWA; HE Saeed Mohammed Al Tayer, MD & CEO of DEWA; HE Majed Hamad Al Shamsi, Board Member of DEWA, Executive Vice Presidents and Vice Presidents, and 1,200 DEWA employees.

In his keynote speech, Al Tayer noted that the gala dinner's theme complements the series of proud themes of previous years, reflecting the noble values and principles that the Founding Fathers have instilled in the hearts of every citizen, resident, and visitor to the UAE. These principles have flourished under the wise leadership led by HH Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE; HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai; and Their Highnesses Members of the Supreme Council and Rulers of the Emirates.

"The UAE is a unique example for promoting the values of tolerance, cooperation, and accepting one another, and a role model for the world in peaceful co-existence. In 2014, the UAE ranked first globally in peaceful co-existence among residents, according to a report issued by the UN International Organisation for Peace, Care and Relief. His Highness Sheikh Mohammed bin Rashid Al Maktoum emphasised that the UAE has always embraced openness, is governed by tolerance, and its renaissance is made by the contribution of all. His Highness once observed, "We always strive to entrench the values of openness and tolerance and will never step back. We welcome great minds from the 200 nationalities living on our country. The UAE is the land of opportunities and the best environment to bring dreams to reality and unleash exceptional potential and talents of people," said Al Tayer.

"At DEWA, we follow in the footsteps of our wise leadership. Over 11,000 employees from 66 nationalities at DEWA work in complete harmony as one team, contributing to DEWA's ongoing success and excellence. Our employees provide world-class services to over 800,000 customers in Dubai. This has made DEWA a role model for excellence locally and globally. It has become one of the best utilities in the world, actively contributing to the excellence and competitiveness of Dubai and the UAE," added Al Tayer.

DEWA employees emphasised that the 'Be Proud. We Are One World' theme stems from their sense of pride and belonging to the UAE, which is committed to the happiness of citizens and residents, as confirmed by international reports. The UAE was ranked first in the Arab World for the 3rd consecutive year in the Global Happiness index, according the World Happiness Report 2017. DEWA staff expressed their happiness to be at the annual gala dinner and the care they receive from DEWA's management. noting that they will always do their best to continuously improve DEWA's performance, efficiency and services. They emphasised that they will always remember the slogan of the gala dinner, which emphasises teamwork. They commended the organisation and activities of the event, adding that it is an important event to promote communication among staff and the management, with such events ensuring a positive and happy environment at DEWA.

3rd Carbon Ambassadors programme launched



DEWA has launched the 3rd Carbon Ambassadors programme during a session titled 'Future Foresight' and was attended by officials from a number of government and private organisations including Ministry of Climate Change and the Environment, Dubai Police, Dubai Municipality, Dubai Roads and Transport Authority (RTA), Dubai Economic Development Department, the Mohammed bin Rashid Space Centre, Dubai Airport Free Zone, Dubai Carbon Centre of Excellence, Emirates Central Cooling Systems Corporation (Empower), and a large number of university students.

In his keynote speech, HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, announced the launch of the 3rd Carbon Ambassadors programme, building on the success of the first two programmes. Since its launch, the Carbon Ambassadors programme has enjoyed the support of major organisations and has achieved significant successes on all levels. Al Tayer commended the innovative projects of the first two rounds, which were displayed along with the achievements of other major organisations at the Water, Energy, Technology, and Environment Exhibition (WETEX).

"These promising projects emphasise the success of the Carbon Ambassador programme in achieving its objectives to involve young people in the issues of the environment and sustainable environment. It also supports DEWA's strategy to develop Emiratis and provide the environment that encourage young people to be creative and innovative. The youth of today are the leaders of tomorrow who will play a key role in decision-making at all levels. We realise that young people are the driving force for building a brighter future that protects natural resources and the environment. Our goal is to prepare a promising generation to lead the sustainable growth, not only in the UAE, but globally," noted Al Tayer.

40 students joined the first batch of the programme, doubling to 80 in the second batch. They have shown promise and potential, demonstrating their ability to assume the leadership responsibilities entrusted to them. They will contribute to leading the efforts of Dubai and the UAE to build a green and sustainable economy.

DEWA receives GCCIA delegates at Mohammed bin Rashid Al Maktoum Solar Park



HE Saeed Mohammed Al Tayer, MD and CEO of DEWA received a high-level delegation from the Gulf Cooperation Council Interconnection Authority (GCCIA) Board of Directors, who visited the Mohammed bin Rashid Al Maktoum Solar Park after the inauguration of its 2nd phase by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, on 20 March this year. The delegation viewed the solar park's latest technologies and best international practices and activities, and discussed its strategic importance in promoting sustainable growth and increasing reliance

on clean and renewable solar energy for a better future, for generations to come.

"We are very pleased with the visit from the GCCIA's Board of Directors to view the Mohammed bin Rashid Al Maktoum Solar Park and to collaborate and share our successful experiences in Dubai and the UAE with specialised authorities and neighbouring governments across the region, to ensure mutual benefits and improve the region's energy sector," said Al Tayer. Al Tayer explained to the visiting delegation the details of the 200 megawatt (MW) 2nd phase of the solar park. The phase was implemented in partnership with the consortium led by ACWA Power from Saudi Arabia, the main developer, and Spain's TSK, the main contractor, with an investment of AED 1.2 billion. The phase will generate clean energy for 50,000 residences in Dubai, and will reduce 214,000 tonnes of carbon emissions a year. This phase installed 2.3 million photovoltaic solar panels over 4.5 square kilometres, involving 1.5 million Safe Man Hours without Lost Time Injury.

DEWA receives 7-star rating from DGEP's Superiority Makers programme

DEWA has received 7 Stars for participating in the Dubai We Learn—Knowledge Sharing and Innovation initiative for promoting and marketing the Shams Dubai initiative to its customers. The certificate has been awarded by the Superiority Makers, hosted by the Dubai Government Excellence Program (DGEP). DEWA beat 9 government organisations by achieving the highest rate possible under this prominent excellence programme. DEWA has accomplished this outstanding achievement by adopting the world's best practices recorded by TRADE benchmarking.

DEWA's team presented the Promoting and Marketing Shams Dubai project to an international expert committee, to highlight its distinguished experience in benchmarking. The expert committee evaluated 13 innovative projects that took part in the Superiority Makers programme under the 'Dubai We Learn–Knowledge Sharing and Innovation' initiative. DEWA's team



worked hard from November 2015 to December 2016 to achieve this new outstanding achievement.

"We are proud of this unprecedented achievement. At DEWA, we adopt innovation, creativity and excellence concepts in our daily operations under the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime

Minister of the UAE and Ruler of Dubai. to promote performance and service efficiency, according to the key principles of the fourth generation of government excellence. This system helps government organisations to attain new advanced levels of excellence and leadership," said HE Saeed Mohammed Al Tayer, MD and CEO of DEWA.

DEWA Sustainability Partner of 16th AMF



Under the title 'Global leadership for Sustainability Partner of the 16th Arab

reviving a sustainable civilisation for Media Forum (AMF). DEWA highlighted generations to come,' DEWA was the its efforts, projects, and initiatives in sustainability, clean energy and environmental protection, and smart transformation at the Forum's exhibition.

"We participated in AMF as the Sustainability Partner since sustainability is a global issue that touches on social, economic, human, and environmental development. The media plays a major role in supporting and consolidating this culture and strengthening the pillars of sustainability. DEWA has global achievements that support the position of the UAE. We are keen to ensure that these achievements are the basis of our participation and of our dialogue with all segments of society. AMF is a bridge of communication with press organisations and Arab and international media," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

DEWA studies impact of climate change in Wadi Wurayah, Fujairah



DEWA organised a 5-day impact study in Wadi Wurayah in Fujairah, in cooperation with Emirates Wildlife Society, in association with the World Wide Fund for Nature. The programme studied the impact of climate change on the UAE's ecosystem, especially fresh water resources, to help the



and opportunities in development activities relating to environment and the preservation of natural resources. A number of DEWA's employees, graduates and members of DEWA's Youth Council took part in the programme. It included scientific research on the impact of climate business community define risks change on fresh water ecosystems



and the UAE's biological diversification through lectures, panel discussions, and field research activities, under the supervision of environmental experts. The programme also included field visits to discover the surrounding environment to provide the participants with a rich and enjoyable scientific experience.

DEWA organises DEWA Student Hackathon to promote innovation and creativity among youth



DEWA launched the DEWA Student Hackathon. The event has witnessed the participation of over 150 students from 30 universities in the UAE. This supports DEWA's vision to become sustainable innovative world-class utility.

The hackathon aims to encourage university students to brainstorm and develop innovative solutions to support DEWA's strategic directions. The DEWA Student Hackathon took place on 7-8 April 2017 at Raffles Hotel, Dubai. It brought together an elite group of creative young minds from different fields.

