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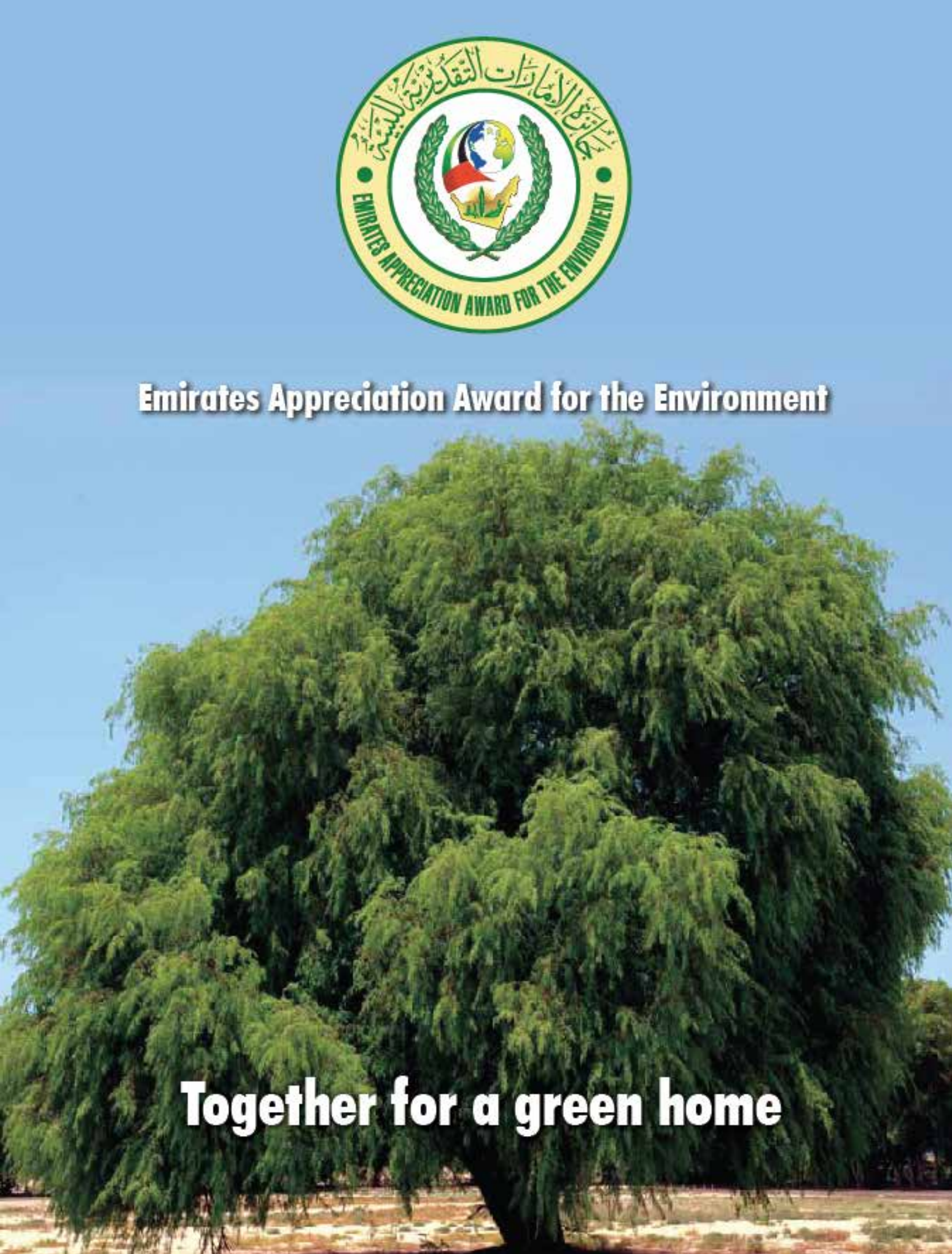
creating green communities for a better tomorrow


## HH Sheikh Mohammed bin Rashid launches Humanitarian Accelerators to empower aid organisations

Cabinet endorses UAE National Climate Change Plan 2050, the first in the region


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

# Chairman's Message

**Prof. Mohammed bin Fahad**
Executive Editor

Taking forward the vision of the Mohammed bin Rashid Al Maktoum Global Initiative (MBRGI) to spread hope, make a positive difference in people's lives and build a better future for everyone, HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai launched the Humanitarian Accelerators programme in Dubai last month.

As a leader and Ruler, HH Sheikh Mohammed has consistently stepped up efforts to work towards advancing humanity and investing in communities to help them grow as a nation. According to HH Sheikh Mohammed, "We are dedicated to serving humanity and standing by those in need wherever they may be; we believe that our value lies in improving the lives of others, regardless of their colour, gender, religion, or sect."

The launch of Humanitarian Accelerators, in collaboration with MBRGI and Dubai Future Accelerators will find technology-driven solutions to address four key challenges in the areas of education, clean water, economic opportunities for refugees and quality of online reading material and content in Arabic.

MBRGI invested more than Dh1.5bn in humanitarian and developmental projects worldwide last year benefitting 42 million people in 62 countries.

Nations and institutions worldwide can take inspiration from these initiatives to instill the value of hope amongst the disadvantaged and be proactive in bringing about positive change and working to build a better future for all of humanity.

On another note, I would also like to applaud the UAE for the launch of the National Climate Change Plan 2050 - the culmination of years of several environmental strategies, and which will now serve as a road map to bolster nationwide action for climate mitigation and adaptation in the UAE to 2050.

With the unveiling of this plan, the UAE has yet again reaffirmed its commitment to address the challenges that climate change and global warning pose and taken measures to steer and guide the country towards a climate resilient, sustainable economy.

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es for a better tomorrow

# From the **Managing Editor**

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

The Zayed International Foundation for the Environment has enjoyed a long and fruitful history of collaboration and partnership with various UN organizations that has strengthened with each passing year.

The signing of an MoU with His Excellency Erik Solheim, the Executive Director of UN Environment at Nairobi, Kenya, on my recent visit there reinforces this collaboration and supports the shift to a green economy and promotion of sustainable development through achievement of SDGs.

For almost two decades now, the Zayed Foundation has been consistently initiating innovative strategies towards pursuing and promoting its environmental achievements and collaborations to a global audience. Last month, for instance, saw the launch of a new innovative knowledge education smart platform with entertainment tools called 'The Zayed Prize Green Challenge' smart app which will soon be registered by the UN Environment on the global registry of actions that marked World Environment Day 2017.

The Zayed International Prize and the Zayed Foundation has also been promoting its innovative strategies through its association and cooperation agreements with other UN entities including UNDP, UNESCO and the UN Office for South-South Cooperation (UNOSSC), amongst others. The emphasis on promoting education for sustainable development has seen the Zayed Foundation partner with universities including the Third World Academy of Science to nurture young minds, to respond positively to pressing environmental challenges.

Carrying forward the sustainable vision of its national leaders on an international platform, the Zayed Foundation has also entered into a partnership with the Prince Albert II of Monaco Foundation to jointly support sustainable activities that directly benefit the environment.

By forging global partnerships with committed stakeholders, the Zayed Foundation thus continues its efforts to drive the transition towards the common goal of a global development agenda beyond 2015.


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Cover Story




# HH Sheikh Mohammed launches Humanitarian Accelerators to empower aid organisations

The initiative — the first of its kind in the region — will be dedicated to improving the financial efficiency of humanitarian organisations and use advanced technologies to enhance humanitarian work.

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, launched on 23rd June, 2017, the Humanitarian Accelerators, a first of its kind initiative in the Arab World which aims to gather skilled professionals in the cause of aiding the humanitarian sector. The accelerators will be dedicated to improving the financial efficiency of humanitarian organisations and leapfrogging conventional technology approaches in order to enhance the work of the humanitarian sector.

At the launch of the Humanitarian Accelerators at Jumeirah Emirates Towers, His Highness Sheikh Mohammed said, "We are striving to accelerate the process of giving, consolidate efficiency and leapfrog conventional technology approaches in humanitarian work. We wish to increase the efficiency of humanitarian organisations so that, in the name of the UAE, we can help more people around the world."

"The goal of the Humanitarian Accelerators is to harness the potential of advanced technology in order to improve the lives of others. We are facing many humanitarian challenges, and must think innovatively in order to accelerate philanthropic work and achieve high results – this cannot wait," His Highness added.

The Humanitarian Accelerators were launched under the belief that collaborating with the most innovative professionals and utilising the latest technologies is essential to finding solutions for some of the most difficult humanitarian challenges. The Humanitarian Accelerators are launched in collaboration


THE HUMANITARIAN ACCELERATORS will address four key challenges facing the region including quality education and providing access to clean water, amongst others.

with Mohammed bin Rashid Al Maktoum Global Initiative (MBRGI) and Dubai Future Accelerators. They seek to adapt modern technology such as Artificial Intelligence to serve humanity, improve the financial efficiency of all MBRGI humanitarian institutions and achieve tangible results in serving humanity.

The Humanitarian Accelerators will address four key challenges facing the region. The first challenge is providing access to quality education to all children, including refugees by providing e-learning tools and developing innovative mechanisms, such as accessible websites, that enable young students to access interactive educational platforms regardless of where they are located.

There are overwhelming obstacles facing young students, especially those living as refugees, in gaining a formal education. There are no schools or curricula that accommodate refugees, there is a shortage of educational tools and qualified teachers, and there are obstacles to obtaining an education in the face of poverty. These issues must be addressed, and radical solutions must be found, to empower future generations in the face of this crisis.

The second challenge is providing access to clean water in underprivileged countries. Today, MBRGI has utilized conventional solutions to provide clean drinking water to over 10 million people – harnessing technology to expand this reach is the next step. Access to clean drinking water is a global challenge, with approximately 780 million people without access to a clean source or water.

Furthermore, over 800 million children under the age of five and mostly in developing countries die every year from diarrhoea caused by unclean water. The Humanitarian Accelerators will look for solutions to create cost-effective technology that can purify water efficiently, quickly and in large quantities that can be delivered to the most affected communities.

The third challenge facing the region is the number of refugees living in poverty – up from 50% in 2015 to 70% in 2017 as per UNHCR reports. The Humanitarian Accelerators will focus on finding electronic solutions and developing a platform for e-business in order to give refugees around the world a platform to leverage their skills, capabilities and services and market their products online, providing them with tangible economic opportunities.

The fourth challenge to be addressed is the below-average reading material and content in Arabic online. The Humanitarian Accelerators will seek to devise electronic solutions in order to increase the amount, and quality, of Arabic content online.

This will be the humanitarian element of Dubai Future Accelerators, an intensive programme designed to identify emergent technologies and create effective partnerships and strategies for embracing the future.

The programme seeks to provide a dynamic and integrated environment for participants and humanitarian institutions to explore opportunities for innovative solutions, technology and services, in various areas, that are capable of changing the world.

This may facilitate partnerships and the signing of memorandums of understanding in order to fund pilot projects after the programme ends.

As of today, 65 international companies have participated in the Dubai Future Accelerators programme, and a memorandum of understanding has been signed with 47 others.


# Emirates showcases environment-friendly aircraft cleaning technique to mark World Environment Day

On the occasion of World Environment Day, Emirates airline showcased an environmentally friendly aircraft cleaning technique that has enabled the airline to save millions of litres of water every year. The 'aircraft drywash' technique, uses little or no water in cleaning the aircraft, which is in contrast to conventional methods which typically use thousands of litres of water per wash, the company said to mark the international day tomorrow.

Traditionally, aircraft are cleaned by using highly pressurised water between four to five times every year. However, on an average this technique uses more than 11,300 litres of water to clean an Airbus A380 aircraft and more than 9,500 litres of water to clean a Boeing 777 aircraft.

Emirates said that with the drywash technique, it saves over 11 million litres of water every year. This reduces the number of times the aircraft has to be washed to about three times a year, and also reduces fuel consumption because of less accumulation of dirt.

Emirates also said that in the engineering and maintenance area, it uses an innovative foam wash technique for cleaning aircraft engines that allows the airline to save about 200 tonnes of carbon dioxide emissions per year across its fleet. Other environmentally aware initiatives include the installation of a one megawatt array of solar photo voltaic panels at the state of the art Emirates Engine Maintenance Centre in Dubai.

The panels generate over 1,800 megawatt-hours of electricity every year, helping save around 800 tonnes in carbon dioxide emissions. Emirates Engineering has also installed energy saving LED lights triggered by motion sensors, substantially reducing electricity consumption.

In the inflight products area, Emirates has introduced sustainable blankets, produced from 100 percent recycled plastic bottles. Using patented ecoTHREAD technology, each blanket is made from 28 recycled plastic bottles.

Cover Story



# Cabinet endorses UAE National Climate Change Plan 2050, the first in the region

UAE National Climate Change Plan consolidates efforts and assures UAE's role in tackling this global challenge, says HH Sheikh Mohammed.

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, announced on his Twitter account that the UAE Cabinet has endorsed during its meeting on 12th June, 2017, the National Climate Change Plan 2050, which aims to emphasize UAE's proactive approach towards sustainable development, raise the quality of life across the country and identify priorities. It also aims to integrate efforts to bridge gaps and strengthen cooperation between the public and private sectors.

His Excellency Dr Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, said: "The National Climate Change Plan builds on the existing policy and institutional framework for green growth and sustainable development in the UAE. It reflects the mandates of the UAE Vision 2021 and the UAE Green Agenda 2015-2030, and factors in the nation's unique circumstances, development priorities, resource endowments, and capacity."

