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creating green communities for a better tomorrow

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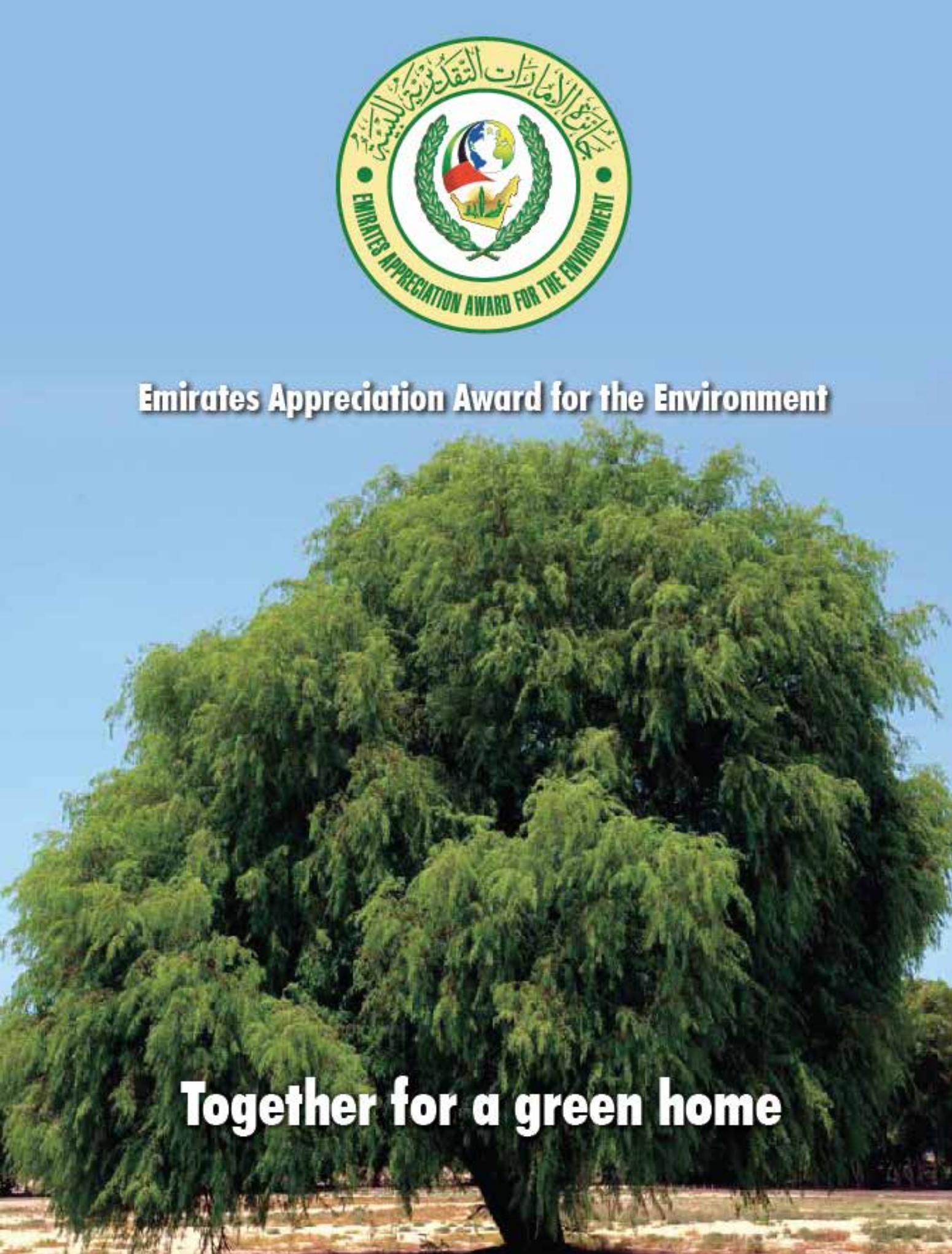
جائزة الإمارات التقديرية للبيئة
EMIRATES APPRECIATION AWARD FOR THE ENVIRONMENT
Emirates Appreciation Award for the Environment
Together for a green home

Chairman's Message

Prof. Mohammed bin Fahad
Executive Editor

With the recent launch of the world's largest single-site Concentrated Solar Power project costing Dh14.2 billion in Dubai, the UAE has firmly entrenched its position as a sustainable energy pathbreaker, and demonstrated to the world, the nation's commitment to the production of clean and renewable energy.

Investing in clean energy is one of Dubai's and the UAE's biggest strategic priorities. From establishing Masdar some 11 years ago in Abu Dhabi, to building wind and solar farms in the UAE as well as other Arab countries, and launching the Mohammed Bin Rashid Solar Park with a plant capacity 5,000MW by 2030, the UAE is looked at as a pioneer in renewables.

The UAE Energy Strategy 2050 aims to develop an energy mix that combines renewable, nuclear and clean energy sources to balance economic requirements and environmental goals. Accordingly, the government will spend hundreds of billions of dirhams over the next three decades to support various solar, nuclear and clean coal initiatives. Earlier this year, Dubai unveiled the implementation plan of the Dubai Clean Energy Strategy 2050 which seeks to produce 75% of Dubai's total power output from clean energy sources by 2050.

Such ambitious projects have been made possible only because the UAE's wise leadership has worked tirelessly to anticipate the future. Today, the UAE leads international efforts in clean and renewable energy, as a result of its strategies and investments.

The vision of UAE President HH Sheikh Khalifa bin Zayed Al Nahyan and HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has been both an inspiration and a guiding beacon in the nation's march towards a sustainable and green future.

Ensuring the sustainability of energy resources guarantees the sustainability of our country's growth, and we have to thank the vision of the UAE's wise leadership in playing a key role in strategic planning, to ensure a sustainable future for generations to come.

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es for a better tomorrow

From the **Managing Editor**

Dr. Meshgan Al Awar
Secretary General
Zayed International Prize for the Environment

"We must plant the seeds today for future generations to grow and prosper tomorrow."

- HH Sheikh Mohammed bin Rashid Al Maktoum

As the UAE takes its first steps towards realizing the UAE Centennial 2071 goals - a long-term government plan aimed at sustaining UAE's development into its 100th anniversary - we must salute the confidence and courage shown by our visionary leaders for prioritizing what is required in ensuring the nation's environmental and sustainable development.

The Centennial 2071 Plan is a remarkable blueprint for long-term social, economic and environmental development that will ensure better living standards for future generations and a sustainable society that is based on sound values. Empowering citizens with world-class education and positioning the UAE as a major economic leader by adopting advanced science and technology solutions, innovating consistently, and investing in entrepreneurship and environmental sustainability, the Plan seeks to position the UAE among the world's leading countries.

The newly announced Dh500 million Mars Science City project also falls within the UAE's objectives to lead the global scientific race to take people to Mars and relies on the capacity of our youth in achieving national aspirations. As a scientific researcher, with experience at NASA, I am proud to see our country leading in the field of technological innovation which is essential for accelerating the transition to a green economy.

The milestones the nation has achieved through advanced energy efficiency solutions by adopting initiatives in renewable and clean energy, has been lauded at the global level. By promoting policies that are environmentally friendly and socially inclusive, while at the same time realising healthy economic growth, the UAE has fulfilled all the parameters of nurturing the growth of a sustainable economy.

The role of innovative solutions and new technologies in supporting the transition to the green economy cannot be stressed enough but we must also commend the strong leadership in the UAE for helping shape this growth and leading the change with viable solutions that promote and enhance green growth.

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Cover Story

Dubai launches world's largest Concentrated Solar Power plant

HH Sheikh Mohammed bin Rashid launches world's largest single-site Concentrated Solar Power project costing Dh14.2 billion in Dubai.

"The implementation of the largest CSP plant in the world demonstrates the UAE leadership's commitment to the production of clean and renewable energy, and entrenches our place among the most advanced countries in this industry."

His Highness Sheikh Mohammed bin Rashid Al Maktoum

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, announced the launch of the biggest Concentrated Solar Power (CSP) project in the world, on 16th September, 2017.

Based on the Independent Power Producer (IPP) model, the ambitious 700MW project, worth AED14.2 billion, is the fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park.

To be implemented by Dubai Water and Electricity Authority (Dewa), the largest single-site project will generate 700 megawatts (MW) of power when completed.

The project is considered an integral part of the emirate's Clean Energy Strategy 2050 and will include the world's tallest solar tower, standing 260 metres tall, and a Dh100 billion fund to finance the plan.

A total of Dh500 million will be allocated, as part of the project, for research and development works in in the field of smart

THE PLANT is due to be operational by 2020 and will cost AED14.2 billion to build.

networks and improvement of energy efficiency over the course of the coming period.

His Highness Sheikh Mohammed highlighted the UAE's model for sustaining a green economy based on environmental sustainability and clean energy. The UAE has a clear strategy for implementing and further developing this model to maximise its benefits, in addition to investing in infrastructure, building capabilities and developing specialised local talent.

"We have made steady progress in realising the goals of Dubai Clean Energy Strategy 2050 that was launched as part of our objective to transform Dubai into a global clean energy and green economy hub. The carbon footprint of Dubai will be the lowest in the world by 2030," said Sheikh Mohammed. "We are proud that by demonstrating their capabilities, our local talent have proved that they are ready to assume responsibility," he added.

"The implementation of the largest CSP plant in the world demonstrates the UAE leadership's commitment to the production of clean and renewable energy, and entrenches our place among the most advanced countries in this industry," His Highness Sheikh Mohammed bin Rashid said.

"We will continue to implement projects that serve comprehensive development directions in our state and advances the ambitious goals we have set for the future, which we will start implementing today," he added.

"We are moving ahead with confident steps towards the

Quick Facts:

- The Mohammed Bin Rashid Al Maktoum Solar Park is the largest generator of solar energy in the world from a single location, with a capacity to produce 5,000MW by 2030, and total investment of Dh50 billion.
- The world's most ambitious Concentrated Solar Power (CSP) project will be implemented in Dubai.
- It will cost Dh14.2 billion to build and deliver 700 megawatts (MW) of power.
- The project aligns itself with a much larger goal of making Dubai the most environmental friendly city by 2050.
- By 2050, 75% of energy in Dubai will come from clean sources.
- Dubai Electricity and Water Authority (DEWA) will implement the project; it has awarded the contract for the construction of the project to a consortium that includes Saudi Arabia's ACWA Power and China's Harbin Electric.
- The project will achieve the lowest cost price of energy, at 7.3 US cents (around 26 fils) per kilowatt.

Dubai Clean Energy Strategy 2050, which we launched with the aim of transforming Dubai into a global centre for clean energy and green economy while making it the city with the lowest carbon footprint by 2050.

It is a source of pride to see the objectives we aspire for turning into tangible reality at the hands of our national cadres, who have proven to be highly efficient and manifested their excellence in various fields," His Highness Sheikh Mohammed added.

Record bid of USD 7.3 cents per kW/h to generate 700MW

The Dubai Electricity and Water Authority, DEWA, has achieved another world record by awarding the fourth phase

The Concentrated Solar Power project underlines UAE's efforts and leadership on the world stage in producing clean and renewable energy.

of the Mohammed bin Rashid Al Maktoum Solar Park to a consortium comprising Saudi Arabia's ACWA Power and China's Shanghai Electric.

The consortium bid the lowest Levelised Cost of Electricity, LCOE, of US$7.3 cents per kilowatt hour (kW/h). The project will have the world's tallest solar tower, measuring 260 metres. The power purchase agreement and the financial deal will be completed soon. The project will be commissioned in stages, starting from the fourth quarter of 2020.

"The awarding of this strategic project supports the vision of Sheikh Mohammed to promote sustainability and make Dubai a global centre for clean energy and a green economy. This vision is supported by the Dubai Clean Energy Strategy 2050 to increase the share of clean energy in Dubai's total power output to 7 percent by 2020, 25 percent by 2030, and 75 percent by 2050," Saeed Mohammed Al Tayer, MD and CEO of DEWA, remarked.

"Our focus on renewable energy generation has led to a drop in prices worldwide and has lowered the price of solar power bids in Europe and the Middle East. This was evident today when we received the lowest CSP project cost in the world," Al Tayer added.

The Mohammed bin Rashid Al Maktoum Solar Park is the largest single-site solar park in the world, based on the IPP model. It will generate 1,000MW by 2020 and 5,000MW by 2030.

Cover Story

Nomination deadline comes to a close for 3rd cycle of Emirates Appreciation Award

The deadline for receiving nominations for the 3rd cycle of the Emirates Appreciation Award for the Environment has come to a close; winners to be announced in December.

Chaired by Prof. Dr. Mohamed Ahmed bin Fahad, Chairman of the Higher Committee of the Zayed International Foundation for the Environment, a Higher Committee meeting was held recently in the presence of the Deputy Chairman, Mr. Ahmed Mohamed Rafie; Dr. Meshgan Al Awar, Secretary General of the Zayed International Prize for the Environment; and Eng. Hamdan Khalifa Al Shaer, Secretary General of the Emirates Appreciation Award for the Environment.