"The DEWA Student Hackathon was launched as part of a series of competitions to support the youth and involve stakeholders in ongoing efforts to support and promote innovation, and attract innovators while establishing new solutionsto achieve our strategic objectives to further our reliance on clean energy, and achieve sustainability on all social, economic and environmental levels. DEWA intends to

analyse the possibility of adopting these innovations, to transform them into projects that support DEWA's efforts to enhance the energy and water sectors, while streamlining smart transformation and achieving sustainability. This supports the Smart Dubai initiative, to transform Dubai into the smartest and happiest city in the world, and the Dubai x10 initiative, to transform Dubai into the city of the future," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

Committee to implement order of HH Sheikh Mohammed bin Rashid Al Maktoum to install back-up power generators



DEWA has formed a committee, headed by HE Saeed Mohammed Al Tayer, MD & CEO, to follow up on implementing the order of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, which requires real estate developers, companies, and other relevant stakeholders, to install back-up power generators at major projects in Dubai. DEWA has sent a circular requiring the installation of back-up power generators in major buildings and landmarks, such as tourist, commercial, and cultural buildings in Dubai. This is to

ensure that they will have the necessary power in emergencies for public security and safety reasons, and to ensure the comfort and well-being of society and the public at large. The circular states that the capacity of the back-up generators should be of sufficient to cover lighting, elevators, escalators, automatic doors, surveillance cameras, alarm systems, and fire and safety equipment. These back-up generators must be properly maintained to ensure that they will work when needed, in an effective and timely manner, according to best safety practices.

DEWA signs MOU with EmiratesGBC



DEWA has signed a Memorandum of Understanding (MOU) with the Emirates Green Building Council (EmiratesGBC) to enhance mutual cooperation on Solar Decathlon Middle East (SDME). SDME is a distinguished competition that is organised as a partnership between Dubai Supreme Council of Energy and DEWA, and United States Department of Energy. It will take place in Dubai in 2018 and 2020, in conjunction with Expo 2020 Dubai.

The MOU aims to strengthen cooperation on sustainable development and green economy in the UAE by organising circles, volunteer activities, and technical support for students on green building designs, innovative solutions for energy efficiency, sustainable environment, and renewable energy use.

The MOU was signed by HE Saeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme Council of Energy and MD & CEO of DEWA, and Saeed Al Abbar, Chairman of EmiratesGBC.



Electricity and water services activated when Ejari is attested

DEWA has announced that, effective 1 July 2017, attesting Ejari tenancy contract will be mandatory for getting electricity and water services. Customers will be able to activate electricity and water services as soon as they attest the contract at any of the 800 real estate offices approved by Dubai Land Department, without having to visit DEWA's customer happiness centres. As soon as Ejari is attested, the customer receives a welcome message from DEWA via e-mail and SMS, including the account and premise numbers, as well as a link to pay the security deposit. Once the security deposit is paid online or using any of the smart channels provided by DEWA, electricity and water services are activated for the customer.

DEWA organises first Youth Circle to engage youth in supporting future initiatives



DEWA organised the first Youth Circle at Dar Al Etihad in Dubai, under the theme 'Youth 10x', to promote sustainable communications amongst youth, to enable them to play a key role in the prosperity of the UAE, and to help DEWA achieve its vision, mission, values, and strategic objectives.

The Youth Circle took place in the presence of HE Shamma bint Suhail Al Mazrui, Minister of State for Youth by HH Sheikh Mohammed bin Rashid Al

Affairs and HE Saeed Mohammed Al Taver. MD & CEO of DEWA. The event included 150 students who have benefited from scholarships offered by DEWA, as well as students from DEWA Academy, and DEWA staff.

During the event, the participants were enthusiastic to discuss the main topics, especially the role of youth in achieving the 10x initiative, launched

Maktoum, to make Dubai a city of the future. The audience discussed how to take part in DEWA's efforts to shape the future, enhance Dubai's sustainable development, and promote national identity and values.

Al Mazrui commended DEWA's positive interaction and its hosting of the first Youth Circle, which emphasises its keen interest in youth and its participation in sharing their ideas and vision to contribute to sustainable development.

"In our youth we see the future of the nation and the basis for its advancement. UAE youth represent the potential of our nation and are the source of its wealth. To achieve our vision to become a sustainable innovative world-class utility, DEWA places the participation of young people in the economic, social, and environmental development process as a strategic objective. We are creating the right environment to find a generation of young people who are willing to contribute to shaping the local and global agenda," said Al Tayer.

DEWA launches Voluntary Work Programme on intranet for employees to promote voluntarism



DEWA launched a new programme to support voluntary work among its employees through, a special section on its website, called the DEWA Programme for Voluntary Work. The objective of the programme is for DEWA employees to participate in community service and charitable projects, by allocating some of their time to volunteering during

working hours. "Through the launch of the volunteer work programme, DEWA aims to facilitate the selection of community programmes and initiatives that suit the interests and abilities of the volunteers and the appropriate times to serve the community, thus, contributing to spreading happiness and creating a positive and stimulating environment.

This comes within the framework of its mission to promote volunteer work and develop the integrated community work system at DEWA, in order to serve the community and strengthen cohesion among all its members," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

Al Tayer revealed DEWA's intention to launch an internal website that includes 11 voluntary initiatives in the first phase, which will provide a special page for each volunteer who will calculate the hours of volunteering he/she has participated in. This is the first step of its kind at the level of government institutions in the UAE, enhancing DEWA's achievements in the area of social responsibility, which has led in the past years to raise the percentage of the society's happiness from 82% in 2013, to 89% in 2016.



DEWA uses Dubai Font

DEWA has adopted Dubai Font for its website, digital communication channels, and internal and external correspondence. The move is in response to the initiative of HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum. Crown Prince of Dubai and Chairman of the Executive Council of Dubai, and supports DEWA's commitment to keep pace with the latest technological developments and innovative initiatives. "Dubai has always been associated with creativity and innovation in various areas and at all levels. DEWA's website will now use the Dubai Font, which is the first in the world to be developed by a city and carry its name. This is part of our efforts to promote National Identity, harness new technologies to serve our corporate goals, and establish Dubai as a global city that adopts innovative ideas. Dubai has unique characteristics that combine heritage with modern creativity, as well as a vision that not only anticipates the future, but also makes it," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA. "Dubai Font is characterised by unique specifications that enhance its visual elements and make it easier to browse the website, thanks to the smooth flow in Arabic and Roman characters. Using Dubai Font also enhances the unified corporate identity, look and feel of Dubai Government's departments and agencies,' noted Al Tayer.

DEWA organises Al Khair Exhibition

DEWA organised the Al Khair Exhibition 2017 at Mirdif City Centre in Dubai, to highlight how prominent social organisations are serving society. Social and humanitarian organisations that took part in the exhibition include the Mohammed bin Rashid Centre for Islamic Culture, the Sheikh Mohammed bin Rashid Centre for Cultural Understanding, the Community Development Authority, the Dubai Club for People of Determination, the Al Noor Training Centre for Persons with Disabilities, and the Dar Al Ber Society. Organisations showed their social and

humanitarian services and products. These include services for People of Determination (people with disabilities), new Muslims, the needy, and other services and products that were appreciated by the visitors. Organisations that took part in the exhibition commended DEWA for its efforts in humanitarian and social work in Dubai and the UAE, and for organising the Al Khair Exhibition, which was an important platform to reach the largest number of people in society and directly interact with the public.



DEWA grants wishes for non-supervisory staff



DEWA has organised a campaign to International Workers' Day, granted grant the wishes of its staff in nonsupervisory positions. This is part of DEWA's commitment to provide a happy working environment for all its staff. The initiative, which coincided with

the wishes of 30 employees in grades 8 and below. Their wishes included laptops, iPhones, appliances, home furniture, shopping vouchers, and gifts for children.

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, received the employees at his office, where he commended them for their hard work and dedication, and applauded their efforts in performing their duties. Al Taver had a friendly conversation with them. talking about the importance of working as one team. He stressed that all jobs are equally-important, to maintain DEWA's achievements and advance services to new levels of excellence, to achieve the vision of the wise leadership to make the UAE number one in everything it does. The employees showed their joy and thanks for making their wishes come true. They also thanked Al Tayer for the friendly meeting and commended DEWA for providing a happy working environment for all its employees.

MOU with University of Dubai to provide 10 annual scholarships



DEWA has signed a Memorandum of Understanding (MoU) with the University of Dubai to provide 10 annual scholarships for Emirati students.The scholarships are for Bachelor's Degrees in Information Systems Security, and in Electrical Engineering – specialising in Communications Engineering. This supports DEWA's strategy to prepare Emiratis to lead the energy sector. The MoU was signed at DEWA's Head Office by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, and Dr Eesa Bastaki, President of the University of Dubai.

