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creating green communities for a better tomorrow



Zayed Foundation heeds HH Sheikh Mohammed bin Rashid's call to celebrate memory of late Sheikh Zayed; launches 'Zayed Green Challenge smart platform' at UNEA 3

UAE makes huge strides in combating climate change impact: Al-Zeyoudi



Emirates Appreciation Award for the Environment

Together for a green home



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Prof. Mohammed bin Fahad
Executive Editor

As part of its overall efforts to promote healthy and sustainable environment, Zayed International Foundation of the Environment has made enormous strides in the global environmental arena through its increased international representation and by strengthening its leadership competence as it continues to advance sustainable development through various environmental initiatives.

The launch of the 'Zayed Green Challenge smart platform', an innovative knowledge smart platform, at the UN Environment Assembly (UNEA3) in Nairobi, is testimony to the Foundation's commitment to effectively respond to the pressing environmental challenges of the day. The launch also marks the 100th birth anniversary of the UAE's Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan, as 2018 has been declared the "Year of Zayed" in the UAE. I believe there is no better time to accelerate the steps towards sustainable development in the UAE than the coming year.

The launch of this smart platform at a global environment forum of great magnitude has been a unique opportunity for the Zayed Foundation to share our pride in the timeless legacy of Sheikh Zayed, whose vision was driven by a passionate belief in social, economic and environmental sustainability.

Sheikh Zayed was a visionary thinker whose influence extended beyond the boundaries of the UAE and served as inspirational figure even for the global community. The people of the UAE will forever be indebted to the path he laid out for the nation in the fields of environment preservation and conservation, and global sustainability strategies. The agenda of progress as set by the UN Sustainable Development Goals, all find resonance in and correspond to Sheikh Zayed's vision of his foresight and vision for the UAE's progress.

Through the launch of the 'Zayed Green Challenge smart platform', and in accordance with the events and activities planned for the celebration of the 'Year of Zayed', the Zayed Foundation seeks to celebrate his values and principles that are intrinsic to our national identity.

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From the Managing Editor



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

"At the first meeting of the gathering of scientists ... Scientists from the UAE and scientists who are drawn to and nurtured by the Emirates ... for its future and the UAE Centennial 2071 ... with you, scientists, our ambitions high, and our plans for the future are great, and our dreams touch the sky because they stand on the solid ground of science and knowledge that you establish every day."

- HH Sheikh Mohammed bin Rashid Al Maktoum
(A twitter message)

It was an absolute honour and a matter of great pride for me to be included as one among the community of prominent scientists and experts from various scientific fields who were invited to attend the first Annual Meeting of the Mohammed bin Rashid

Academy of Scientists in Dubai. Developing the sciences have always been a top priority for the UAE, as it believes that investments in scientific advancements and innovation are necessary to build a knowledge society. The UAE also looks upon science as playing an increasingly important role as an enabler of equitable and sustainable development for all people.

As a scientist and an environmentalist at heart, I am proud that the UAE's investments in research and development have helped to accelerate the country's transition to a knowledge-based economy and spur new economic sectors, such as renewable energy, which help secure a vibrant energy future. The UAE has today taken a leading position in the region and globally in introducing new technologies that can generate endless clean power, secure access to water and sequester carbon emissions.

In this respect, the Mohammed bin Rashid Academy of Scientists, which was launched as part of the initiatives of the Emirates Scientists' Council, will provide an incubator environment for all scientists and researchers from the scientific community in the region to undertake cutting-edge research to contribute to the growth and sustainable development and continued advancement of the region.

It is ideas that will shape our future; and I am proud to be part of a nation that supports creativity and values innovation, and is also building a new tradition in science and research that will drive economic, social and environmental changes in a positive and effective manner.

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Cover Story

6 c r e a t i n g g r e e n c o m m u n i t i e s

Zayed Foundation
heeds HH Sheikh
Mohammed bin
Rashid's call to
celebrate memory
of late Sheikh

Zayed; launches 'Zayed Green Challenge smart platform' at UNEA 3

Heeding the nation-wide call of HH Sheikh Mohammed bin Rashid to reinforce the memory of the late Sheikh Zayed in the hearts and minds of the people of the UAE, the Zayed Foundation launched the 'Zayed Green Challenge smart platform' in appreciation of the Founding Father's legacy in environment and sustainable development as the UAE celebrates the 'Year of Zayed' in 2018.

In a recent message issued by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, he invited the nation to deliver a message to the world in 2018 that the late Sheikh Zayed bin Sultan Al Nahyan, the Founding Father of the UAE, is present and will remain forever in the heart and mind of everyone in the UAE.

The Zayed International

Foundation for the Environment heeded this call when it announced the launch of the 'Zayed Green Challenge smart platform' in appreciation of the late Sheikh Zayed bin Sultan Al Nahyan's legacy in environment and sustainable development that has since laid the foundations for the green future of the UAE.

The year 2018 will mark 100 years since the birth of the late Sheikh Zayed, the Founding Father of the

UAE, whose visionary leadership set the course to UAE's growth and modern development. UAE President His Highness Sheikh Khalifa bin Zayed Al Nahyan has announced 2018 as the 'Year of Zayed' to commemorate the legacy of this great visionary leader who passed away in 2004.

The launch of 'Zayed Green Challenge smart platform', an innovative knowledge smart platform on 6th December,



The 3rd UN Environment Assembly

Towards a pollution-free planet

4-6 December 2017

unenvironment.org
beatpollution.org
#BeatPollution

e s f o r a b e t t e r t o m o r r o w



The "Zayed Green Challenge smart platform", an innovative knowledge & education smart platform, was launched in tandem with UNEA3 in Nairobi.

2017, was held in tandem with the UN Environment Assembly (UNEA3) in Nairobi, Kenya, further propelling the international stature of the Zayed International Foundation for the Environment as a progressive force in the environmental field.

As a leading global environmental organisation, the Zayed Foundation has significantly enhanced its international representation by launching the Zayed Green Challenge at the UN Environment Assembly, the world's highest-level decision-making body on the environment.

With a universal membership of all 193 UN Member States, the UN Environment Assembly provides a platform for leadership on global environmental policy and enjoys the full involvement of UN organizations, specialized agencies, inter-governmental organizations, civil society and the private sector.

The announcement of the launch was made by Dr. Meshgan Al Awar, Secretary General of Zayed International Prize for the Environment, who led the Zayed Foundation delegation at UNEA 3. Speaking at the press

conference, she said, "Sheikh Zayed's far-sighted vision has led the UAE to adopt an innovative approach to policymaking leading to lasting results in sustainable development and commitment, and continues to impact lives even today. The Zayed International Prize for the Environment, launched almost two decades ago by UAE Vice President, Prime Minister and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum, is honored to bear the name of this leader who dedicated his life for environmental protection and sustainable development."



Long before the term 'sustainable development' became widely recognized, the late Sheikh Zayed had made conservation and protection of the environment a national priority, almost five decades ago. By looking at the totality of ecosystems, he created a blueprint for making our world more equitable, sustainable and liveable - a framework that is in harmony with the 2030 Agenda for Sustainable Development Goals adopted by the UN in 2015.

Apart from carrying forward the sustainable development vision of the UAE's leaders on an international platform, the Zayed Foundation is also committed to initiating innovative strategies towards pursuing and promoting

its environmental achievements and collaborations to a global audience.

The launch of the "Zayed Green Challenge" smart app - a knowledge-based platform with entertainment tools - seeks to educate and create awareness on sustainable development ideas and promote lifelong learning for all ages and cross-sections of society to enable them to respond positively to pressing environmental challenges.

The Zayed Green Challenge smart platform has been actively promoted and was trending on all social media including Instagram, YouTube and other popular media channels. This smart platform has several

value-added features including prize-winning competitions and the smart app will now select 3 winners monthly. Winners will be rewarded with cash prizes of US\$ 100, 50 and 25 respectively. This smart app is available on both iOS & Android platforms.

Further emphasizing the significant role of smart platforms, applications and innovations for sustainable living, Dr. Al Awar added: "By testing one's knowledge and raising your appreciation of a healthy environment which is the cornerstone of a sustainable future, the Zayed Foundation is taking forward the call to celebrate the precious resources of our Earth while also pledging to keep it pollution-free for the

The Zayed Foundation is committed to initiating innovative strategies towards pursuing and promoting its environmental achievements and collaborations to a global audience.



coming generations.

"This is to fulfil the aim of promoting sustainable development through achievement of SDGs, especially Goal 4 that calls for ensuring inclusive and quality education for all as it is the key to build the human capacity & create awareness that will allow many other SDGs to be achieved."

With the understanding that knowledge and innovation can play a crucial role in shaping our sustainable future, the Zayed International Foundation for the Environment is undertaking education initiatives consisting of innovative smart applications, interactive and entertainment tools, mass media and web

services that serve as a smart and innovative educational tool to disseminate knowledge and awareness through the mode of entertainment. This innovation strategy also carries forward the achievements and collaborations of the Zayed Foundation to a global audience. We are currently in the final phase of the Year of Giving that has instilled the culture of volunteering, another valuable legacy of Sheikh Zayed.

"The humanitarian values of generosity and hospitality that he embodied lie at the heart of the UAE identity and his pioneering steps towards sustainable development will guide us as we move forward to celebrating 2018 as the Year of Zayed," said Dr. Al Awar.

"I believe that the UAE will continue its trailblazing success in incorporating sustainable strategies on a national scale in the Year of Zayed as it continues its transformation into becoming one of the most sustainable nations in the world, and which will, no doubt, serve as a viable model for progress and development for other nations."

Since its inception in 1999, the Zayed Foundation has made enormous strides in the global environmental arena through its increased international representation and by strengthening its leadership competence as it effectively responds to the pressing environmental challenges of the day.

Cover Story

10 c r e a t i n g g r e e n e c o m m u n i t i e s

**UAE makes
huge strides in
combating climate
change impact: Al-
Zeyoudi**



The Minister of Climate Change and Environment delivered the UAE's keynote speech at the 23rd session of the Conference of the Parties (COP23) to the United Nations Framework Convention on Climate Change (UNFCCC), held from November 6th to 17th, 2017 in Bonn, Germany.

Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, has stated that the United Arab Emirates has made significant progress in combating the climate change impact.

He cited in this regard the country's national programmes, such as the launch of the National Climate Change Plan 2050 and the National Climate Adaptation Programme, NCAP, which aim to strengthen the state's national capacities to withstand climate challenges and transform them into opportunities that ensure

long-term economic growth for current and future generations.

He made these statements during the UAE's keynote speech at the 23rd session of the Conference of the Parties (COP23) to the United Nations Framework Convention on Climate Change (UNFCCC), held from November 6th to 17th, 2017 in Bonn, Germany, to discuss the next steps in the implementation of the Paris Agreement and review the progress of the signatory countries in achieving their climate change goals.

Al-Zeyoudi added that in view

of the substantial changes to be implemented in the next phase as part of the UAE Centennial Plan 2071, the UAE Energy Strategy 2050 has been announced to boost the country's ambitions to raise the share of clean energy in the national energy mix to 27% by 2021 and 50% by 2050, in addition to laying the foundation stone of the Noor Abu Dhabi Plant featuring cutting-edge photovoltaic technology with a potential to generate 1,177 MW of solar energy.

Al-Zeyoudi added that the fourth stage of the Mohammed bin



During the conference, Dr. Al Zeyoudi reaffirmed the UAE's commitment to the objectives of the UNFCCC, the Paris Agreement and all relevant international resolutions.

Rashid Al Maktoum Solar Park was launched with a production capacity of 700 MW as part of a plan to produce 5,000 MW of energy by 2030. He indicated that the UAE has also laid the foundation for the first waste-to-energy project and implemented the first carbon capture and storage (CCS) facility in the Middle East and North Africa region.

In recognising the UAE's most stellar environmental achievements, he highlighted the important role played by Abu Dhabi Future Energy Company,

Masdar, which has been leading the country's efforts in the development of renewable energy technologies and solutions since its inception in 2006, and has invested about US\$8.5 billion in local and global projects, contributing to the increase of renewable energy capacity by about 2.7 million GW.

The minister stressed that this global event is taking place at a time when the global climate has been worsening, and extreme weather events have been occurring at a faster and more severe pace than ever before

"This conference serves as an ideal platform for strengthening cooperation frameworks that will allow countries to tackle the global challenges of climate change. Considering the current alarming situations, we need to act more swiftly to maintain the momentum created by the historic Paris Agreement if we are to translate its objectives into practical measures. Today, let us together send a positive message from Bonn to the entire world through reaffirming our determination to move forward in shaping the future we aspire to achieve," Al-Zeyoudi said.



12 creating green community

Al-Zeyoudi reaffirmed UAE's commitment to the objectives of the United Nations Framework Convention on Climate Change, the Paris Agreement and all relevant international resolutions, as well as the country's determination to continue its voluntary participation in international efforts to mitigate and adapt to climate change.