His Excellency pointed out that with an ambition to achieve a diversified, innovative, climate-resilient economy and a high quality of life, the National Climate Change Plan seeks to achieve the following threefold objectives: (1) manage greenhouse emissions while sustaining economic growth; (2) build climate resilience through minimizing risks and increasing capacity for climate adaptation; and (3) advance the UAE's economic diversification agenda through innovative solutions.

Through pursuing these interlinked goals, the Plan seeks to enable the nation to achieve continuous growth even while


Al Zeyoudi said that the private sector will play an important role in helping the UAE achieve its green objectives.

addressing the complexity of climate change, thereby facilitating the transition toward a climate-resilient green economy.

Al Zeyoudi said: "The UAE's current policy directions already represent solid progress on the management of greenhouse gas (GHG) emissions. As a next step, the UAE will work to synthesize ongoing efforts at sectoral and emirate-wide levels in monitoring and managing GHG emissions, and integrating international best practices."

The Minister added: "The private sector will play a critical role in advancing the UAE's economic diversification agenda by strengthening the market for environmental goods and services. It is in the best interests of the private sector to tackle climate change as the expected impacts may affect their bottom line."

"Businesses can be a source of innovation in addressing sustainability challenges and they have huge potential to provide the necessary resources to advance the diversification agenda. To achieve this goal, the government will endeavor to provide an enabling environment for the private-sector's climate actions through combining regulations and incentives," he explained.

Al Zeyoudi further pointed out that employment opportunities in the green economy are promising, but currently require significant capacity gaps to be filled to realize them. To prepare the workforce for the transition to green sectors such as clean energy, green manufacturing, and environmental goods and services, the UAE will carry out a comprehensive capacity needs

assessment, leverage young local talents by equipping them with technical, managerial, and vocational skills, and forge closer collaboration between academia and industry.

"The National Climate Change Plan comprises three components that facilitate policy alignment and innovation. The UAE is already undertaking a wide range of climate action initiatives. Within the 'Key Climate Priorities' segment, the Plan seeks to address the gaps and opportunities for growth in the current policy landscape, in the near-term (up to 2020) and long-term (2030-2050). The wide range of existing climate action efforts in various sectors under the scope of the country's Green Agenda are captured in 'Foundation: Green Agenda' section, that also highlights key progress and lessons to date. The Plan also features an important segment 'Enablers: Means of Implementation', that outlines mechanisms to support climate action," the Minister added.

In the UAE, innovative green finance is gaining momentum, but a stronger enforcement of policy framework and regulations is required to link bankable projects and financiers. Mainstreaming green finance in public policy requires an iterative and participatory process of strategic planning and implementation. In the longer term, the UAE will consider innovative tools such as green fiscal policy to further stimulate investment flows into sustainable projects.

The job prospects in the green economy are promising, but require filling significant capacity gaps to realize them. To prepare the workforce for the transition to green sectors such as clean energy, green manufacturing, and environmental goods and services, the UAE will carry out a comprehensive capacity needs assessment; leverage young local talents by equipping them with technical, managerial, and vocational skills; and forge closer collaboration between academia and industry.

In line with these priorities,

"The National Climate Change Plan reflects the mandates of the UAE Vision 2021 and the UAE Green Agenda 2015-2030."


MOCCAE will lead an awareness and communication campaign, in partnership with concerned stakeholders, following a thorough assessment of the targeted audiences' understanding, motivations, and willingness to engage in climate actions. Furthermore, MOCCAE will conduct campaigns in partnership with relevant stakeholders to facilitate the participation of government entities, businesses, youth, households, academia, and media, in addressing climate change.

The implementation of the National Climate Change Plan will be overseen by the UAE Council on Climate Change and the Environment (CCCE) as an inter-ministerial, inter-emirate governance body. The Ministry of Climate Change and Environment (MOCCAE) will assume the role of the secretariat. In addition, MOCCAE will also take on the primary responsibility for monitoring the progress of the Plan.

His Excellency reiterated that the UAE is ready to fulfill its international commitments as it shares common aspirations with the global community in relation to achieving the United Nations' sustainable development goals (SDGs) and the objectives of the Paris Agreement.

The Minister said: "In addition to actively engaging in international climate change negotiations to protect the UAE's interests, we will also aim to enhance the country's technical capabilities through technology transfer and financing mechanisms currently available to the country."

Launch



# Ministry of Energy launches third edition of "UAE State of Energy 2017"

The report serves as a national reference to highlight the successes in the field of energy in UAE, serving the country's strategy for future energy, which was announced earlier this year.

The Ministry of Energy has launched the third edition of the report, "UAE State of Energy 2017" during the activities of the annual Iftar organized by the Ministry and in the presence of a large gathering of strategic partners and sponsors.

The report serves as a national reference to highlight the successes in the field of energy in UAE, serving the country's strategy for future energy, which was announced earlier this year.

The ministry said, in a press release on June 18, 2017, that the report reviews the country's efforts to diversify energy sources, incorporate clean energy and energy efficiency solutions, as well as balance water, energy and food links in an innovative way to achieve the UAE's 2021 vision on energy and carbon emissions reduction and in line with the global energy revolution.

The report includes several sections: Energy Status, Future Energy, Energy and Innovation, Green Cities, Energy Production, Energy and Climate Change, Energy and Transport, Renewable, Clean and Alternative Energy, energy and water decoupling". The report also contains 57 articles written by a number of decision makers and experts in the field of energy in UAE.

HE Suhail bin Mohammed Al Mazrouei, Minister of Energy, said in his opening speech that the report is an extension of the role played by the UAE at the global level in the framework of international efforts to reduce carbon emissions and the commitment of the UAE to achieve its clean energy goals, and what it has achieved in collaboration with its strategic


THE UAE has demonstrated its regional leadership in the field of sustainable energy through its green initiatives and environmental policies in the field of energy.

partners and stakeholders in the energy sector in the development of the National Energy Strategy 2050, aiming to increase the contribution of clean energy capacity in the total energy mix to 50 percent, which will enable savings of 700 billion dirhams by 2050.

HE Al Mazrouei also thanked the sponsors for their keenness to support the Ministry's efforts to demonstrate the country's leadership in the field of energy and what it seeks to achieve.

HE Dr. Matar Hamid Al Neyadi, Undersecretary of the Ministry of Energy, said that the UAE has demonstrated its regional leadership in the field of sustainable energy through its green initiatives and environmental policies in the field of energy. He said that the report is a tool for decision makers and specialists in the world to make standard comparisons to enable them adopt Practices to achieve energy security and contribute to face the challenges of climate change.

HE Eng. Fatima Al Foora Al Shamsi, Assistant Undersecretary for Electricity and Future Energy, stressed the importance of the UAE Energy Status Report 2017 in presenting the energy data of all types, and the achievements accomplished in attaining the vision of UAE 2021. She said that this would help in drawing up and modifying policies and trends in energy; and identifying suitable opportunities for energy sector development and sustainability in all its fields.

On the sidelines of the launch of the State of Energy 2017, HE the Minister of Energy, and in the presence of HE Dr. Matar Al Neyadi, Undersecretary of

the Ministry of Energy and HE Eng. Fatima Al Foora Al Shamsi, Assistant Undersecretary for Electricity and Future Energy, honored The Dubai Electricity and Water Authority (DEWA) as the main sponsor of the report, and Roads and Transport Authority in Dubai As Platinum Sponsor; Emirates National Oil Company (ENOC) as the Platinum Sponsor of the Report, Dolphin Company as Gold Sponsor of the Report, Emerson as a Bronze Sponsor and ABB as a Bronze Sponsor.

**DEWA invites companies to use opportunities and investments provided by WETEX and Dubai Solar Show**

Dubai Electricity and Water Authority, DEWA, has invited companies and organisations working in energy, water, the environment, and renewable energy to participate and display their products and services at the 19th Water, Energy, Technology, and Environment Exhibition, WETEX, and the 2nd Dubai Solar Show which will be held from 23rd - 25th October, 2017, at the Dubai International Convention and Exhibition Centre.

DEWA organises WETEX under the directives of Vice President, Prime Minister and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum, and the patronage of H.H. Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai and UAE Minister of Finance and President of DEWA.

For the 4th consecutive year, DEWA organises WETEX under the umbrella of Green Week, which includes a series of environmental activities and events aimed at raising awareness about the conservation of energy, sustainable development, and providing a green economy in Dubai.

The 18th WETEX and 1st Dubai Solar Show in October 2016 attracted 1,975 exhibitors and 25,000 visitors from 47 countries. They were an important platform for companies and organisations working in sectors such as energy, renewable energy, water, and the environment, to promote their technologies and projects, meet with decision makers,

The UAE State of Energy 2017 report reviews the country's efforts to diversify energy sources, incorporate clean energy and energy efficiency solutions, as well as balance water, energy and food links.


investors, buyers and interested people from around the world, conduct deals and build partnerships, learn about the latest solar-energy technologies, as well as opportunities to take part in solar energy projects and programmes in the region.

Saeed Mohammed Al Tayer, MD and CEO of DEWA, and President and Founder of WETEX, said, "Over 18 years, WETEX has grown to be the largest and most important specialised exhibition in the region in these key sectors. The exhibition has established itself as a key international event and a platform that brings together exhibitors, visitors, experts, specialists, decision makers, and investors. This year, a large number of international companies will take part in WETEX. They see it as an ideal platform to display their green solutions and products at a time when the UAE and Dubai Government continue to launch promising projects to support the green economy and sustainable development."

**Residents urged to limit electricity usage from 12 to 6pm**

Dubai Electricity and Water Authority, DEWA, is urging consumers to limit their use of electrical appliances during peak-load hours from 12 noon to 18:00 every day during the summer months.

The appeal comes as part of DEWA's annual campaign dubbed, "Let's Make this Summer Green", which aims to boost awareness about the importance of adopting sustainable practices and rational consumption to preserve natural resources and reduce Dubai's carbon footprint. The campaign incorporates tips to reduce energy use during the summer, when energy demand is higher, specially during peak-load hours, which results in increased energy production and use of more fuel.

Conference



# UAE delegation marks successful participation at United Nations' Ocean Conference in New York

The Conference is the game changer that will reverse the decline in the health of our ocean for people, planet and prosperity.

A UAE delegation led by Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, made an impactful participation at the high-profile Ocean Conference recently held at the United Nations' headquarters in New York.

Held from June 5 to June 9, 2017, the event coincided with World Oceans Day on June 8.

The Ocean Conference aims to support the implementation of the UN's Sustainable Development Goal 14 that calls for the conservation and sustainable use of the oceans, seas and marine resources.

Conveying the UAE's message at the conference, Dr. Al Zeyoudi, said, "The marine environment has been a significant component of the country's environmental resources and continues to play an integral role in our everyday lives. It remains our window to the external world and a primary source of food for a wide segment of our population."

He added, "The discovery of oil strengthened the position of our marine environment as a mainstay of our economic resources. Our marine wealth is equally precious for its rich biodiversity and for enabling the country's significant success in the transportation, desalination, tourism and entertainment industries."

The Minster said, "The event is set to play a game changing role in improving the health of our oceans for the wider benefit of people, planet and prosperity." The UAE's efforts in the field of marine environment conservation are three-fold and include: protection from pollution due to


The Ocean Conference aims to support the implementation of the UN's SDG 14 that calls for the conservation and sustainable use of the oceans, seas and marine resources.

oil and other harmful materials, protection of marine environment ecosystems, and strengthening our ability to withstand and adapt the impacts of climate change, he added.

"Since 1999, the country has put in place a comprehensive legislative framework that includes standards and regulations to prevent the pollution of the marine environment. The UAE also works tirelessly to strengthen its capacities and accelerate its emergency response time, while fine-tuning the mechanisms of monitoring changes in the marine environment," Dr. Al Zeyoudi said.

He explained that the UAE coordinates with neighboring countries in the Arabian Gulf in collaboration with concerned local and international organisations to protect its marine environment.

Notably, the country has intensified efforts to safeguard its aquatic resources through adopting diversified measures including fishing regulations. The UAE also routinely hosts awareness programs for regional and international stakeholders," he explained.

The Minister said, "Our efforts to support the aquaculture industry and boost the private sector's participation in this field have already paid rich dividends. The Sheikh Khalifa bin Zayed Al Nahyan Centre for Marine Research in Umm Al Quwain has the capacity to produce 15 million fingerlings (juvenile fish) yearly.

"The protection of marine areas provides safe shelters for fish and other aquatic species, especially for endangered ones including sea turtles and sea cows."


"Other significant efforts of the UAE include the rehabilitation of marine areas affected by climate change, protection of seaweed habitats and saline ponds, installation of artificial habitats with eco-friendly materials in the most important marine areas of the country and management of some negatively impacting phenomena such as red tide and invasive species within the framework of integrated national plans," he added.

Dr. Al Zeyoudi also highlighted a set of important policies and national plans in the UAE's marine environment protection portfolio such as the National Plan for the Sustainability of Marine and Coastal Environment, the National Strategy for Biodiversity (2015-2021) and the UAE Green Development Strategy, as well as the UAE Energy Strategy 2050, and the upcoming National Climate Change Policy.

Dr. Al Zeyoudi reiterated the UAE's commitment to participating in achieving the Sustainable Development Goals and to mobilise international expertise to accelerate efforts to safeguard the health and vitality of oceans and enhance their role in sustainable development.

He also extended an invitation to all delegations to participate in the World Governments Summit to be held in Dubai from 11 to13 February 2018, which will discuss, through the climate change platform, the most important issues related to oceans health and the sustainable use of their resources.