DEWA participates in 'For your sake, Somalia' and donates 20,000 water cartons from Mai Dubai

As part of DEWA's efforts to achieve the objectives of the Year of Giving, and to consolidate the UAE's global standard in the field of humanitarian work, DEWA participated in the campaign 'For your sake, Somalia', which was launched by the UAE Red Crescent, to alleviate millions of people suffering from famine and war in Somalia.

"Our participation in this campaign is part of our efforts to support the UAE Red Crescent's efforts at the local and international levels. We are honoured to donate 20,000 cartons of Mai Dubai bottled water, through the humanitarian campaign to help the Somali people, whose conditions were affected by a lack of food, water and medicine, due to drought, and the repercussions of the events in Somalia," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA. Al Tayer praised the efforts of the UAE Red Crescent, which is an ambassador of the Emirati people to help those in need.

He said that DEWA is proud to take part in the charitable and humanitarian work undertaken by the UAE, as part of its track record of charitable and relief initiatives, which were initiated by the forefathers of the UAE, and are continued by its current loyal leaders.



Drinking water for 90,000 people

Suqia has implemented two projects to provide drinking water to 90,000 people in Somalia. Suqia has implemented these projects in cooperation with the Mohammed bin Rashid Al Maktoum Charity and Humanitarian Establishment. The first project, in Ufayn in the eastern region of Somalia, includes building a 300-cubicmetre water collection point near the water springs at the foot of the mountain and 600 cubic metre water reservoirs. The project also includes repairing and replacing the three-kilometre pipeline network. Solarpowered pumps will be provided to pump water from the ground reservoir to an elevated water tank in the town. The project will make it easier for residents to access potable water, reducing the distance they have to travel to obtain water for drinking, irrigation, or livestock. The project will benefit about 50,000 people in the town and neighbouring villages. The second project involved drilling an artesian well in the village of Tookiyo in the Lower Shabelle province in Somalia, and the installation of pipes and an electric pump. This covers the basic water needs of the village. The project includes building a 20 cubic-metre water tank, 3 basins for animals, and shaded water taps to protect residents from the sun, and also connecting the water systems from the well to the water tank and the basins. The project will provide over 40,000 people with clean water, alleviating residents' suffering in getting water, and limiting diseases that could spread as a result of drinking contaminated water.

MD & CEO welcomes high-level delegation from ENGIE

cooperation with international companies to share best experiences and international practices and developments in the energy sector, HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, welcomed Sebastien Arbola, CEO of ENGIE Middle East, South & Central Asia and Turkey, who headed a high-level delegation from ENGIE.

Al Tayer welcomed the delegation and stressed on the importance of such meetings in enhancing cooperation. He also reviewed the most important programmes, projects, and initiatives undertaken by DEWA, to promote the sustainability and green economy of Dubai, and the establishment of infrastructure for electricity and water services in Dubai, as per the best international standards.

From their side, the ENGIE delegation presented the latest solutions and

As part of DEWA's keenness to enhance technologies they are offering, in the field of traditional and renewable energy production, and in the development of smart and sustainable solutions that contribute to the promotion of a low

carbon economy. Arbola expressed his interest in participating in DEWA's projects, and contributing to the sustainable growth of Dubai.



DEWA sends two staff to University of Rochester for Science and Technology



DEWA sent two DEWA staff to New York, USA, joining a delegation of 17 employees from various Dubai government organisations, to attain their Masters of Science degrees. The

programme has been organised under the patronage of Smart Dubai Office and Dubai Silicon Oasis, in cooperation with the University of Rochester for Science and Technology.

The programme will educate students about best practices in smart city development in New York. It also allows for students to exchange knowledge and take advantage of global expertise, and learn about the latest smart innovations from experts in smart city development.

"This visit will enable students to gain experience and global expertise, while qualifying them to become the next generation of creative leaders, to drive the sustainable development of the Emirate. This reflects DEWA's efforts to support the vision of the wise leadership. to strengthen government services, and achieve the Smart Dubai initiative, to transform Dubai into the smartest and happiest city in the world," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

DEWA has become a role model to government organisations in the UAE for launching training programmes for Emirati nationals who aspire to study at home and abroad, in energy and water, renewable and clean energy, innovation, shaping the future, and smart cities.

DEWA organises sports tournament for suppliers



As part of DEWA's efforts to strengthen relationships with all stakeholders, and ensure long-term strategic partnerships, DEWA organised the third tournament for suppliers, which was held at InSportz Club in Al Quoz, and saw huge participation from 32 teams in cricket, volleyball and bowling.



HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, commended the winning teams including General Electric (GE) who came first in cricket, and Liberty Automobiles who came second. In the volleyball tournament, DEWA ranked first, while DUCAB's team came second. Sakina, from Geko, ranked first in the bowling tournament, while Persila and



Merlin, from Emirates Central Cooling Systems Corporation (Empower) came second and third respectively.

Al Tayer applauded the efforts of the participating teams and the spirit of the competition, which gave the games an atmosphere of fun and challenge that brought together the staff, families and supporters in one place.

DEWA briefs Saudi Electricity Company on best practices and latest technical innovations

As part of a series of mutual visits with leading service providers in the region, DEWA received a delegation from the Saudi Electricity Company (SEC), to study best practices and the latest solutions in technical innovation.

During the visit, the SEC delegation reviewed the structure and strategy of the Innovation and the Future division at DEWA, as well as the Microsoft HoloLens technology, which reflects DEWA's efforts in leading the digital transformation and enhancing its global position through its operations, improving productivity, accelerating innovation, and providing best quality and fully efficient services that contribute to the upgrade and efficiency of government work.

"DEWA is keen to strengthen its cooperation with various local, regional, and international entities. DEWA is following the footsteps of the UAE's wise leadership by adopting innovation and excellence to provide the best and highest quality smart services and latest technologies, to achieve the Smart Dubai Initiative. This collaboration also reinforces DEWA's position as one of the largest and most efficient service providers in the world," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

The Microsoft HoloLens technology, (3D Mixed Reality technology), creates a unique end-to-end solution for DEWA's energy plants with 3D representation of

real data. HoloLens technology can also be used in confined spaces such as the combustion chambers, with continuous direct communication with the entire team. Documents can be attached and voice annotations added to make technical decisions quickly.



Technical Committee of 3rd EEA holds 1st meeting to review participation



The technical committee of the Emirates Energy Award (EEA), which was formed under the patronage of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, under the theme 'Innovative solutions for clean energy,' held its first meeting in the headquarters of the Dubai Supreme Council of Energy. The meeting was led by Dr Essa Al Bastaki, chairman of the technical committee, in addition to the committee members, Saeed Al Abbar, Chairman of Emirates GBC, Habiba Al Marashi, Chairperson of the Emirates Environmental Group, Taher Diab, Secretary General of EEA, technical committee coordinator, and other experts.

Members of the committee reviewed the applications received by the Dubai Supreme Council of Energy to participate in the 3rd EEA.

The number of applications has doubled this year compared to applications in the previous cycle of the award. Applications were received from 21 countries from the Middle East and North Africa, as well as countries such as the USA, Finland, India, Portugal, Germany and Sweden, which demonstrates the remarkable regional and global reputation of the award.

"We are keen on building on our successes in the previous two cycles of the award. Looking at the number and the diversity of the applications we received this year, we can say that EEA is well-positioned as a leading event that supports innovation in energy," said HE Saeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme Council of Energy and President of the Emirates Energy Award.



MD & CEO of DEWA signs up on UAE Volunteer Platform

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, has signed up as a volunteer on the UAE National volunteer platform (www.volunteers.ae). The platform was launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and HH Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, as part of the Year of Giving initiatives. Al Tayer signed up on the platform in the presence of Executive Vice Presidents and Vice Presidents of DEWA, and Mohamed Abdul Hamid Al Hosani. Director of Leadership and Empowerment at the Emirates Foundation.

Al Tayer urged DEWA's staff and members of society to sign up on the platform, which was developed by the Emirates Foundation, in collaboration with the



Ministry of Community Development. and sustainabl The platform consolidates a culture of in the UAE, c volunteering and social responsibility in volunteers ca the UAE, and seeks to create an integrated their interests.

and sustainable system for volunteering in the UAE, covering 14 areas where volunteers can choose the closest to their interests.

DEWA organises GCC Solar Photovoltaic Testing Centres Network workshop



DEWA, in cooperation with the EU-GCC Clean Energy Technology Network, and in association with the International Renewable Energy Agency (IRENA) and other organisations from the European Union (EU) and Gulf Cooperation Council Countries (GCC), has organised an inception meeting and training workshop in Dubai to discuss establishing the 'GCC Solar Photovoltaic Testing Centres Network.' participants also visited the solar testing facility at the Mohammed bin Rashid Al Maktoum Solar Park, which is the largest single-site solar project in the world. The inception meeting discussed forming the GCC Photovoltaic Testing

Labs network, its aims, objectives, and organisation. Participants reviewed best practices on the methodology and procedures used to test solar photovoltaic modules. The workshop discussed ways to help photovoltaic testing centres in the GCC improve their capabilities to meet international standards and provide support to transform photovoltaic labs to strong market players that can support solar photovoltaic deployment in the region. Participants in the twoday event included representatives from the Spanish National Renewable Energy Centre (CENER), European Standardisation Organisations (CEN/CENELEC), Gulf Standardisation Organisation (GSO), GCC Electrical Testing Laboratory, Masdar Institute, King Abdullah University of Science and Technology, and local, regional, and European utilities and standardisation organisations.