UAE highlights climate action achievements at COP23 in Bonn

A high-level delegation comprising representatives of the country's public and private sector attended the 23rd session of the Conference of the Parties (COP23) to the United Nations Framework Convention on Climate Change (UNFCCC).

Delegates from the UAE government, business and academia joined their counterparts from around the globe at the event held from November 6th to 17th, 2017 in Bonn, Germany, to discuss the next steps in the implementation of the Paris Agreement and review the progress of the signatory countries in achieving their climate change goals.

Dr Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, headed the UAE delegation to COP23.

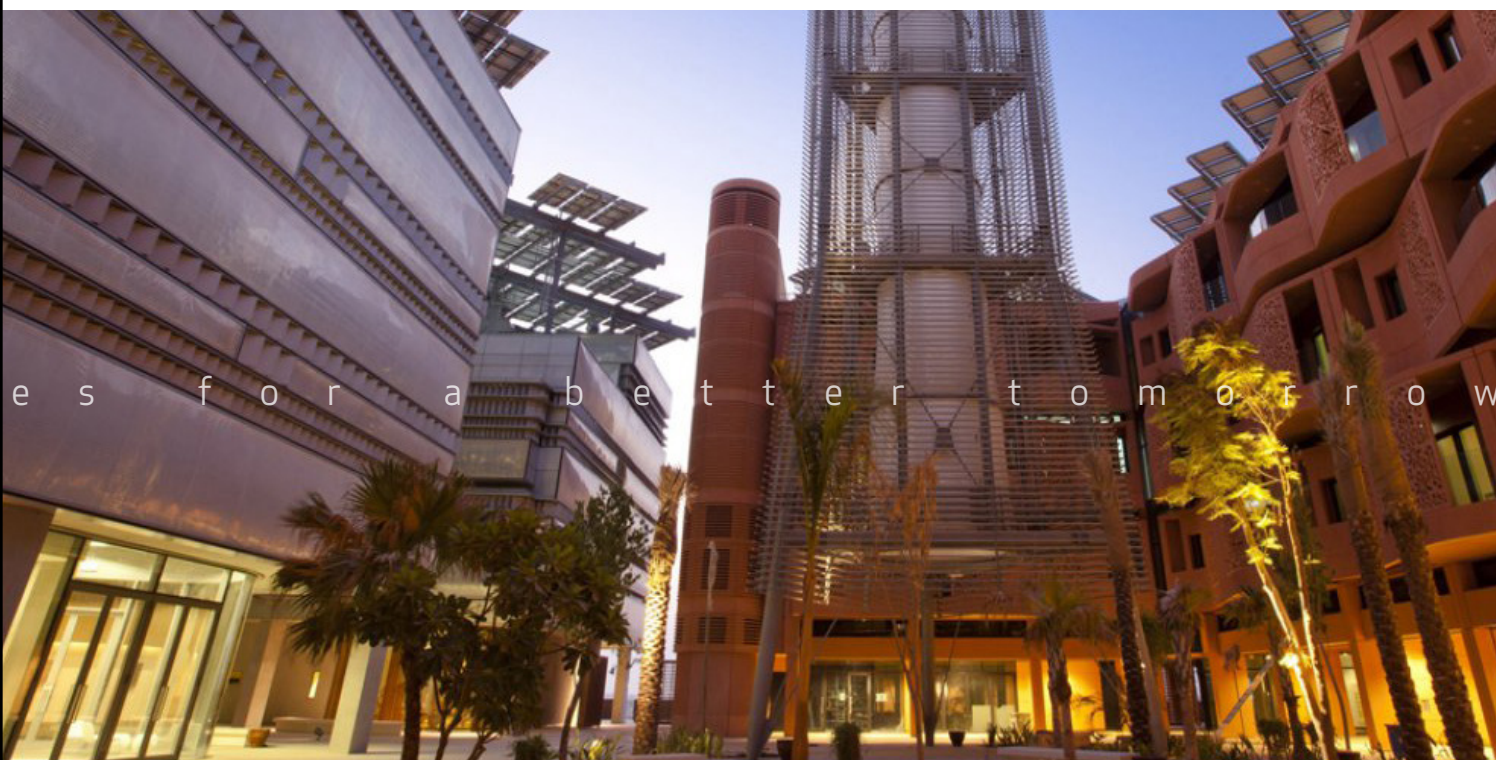
Presided by Fiji with the support of the German government, COP23 took place against a backdrop of extreme weather events that have destroyed the

lives of millions of people across Asia, the Americas and the Caribbean.

In his address at the event, Dr. Al Zeyoudi said: "This year witnessed devastating hurricanes, fires, floods, droughts, ice melting and impact on agriculture that could hugely threaten food security. This conference therefore serves as an ideal platform for strengthening cooperation frameworks that will allow countries to tackle the global challenges of climate change."

He added: "Considering the current alarming situations, we need to act more swiftly to maintain the momentum created by the historic Paris

“The UAE has made significant progress in combating the climate change impacts through our revolutionary national programs such as the launch of the National Climate Change Plan 2050 and the National Climate Adaptation Program.”



Agreement if we are to translate its objectives into practical measures.”

Speaking on the UAE's ambitious climate action plans, Dr Al Zeyoudi said: “The UAE has made significant progress in combating the climate change impacts through our revolutionary national programs, such as the launch of the National Climate Change Plan 2050 and the National Climate Adaptation Program, which aim to strengthen our national capacities to withstand the climate challenges and transform them into opportunities that ensure long-term economic growth.”

Dr Al Zeyoudi participated in a high-level panel discussion, held

as part of the five-day agenda of events hosted by the Marrakech Partnership for Global Climate Action to demonstrate how cities, regions, businesses and investors work side by side with governments to implement the Paris Agreement.

Highlighting the UAE's contributions to achieving the goals of the Paris Agreement and UNFCCC, he noted that the National Climate Change Plan 2050 involves engaging companies and other non-government entities in climate and environment policy-making as well as introducing new solutions and technological innovations that help combat climate change. He emphasized that the country's businesses

are leading the change in many climate-related areas.

He said that the UAE tackles climate change through effective policies and initiatives that aim to diversify the economy into new, knowledge-based industries. He added that the country dominates the clean energy sector with an ambitious clean energy target of 27 percent by 2021 and 50 percent by 2050. He also stressed that the UAE supports international climate action through renewable energy aid and investments in multiple commercial renewable energy projects across the globe. In closing, he emphasized that the country seeks to reinforce its status as a regional leader and global convener on climate action.

UNEA 3

14 creating greener communities

World commits to pollution-free planet at UNEA 3



If all commitments are met, 1.49 billion people will breathe clean air, one-third of the world's coastlines will be clean, and USD 18.6 billion of investment will come online.

On 6th December 2017, the world committed to a pollution-free planet at the close of the UN Environment Assembly in Nairobi, with resolutions and pledges promising to improve the lives of billions across the globe by cleaning up our air, land and water.

If every promise made in and around the summit is met, 1.49 billion more people will breathe clean air, 480,000 km (or around 30 per cent) of the world's coastlines will be clean, and USD 18.6 billion for research and development and innovative

programmes to combat pollution will come online.

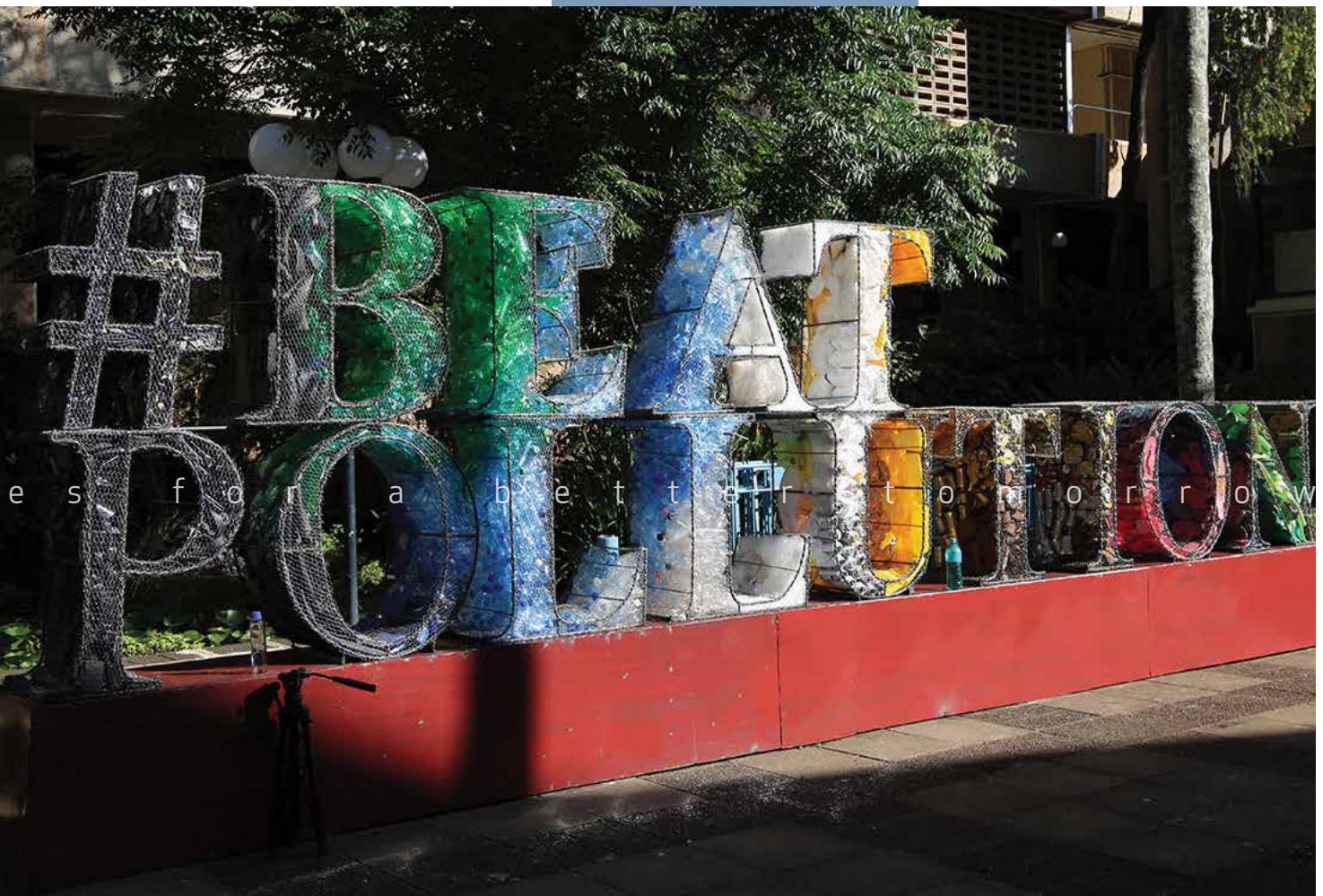
"The science we have seen at this assembly shows we have been so bad at looking after our planet that we have very little room to make more mistakes," said Dr. Edgar Gutiérrez, Minister of Environment and Energy of Costa Rica and the President of the 2017 UN Environment Assembly.

"With the promises made here, we are sending a powerful message that we will listen to the science, change the way we consume and produce, and tackle pollution in

all its forms across the globe," he added.

Over 4,000 heads of state, ministers, business leaders, UN officials, civil society representatives, activists and celebrities gathered at the summit in Nairobi, which ran for three days.

For the first time at a UN Environment Assembly, environment ministers issued a declaration. This declaration said nations would honour efforts to prevent, mitigate and manage the pollution of air, land and soil,



The report shows that the Abu Dhabi is already experiencing the effects of climate change including increases in air and sea temperatures, sea level rise, higher salinity and acidity of water resources.

freshwater, and oceans – which harms our health, societies, ecosystems, economies, and security.

The declaration committed to increasing research and development, targeting pollution through tailored actions, moving societies towards sustainable lifestyles based on a circular economy, promoting fiscal incentives to move markets and promote positive change, strengthening and enforcing laws on pollution, and much more.

The assembly also passed 13

non-binding resolutions and three decisions. Among them were moves to address marine litter and microplastics, prevent and reduce air pollution, cut out lead poisoning from paint and batteries, protect water-based ecosystems from pollution, deal with soil pollution, and manage pollution in areas hit by conflict and terrorism.

“Today we have put the fight against pollution high on the global political agenda,” said Erik Solheim, head of UN Environment. “We have a long struggle ahead of us, but the summit showed there

is a real appetite for significant positive change.

“It isn’t just about the UN and governments, though. The massive support we have seen from civil society, businesses and individuals – with millions of pledges to end pollution – show that this is a global challenge with a global desire to win this battle together.”