Other members of the Higher Committee attending the event included Dr. Khaled Ahmed Omar, Legal Advisor; Eng. Mariam Mohammed Saeed Hareb, Dr. Saleh Al Hamrani, Eng. Alia Abdulrahim Al Harmoodi and Eng. Aseela Abdulla Almualla and Dr Eisa M. Abdellatif, Chief Technical Advisor, Zayed International Prize for the Environment.

The meeting was held to discuss the nominations deadline for the third cycle of the Dhs 1 million Emirates Appreciation Award for the Environment, which concluded on August 31st. Several hundreds of nominations in the various categories of Environmental Personality, Industrial Enterprise, Educational Institutions, Innovation/Invention and Environmental Research, and Media and Environmental Awareness have been received till date.

Dr. Fahad explained that a Technical Committee will begin to sort and evaluate nominations that will then be presented to the Jury for final selection of winners in all the five categories. The names of the winners will be announced at a press conference in December. The winners are

THE WINNERS of the 3rd cycle of the Emirates Appreciation Award for the Environment will be announced in December.

likely to be honored at a ceremony held in January 2018.

The Emirates Appreciation Award for the Environment was established under the patronage of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai to stimulate and appreciate the pioneering national initiatives and best practices aimed at protecting environment and achieving the sustainable development in the U.A.E.

He added that the award had achieved an amazing success in its previous cycles and honoured elite personalities and foundations, who participated successfully in the national environmental work in the U.A.E.

Presiding over the meeting, Dr. Fahad also pointed out that the Zayed Foundation looks forward to celebrating the Year of Zayed in 2018 as announced by President H.H. Sheikh Khalifa bin Zayed Al Nahyan with exceptional new projects and initiatives inspired by the legacy of environmental stewardship practiced and implemented by the founding father of the nation.

Discussing his recent visit to Khartoum, Sudan, Dr. Bin Fahad also spoke of the initiative undertaken by the Zayed Foundation for activating regional cooperation to combat desertification via tree planting within the Pan African Great Green Wall (GGW)I, taking advantage of the elaborate UAE experience in desert greening and the Zayed Foundation's experience in planting millions of trees in the UAE as part of the Dubai Million Trees Planting Initiative.

Launch

Work mechanism to achieve UAE Centennial 2071 goals approved

HH Sheikh Mohammed bin Rashid Al Maktoum and HH Sheikh Mohamed bin Zayed Al Nahyan take first step in UAE Centennial 2071 journey; work progress to be reviewed during the next annual meetings.

Vice President, Prime Minister and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, have announced the start of the journey toward realising the UAE Centennial 2071 goals.

Speaking at the end of the 1st edition of the UAE Government's Annual meeting in Abu Dhabi, Sheikh Mohammed bin Rashid said, "In order to achieve our UAE Centennial 2071 objectives, we need to work together as a team, each taking a part in making the UAE the best country in the world. We believe in our national capabilities and seek to empower national cadres ready to lead the future, today."

He continued, "We want the best government, the best education, the happiest society and the best economy in the world. We aspire to build a global economic powerhouse."

Sheikh Mohamed bin Zayed said, "The UAE has full confidence in, and supports completely, the young generation of our citizens who will pursue, and achieve, the UAE Centennial 2071 goals."

He continued, "We aim to nurture and prepare our young people to be confident of their national identity, empowered with world-class education and able to pioneer the future, positioning the UAE among the world's leading countries. They will unleash their energies and dedicate their efforts to achieving excellence and realising the ambitious vision of our leadership."

The UAE Centennial 2071 strategy

THE UAE Centennial 2071 goals include positioning the UAE as a major economic leader by adopting advanced science and technology solutions.

and highlights concluded the two-day UAE government annual meetings, held in Abu Dhabi on September 26th and 27th.

UAE Centennial 2071 aims to secure a happy and prosperous future for many more generations by providing citizens with the highest academic opportunities, and endorsing positive and ethical communities.

The goals behind UAE Centennial 2071 are for the UAE to have the best education in the world, the best economy, the happiest communities, and the best government. Clear and practical steps will be outlined in order to achieve these goals with the highest standards and utmost efficiency.

Top amongst the UAE Centennial 2071 priorities is for the UAE to offer the best education in the world, in order to empower future generations. Specific resources and investments will be dedicated to improving the education system focusing on technology and Artificial Intelligence, in order to provide future generations with tools to contribute to serving the nation and building its future.

The UAE Centennial 2071 goals also include positioning the UAE as a major economic leader, with the best global economy, by adopting advanced science and technology solutions, innovating consistently, and investing in entrepreneurship and environmental sustainability, among others.

The plan also seeks to fuel the economy through competitive environmental, digital and physical infrastructure, establishing the UAE as a hub for innovation and entrepreneurship, and ensuring sustainable development in order to prosper in the future.

Happiness is an important priority in the UAE Centennial 2071 plan, which will invest in community happiness through cohesive families, tolerance and a solid national identity. It seeks to provide young citizens with all the tools to be happy ambassadors of the UAE, enriched in their knowledge and lifestyle.

The UAE Centennial 2071 plan also focuses on solidifying future generations' national identity, embracing the values rooted in Emirati culture, including positivity, peace, humility, respect, tolerance, generosity, leadership, determination, perseverance, loyalty and patriotism, as inspired by the UAE's wise and ambitious leadership.

The plan also stresses the important role that the UAE government plays in achieving happiness for its citizens by empowering people, ensuring securing and stability, harnessing the potential of advanced science and technology to improve quality of life, and providing the social services and legislation needed to establish the UAE as the best country in the world.

The annual meetings for the UAE government were held in Abu Dhabi. The meetings constituted the largest governmental gathering of its kind in the UAE, and introduced over 120 federal and local government initiatives in 30 sectors in response to national goals and challenges. The meetings saw the launch of strategies including the UAE Soft Power Strategy, the Emirates Higher Education Strategy, the Fourth Industrial Revolution Strategy and the UAE Water Security Strategy 2036.

Al Ain Oasis saves 75% of resources used in farming

For years, Al Naboodah Group Enterprises (ANGE), one of the UAE's oldest and most respected family conglomerates with a diverse portfolio of businesses, has been entrusted with maintaining the prestigious Al Ain Oases date plantations – part of the first listed UNESCO World Heritage Site in the UAE, and operated by the Al Ain City Municipality. Covering 3,000 acres, and more than 184,000 date palms, ANGE has long since committed to embedding sustainable practices at the Al Ain Oases, preserving a treasured piece of UAE heritage while embodying the UAE's 2021 Vision.

Managed by the Group's agriculture business, ANGE's sustainability efforts at the oases ensure that almost 75% of natural resources are saved. The Group has reduced pesticide use from 140,000 litres per day to just 18,000 litres, and minimised wastage by re-using portions of trimmed leaves for livestock feed.

Almost every part of fallen or trimmed date plants is re-used: trunks used for furniture and planters for flowers; and leaves being re-purposed into ropes, or used to create barasti fencing and roofing for traditional buildings. Additionally, leaves are also up-cycled to create ornaments, baskets and furniture, preserving traditional Emirati handicraft techniques.

Buti Al Naboodah, Deputy Chief Executive Officer: Commercial for ANGE commented: "Our passion to preserve Emirati culture is demonstrated throughout Al Naboodah Group Enterprises' operations, and we are proud to protect the culturally significant Al Ain Oases date plantations. We cultivate the land to pay homage to our heritage while ensuring this legacy for many future generations to come. Through these initiatives we seek to enhance the community we live in and work towards establishing a sustainable future for us all."

Al Naboodah Group Enterprises' agriculture business is in strategic partnerships with several other municipalities across the UAE in Ras Al Khaimah, Fujairah and in Al Dhaid to assist in protecting agricultural resources.

Innovation

UAE launches Mars Science City dedicated to researching Mars colonization

HH Sheikh Mohammed bin Rashid describes Mars Science City as an "extraordinary national project" that would cover 1.9 million square feet.

"We believe in the potential of space exploration, and in collaborating with global partners and leaders in order to harness the findings of this research and movement that seeks to meet people's needs and improve quality of life on earth."

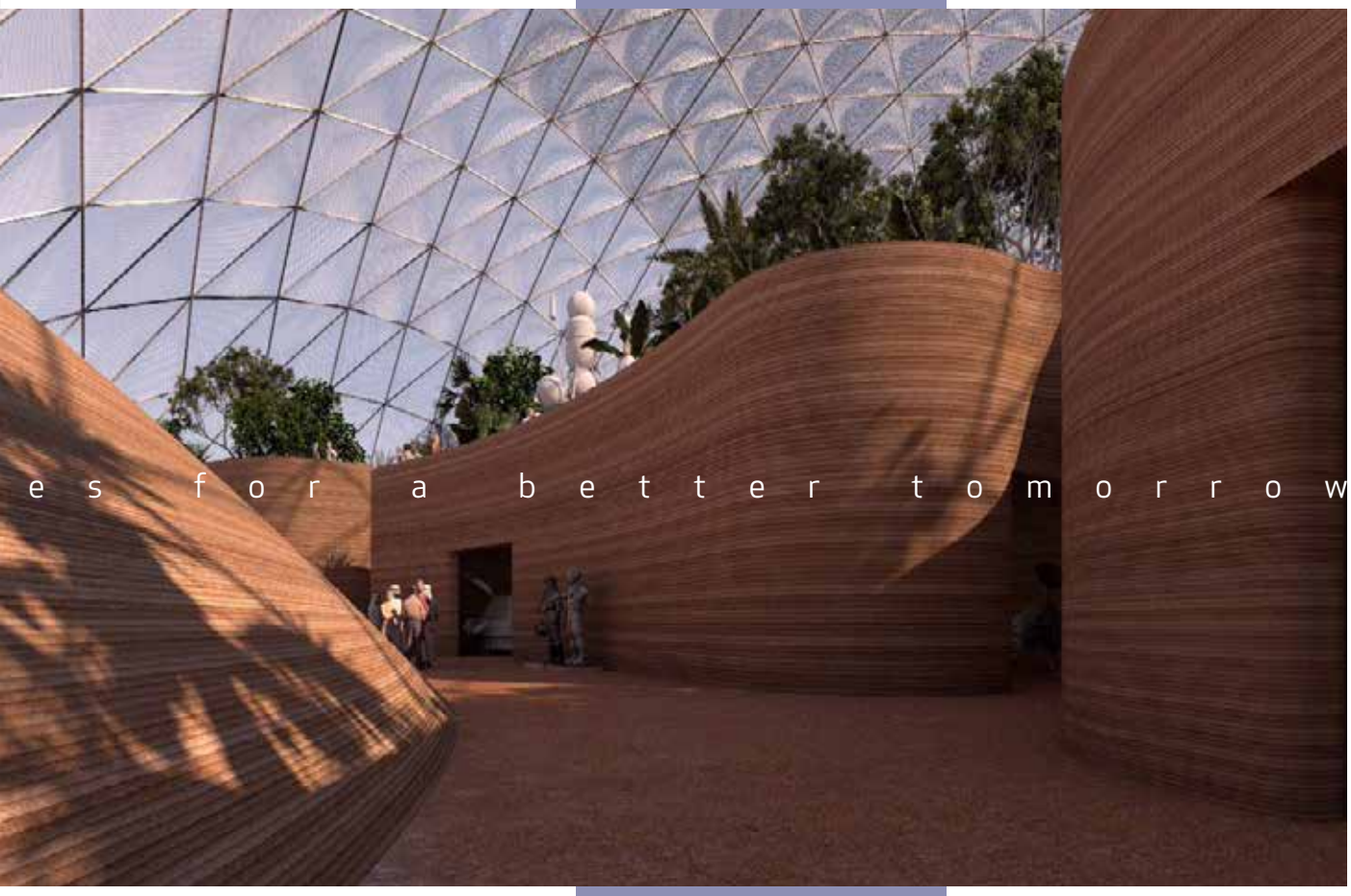
- His Highness Sheikh Mohammed bin Rashid Al Maktoum

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, launched the Mars Science City project on 26th September, 2017.

The AED 500 million-City will cover 1.9 million square feet, making it the largest space stimulation city ever built and will provide a viable and realistic model to simulate living on the surface of Mars.

The project, which was unveiled at the annual meetings for the UAE government in Abu Dhabi, encompasses laboratories for food, energy and water, as well as agricultural testing and studies about food security in the future.

The science city will also boast a museum that displays humanity's greatest space achievements, including educational areas meant to engage young citizens with space, and inspire in them a passion for exploration and



THE MARS Science City structure will be the most sophisticated building the world, and will incorporate a realistic simulation environment replicating the conditions on the surface of Mars.

discovery. The walls of the museum will be 3D printed, using sand from the Emirati desert.

At the meetings, Sheikh Mohammed bin Rashid said, "The UAE seeks to establish international efforts to develop technologies that benefit humankind, and that establish the foundation of a better future for more generations to come. We also want to consolidate the passion for leadership in science in the UAE, contributing to improving life on earth and to developing innovative solutions to many of our global challenges."