DEWA supports 30 families of people of determination in cooperation with UAE Deaf Association

In line with the objectives of the Year of Giving, and as part of DEWA's strategy for community work and cooperation with public and private partners to reinforce the culture of charitable work in UAE society, DEWA has provided electronic equipment and devices to 30 families of people with determination to help them in their daily lives, in cooperation with the UAE Deaf Association.

In line with the Smart Dubai initiative, to make Dubai the smartest and the happiest city in the world, and in accordance with the best international practices in the field of support for people with hearing disabilities, DEWA provided each family with a set of smart devices, based on the latest technologies. The smart devices included alarm devices to help them communicate with others, vibration devices to help them wake up, and other notification and vibration tools to support doorbells, telephones, fire alarms, security equipment, childcare, and others.

"DEWA's cooperation with the UAE Deaf Association is part of its strategy of empowering people of determination (people with disabilities), and integrating them into the social environment as individuals capable of production and creativity. This comes in line with the announcement of the Year of Giving in the UAE. It also supports the 'My Community, a City for Everyone' initiative, to transform Dubai into a friendly zone for people with determination," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.



59 children graduate from DEWA nurseries

DEWA celebrated the graduation of 59 children from its nurseries in 2017. These are employees' children who turned four, and completed the requirements to go to kindergarten. Nursery management organised the ceremony, which was attended by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

"Under the directives of the UAE's wise leadership, and in line with our corporate social responsibility, we are committed to providing an ideal, motivating, and happy working environment, for our female employees, to provide working mothers with social and emotional support to stablise their their families and careers. In 2010, DEWA established the nurseries to be one of the first government institutions to establish nurseries to support working mothers. Today, it has the largest number of nurseries compared to other government institutions in



Dubai, with a capacity of 175 children, and this capacity will increase in the future." Said Al Tayer.

DEWA established the first nursery for its employees' children in February 2010, with a capacity of 40 children. Another nursery opened with a capacity for 48 children in the Sustainable Building at Al Quoz in April 2013. The third nursery opened at DEWA's Al Warsan centre, which accommodates 87 children. A total number of 341 children have graduated from DEWA's nurseries.

DEWA signs strategic partnership with Dubai Post



DEWA has signed a strategic partnership agreement with the Dubai Post digital platform.

HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, Chairman of the Dubai Executive Council, launched Dubai Post, last March, as the first local digital platform based mainly on visual content, and adapted to the technologies in stimulating human interaction in parallel with social media. Dubai Post will set up and implement special visual content that reflects DEWA's efforts in supporting its employees and helping them advance in various jobs, providing them with the appropriate environment to achieve the future objectives of DEWA and its members.

Khawla Al Mehairi, Vice President of Marketing and Corporate Communications at DEWA, expressed her happiness with the strategic partnership between DEWA and the Dubai different



media channels; especially those which adhere to the trend towards new media, which uses simple yet visual and untraditional content.

"Our partnership with DEWA is an extension of Dubai Post's vision of focusing on the bright side of every story, highlighting positive and useful models in society that create the values of inspiration and hope," said Khadija Al Marzouqi, Editor-in-Chief of Dubai Post.

DEWA supports Emiratis in Dubai through 'Caring for the Bereaved' initiative

DEWA has presented a proposal to the Executive Council of Dubai for its Caring for the Bereaved initiative to simplify procedures and getting services for families of deceased UAE Nationals. DEWA formed a joint committee comprising the relevant government organisations in Dubai, to identify all the procedures required in case of death such as the issuance of death certificate, forensic report, and burial permit, setting up signs that guide people to the condolence tent, and supplying the tents with electricity and water. The committee developed a future vision for the initiative, based on experiences of the bereaved. Eight government departments in Dubai expressed their interest to join the initiative. In March, DEWA issued a resolution exempting Emirati condolence tents from electricity-connection fees and will provide a water tank free of charge for each day for the three-day mourning period.

HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, recommended establishing a joint committee from the Executive



Council of Dubai, DEWA, the Community Development Authority, and Dubai's The Model Centre, to determine the mechanism of the initiative, and submit recommendations to the Executive Council to be considered and adopted.

Government departments in Dubai welcomed the initiative and announced

willingness to provide the necessary support for its success. The initiative was also welcomed by the Executive Council of Dubai. HE Abdullah Al Shaibani, Secretary General of the Executive Council of Dubai, commended the initiative and its role in facilitating procedures and streamlining processes, which relieves the burdens of the families of the deceased in Dubai.

DEWA receives lowest international bid for 4th phase of the Mohammed bin Rashid Al Maktoum Solar Park



DEWAhasreceived the lowest international bid of USD 9.45 cents per kilowatt hour (kW/h) for the 200MW Concentrated Solar Power (CSP) plant, which is the fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park. The bids from 4 international consortiums were opened at DEWA head office.

DEWA is working to build the biggest CSP project in the world based on the Independent Power Producer (IPP) model. The 200MW CSP plant will be operational by April 2021, with other CSP projects eventually generating a total of 1,000MW by 2030.

On 4 October 2016 DEWA invited energy companies to send Expressions of Interest (EOI) for the 200MW Solar CSP

plant. By 27 October, 30 International Solar IPP players had sent EOIs. DEWA received 7 Requests for Quotations from international IPP bidders and consortium partners on 5 December 2016. The Request for Proposal was sent to qualified bidders on 15 January 2017.

"Our achievements support the Dubai Clean Energy Strategy 2050 aiming to provide 7% of Dubai's total power output from clean energy by 2020, 25% by 2030, and 75% by 2050. This will transform Dubai into a global hub for clean energy and a green economy. The UAE's focus on renewable energy generation has led to a drop in prices worldwide and has lowered the price of solar and wind power bids in Europe and the Middle East, "said HE Saeed Mohammed Al Tayer, MD&CEO of DEWA.

DEWA signs OPSA contract with Siemens

DEWA has signed a 12-year Operating Plant Service Agreement (OPSA) with German company Siemens, worth AED 1.7 billion. The contract includes providing maintenance, spare parts and gas turbine rehabilitation for the second phase of K-Station at Jebel Ali Power and Desalination Station, and the third phase of H-Station at the Al Aweer Power Station.

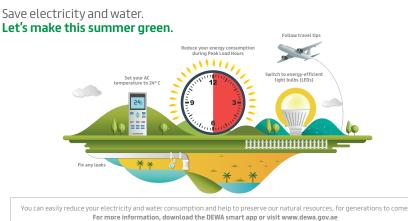
To implement best practices to achieve the highest levels of efficiency, reliability and service availability, and in support of its vision to become a sustainable innovative world-class utility, DEWA also extended the Long Term Maintenance Plan (LTMP), for seven more years, for the second phase of L-Station.

"DEWA strives to introduce all the latest developments in technology and re-engineering processes in its operations. DEWA is consolidating its leading position, both nationally and globally," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.



Al Tayer added that the contract contributes to efficiency and quality improvements, cost reduction, and the efficient operation of DEWA's power plants. It also requires Siemens to provide specialist personnel, and all the necessary equipment and spare parts for the maintenance of all the turbines and generators.

DEWA launches 'Let's Make this Summer Green' media and social media campaign for 2nd year running



Within the framework of DEWA's efforts to establish the foundations of environmental sustainability, support sustainable development and raise awareness about the importance of energy and water conservation, especially during the summer, DEWA launched 'Let's make this summer green' for the second year running. The campaign was launched via social media channels, as well as other audio-visual media channels.

The campaign runs from the beginning of May, until the end of August. It focuses on several guidelines including reducing power

consumption during peak hours (12-6 pm), setting the AC to 24C, tips for when away on summer vacation, fixing water leaks, and installing drip irrigation systems. DEWA's Conservation Team organises lectures and field visits to government organisations and departments, private companies, malls, and union centres.

"This summer initiative is a continuation of the series of initiatives, programmes and awareness activities launched by DEWA throughout the year. DEWA managed to reduce water usage over the past eight years through its various campaigns, and managed to save 1.54 terawatt (TW) of electricity, and 6.2 billion imperial gallons of water, saving AED 957 million, and limiting carbon dioxide emissions by over 831,000 tonnes, which is equivalent to the cultivation of 944,000 trees," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

DEWA urges its customers to follow certain guidelines, to rationalise their consumption of water and electricity. The guideline is published on DEWA's website www.dewa.gov.ae and on DEWA's smart app.