A large part of the impact from the assembly comes from global support. UN Environment’s #BeatPollution campaign hit almost 2.5 million pledges during



the event, with 88,000 personal commitments to act.

Chile, Oman, South Africa and Sri Lanka all joined the #CleanSeas campaign during the Nairobi summit, with Sri Lanka promising to implement a ban on single-use plastic products from 1 January 2018, step up the separation and recycling of waste, and set the goal of freeing its ocean and coasts of pollution by 2030.

There are now 39 countries in the campaign.

Colombia, Singapore, Bulgaria, Hungary and Mongolia joined 100 cities who were already in the #BreatheLife campaign, which aims to tackle air pollution. Every signatory has committed

to reduce air pollution to safe levels by 2030, with Singapore promising to tighten fuel and emissions standards for vehicles, and emissions standards for industry.

The global momentum comes not a moment too soon, as the UN Environment report, The Executive Director's Report: Towards a Pollution-Free Planet, lays out.

Overall, environmental degradation causes nearly one in four of all deaths worldwide, or 12.6 million people a year, and the widespread destruction of key ecosystems. Air pollution is the single biggest environmental killer, claiming 6.5 million lives each year.

Exposure to lead in paint causes brain damage to 600,000 children annually. Our seas already contain 500 "dead zones" with too little oxygen to support marine life. Over 80 per cent of the world's wastewater is released into the environment without treatment, poisoning the fields where we grow our food and the lakes and rivers that provide drinking water to 300 million people.

There is also a huge economic cost. A recent report by the Lancet Commission on Pollution and Health says that welfare losses due to pollution are estimated at over USD 4.6 trillion each year, equivalent to 6.2 per cent of global economic output.



GCC countries adopt UAE's draft regulations for electric vehicles

GCC countries have adopted the UAE's draft regulations on the use of electric vehicles, thanks to their positive features which take into account safety requirements, overall performance of electric vehicles, and their adaptation to weather conditions in the region.

Abdulla Al Maeeni, Director-General of the Emirates Authority for Standardisation and Metrology, ESMA, said that the GCC Standardisation Organisation is currently drafting their own regulations based on those documents.

Al Maeeni added that ESMA is also working on, through the UAE draft, a new phase of eco-friendly and economically-beneficial

national policies. The main purpose of adopting these directives was to protect the environment from pollution and emissions, as well as to support the national economy, encourage new sources of economic growth, and realise the country's strategy that aims to support eco-friendly concepts and innovation, he further added.

RTA operates electric abras for serving Global Village visitors

The Roads and Transport Authority, RTA, in collaboration with the management of the Global Village, has endorsed a plan for operating electricity-powered abras to serve visitors of that popular leisure destination.

The deployment of these abras on the Water Canal of the Global

Village has been quite popular over the past eight years.

According to Mansour Al Falasi, Director of Marine Transport, RTA Public Transport Agency, "The growing popularity of the Abra service contributes to the growth of tourist numbers in the Global Village."

"The RTA is keen on running integrated transit services, including electric abras, to meet the growing public demand and realise its vision of Safe & Smooth Transport for All. In collaboration with the Global Village management, the RTA provides stylish mobility options featuring modern, and environment-friendly transit means with heritage-inspired design," he added.

Report

18 c r e a t i n g g r e e n c o m m u n i t

Dr. Meshgan Al Awar is recognised and honored in the Women in Science Hall of Fame



Under the patronage and presence of His Majesty King Abdullah Bin Al-Hussein of the Hashemite Kingdom of Jordan, and with the attendance of about 3000 prominent scientists, political leaders, academics and decision-makers representing more than 120 countries, Dr. Meshgan Al Awar, Director, Research & Studies Center, Dubai Police Academy, was honored and recognised as the first Emirati in the Women in Science Hall of Fame at the World Science Forum in Jordan.

As an honoree of the Women in Science Hall of Fame, the several noteworthy achievements and contributions to the field of science made by Dr. Meshgan Al Awar, Director, Research & Studies Center, Dubai Police Academy, and Secretary General, Zayed International Foundation for the Environment, was prominently highlighted at the Women in Science Hall of Fame at the World Science Forum held in

Jordan in November 2017.

Dr. Meshgan Al Awar was inducted into the Women in Science Hall of Fame in her capacity as an outstanding female scientist of the UAE and her remarkable accomplishments in her field continue to serve as an inspiration for young girls to study science and pursue scientific careers. Dr. Meshgan received her Bachelor of Science in Chemistry and

Geology with Distinction from UAE University and her PhD in Physical Chemistry from University of Wales College of Cardiff.

On the invitation of HRH Princess Sumaya bint El Hassan, President of the Royal Scientific Society, the Hashemite Kingdom of Jordan, and Professor László Lovász, President, Hungarian Academy of Sciences, World Science Forum, Dr. Meshgan Al Awar, attended the World Science



World Science Forum 2017 in Jordan has called for a more responsible and ethical use of innovation to address the social and economic relevance, influence, and responsibilities of science.

Forum. She was also invited to a special session entitled "Promotion of Arab Women in Science".

The session ought to strengthen lifelong learning trends for Arab women and highlight its mechanisms, approaches and technical platforms in order to utilize them within the contexts of education and work. Arab women have contributed significantly to scientific disciplines despite the numerous challenges which include cultural and other constraints.

At the event, Dr. Meshgan Al Awar highlighted how developing the

sciences has always been a top priority for the UAE, as it believes that investments in scientific advancements and innovation are necessary to build a knowledge society. "Future skills, future sciences and future technology, are at the core of the UAE's strategies as it aims to foster knowledge, science and research to ensure a better future for the generations ahead."

The UAE is aware of the importance of scientific research as a key method for achieving growth, progress and sustainable development, she said. "Accordingly, national universities in the UAE

- where future scientists and researchers are born - are creating interrelated disciplines that combine scientific specializations with technological abilities and business management skills which help to increase the choices for both men and women in science."

Dr. Meshgan also said that science plays an increasingly prominent role as an enabler of fair and sustainable development. "Science serves humanity and it is imperative to bridge the gap between science and technology and science diplomacy to ensure that critical global issues can be addressed holistically."

Future Industry

20 c r e a t i n g g r e e n c o m m u n i t

HH Sheikh Mohammed bin Rashid attends first annual Academy of Scientists meeting



The Mohammed bin Rashid Academy of Scientists aims to create a scientific database to build up national capabilities in the field of scientific research and shape the future development of scientific and technological fields for the future industry.

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has said that developing the sciences are a top priority for the UAE, given its importance to achieve the government's strategic objectives by assisting and advising government bodies in their various development projects.

"The prosperity of any society lies in investing in the capabilities of its scientists and researchers and involving them in the planning for the future," His Highness said.

"We launched the Mohammed bin Rashid Academy of Scientists, the first of its kind in the Arab world, to be the incubator platform for all scientists of the region and their cutting-edge research that we need to sustain our growth and development," he added.

"Our aims are to revive the spirit of scientific production to serve humanity, enhance the role of scientists in the development process of the UAE, and to create an Emirati community of scientists across all scientific disciplines," Sheikh Mohammed explained.

Sheikh Mohammed's remarks came as he attended the first annual meeting the Mohammed bin Rashid Academy of Scientists, which took place at Etihad Museum in the presence of prominent scientists and experts from various scientific fields.

The Annual Meeting focused on three main topics: natural sciences, health sciences, and engineering and technology.

Ten discussion groups were formed with an aim to develop scientific plans and initiatives to achieve the national strategies



The Mohammed bin Rashid Academy of Scientists is a platform for the scientific community from different disciplines, both in the UAE and outside.

and objectives and enrich the scientific arena locally and globally.

Present during the meeting were HH Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai; Sheikh Ahmed bin Saeed Al Maktoum, Chairman of Dubai Civil Aviation Authority; Sheikh Mansour bin Mohammed bin Rashid Al Maktoum; Mohammad bin Abdullah Al Gergawi, Minister of Cabinet Affairs and the Future, and Sarah Al Amiri, Minister of State for Advanced Sciences and Chairperson of Emirates

Scientists Council, along with a number of senior officials.

The meeting witnessed the launch of the Mohammed bin Rashid Medal for Scientific Excellence, which aims to honour distinguished scholars and researchers who achieved remarkable contributions in scientific fields.

The medal, which represents the highest Emirati scientific honour, was awarded to Dr. Saeed Alhassan Alkhazraji, from the UAE, and Dr. Hassan Arafat, from the Kingdom of Jordan, for their

achievements and contributions to the sciences.

According to Sarah Al Amiri, "The Annual Meeting of the Mohammed bin Rashid Academy of Scientists comes as a response to His Highness Sheikh Mohammed's message to the community of scientists to advance the role of science and scientists in the UAE." She further noted that the Mohammed bin Rashid Medal for Scientific Excellence honours distinguished scholars and researchers who achieved remarkable contributions in scientific fields.

Nuclear Energy

22 c r e a t i n g g r e e n c o m m u n i t

UAE peaceful
nuclear energy
programme in
full compliance
with international
standards: IAEA



[The IAEA international ministerial conference provided a forum for high-level dialogue on the role of nuclear power in meeting future energy demand, contributing to sustainable development and mitigating climate change.](#)

The United Arab Emirates' peaceful nuclear energy programme is in full compliance with the highest international standards of safety and security, set by the International Atomic Energy Agency, said Mikhail Chudakov, Deputy Director-General, IAEA.

The international official made the statements at a news conference wrapping up the IAEA international ministerial conference which concluded in Abu Dhabi on 11th November, 2017. The conference provided a forum for high-level dialogue on

the role of nuclear power in the coming decades, he said.

"While respecting the right of each State to define its national energy policy, the conference recognised that nuclear power remains an important option for many countries to improve energy security, reduce the impact of volatile fossil fuel prices and mitigate the effects of climate change and air pollution, including by backing up intermittent energy sources," said Ambassador Hamad Ali Alkaabi, the UAE's Permanent Representative to the IAEA in Vienna.

Al Kaabi said that the participants widely agreed on key areas, including the need to create an enabling environment to facilitate the introduction of nuclear power and ensure its safety and sustainability; that nuclear power is a safe, reliable and clean energy option; and that "innovations in technology design including reactor size as well as in investment and ownership models could facilitate the introduction of nuclear power in more countries."

Small modular reactors currently under development "may allow for



Nuclear power produces 11 percent of the world's electricity, which amounts to one-third of all electricity generated from low-carbon sources.

expanded use of nuclear power including on smaller grids and in remote settings, as well as for non-electrical applications and improve access to nuclear energy," the ambassador said.

The conference highlighted the importance of public confidence for the future of nuclear power.

The event concluded that for many countries, nuclear power is a proven, clean, safe and economical technology that will play an increasingly important role in achieving energy security, reducing the impact of volatile

fossil fuel prices and mitigating the effects of climate change and air pollution. For many countries, nuclear power will have an important role to play in achieving the Sustainable Development Goals and meeting the targets in the Paris Agreement. Governments should ensure that their national energy policies support their development and climate goals.

Nuclear power emits virtually no greenhouse gases during operation. It produces 11 percent of the world's electricity, which amounts to one-third of all

electricity generated from low-carbon sources. Thirty countries currently operate nuclear power plants and around 30 others are considering or preparing to introduce nuclear power. Fifty-seven power reactors are under construction around the world, with the UAE in the process of building its first four.

In conclusion, participants recognised the IAEA's leading role in promoting peaceful uses of nuclear energy and supporting efforts to strengthen global nuclear safety, nuclear security and safeguards.



MOCCAЕ signs MoUs on combating illegal trade in endangered species

Ministry of Climate Change and Environment signs MoUs with Dubai Police, Telecommunications Regulatory Authority and Dubai Municipality to combat illegal trade in endangered species.

The Ministry of Climate Change and Environment, MOCCAЕ, has signed MoUs with Dubai Police, the Telecommunications Regulatory Authority, TRA, and Dubai Municipality, DM, on stepping up coordination in combating illegal trade in endangered species in the UAE.

Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, and Major-General Abdullah Khalifa Al Marri, Commander-in-Chief of Dubai Police, signed the MoU between the MOCCAЕ and Dubai Police.

Sultan Alwan, Assistant Under-Secretary of the Regions Sector at MOCCAЕ, signed the MoUs with the TRA, represented by Majed Sultan Al Mesmar, Deputy Director-General. He also signed the MoU with Dubai Municipality, represented by Ahmed Abdulkarim Ahli, Assistant Director-General for General Support.

Speaking on the occasion, Dr. Al Zeyoudi said, "MOCCAЕ has undertaken a series of measures to combat illegal wildlife trade at the federal level. Confirming the commitment of the signatories

to pursuing common interests, the MoUs aim to facilitate the enforcement of Federal Law No. 11 of 2002 concerning the regulation and control of international trade in endangered species of wild fauna and flora. In addition, they seek to help the concerned authorities avoid duplicating efforts in the implementation of laws, rules and regulations, as well as the inspection of the relevant facilities."