He continued, "The UAE is a great country with vision and understanding of the challenges we face and the rapid changes our world is experiencing. We believe in the potential of space exploration, and in collaborating with global partners and leaders in order to harness the findings of this research and movement that seeks to meet people's needs and improve quality of life on earth."

"The new project is another step in the UAE's leading contributions to the global science movement; we seek to set an example and motivation for others to participate, and contribute, to humanity's march into space," he concluded.

Sheikh Mohamed bin Zayed said, "We have great confidence in our national work teams, and Emirates Mars Mission prove that our youth are trustworthy and capable of achieving national ambitions."

The Mars Science City project falls within the UAE's objectives to lead the global scientific race to take people to Mars, and is part of the Mars 2117 Strategy, launched during the fifth World Government Summit, which seeks

to build the first settlement on Mars in the next 100 years.

This project will include advanced laboratories that stimulate the red planet's terrain and harsh environment through advanced 3D printing technology and heat and radiation insulation.

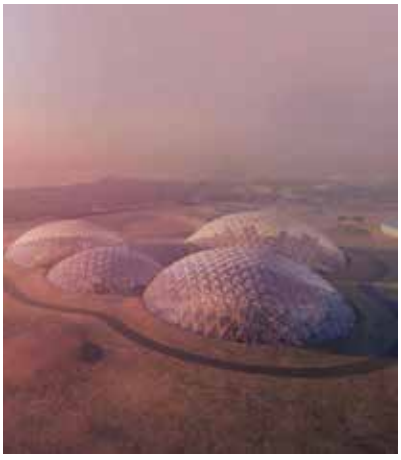
It seeks to attract the best scientific minds from around the world in a collaborative contribution in the UAE to human development and the improvement of life. It also seeks to address global challenges such as food, water and energy security on earth.

The plan for the Mars Science City project includes an experiential element which will involve a team living in the stimulated red planet city for one year. It is hoped the experience will form an important reference model for future innovation around sustaining life in a hostile planetary environment. A range of experiments are to be devised which will lead to innovation around self-sufficiency in energy, water and food.

The Mars Science City structure will be the most sophisticated building in the world, and will incorporate a realistic simulation environment replicating the conditions on the surface of Mars.

The city will consist of several domes, with innovative construction techniques providing support for the structures.

A team of Emirati scientists, engineers and designers, led by a team from the Mohammed bin Rashid Space Centre and Dubai Municipality, will carry out the project, in cooperation with internationally renowned architects Bjarke Ingels.



Environmental Youth Champions Programme to raise awareness on climate change amongst youth

Waha Capital, a leading investment company based in Abu Dhabi, has partnered with the Emirates Wildlife Society in association with WWF (EWS-WWF) to launch the Environmental Youth Champions Programme.

The programme aims to raise awareness of climate change issues and encourage scientific study among youth in the UAE. Inspired by the "Year of Giving", Waha Capital has committed to supporting the Emirates Wildlife Society, as well as encouraging its employees to assist in the execution of the programme and engaging with youth through research and practical activities related to the environment and sustainability.

According to Amer Aidi, Head of Marketing & Corporate Communications at Waha Capital, "EWS-WWF has designed an excellent initiative that addresses two crucial issues for our future - climate change and science education. We hope our partnership will help make the Environmental Youth Champions Programme a real success, and that it will leave a lasting impression on the young people involved."

The Environmental Youth Champions Programme focuses on engagement with the country's youth, supporting their hopes and aspirations to face the challenges of climate change. The programme is comprised of an inspirational lecture, a sustainability board game workshop and a two-day field experience that is made up of scientific research, theoretical lectures and lab work, covering a variety of climate change modules through the Future Scientists Programme.

"Climate change is one of the biggest threats to humanity and life as we know it today in the UAE and things will only get worse if we don't act. The good news is there is still time to make a difference – 2017 has been declared the "Year of Giving" in the UAE and as an organisation we are working with partners - such as Waha Capital - to positively contribute to the environment and society," commented Laila Mostafa Abdullatif, Director General at EWS-WWF.

Water Security

Ministry of Energy unveils UAE Water Security Strategy 2036

The UAE Water Security Strategy 2036 aims to ensure sustainable water supply and increase water productivity with the objective to reduce total demand for water resources by 21 percent.

On 27th September, the Ministry of Energy unveiled the UAE Water Security Strategy 2036, which aims to ensure sustainable access to water during both normal and emergency conditions in line with local regulations, standards of the World Health Organisation, and the UAE's vision to achieve prosperity and sustainability.

The announcement was made at the UAE Annual Government Meetings held last month in Abu Dhabi. The overall objectives of the strategy are to reduce total demand for water resources by 21 percent, increase the water productivity index to $110 per cubic meter, reduce the water scarcity index by three degrees, increase the reuse of treated water to 95 percent, and increase national water storage capacity up to two days.

Suhail Mohammed Al Mazrouei, Minister of Energy, affirmed, "The UAE Water Security Strategy 2036 came as a result of consolidated efforts between federal and local water authorities to explore and define a vision for the water sector in the UAE and to ensure adaptability to future demands on water resources."

He added, "The strategy aims to ensure sustainable water supplies in various circumstances to meet the needs of the community and the economic prosperity of the UAE."

Al Mazrouei pointed out that the comprehensive, long-term strategy covers all components of the water supply chain throughout a time frame of 20 years. It focuses on three main programs: the Water Demand Management Program, the Water

THE WATER Security Strategy 2036 seeks to encourage initiatives focusing on water efficiency, waste reduction and behavioural change.

Supply Management Program and the Emergency Production and Distribution Programme.

The strategy also tackles policy development, legislation, water conservation awareness campaigns, use of advanced technologies, innovation, and building national capabilities in the field of water security.

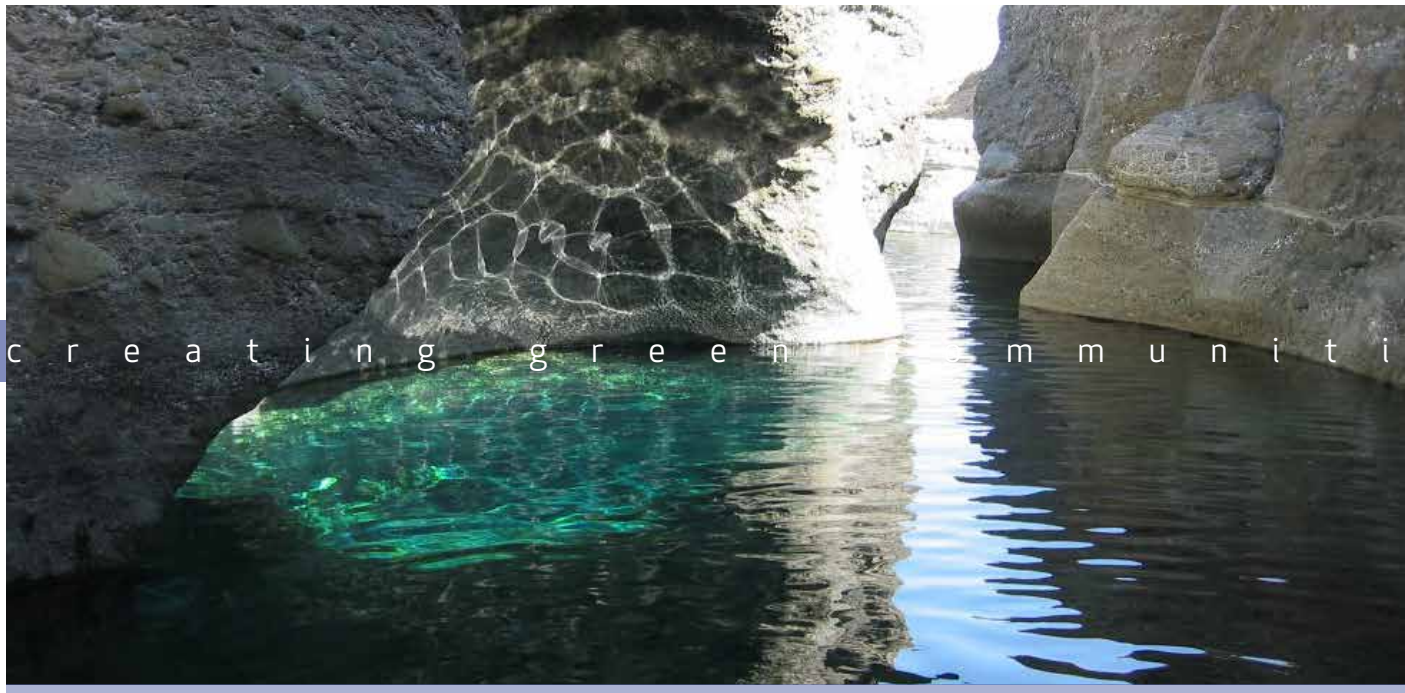
"The Water Security Strategy 2036 seeks to reduce average consumption per capita by half as well as focus on sustainable practices, for instance one of its key aims is increasing the reuse of treated water to 95 percent," Al Mazrouei explained.

The strategy seeks to develop a storage capacity for the water supply system that lasts for two days under normal conditions, which would be equivalent to a capacity of 16 days in emergency situations, and enough to supply water for more than 45 days in extreme emergencies.

Water networks will be able to provide 91 liters of water per person per day in cases of emergency, or 30 liters per person per day in cases of extreme emergencies. The strategy also includes the establishment of 6 connecting networks between water and electricity entities across the UAE.

Once implemented, the Water Security Strategy 2036 will achieve savings of AED 74 billion and reduce the emissions of carbon dioxide (CO2), associated with water desalination process, by 100 million metric tons.

The long-term strategy addresses the challenges of future water security taking into account a number of concerns which include



the scarcity of freshwater resources, depletion of groundwater, high water demand, high water consumption per capita and high water losses in the water system due to efficiencies in both irrigation and usage of treated water.

The Water Security Strategy 2036 seeks to encourage initiatives focusing on water efficiency, waste reduction and behavioural change. It will also introduce reforms to current water subsidies that have a negative effect on the sustainable development and the environment.

A number of programmes will be launched to ensure the protection of non-renewable groundwater, the development of non-traditional and sustainable water sources, increasing the use of renewable energy in the water sector, and ensuring compliance with water quality standards.

The strategy also takes into account strategic water storage and transport improvements, as well as prevention of tainting of water supplies as a result of oil pollution.

'UAE exerts significant efforts to reduce impact of climate change and achieve sustainable economic growth'

Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, has praised the efforts of Vice President and Prime Minister of the UAE and Ruler of Dubai, HH Sheikh Mohammed bin Rashid Al Maktoum, as well as HH Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, in launching visionary strategies and initiatives that enhance the country's development model in order to achieve the goals of the UAE Centennial Plan 2071.

In a statement Dr. Al-Zeyoudi said, "The participation of MOCCAE in the meetings and workshops associated with the Annual Meetings of the UAE Government is aimed at proposing initiatives related to the environmental conservation efforts of our nation. We aim to contribute to the conversation through suggesting viable solutions for mitigating the impact of climate change.

"This, we believe, is the need of the hour given the alarming consequences of global warming that pose an important development challenge to many countries. The unusually high temperatures that are being recorded across the world, as well as fluctuating rainfall rates and increasingly violent weather events, are anticipated to affect the economic and social sectors in the short and the long term.

"The UAE continues to exert significant efforts to reduce the impact of climate change and achieve sustainable economic growth. Our leadership is committed to lessening carbon emissions, investing in clean and renewable energy projects, developing green cities and buildings and adapting to climate change through expanding green areas within the framework of the UAE Vision 2021.

"The UAE National Climate Change Plan 2050 developed an integrated national framework to unify efforts and to identify priorities, fill gaps and ensure co-operation between the public and private sectors to serve the country's interests at the domestic and international levels.

Climate Change

Dubai to launch climate adaptation strategy

Dubai Municipality says strategy is part of plan to make emirate the environmentally cleanest city by 2050.

Dubai Municipality has announced that it is in the process of developing a climate adaptation strategy for the Emirate of Dubai.
The announcement came during a ceremony held at the InterContinental Hotel Dubai to honor its strategic partners in the development and preparation of the air quality strategy. The event was attended by a number of leaders in government and private sectors and academic institutions.

Eng. Hussain Nasser Lootah, Director General of Dubai Municipality said that the Municipality was pleased to honor the leaders of government and private sectors for their active role in preparing and developing the air quality strategy for the Emirate of Dubai 2017-2021. He also announced the start of the development and implementation of an integrated strategy for climate adaptation in Dubai.

Lootah stressed that the civic body's mandate to develop this strategy reflects the vision of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of UAE and Ruler of Dubai to make Dubai the environmentally cleanest city by 2050.

He said that the climate adaptation strategy will cover several sectors, including but not limited to, energy, water, infrastructure, food, biodiversity, ecology, coastal area, air quality, public health, business and tourism development, and other related sectors.

According to Alia Al Harmoudi, Director of Environment Department, "The strategy will be implemented in three major phases. The first phase is to study

THE STRATEGY will cover several sectors, including energy, water, infrastructure, food, biodiversity, ecology, coastal area, air quality, public health, business and tourism development.

the best global practices, which will focus on the methodologies and principles of implementation followed globally, in order to ensure the quality of outputs and accuracy of implementation of priorities and how to follow up its future outputs with the right scientific and technical foundations."