800MW third phase of Mohammed bin Rashid Al Maktoum Solar Park reaches financial close



DEWA with GE organises 3D Printing and Additive Manufacturing workshop





The financing for Phase 3 of the Mohammed bin Rashid Al Maktoum Solar Park in Dubai has been completed. Marking the latest significant milestone for the Masdar-led consortium, EDF Group's subsidiary, EDF Energies Nouvelles, is developing the 800 MW project in partnership with DEWA.

A sophisticated financing structure has been developed which includes seven different institutions: from the Middle East, the Union National Bank, the Islamic Development Bank and the Arab Petroleum Investments Corporation (APICORP), the commercial banks of Natixis from France, Siemens Bank from Germany, Korea Development Bank, and Canada's export credit agency, Export Development Canada (EDC).

Following the agreement, the third phase of the Mohammed bin Rashid Al Maktoum Solar Park becomes the largest renewable energy project in the Middle East to receive Sharia-compliant financing.

This is now one of the fastest-growing segments of the global financial market.

"DEWA has adopted the Independent Power Producer (IPP) model to build the 800MW third phase of the Mohammed bin Rashid Al Maktoum Solar Park. It has generated international interest from global business and energy companies. The project has also set a global benchmark in solar tariffs at a price of 2.99 US cents per kilowatt-hour. The third phase will be operational by 2020," said HE Saeed Mohammed Al Tayer, MD & CEO of DEWA.

The 16 square-kilometre 800MW photovoltaic plant will be the largest of its kind in the world on completion, generating around 2.5 million megawatthours of electricity per annum on completion. Unlike conventional solar power arrays, the third phase of the solar park will use tilting panels that track the sun, thereby maximising output.

The plant is being delivered in three stages. Considerable progress is being made on site, with drilling and piling works underway for the placement of photovoltaic panels. Completion of Stage A is due in 2018, the 300MW Stage B in 2019, and the final 300 MW Stage C in 2020.

DEWA organised a 3D Printing and Additive Manufacturing Workshop, in cooperation with General Electric (GE). This is part of a Memorandum of Understanding (MoU) that was signed between DEWA and GE last March to collaborate in 3D printing, additive manufacturing, and Industrial Internet technologies. The workshop supports DEWA's 3D Printing plan, in cooperation with the GE Additive Manufacturing Unit. The workshop was attended by HE Saeed Mohammed Al Tayer, MD & CEO of DEWA, Dr. Dalya Al Muthanna, President & CEO of GE Gulf, DEWA's Executive Vice Presidents and Vice Presidents, 50 DEWA staff, and officials from GE Additive Manufacturing Unit.

As per the MoU between DEWA and GE, the two sides collaborate in research and innovation to develop 3D printing, additive manufacturing, and digital technologies including the Internet of Things (IoT), Industrial Internet, Artificial Intelligence (AI), and robotics. This will enhance productivity, efficiency, sustainability, energy efficiency, smart grid integration, and other future technologies and innovations.

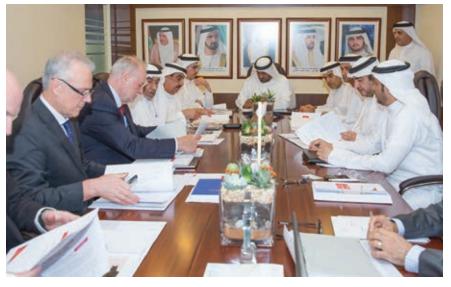
Supreme Council of Energy reviews projects and initiatives to improve energy efficiency in Dubai

HH Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, chaired the Supreme Council's 46th meeting, attended by HE Saeed Mohammed Al Tayer, Vice Chairman of the Supreme Council of Energy.

HE Ahmed Buti Al Muhairbi, Secretary General of the Supreme Council of Energy, and council members also attended.

During the meeting, those present reviewed the strategic projects, initiatives and programmes to enhance energy efficiency in Dubai.

"The meeting reviewed the study to improve the operational efficiency of cooling units in buildings by Etihad Energy Services Company (Etihad ESCO), which specialises in retrofitting buildings in Dubai to increase the share of central cooling in Dubai to 40% by 2030. We also reviewed a proposal to develop a power rating system for existing buildings, which relies on water and electricity consumption, to promote



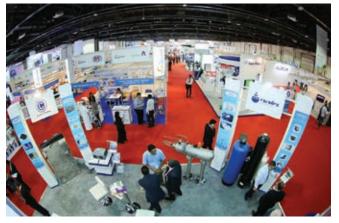
the Building Retrofit Programme, which is part of the Demand Side Management Strategy," said Al Tayer.

Attendees reviewed the results of the visit by a delegation from the World Green Economy Organisation (WGEO) to South Korea's capital city of Seoul, to launch the smart and sustainable cities platform.

At the end of the meeting, they approved the proposed nominations submitted by the Technical Committee of Emirates Energy Award (EEA).

Companies invited to use opportunities and investments provided by WETEX and Dubai Solar Show





DEWA has invited companies and organisations working in energy, water, the environment, and renewable energy to participate and display their products and services at the 19th Water, Energy, Technology, and Environment Exhibition (WETEX) and the 2nd Dubai Solar Show. Companies can benefit from the promising opportunities offered by the UAE and the region, and review key projects and investments that will be announced at the exhibitions, which will be held from 23-25 October 2017, at the Dubai International Convention and Exhibition Centre.

The 18th WETEX and 1st Dubai Solar Show in October 2016, were a remarkable success among exhibitors, visitors, participants and government organisations. The two exhibitions attracted 1,975 exhibitors and 25,000 visitors from 47 countries. They were an important platform for companies and organisations working in sectors such as energy, renewable energy, water, and the environment, to promote their technologies and projects, meet with decision makers, investors, buyers and interested people from around the world, conduct deals and build partnerships, learn about the latest solar-energy technologies, as well as opportunities to take part in solar energy projects and programmes in the region.

WGES 2017 starts on 24 October



القمة العالمية للإقتصاد الأخضر WORLD GREEN ECONOMY SUMMIT

۲۵ – ۲۵ أكتوبر، ۲۰۱۷ ۲۵۱۲ 24 – 25 October, 2017 دين، الإمارات العربية المتحدة – Dubai, United Arab Emirates

The organising committee of the fourth World Green Economy Summit (WGES 2017), which will be held under the patronage of HH Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, organised by DEWA, and the World Green Economy Organisation (WGEO) in collaboration with global partners, has announced that WGES 2017 will be held on 24-25 October at Dubai International Convention and Exhibition Centre. The fourth WGES will be held under

leading change.'

WGES 2017 expects to attract over 3,000 participants, making it the largest in the Miidle East and North Africa. The summit will be held in conjunction with the 19th Water, Energy, Technology and Environment Exhibition (WETEX 2017) and the Dubai Solar Show, as a part of Green Week in Dubai.

"We are responsible for maintaining and increasing success of the previous

the theme 'Driving innovation, three sessions editions of WGES, to reconfirm once more that Dubai is the world's capital of green economy," said HE Saeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme Council of Energy, and Chairman of WGES.

> Over two days, the Summit will discuss various new technologies and solutions. This will not only provide renewable and alternative resources of energy, but it will also offer several ways to make use of productive and eco-friendly technologies.



Suqia

Suqia reviews achievements in Q2 of 2017



The Board of Trustees of UAE Water Aid Foundation (Suqia) held its second meeting for 2017. The meeting was headed by HE Saeed Mohammed Al Tayer, Chairman of the Board of Trustees, and included HE Sultan Al Shamsi, Assistant Minister of Foreign Affairs and International Cooperation for International Development Affairs, HE Dr Arif Al Hammadi, Executive Vice President of Khalifa University, Nasser Lootah, Executive Vice President of Generation at DEWA, Waleed Salman, Executive Vice President of Strategy & Business Development at DEWA, Mohammed Abdulkareem Al Shamsi, Acting Executive Director of Suqia, and Fahad Abdullah bin Afira Al Falasi, Acting Secretary of the Board of Trustees of Suqia.

During the meeting, the Board of Trustees discussed Suqia's projects, under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives, the second quarter of this year, as part of its efforts to contribute to finding sustainable solutions to the problem of water scarcity. Suqia has implemented projects to provide clean drinking water to over 8 million people in 19 countries around the world, in cooperation with leading organisations and charities. These include the Emirates Red Crescent and the Mohammed bin Rashid Al Maktoum Charity and Humanitarian Establishment, which is part of the Mohammed bin Rashid Al Maktoum Global Initiatives Foundation. Suqia distributed 161,111 cartons of water cups as part of the drinking water distribution initiative during the Holy Month of Ramadan 2017.



Interview



Interview with HE Dr Thani bin Ahmed Al Zeyoudi Minister of Climate Change and Environment

How does the Ministry of Climate Change and Environment work to achieve the Government Accelerators' objectives in creating opportunities and solutions to meet the challenges of climate change and the environment?