Under the terms of the Dubai Police MoU, MOCCAЕ will report suspected traders in endangered



MOCCAЕ has undertaken a series of measures to combat illegal wildlife trade at the federal level.

species to them. The police will take all necessary legal actions, including launching investigations into the illegal activities and reporting the locations of endangered animals to the ministry.

Major-General Al Marri said that Dubai Police is always committed to its security and environmental role and implementing domestic and international policies for the protection of endangered plants and animals, combating any activity contrary to the principles of the preservation of these species.

Mr. Ahli said, "Dubai Municipality is one of the first local authorities to join the CITES Convention and has committed itself to the implementation of its provisions."

MOCCAЕ and Dubai Municipality will collect statistics on violations and run periodic public awareness campaigns on the illegal wildlife trade. In addition, the ministry will support DM with capacity building to assist the parties in implementing the provisions of the MoU.

With regards to the third Memorandum, MOCCAЕ will

provide the TRA with details of those selling endangered species on social media. The authority will coordinate with the respective social media platforms to delete posts related to illegal animal trade and poaching activities. The concerned parties will also exchange expertise and best practices in the tracking of illegal animal traders online.

Al Mismar said, "We will work in coordination with our partners to ensure that all electronic business processes and activities are in line with the laws, policies and legislation in force in the UAE."

Report

26 c r e a t i n g g r e e n c o m m u n i t

Renewable energy can be strengthened in next round of climate negotiations



Nationally Determined Contributions under Paris Agreement must reflect growing business case and global momentum for renewables.

Countries have an opportunity to significantly increase renewable energy ambition within Nationally Determined Contributions (NDCs), and to accelerate its deployment in line with climate objectives under the Paris Agreement, according to a new report by the International Renewable Energy Agency (IRENA).

Released on 7th November at the UN Climate Change Conference in Bonn, Germany, the report found that current NDCs and energy strategies can be substantially enhanced to meet global climate

objectives. The report also identifies that renewable energy already targeted within national energy strategies often exceeds renewable energy capacity currently envisaged under NDCs.

Renewable energy deployment levels under current NDCs would bring online 80GW of renewable energy capacity globally each year, between 2015 and 2030. However, the current pace of deployment has seen countries install 125GW of new renewable energy capacity on average annually between 2010 and 2016, suggesting that NDCs can

better reflect the global energy transition. The report highlights that a more integrated approach would send a clearer message to the global investment community willing to invest in this sector.

“The case for renewable energy has strengthened considerably since parties first quantified the renewable energy components of their nationally determined contributions,” said Adnan Z. Amin, IRENA Director-General. “Since then, the increasing attractiveness of renewables as the lowest-cost source of new energy supply in countries around the world has



Substantial scope exists for countries to increase their renewable energy ambitions in a cost-effective way under NDCs

fuelled unprecedented levels of deployment. Our analysis finds that the convergence of innovation, falling costs and positive socioeconomic impacts of renewable energy make a compelling case for accelerating action.”

Furthermore, while the power sector emissions are addressed in most NDCs, significant carbon reductions in end uses of energy (mobility, heating and cooling) are needed to meet the objectives of the Paris Agreement. The use of renewable energy in other sectors of the economy such as transport, industry and residential buildings can also

support increased ambition.

Key findings of the report are:

- Substantial scope exists for countries to increase their renewable energy ambitions in a cost-effective way under NDCs.
- In Africa, NDCs could cost-effectively target 310 gigawatts (GW) of renewable energy by 2030, almost four and a half times the capacity outlined currently in NDCs on the continent.
- Only ten G20 countries currently include quantified

renewable energy targets in their NDCs, while all of them have set targets as part of their national energy plans and strategies.

- NDCs of G20 countries – responsible for 80 per cent of the global energy-related CO₂ emission reductions needed by 2050 – could aim for an installed renewable energy capacity of 4.6 terrawatts (TW) by 2030, 60 per cent more than would be achieved though the combined implementation of national energy targets and current NDCs.



Emirates Group releases 2016/17 Annual Environmental Report

The report presents environmental sustainability initiatives and performance data from a range of Group activities covering airline operations, dnata's cargo and ground handling businesses, and other commercial activities such as engineering and catering.

The Emirates Group, comprising Emirates Airline and dnata, published its seventh annual Environmental Report on 23rd November which outlines the group's environmental performance for the financial year 2016-2017.

Audited by PricewaterhouseCoopers, PwC, the report presents environmental sustainability initiatives and performance data from a range of group activities covering airline operations, dnata's cargo and ground handling businesses, and other commercial

activities such as engineering and catering.

With 2017 being the United Nations International Year of Sustainable Tourism for Development, the group has linked its environmental priorities to the UN Sustainable Development Goals to help it focus better on where it can have the greatest impact.

"2016-17 was a particularly testing year, as we faced a series of social, economic and political events that erupted across our markets around the world.

Consumer confidence and travel demand were hit by a series of shocks. Yet our strong track record, business foundation, and brand reputation have stood us in good stead, enabling us to weather these turbulent times," said H.H. Sheikh Ahmed bin Saeed Al Maktoum, Chairman of Dubai Civil Aviation Authority and Chief Executive of Emirates Group.

"We are investing in our people, new systems, technologies, and infrastructure that will enable us to continue developing our business profitably and sustainably. Our journey to

e s f o r a b e t t e r t o m o r r o w



Water-saving aircraft washing procedures introduced by Emirates Engineering help to save 11 million litres of water a year.

transform our business will open new opportunities to improve levels of resource efficiency, building up our business resilience to chart a path not just through the year ahead, but for the long-haul," he added.

A key part of the group's environmental strategy is operating an eco-efficient fleet, and during the year Emirates Airline retired its last remaining Airbus A340s and A330s. It now only operates a passenger fleet of Airbus A380s and Boeing 777s, and together with its Boeing 777 freighters, the average fleet age

stands at 5.3 years, well below the industry average. A modern wide body fleet delivers lower engine and noise emissions, and offers customers a higher level of comfort.

The group's efforts during the year to enhance operational efficiency across the business also helped to reduce costs and its environmental impact. Water-saving aircraft washing procedures introduced by Emirates Engineering help to save 11 million litres of water a year, while their energy efficiency projects, such as installing light

emitting diode lighting in hangars, are saving a substantial 237 megawatt-hours of electricity a month.

On board, the airline is now providing sustainably-made blankets in Economy Class made from 28 recycled plastic bottles, which could otherwise have ended up in landfills.

dnata marked its most successful and profitable year of operations yet in its 58-year history. Across its four business divisions, UAE airport operations, international airport operations, travel



services, and catering, the company won significant new contracts, expanded existing relationships, and continued to win recognition for its quality services.

Its ground handling operations in Dubai and around the world have been gradually replacing vehicles and ground service equipment with electric/hybrid equipment, reducing emissions of carbon dioxide and other pollutants. Electric ground equipment is also being used at several airport operations internationally, including in the UK, the US, Netherlands, Switzerland and Singapore, with plans to extend the fleet of vehicles and the locations where they are deployed.

To enable long-term excellence in Health, Safety and Environment, HSE, dnata implemented an Integrated Management System, IMS, during the year. The IMS covers all operational aspects of dnata's diverse business, and will support a learning culture to deliver continuous improvement across all areas of the business.

The group continued its strong support for action against the illegal trade in wildlife, and through its "A Greener Tomorrow" initiative, contributed to three organisations in Africa that are at the forefront of wildlife protection: the Southern African Wildlife College Trust, Southern African Foundation for the Conservation of Coastal Birds, and African Parks. dnata's

employee-led philanthropy programme 'dnata4good' also continued its support for wildlife conservation in South Africa, and completed a school-building project in Nepal.





Global market for district cooling solutions to rise to \$9.54 billion by 2021

The use of district cooling in buildings has become a central part of the construction planning and design, as more property developers realise the value of energy-efficient technologies in delivering less expensive and greener built environment.

In Dubai, seven of the 10 most beautiful and uniquely-designed buildings are served with the district cooling system provided by the Emirates Central Cooling Systems Corporation, Empower, the world's largest district cooling services provider.

Empower has announced that the Burj Al Arab, Raffles Hotel Dubai, Jumeirah Beach Hotel, Atlantis The Palm, DIFC – Gate Building,

Emirates Towers, and JW Marriott Marquis Hotel Dubai preferred to use district cooling, rather than conventional cooling, and have entrusted Empower to provide the services.

Studies show that district cooling can save approximately 50 percent of the energy used for cooling, compared to conventional methods, which makes the system one of the major energy efficiency accelerators in the world, as declared by the United Nations-led initiatives on energy efficiency.

The system is cost-efficient and also saves on resources. Market research has revealed that the global market for district cooling solutions could grow from

US\$5.14 billion in 2016 to \$9.54 billion by 2021 at a compound annual growth rate of 13.19 percent from 2016 to 2021. From an economic perspective, rising energy prices, growing environmental concerns and increasing awareness on low-cost and highly efficient cooling systems are major drivers for their growth.

Apart from addressing environmental sustainability, Empower notes that modern district cooling makes it easy for companies to maintain their air-conditioning systems, as the solution is remotely maintained in a highly-controlled environment, thereby, improving safety and security and reducing the leakage rate.



GCC experts attend Wetland Monitoring Workshop in Dubai

More than 60 experts from GCC countries recently discussed wetland monitoring and management plans using advanced technology, including remote sensing. The participants, who included experts from the UAE, work in wetland management and the remote sensing field in government departments and corporate entities, in addition to academic institutions.

The wetland monitoring workshop was organised by the Natural Resources Conservation Section of the Environment Department in Dubai Municipality, in collaboration with Tour du Valat and the Satellite-Based Wetland Observation Service, SWOS, project.

During the workshop, participants addressed site-based issues, integration of Earth Observation, EO, Data and implementation of monitoring plans using the practical example of Ras Al Khor Wildlife Sanctuary, a wetland of international importance and the first Ramsar site in the UAE.

The workshop included a field trip to Ras Al Khor Sanctuary, which gave participants a hands-on experience of identifying the site's ecological character and an opportunity to implement monitoring techniques learned from the workshop.

Alia Al Harmoudi, Director of Environment Department, said that the aim of the workshop

was to enhance the level of the participants experience on developing and implementing monitoring plans for wetlands ecosystem.

"In 2007, Dubai was the first emirate to list Ras Al Khor as the first wetland of international importance according to the Ramsar Convention. In the UAE, Wetland ecosystems are given the priority for protection according to global standards. Dubai is not only contributing to the local conservation efforts on the local level but also at the global level since Dubai will be hosting the 13th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands, COP13, in October 2018," pointed out Al Harmoudi.



Emirates Transport to launch the first electric-powered school bus in the region

Emirates Transport (ET), the leading transport, logistics and auto services provider, launched on 6th November, the final phase of testing for the first electric-powered school bus in the region.

The 45-seater bus was manufactured in close cooperation with the Shanghai Sunwin Bus Cooperation, in one of the first projects of its kind worldwide.

Speaking at the launch ceremony, Mohammed Abdullah Al Jarman, general manager of Emirates Transport, said: "The launch of a Zero Emission school bus comes as part of our efforts to achieve the vision of the government for a green economy and puts the UAE

in the forefront of such initiatives, regionally and globally."

Al Jarman explained that the bus will operate in accordance with the specifications and regulations of school transport enforced in the country, pointing out that the application of these specifications represented the largest challenge during the manufacturing phase during which specialists from ET conducted three field visits to the factory floor, in China, to inspect the production line to ensure the application of all applicable specifications.

In turn, technicians and specialists from Sunwin also visited the UAE to assess how the country's climate and other

conditions may impact on the performance of the bus.

The general manager of Emirates Transport stated that, in addition to the usual structural safety tests, the bus underwent operational tests for three months, followed by several preliminary operational tests in the UAE, adding that the series of tests will be concluded during the coming period under climatic and operational conditions similar to the usual conditions during the school year.

During the pilot phase, the bus will operate on full routes in conditions that accurately simulate the normal school bus's daily journeys, as well as daily operating conditions.

UAE Climate Change Minister opens Solar World Congress



The Solar World Congress (SWC) is the International Solar Energy Society's key event, providing the platform needed to achieve the Society's goals of developing and expanding renewable energy technologies throughout the world.

Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, inaugurated the 2017 joint ISES Solar World Congress and IEA SHC International Conference on Solar Heating and Cooling for Buildings and Industry (SWC and SHC 2017) Abu Dhabi on 30th October, 2017.

The conference was attended by experts and representatives of scientific, academic, financial, governmental and private sectors around the world to highlight the latest developments and innovations in renewable energy technology. It also focused on a

number of topics including solar heating, the link between water and energy, renewable energy programmes in the region and the progress achieved in addition to the educational aspect of renewable energy.