She stressed that this phase will include identifying legal gaps and assessing the current and future status of climate change on all sectors in the light of rapid climatic changes, including the rise of temperature in various areas, and the extent of sea level rise and water quality and salinity in the coastal area of the Emirate, to the levels of low rainfall and its impact on the intensity and increase of sandstorms, air quality and public health, and other elements of climate change that affect the various sectors such as the infrastructure sector, business and tourism development, economy and the levels of public spending.

Al Harmoudi pointed out that the second phase will include the preparation of short and long term plans, including initiatives, projects and studies, and prioritizing them.

"The third and final phase will include setting the timeframe for implementation of these plans and linking them to performance indicators that will be followed up later," she said.

UNGA

'Governments cannot work alone to achieve goals of Paris Agreement'

UAE Ministry of Climate Change and Environment marks effective global engagement at 72nd UNGA as Dr. Thani bin Ahmed Al Zeyoudi participates in several engagements to promote global sustainability.

Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, has stressed that governments cannot work alone to achieve the goals of the Paris Agreement while highlighting that they must come up with creative ways of involving institutions and individuals in this process.

He made this statement during a meeting of the Climate Action Network Founders Group, as part of the participation of a UAE delegation in the 72nd session of the United Nations General Assembly in New York, under the slogan, "Focusing on People: Striving for Peace and a Decent Life for All on a Sustainable Planet."

"Most of our particular national contributions currently concentrate on the three core elements of reduction, accommodation and capacity building. We can involve the business sector in climate action, create a robust tool to bolster investments and improve economic proceeds, by highlighting the economic benefits of specific national contributions," Al-Zeyoudi said.

On the sidelines of his presentation on the UAE's contributions to achieving the goals of the Paris Agreement and the United Nations Framework Convention on Climate Change, Al-Zeyoudi highlighted the UAE's success in adopting a national climate change plan that primarily aims to involve the business sector and other non-governmental organisations in the policy-making process with regards to climate and the environment.

During the Sustainable Development Impact Summit of

AL-ZEYOUDI stressed that the UAE is continuing to promote its pivotal role in the clean energy sector.

the World Economic Forum, which is part of the 72nd UN General Assembly, Al-Zeyoudi announced the UAE's plans to create a roadmap for investing in specific national contributions, the first of its kind in the Arab region, which will identify potential paths and entry points for companies, to realise the UAE's specific national contributions.

Al-Zeyoudi stressed that the UAE is continuing to promote its pivotal role in the clean energy sector while highlighting its ambitious goal of consuming 27 percent clean energy throughout the country by 2021, and 50 percent by 2050. This reflects the significant achievements of the nation's companies in many areas related to climate, highlighting the UAE's regional leadership and its international contributions to this field, he added.

Al-Zeyoudi also participated in the UN High-Level event on Innovation and Technology, where he spoke about the UAE's contributions to the development and implementation of the UN's sustainable development goals, which emphasised the vital role of the business sector in achieving these goals by 2030.

He further stressed that the UAE has placed innovation as a top priority for its sustainable development plan, to achieve economic diversity, while noting that the National Innovation Strategy launched in 2014, reflects its ambitions to be among the world's most innovative countries. The UAE also launched the Mohammed bin Rashid Innovation Fund in 2015, with a budget of US$544 million, to support national inventors and facilitate funding for their projects through commercial loans.

Hybrids

Dubai launches incentives to encourage use of electric, hybrid vehicles

The incentives to encourage the public use of electric vehicles in Dubai are a joint initiative by DEWA and the Road and Transport Authority (RTA).

The Dubai Supreme Council of Energy has announced incentives to encourage community members to use electric and hybrid vehicles and promote the use of sustainable transport, which will have a lower average annual energy consumption rate.

The announcement was made during a press conference attended by Saeed Mohammed Al Tayer, Vice Chairman of the Supreme Council of Energy and Managing Director and CEO of Dubai Electricity and Water Authority, DEWA.

During the press conference, Al Tayer expressed his enthusiasm about the incentives which seek to promote the use of electric vehicles in the Emirate of Dubai. "This supports the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and the UAE National Agenda leading to the UAE Vision 2021 to create a sustainable environment for air quality, conserve water resources, increase clean energy and green development, and the objectives of the Dubai Plan 2021, to make Dubai a smart, sustainable and innovative city in managing its resources, improving its quality of life, and consolidating its position as a global model for green economy," he added.

Al Tayer went on to say that under the directives of the UAE's wise leadership, who made sustainability a top priority, the Dubai Supreme Council of Energy launched the Dubai Green Mobility Initiative to motivate organisations, under its umbrella to use sustainable transport, such as hybrid and electric vehicles, and to contribute to the sustainable development of

THE PROPORTION of electric and hybrid cars in the UAE is estimated to rise to 2 percent by 2020, and 10 percent by 2030.

the emirate by reducing carbon emissions in ground transport, which is the second-largest greenhouse gas emitter in Dubai.

As per the target set by the Supreme Council of Energy, at least 10 percent of all newly-purchased cars will be electric or hybrid from 2016 to 2020, he explained.

The proportion of electric and hybrid cars will rise to 2 percent by 2020, and 10 percent by 2030, he said adding that under the umbrella of the Supreme Council, DEWA is working on implementing the Dubai Green Mobility Initiative to promote the use of electric and hybrid vehicles, which supports the Dubai Clean Energy Strategy 2050, for Dubai to have the lowest carbon footprint in the world by 2050, and the Dubai Carbon Abatement Strategy to cut carbon emissions by 16 percent by 2021.

Earlier in 2014, DEWA had launched the Green Charger initiative to build the infrastructure for electric vehicle charging stations all over Dubai. As an incentive, DEWA's registered users will be able to have their electric vehicles charged by DEWA's Green Charger electric vehicle charging stations, completely free. The stimulus will last until the end of 2019, will be exclusive to public charging stations, and does not include home charging stations.

The Road and Transport Authority, RTA will also provide incentives for electric vehicles, including free assigned parking, exemption from RTA electric vehicle registration and renewal fees, exemption from Salik's tag fee, and arranging a special sticker for number plates.

Study

UAE home to the world's largest population of Indian Ocean humpback dolphins

Abu Dhabi is home to the world's largest population of endangered Indian Ocean humpback dolphins, a new study has found.

Through its 'Dolphin Survey', the Environment Agency - Abu Dhabi (EAD) has estimated that 701 Indian Ocean humpback dolphins and 1,834 Indo-Pacific bottlenose dolphins inhabit Abu Dhabi's coastal waters, with the Indian Ocean humpback dolphin population being the largest ever reported for this species in the world!

The next largest population (466) is found in South Africa and other populations that have been estimated are typically very small; Mozambique (105), Kenya (104) and Tanzania (63).

HE Razan Khalifa Al Mubarak, Secretary General of EAD comments: "Dolphins are apex predators that bio-accumulate marine toxins, consequently, they are good indicators of marine environmental quality. As very little was known about the ecology and conservation status of dolphin species in Abu Dhabi waters, EAD started a dolphin survey in 2014. This has provided population size estimates and information on the main threats."

To date, 64 days of vessel-based surveys have been completed covering 5,592 km of survey track. A total of 403 Indian Ocean humpback dolphins 693 Indo-Pacific bottlenose dolphins, and 52 finless porpoises were recorded.

Population sizes were established using the 'mark-recapture' method, which relies on individual dolphins being identified, using the unique pattern of notches, cuts and nicks on the trailing edge of their dorsal fins.

Dr. Shaikha Al Dhaheri, Executive Director of the Terrestrial and Marine Biodiversity Sector of EAD described the importance of

THE DISCOVERY that Abu Dhabi has the largest population of Indian Ocean humpback dolphins has evoked scientific interest worldwide.

the results, "We are very excited to have identified the presence of the world's largest population of Indian Ocean humpback dolphins in Abu Dhabi's waters. This further demonstrates the international value of Abu Dhabi's marine biodiversity and it is our responsibility to ensure the conservation of this important resource.

"It also highlights the need of carrying out further research and monitoring activities in order to learn more about the ecology and habitat use of dolphins so that specific conservation measures can be implemented, and we are reaching out to corporate partners to support us in this."

The results of the surveys demonstrated that the Indian Ocean humpback dolphin is a shallow-water species that occurs mostly in the channels and near-shore waters of the Abu Dhabi mainland and islands.

The habitat of the Indo-Pacific bottlenose dolphin included both near-shore and deeper off-shore waters. Finless porpoises have a narrow habitat preference, restricted distribution and are very rare.

A large proportion of dolphins (13% of the Indo-Pacific bottlenose dolphins and 12% of the Indian Ocean humpback dolphins) had cuts and scars on their dorsal fins and/or body, which were derived from propeller strikes or entanglement in fishing gear. Other threats to Abu Dhabi's dolphins included habitat loss from dredging, land reclamation, port and harbour construction, noise pollution and other development activities, which are concentrated in the shallow coastal waters and channels.

Project

Dubai approves Dhs1.3 billion mega drainage project

Said to be the largest groundwater and rainwater drainage project, it will serve Al Maktoum Airport area, the Expo 2020 area and the nearby urban complexes covering 400 square kilometers.

His Highness Sheikh Hamdan Bin Rashid Al Maktoum, Deputy Ruler of Dubai and Minister of Finance and Chairman of Dubai Municipality, has approved Dhs1.3 billion for the implementation of the first stage of the rainwater and groundwater drainage project for the Al Maktoum Airport area, the Expo 2020 area and the nearby urban complexes covering 400 square kilometers, said Eng. Hussain Nasser Lootah, Director General of Dubai Municipality.

He added the approval of the project confirms the keenness of Dubai Government to provide all the requirements of the city of projects that serve the vision and mission of the emirate's ambitious future to maintain its status as a global destination with all modern components of a global city.

Lootah said that the Municipality is playing its role as a service organization in accordance with the directives of the Government of Dubai and the directives and vision of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai to make Dubai among the most prominent smart and sustainable cities of the world through the implementation of projects and services and standards and modern systems in the world.

He reiterated that he and his team are keen to meet all the needs of the society in accordance with the strategic mission and vision of the Government of Dubai and to implement these projects in accordance with the finest and best international standards adopted in this field.

Lootah added that the second

DUBAI HAS approved Dhs1.3 billion for the implementation of the first stage of the rainwater and groundwater drainage project.

phase of the project is under consideration for approval, which will raise the total cost of the project to Dhs2.5 billion.

"The project involves collecting and transporting of rain and groundwater through underground tunnels into the Gulf waters for disposal as a long-term solution to tackle the issue of rainwater drainage for the 100 years to come," he said.

Eng. Talib Julfar, Assistant Director General of the Municipality for Environment and Public Health Services Sector, expressed his great pleasure in launching this mega project in conjunction with the opening of Expo 2020, which confirms that there is a creative vision and a qualitative development in the Middle East, especially that this project will benefit Dubai for 100 years without maintenance."

Eng. Mohammed Ahmed Al Rayes, Acting Director of Sewage and Irrigation Department, said that the rainwater drainage system will be able to discharge six million cubic meters of water, equivalent to 2,600 Olympic swimming pools, at a rate of one minute to complete pumping of one of these pools.

"This capacity will be enough to protect Al Maktoum Airport, the Expo 2020 area and the surrounding areas from the risk of rainwater harvesting that will affect development operations, cause disruptions, and stop activities, in addition to the technical aspects of the project.

"The new project will save the government with millions of dirhams per year that was used for operation and maintenance of the usual infrastructure used in solving such problems. It will also

rationalize land consumption for public and commercial activities and will save about 30% of the consumed electrical power that could have been consumed in the case of the usual systems," he said.

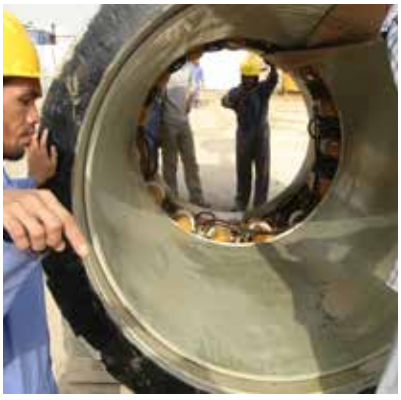
Al Rayes pointed out that the project includes the establishment of a main line for the collection of rainwater to serve the airport area and Expo 2020 area of the project that is equivalent to the total area of Deira area.

He said the project, which includes digging of two tunnels with depths ranging from 40 to 50 meters with a diameter of 10 meters and 10.5 kilometers long extension pipes, has been assigned to the contractor to start implementation.

Al Rayes added that the underground rainwater drainage lines will be built using innovative tunnel technology and thus minimizing the damage of construction works. "Developing this strategic tunnel is vital and the latest tunnel technology will ensure that during the implementation period, it will minimize the structural damage on the ground, including roads, traffic and other facilities."

Al Rayes said the new rainwater and ground water collection network has been designed with great care to preserve the desert and coastal environment.