# EmiratesGBC launches online 'Green Building Tooltips' to promote sustainable best practices

Emirates Green Building Council (EmiratesGBC), an independent forum aimed at conserving the environment by strengthening and promoting green building practices, launched its brand-new initiative to encourage green building best practices, the 'Green Building Tooltips,' freely accessible online at: www.emiratesgbc.org The Tooltips were launched on World Environment Day 2017.

A rich online resource on best practices that will help the construction industry and community make their built environments more sustainable, the EmiratesGBC Green Building Tooltips aim to provide relevant information on green buildings for an audience of varying levels of technical capacity. The interactive designs cover three different building typologies, showcasing a home, school and office building. The initiative is powered by BASF and Legrand, EmiratesGBC corporate members, underlining their commitment to promoting sustainability.

Saeed Al Abbar, Chairman of Emirates Green Building Council, said: "The new EmiratesGBC Green Building Tooltips webpage is the first and only one of its kind initiative in the region that provides valuable guidance and insights for building users and the industry to implement sustainability best practices. The free-to-access resources brings incredible knowledge on how to promote energy and water efficiency in built environments."

Effortless to navigate and access, the EmiratesGBC Green Building Tooltips will not only help developers who are currently building new projects but also those who seek to retrofit their buildings, as well as members of the public who wish to pursue a greener lifestyle. The best practices recommended in the Tooltips are easy to apply and will help make a tangible difference in promoting a greener environment. In addition to achieving savings on utility bills, the tips suggested through the online resource will help reduce the carbon footprint by making built environments more sustainable.

Conference



# UAE is leading the world in renewable energy: Al Zeyoudi

Dr. Thani Al Zeyoudi was speaking at the World Scientific and Engineering Congress (WSEC) 2017, held recently in Astana, Kazakhstan, under the theme "Future Energy: innovative scenarios and methods of their implementation".

Renewable energy lies at the heart of the transformation strategy adopted by the UAE to diversify its economy and meet the growing demand over energy, Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, has stated.

The minister made the statements while addressing the World Scientific and Engineering Congress, WSEC, 2017, which was held recently in Astana, Kazakhstan, under the theme "Future Energy: innovative scenarios and methods of their implementation". The UAE is among the key partners of the international event where it is presented through one of the exhibition's largest pavilions.

The UAE is considered among the world's leading countries in areas of renewable energy and attaches paramount importance to the development of efficient solutions in this field, the minister added.

"Over the past decade we have deployed large-scale renewable energy schemes at the local and global levels," he said, noting that the UAE capital plays host to the permanent headquarters of the International Renewable Energy Agency, IRENA, and organises an array of conferences and events of relevance around the year, most notable of which is the World Future Energy Summit, WFES, in January of every year.

He pointed out to the world's largest independent solar power plant to be built in Abu Dhabi at a total cost of AED3.2 billion under the name "Noor Abu Dhabi," which means "the light of Abu Dhabi" in Arabic. The project, which will generate 1.177 megawatts from the second quarter of 2019,


The UAE is considered among the world's leading countries in areas of renewable energy

is part of the emirate's bid to diversify its economy and provide alternative sources of energy at competitive prices while following the best possible environmental and technological practices.

"The growing interest being displayed in the renewable energy sector reflects the UAE's commitment to diversify sources of sustainable energy and translates the prudent vision of the UAE wise leadership to ensure an investment-conducive environment at the renewable energy sector with the overall goal of propelling economic growth."

The minister shed light on the UAE Energy Strategy for 2050, saying that it targets an energy mix that combines renewable, nuclear and clean energy sources to meet the UAE's economic requirements and environmental goals, ensuring a comfortable economic environment for growth across the sectors.

The UAE National Plan for Climate Change for the years 2017-2050, recently announced by the country, places deployment of clean energy sources and enhancing efficient use of energy on top of its main priorities, the minister added.

He reiterated the UAE's keenness to continue to adopt and deploy sources of renewable energy, citing in this regard the country's hosting of Expo 2020 Dubai under the theme "Connecting Minds, Creating the Future.

"The location of Expo 2020 will get 50 percent of its power from renewable energy sources, most notable of which is Mohammed bin Rashid Al Maktoum Solar Park," said the minister.

MoU



# DP World and Masdar to explore clean energy solutions

Masdar to provide technical advisory services and explore renewable energy solutions for DP World's ports and free zones in the Middle East and Africa.

Global trade enabler DP World and Masdar, Abu Dhabi's renewable energy company, have signed a Memorandum of Understanding (MoU) to explore areas of collaboration on clean energy solutions for DP World's portfolio of ports and freezones in the Middle East and Africa.

Masdar will work with DP World to address challenges related to the delivery of sustainable, reliable and cost effective power generation, with a particular focus on areas that are remote or off-grid. Masdar will provide specialist project management services, from concept to implementation, including community projects to support DP World's operations.

The first collaborative activity will be to review DP World's operations at the Port of Berbera in Somaliland, focusing on hybrid solar photovoltaic (PV) – diesel plants, water treatment and other technical advisory services for power generation.

The agreement will also look at increasing energy efficiency across the company's ports and terminals in the region.

DP World Group Chairman and Chief Executive Officer, Sultan Ahmed bin Sulayem, said: "We strive to integrate sustainability into everything we do and I believe it is essential to modern business practice.

We look forward to this partnership with a world leader in renewable and clean energy that will help reduce our carbon footprint in the region and to develop long term energy solutions for the communities in which we operate.


DP World Group Chairman and CEO, Sultan Ahmed Bin Sulayem and CEO of Masdar, Mohamed Jameel Al Ramahi

The agreement will also look at increasing energy efficiency across the company's ports and terminals in the region.

This collaboration is an important step in contributing towards achieving the UAE 2021 vision and implementing the Dubai 2021 plan as well as the Abu Dhabi Economic Vision 2030, which is focused on developing the UAE into a knowledge-led economy."

Mohamed Jameel Al Ramahi, Chief Executive Officer of Masdar, said: "We are delighted to be working with DP World to explore the potential for commercially viable renewable energy across its operations in the Middle East and Africa. Masdar has vast experience of delivering projects in off-grid locations around the world, and we fully understand the transformational benefits that access to reliable, cost-effective clean energy can bring to both businesses and local communities.

"We are excited by the opportunity to realise these benefits through this important new partnership."

Masdar's work to bring renewable energy access to remote locations ranges from Pacific island micro-grids and rural solar home systems in Afghanistan and Morocco, to onshore wind in the Republic of Seychelles and off-grid community solar PV projects in Egypt.

Masdar's activities in the Pacific Islands included 11 highly customised renewable energy projects designed to drive economic growth and sustainable development by increasing energy resilience, bolstering job creation and contributing to renewable energy targets.

The projects have replaced the need for approximately 3.2 million litres of imported diesel fuel, saving in excess of $3.7 million per year in fuel costs.

Conservation



# Impact of developmental projects on Ras Al Khor Wildlife Sanctuary assessed

A delegation of the Consultative Mission to the Convention on Wetlands of International Importance (Ramsar) visits Ras Al Khor Wildlife Sanctuary to assess the cumulative impact of current and future development projects surrounding it.

The Environment Department of Dubai Municipality, in coordination with the Ministry of Climate Change and Environment, received a delegation of the Consultative Mission to the Convention on Wetlands of International Importance (Ramsar) recently.

The objective of the mission was to assess the current environmental situation of the Ras Al Khor Wildlife Sanctuary and the cumulative impact of current and future development projects surrounding it to maintain its sustainability, said Eng. Alia Al Harmoudi, Director of Environment Department, Dubai Municipality.

She added that Ras Al Khor Wetlands is an important station for migratory birds and that the number of birds during migratory season exceeds 20,000. This is due to the richness and diversity of natural habitats in the site from mangroves to mud surfaces and swamps.

The Ras Al Khor Wildlife Sanctuary was established in 1985 and was declared as a protected area in 1998. In December 2003, His Highness the Ruler of Dubai issued Law No. 11 of 2003 on the Establishment of Protected Areas in the Emirate of Dubai. The Ras Al Khor Wildlife Sanctuary has been fully protected under the supervision of Dubai Municipality.

The Ras Al Khor Wildlife Sanctuary was listed on the list of Wetlands of International Importance under the Ramsar Convention in 2007, making it the first Ramsar site of the United Arab Emirates. It performs many services of bio-systems. The water bodies regulate the local


The Ras Al Khor Wildlife Sanctuary is the first Ramsar site of the United Arab Emirates.

atmosphere and recycle the food, while the mangroves protect the beaches from erosion and the city from torrents and flood waters. This is in addition to its role in serving the scientific, research and educational bodies, environmental tourism, a haven to spend after a week's work for the local residents, and a location to relax and calm away from the noise of the city.

It also has an aesthetic role being an important attraction for migratory birds that seek the comfort and food provided by mud surfaces and swamps, not to mention being an integral part of the cultural and natural heritage of the UAE.

The beautiful vegetation in the Ras Al Khor Wildlife Sanctuary is attributed to the Avicennia marina mangroves, one of the most widespread ecosystems in the Sanctuary. During the period from 1994-1991 the areas was planted with 45,000 seedlings, which have since flourished into a rainforest. The mangrove trees also store carbon, as the carbon reserves at Ras Al Khor is the third largest stock in the UAE, providing clean air for Dubai residents.

Control towers in Ras Al Khor Wildlife Sanctuary receive increasing number of visitors annually. While in 2008, more than 4,000 people visited the park, more than 17,000 visitors arrived in 2014, and in 2015 the number jumped to more than 50,000, reaching 92,000 during 2016.

"The beauty of this area and its uniqueness make it an attractive area for real estate development projects, surrounded by highways. This is expected to make a steady increase in the population density in the vicinity of the reserve during the next


ten years, which is expected to affect in the future clearly on the biological characteristics of the reserve and its primary role in supporting the biodiversity and the species that depend on survival and continuity, whether they are migratory birds such as flamingoes, eagles, or resident birds and other plant species and fish," said Al Harmoudi.

"In view of the sensitivity of the site and the expected future impacts of the development projects, Dubai Municipality commissioned an Consultative mission in collaboration with the Ministry of Climate Change and the Environment to assess the cumulative impacts of current and future development projects on the site's biodiversity," she said.

The mission team included international and local experts, who visited Dubai from 14 to 17 May 2017.

The visit included several field trips and meetings with key developers in the vicinity of the reserve.

The mission's visit ended with a workshop that included several specialists from Dubai Municipality and the country and representatives of all major development projects, in the presence of Eng. Mariam Mohammed Saeed Hareb Al Muhairi, Assistant Undersecretary for Water Resources and Nature Conservation at the Ministry of Climate Change and Environment.

During the workshop, all participants stressed the importance of preserving the sustainability of the Ras Al Khor reserve because of the services it provides to the environment and the society. The workshop was supported by all concerned parties including developers, local and federal government agencies.


# Dubai launches "Sustainable Homes with Intelligent Waste Management" initiative

Dubai Municipality's Waste Management Department has launched a new initiative called "Sustainable Homes with Intelligent Waste Management," aimed at processing waste at its source.

The project is in line with the environmental goals of the National Agenda 2021 and achieving the National Index of transferring 75% of the waste produced in the Emirate of Dubai from the landfill for recycling and also as a translation of the ambitious vision of Dubai Municipality in building a happy and sustainable city.

The implementation of the first phase of the project coincided with the start of the Holy Month of Ramadan with the distribution of 13 thermal fertilizer containers for the production of organic compost to the best houses committed to waste sorting operations from its sources in the areas that come under My City, My Environment project.

This container is an excellent tool to reduce organic waste without using an electrical source. It is made of plastic with an approximate size of one meter length and one meter height. Its walls are perforated with many openings to allow air to enter the waste mixture and allow water to be sprayed to the ground. It is possible to get 1 cubic meter of organic manure from about every 10 cubic meters of organic waste consisting of excess household food waste.

The Sustainable Waste Management Awareness Team from the Waste Management Department has conducted an awareness drive among the homeowners and their families about the installation and use of thermal compost containers and on the importance of families' commitment to reducing waste, especially organic waste.

On the other hand, electronic awareness cards were published through social networking sites aimed at highlighting the role of the family in reducing the waste generation by following a number of sustainable environmental measures from shopping to proper handling of household waste.

## WED 2017



'UAE maximises value of nature in various policies and development plans'

There are 43 officially declared protected areas that span more than 14 per cent of the country's territory, which exceeds the target set out in the National Strategy for Biodiversity 2015-2021.

On the occasion of World Environment Day, celebrated on 5th June every year, Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, has said that the changes in people's relationship with nature in recent decades, including the intensive exploitation of nature's resources beyond its ability to regenerate, are a major cause of the current global environmental degradation.

In a statement, the minister said, "As part of our cultural heritage embodied by the practices of our forefathers, improving the relationship between people and nature and restoring the balance between development needs and nature's capacities is of great interest to all stakeholders in the UAE."

This year's theme for World Environment Day was 'Connecting People with Nature'. The theme represents human capital, the cornerstone of development, awareness of the importance of living in harmony with nature, and of using natural resources in a sustainable manner, especially given the pressures and challenges the population currently faces in relation to economic growth and climate change.

The founding father of the UAE, the late Sheikh Zayed bin Sultan Al Nahyan, instilled in the UAE peoples a commitment to the principle of coexistence between man and nature, and although the UAE has seen a rapid population growth and where ambitious plans require more exploitation of the nation's resources, efforts have been made to achieve this coexistence in a sustainable way.

"The relationship between the


THE UAE will make greater strides towards eco-tourism while expanding its areas of special protection.

country and nature has been an important part of our concerns. Even amid the comprehensive developmental renaissance that has affected various aspects of life, the UAE has always been keen on preserving a good relationship between man and nature, and maximising the value of nature and its resources in various policies and development plans.