Under the theme of 'Innovation for the 100% Renewable Energy Transformation', the event was held in the Middle East and North Africa (MENA) region for the first time.

During his keynote speech, Al Zeyoudi said: "The UAE leadership has always emphasized the importance of preserving

our environment and natural resources. Our country has been at the forefront of the global renewable energy upsurge and the international efforts to reduce greenhouse gas emissions, build capabilities in the field of clean energy and optimize the use of natural resources. The UAE Energy Plan 2050 aims to cut carbon dioxide emissions by 70%, increase clean energy use by 50% and improve energy efficiency by 40% by 2050, saving AED700 billion in the process.

"The UAE has been leading the region in mega renewable energy

“The UAE has been leading the region in mega renewable energy projects and shattering solar energy prices three times in the past two years in Abu Dhabi and Dubai.”



The conference highlighted the diverse technologies that are already cost effective and commercially available to work together to achieve a 100% global renewable energy system.

projects and shattering solar energy prices three times in the past two years in Abu Dhabi and Dubai. We set a world record in low photovoltaic energy prices with a tender for a 350MW photovoltaic project attracting a bid of 2.42 US cents per kWh, proving once again that renewables make economic sense, not just environmental sense,” he added.

Additional keynote addresses were delivered by Fatima Al-Foora Al Shamsi, Assistant Undersecretary for Electricity and Future Energy at the UAE Ministry of Energy, Adnan Amin, Director-

General of the International Renewable Energy Agency (IRENA), Dr. Steve Griffiths, Acting Vice President of Research, Khalifa University of Science and Technology, Dr. David Renne, President of the International Solar Energy Society, and Ken Guthrie, Chair of the International Energy Agency IEA Solar Heating and Cooling Program.

Addressing the gathering, Adnan Z. Amin, Director-General of the International Renewable Energy Agency (IRENA), said: “Today, the global energy transformation is well underway, and solar is central

to it. The chief driver of solar deployment is its business case, which has never been stronger. Costs have continued to drop dramatically, with PV projects now offered for less than 3 US cents per kWh as evidenced by record low costs here in the UAE.”

This energy transformation is reshaping the way electricity is produced, distributed and consumed around the world. With growing solar generation at both the large-scale and small-scale distributed level, it is leading to a more decentralised and democratised energy system.

Conference



36 c r e a t i n g g r e e n c o m m u n i t

International experts put forward a vision for the future of smart vehicles for the next 20 years

Held under the theme “Towards Sustainable and Intelligent Mobility”, the 3rd edition of the International Future Mobility Conference discussed and analysed the future of transportation in the region.

The 3rd edition of the International Future Mobility Conference discussed strategies to develop a forward-looking vision for the future of smart vehicles for the next 20 years.

More than 350 representatives of global intelligent vehicle manufacturers, international experts in advanced technologies, energy and environment, manufacturing and marketing held brainstorming sessions to explore the future of the private sector and find technical solutions to meet any challenges.

The conference set the stage for the world’s leading automotive manufacturers, regional distributors and solution providers to meet with standardisation, regulatory and other relevant government authorities to understand the various initiatives planned by the government to accelerate the market demand for eco-friendly, intelligent and autonomous vehicles. The conference also discussed how various industry stakeholders can support each other in realising the vision of a smart, connected and sustainable future in the transport sector.

Emirates NBD announced during the event that it would provide consumers with loans for the purchase of smart vehicles at an interest rate of no more than 1.99 percent; return car parking fees and the cost of transit on the Salik gates for up to one year; issue free credit cards, and reduce transaction fees by 50 percent when buying a smart vehicle.

“International brainstorming sessions also explored how to develop the work capacity of this type of vehicle, so that it can perform well in harsh climatic conditions similar to



e s f o r a b e t t e r t o m o r r o w

ترحب هيئة الامارات للمواصفات والمقاييس بالضيوف الكرام بهدف التكايف
في تحقيق رؤية قيادتنا الرشيدة، حيث تقود دولة الإمارات العربية المتحدة الطريق نحو الانتقال
إلى مستقبل ذكي ومستدام وصديق للبيئة

ICFM also featured an exhibition that showcased the latest automotive products, solutions and supporting infrastructure in sustainable and intelligent mobility and transportation.

those of the GCC countries, which are characterised by extreme summer weather,” said Abdulla Abdul Qader Al Maeeni, Director-General of the Emirates Authority for Standardisation and Metrology, ESMA, the organiser of the event.

The Authority organised four brainstorming sessions attended by the elite of representatives of international, regional, and local governments, as well as the pioneers in the manufacturing of smart vehicles. “This sector is very positive for the environment and the national economy

of the UAE, according to the Government Agenda 2021. The ongoing research conducted by the companies for the production of smart vehicles, need to parallel the infrastructure and legislation for countries that intend to open their markets to these vehicles,” Al Maeeni said.

He further confirmed that the government and the private sector should join forces if the world wants to expand intelligent systems. “Last year, we saw the announcement of six smart vehicles only, while in the current session, this number is more

than four times. We see today 27 electric vehicles and self-driving and Hybrid, which confirms that it is a promising economic sector,” he added.

The brainstorming sessions on the second day also focused on the vision of self-governing vehicles in the US, Dubai’s strategy for self-control testing, self-control infrastructure requirements, and cyber security threats. A roundtable was also organised for GCC regulators to discuss the capabilities to be met in self-driving vehicles so as to suit the temperature and weather here.

Green Economy

38 c r e a t i n g g r e e n c o m m u n i t

Carbon credits drive green funding in Dubai



Dubai Carbon marks green economy milestone through the inaugural sale of CERs to Farnek Total Facilities Management

Dubai Carbon announced its first carbon credit transaction, with the sale of the resulting Certified Emission Reductions, CERs, from Dubai Electricity and Water Authority Chiller Station L Project through adopting the Clean Development Mechanism (CDM) to Farnek Total Facility Management.

This initial sale paves the way for expansion of the green economy in Dubai, inviting further investment in Clean Development Mechanism (CDM) Projects in the Emirate. This inaugural sale of locally issued CERs contributes

to the growth of green projects, and is a breakthrough in Dubai Carbon's efforts as a green economy enabler.

The sale which depends on locally produced CERs, enhances the development of Green Projects in Dubai, since it is considered as a major achievement in investing in CDM in the Emirate.

The sale will also aid the efforts of Carbon Dubai in reducing the greenhouse gas emission footprint, and augment Dubai's green economy ambitions, as it reflects the growing demand

for CERs in a diligent pursuit of sustainable development.

The project contributes to the isolation of 1,000 CERs (equal to 1,000 tonnes of CO₂) achieving Farnek Total Facility Management's emission reduction targets, highlighting the organisation's commitment to social and environmental projects in Dubai.

Saeed Mohammed Al Tayer, MD & CEO of DEWA, said, "DEWA is committed to support the vision of His Highness Sheikh Mohammed bin Rashid Al



A CER is a carbon certificate issued when an organisation prevents one tonne of CO2 equivalent being emitted through a registered carbon project.

Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, the Dubai Clean Energy 2050 strategy, and Dubai Plan 2021, to make Dubai a smart, environmentally clean, and sustainably healthy city, and for that, we support CDM projects.”

“Our environmental strategy focuses on reducing carbon emissions based on the best integrated green practices at all levels of our operations to ensure protection of natural resources, and creating a sustainable carbon market is an important part of our vision, which is to build

sustainable financing for green projects, and bring best practices into the market. We are pleased that Farnek was able to offset their CO2 emissions through our Chiller Station L Project and wish them success for further adoption of clean and renewable energy sources in the future,” he said.

Markus Oberlin, CEO, Farnek, said, “Being a leader in providing innovative and bespoke solutions in the facility management sector, we are keen to invest in offsetting our emission footprint and reducing the impact of our businesses on the environment.

We are proud to be the first to purchase CERs from the maiden project generating carbon credits in the GCC. It also gives us the opportunity to support the efforts of the Dubai Government in creating an environmentally responsible economy.”



Conservation

40 c r e a t i n g g r e e n c o m m u n i t

Arabian Oryx given another chance at life in the wild at Qasr Al Sarab protected area



Fourteen Arabian Oryx were released into the wild in Abu Dhabi as part of an Oryx reintroduction programme, a key example of UAE's prioritisation in boosting and preserving biodiversity.

Around 200 kilometers away from the hustle and bustle of Abu Dhabi city, 14 Arabian Oryx have been given another chance at life in the wild. The Oryx were released into the Qasr Al Sarab Protected Area, as part of the long-running Sheikh Mohamed bin Zayed Arabian Oryx Reintroduction Programme, led by the Environment Agency – Abu Dhabi (EAD).

Once on the verge of extinction, the species will now be able to traverse one of the largest sand deserts in the world - the Empty Quarter - and guests at the Qasr

Al Sarab Resort by Anantara will have the opportunity to appreciate and learn about the Arabian Peninsula's most iconic species in its natural habitat.

The release took place in the presence of Noura Al Kaabi, Minister of Culture and Knowledge Development, Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, and Razan Khalifa Al Mubarak, Secretary General of EAD.

The Arabian Oryx is said to have inspired the legend of the unicorn,

however, the battle that the Oryx has waged against extinction is legend itself. The animal had long been a coveted trophy for hunters until it eventually became extinct in the wild. However, the late Sheikh Zayed bin Sultan Al Nahyan was an extraordinary visionary and, in the late 1960s, initiated a captive breeding programme to ensure the survival of this species.

On this occasion, Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, said "Under the directives and continued support of the country's



The oryx had long been a trophy for hunters until they nearly became extinct in the wild.

visionary leadership, the UAE has succeeded in transforming ecologically distinctive areas into internationally recognised protected ones. The Emirate of Abu Dhabi has 6 marine and 13 terrestrial sites, making up 13% and 15.4% of the Emirate's area respectively, which are supporting some of the most critical habitats and significant species populations. The release of the Arabian Oryx by the Environment Agency – Abu Dhabi today is a key example of how the UAE has placed a high priority on the importance of boosting and preserving biodiversity."

On the release, Noura Al Kaabi, Minister of Culture and Knowledge Development, said, "The Arabian Oryx is not only important environmentally to the region, but also culturally. It held high value during past civilizations on the Arabian Peninsula and has featured prominently in Arab literature, art and poetry. It was revered not just for its physical beauty but for its ability to adapt very well to the desert environment, as well as for its strength and courage. It is a moment of pride for the whole nation to see the late Sheikh Zayed's aspirations for the

Arabian Oryx become a reality."

Razan Khalifa Al Mubarak, EAD's Secretary General, who led the release, said: "The late Sheikh Zayed bin Sultan Al Nahyan's personal interest and foresight are the drivers behind the successful reintroduction of the Oryx into the wild. Today, these efforts have evolved into the Sheikh Mohamed bin Zayed Arabian Oryx Reintroduction Programme, which is considered one of the world's most successful conservation programmes. Today, thanks to the support of His Highness Sheikh Mohamed



bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, and H.H. Sheikh Hamdan bin Zayed Al Nahyan, the Ruler's Representative in Al Dhafra Region and Chairman of EAD, the UAE is home to over 10,000 Arabian Oryx, of which 5,000 are in Abu Dhabi. In addition, the status of the species has been down-listed from "Endangered" to "Vulnerable" by the International Union for Conservation of Nature (IUCN). Moreover, our Deleika Breeding and Conservation Centre will help to ensure genetic diversity is preserved for the long-term sustainability of the species."