He said that upon completion of the system, which is the latest sustainable system of rainwater and groundwater drainage, this project will be one of the most sustainable and pioneering projects at the global and regional levels, because it is environmentally friendly and contains the latest technologies in this field.



Lootah inspects progress of Quran Park project

Eng. Hussain Nasser Lootah, Director General of Dubai Municipality, inspected the progress of the Quran Park project in Dubai on 7th September which is being developed in an area of 64 hectares by the Municipality within the framework of its creative initiatives in the field of landscaping and increasing the green area in the Emirate.

Quran Park will feature exhibits that explain the meaning behind many of the stories told in the Holy Quran and the scientific and medical benefits of plants mentioned in the Quran and how modern medicine depends heavily on them in the treatment as well as their environmental benefits.

Lootah was accompanied by Eng. Dawood Al Hajri, Assistant Director General for Engineering and Planning Sector and Mohammed Mubarak Al Mutaiwei, Assistant Director General for Communication and Community Sector and a number of department directors and other senior officials.

During the visit, he listened to an explanation by the specialists about the nature of the project and the stages planned by the Municipality to develop the park and add many types of trees and fruits that were included in the Holy Quran.

The Quran Park is a pioneering modern cultural project that emerges from the cultural and scientific achievements of Islam. It showcases the collection of plants mentioned in the Holy Quran and Sunnah, and introduces visitors the plant species and their importance and scientific and food value, allowing them to learn about the cultural and environmental achievements of the Islamic heritage in agriculture.

The project divides the green spaces into 51 species of plants and fruits that are mentioned in the Holy Quran including bananas, pomegranates, olives, melons, grapes, figs, garlic, leeks, onions, corn, lentils, wheat, sorghum, ginger, tamarind, basil, pumpkin.

There will be plenty of modern features, including solar trees, on-site Wi-Fi, and phone-charging stations.

Recycling

Pioneering environmental initiative to transform recycling in Ras Al Khaimah

Ras Al Khaimah Waste Management Agency's 'RAK Recycles' initiative aims to divert 75 per cent of municipal waste from landfilling by 2021 through community-driven source separation of waste.

Ras Al Khaimah Waste Management Agency (RAKWMA) has launched an innovative recycling program that will transform the way the Ras Al Khaimah community manages its waste. The RAK Recycles initiative will allow residents, schools, government entities and businesses to separate their waste at the source. Locally produced colour-coded green and brown recycling bags are being distributed free of charge throughout the emirate from 20th September 2017, to encourage the separation of food waste from other recyclable items.

His Highness Sheikh Saud bin Saqr Al Qasimi, Supreme Council Member and Ruler of Ras Al Khaimah, said in a statement: "It is with great pride that I support the introduction of the RAK Recycles initiative in Ras Al Khaimah. I encourage all those in Ras Al Khaimah to think about the sustainable lives we led in the past and to start living for a more sustainable future."

Rollout of the program will begin in the local residential communities of Al Dhait, Rams and the Southern region, before being introduced to other communities including Al Hamra and Mina al Arab in 2018.

Under the initiative, clean and dry plastics, paper, cardboard, cans and glass bottles will be collected in green bags. These recyclable materials will be sold as feedstock for new products, with income generated contributing to waste management costs in Ras Al Khaimah.

Brown bags will be used to collect food waste, which will then be recycled into compost and other soil enhancement products. This will be utilised in community

Through the provision of waste collection, recycling, treatment and disposal, the Ras Al Khaimah Waste Management Agency will ensure sustainable and innovative waste management.

gardens and landscaping throughout the emirate.

General mixed waste that cannot presently be recycled will continue to be collected in black bags with the future goal of converting this waste to energy.

The process of separating waste before discarding it reduces the potential for materials to be contaminated and ensures that greater volumes of high-quality recyclable products can be processed. Clean recyclable materials can be sold at a higher price and require less processing before being recycled into new products.

By greatly simplifying the sorting process, RAKWMA aims to divert 75 percent of municipal waste from landfilling, a target that is in line with the UAE Vision 2021 goals. RAKWMA, which is an entity of the Ras Al Khaimah Government, aims to build a culture of sustainability and environmental awareness throughout the emirate. Statistics indicate a low level of participation in existing waste management efforts, with just seven per cent of municipal solid waste recycled in Ras Al Khaimah in 2016. RAKWMA aims to build community awareness of the recycling process, enabling residents and businesses to become active participants in Ras Al Khaimah's environmental efforts.

Sonia Nasser, Executive Director of RAKWMA said: "Our main objective is to significantly improve the RAK community's commitment to sustainability and environmental protection from a grassroots level which includes schools and local businesses and the Government."

Nuclear Energy

ENEC CEO highlights priorities of UAE Peaceful Nuclear Energy Program

ENEC CEO, Eng. Mohamed Al Hammadi, updates industry leaders on evolution of ENEC and the UAE Peaceful Nuclear Energy Program ENEC Executives at the World Nuclear Association (WNA) Symposium, London, UK.

A senior delegation from the Emirates Nuclear Energy Corporation (ENEC), led by Chief Executive Officer, Eng. Mohamed Al Hammadi, has participated in the World Nuclear Association (WNA) Symposium in London, U.K. During the opening session of the conference, Mr. Al Hammadi shared a number of lessons learned on the quality and safety-led development of the UAE Peaceful Nuclear Energy Program with the international nuclear energy community.

On the cusp of becoming the 31st country to generate electricity using peaceful nuclear energy, the UAE has set the gold standard for new nuclear build and operations. The UAE has not only illustrated its ability and commitment to diversifying its energy mix but has demonstrated the benefits of transparency, international cooperation, and development of local human capital.

"The UAE possesses unique know-how and experience in the delivery of mega projects across a range of sectors, as highlighted in the delivery of the world's largest nuclear plant under construction, in Abu Dhabi. As a result, we are steadily progressing on our journey to becoming a peaceful nuclear energy nation, and we have achieved this with significant agility, adapting to different phases of the complex project that is the Barakah plant," Al Hammadi said during his remarks at the opening session of the conference.

In updating the audience on the current status of the UAE Peaceful Nuclear Energy Program, Al Hammadi said: "To prepare for nuclear operations, we are entirely focused on ensuring that our plant is delivered to the

THE WNA Symposium provided an annual high-level platform for discussion of the challenges and opportunities shaping the global nuclear energy industry.

highest standards of nuclear quality and safety. We also continue to dedicate significant attention to continuously developing our people and on human performance, as these are fundamental to safe nuclear operations."

The UAE Peaceful Nuclear Energy Program and all of ENEC's activities are regulated by the country's nuclear regulator – the Federal Authority for Nuclear Regulation (FANR). ENEC also continuously engages with and utilises the expertise of an extensive network of organizations whose members include some of the world's most renowned professionals in nuclear energy, including the International Advisory Board (IAB), the International Atomic Energy Agency (IAEA), the World Association of Nuclear Operators (WANO) and the Institute of Nuclear Power Operations (INPO).

Held between 13 and 15 September at the Park Plaza Westminster Bridge in London, the WNA Symposium brought together more than 600 nuclear energy professionals from more than 30 countries.

The project at Barakah is progressing steadily; as of July 2017, Unit 1 is more than 96 percent complete. Unit 2 is more than 86 percent complete, Unit 3 is more than 76 percent, and Unit 4 is more than 54 percent. Overall, construction of the four Units is now more than 82 percent complete. All four units will deliver clean, efficient and reliable electricity to the UAE grid, pending regulatory reviews and licensing. When the four reactors are completed, the Barakah Nuclear Energy Plant will save up to 21 million tons of carbon emissions each year.

Conservation

IFHC celebrates breeding of 367,499 Houbara as it marks 40 years of Sheikh Zayed's vision

Breeding across the Fund's international breeding centers this year alone exceeded 59,294 Houbara.

In its continued mission of fulfilling the vision of the late Sheikh Zayed Bin Sultan Al Nahyan, the International Fund for Houbara Conservation (IFHC) announced at the Abu Dhabi International Hunting and Equestrian Exhibition (ADIHEX) that it has achieved a total breeding milestone of 367,499 Houbara since the Fund was established. The Fund aims to achieve a sustainable population of Houbara for future generations.

In 2017 the captive breeding programme exceeded 59,294 Houbara. The ongoing breeding of Houbara in centres located in the UAE, Morocco and Kazakhstan has been accompanied by a successful release programme, launched in 1998, of 263,399 captive-bred Asian Houbara and the North African Houbara.

As part of an integrated strategy, the Fund's scientific and research programmes continue to develop techniques and knowledge related to the conservation of Houbara, which also include strengthening cooperation and coordination with host countries of the Houbara. The strategy extends to raising awareness and instilling sustainable values whilst involving local communities in conservation efforts.

Mr. Ali Al Shamsi, Acting Director of Communications and Public Relations, said, "This year the Fund will continue to implement its strategy for further development of projects that support the conservation of Houbara in the UAE and other countries in Asia and North Africa. We continue to build upon our milestone successes, right from the birth of the visionary programme in 1976, to now achieving an annual production

The UAE's efforts in the conservation of Houbara and falcons go back more than four decades.

increase of 50,000 Houbara. Close ties with host countries in the Houbara's migration map, and several agreements in place to establish projects and breeding centers amidst other wildlife conservation initiatives, along with awareness campaigns, have all contributed to this success."

The IFHC was established by His Highness Sheikh Mohammed Bin Zayed Al Nahyan in 2006 to manage and develop existing projects and to establish new ventures to achieve the Houbara's sustainability along the international migration path of the bird. The Fund has been achieving an increase in the numbers of wild Houbara by breeding them in captivity and releasing them in their natural habitat.

The Fund has recently built a scientific base of ecological studies, developing techniques within captive breeding and outlining the requirements for successful release in the wild.

Its efforts have helped increase numbers of Houbara and their return to nesting locations such as those in the Kingdom of Jordan.

The UAE's efforts in the conservation of Houbara and falcons go back more than four decades. In 1976, Abu Dhabi organized the first international conference and festival under the guidance and care of the late Sheikh Zayed bin Sultan Al Nahyan. The conference, recognized by global environmental protection organisations, marked the start of sustained conservation efforts. Only a year later, the Houbara captive breeding projects started, in 1977, at the zoo in Al Ain. The first Asian Houbara chick was born in captivity in 1982.

Roundtable

UAE hosts 'Leaders' Roundtable to promote a sustainable ocean economy

The high-level roundtable was held during the 72nd United Nations General Assembly at New York last month.

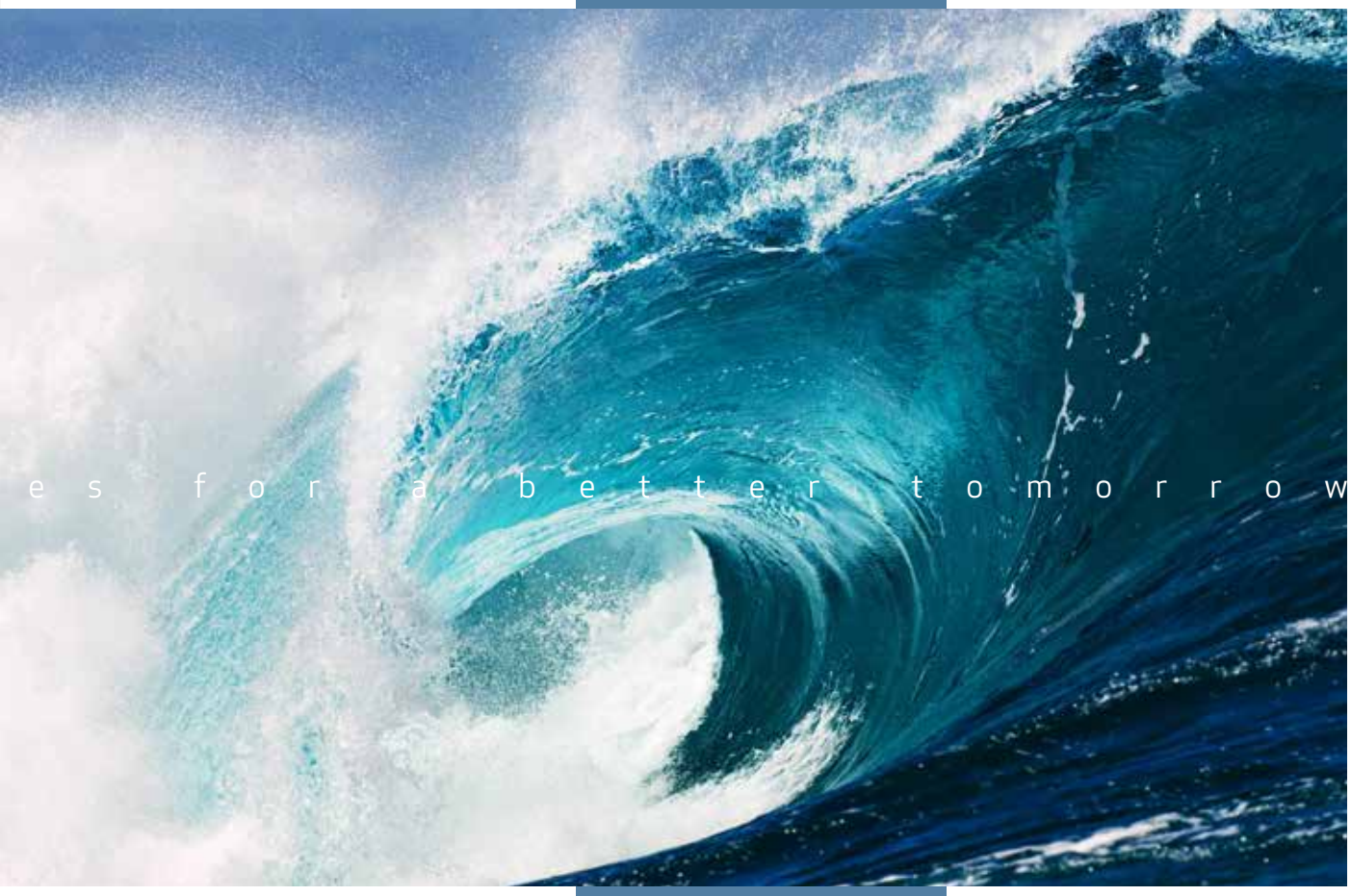
The UAE, in partnership with the European Union and Fiji, hosted a high-level roundtable during the 72nd United Nations General Assembly on enhancing and mobilising investments to promote a sustainable ocean economy that supports climate change mitigation and adaptation efforts.