"This is reflected in the UAE Vision 2021, launched by President His Highness Sheikh Khalifa bin Zayed Al Nahyan, that emphasises the importance of protecting the country's natural environment from the dangers of human activities on a local and global scale," Dr. Al-Zeyoudi continued.

The country has endeavoured to provide appropriate protection for many areas of land and sea that are environmentally sensitive or historically significant, so that they can withstand natural and developmental pressures and challenges. Today, the UAE has officially declared 43 protected areas that span more than 14 percent of the country's territory, exceeding the target set in the National Strategy for Biodiversity 2015-2021.

In addition, there are dozens of protected areas with local and international reputations, such as Sir Bani Yas Island, known as the 'modern-day Noah's Ark', and Qarnein Island that has featured on the World Wildlife Fund's 'Gifts to the Earth' list since 2003. Making protected areas accessible to visitors is a valuable opportunity to enhance the attachment of people to their natural environment.

According to the Minister, the UAE has created new natural

areas, developed hundreds of natural sites, established tourist resorts around the most important natural and historical areas within urban development plans, and invested in promoting eco-tourism.

"Sustainability of the environment and preservation of natural resources are among the objectives of the UAE Green Development Strategy. Reinforcing the country's reputation as an important tourist destination calls for stepping up our efforts to develop a comprehensive environmental tourism policy. In the run-up to Expo 2020 Dubai, we are committed to achieving the desired balance between economic activity and tourism while preserving our rich natural heritage," he added.

Dr. Thani Al-Zeyoudi reiterated the need to raise awareness about the importance of nature, especially among the youth, and to adopt a sustainable lifestyle in order to live in harmony with nature.

**Follow Up Committee of UAE President's Initiative reviews various environmental projects**

The Follow Up Committee of the Initiatives of the UAE President, has held a meeting chaired by Ahmed Juma Al Za'abi, Deputy Minister for Presidential Affairs.

During the meeting, which was held at the Ministry of Presidential Affairs, the participants reviewed the latest developments and work progress on a number of environmental projects across the country. They also discussed ways to preserve the environment and reduce its pollutants, as part of the initiatives of the UAE President His Highness Sheikh Khalifa bin Zayed Al Nahyan, that aim at enhancing infrastructure and providing the highest standards of health and safety for UAE citizens.

The committee members also tackled the latest developments in the Integrated Waste Management Project in various areas in the country. They were also briefed on the project related to building a biofuel plant in Umm Al Qaiwain.


# Goumbook donates 10,000 indigenous Ghaf trees back to the UAE in celebration of The 2017 'Year Of Giving'

Goumbook, the leading social enterprise promoting sustainable living and green practices in the UAE, celebrated the 2017 "Year of Giving" by donating 10,000 Ghaf trees back to the UAE as part of its "Give a Ghaf" campaign.

"The aim of the "Give a Ghaf" tree planting program is to make the UAE greener and more sustainable, and it is also a great opportunity to raise awareness about the local ecosystem and water conservation. By offering a home to these trees, UAE Nationals will take an active role in safeguarding the natural heritage of the UAE," said Tatiana Antonelli Abella, MD and founder of Goumbook.

An indigenous species, the Ghaf is the national tree of the UAE, as declared by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai. Drought-tolerant and evergreen, the Ghaf tree is, possibly, the sturdiest plant of the harsh desert environment, with its unique ability to tap water stored deep in the sand and its roots penetrating as deep as 30 meters to access it. As such, the Ghaf tree requires very little irrigation to thrive and stay green (It is estimated that during the summer months a Ghaf tree requires only a couple of litres of water per day, compared to 200 litres a day for a date palm tree).

Since 2011, Goumbook has already planted over 35,000 seeds and almost 10,000 trees through its "Give a Ghaf" tree planting program. Ghaf seeds are initially planted and nurtured in a nursery for about two years, until they grow into healthy seedlings. The young trees are then ready to be planted where natural shade and greenery are needed: these trees are planted by the collective efforts of individuals and corporations from all parts of society, and contribute to the biodiversity of the UAE.

To order their complimentary Ghaf tree saplings, farmers and land owners need to email giveaghaf@goumbook.com before the end of August. Trees will be ready for collection and/or delivery at the beginning of October ready to be planted.

# 2000 mangroves planted with community participation

Dubai Municipality embraces spirit of Year of Giving in observing World Environment Day

Dubai Municipality's Environment Department organized a Mangrove tree planting event at Jebel Ali Marine Sanctuary on 6th June, 2017, to mark the close of its activities for the World Environment Day. A total of 2,000 mangroves were planted, enhancing existing mangrove forests. "Given the theme for World Environment Day this year – connecting people to nature – this activity was a fitting and rewarding volunteering opportunity," said Eng. Alya Al Harmoudi, Director of Environment Department at Dubai Municipality.

"During this year's Car Free Day initiative, Dubai Municipality had announced that it would plant the number of mangroves that would absorb the amount of carbon dioxide that would have been emitted by the number of cars that were not driven on that day," she said.

"As the Year of Giving is a priority for Dubai Municipality we wanted to link our activities during the World Environment Day with that. We believe it aligns with our own values and beliefs and we strive to pioneer initiatives, support projects and create opportunities all in the name of The Year of Giving. There are many ways to give, including giving to nature and to the community and we want to encourage people to join us in this giving by providing opportunities for them to do so," said Al Harmoudi.

Ms. Tasnim Al Falasi, Head of the Environment Awareness Section said that the Mangrove tree is a very important species as it provides important habitats and feeding grounds for visiting and migratory birds.

"Mangrove roots also bind sand


The Mangrove tree is a very important species as it provides important habitats and feeding grounds for visiting and migratory birds.

and prevent the erosion of our coasts from wave activity. Mangrove forests absorb five times more carbon dioxide from the air than other tree species and so help us improve our air quality," she said.

"On 26th May, Dubai Municipality had released 40 rehabilitated rescued sea turtles at the Jebel Ali Marine Reserve. These turtles were the critically endangered Hawksbill turtles, a species that was hunted to near extinction for its beautiful shell and they were also a victim of boat injuries and by-catch from fishing," she said.

"When injured turtles are found on the beach, the public are asked to take them to the Dubai Turtle Rehabilitation Centre, where they are nursed back to health before being released at the sanctuary," she said.

"Following this, on 5th June, 70 Hawksbill hatchlings emerged from their nests to the delight of those volunteers who arrived to plant their mangrove trees.

"These nests had been relocated to a protected nursery at Jebel Ali Marine Sanctuary to prevent predation from foxes and inundation from the sea. In some cases turtles, particular first-time-nesters, will lay their eggs too close to the high-tide line, so when the tide rises too high, the nest becomes flooded and the eggs perish. Also, left unprotected, nests often become the victim of predation by foxes and other such scavengers," said Al Falasi.

"The community members were invited to volunteer for this worthwhile conservation effort and aid these freshly hatched turtles on their journey to the sea," she said.

# Solar panels to power four more Majid Al Futtaim malls by 2018

Under a deal signed on World Environment Day, shopping centres tosave a staggering AED 80 million as part of Majid Al Futtaim's commitment towards becoming a Net Positive company

Enova - the regional leader in integrated energy and multi-technical services – will supply solar power to four Majid Al Futtaim malls, delivering expected savings of AED 80 million.

Enova's first solar power deal with Majid Al Futtaim Properties was signed on World Environment Day, the United Nations' annual initiative to promote sustainability.

The deal is set to cut the four malls' carbon dioxide emissions by 3,200 tons per year – the equivalent of taking 700 cars off the roads – and will see the technology installed at Dubai's Mall of the Emirates, City Centre Deira, City Centre Mirdif and City Centre Fujairah. Following City Centre Me'aisem and My City Centre Al Barsha, the first malls to be fitted with solar panels a year ago, this new agreement covering four more UAE malls strengthens Majid Al Futtaim's pioneering role in the region and is the first solar project to involve Enova.

Solar panels contain photovoltaic cells, which absorb energy from the sun and convert it into electricity. The power generated is then fed directly into the malls' electrical network. Under this deal, about 12,500 panels will be installed across the buildings, covering an area of 25,000 square metres, including 1,020 car ports.

Feasibility studies are underway with a view to rolling the project out across other assets. The scheme will enable Majid Al Futtaim Properties to generate 6,000 MWh of electrical energy annually, earning it points with the LEED certification system (Leadership in Energy and


Fuad Mansoor Sharaf, Managing Director (UAE, Bahrain & Oman) – Property Management, Shopping Malls for Majid Al Futtaim and Anne Le Guennec, CEO, Enova

Investing in renewables aligns with Majid Al Futtaim's commitment to become a regional leader in environmental stewardship.

Environmental Design), the globally recognised green building benchmark.

Enova's CEO, Anne Le Guennec, said: "Every day throughout the Middle East, Enova helps firms achieve their best performance and environmental targets, freeing them to concentrate on their core business activities. Our energy management solutions are based on a comprehensive package of services, including design, commissioning, strategy and long-term maintenance – and when parts eventually expire we'll take them away for recycling."

Benefiting from the global experience of its parent company, Veolia, Enova is able to offer a holistic and circular solution for when the solar panels will need to be replaced after an expected lifespan of around 25 years.

Ibrahim Al-Zu'bi, Head of Sustainability at Majid Al Futtaim – Holding, said: "At Majid Al Futtaim our sustainability mission is to enhance people's lives through sustainable real estate.

We aim to slash water and energy consumption, creating more of these resources than we consume by 2040, and at least 5 per cent of energy used will come from renewable sources by 2018."

# Panasonic announces Environment Vision toward 2050

Under the new vision, the company will focus on building sustainable technologies, clean energy systems and creating zero emission factories

Panasonic, a global technology leader, announced its new long-term environment vision called "Panasonic Environment Vision 2050" on World Environment Day. The new vision will guide the Panasonic Group to practice environmentally sustainable management toward 2050.

Panasonic Environment Vision 2050 aims to achieve "a better life" and "a sustainable global environment". Many of Panasonic's products consume energy such as electricity for the life of the product. Under the new environment vision, Panasonic will strive not only to reduce the amount of energy consumption of its products but also enhance its energy creation and storage businesses and reduce the impact on the global environment by contributing to increasing opportunities for utilising clean energy in various situations in society.

"World Environment Day reminds us to realign our thoughts and actions for the betterment of the society with good environment practices. With the goals set in Green Plan 2018 already within reach, the new vision towards 2050, sets a clearer direction for environmental management. Panasonic will work on enhancing development of eco-conscious products, boost clean energy systems, and strive to create factories with zero CO2 emissions," commented Anthony Peter, Director, Corporate Communications Division - Panasonic Marketing Middle East and Africa.

Panasonic seeks to achieve its goal of Environment Vision 2050 through implementation of the following activities:


Panasonic Environment Vision 2050 aims to achieve "a better life" and "a sustainable global environment".

**1. Create a safe and secure society with clean energy**

**Provide eco-conscious and smart living space**
'Panasonic will realise a living space with electricity created by clean energy and batteries storing such electricity, without causing impacts on the global environment.'

• Next-generation technology will lead the way in all matters related to energy creation, storage, saving and management.

**Contribute to eco-conscious and smart travel and transport**
'Panasonic will contribute to achieving smooth travel and transport through a storage battery system and IT solutions.'

• Next-generation storage battery technology for eco-cars, next-generation logistics- and transport-related technology, etc.

**2. Panasonic will promote businesses aiming for a sustainable society**

**Promote effective utilisation of resources**
'Panasonic will aim for sustainable use of resources through the reuse of parts and materials and product recycling.'

• Recycling technology, etc.

**Promote creation of factories with zero CO2emissions**

'Panasonic will utilise its own environmental technologies and products and reduce CO2emissions from its factories.'

• Shift to LED lightings

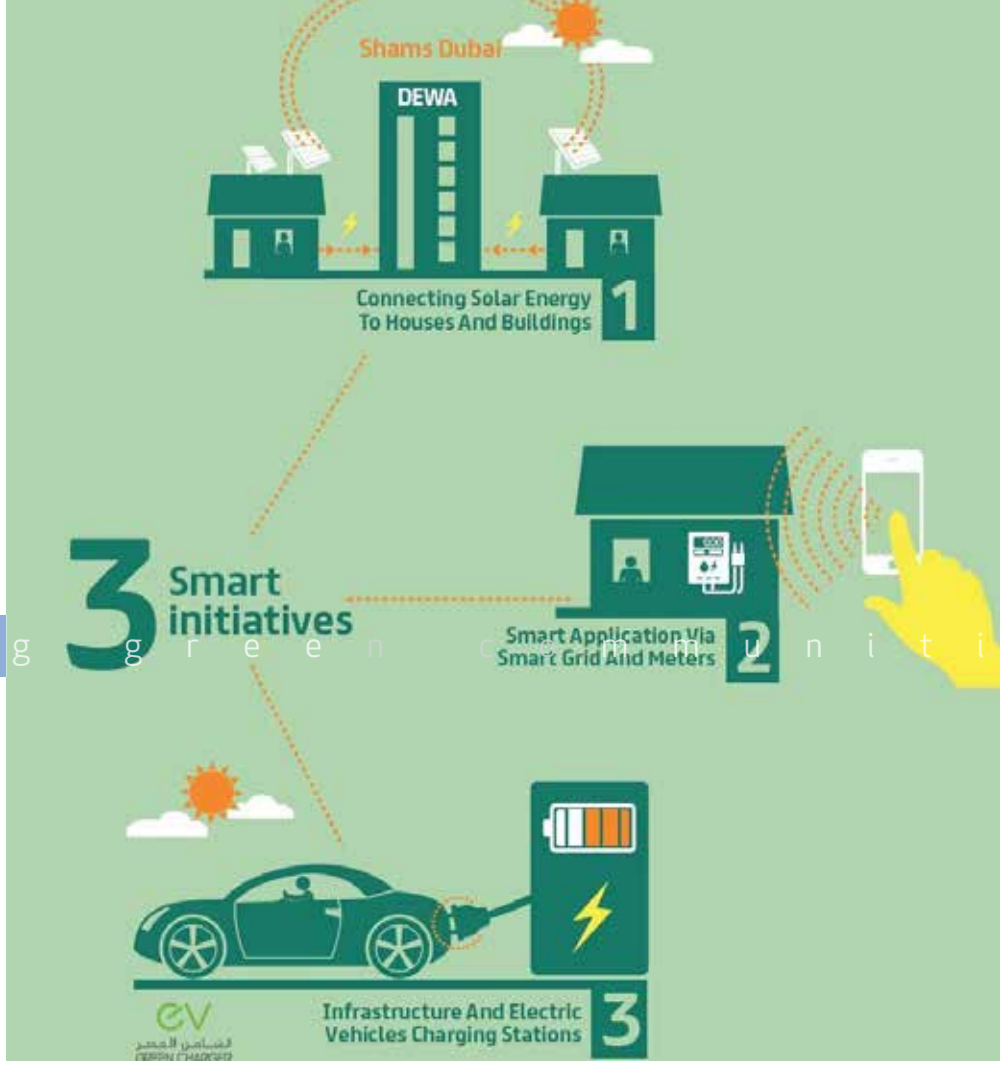
• Install photovoltaic power generation systems

• Smart manufacturing, energy-saving technologies, FEMS technology, etc.