Al Mubarak added, "Our efforts

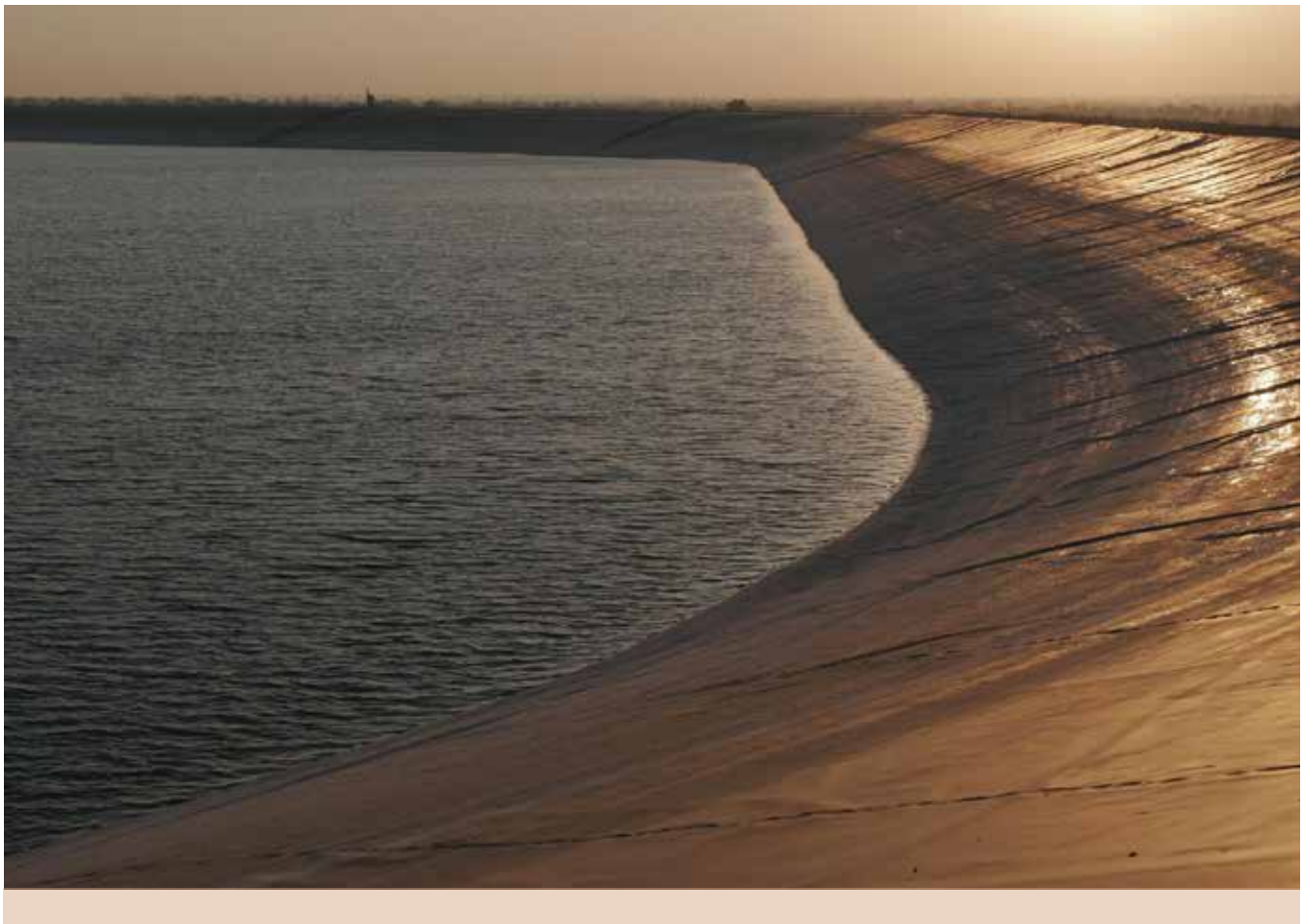
also extend globally as we have reintroduced the Oryx into protected areas, not only in the UAE, but also in the Sultanate of Oman and the Kingdom of Jordan.

"We have hosted a secretariat that has enabled a number of Arab countries to come together under a unified conservation strategy, committing them to intensifying efforts to protect the Arabian Oryx."

Dr. Shaikha Salem Al Dhaheri, Executive Director of the Terrestrial and Marine Biodiversity Sector at EAD, said: "By releasing Oryx into Qasr Al Sarab Protected Area, we have once again brought nature one step closer to the public. We have worked closely with the

management of Qasr Al Sarab Resort by Anantara and trained their guides to ensure that their guests will be able to see and learn about this majestic animal in the wild and enjoy an inspiring and informative experience. EAD will also continue to routinely patrol the protected area to ensure the safety and health of this important species."

Wael Soueid, Area General Manager at Anantara Hotels, Resorts & Spas, Abu Dhabi said: "We are delighted about the reintroduction of the Arabian Oryx as it provides our guests with the exceptional opportunity to see this magnificent endangered animal back into the wild and close to Qasr Al Sarab Desert Resort by Anantara.



DEWA's water reservoirs to be powered by solar photovoltaic systems

Etihad Energy Services Company (Etihad ESCO) has been awarded the development, and installation of solar photovoltaic (PV) systems to be installed at Dubai Electricity and Water Authority (DEWA) water reservoirs.

The installation of solar PV systems on DEWA's water reservoirs will reduce the Emirate's carbon footprint and increase the proportion of solar power in Dubai's energy mix.

"The installation of solar PV systems at DEWA water reservoirs comes under the implementation of the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister

of the UAE and Ruler of Dubai to transform Dubai into one of the most sustainable cities in the world. The solar PV systems will promote sustainable development, which will reinforce the UAE's position as one of the most advanced countries for alternative energy," said Ali Al Jassim, CEO of Etihad ESCO.

Etihad ESCO will design the solar PV systems and install them on DEWA's water reservoirs.

"The installation of solar PV systems on DEWA's water reservoirs drives us closer to achieving the Dubai Clean Energy Strategy 2050, that aims to provide 7 per cent of Dubai's total power output from clean energy by 2020, 25 per cent by 2030

and 75 per cent by 2050," said Christos Mimikopoulos, Executive Director of Solar - Etihad ESCO.

The company stated that the total installed capacity of solar PV systems on water reservoirs could reach up to 60 MWp.

According to a report by Frost & Sullivan, the GCC's installed solar capacity is expected to reach 76 GW by 2020. Egypt is hoping to interconnect 2,650 MW of PV capacity by 2020, Morocco is aiming for 600 MW, while Jordan has 540 MW of PV projects under construction with more expected before the end of 2017. With a wave of solar projects already underway across Dubai, the Emirate is set for a green revolution with alternative energy.



700 students attend environmental campaign launch

Dubai Municipality has launched the 2017 'Clean up the World' campaign with an Awareness Forum for Students, organised with the participation of the representatives of a number of government departments and establishments, who presented papers on environmental awareness and sustainability.

700 students from 15 public and private educational institutions assembled at the theatre of the New World School in Al Twar-1 for the launch of the first activity of the 24th edition of the global environmental initiative.

Talib Julfar, Assistant Director-General of Dubai Municipality for Environment and Public Health Services Sector, said

the forum presented papers on the environment and its laws and provided an integrated awareness package for students.

Papers and lectures covered topics including sustainability and integrated waste management.

EEG, Sumitomo Rubber Middle East plant indigenous trees

The Emirates Environmental Group, EEG, has continued its quest of increasing sustainable green spaces within the UAE under its slogan, 'Together, We Plant', one of the four constituents under the umbrella of the 'For Our Emirates, We Plant' project. In collaboration with Sumitomo Rubber Middle East, the EEG planted a total of

65 indigenous saplings at the Gems New Millennium School and Dovecote Green Primary School. Upon maturation - in 5 to 7 years - the trees will be able to mitigate approximately 0.50 CO₂ emissions annually.

The tree planting programme was headed by EEG's Chairwoman, Habiba Al Mar'ashi. The hands-on tree planting enables students to understand the importance and lasting benefits to the environment. "The planted trees not only engage the youth and communities in learning about their local environment, but it also improves air quality, creates healthier outdoor spaces and restores urban habitats for wildlife, thus advancing global reforestation and intercultural awareness."



Fourth edition of “Al Wathba Photography Competition” launched

The Environment Agency – Abu Dhabi (EAD) has launched the fourth edition of “Al Wathba Photography Competition” which has been organised to encourage professional and amateur photographers to capture creative images that reflect Al Wathba Wetland Reserve’s natural beauty and rich biodiversity.

To participate in the competition, which started on November 19, 2017 and will run until April 30 2018, contestants must follow EAD’s Instagram account, http://instagram.com/EAD_community, and upload photos taken using the hashtag “#snapalwathba”.

Two photos per participant can be entered into this competition.

Due to the ecological sensitivity of the Al Wathba Wetland Reserve, EAD called on competition participants to be particularly cautious while taking pictures and to ensure that they are thoughtful about the environment, without endangering themselves or any species in the surrounding area.

It is worth noting that, earlier in November, EAD and TOTAL E & P UAE signed an agreement to develop further Al Wathba Wetland Reserve and turn this globally recognised site into a national and regional hotspot for education and ecotourism and a model of responsible tourism.

As part of this agreement, EAD with TOTAL’s support

will implement the reserve’s enhancement plan that aims to support the rehabilitation programme for natural habitats within the reserve. In addition, it will continue scientific research in the reserve that contributes to the global scientific knowledge on wetland ecology, biology of breeding resident and migratory birds of the UAE, including the flagship species, such as the Greater Flamingo.



Renewable Energy



46 c r e a t i n g g r e e n c o m m u n i t

UAE rolls out renewable energy training programme for Pacific Island countries

Capacity building effort led by Masdar part of the Abu Dhabi Fund for Development (ADFD)-funded US\$50 million UAE-Pacific Partnership Fund.

The UAE Ministry of Foreign Affairs and International Cooperation (MoFAIC) has launched a two-year renewable energy training programme for Pacific Island countries financed by Abu Dhabi Fund for Development (ADFD), the leading national entity for development aid. The training is being led by Masdar, Abu Dhabi's renewable energy company.

The capacity-building initiative falls within the framework of the ADFD-funded US\$50 million UAE-Pacific Partnership Fund (UAE-PPF). Masdar developed

and is now managing the training programme in collaboration with delivery partners from the University of the South Pacific in Fiji, and two leading green energy consultancy companies – New Zealand's Elemental Power and Renewables, and Australia's ITP Renewables.

The first workshop in Suva, Fiji, in late October 2017 received 25 representatives of the 11 Pacific Island countries that have implemented renewable energy projects through the UAE-PPF – Fiji, the Federated States of Micronesia and Palau, Kiribati,

Nauru, the Republic of the Marshall Islands, Solomon Islands, Samoa, Tonga, Tuvalu, Vanuatu.

Decision makers and senior executives from the beneficiary countries will receive high-level training at a second workshop prior to the IRENA General Assembly during Abu Dhabi Sustainability Week in January.

A third session, planned for October 2018, will cater to project and technical managers responsible for utility operations and renewable energy project planning in the Pacific region.



e s f o r a b e t t e r t o m o r r o w

The ADFD-funded US\$50 million UAE-Caribbean Renewable Energy Fund represents one of the largest grant investments in the region's renewables sector to date.

Ali Al Shafar, the UAE's Permanent Representative to the International Renewable Energy Agency (IRENA), said: "The UAE-PPF has concretely demonstrated that renewables offer immediate cost savings and can integrate seamlessly with existing power systems at much higher rates than previously estimated. The new training programme leverages both regional and international expertise to keep the momentum up on planning and executing transformative projects that support the UN's Sustainable Development Goals and the Paris climate agreement."

Khaled Ballaith, Director of Special Projects at Masdar, said: "Based on tangible project experience in the Pacific, the new training programme aims to share lessons and to provide delegates from the island nations with more knowledge and insight. It is important that those involved in the projects on a day-to-day basis are empowered to deploy and capitalise on the renewable energy sources available in their countries."

The UAE-PPF was launched in 2013 to address the development challenge posed by the Pacific

region's energy costs that are among the highest in the world.

To date, the UAE-Pacific Partnership Fund has enabled the installation of a total of 2.8 megawatts of renewable energy capacity and replaced approximately 3.2 million litres of imported diesel fuel. The combined output of the projects implemented through the fund has saved US\$3.7 million per year in fuel costs (based on 2015 diesel prices) and eliminated approximately 8,450 tonnes of carbon dioxide emissions annually.

Conservation

48 c r e a t i n g g r e e n c o m m u n i t

Arabian Eagle-Owl discovered in the UAE



As part of its nation-wide Terrestrial Conservation Programme, Emirates Wildlife Society-WWF discovers first Arabian Eagle-Owl in UAE.

The Emirates Wildlife Society in association with WWF (EWS-WWF) has confirmed its recent discovery of a previously unsighted owl species in the UAE — the Arabian Eagle Owl (*Bubo africanus milesi*) — among the rich wildlife currently inhabiting the Hajar Mountains in the Eastern Region.

Discovered during an owl survey conducted by Anthony Stoquert, a scientist from EWS-WWF's Terrestrial Conservation Programme— with the support of Sami Majeed, a Wadi Wurayah National Park ranger from

Fujairah Municipality— the sighting of the Arabian Eagle Owl is particularly significant, as it highlights the need for more in-depth research and studies on the UAE's rich biodiversity.

Commenting on the discovery, Jacky Judas, Manager & Scientific Advisor - Terrestrial Biodiversity, EWS-WWF, stated: "In spite of a hot and arid climate, a wide variety of resilient and fascinating species, thrive in our deserts and mountain areas.

"Unfortunately, the rapid pace of development has become a major

threat to many of these creatures. Thus, it is crucial that we ramp up collective efforts to protect and safeguard key habitats and endangered species, all of which constitute the UAE's rich natural heritage."