Building on the UN Ocean Conference, held in June 2017, the roundtable discussed ways to enhance preparations for the Our Ocean Conference to be held in Malta in October 2017 and COP23 in Bonn, Germany, in November 2017.

The roundtable took place in the presence of Frans Timmermans, First Vice-President of the European Commission, Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, and Inia Seruiratu, Minister for Agriculture, Rural and Maritime Development and National Disaster Management and COP23 High-Level Champion, Fiji. It brought together government and business leaders, financial institutions, international organisations and academics to build a shared view on near-term investment and policy priorities, and, most importantly, to strengthen partnerships to benefit the sustainable ocean economy.

In his welcoming remarks, Dr. Thani Al-Zeyoudi underlined the ever-increasing importance of oceans and marine resources, in particular with the adoption of the Sustainable Development Goal 14 on the conservation and sustainable use of the oceans, seas and marine resources.

"The marine environment has been a significant component of the



THE UAE is home to a wide range of marine species including green turtle, fin whale and dugong.

UAE's environmental resources and continues to play an integral role in our everyday lives. The discovery of oil strengthened the position of our marine environment as a mainstay of our economic resources. Our marine wealth is equally precious for its rich biodiversity and for enabling the country's significant achievements in the transportation, desalination, tourism and entertainment industries," Dr. Al-Zeyoudi said.

The Minister added, "The UAE is home to a wide range of marine species including green turtle, fin whale and dugong. The country is also rich in 'Blue Carbon' coastal and marine ecosystems, such as mangroves, tidal marshes and seagrass, which protect our shorelines, provide nursery grounds and habitats for marine species and support coastal tourism. We also recognise their contribution in mitigating climate change through carbon sequestration and storage."

Dr. Al Zeyoudi emphasised that the UAE is taking proactive measures to ensure the sustainability of these valuable natural assets and to meet its national objective for economic diversification. He noted that the UAE's efforts in the field of marine environment conservation are three-fold and include: protection from pollution due to oil and other harmful materials, protection of marine environment ecosystems, and strengthening the country's resilience to the impacts of climate change.

He also highlighted a set of relevant policies and national plans in the UAE's marine environment protection portfolio, such as the 'National Plan for the Sustainability of Marine

and Coastal Environment', the 'National Strategy for Biodiversity 2015-2021', the 'UAE Green Development Strategy', as well as the 'UAE Energy Strategy 2050' and the 'National Climate Change Plan'.

In his concluding remarks, Dr. Thani Al-Zeyoudi reiterated the UAE's commitment to facilitating dialogue and cooperation with the global community on the sustainable management of the marine environment and resources that offer immense social and economic value.

Inia Seruiratu highlighted the necessity to engage with different stakeholders to achieve a sustainable economy. He said that "while supporting policy and incentive frameworks are important, the involvement of the private sector, local communities, civil societies and other institutions is crucial to ensure successful implementation."

The Fiji high-level champion urged and challenged partners in the room to come up with innovative and transformative approaches, technologies, and financing, to accelerate climate action and build a more resilient ocean sector.

He also informed the high-level participants of a planned Oceans Pathway that the Fiji COP23 Presidency would be introduced during COP23 in November. The Oceans Pathway serves to ensure that the nexus between oceans and climate change is integrated into the UNFCC process by 2020.

In his remarks, Frans Timmermans underscored the importance of raising awareness of the challenges that oceans face. He emphasised that the responsibility for preserving the world's oceans does not fall on one government or sector, but is rather the collective responsibility that all sectors, governments and communities share.

He also reiterated the urgent need for all concerned parties and stakeholders to work together in shaping a global strategy to curb plastic waste entering the oceans.

200 sqm Ecological Ice Skating Rink functions entirely without water and electricity

Desert Snow, the region's pioneering and leading specialist winter effects company, and exclusive Middle East partner for Glice®, the market leader for ecological rinks, has introduced the first-of-its-kind Ecological Outdoor Skating Rink in the UAE.

Dubai's penchant for defying the odds and out of the sand-box visions takes on a new angle at the Next Generation School in Al Barshah as students are presented with an ecological future vision – a Glice® synthetic ice rink that conserves resources.

Thanks to a complex molecular technology Glice zero-energy ice functions entirely without the use of water and electricity, while offering the same glide-effect as conventional ice. Hence, Glice ice rinks allow for Eco-friendly, climate-independent and cost-efficient installations.

Ben Elliott-Scott, Managing Director of Desert Snow commented: "We are truly delighted to partner with Glice on this unique and innovative ecological ice rink to introduce yet another "First" to the UAE. With the hundreds of events taking place in Dubai every year leading up to Expo 2020, we foresee demand for fast, innovative ideas and this is what we are here to cater for."

Today Glice sells its ecological ice rinks in more than 70 countries on five continents and prominent clients include Coca Cola, Red Bull and the Venetian Casino and Hotel.

The array of installations ranges from the world's biggest ecological ice rink in Azerbaijan to tiny installations in private gardens, garages and basements.

During the 2016 Olympic Summer Games in Brazil a Glice ice rink became a true people magnet and welcomed the Brazilian National Ice Hockey Team and the Swiss president among its visitors.

Desert Snow brings a wealth of expertise in the winter effects industry offering expert services in real, artificial and technical snowmaking systems for event agencies, film and TV, retailers, developers and private clients.

Congress

Experts to discuss strategies for 'Powering Smart, Happy and Efficient Cities'

The sixth Annual EmiratesGBC Congress on October 17 and 18 is being held under the theme 'Urban Energy', and will discuss strategies for promoting sustainable built environments.

Experts in diverse aspects of energy management will converge in Dubai for the sixth Annual EmiratesGBC Congress on October 17 and 18, 2017, to discuss strategies for promoting sustainable built environments.

Organised by Emirates Green Building Council (EmiratesGBC), an independent forum aimed at conserving the environment by strengthening and promoting green building practices, the annual Congress will be held at the Pullman Dubai Creek City Centre hotel, under the theme 'Urban Energy: Powering Smart, Happy & Efficient Cities.'

The Congress will commence with welcome addresses by the Congress Moderator Holley Chant, Executive Director of Corporate Sustainability, KEO International Consultants; Saeed Al Abbar, Chairman of EmiratesGBC; Eng. Aisha Al Abdooli, Director of Green Development, Ministry of Climate Change & Environment; and Rajiv Rajgopal, Regional Director, AkzoNobel Middle East & Africa.

Saeed Al Abbar said: "With an increasing focus on diversifying urban energy sources and demand side management in the region, the Annual EmiratesGBC Congress is discussing a highly topical issue that has great importance and relevance to the public and private sector, and for the community at large. By addressing the three key pillars of a modern city – efficiency, smartness and happiness – the Congress will present not only path-breaking achievements in urban energy management but also discuss strategies to address future challenges. We have a line-up of experts at the event who will

EmiratesGBC regularly hosts and participates in multinational events, conferences and forums based around specific issues related to the built-environment.

present compelling insights on sustainable built environments."

The discussions are centred on three sub-themes: Powering Efficient Cities, Powering Smart Cities and Powering Happy Cities. Each session will be addressed by experts in the field.

Powering Efficient Cities will examine local, regional and international clean energy strategies before diving into the role of retrofitting the existing building stock to achieve the necessary targets. Karim Elgendy, Founder & Coordinator; Senior Sustainability Architect, Carbon Initiative, Dar, will deliver a keynote presentation on 'Carbon Emissions in the Middle East' while Saeed Al Abbar, Chairman of EmiratesGBC, will deliver a keynote on 'Accelerating Building Efficiency'.

Powering Smart Cities discusses the relevance of smart technologies in green building design, construction, maintenance and operations. Abdulla Ali Ahli, Manager - Sustainable Energy Programmes, Mohammed Bin Rashid Space Center, will deliver a keynote on the Autonomous House, followed by presentations by Marco Janssen, Director Smart Grid PMO, DEWA; and Gauthier Dupont, Director of Clean Energy & Sustainability Services, EY.

Powering Happy Cities focuses on how green buildings can make us healthy, happy and productive. John Alker, Campaign & Policy Director, Steering Committee Better Places for People, UK Green Building Council, will deliver a keynote presentation on 'Wellbeing' followed by a WELL-certified office case study by Sreya Vempatti, Environmental Coordinator, AESG.

Waste Management

Dubai urges safe transportation and disposal of hazardous and medical wastes

Appropriate handling, treatment, and disposal of waste by type reduces costs and does much to protect public health.

Dubai Municipality has urged the companies working in the field of transportation and production of hazardous and medical waste to take extra care in the safe transportation and disposal of these wastes.

Eng. Abdulmajeed Sifai, Director of Waste Management Department of Dubai Municipality said the Municipality endeavours to achieve environmental sustainability and support all environmental policy focuses included in the UAE Vision 2021, launched by His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, aimed at raising the quality of life in the country by building a diversified economy that preserves the environment and achieves sustainable development.

He was speaking at a customer forum of the companies working in the field of transportation and production of hazardous and medical waste at the Falcon Heritage and Sports Centre. The forum, aimed at creating excellent environmental partnerships with the private sector and providing quality services that satisfy the aspirations of all customers, was attended by more than 100 representatives of these companies.

Sifai said that the forum, was a real platform and a direct window to broaden the horizons of serious dialogue and face-to-face interaction with customers to hear their constructive comments and identify their needs closely in order to reach the highest levels of public satisfaction by providing the best services in accordance with internationally recognized standards.

The key to minimization and effective management of health-care waste is segregation and identification of the waste.

"The forum also comes within the framework of cooperation and coordination between the Municipality represented by the Waste Management Department and companies engaged in the production, collection and transport of hazardous and medical wastes in order to support the government goals and agenda and to enhance communication with the various categories of customers," he said.

The forum included presentations by the hazardous waste treatment engineers on the requirements for the transfer of medical and hazardous waste and the best way to apply for disposal services that pose a threat to the environment and society and is dangerous due to the continuous increase of quantities to be disposed of.

There were also presentations on the development projects of the hazardous and medical waste treatment complex in Jebel Ali, and the requirements of applying the highest standards of occupational health and safety.

The dialogue session at the forum, led by Salem Al Abelam, Acting Head of Waste Treatment Section, was participated by a number of specialists from private companies working in the field of hazardous and medical waste transportation.

The best companies were honored at the forum for their efforts to achieve environmental sustainability through waste minimization and recycling. The company representatives, who thanked the Municipality for organizing the forum, said the meeting gave them a wider opportunity to learn about a range of sustainable solutions and advanced systems.

Partnership

Joint venture to strengthen the Middle East's renewable energy infrastructure

The partnership between UL and the GCC Laboratories combine resources, knowledge and expertise to expand services to the region's renewable energy market.

Global safety science organization, UL, has announced a joint venture with Saudi-based GCC Lab aimed at strengthening the Middle East's Renewable Energy Infrastructure.

UL's regional base operates out of offices in Dubai and its new, state-of-the-art lab facility in Abu Dhabi. The joint venture will operate as a UL and GCC Lab Company and will be based in Dammam, Saudi Arabia, to cater to customers in parts of the Middle East, including Egypt.

The joint venture will support the region's renewable energy market by leveraging both party's resources, knowledge and experience and updating the certification requirements.

Moreover, the joint venture company will offer a variety of services related to the renewable industry, such as pre-commissioning tests, construction monitoring services and product testing of solar PV modules, including accessories that comply with applicable standards including UL and IEC standards.

The partnership will also aim to capitalize on UL's reputation as a leading safety science company in the region and on GCC Lab's strength and mandate as part of the Kingdom's Vision 2030 initiative to diversify its economy.