Clean Energy



# UAE calls for acceleration in the transition to clean energy




UAE participates in the Eighth Clean Energy Ministerial (CEM8) and in Second Mission Innovation Ministerial in Beijing that serves as a valuable platform for exchanging expertise and experiences in the field of clean energy.

HE Suhail Mohammed Al Mazrouei, UAE Minister of Energy, led the Delegation of the United Arab Emirates at the Eighth Clean Energy Ministerial (CEM8) and in the Second Mission Innovation Ministerial on June 7-8 in Beijing, in the People's Republic of China.

During the meeting, the Minister of Energy reviewed the Energy Strategy 2050 of the UAE and the contribution of clean energy, which is expected to reach 50 GW by 2050. He pointed out the significance of the meeting of the Eighth Clean Energy Ministerial Forum and the importance of the Second Mission Innovation Ministerial meeting as a valuable platform for exchanging expertise and experiences in the field of clean energy.

This platform represents a strong indicator of the importance of clean energy and its diverse applications and the importance of developing energy-efficient solutions to reduce emissions and conserve fossil energy sources. The Minister also spoke about the "pilot project" to carbon dioxide sequestration and use, the UAE's efforts to use clean coal as one of the sources of energy, and the use of nuclear energy as a source of clean energy.

The UAE also joined the initiative ISGAN (International Smart Grid Action Network). This initiative serves as a high-level platform for participation among the governments members of the Clean Energy Ministerial Forum for International Cooperation to accelerate the development and deployment of smarter grid technologies and systems worldwide. ISGAN initiative seeks to create a global understanding of smart networks, developing


THE CLEAN Energy Ministerial (CEM) is a forum of the world's largest and most forward-leaning countries working together to accelerate the global transition to clean energy.

knowledge and integrated tools, and facilitate project coordination to support decision-making on smart grid projects and systems.

The Ministry of Energy has also actively participated in the Global Lightning Challenge and has highlighted the UAE's progress in switching to highly efficient bulbs such as LEDs through strategies and programs at the federal and local level to convert to energy-saving lamps in public places.

During the event, the "Dubai Lamp" was launched by Dubai Municipality in collaboration with Phillips, as one of the outputs of the future accelerators. Dubai Lamp is the world's most efficient lamp, with a capacity of up to 200 lumens per watt, providing nearly 90% of energy reduction if replaced by conventional lamps. This lamp is a successful example of cooperation between government and private sector to reach an innovative product that achieves record results. During the meeting, samples of the Dubai lamp were distributed to representatives of participating countries.

On the sidelines of the Clean Energy Ministerial Forum in Beijing, HE the Minister of Energy met with the US Energy Minister and HE the Commissioner of the European Union. The two meetings discussed enhancing cooperation in the field of energy with the United States of America and the European Union. The meetings were attended by HE Dr. Matar Al Neyadi, Undersecretary of the Ministry of Energy and Eng. Abdullah Al Shehyari, Director of Productivity Department at the Ministry.

Abu Dhabi National Oil Company (ADNOC) was awarded the Leadership Award in Energy Management of the Eighth Clean

Energy Ministerial Forum for its excellence in implementing the best standards of energy management at the global level from 37 institutions from 21 countries.

The Sharjah Electricity and Water Authority (SEWA) and Emirates National Oil Company (ENOC) were also honored during the ceremony for their active participation in the competition, by highlighting their achievements in implementing international standards in energy management.

These efforts in the energy sector in UAE confirm the intention of UAE institutions to increase energy productivity and achieve the energy strategy to reduce energy demand by 40%.

The Clean Energy Ministerial Forum brought together 25 countries from all over the world, all of which believe in the importance of clean energy and make efforts to increase the contribution of clean energy, collaborate on smart networks, energy switching, deploying pilot lighting applications, smart cities and high-efficiency air conditioners, and sharing best practices and expertise in this matter.

Among the members of the Clean Energy Forum are the United States, the United Kingdom, Australia, Canada, the United Arab Emirates, Sweden, Saudi Arabia, China, India, France, Germany and Russia. The UAE and Saudi Arabia are the only Arab countries in this forum. In 2012, the United Arab Emirates hosted the second meeting of the Clean Energy Ministerial Forum.

CEM8 was co-located with the Second Mission Innovation Ministerial (MI-2). While the CEM focuses on scaling the deployment of clean energy technologies and solutions that are available today, MI focuses on scaling R&D for the new technologies of the future.


# DP World wins prestigious awards for global sustainability and education programmes

DP World's commitment to sustainability was recognised at the International CSR Excellence Awards in London recently, winning Gold for Employee Engagement in recognition of its Global Education initiative and being named Sustainability Champion for its 'Our World, Our Future' global sustainability programme.

'Our World, Our Future' was launched in February 2016 to unite DP World's wide-ranging sustainability efforts and ensure maximum impact. Over the past year, it has reached all of DP World's 36,500 employees across six continents. The innovative Global Education Programme is being implemented across the world following a pilot study in early 2016. It involves employees delivering lessons in local schools to increase the knowledge of the industry in young people. The modules encourage children to consider a career in the maritime and trade industry, helping develop a pipeline of future talent for a crucial sector.

The initiative has been a great hit with schools, with 96% of teachers saying it provided pupils with something new their school could not. It also has significant benefits for employees, with 96% of volunteers that have taken part saying they are more likely to speak positively about DP World, and 93% increasing their job satisfaction. The programme aims to reach 34,000 young people by 2020.

DP World Group Chairman and CEO, Sultan Ahmed Bin Sulayem, said: "We are committed to being world leaders in sustainability, a key part of which means helping to develop young people in the communities where we operate, and I am delighted to have our efforts recognised."

DP World's sustainability initiatives involve four key sustainability commitments launched as part of 'Our World, Our Future'. These are: protecting the environment; ensuring the highest standards of safety; investing in its people; building a vibrant, secure and resilient society.

Summit



# Abu Dhabi can be world leaders in environmentally-friendly healthcare


Cleveland Clinic Abu Dhabi hosts special summit with Emirates Green Building Council to address key issues.

Abu Dhabi has an opportunity to play a leading role in developing environmentally-friendly healthcare practices that could have an international impact, according to experts speaking at a talk in the emirate.

Globally, the healthcare sector is interconnected with a range of industrial processes that produce emissions and can potentially damage the environment. Concerted efforts to improve the environmental performance of healthcare could help reduce waste, deliver energy and water savings, and reduce the impact of pollution on public health. These efforts include reducing the use of environmentally harmful chemicals and driving efficiencies in operations that are required to operate around the clock.

Organized by Cleveland Clinic Abu Dhabi, in association with the Emirates Green Building Council, the event examined a range of programs currently being developed in the UAE. It included contributions from the Department of Municipal Affairs and Transport, Masdar and the Environment Agency - Abu Dhabi, presenting the agencies' initiatives to reduce greenhouse gas emissions in the emirate.

As host venue, Cleveland Clinic Abu Dhabi is helping to drive sustainability standards for the healthcare sector in the UAE. This month, the hospital received the "Green Commercial Building of the Year" award at the 2017 MENA Green Building Awards. The hospital employs measures to reduce its energy consumption and, in 2017, aims to cut its greenhouse gas emissions by 21% by improving its water, energy and cooling efficiency among other areas.


Cleveland Clinic Abu Dhabi has reserved 153 carpool and low emission vehicle bays to encourage more car sharing between employees.

During the talk, experts from Cleveland Clinic Abu Dhabi presented their Alternative Commuting Transportation strategy. The hospital has installed six charging stations for electric vehicles on its campus, encouraging the use of low or zero emission vehicles by its staff and visitors.

In addition, Cleveland Clinic Abu Dhabi has reserved 153 carpool and low emission vehicle bays to encourage more car sharing between employees. In 2016, the hospital's carpooling initiative has saved around 1.8 tonnes of CO2 equivalent emissions. As cities around the world move to shift commuters away from cars and towards a more sustainable transport mix, Cleveland Clinic Abu Dhabi is encouraging staff to use bikes during the cooler months, providing 200 bicycle racks in its car park.

Speakers from Masdar, the Department of Municipal Affairs and Transport and the Environment Agency - Abu Dhabi discussed the future of public transport and transportation system design for sustainable cities, presenting a higher-level view of how cities can work with partners to both reduce greenhouse gas emissions and alleviate congestion. The event also highlighted Abu Dhabi's efforts to accelerate electric vehicle adoption.

Future installments of the sustainability talk series will focus on topics including the nexus between energy, water and well-being in the city, as well as building design, operation and urban planning. The series reflects Cleveland Clinic Abu Dhabi's commitment to improving the health and wellbeing of the local population beyond healthcare.


# UAE requires incentives to achieve real sustainability, say construction industry leaders

The standing roundtable on the subject of sustainability in the construction industry organized by iHC, a Dubai-based integrated communications agency, culminated in a unanimous call to action to introduce either incentives or penalties to push forward sustainability in the UAE, according to construction industry leaders.

The event was hosted by Curtin University in Dubai.

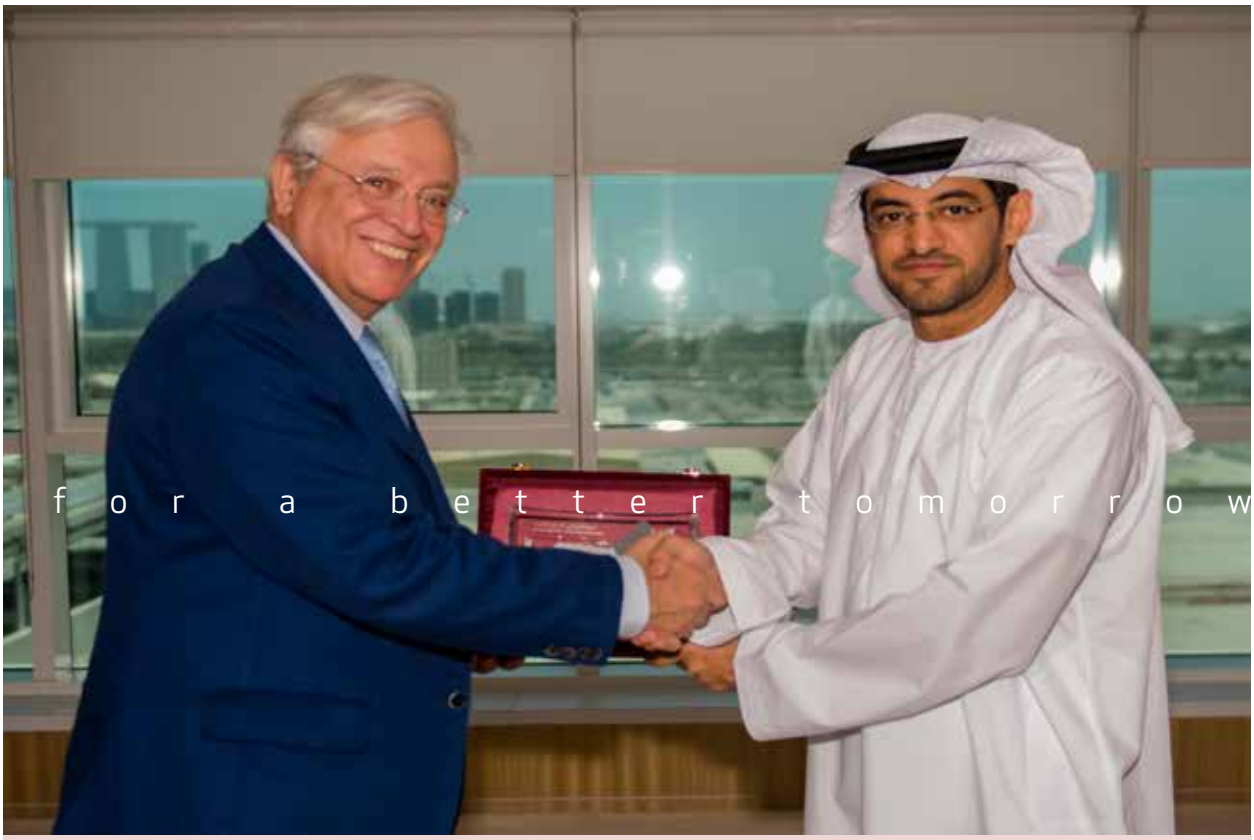
A consistent theme throughout the debate among the seven industry expert panellists was the issue of a lack of economic incentives for buildings to be either designed or retro-fitted with sustainability measures.