He continued: "If a large bird, 45cm in height, weighing 600 to 800g— even if nocturnal and elusive— went unnoticed up to the beginning of the 21st century, what about much smaller species of animals and plants, or under-surveyed taxonomic groups? We have very little doubt that so much more is still to be found in



EWS-WWF's Terrestrial Conservation Programme focuses on safeguarding land-based ecosystems (such as wetlands, mountains, and desert shrub lands) and species.

the Hajar Mountains.”

In 2015, the discovery of a single singing individual of Omani Owl in Wadi Wurayah National Park, inspired EWS-WWF to organize a more comprehensive owl survey in the Hajar Mountains of the UAE and Oman— with an aim to better understand the status of owls in the area.

Funded by the Mohammed bin Zayed Species Conservation Fund, the owl survey is part of a wider biodiversity survey of the Hajar Mountains also initiated by EWS-WWF, which intends to

gather information on the many species living in the Mountains, including their status, distribution and abundance. The ultimate goal of this research is to contribute to the creation of a network of Protected Areas, focusing on biodiversity hotspots.

The Arabian Eagle Owl typically inhabits different parts of Dhofar, Oman, but few scattered records also attest its presence in the Hajar Mountains of Oman. It is also found in Yemen and in the Asir Mountains of Saudi Arabia, along the Red Sea coast. A subspecies of the

widespread Spotted Eagle-Owl (*Bubo africanus*) — which ranges from Kenya, Uganda up to South Africa— the Arabian Eagle Owl tends to live in open woodland, rocky hillsides with scattered thorny shrubs. Its diet in Africa is composed of large insects, small mammals, birds and reptiles.



Report

50 c r e a t i n g g r e e n c o m m u n i t

Integrated efforts
in place to protect
Dubai's natural
resources



The groundwater protection policy approved by the Executive Council of Dubai aims to tackle the unsustainable use, contamination and depletion of groundwater resources.

Dubai's groundwater protection policy seeks to protect and sustain groundwater and maintain them as strategic stocks of drinking water in times of emergency and crisis, while also working to develop sustainable solutions against the risk of exhaustion and pollution.

Eng. Hussain Nasser Lootah, Director General of Dubai Municipality has said that the Dubai Municipality's efforts to enhance the protection of natural resources in the emirate have contributed significantly to the emirate's pioneering position and global competitiveness. This is also in line with national directives, Dubai Strategic Plan 2021, and the objectives of the Dubai Municipality's Strategic Plan to protect the environment and sustain its natural resources.

"As regards the protection of ground water in Dubai, the

groundwater protection policy was approved by the Executive Council of Dubai. This seeks to protect and sustain groundwater and maintain them as strategic stocks of drinking water in times of emergency and crisis, while also working to develop sustainable solutions against the risk of exhaustion and pollution," said Eng. Alia AbdulRahim Al Harmoudi, Director of Environment Department in Dubai Municipality.

"In planning the said policy, several global practices in the development of groundwater



The groundwater quality index is an annual strategic indicator for Dubai Municipality's Environment Department which measures the state of groundwater in the emirate.

protection and sustainability policies were also reviewed.

"The policy included six main outputs, namely: identification of groundwater resources protection zones, control of the quantity of groundwater extracted, development of performance indicators of groundwater sustainability, enhancement of the economic feasibility of different uses of groundwater, development of awareness programs to define the importance of groundwater and methods of conservation and development of an integrated

groundwater management system in the Emirate, including work systems and operational programs," she said.

Groundwater quality index

The groundwater quality index is an annual strategic indicator for Dubai Municipality's Environment Department, which measures the state of groundwater based on specific standards in Dubai and in accordance with international practices in this area such as the European Union and the World Health Organization.

Programs and projects related to

the groundwater quality index

Al Harmoudi added that the Department has been keen to activate the groundwater policy by launching and implementing several projects and initiatives aimed at sustaining this precious resource, from 2015 until today that include:

- Development of a system for granting permits for drilling wells and using groundwater
- Groundwater wells survey in farm areas - to identify the status and number of groundwater wells and determine the nature of practices in terms of methods



and techniques of irrigation and nature of plantations to ensure the sustainability of groundwater

- Groundwater monitoring network project - to establish a network for groundwater monitoring using the telemetry network to determine whether it is subjected to exhaustion and pollution and to develop a crisis management infrastructure to ensure the strengthening of the system of sustainable management of groundwater
- Program for identification of groundwater resources protection zones - to establish protection zones for the Emirate's groundwater basins, reduce sources that threaten

groundwater resources with depletion and pollution, and increase the life span of the strategic stock of groundwater.

- Project for installing meters for controlling the quantities of groundwater extracted - to control groundwater extraction by users thereby enhancing the sustainability of groundwater in the emirate to ensure future needs of this important natural resource.
- Groundwater consumption rationalization program - a continuous comprehensive awareness program for the next five years and included within the programs and projects of Dubai Strategic Plan 2021.

According to Al Harmoudi, the Environment Department at Dubai Municipality has started intensifying inspections and field visits to the farms to verify compliance with the relevant laws and regulations.

The Department has carried out 775 inspections for groundwater protection in 2016 and 336 in the first half of 2017.

"All of these programs, projects and initiatives have resulted in achieving the target over the years to measure the groundwater quality index. The target of 80% was achieved in 2016, the target for 2017-2018 is 82%, and the years 2019-2020 target 83%, reaching a target of 84% in 2021," she said.



Level of soil quality in the emirate

Al Harmoudi explained that the soil quality index is an annual strategic indicator for Dubai Municipality's Environment Department. It measures the state of the soil based on specific standards from soil quality monitoring reports and in accordance with international practices in this area.

"Soil samples are taken from the monitoring sites for analysis which include a number of elements within the two groups of heavy metals and salinity.

"Through the results of the analyses, the soil quality, sources of pollution and potential salinization are identified and

necessary actions are taken for improvement or reinforcement," she explained.

Programs and projects related to soil quality index

A large number of programs and projects have been undertaken by the Dubai Municipality related to the soil quality index. These include:

- Integrated Soil Management Project - to develop and apply the concepts of environmental sustainability of soil and manage its uses for various purposes in accordance with environmental standards.
- Program to issue permits to obtain agricultural land: This seeks to enhance the chances of protecting the agricultural

soil and its sustainability as an important natural resource and prevent practices of depletion or pollution. A total of 293 permits were issued in 2016.

- Program for monitoring soil disposal: This includes field control programs to control any practices that threaten the quality of the soil. A total of 141 inspections were carried out in 2016 and 118 inspections during the first half of 2017.



Energy Efficiency

54 c r e a t i n g g r e e n c o m m u n i t

One billion LED
lights delivered
as part of Global
Lighting Challenge



Philips Lighting becomes first company to break through the one billion LED milestone; says it is on track to meet commitment of two billion LED lamps and luminaires ahead of 2020 target.

Philips Lighting, the world leader in lighting, has delivered one billion LED lamps and luminaires as part of its commitment to the 'Global Lighting Challenge', the Clean Energy Ministerial campaign to deploy ten billion high-efficiency light points to improve energy efficiency around the world. In doing so, it has pushed through the halfway mark of its target to deliver two billion by 2020.

Philips Lighting is the first company to reach this milestone, which marks the latest progress in the global transition to energy-

efficient lighting, a vital measure in slowing climate change. In December 2006, when Philips Lighting called for the global phase-out of incandescent light bulbs, lighting accounted for 19% of global electricity consumption. This level was down to 15% in 2015 when the Paris Agreement was signed, and is on track to further decline to 8% by 2030.

"This milestone demonstrates that we can successfully drive the transition from conventional lighting technologies to LED, which can make a significant contribution to global climate

change objectives. Energy efficiency is the low hanging fruit – today, energy efficiency improves by about 1.5% every year but simply doubling this to 3% per year would set us on a sustainable path," said Harry Verhaar, Head of Global Public and Government Affairs at Philips Lighting.

"When compared to the outdated lighting sources these LEDs replaced, the energy savings achieved are equivalent to the energy generated by 30 medium-sized coal-fired power stations and the CO2 reductions achieved



The Global Lighting Challenge is a Clean Energy Ministerial campaign to reach cumulative global sales of ten billion high-efficiency, high-quality, and affordable advanced lighting products, such as LED lamps.

are equivalent to the emissions produced by 12 million cars. The impact is real and measurable,” Verhaar continued.

A simple switch to LED lamps will result in significant energy savings, and when combined with connected lighting systems these savings are amplified, with the potential to reduce electricity used for lighting by up to 80%.

The 1 billionth LED lamp was presented to a group of representatives from international governmental and non-governmental organizations

at a special ceremony in Bonn on 28th November.

Rachel Kyte, Chief Executive Officer and Special Representative of the UN Secretary-General for Sustainable Energy for All, said: “In Paris numerous companies made commitments to a low carbon world. Philips Lighting has turned words into action. In just two years, they are halfway to their 2020 goal of delivering 2 billion LED bulbs. One billion LEDs sold equals the energy consumption of 300,000 households.”

At the event, Philips Lighting called on governments worldwide to join them in its goal to make the world more energy-efficient by making the following commitments:

- By 2020 all new buildings should be installed with LED or equivalent energy-efficient lighting
- By 2025 all street lighting should be LED or equivalent energy-efficient lighting
- By 2030 all existing corporate buildings should be fitted with LED or equivalent energy-efficient lighting

Award



Jury selects 2018 Zayed Future Energy Prize winners

Inspired by Sheikh Zayed bin Sultan Al Nahyan's environmental stewardship, the Zayed Future Energy Prize was created to not only honour but carry on his legacy in both the local and international arena.

The Jury of the Zayed Future Energy Prize convened to deliberate and select nine winners across its five categories on 31st October, 2017. The winners will be announced at the Prize awards ceremony on 15th January 2018 as part of Abu Dhabi Sustainability Week (ADSW).

The Prize recognises notable work carried out by businesses and individuals through the large corporation and lifetime achievement categories. Simultaneously, it serves to help small and medium enterprises and non-profit organisations scale

their operations. The Prize also provides funding for high schools around the world to execute sustainable project plans that create a meaningful impact in their school and community.

Chair of the Zayed Future Energy Prize Jury and Former President of the Republic of Iceland, Olafur Ragnar Grimsson said, "This marks the 10th year of the Zayed Future Energy Prize sounding a call to resolve energy challenges, making Abu Dhabi the epicentre in driving progress in the field of renewable energy. In a decade, the Prize has created global impact

on approximately 289 million lives through innovative solutions and implementation of new energy projects. Its past winners have since formed an international network that drives the clean energy transformation forward globally."

The Zayed Future Energy Prize was created to inspire the next generation of global energy innovators to push the boundaries of renewable energy and sustainable development and create novel solutions for a better tomorrow. Inspired by Sheikh Zayed bin Sultan Al Nahyan's



The Zayed Future Energy Prize Jury includes former heads of state, leading energy experts and others committed to accelerating the adoption of renewable energy globally.

environmental stewardship, the Prize was created to not only honour but carry on his legacy in both the local and international arena.

Dr Sultan Ahmed Al Jaber, UAE Minister of State and Director-General of the Zayed Future Energy Prize, said, "The Zayed Future Energy Prize is a testament to our late founding father Sheikh Zayed bin Sultan Al Nahyan's life-long commitment to sustainable development.

"Marking the centenary of his birth, 2018 has been declared the

Year of Zayed, in celebration of his visionary leadership.

"Over the last ten years, the winners recognised by the Zayed Future Energy Prize have made an extraordinary impact on the economies and societies across the globe. We look forward to the next decade of the prize continuing to achieve the goals of our collective sustainable future."

As many as 34 finalists vied to win the 2018 Zayed Future Energy Prize. The finalists in the Non-Profit Organisation category included groups

focused on expanding solar solutions and empowering women entrepreneurs in 'last-mile' communities, as well as financing renewable and sustainable energy systems for low-income households in India.

The Small and Medium Enterprise category finalists demonstrated the innovation and expansion taking place in the solar power market through projects focused on the creation of smart solar street lighting, solar home systems and utility services, and solar wafers using more cost and energy-efficient processes.

COP 23



COP23 concludes in Bonn, participants agree on further climate action agenda

The conference resulted in agreements on the process for COP24, initiatives on climate financing and a series of action plans on gender, regions, health, oceans, or indigenous peoples.

Two years after the Paris Agreement, UN member states met at COP23 in Bonn, Germany to discuss and agree the next steps in global climate action.

The conference resulted in agreements on the process for COP24, initiatives on climate financing and a series of action plans on gender, regions, health, oceans, or indigenous peoples. Backed by a wide range of positive announcements from governments, cities, states, regions, companies and civil society, delegates from over 190

countries agreed to a 12-month engagement focusing on 'Where are we, where do we want to go and how do we get there?'

The 'Talanoa Dialogue', inspired by the Pacific concept of constructive discussion, debate and story-telling, will set the stage in Poland in 2018 for the revising upwards of national climate action plans needed to put the world on track to meet pre-2020 ambition and the long-term goals of the two-year old Paris Agreement. Its central goal is to keep the global average temperature rise below 2 Celsius

and as close as possible to 1.5.