Hamid Syed, Vice President & GM, UL Middle East, said: "This agreement represents each organization's strong commitment to providing customers with all services related to renewables to meet the varied climate of the region."

The GCC Lab is a closed joint stock company that was formed

UL fosters safe living and working conditions for people everywhere through the application of science to solve safety, security and sustainability challenges.

by a select group of prime governmental and commercial entities in Saudi Arabia and the Gulf region. Its mandate is to provide testing, inspection, and certification services for electrical equipment.

Saleh Amri, CEO of GCC Lab stated: "This partnership combines UL's safety science knowledge, expertise and global resources with the GCC Lab's knowledge of local market needs and goals - laying the groundwork for improvements and updated certifications in the region's renewable energy market.

"It is a significant step in line with the Kingdom's Vision 2030 and GCC countries vision and will contribute significantly towards localizing manufacturing and services, fostering a knowledge-based economy, energy sustainability, and competitiveness, supporting research, enhancing energy efficiency, and promoting alternative energy applications suitable for the climatic conditions in the GCC countries."

The Middle East markets to be served by the joint venture all have ambitious renewable targets with substantial growth expected over the next several years. It is anticipated that the joint venture will be well positioned to support those targets in the years to come.

Conservation

Scientific paper proves rehabilitated sea turtles can be successfully reintroduced into the wild

Published by Jumeirah Group's Dubai Turtle Rehabilitation Project (DTRP) team, the research details how one rescued turtle named Dibba travelled 8,283 km from Fujairah to the Andaman Sea.

After twelve years of dedicated research and analysis, Jumeirah Group's Dubai Turtle Rehabilitation Project (DTRP) team has condensed its results into the first scientific paper published in the UAE to document the long term satellite tracking of Green Turtles, which proves sea turtles can be successfully reintroduced into the wild after sustaining serious injuries and undergoing rehabilitation.

The manuscript focuses on the satellite tagging of eight rehabilitated green sea turtles from the United Arab Emirates and includes details of the longest tracked journey ever recorded for the species. This journey was made by Dibba who travelled from Fujairah to the Andaman Sea, a total distance of 8,283 km. The journey is also the first regional movement linking sea turtles from the Middle East to South East Asia.

Dibba was found on the east coast of the UAE in 2006 with a massive head trauma and was close to death upon arrival at the DTRP. Her rehabilitation took 546 days and treatment was given for both the original injury and subsequent illnesses associated with her injury. After being monitored for several months in a large sea-fed enclosure, Dibba was released close to the area where she was found. She then travelled 8283 km from the UAE, to Omani waters, crossing the Arabian Sea to the Maldives, before proceeding to Sri Lanka and entering the Bay of Bengal where the last transmission was made close to the Andaman and Nicobar Islands.

Further results of the tagging showed that the green turtles in this study utilised the shallow

THE MANUSCRIPT focuses on the satellite tagging of eight rehabilitated green sea turtles from the UAE and includes details of the longest tracked journey ever recorded for the species.

coastal waters between Dubai and Abu Dhabi, where they washed ashore before being rescued.

Warren Baverstock, Burj Al Arab's Aquarium Operations Manager, said: 'We are very proud of our achievements to date through the project and this scientific paper shows the results from our early years of tagging green sea turtles. Dibba's journey is particularly exciting and demonstrates that international collaboration is needed to help manage and conserve sea turtle populations. The paper also demonstrates that sea turtles can be successfully re-introduced into the wild after sustaining injuries and undergoing prolonged periods of rehabilitation."

Throughout the project, the team have treated and released over 1300 sea turtles back into UAE waters and have satellite tagged over 50 sea turtles. The team has been satellite tagging sea turtles for over 12 years with their first tag placed on a green sea turtle called 'Maju' in 2005.

This scientific paper is a massive achievement for the Jumeirah Group's sea turtle conservation work, with the collation of nearly 12 years of green sea turtle tracking data. The DTRP is one of the longest standing corporate social responsibility initiatives in the region and the only project of its kind in the Middle East and Red Sea region.

Study

Sharks, rays, and chimaeras in Arabian Sea region at risk of extinction

Overfishing was considered the main cause of threat due to both targeted and incidental capture, says new research study.

The results from the 2017 IUCN Regional Red List assessment of 153 species of chondrichthyan fishes (sharks, rays, and chimaeras) indicate the Arabian Sea and adjacent waters are home to some of the most threatened chondrichthyan populations in the world.

The assessment was part of the final result of the workshop and researches that commenced in February 2017, which was organised by the Environment Agency-Abu Dhabi (EAD), in collaboration with the International Union for the Conservation of Nature (IUCN) Shark Specialist Group (SSG), to evaluate the extinction risk status of sharks, rays, and chimaeras found in the Arabian Sea and its adjacent waters (Red Sea, Gulf of Aden, and Arabian Gulf) for the IUCN Red List of Threatened Species.

The assessment highlights the need for urgent action to conserve populations and habitats, because more than half of the species (78) considered threatened with an elevated risk of extinction within the region. A further 27 species were assessed as being close to entering a threatened category in the near future.

Only 19 species were assessed as being in a healthy state. For 29 species, there was insufficient scientific information to evaluate their risk of extinction, highlighting the need for more work to understand the status of these species. Overfishing was considered as the main cause of threat due to both targeted and incidental capture.

“This workshop was the first step in understanding the regional status of sharks and rays. The

THE WORKSHOP and assessments had the support of Save Our Seas Foundation, the International Fund for Animal Welfare, and the Sharks MoU under the Convention of Migratory Species.

results are a call for action and highlight the need for regional cooperation in research and policy efforts", stated Dr. Shaikha Al Dhaheri, EAD's Executive Director, Terrestrial and Marine Biodiversity Sector, and IUCN Regional Councilor for West Asia.

"Sharks, rays and chimaeras tend to grow slowly and produce few young, which leaves them particularly vulnerable to overfishing", added Dr. Peter Kyne, Senior Research Fellow at Charles Darwin University and Red List Authority for the IUCN SSG. Some of the families with the highest numbers of threatened species include the sawfishes, hammerhead sharks, wedgefishes, guitarfishes, and eagle rays, have slow life histories least capable to withstanding fishing pressure.

"The rapid development and expansion of deepsea fishing operations in the southeastern Arabian Sea, are of concern. There is a need to monitor fisheries, and their catches, to better understand the species being caught, and their status," stated Dr. Nick Dulvy, Co-chair of the IUCN SSG. "The outcomes of these assessments should inform future research and government action in the region that addresess information gaps and enables population recovery," stated Prof. Colin Simpfendorfer, IUCN SSG Co-Chair and Director of the Centre for Sustainable Tropical Fisheries and Aquaculture at James Cook University.

Renewable Energy

Governments adopt 'Florence Declaration' to advance geothermal energy

Milestone meeting moves nations closer to unlocking more than 200GW of global geothermal energy potential.

Governments have agreed to work together to identify and implement measures that will significantly increase the speed of geothermal energy development around the world, following a milestone meeting between public and private leaders Florence in September. Under the terms of the 'Florence Declaration' – an outcome of the Global Geothermal Alliance (GGA) meeting – governments will actively pursue a collective ambition to realise geothermal potential.

The meeting, entitled: 'Working Together to Promote Geothermal Energy Towards a Sustainable Energy Future' – the largest such meeting of ministerial representatives to discuss geothermal energy – was marked by the release of a new report from the International Renewable Energy Agency (IRENA), coordinator of the GGA, in which access to capital for surface exploration and drilling was cited as the main barrier to geothermal development. The report also noted that more 'transparent government regulations that avoid project delays' were needed to provide sufficient certainty to developers and investors.

Minister of Environment, Mr. Gian Luca Galletti stated: "Italy considers the Paris Agreement to be irreversible and non-negotiable and therefore strives to promote geothermal and other renewable energy sources as a vital component for the planet's sustainable development."

"Geothermal's vast potential is currently untapped," he continued. "We must develop new technologies and encourage new investments to ensure we cover this gap. The Alliance will

THE GLOBAL Geothermal Alliance (GGA) meeting represents the largest ministerial gathering dedicated to geothermal energy development.

multiply its efforts to guide this process, and Italy will provide its contribution with its long experience and know-how."

Ms. Teresa Bellanova, Italy's Vice Minister of Economy and Development, said: "Geothermal energy's consistent and continuous availability make it a highly precious source of renewable energy both in Italy and many countries all over the world. Through our knowledge of the industry, Italy can play an important role in achieving the ambitions of the Paris Agreement, in addition to stimulating sustainable job creation."

Director General of IRENA, Mr. Adnan. Z. Amin, said: "This meeting has, without question, allowed both the policy and industry communities to identify common ground in the pursuit of what is a renewable energy source with tremendous potential.

"If we can identify and implement mechanisms that deliver a greater level of certainty to investors and developers, then we will move beyond meaningful dialogue to decisive action that accelerates geothermal production," continued Mr. Amin, "contributing significantly to decarbonisation of the global economy, whilst creating jobs and supporting growth around the world."

"Access to low carbon forms of energy that support economic development while mitigating climate change, is a core priority for the African Union," said H.E. Dr. Amani Abou-Zeid, African Union Commissioner for Infrastructure and Energy. "Geothermal energy is emerging as a hidden gem of Africa's renewable energy resources and we must work together, across nations, to

ensure this resource achieves its potential.

"Through partnerships and the Geothermal Risk Mitigation Facility, the African Union is currently supporting twenty-six projects in East African countries that will generate more than 1500 MW of power," continued H.E. Abou-Zeid. "We aim to build on this, supporting sustainable exploration, through the work of this Alliance."

The GGA meeting was attended by more than 200 high-level public, intergovernmental, non-governmental and senior private sector representatives committed to scaling up geothermal energy deployment worldwide.

Mr. Carlo Pignoloni, Head of Renewable Energies Italy, Iberia, rest of Europe and North Africa at ENEL, said: "Geothermal power can play a significant role in promoting a sustainable and clean development globally. Stable regulatory frameworks, long-term licenses and bankable PPAs, in addition to transparent and public tenders, are key to if we are to take full advantage of the vast global geothermal potential."

The GGA membership is composed of 42 countries, and 29 partner institutions, including multilateral organisations, development partners, international and regional organisations, global financial institutions, academia, research institutions and the and private sector.

The Alliance aims to enhance multilateral efforts towards a more favourable environment to achieve a 500 per cent increase in global installed capacity for geothermal power generation and a 200 per cent increase in geothermal heating by 2030.

EPAA holds Palm Tree Day celebration at Islamic Botanical Garden

The Islamic Botanical Garden, which is affiliated to the Environment and Protected Areas Authority, EPAA, in Sharjah, held a Palm Tree Day celebration under the theme, "How the World Sees Palm Trees," on 14th September, 2017.

The Islamic Botanical Garden was inaugurated in March 2014, as a part of the celebration of the emirate of Sharjah the capital of Islamic culture. The garden gathers various plants mentioned in the Quran and Sunnah. There are 30 plants cited in the Quran, including figs, pomegranates, basil, pumpkins and grapes, as well as 44 in Sunnah such as citrons, fennel-flower seeds, henna, indigo, aquilaria and sweet flag (Acorus Calamus).

The celebration and its events were attended by the Al Dhaid Municipality as an official sponsor, the Sharjah Biennial and the Social Services Department.

Hana Saif Al Suwaidi, Chairperson of the EPAA, said, "Palm trees are the most cited plant in the Quran and Sunnah. Palm trees have always enjoyed sublime status in Arab society, even in the pre-Islam era, where they were symbols of wealth and glory."

She explained that the aim of the celebration was to highlight the importance of palm trees as a source of food and living; revive their heritage; educate the public on the need to preserve them, and to inculcate a love for traditional crafts in the next generation.

The celebration included a photo gallery, various competitions, an exhibition on several treatments using palm trees and their derivatives, a workshop on how to make paper using palm trees, and presentations on palm trees in the UAE.

"According to several statistics, the Arab region has about 90 percent of all the world's palm trees. In the past, Arabs called it the blessed tree or the mother tree. Palm trees are an Arab's best friend and the main source of food. According to many studies and research, palm trees in the UAE date back to more than 5,000 years," she added.

Solar panel cleaning robots debuts in Dubai

As part of its plan to keep abreast of modern applications and advanced methods of project operation, the General Maintenance Department of Dubai Municipality recently implemented one of the new smart applications, automatic cleaning of solar panels that are used for lighting the parks. The experiment was applied in Al Khazan Park.

Eng. Jabir Al Ali, Director of General Maintenance Department at Dubai Municipality said that solar energy projects and applications have become a priority in the projects of Dubai Municipality because of its economic feasibility and environmental and health benefits.

He stressed that the optimal operation of solar projects requires the provision of supplementary services to ensure the best results of its design, implementation and operation.

Al Ali added that the application of cleaning the solar panels automatically in Al Khazan Park is a preparatory stage for implementing this successful experience in existing solar projects and future projects.

"The idea of the experiment is based on the principle of installation of the automatic cleaning device operating on the edges of the panel with a brush with flexible automatic tuning. The system does not require the use of electrical energy and works on the solar energy generated from the panel. In addition to that it does not need water at all in the process of cleaning because its work depends on the pressure of the air," he said.