Alex Davies, managing director of facilities management company, Emrill, said: "A major problem with including real sustainability features into commercial or residential properties is the payback in terms of efficiency savings usually takes longer than five years.

"This period of time is way too long to be an influencing factor for most investors in this part of the world, but if there was more of an incentive provided to fill this gap, it would give sustainability a better chance."

Daniel Adkins, CEO of Global Institute ME – academic partner of Curtin University Dubai, explained an added problem comes from a lack of demand from end-users in the UAE for sustainable buildings. "Those buying properties should be the driving force for more sustainable building and they need to be educated more in this respect to create the demand that will in turn make implementing sustainable measures more attractive for developers," he said.

Representatives from De Boer, Emrill, Thomas & Adamson, Perkins+Will, AESG and SES joined Curtin University's CEO in the high energy iHC Standing Roundtable event, where hot topics were debated ranging from standards, localisation, the environment and sustainable design.




# UN Under Secretary General discusses Urban Sustainability with UPC

A senior representative from the United Nations (UN) met with Abu Dhabi Urban Planning Council (UPC) on 23rd May, 2017 to discuss the global issue of rapid urbanisation and its impact on communities, cities, economies, climate change and policies.

H.E. Falah Al Ahbabi, Director General of the UPC, met with Dr. Joan Clos, UN Under-Secretary-General and UN-Habitat Executive Director, to explore possible solutions for challenges faced by urban areas around the world. They discussed the UPC's best practice on strategies for sustainable urbanisation, such as its implementation of the Estidama Pearl Rating System – a mandatory requirement for all new Abu Dhabi developments. The Estidama initiative is based on four pillars of sustainability: environmental, economic, social and cultural. These have been woven into the fabric of the UPC's framework and master plans to help preserve Abu Dhabi's physical and cultural identity.

H.E Falah Al Ahbabi, said: "We were delighted to discuss concrete solutions to urban development issues facing cities. We are proud of our notable milestones, in accordance with the Abu Dhabi Plan. These achievements follow in the footsteps of the late Sheikh Zayed, whose vision for a sustainable future lives on today in the UPC's policies and practices."

Another key area of discussion was the UPC's proposed theme of "sustainable resources for future cities", which explores the view that human capital, education, mobility, ideas and information are vital for sustainable urban development.

The discussion also covered the Emirate's approach to housing provision for UAE Nationals, which is closely aligned with the New Urban Agenda adopted at the UN Conference on Housing and Sustainable Urban Development in Quito in 2016.

The meeting has strengthened Abu Dhabi's position as a key player in the Middle East that helps encourage, promote and implement sustainable development goals in the region.

Technology



# New technology extracts drinking water and crop fertilizer from air using the sun

The Abdul Latif Jameel World Water and Food Security Lab (J-WAFS) at the Massachusetts Institute of Technology (MIT) is funding new research into harvesting water from air and technology that enhances crop production.

New research into harvesting water from air and technology that enhances crop production are among several projects being supported by the Abdul Latif Jameel World Water and Food Security Lab (J-WAFS) at the Massachusetts Institute of Technology (MIT).

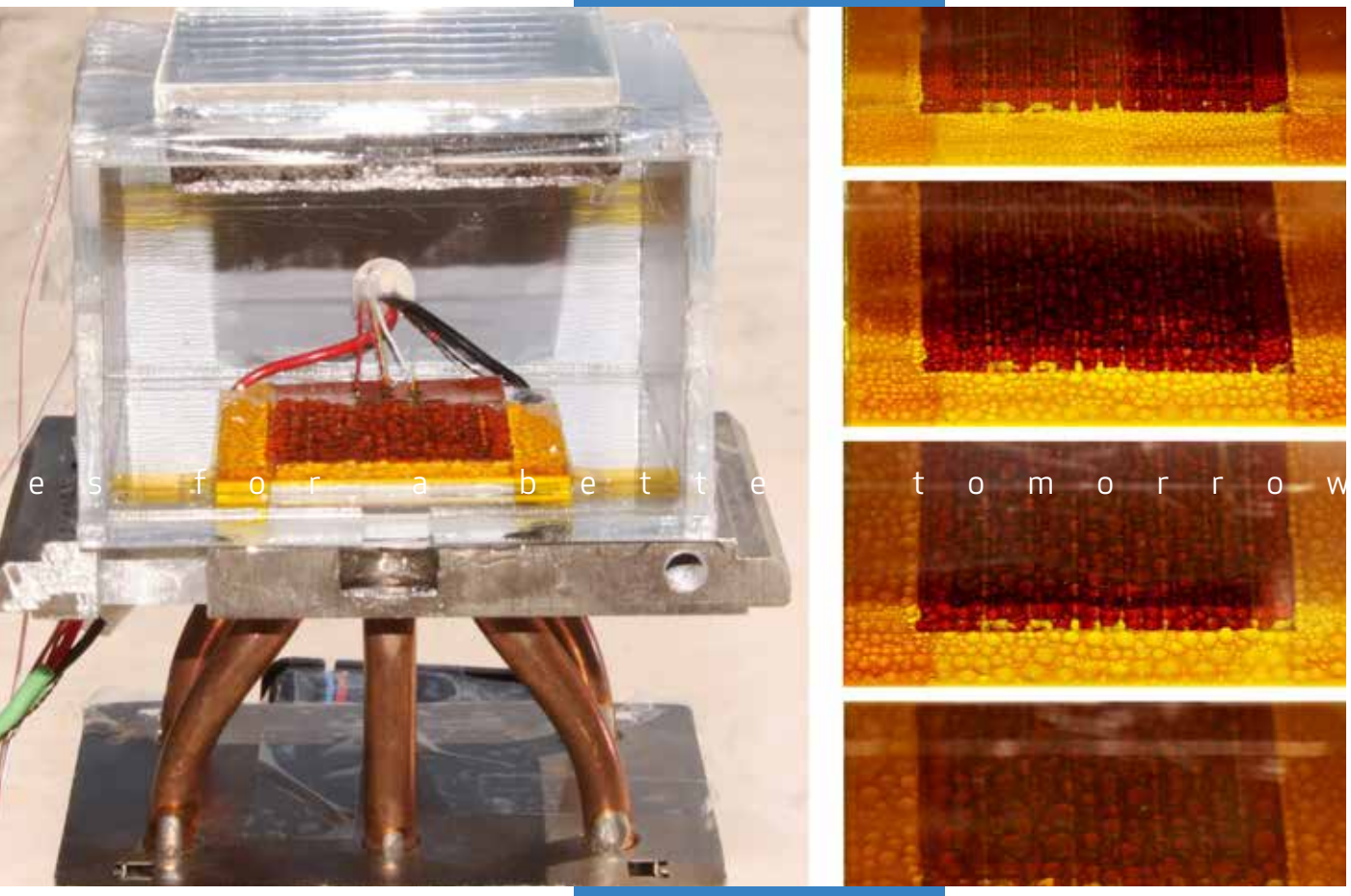
Co-founded in 2014 by Community Jameel and MIT, J-WAFS is an initiative to coordinate and promote research related to water and food safety and security that will have a positive impact on communities in a rapidly changing world with expanding population.

Seven new projects are being supported by J-WAFS this year, and two notable initiatives include:

- Harvesting water from air: Developing technology that can be used to extract clean, fresh water from the air at any range of humidity using a specialized porous material. Securing clean drinking water in environments that are water-scarce or polluted is a challenge in many regions of the world. Additionally, agriculture and industrial uses deplete – and contaminate – global supply of freshwater which increases the demand for alternative means of water gathering.

- Enhancing crop production: Creating a solar-powered device to convert atmospheric nitrogen, water, and sunlight into ammonia, which can be added to soil to promote plant growth.

Fady Mohammed Jameel, President of Community Jameel International, said: "Community Jameel firmly believes that MIT-led research can deliver real solutions to help communities




Community Jameel is a social enterprise organization that operates a wide range of initiatives to promote a positive society and economic sustainability.

transform themselves. With Community Jameel's partnership, MIT is providing an opportunity to tackle some of the most pressing issues related to food and water safety and security in the Middle East and around the world."

John Lienhard, the Abdul Latif Jameel Professor of Water and Food at MIT, said: "We must continue to advance innovations and creative ideas for delivering safe and secure food and clean and renewable water supplies.

Through the innovative technologies and collaborations we are supporting with these new research projects, J-WAFS is working to secure the future of our communities, the sustainability of our cities, and the prosperity of our economies in the face of rising population, greater urbanization, and changing climate."

In the Middle East and North Africa (MENA) – the world's driest region - more than half of the region's population live under conditions of 'water stress', where demand outstrips supply, according to the World Bank. Since 2015, J-WAFS has supported a number of research projects to improve food and water safety and security. In one previous project, environmental modeling is used to understand mercury contamination in rice, which is an emerging pathway to mercury exposure for people living in areas contaminated by coal-fired electricity and other industrial activities.

Another project resulted in designs for constructed wetlands that can reduce storm water runoff and improve the ecological function of water systems in urban centers.

Opinion



# Renewable Energy in the Middle East

Elena Giannakopoulou_Energy Markets Economist, Bloomberg New Energy Finance

Elena Giannakopoulou, Energy Markets Economist, Bloomberg New Energy Finance, provides an interesting regional renewable energy overview along with future prospects in this segment.

The Middle East and North Africa region has seen electricity demand rise 6-8 per cent annually for the last ten years, which is among the highest growth rates in the world. To meet this demand, Middle Eastern countries have committed to major capacity expansion plans. In 2015, the UAE, Saudi Arabia, Qatar, Kuwait, Bahrain and Oman collectively added approximately 7GW of net utility-scale power capacity.

Additionally, almost all Middle Eastern countries have been implementing energy-subsidy reforms in the last three years. The elimination of fuel and electricity subsidies in particular will help relieve the fiscal pressure that both energy importers and producers are experiencing, and it will also reveal the true cost of fossil-fuel electricity generation, facilitating the competition with renewables on an economic basis.

**Renewable energy landscape**

While renewable energy remains underdeveloped in the Middle East, countries in the region continue to make headlines with competitive tenders that set record-low solar and wind energy prices. For example, Dubai and Abu Dhabi's PV auctions logged $30/MWh and $29/MWh respectively in 2016, with the region's world-class resources, continuously declining costs of solar and wind systems and availability of cheap financing being among the most important factors behind these low bids.

Moreover, net importing countries (NICs) are pushing renewable energy development to diversify the import-dependent energy mix and address the power deficit. Saudi Arabia, the biggest power


Between 2004 and 2016, almost $3 billion was invested in renewable energy in the region.

market in the region, renewed its commitment to clean energy by launching Vision 2030, a new roadmap for restructuring the economy from state-driven to private-sector led.

Jordan has also made significant progress in opening its market and attracting interest from private developers, and the UAE's "green energy" commitment is supported by climate considerations and the paucity of domestic gas reserves.

**Asset-finance investment in renewables**

Middle Eastern governments have prioritized investments in renewable power generation to meet rising electricity demand. By 2015, renewable energy investment had ballooned to almost 12 times its 2004 levels, despite the plunge in fossil-fuel commodity prices.

Between 2004 and 2016, almost $3 billion was invested in renewable energy in the region, with 90 percent of investments going into solar. Solar power investments notably topped $1 billion for a second year in 2016, totaling to $1.6 billion, which is almost 140 times greater than investments in 2014 ($11.2 million). Countries in the Middle East are also some of the hottest markets for solar thermal electricity generation worldwide, as it offers firm turbine-generated power and 4-12 hours of storage capacity.

Overall, Middle Eastern countries are prioritizing capacity expansion plans to meet rapidly rising demand for electricity.

There are, however, different challenges and constraints that they need to tackle to continue to spur growth of renewable energy:


**Risks**

- Currency devaluation, bureaucracy, local content requirements and the lack of commitment on behalf of energy producers are the major challenges renewable energy is facing in the region.
- The establishment of a solid regulatory framework and the restructuring of the power sector are major barriers to overall development in the region.
- Energy-exporting countries still lag behind in the development of renewable energy.
- Political instability and the risk of currency devaluation are major concerns for private investors; this leaves international institutions as the only source of financing available.

**Opportunities**

- Renewable energy investments hit a record in 2015, despite the plunge in fossil-fuel commodity prices. The strong activity was mostly driven by solar installations, with solar thermal accounting for about half of it.
- Middle Eastern countries are shifting away from feed-in-tariffs and towards competitive auctions, and they continue to set global benchmarks for solar and wind development. In 2016, Abu Dhabi led the way with a record low for PV prices at $29/MWh, and Dubai followed at $30/MWh.
- The declining costs of solar and wind systems, coupled with energy subsidy reforms, are creating a new energy and economic reality in Middle Eastern economies. Today, a solar plant generates electricity more cheaply than a baseload gas plant in countries that import LNG. In countries that heavily subsidize fuel prices, like Saudi Arabia, solar energy is the cheapest way of meeting power-demand peaks.


# Preparations on for holding EnviroCities 2017 in Saudi Arabia

The scientific topics have been finalized for the 7th International EnviroCities Conference and Exhibition, which will be held in November in Yanbu, Saudi Arabia, in cooperation with the Environmental Center for Arab Towns (ECAT) and Dubai Municipality with the support of the Arab Towns Organization and the Royal Commission for Yanbu.