The Government Accelerators support the implementation of the National Agenda for the UAE Vision 2021. It is an exceptional initiative that aims to transform the work of government institutions from mere service and organisational bodies, to ones that support innovation. research and development, and the industry of the future. This comes under the leadership of HH Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, and the directives of HH Sheikh Mohammed bin Rashid Al Maktoum. Vice President and Prime Minister of the UAE and Ruler of Dubai, and the follow-up of HH Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces.

In line with the UAE's efforts to reduce the impact of climate change and achieve sustainable development, and its global leadership in launching policies and initiatives aimed at reducing carbon emissions, the Ministry of Climate Change and the Environment, in partnership with the industrial sector, is accelerating these efforts. We have been extremely successful in reducing nitrogen oxide in the aluminium industry, under the umbrella of the Government Accelerators. Emirates Global Aluminum (EGA) and General Electric (GE), working in

Al Zeyoudi talks about how Government Accelerators are turning government bodies into enablers of innovation and the future.

cooperation with the Ministry of Climate Change and the Environment, and the Prime Minister's Office, have managed to reduce nitrogen oxide from the company's activities by 12% in just 100 days. This is equivalent to the removal of 336,000 cars from the roads in the country, exceeding the already-established rate of 10%. This success undoubtedly reflects the importance, represented by Government Accelerators, to ensure the achievement of the goals of the National Agenda, according to their specific time frames, including the goal of raising air quality levels by up to 90% by 2021.

What are the main policies and measures taken to rationalise energy and water resource consumption, and contribute to sustainability?

The UAE has taken a wide range of policies and measures to sustain production and consumption patterns, particularly in the field of energy and water, with clear implications for the sustainability of these important resources. In particular, it has included the diversification of energy sources, which culminated recently in the announcement of the UAE Energy Strategy, which aims to achieve the share of clean energy in the national energy mix to half by 2050, enhance energy efficiency at institutional and individual levels by 40%, and reduce greenhouse gas emissions related to energy production by 70%.

These policies also included the adoption of the green economy approach, under the Emirates Green Development Strategy, which aims to transform our national economy into a low-carbon, green economy that knows the true value of environmental resources and ecosystem services, as well as green architecture approaches, sustainable transport, and enhanced resource efficiency, especially energy and water. This can only happen through knowledge-based economy, adoption of carbon capture and storage techniques, climate-smart agriculture, and enhancement of biodiversity conservation efforts to maximise the protection of our natural capital, and strong awareness of the economic, social and environmental risks involved in the production and consumption of unsustainable phenomenon programmes.

Although it is too early to measure the impact of these policies and measures on consumption patterns, there are many signs of optimism for a bright and sustainable future.

What is the Ministry of Climate Change and Environment's mechanism in the use of modern technology and scientific innovations to achieve prosperity for society?

The UAE believes that advanced science, innovation and technology are key to advancing and achieving high levels of prosperity for society. Therefore, our wise leadership has been keen to emphasise the importance of developing science, innovation, and technology in all government plans and projects, and transforming them into incubators for innovation. This trend has been reflected in a number of national strategies, for example, the National Innovation Strategy, the UAE Strategy for the Future, the Government Accelerators, as well as the establishment of centres for enhancing their capabilities.

The Ministry of Climate Change adopts these tools based on the guidance of our wise leadership, and our belief that environmental and climate change issues and the protection of society from the economic and social risks resulting from them, depend mainly on these tools. Therefore, the Ministry was keen to cooperate with all the specialised national environmental institutions and entities to employ science, innovation and technology in their plans and projects to achieve sustainability.

For example, I refer to the use of modern technologies in air pollution monitoring and control projects, agricultural

innovation, food diversification, aquaculture and coral reefs. Sheikh Khalifa bin Zayed Marine Research Centre Hatchery, with its modern technologies and highly-qualified staff play a vital role in the protection of natural resources, biodiversity, waste management and conversion to energy, as well as carbon capture and storage, and many others. It also employs modern technologies in providing and facilitating access to services, for all stakeholders, with the ministry. In addition, the Ministry is keen on promoting scientific research in all areas related to its work, through the establishment of the Emirates Committee for Sustainable Environment Research, which includes representatives from the most important universities and scientific research centres and institutions in the country.

How does your Ministry deal with environmental issues and climate change?

Climate change is one of the most important issues in the UAE because of its impact on the economic sectors and ecosystems. The Ministry of Climate Change and Environment is working hard to lay the foundations for solving this national and international issue.

The Ministry of Climate Change and Environment, in cooperation and coordination with all the institutions responsible, is developing policies and action plans for mitigation and adaptation based on scientific foundations, in order to strengthen our leading role in the region. This takes place through the adoption of policies and projects in renewable energy and nuclear energy for peaceful purposes, carbon storage, and promoting energy and water efficiency.

The UAE National Climate Change Plan. adopted by the UAE cabinet, represents the umbrella of the efforts of all responsible parties in the UAE, to highlight the efforts of the UAE Government to achieve the UAE Vision 2021, to make the UAE one of the best countries in the world by 2021. It also builds on what has been achieved, including the UAE Green Growth Strategy, launched by HH Sheikh Mohammed bin Rashid Al Maktoum, in January, 2012 with the theme Green Economy for Sustainable Development, to make the country's economy green and diversified by 2030.



UNITED ARAB EMIRATES MINISTRY OF CLIMATE CHANGE & ENVIRONMENT

National Climate Change Plan

The objectives of the national climate change plan...

- 0 Manage greenhouse emissions while sustaining economic growth
 - Build climate resilience by minimizing risks and increasing 2 capacity for climate adaptation

Advance the UAE's economic diversification agenda through innovative solutions









Private Sector-Driven Innovative

Diversification Program

2017 The timeline extends as far as 2050... Foundation: Green Agenda The UAE Strategy with short-term goals to be achieved by 2020 2020 for Green Growth 2015 - 2030 2021to align with UAE Vision 2021 Sectoral Climate Actions ..to align with the UAE Green Growth Strategy 2015 2030 2050

Enablers: Means of Implementation



Innovative Green Finance

In the UAE, stronger policies and regulations is required to link bankable projects and financiers in order to further stimulate investment flows into sustainable projects



Capacity Building

Building the capacity of the nation's workforce and shifting to fast-growing green sectors such as clean energy, green manufacturing, and environmental goods and services



(Governance and Monitoring and Evaluation (M&E

The implementation will be overseen by the UAE Council on Climate Change and the Environment (CCCE) as an inter-ministerial, inter-emirate governance body



Awareness Raising and Communications

Effective awareness raising and communications on climate change with all relevant stakeholders from the government, business, and civil society in the course of implementing the Climate Plan



Creating an integrated framework thus serving its effective role in international climate action and enhance its technical capabilities through technology transfer and financing mechanisms

🖌 F 🔚 🗗 @MOCCAEUAE www.moccae.gov.ae

Women's Committee



Khawla Al Mehairi Chairperson of DEWA's Women's Committee

Women's Committee supports DEWA's role in empowering society through women

The UAE attaches great importance to women and makes every effort to enhance their development, in continuation of women's empowerment, which was started by the late Sheikh Zayed bin Sultan Al Nahyan, who was a strong supporter of all women in everything they do.

DEWA is one of the largest organisations in the UAE that support women's empowerment, both professionally and socially;providing support for female staff to ensure a happy and motivating work environment.

The Women's Committee at DEWA contributes to the development of talent, knowledge and skills of female staff, highlighting their achievements and successes. The Women's Committee is an interactive platform, where female staff can discuss different issues that matter to women. It provides personal, psychological, and professional support for them to achieve their aspirations and develop their skills. This is done by using an approach that combines guidance and education, contributing to a vibrant and happy professional environment. This has a positive effect, not only on DEWA, and helps empower society through women.

Our success at the Women's Committee depends on the efforts of DEWA's female staff. We see, first-hand, their sincere dedication. They offer a great deal, both professionally and socially, and add value that contributes to the empowerment of society as a whole. I here remember the inspiring words of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, who once observed that, "Our value in life is defined by what we do. Achievement is similar to love, they both grow by sacrifice and both are essential for life."

With support from DEWA's top management, the Women's Committee adopts a comprehensive approach that explores the different aspects that matter to women. The committee translates them into plans and programmes that develop women's personal and life skills, while supporting them to balance their professional and personal lives. The committee is expanding its scope of work through many initiatives and programmes that cover the administrative and professional aspects of DEWA's female staff, to develop their skills and capabilities. This reflects positively on their happiness, efficiency, and productivity every things they do.

The committee's work is not limited to internal activities and programmes, but also involves exchanging experiences and expertise with other local and international organisations that work in women's empowerment. The committee works to strengthen its relations with other female organisations, and those that support children and families, to achieve social development.

DEWA's Women's Committee strives to enhance communication and cooperation with private organisations that specialise in social, cultural and educational works as well as charitable and non-profit organisations. These efforts support the committee's role in supporting society through women.