Al Ali added that the Department is planning to implement such an experiment in other projects and sites too.

3 megawatt solar energy project to put Dubai Autodrome on track towards sustainable energy

The Union Properties pavilion at the 16th edition of Cityscape Global in Dubai provided the backdrop to a signing agreement between SirajPower and Dubai Autodrome to begin work on a new solar power initiative for the MotorCity race track.

The agreement aims to develop the popular motorsport venue into an energy-sustainable facility by outfitting the expansive rooftops at Dubai Autodrome with state-of-the-art solar panels. Once installed, the 3 megawatt project will provide the facility's annual energy requirements.

Chief Executive Officer of Union Properties, Ahmed Khouri, presided over the signing ceremony between the Director at SirajPower, Laurent Longuet, and the General Manager of Dubai Autodrome, Faisal Al Sahlawi.

Longuet highlighted the agreement saying: "The partnership between Dubai Autodrome and SirajPower marks a significant new step to operate this business in a more sustainable fashion. This unique project will showcase the benefits of going green and give us a terrific platform to carry the message to a broader audience."

Al Sahlawi is enthusiastic to make Dubai Autodrome a pioneer circuit for the region. He said: "The collaboration with SirajPower marks a new era for Dubai Autodrome, one which will see our business operate in a more sustainable and cost effective way."

Completed in 2004, the Dubai Autodrome was the UAE's first fully-integrated multipurpose motorsport and entertainment facility. SirajPower is a partnership between Corys Environment, the environmental investment arm of Green Coast Enterprises, a family owned business established in 1977 and Akuo Energy, a leading French independent renewable energy power producer. The Dubai based joint venture is devoted to net metering and provides comprehensive turnkey net metering solutions on solar rooftops in the UAE, including financing.

Study

What is happening in Asia's textile and apparel industry?

The challenges confronting the textile industry in Asia must be overcome to achieve UN SDG Goal 17: Revitalize the global partnership for sustainable development.

A report by Yick, Yan Hung, Janet and Yeung, Mo Ching, Shirley

The corporate disclosure of environmental, social and governance (ESG) aspects has developed in a variety of directions in the past decade. A study on ESG reporting in China by Weber (2014) for the period between 2005 and 2012 has revealed that the main drivers for ESG disclosure were accountability and quality of management.

The Textile Industry in China

China National Textile and Apparel Council (CNTAC) is a national federation of all textile-related industries that aims to improve the textile industry through setting up guidelines and rules with research and development, participating and implementing relevant industry-based guidelines to strengthen international co-operation for the modernization of China's textile industry.

Xiaohui Liang, Chief Researcher, Office for Social Responsibility, says, "Adequate and effective communication on the same platform is vital between management and employees for visualizing United Nations Sustainable Development Goal (UNSDG) #17 Partnership."

Overall impact

The major contributions of CNTAC are to promote long-term internal and external partnerships to increase the awareness of human rights and environmental concerns in the textile industry. In the past decades, the operations mentality of textile industry practitioners in Asia focused on short term benefits, for example, cost reduction and profit-maximization.

In the wake of globalization and technological advancement, competition and quality of labor have been great challenges in the textile industry.

In the wake of globalization and technological advancement, competition and quality of labor have been great challenges in the textile industry.

With the exposure to UNSDGs and continual efforts with resources devoted to CSR, Dr. Liang, one of the 10 UN Sustainable Pioneers 2016, integrated CSR and environmental guidelines into different stakeholders in the textile supply chain, making partners realize the importance of a single platform with two-way communication to highlight and manage issues of human rights and environmental standards. Communication with stakeholders on human rights and environmental issues not only promoted UNSDG #17 partnership but also achieved UNSDG #12 - responsible production and consumption. This helps to build credibility of CNTAC and trust with customers.

Human rights problems and cultural differences have hindered the global growth of Asia's fashion industry. Cultural differences include lack of communication amongst management and employees; and the short-term thinking principle that is often followed.

Asia has been relegated to a role on the supply-side, often playing an unsustainable supplier role in the industry and thereby leading to an unequal industry structure. The four main challenges confronting Asian textile companies are:

1) Inadequate business benefit & profit

The profit margins of Asian products and services are very low because of fierce price competition. Textile companies

depend on exports of raw-materials and simple manual machining programs to survive.

Although China's economic development has meant that a greater number of textile companies and factories can now export directly to foreign markets, the production capacity has not increased rapidly, and the competition has reduced exporters' profit margins dramatically.

2) Lack of Staff Development
The textile or apparel industry as a whole faces huge pressure, for example, from regulatory bodies, demands from consumers and/ or suppliers, and from the community and NGOs. With an unequal supply/demand-chain structure and short-term focused industry leaders, most of the textile companies fail to perform well. As a result, on-job training or interpersonal skills development and mentoring schemes cannot be offered to employees.

3) No popular brands
Although Asia's textile and apparel industry development has a long history, there are very few brands with great reputation. Only one Asian company has entered the ranks of the Top 20 textile brands globally.

4) Special industry norms and compliance
The concept of long-term business partnership is lacking in Asia. Instead, most corporations are "project-based". Such short-term partnerships make it difficult to achieve a "win-win" situation in Asia. Child labor in factories is a major compliance problem facing the industry.

Corporate Sustainability Strategy
In order to tackle the above issues, Dr. Liang has offered two directions to minimize the impacts on the community.

First, as adequate and effective communication is vital, Dr. Liang suggests developing a bridge between management and employees, linking two distant layers up to the same platform.

This consists of "down-to-up" and "up-to-down" communication

channel where, in the former, the employees are encouraged to be more proactive and voice out their thoughts and opinions to the management. In the latter, the management is encouraged to give regular feedback and advice to the employees.

Industry Cultural Change Strategy

Effective communication is required to educate the community as a whole, both in China and in countries around the world.

Dr. Liang therefore emphasizes three main points to increase this awareness:

1) Issues affecting China are not restricted to human rights alone. A comprehensive and all-round development, including environment and well-being, must be promoted.

2) Share the idea of "building a company communication platform" to benefit both management and employees.

3) The unequal industry structure in the textile and apparel industry is a complicated and integrated issue that requires tremendous efforts in dealing with intelligence and cultural differences, amongst others, to solve the problem.

Best Practices

Dr. Liang believes in the power of sustainable partnerships. In his quest to promote the SDG#17 Partnership, he outlines the three best practices for the whole industry in Asia: (1) Strike a balance in the supply chain, allocating resources wisely; (2) Find out how to satisfy employees and make them more socially responsible; (3) Realize people's social responsibility as the textile and apparel industry is still at a developing stage; (4) Motivate consumers to have a mindset of responsible consumption and shoulder social responsibility.

In addition, the three main social and environmental benefits that would arise from implementing this strategy include: resolving of pollution issues, enhancement of quality of labor, and advancement of social and living standards.

Green Flash

Why not buy an Electric Car?

Electric cars were previously unable to cope with hot climatic conditions, but the new models and batteries are suitable for any kind of climate and at competitive prices. They are now available in the Gulf and are taking over the global car market as petrol is getting more expensive and people are getting aware of the serious impact of pollution.

You can drive a charged electric car for 400 kms and this distance is on the rise with developments in battery technology and efficiency in parallel with the drop in time required for fully charging the battery.

Yes, power plants themselves need to burn fossil fuel, polluting the air, but that is not comparable to car emissions. Renewable energy can be tapped to generate electricity (solar, wind, geothermal, biofuel, and tidal energy). We can also maximize energy efficiency and minimize emissions at power stations far better than in vehicles or petrol stations, especially when using natural gas.

Renewable energy will take over electricity generation and electric vehicles will take over transport in the near future. Hence, if you are planning to buy an electric car, there are several things that you need to know and prepare beforehand.

1. Inform utility that you are getting an electric vehicle and check their portal for any promotional plans or advice for vehicle charging. Some utilities charge less off-peak times. There may even be incentives to encourage the use of electric vehicles. New electric car owners in Dubai can charge their vehicles for free until 2019, use free designated green parking, get free vehicle registration and renewal plus a free Salik tag and a license plate sticker identifying the vehicle as an electric car.

2. In order to plan your trips, locate the charging stations. There are 200 stations in Dubai and 8 on the federal highways. Dubai Taxi already has 300 hybrid vehicles and the RTA is planning to add another 200 limousines. Dubai is looking at increasing the number of electric and hybrid cars to 42,000 vehicles in 2030.

3. Home Charging: You can charge an electric vehicle from an ordinary outlet at a rate of 7-10 kms per hour. If you do not travel more than 50 kms/day, night charging is enough, with no modifications to electric panels or home wiring. But you can also use an upgraded home circuit, which is faster and reaches up to 40 kms/hour and costs around AED 3,500.

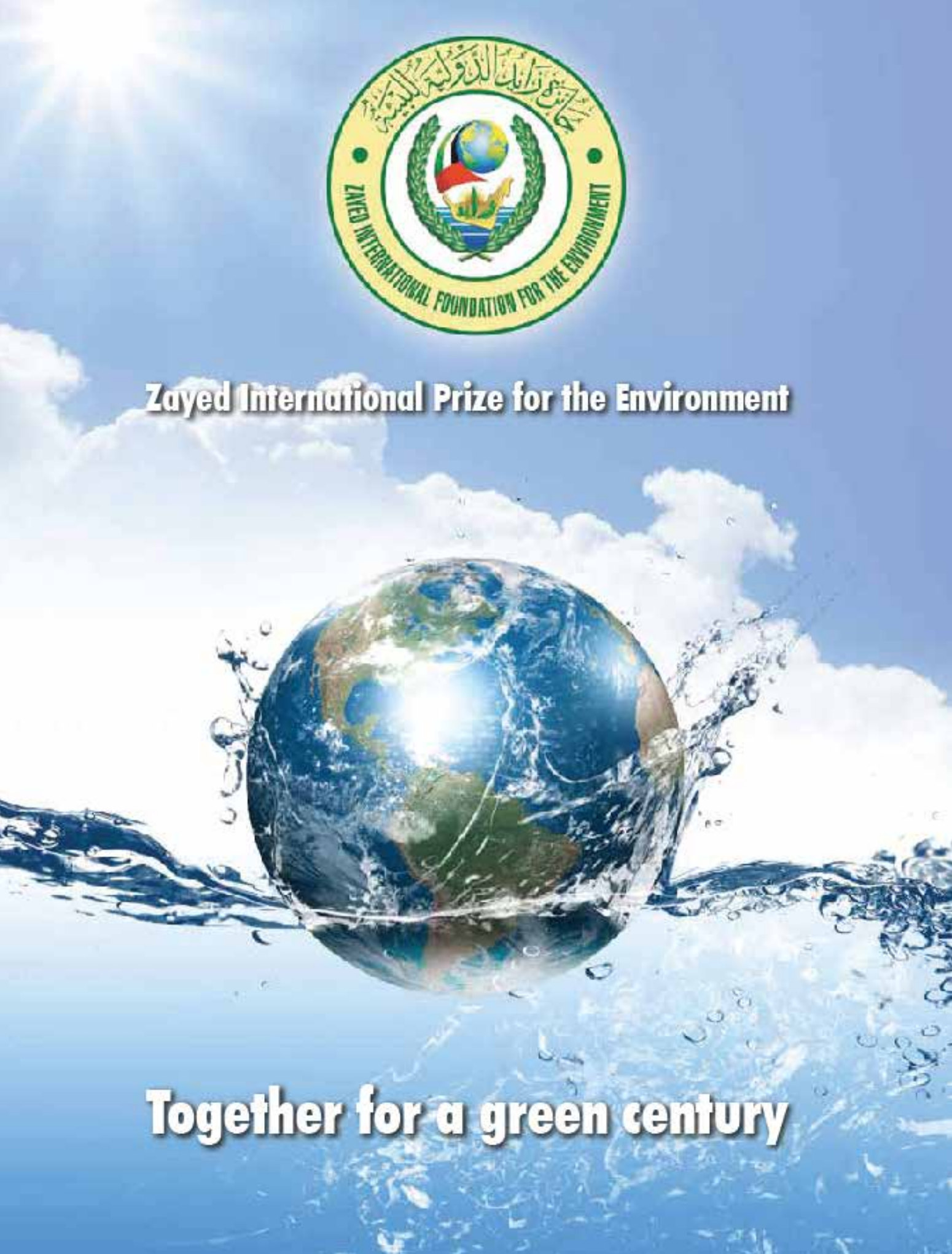
There is also DC fast charging on-the-go which can charge the battery to 80% in 30 minutes, but will be too expensive for home use. It is therefore very important to consult a professional electrician before charging.

4. You have to be very careful when driving an electric vehicle for the first time. The acceleration is much higher than gasoline cars and it can reach very high speed in seconds without emitting any sound.

Driving an electric car is not only cheaper and cleaner, it is also an enjoyable experience as you cruise on the smooth, silent power of electricity.

Dr. Eisa M. Abdelllatif
Chief Technical Advisor
Zayed International Foundation for the Environment

Zayed International Prize for the Environment



Together for a green century

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