"About 60% of the researchers have been recruited and ECAT has communicated with them as well as with the best organizations that will add to the conference their outstanding experiences and best executed projects," said Hussain Al Fardan, Head of ECAT under Dubai Municipality.

"EnviroCities 2017 aims at providing city officials with an exclusive opportunity for meeting, exchanging team expertise and participating in an open discussion to share ideas resulting from innovations of sustainable environmental technologies, solutions and best practices that have been produced and implemented locally, regionally and globally to ensure the sustainable development of our Arab cities," he said.

"The event will be a platform for a wide range of decision makers, specialists and stakeholders at the local, regional and global level, including leaders, ministers, representatives of central governments, municipalities, the private sector, businessmen, in addition to relevant city community associations and organizations to consider a broader and more comprehensive approach to sustainable innovation as a means of mitigating the impacts of climate change at the city level to find long-term solutions and strategies to ensure the social, economic and environmental development of our Arab cities," said Al Fardan.

He explained that the main themes of the conference include sustainable green energy, renewable energy, energy efficiency, sustainable urban design and sustainable buildings as well as the best practices applied in industrial areas.

Renewable Energy



# US$50m UAE-Caribbean Renewable Energy Fund in talks with six Caribbean countries

UAE development assistance for renewable energy globally is now approaching US$1 billion.

The UAE-Caribbean Renewable Energy Fund is engaged in project evaluations with six Caribbean countries, the UAE Ministry of Foreign Affairs and International Cooperation (MOFAIC) announced at the annual meeting of Caribbean utility CEOs under the CARILEC industry association.

This US$50m grant fund, one of the largest and most pioneering initiatives for the region's renewable energy sector, was launched in January 2017 in a partnership between MOFAIC, Abu Dhabi Fund for Development (ADFD), and Masdar, Abu Dhabi's renewable energy company. The UAE-Caribbean Renewable Energy Fund operates under the management of MOFAIC, whereas ADFD provides the grant funding, and Masdar leads in implementation.

"The response to the fund has been tremendous, in terms of both the volume and quality of project proposals," said His Excellency Ali Al Shafar, the UAE's Permanent Representative to the International Renewable Energy Agency (IRENA). "With Masdar and ADFD's technical expertise, we are now working with the countries in the Fund to identify critical interventions which, with an extra push, can move to implementation and help to increase commercial viability for future renewable energy projects."

At the CARILEC CEOs' meeting, MOFAIC met with utility executives and financiers from across the region to identify promising projects, as well as to present the initial results of the recently concluded first round of site inspections in six countries. "We aim for the Fund to be a bridge-builder between


UAE launched the US$50 million renewable energy fund for the Caribbean in January 2017

Abu Dhabi Fund for Development seeks to help emerging countries by providing concessionary loans to finance sustainable development projects alongside other long-term investments and direct contributions.

the UAE and Caribbean countries," said Adel Al Hosani, Director of Operations at ADFD. "The UAE-Caribbean Renewable Energy Fund, is expected to sign about four to six project agreements in its first cycle."

Khaled Ballaith, Director of Special Projects at Masdar, said: "The business case for renewable energy in the countries we have visited is among the strongest in the world. The due diligence process we are following in coordination with government bodies and other local stakeholders is focused on analysing the renewable resources available, in order to recommend the type, structure, and timing of external support."

UAE development assistance for renewable energy globally is now approaching US$1 billion. ADFD, through its seven-funding cycle – US$350 million ADFD-IRENA Project Facility, successfully approved US$189 million across 19 renewable energy developments. January 2017 marked the completion of the fourth funding cycle, in which four renewable energy projects in four developing countries were identified. The ADFD-IRENA Project Facility, currently generating about 100 megawatts of energy, continues to enhance hundreds of thousands of lives.

Furthermore, Masdar implements bilateral programmes on behalf of the UAE government. Notably, Masdar has recently completed eight solar plants in rural Mauritania, which power about 39,000 homes and save 27,850 tonnes of carbon emissions per year, as well as delivering 6.5 megawatts (MW) of solar and wind capacity across 11 Pacific countries.

Convention



# New convention calls time on mercury poisoning

Mercury is listed by the UN as one of the top 10 chemicals endangering human health and the environment

The world took a historic step forward in the fight against mercury poisoning on 18th May, 2017 as the European Union and seven of its member states (Bulgaria, Denmark, Hungary, Malta, the Netherlands, Romania and Sweden) ratified the Minamata Convention on Mercury, one of the world's top ten chemical threats to health.

The Convention, which has been signed by 128 countries, will now come into force on 16th August, 2017. It is the first new global Convention related to the environment and health in close to a decade, and commits governments to specific measures to control man-made mercury pollution. These cover the entire "lifecycle" of man-made mercury pollution and include banning new mercury mines, phasing-out existing ones, regulating artisanal and small-scale gold mining, and reducing emissions and mercury use.

There is no safe level of exposure to mercury, and everyone is at risk because the dangerous heavy metal has spread to the remotest parts of the earth and can be found in everyday products, including cosmetics, lightbulbs, batteries and teeth fillings. Children, newborn and unborn babies are most vulnerable, along with populations who eat contaminated fish, those who use mercury at work, and people who live near of a source of mercury pollution.

"Who wants to live in a world where putting on makeup, powering our phones and even buying a wedding ring depends on exposing millions of people to the risk of mercury poisoning?" said Erik Solheim, Head of UN Environment. "But with mercury we have solutions that are as obvious as the problem itself.


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

Artisanal and small-scale gold mining alone exposes up to 15 million miners in 70 countries to mercury fumes, including 5 million women and children.

There are alternatives to all of mercury's current applications, such as newer, safer industrial processes. Big and small countries can all play a role – as can the man and woman in the street, just by changing what they buy and use."

Up to 8,900 tonnes of mercury are emitted each year. It can be released naturally through the weathering of mercury-containing rocks, forest fires and volcanic eruptions, but significant emissions also come from human processes, particularly coal burning and artisanal and small-scale gold mining. Mining alone exposes up to 15 million workers in 70 different countries to mercury poisoning, including child labourers.

Other man-made sources of mercury pollution include the production of chlorine and some plastics, waste incineration and use of mercury in laboratories, pharmaceuticals, preservatives, paints and jewelry.

The Convention takes its name from the most severe mercury poisoning disaster in history, which came to light in Minamata, Japan in May 1956, after sustained dumping of industrial wastewaters into Minamata Bay, beginning in the 1930s. Local villages who ate fish and shellfish from the bay started suffering convulsions, psychosis, loss of consciousness and coma. In all, thousands of people were certified as having directly suffered from mercury poisoning, now known as Minamata disease.

# Dubai launches Middle East's largest smart geological project to produce soil maps

Dubai Municipality has launched the largest geological project in the Middle East, the Soil Map Project, to produce and extract interactive soil maps using soil survey data and to save all interactive soil maps in a centralized and unified database, said Eng. Hussain Nasser Lootah, Director General of Dubai Municipality.

He added that this project will contribute to the availability of a comprehensive soil map and an integrated database on the soil of each area for the decision makers and future policy planners.

"The map's valid uses are particularly significant because of the importance of maps in the design and construction of buildings for conducting geological studies before the establishment of large projects such as dams, bridges, tunnels and high-rise buildings towers. It's also important to provide comprehensive records supported with maps of each area in the Emirate of Dubai in a central and unified database," said Lootah.

He said the project also aims at facilitating the use of soil maps in the study and analysis of soil and soil data (soil type, soil layers, the groundwater level, chemical and physical properties) in the form of interactive maps.

Lootah pointed out that the objectives of the project also include simplifying the work procedures for the end user, reducing paper consumption, conservation of natural resources, reducing per capita consumption of gasoline and achieving the vision of the Municipality through its initiative, Zero Visit to the Municipality as ordered by His Highness the Ruler of Dubai.

He pointed out that the benefits of the project include contributing to the transparency required in order to obtain accurate information about the soil. "It also contributes in providing two-dimensional soil map and also helps to provide correct soil report data in the unified central database," he added.


# 'Sustainable development, green economy are priorities of Ajman Government'

H.H. Sheikh Ammar bin Humaid Al Nuaimi, Crown Prince of Ajman and President of the Executive Council, stated that sustainable development and the green economy are among the priorities of Ajman's local government.

The Ajman Crown Prince directed all officials to harness all their energy and potential, to protect the environment and implement the best practices that support a green economy, as one of the main pillars of the Ajman 2021 Vision.

His statement coincided with the annual World Environment Day on 5th June, as the General Secretariat of the Executive Council organised the first stage of the Al Mailas Programme for 2017, under the title, "Sustainability and Green Economy".

The programme's guests included the sustainability expert, Dr. Ibrahim Al Zaabi, who talked about several issues related to the green economy and its relationship with the three components of sustainability, which are the economy, the environment and finance.

The programme addressed the role of the Ajman government in complying with the UAE's commitment to reduce emissions and encourage local and international investment in the green economy.

The participants' discussions included sustainability in local strategic plans, as well as the impact of various awareness campaigns and partnerships, to achieve a clean environment free from pollution. The guests presented the experiences of the UAE's leading companies in their positive practice of sustainable development and the green economy, based on recycling, reducing energy consumption, cost reduction and enhancing the working environment.

The participants also stressed the importance of increasing investments in renewable energy and holding awareness campaigns with an emphasis on the outcomes and the economic benefits of green buildings.

# Dubai Investments' Sustainability Champions align initiatives with UN Sustainable Development Goals

Dubai Investments, the leading, diversified investments conglomerate listed on the Dubai Financial Market, has hosted the second round of the training session for 'Sustainability Champions' of the company and its subsidiaries.

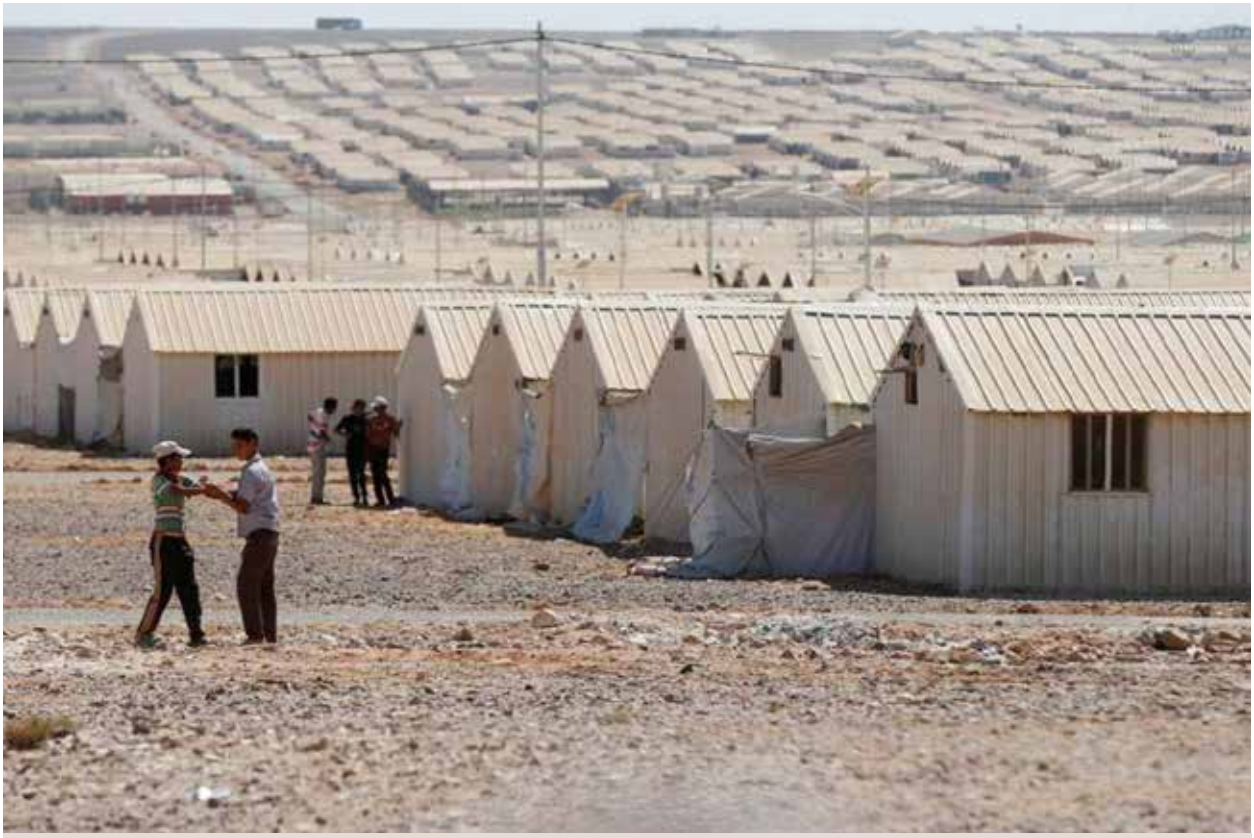
Held under the theme 'For a Better Partnership within the Dubai Investments Family', the session focused on the Sustainable Development Goals 2030, outlined by the United Nations in its Agenda, which is being adopted by countries globally, especially in the UAE.

The Sustainable Development Goals 2030 agenda is being implemented by governmental bodies and several public and private sector departments, as well as by humanitarian, environmental and social NGOs.

Statistics, reports, films and a variety of models for international companies were presented to explain the 17 Sustainable Development Goals, which range from poverty eradication, hunger, clean drinking water, health care and education for all, to decent work, economic growth and innovation, reducing inequality, preserving environment, reducing climate damage and partnerships.