Women's Committee projects and initiatives







DEWA's Women's Committee is committed to providing every opportunity to contribute to women's empowerment, and enhancing their role. Through its projects and initiatives, the Committee works to support women's creativity and capabilities, in line with the vision of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, who once said that, "Our job is to provide an environment that unlocks women's potential - one that protects their dignity and femininity, helps them create the necessary balance in their lives, and values their talents and potential. Given this environment, I am confident that women will perform nothing short of miracles."

Committee's projects

'For Her' Exhibition

The 'For Her' exhibition is an integrated and inspiring platform to show women's skills and abilities, especially design, to reflect the high level of creativity, professionalism and excellence of Emirati women. The exhibition was attended by a number of Emirati businesswomen who showed their creative talents in various industries related to women. The exhibition featured different activities where participants reviewed their designs in fashion, perfumes, skin care products, and other female products. In May, the Women's Committee organised the second exhibition, to mark the approach of the Holy Month of Ramadan.

Abayaty

The Women's Committee launched Abayaty, in collaboration with Human Appeal International (HAI), to support underprivileged families. As part of the initiative, DEWA Women's Committee members collect unneeded abayas and package them for delivery to underprivileged families through HAI. The Committee dedicated special locations for collecting abayas including, DEWA headquarters, and its offices in Warsan, Jebel Ali, and the Sustainable Building in Al Quoz, with the help of female volunteers from DEWA staff.



The Pink Caravan Ride

The Women's Committee organised an open day for its female staff about breast cancer. The day, which was organised in collaboration with the Pink Caravan, encouraged women to conduct screening for early detection and treatment of the disease. Activities during the day included screening female staff and a lecture by the Pink Caravan team. Participants received educational leaflets and brochures about the disease, its causes, and how to conduct regular examinations.

Shine & Discover Your Talent

A workshop was organised for DEWA's female staff entitled 'Shine & Discover Your Talent' to discover their talents, and empower them with training and development. The workshop achieved positive results that reflected on the personality of the female employees participating in a number of topics such as 'What is talent and how to recognise it?', 'Discovering talents and strengths,' 'Utilising talents to achieve goals,' and 'Understanding ways to embrace talent to create positive energy in work and life.'

How to Start Your Business?

The Women's Committee and Dubai SME organised a workshop to educate participants with the necessary information to start their own businesses. The workshop included information on marketing strategies, and preparing successful plans to ensure the establishment of a successful project.

'A Drop of Honey' Workshop

The Women's Committee organised a workshop entitled 'Couples Etiquette ... A Drop of Honey', presented by Mohammed Al Marzouki, an etiquette expert, where he spoke about the foundations of a successful marriage. The workshop aimed to spread a culture of marriage and education for building stable and happy family.

Cultural Diversity Day

In cooperation with DEWA Internal Communications, the Women's Committee participated in the World Day for Cultural Diversity, which falls on 21st May, at the UAE zone in the exhibition, which showcased products from 12 different countries.



Women's Committee

DEWA marks World Physical Activity Day 2017

DEWA's female badminton players took part in a friendly tournament with Dubai Health Authority's team, at Dubai Stars Club, to mark World Physical Activity Day 2017, taking place on 6 April each year, and being celebrated this year under the theme Active People Happy People.

DEWA is keen on promoting the positive energy culture by encouraging its employees to take part in such events to acquire positive values, while implementing them in the workplace. Participating in various events, DEWA Women's Committee seeks to contribute to realizing the supreme goals of such events, and raising awareness on the issues they address.

Bushrat Akhtar won the second position in the individual competition. In doubles, Mariam Ahmed Al Noukhada and Aisha Ahmed Shaheen came second, while Puja and Kaltham Al Ketbi came third.



DEWA Women's Committee organises free check-ups as Golden Sponsor for 7th Pink Caravan Ride

As part of DEWA's efforts to contribute to the community and raise awareness on women's health issues, DEWA Women's Committee organised at head office an open day for DEWA's female employees, to have free check-ups for breast cancer, in collaboration with the 7th Pink Caravan Ride. DEWA is participating as a Gold Sponsor in this initiative.

60 female employees participated in the event, undergoing check-ups, and benefitting from advice regarding the misconceptions of breast cancer, its causes, and ways to prevent it.

The 7th Pink Caravan Ride was held under the theme 'Seven Years for Seven Emirates,' and was successful in raising awareness about breast cancer and the importance of early detection of breast cancer, which is one of the most common cancers to occur worldwide.





WHEN YOU GIVE YOU GIVE CHILDHOOD

CLEAN DRINKING WATER CAN CHANGE EVERYTHING. WITH YOUR HELP, WE CAN MAKE IT ACCESSIBLE TO ALL.

SMS 'SUQIA' (DU AND ETISALAT) TO

DONATION AMOUNT	AED 25	AED 75	AED 150	AED 250	AED 500
SMS NUMBER	8025	8075	8150	8250	8500

Above AED 500, deposit into:

Account Name - UAE WATER AID (SUQIA) FOUNDATION Abu Dhabi Islamic Bank - IBAN No. AE43 0500 0000 0001 2001 107 Dubai Islamic Bank - IBAN No. AE58 0240 0165 2008 1625 701 Emirates Islamic Bank - IBAN No. AE46 0340 0037 0755 6269 301

Interview

Investing in Youth is the best investment in the future

HE Shamma bint Suhail Al Mazrui , Minister of State for Youth Affairs, and Chairperson of Emirates Youth Council, talks about how Youth Circles overcome challenges



How does Emirates Youth Council work to achieve Dubai Future Accelerators' objectives in creating opportunities and solutions to meet energy challenges?

The Emirates Youth Council serves as a comprehensive umbrella for young people in the country by drawing up the best policies and developing the best plans to enable them to show their best to serve their country and to translate these policies on the ground, through youth initiatives and projects such as the Youth Circle and the 100 Mentors initiative.

The Emirates Youth Council supports the objectives and initiatives of the federal and local government, through institutional youth councils in many institutions, such as DEWA's Youth Council, which serves as a consulting body to the leadership at DEWA, and supports the achievement of DEWA's objectives, through the introduction of the best ideas and proposals for the implementation of those goals.

DEWA's Youth Council held a Youth Circle in May 2016, under the title 'Youth and Sustainability,' in the presence of HE Saeed Mohammed Al Tayer MD& CEO of DEWA, and several other important personnel from DEWA. We discussed ways to achieve sustainable development in the UAE. We discussed the role of youth in disseminating knowledge, best practices of sustainability through the media, especially social media, and the production of short films on sustainability, as well as its inclusion in works of art.

At the circle, several topics were discussed between the youth and some of DEWA's

senior management. The topics included achieving sustainability as a way of life for young people through simple and easy changes in their lifestyle, the introduction of sustainability within the academic curriculum and the expansion of disciplines in sustainability.

DEWA also organised a youth circle, one of the first youth circles to be organised by a government institution, under the title, Youth 10x, in line with the directives of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to make Dubai the city of the future, and contribute to DEWA's efforts to look ahead and promote sustainable development in Dubai in all its aspects, and promote national identity.

How does the UAE invest in its youth?

I think of His Highness Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, when he said that, in 50 years' time, we will celebrate the export of the last barrel of oil. By this, he meant that we will have energy resources that exceed the value of oil, which are our youth, and that investing in our youth is the best investment for the future. This was why Emirates Youth Council was formed, in addition to the local, institutional and ministerial councils, so that our youth can contribute to the future, by eliminating oil as a source of income and energy, diversifying sources of income, and focusing on renewable energy.

Our youth have proven that they are worthy of our trust, through their local and international achievements, and their participation alongside those with experience in international events in the fields of space, energy, medicine and other areas.

How does the Emirates Youth Council deal with challenges and obstacles facing youth today?

The solutions are made by the youth themselves. Our wise leadership believes that the youth are the best people to create their future, as well as the future of the state, in partnership and cooperation with government leaders and experts.

There is no doubt that our youth are fullysupported and empowered by government and private entities, in accordance with the vision of UAE leadership. However, there are some challenges that may be encountered during their academic years, or their work life. For example choosing the right specialisation and getting their dream job. The Emirates Youth Council interacts with them to find the best



solutions to overcome these challenges. The Mohammed bin Rashid School of Government (MBRSG), in collaboration with the Mohammed bin Zayed Majlis for Future Generations, and in the presence of HE Dr Ahmad Belhoul, Minister of State for Higher Education, held a youth circle entitled Best University Design Challenge.

How does Emirates Youth Council see the youth-related programmes and plans offered by DEWA in Dubai?

DEWA, headed by HE Saeed Mohammed Al Tayer, was one of the first institutions to support youth in various initiatives and plans. DEWA's Youth Council was formed and youth circles were held, under the theme 'Youth and Sustainability,' with the participation of over 150 students. A large number of young employees from DEWA also participated, in conjunction with DEWA's senior management.