With many climate action pledges and initiatives, a further strong message from all sides at COP23 was the growing need to coordinate efforts across policy, planning and investment to ensure that every cent invested and every minute of work contributed results in a much greater impact and boosts ambition under the national climate plans.

Outcomes and Highlights of the 2017 UN Climate Conference

The COP23 President and the UN Climate Change Executive



The report shows that the Abu Dhabi is already experiencing the effects of climate change including increases in air and sea temperatures, sea level rise, higher salinity and acidity of water resources.

Secretary outlined some highlights from the 2017 UN climate conference as a result of the negotiations; the Marrakech Partnership for Global Climate Action and the myriad of High-Level and other events.

- Long-term Finance – Countries welcomed progress but also urged greater efforts to deliver the agreed USD 100 Billion per year by 2020 for support to developing countries to take climate action
- Adaptation Fund Exceeds 2017 Target – The target for funding

this year was \$80 million, but funding announcements including by Germany and Italy has exceed this by over \$13 mn taking the total to \$93.3mn

- Historic Breakthrough in Agriculture – there was an historic political breakthrough in respect to agriculture that may lead to a faster and more coordinated response by nations to address a sector that is the second biggest emitter after energy
- The Government of Norway, the multinational company Unilever

and other partners announced a \$400 million fund to support more efficient agriculture, smallholder farmers and sustainable forest management

- Gender Action Plan –The crucial role of women in combating climate change will be formally supported through the plan. The Plan aims to make women part of all climate change projects and decisions internationally and nationally
- Local Communities and Indigenous People’s Platform – A political and practical



achievement that aims to support the full and equal role of indigenous people in climate action while recognizing the responsibility of governments to respect the rights of indigenous peoples in these decisions

- Launch of the Ocean Pathway Partnership – It aims, by 2020, to strengthen action and funding that links climate change action with healthy oceans including through the UN Climate Change process
- Launch of Network of Pacific Island Journalists – Ten award-winning media from Fiji, Samoa; Solomon Islands; Papua New Guinea; Tonga and Vanuatu, attending the

conference announced the formation of a new association aimed at strengthening climate media reporting across the Pacific

- InsuResilience Initiative announced a new Global Partnership and an additional \$125 million from the Government of Germany to support its aim of providing affordable cover to 400 more million poor and vulnerable people by 2020
- Launch of Fiji Clearing House for Risk Transfer – A new online platform using artificial intelligence to help vulnerable countries find affordable insurance and solutions to avoid climate risk.

- The governments of Germany and the United Kingdom along with other partners announced \$153 million to expand programs to fight climate change and deforestation in the Amazon
- The European Investment Bank formally announced \$75 million for a new \$405 million investment programme by the Water Authority of Fiji to strengthen resilience of water distribution and wastewater treatment for close to 300,000 people living in and around the capital Suva.
- America's Pledge brings together private and public sector leaders to ensure the US reduces emissions

Countries welcomed progress but also urged greater efforts to deliver the agreed USD 100 Billion per year by 2020 for support to developing countries to take climate action



and delivers the country's climate goals under the Paris Agreement

- The Green Climate Fund and the European Bank for Reconstruction and Development announced over \$37 million of GCF grant financing to the \$243 million Saïss Water Conservation Project to assist Morocco with more resilient agriculture
- Powering Past Coal Alliance brings together 25 countries, states and regions to accelerate the rapid phase-out of coal and support affected workers and communities to make the transition.
- The UN Development

Programme, Germany, Spain and EU launched a EUR 42 million NDC Support Programme to assist countries deliver on the Paris Agreement

- The existing NDC Partnership announced the establishment of a new regional hub to support implementation of national climate action plans or NDCs in the Pacific
- 13 countries and the International Energy Agency announced EUR 30 million to the "IEA Clean Energy Transitions Programme" to support clean energy transitions around the world
- Launch of New Small Island Developing State (SIDS)

Health initiative - The WHO, in collaboration with the UN Climate Change secretariat and Fijian COP23 Presidency, announced a special initiative to protect people living in SIDS from the health impacts of climate change. Its goal is, by 2030, to triple the levels of international financial support to climate and health in those countries

The Bonn-Fiji Commitment was made - a commitment to action adopted by over 300 local and regional leaders to deliver the Paris Agreement at all levels, supported with 20 initiatives including those focusing on Africa, islands, post-industrial cities and climate reporting standards.



One million plastic bottles collected in five days

The Waste Management Department of Dubai Municipality has collected nearly one million plastic bottles in five days. The drinking water bottles collected from the public amounted to about 2,000 kilograms of waste.

The move was part of the “Giant Bag” initiative implemented at the Lulu Hypermarket in Al Barsha from November 21-25. The initiative was aimed at spreading and establishing a waste sorting culture and enhancing environmental awareness and behavior.

A large number of shoppers at Lulu Hypermarket brought plastic bottles throughout the five days of the event, which

also witnessed a great deal of interaction between the families, who were competing each other to fill the Giant Bag, which was seven meters high and three meters wide and was manufactured from recyclable materials in cooperation with Paper Chase International.

The initiative comes within the framework of the strategic directions of Dubai Municipality to interact with the community in its various activities and programs and to employ them to contribute to environmental efforts in conjunction with the launch of the 24th Clean up the World campaign, which was organized under the slogan, “Our place...Our...planet...Our responsibility.”

Dubai Municipality strives to achieve the objectives of Dubai’s environmental culture and enhance its position among the cities of the world as a sustainable city, said Abdulmajeed Sifai, Director of Waste Management Department.

“Our aim is to establish a culture of sorting waste from the source, classifying it according to value and raising the level of environmental awareness among the public, especially those who frequent the malls and markets,” he said.





Dubai government agencies sign Dubai Lamp agreement

In continuation with the efforts made by Dubai Municipality to promote the Dubai Lamp, which was launched by the UAE Vice President and Prime Minister and Ruler of Dubai, His Highness Sheikh Mohammed Bin Rashid Al Maktoum, the Municipality on has signed a cooperation agreement in the field of energy with Dubai Land Department.

The cooperation agreement, signed by Eng. Hussain Nasser Lootah, Director General of Dubai Municipality and Sultan Bin Butti Bin Majran, Director General of Dubai Land Department, highlights the interest of the two government organizations in the field of rationalization of energy consumption in the Emirate of Dubai, through participation

in the efforts and awareness campaigns, and replacing the traditional lamps with the new Dubai Lamps.

Lootah said that the agreement translates the Government's plans to transform Dubai into one of the smartest cities in the world as Dubai Lamp is considered to be the most energy-efficient LED lamp in the world, and is the first 200 lumen per Watt LED lamp available in the market in terms of energy efficiency for lighting purposes.

Majran said the Land Department will gradually use Dubai Lamp in a number of its existing and new projects to save energy for longer periods and reduce costs dramatically and significantly.

According to Eng. Ahmed Badwawi, Director of Applied Sustainability and Renewable Energy Department in Dubai Municipality, "The Dubai Lamp saves electricity bills by up to 90% compared to traditional lamps and it has a life span ranging between 15,000 to 25,000 hours.

Dubai Municipality had recently announced the Dubai Lamp Initiative, a unique research partnership between Philips Lighting and DM, resulting in the development of the world's first commercially available, 200 lumen per Watt LED lamp. The lamp is available in the local market and Dubai has plans to replace 80% of its lamps with the new lamp in cooperation with Philips.



Mohamed bin Zayed Species Conservation Fund benefits 1,677 projects to conserve endangered species

The total value of grants provided by the Mohamed bin Zayed Species Conservation Fund, MBZ Fund, has reached AED58,852,000, benefitting 1,677 projects in efforts to protect 1,133 endangered species, according to its published statistics.

Over 150 countries from around the world have benefitted from the grants provided by the MBZ Fund since its establishment in October 2008, reflecting the UAE's role in protecting the environment and wildlife and in conserving rare species.

The grants have also supported research and individual projects to rescue many endangered species in Asia, Africa, Europe

and the Americas, including amphibians, reptiles, mammals, birds, fungi, fish, plants and other living organisms. The largest portion of these grants, totalling US\$6,337,643 was directed towards mammal conservation projects.

The MBZ Fund provides its grants without discrimination or bias, based on geographical location or species. It also provides small grants that focus on local projects, to cover the broadest possible range of conservation efforts, and these grants can then be further divided into smaller segments, ranging between \$2,500 and a maximum of \$5,000.

The fund has donated around

AED 92,000 in small grants to conservation projects run by individuals, small organisations or community-based organisations.

Since its establishment, the MBZ Fund has become one of the world's leading providers of financial grants that directly support conservation projects related to endangered species of plants, animals and fungi.





du organises Waste Management Forum

In line with the UAE's Green Economy vision and company-wide sustainability efforts, du has organised its first Waste Management Forum, which took place recently at du headquarters in Dubai Media City.

Government entities, HSE practitioners, NGO's and other key stakeholders were invited to come together and discuss current waste management strategies and best practices to promote more environmentally friendly solutions in the region.

"At du, we strive to continually improve our sustainable operations and we believe it is extremely relevant to address the issue of e-waste," said Abdulhadi Alalyak, Senior Vice

President of Corporate Services at du.

The forum included an open session in which all waste vendors, NGOs, and key stakeholders in the telecommunications industry that produce electronic waste were invited to create awareness and formulate solutions to support the UAE's waste management strategy.

Discussion points included challenges faced by cities and governments due to improper and unsegregated waste and e-waste dumping at landfills, the impact of unsegregated and e-waste dumping on the environment, especially locally, the measures the government, NGOs, and waste

recycling companies are taking to improve the situation.

AUS wins top awards at the Sustainable Campus Initiative

A team of faculty members and students from the Department of Biology, Chemistry and Environmental Sciences of the American University of Sharjah (AUS), has won two major awards at the Sustainable Campus Initiative (SCI), Environment Agency-Abu Dhabi, EAD, held in partnership with Borouge.

The awards reinforce the university's focus on research, innovation and sustainability. AUS received the awards in two categories: the Green Campus Audit 2017 and the Sustainable Action Project.



UNEA3 Outcome & Resolutions

The 3rd session of the UN Environment Assembly (UNEA3) was held from 4th to 6th December 2017 under the overarching theme of pollution, the most important global threat to the environment and human health. Over 4,300 delegates from over 170 countries attended UNEA3 representing governments, businesses and civil society organizations. They have made voluntary commitments to beat pollution under the slogans: "A Pollution Free Planet" and "Together, we can clean up the planet".

Powerful messages were put forward by attending leaders on the urgent need to act on pollution. The EU responded by announcing 20 bold commitments to tackle pollution including policy initiatives on plastics and waste, funding programs to control marine pollution and new research and innovation activities. The EU focused on new innovative actions and those expected to have

high impact to prevent or reduce pollution in Europe or beyond.

UNEA3 resolutions and decisions called for accelerated action and strengthened partnerships to combat marine plastic and micro-plastics littering; eliminate exposure to lead in paint and batteries; improve air quality globally; address water pollution; manage soil pollution; and control pollution in armed conflicts areas.

The UNEP #BeatPollution campaign attracted 2.5 million pledges. If all commitments are met, the UNEP has estimated that 1.49 billion people will breathe clean air, one-third of global coastlines will be clean, and US\$18.6 billion of investment will come online. Meanwhile, ministers held an additional forum to discuss practical policy measures towards a pollution-free planet. Being the most serious global challenge to human health, and as one of the main avoidable causes of death and disease, the issue of global warming and air pollution received special attention. Its abatement is key to attaining many of the Sustainable Development Goals (SDGs). Hence, the first draft resolution, submitted by Canada and the EU was on air pollution. Addressing air pollution has multiple benefits to human health, economy, environment and climate. Efforts have to be cross-sectoral to improve air quality.

Therefore, all countries were urged to develop effective plans and programs to fight air pollution by setting ambitious air quality goals as per WHO guidance, establishing monitoring systems to know the state of air pollution and its sources and adopting policies and measures for relevant sectors to improve air quality.

Sharing of knowledge and cooperation at the regional and global levels is equally important to manage and abate Trans-boundary Air Pollution. Yet the most important component of action is that of education and creating public awareness. This is in addition to the fact that proper and efficient funding sources and mechanisms are vital for these actions to take place.

UNEA3 came to a close by adopting 11 resolutions and a negotiated Ministerial Declaration, through which nations agreed to address air, land and soil, freshwater, and marine pollution. That was really great; but I noticed that when the chairperson was reading the resolutions and asking if there were objections, many delegates were not listening. I am happy that these resolutions were adopted by consensus, but I am afraid that they may not be taken seriously.

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Zayed International Prize for the Environment



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