'Sustainability Champions' at Dubai Investments actively participated in a range of practical tests that contributed to developing concepts for furthering the Sustainable Development Goals, implementing them internally, and improving corporate responsibility among the employees. The participants discussed the role of private sector, and companies specifically, in studying and selecting objectives aligned with nature of each company's business and sustainability strategies.

As part of its sustainability strategy, Dubai Investments deals with environmental and social issues in a highly responsible manner, including supporting Dubai's Smart Vision, producing clean energy, reducing carbon emissions, and encouraging volunteerism.



# Jordan's Azraq becomes world's first clean energy refugee camp

The world's first solar farm in a refugee camp switched on - on 17th May, 2017 -in northern Jordan, providing renewable energy sources to about 20,000 Syrians living in the Azraq camp, the United Nations refugee agency said.

Thousands of Syrian families will light up their homes, charge their phones and chill their food by solar power tonight, as Jordan's Azraq camp becomes the first refugee camp in the world to be powered by renewable energy.

Calling it a "milestone," the deputy from the Office of the United Nations High Commissioner for Refugees (UNHCR) said the 2-megawatt solar photovoltaic (PV) plant, funded by IKEA Foundation's Brighter Lives for Refugees campaign, allows all residents to leave more dignified lives.

"Lighting up the camp is not only a symbolic achievement; it provides a safer environment for all camp residents, opens up livelihoods opportunities, and gives children the chance to study after dark," said UNHCR Deputy High Commissioner, Kelly Clements.

A lack of electricity was one of the main challenges in Azraq, which opened in April 2014, and which has 5,000 shelters.

"Each family can now connect a fridge, a TV, a fan, have light inside the shelter and charge their phones, which is critical for refugees to keep in contact with their relatives abroad," the UN agency said.

In addition, 50 refugees have been trained and employed to help build the solar farm under the supervision of a Jordanian company, and some will work on its maintenance.

The plant was built at a cost of 8.75 million euros (US$9.6m), funded entirely by the IKEA Foundation's "Brighter Lives for Refugees" campaign. It will result in immediate energy savings of US$1.5m a year - which UNHCR will be able to reinvest in other much-needed assistance - as well as annual CO2 emissions savings of 2,370 tons.

Partnership



# Formula E team up with UN Environment in race to improve inner-city air quality

Partnership aims to support the transition to cleaner transport solutions and reduce carbon emissions from road vehicles.

Formula E, the world's first fully-electric single-seater racing series, has joined forces with UN Environment to launch a global partnership in the fight to improve inner-city air quality – continuing to boost the profile of alternative energy solutions and the increased uptake of electric vehicles.

The multi-year partnership will focus on raising awareness of the benefits of electric vehicles among younger generations and motorsport fans globally – educating future consumers of electric cars, and challenging major cities and governments to take action to tackle pollution.

The new partnership will leverage the popularity of the FIA Formula E Championship, who bring electrifying motorsport to some of the world's leading cities, including Hong Kong, Marrakesh, Buenos Aires, Paris, New York and Montreal.

Racing has always been a laboratory for the development of technology in the motor industry, previously with combustion-engine cars and now with electric vehicles. Formula E wants to play a role in providing a solution – to help more people buy and drive electric cars.

"Formula E puts a fresh spotlight on electric vehicles and is an exciting glimpse of what is to come - the age of clean, viable transport," said Erik Solheim, head of UN Environment. "Formula E and UN Environment share the aim to usher in this era and speed up acceptance of these technologies to combat air pollution. Air pollution has taken centre-stage this year as a serious public health threat, and with good reason."


An estimated 6.5 million people die prematurely each year from air pollution-related diseases – with 80 per cent of urban residents worldwide breathing polluted air.

The 40 fully-electric Formula E cars are powered by generators using zero-emissions glycerine. The generators are based on standard production diesel engines that have been adapted with Aquafuel's patented technology to run on glycerine. The fuel itself is a by-product of the bio-diesel production process, and it's so clean you can drink it.

Formula E currently works in collaboration with Enel - Official Power Partner of the FIA Formula E Championship - to promote the advancement of the championship's power technology infrastructure, through optimising clean energy generation, distribution and management, and showcasing advanced energy solutions.

The World Health Organization estimates that 6.5 million people die prematurely each year from air pollution-related diseases, and 80 per cent of urban residents worldwide breathe polluted air – with a whole host of detrimental short and long-term health effects. Transport contributes one-quarter of all energy-related greenhouse gas emissions today.

UN Environment sees electric transportation as one of the essential components of achieving more sustainable and cleaner cities. Its Electric Mobility Programme works in 50 developing and transitioning countries to support their move from internal combustion engines to electric vehicles.

UN Environment is a founding partner of the Breathe Life campaign, the UN's biggest-ever campaign on air quality, which aims to raise awareness of global and local impacts of air pollution and the broad range of viable solutions for cities and governments to improve air quality.

Report



# Big wins for human health, natural resources in switch to energy efficiency

25 billion tonnes of greenhouse gas emissions and 17 million tonnes of particulates a year could be avoided through low-carbon and energy efficiency technologies, says a new UN report.

A radical transformation in the way energy is supplied and used will be needed if the world is to meet its ambition of keeping global temperature increase to below 2 degrees Celsius, but the impacts of that transformation on the environment and on natural resources have been unclear.

Now, the International Resource Panel, a group of eminent experts in natural resource management hosted by UN Environment, has provided a global assessment of the benefits, risks and trade-offs encountered when energy efficiency technologies are deployed alongside low-carbon electricity supply technologies.

In its latest report, entitled Green Technology Choices: The Environmental and Resource Implications of Low-Carbon Technologies, released at the Vienna Energy Forum, the Panel examines eight energy efficiency technologies and 36 sub-technologies across buildings, industry and transportation.

The report is important because it is only by having a complete picture of the impacts of low-carbon technologies throughout their full life-cycle that governments and regulators can put in place policies to maximize environmental benefits.

The report compared two scenarios – a global temperature rise of 6 degrees Celsius and a scenario where the global target of 2 degrees Celsius above pre-industrial levels is achieved.

**Key findings of the analysis include:**

- Low-carbon energy production and energy efficiency technologies are needed


The report found that aggressive electrification of passenger transport in regions that rely on coal and oil-based electricity led to an increase – rather than a decrease – in environmental and natural resource impacts.

for a substantial reduction in global greenhouse gas emissions. Taken together, under the 2-degree scenario, the combined technologies have the potential to cut about 25 billion tonnes a year of greenhouse gas emissions by 2050, which is about 34 per cent lower than the emissions under business-as-usual.

- Low-carbon energy technologies avoid more than just greenhouse gases. The report finds that under the 2-degree scenario more than 17 million tonnes per year of particulate matter and over 3 billion tonnes of emissions toxic to humans could be avoided.
- Low-carbon energy technologies also alleviate pressure on land and water, but may increase pressure on metallic resources. More than 200 billion cubic metres of water a year and nearly 150,000 square kilometres of land occupation could be saved by 2050, the report finds, but low-carbon energy technologies will require over 600 million tonnes of metal resources over the same period for additional infrastructure and wiring needs.
- By 2050, 90 per cent penetration of LED lighting, along with expected efficiency improvements and decarbonized electricity generation, would allow global demand for lighting to grow 2.5 - 3 times, while still reducing the total amount of energy consumed.
- The building insulation technologies considered in the report could reduce life-cycle greenhouse gas emissions from heating and cooling by 30-50 per cent.



## On the Solar Track

Countries where people are dependent upon agrarian economy and natural resources, are highly vulnerable to adverse effects of climate change. They should be more inclined to adopt sustainable development strategies, contributing to the global efforts to cut down emissions leading to global warming. Energy efficient technology is making it possible to move towards clean production and rational consumption of natural resources. The time has come for government, corporate and community to adopt 'green living' and stop wasting precious natural resources like water, energy, minerals and soil.

India, for example, is committed to reduce emissions of its GDP by 33-35% from 2005 levels by 2030. Achieving this goal requires that companies focus on renewable energy, especially solar, biofuels and wind.

India has to develop its infrastructure because it has 30% of its population living in poverty; 20% without proper housing; 25% living without electricity and it is a growing economy. Hence, green development is a must and policy makers and developers must adopt pro-environment, energy efficient projects. The government policy promoting electric vehicles and the plan to sell only electric cars by 2030 is an important step to curb pollution. Other environment friendly solutions include LED lighting, water saving products and smart waste management systems. Industries are also taking up the zero-waste approach with 100% recycling of water and other resources in their manufacturing facilities.

The Indian government is also encouraging the spread of greenery to preserve natural resources and provide better living standards by reducing air pollution, improving water, food & energy security and health indicators.

What is really interesting and more attractive to me is the Greenpeace India initiative promoting a solar revolution in New Delhi, where a solar-powered bus (Solar Comet) is out on the streets raising awareness of the value of solar power and showcasing LED lights, an air-conditioner and a refrigerator and other household appliances that solar can potentially power. It has been on the streets on a 20-day educational tour to clear up misconceptions about solar energy among citizens who are confused about costs, maintenance and viability. Actually, government subsidies and decreasing costs of solar panels have made powering Indian homes by sunlight affordable, but the success of such ambitious nationwide project will depend on citizens adopting solar themselves.

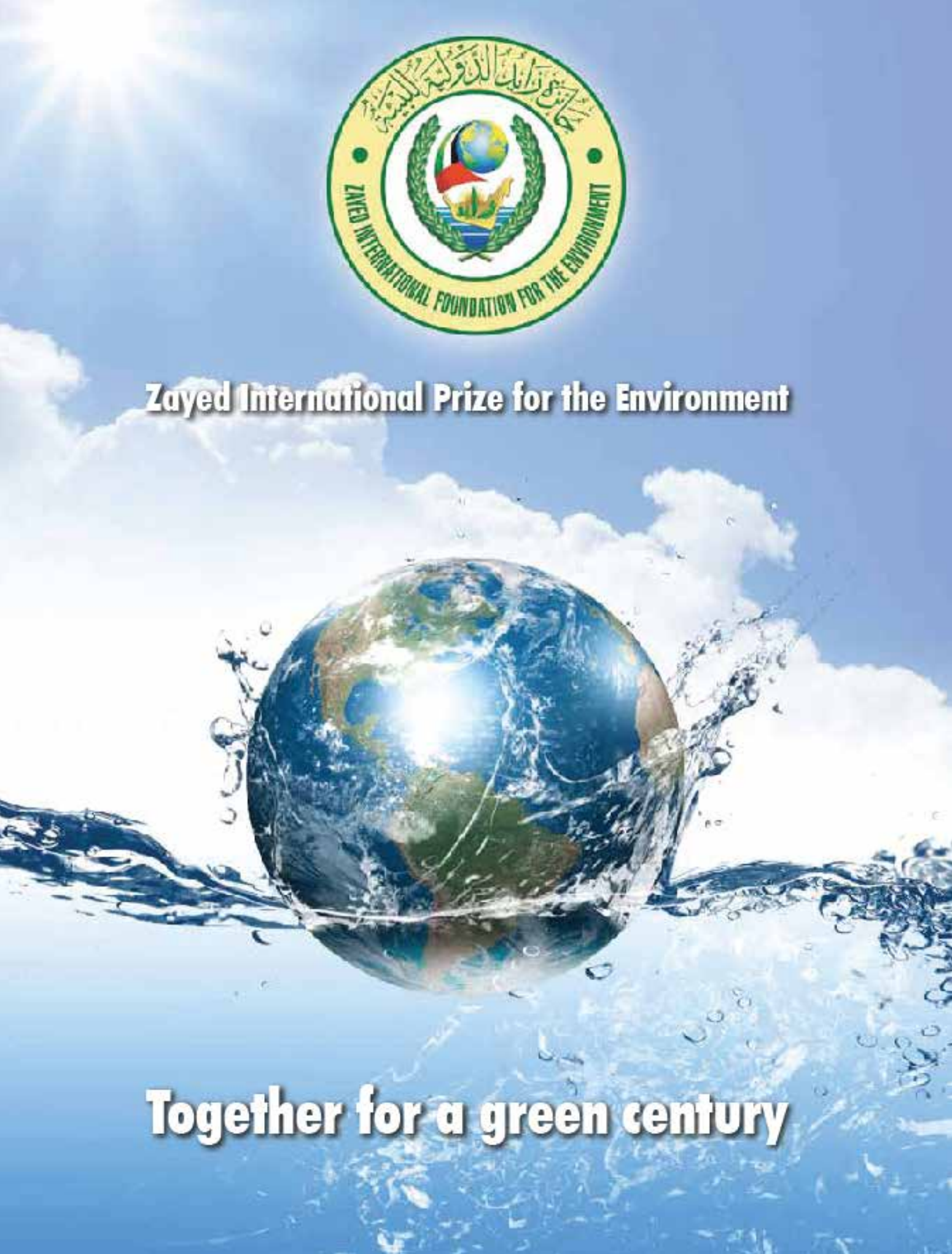
It is time to install solar power on rooftops that can pay back financially in four to five years. Dyal Singh University was the first institution to embrace solar energy and in 2016 it was granted a 15 percent government subsidy for the project. Not only will the solar panels reduce the University's electricity costs by 30 percent, but it will also deliver power to residential homes in the surrounding area.

Should India succeed in its plan to generate 40 percent of its energy from non-fossil fuel sources by 2022, this will exceed expectations set forth in the Paris Accord.

So, good luck for India and we hope that big polluters like the USA follow suit.

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

# Zayed International Prize for the Environment



# Together for a green century

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