The youth circle discussed topics related to DEWA's work, such as sustainable energy and the importance of adding the UAE footprint in all of DEWA's projects. This proves DEWA's senior management's keenness to support youth in the UAE, in general, and, in Dubai, in particular.

I would also like to pay tribute to the scholarship programme offered by DEWA to young people to study the specialisations that fit its work, and support the process of renewable energy in Dubai.

We are also proud that one of the members of the first session of the Emirates Youth Council was from DEWA. She happens to be Fatima Al Joker, who has been credited with conveying the leadership's vision for empowering youth. She also acted as a link between the initiatives implemented by the Council, and DEWA's staff. How many ideas have been submitted by UAE youth since the launch of the ministry until 30 June, 2017, and were these ideas proposed to the state to benefit from them? How many of these ideas were implemented?

The Emirates Youth Council receives youth ideas and proposals and interacts with them through youth seminars held in cooperation with various governmental and private institutions, inside and outside the country. Since its inception, the Council has held over 36 youth circles in over 5 countries, with the participation of over 3,000 young adults. These circles resulted in several achievements, such as the establishment of the first business incubator in Ajman, a partnership between the Council and Saudi Arabia's MiSK Foundation, as well as designing a sponsorship programme sponsored by DP World.

Furthermore, HH Sheikh Mohammed bin Rashid Al Maktoum, launched the national dialogue on youth through Twitter, which attracted thousands of ideas from young people on the topics of empowering and supporting youth in various sectors.

The Council also received youth ideas through the Youth Challenges initiative, where intense brainstorming sessions are held to present ideas about projects, such as the challenge of designing the University of the Future. HE Dr Ahmad Belhoul, Minister of State for Higher Education, attended and emphasised that the proposals and ideas that were put forward in the challenge will be studied by a special team for future implementation.

A challenge to design the world's best youth centre was also put up. The centre will be built at Emirates Towers, under the guidance of HH Sheikh Mohammed bin Rashid Al Maktoum.

Tell us about Youth Circles, since it is a practice adopted by Emirates Youth Council, to interact with youth.

We started youth retreats in October, 2016, as a way to generate ideas. This was when the Youth Circle was organised, in the presence of HH Sheikh Mohammed bin Rashid Al Maktoum, HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai, ministers, officials and decision-makers, along with 100 young men and women, which resulted in the development of the National Youth Agenda.

Youth Circles have become an advanced practice to gather as many creative ideas as possible to develop a policy or overcome a youth challenge. Institutions such as DEWA and the American University of Sharjah (AUS) held youth circles that were also attended by officials.

This resulted in a lot of ideas and proposals to help overcome challenges that may be faced by youth, or to develop action plans to help them unlock their potential.

The Ministry of Education, in cooperation with the Emirates Youth Council, organised a youth circle entitled Student Circle, in the presence of over 90 students.

The circle resulted in over 100 proposals and recommendations to promote academic progress.

We are proud of the cooperation of the Emirates Youth Council with various governmental and private institutions to organise these initiatives, in order to come up with the best suggestions and ideas for the development of institutional work in the country.



Interview



Fatima Mohammed Al Joker Chairperson of DEWA's Youth Council





























Tell us about the establishment of DEWA's Youth Council

DEWA's Youth Council was founded in the beginning of this year as per the directives of HE Saeed Mohammed Al Tayer, MD & CEO of DEWA. The move supports the vision of the wise leadership, to support and empower the youth. His Excellency confirmed during the first meeting of the council that the launch of the council helps us engage with the youth and learn more about their aspirations and ideas and innovate new solutions to ensure their positive contribution in the sustainable development of DEWA.

The Council represents the executive and advisory arm in DEWA's top management addressing youthrelated issues. At first, membership applications from all departments were submitted, and then the candidates were asked to fill an evaluation form. After that, face-to-face interviews took place with all candidates to choose a number of young people, equally split between the two genders, and fairly representing all DEWA departments and sectors.

What are the short-term and long-term goals of the Council?

The council seeks to achieve many objectives in order to advance the development of DEWA and implement its strategic directions and realise its values. Ultimately, the council aims to provide a better incubator environment to realise our youth's dreams and aspirations, and enable them to play key roles in their development. The council opens a direct channel of communications to highlight their role and utilise their capabilities and talents for DEWA. It also aims to develop initiatives and projects specifically related to youth's interests.

Please tell us more about the annual agenda of the council.

The Council prepared its annual agenda during the recently-held youth retreat organised by the council, based on 5 core themes: continuous education, career development, values and national identity, sustainability, and innovation and future anticipation. Every theme is part of the agenda that was created, based on talks with young people, to include their own requirements in the council's work plan.

Who are the members of the council and what is their mission?

The Council is represented through 12 members, 6 males and 6 females, who belong to different departments in DEWA, to ensure that all departments are well represented in the council. Their mission is distributed in three committees: communications committee, events and initiatives committee, and statistics and research committee.

HE the MD&CEO of DEWA has appointed these members after thorough assessment and evaluation process:

- Abdulaziz Salem Alhosani, Senior Officer, IT Security, Innovation & The Future 1. 2. Abdullah Sultan Al Suwaidi, Senior Engineer, Projects, Water and Civil 3. Afra Al Shamsi, Internal Auditor, Internal Audit 4. Ahmad Mana bin Ahmed, Senior Operator, Power Stations, Generation 5. Ali Saeed Al Marri, Senior Executive, Billing Services 6. Anood Ahmed Al Marzougi, Senior Executive, Strategic Planning & Performance Management-Distribution Power Fatma Mohammad Al Alili, Deputy Manager - Corporate Excellence, Strategy 7. and Business Development 8. Hessa Salem Al Saleh- Senior Executive- Employees Happiness – Human **Resources & Business Support** Majid Al Hajri, Engineer, Network Analysis- Power & Water Planning 9. 10.
- 10. **Marwan Juma bin Doei** Senior Executive- Corporate Sponsorship Marketing and Corporate Communications
- 11. **Maryam Ali Abdulqader**, Engineer Transition Cable Maintenance Transmission Power
- 12. Maryam Ali Al Falasi- Accounts officer Debit Advice Finance

What are the main youth related issues the council is working on?

Currently, the council is working to highlight a number of issues and challenges. The United Arab Emirates is a young country that was built by young Emiratis. In a society full of changes and developments, it is our responsibility as young people, to always be alert, and keep up with the worldwide developments so our country maintains its leadership position in all domains.

Through my participation as a member in the council and a Coordinator-General for Dubai Youth Council, we seek to turn all challenges into opportunities for the youth of this country.

How can we take advantage of youth's abilities to support the development process?

There is no doubt that DEWA is lucky to have a large number of young talents and skills that must be utilised and harnessed. The only way to benefit from these capabilities is to have a unified body to highlight each and every talent in its own capacity, which was achieved by the establishment of the Council. HE Shamma Al Mazrui, Minister of State for Youth Affairs and Chairman of the Emirates Youth Council, confirmed this in several forums, stressing that our wise leadership supports young people, and listens to them and wants them to be part in servicing the nation.

Since the establishment of the council at the beginning of this year, what are the main achievments attained

There is no doubt that the achievements of the Council have always been focused on direct communications with the youth, which is the supreme objective that the Council seeks to achieve.

DEWA's Youth Council is proud to be the first government agency to adopt such an initiative at this level of government, which has achieved a satisfaction rate exceeding 94%. The Youth Retreat has highlighted the views and interests of young people, and contributed to the development of the Council's plans and projects.

It also reaches three different categories of young people in DEWA: the employees aged 21-29, scholarship students and DEWA secondary school students.

The Council also launched an interactive online campaign called 'My Thoughts

"The council seeks to achieve many objectives in order to advance the development of DEWA."





for Youth,' which provided a unified and sustainable platform for young people in DEWA, including presenting young people's ideas and communicating them to the relevant departments in DEWA.

In addition, the Council has recently implemented a field visits initiative for all the branches of DEWA, in a series of direct encounters with youth, with a view to informing them of the Council's plan, identifying the challenges they face and how to turn them into opportunities for continuous progress and improvement.

The Council also announced the DEWA Policy for Youth Support and Empowerment, which was approved by the MD & CEO of DEWA, in line with the Government's directives towards good governance. This policy is the general framework of DEWA's role in supporting the youth.

What about DEWA's role in supporting youth?

DEWA has always paid great attention to youth. DEWA is a pioneer in supporting young people even before establishing the youth council. DEWA has been providing grants, sponsorships and scholarships for the outstanding students; constantly seeking to refine and develop young talents and abilities through continuous training and development.

What is the council's future plan?

Fo its future plan, the Council aspires to oversee and implement youth initiatives in DEWA. Having direct connections with the youth is also one of the most important pillars of the Council's future plans.

This plan also supports the words of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, who said that, "Governments cannot carry out sustainable development without meaningful partnerships with the youth."