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creating green communities for a better tomorrow



HH Sheikh Mohammed bin
Rashid Al Maktoum
launches Marmoom Desert
Conservation Reserve

Zayed International Foundation for the Environment launches 'Zayed Smart Platform'



Emirates Appreciation Award for the Environment

Together for a green home

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creating green communities for a better tomorrow

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Prof. Mohammed bin Fahad
Executive Editor

The lifelong passion and commitment of the UAE's Founding Father, Sheikh Zayed bin Sultan Al Nahyan, towards greening the environment resonated through the celebrations held to mark the 21st UAE National Environment Day on February 4th this year. It is indeed a proud occasion to be celebrating this day under the theme 'Sustainable Production and Consumption' in the year that has been declared the Year of Zayed on the directives of President HH Sheikh Khalifa bin Zayed Al Nahyan.

One of Sheikh Zayed's most remarkable and enduring achievements is the greening of the region's deserts. Environment protection ranked high as a priority even as he was leading the comprehensive development drive of the nation in the early days of the federation. Environmental preservation and the principles of sustainable development were thus ingrained into the country's development strategies early on. His belief that environmental problems had no geographical boundaries saw the UAE extend maximum cooperation with other nations and regional and international organizations to enhance collective action to redress the global environmental challenges.

The eminent place that the UAE occupies today in the global map of environment stems from the strategy of international cooperation and partnerships that Sheikh Zayed practiced. Today, the UAE has become the hub for major international environmental forums, is the frontrunner in innovative clean technologies and shines as a sustainable energy pathbreaker. Its success in forming new environmental strategies and rethinking business models to ensure our collective energy future is now emulated by other nations.

With the UAE Energy Strategy for 2050 aiming to bring the share of clean energy in the national energy mix up to 27% by 2021 and 50% by 2050, and by implementing large-scale domestic and international renewable energy projects, the nation is clearly playing a leading role in advancing the Sustainable Development Goals and climate change objectives - thereby ensuring that the legacy of environmental stewardship of Sheikh Zayed lives on.

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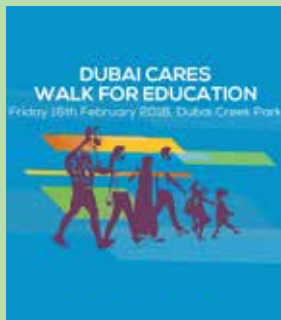
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From the **Managing Editor**



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

“A nation without a past is a nation without a present or a future. Thanks to God, our nation has a flourishing civilisation, deep-rooted in this land for many centuries. These roots will always flourish and bloom in the glorious present of our nation and in its anticipated future.”

- *Sheikh Zayed bin Sultan Al Nahyan*

On the occasion of the 21st UAE National Environment Day held under the theme ‘Sustainable Production and Consumption’, and to mark the spirit and respect that our Founding Father, Sheikh Zayed bin Sultan Al Nahyan, instilled in us about the preservation and

conservation of our natural resources, the Zayed International Foundation for the Environment has launched a #SpecialSmartEvent app for smart game players around the world.

The Zayed Green Challenge Special Smart Event tests your knowledge of the environment through the #KnowledgeHunt game and offers a chance to win prizes through participation. Held over two days from 4th to 5th February, this global event will feature many questions related to Sheikh Zayed’s innumerable contributions to sustainability.

Sheikh Zayed was born and lived as a champion of culture, heritage and the environment. His utmost respect and passion for nature convinced him that it is important to pursue development that meets the needs of present and future generations. It was Sheikh Zayed’s belief in social, economic and environmental sustainability that helped lay out a vision that would ensure the sustainable development of the UAE.

Celebrating the UAE National Environment Day is an occasion to remind us of our responsibility towards ensuring sustainable levels of consumption. Therefore, in honor of this great leader and environmental champion, let us all join hands to renew our commitment to sustainable development.

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Cover Story

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HH Sheikh
Mohammed
launches
Marmoom Desert
Conservation
Reserve



A groundbreaking natural desert reserve covering 10 per cent of Dubai's total area has been launched by HH Sheikh Mohammed bin Rashid Al Maktoum.

"Preserving and investing in the environment means preserving and investing in one of our most important assets."

- HH Sheikh Mohammed bin Rashid Al Maktoum

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has launched the Marmoom Reserve project, the first unfenced desert conservation reserve in the country.

The reserve spans 10% of the emirate of Dubai's total area – and will introduce more than 20 environmental, cultural and sports-related initiatives, sponsored by nine Dubai government agencies.

Enjoying over 40 hectares of shrub land and fertile area, the reserve is

home to over 204 species of native birds, 158 species of migratory birds, and over 10 km of lakes, encompassing the Al Qudra Lakes.

The new project will include 10 animal and bird observation platforms, star and sunset observations decks, areas for yoga, an outdoor theatre that can host 350-person events, and will be powered by a 5,000 megawatt solar power complex.

By 2030, it will host more than 20 annual sporting events, which will attract an estimated 20,000 participants. Its cycling tracks will



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

AL MARMOOM is one of the largest protected areas in Dubai, spanning over 10 per cent of the emirate's total area

add up to the longest in any desert anywhere in the world.

Sheikh Mohammed said, "Preserving and investing in the environment means preserving and investing in one of our most important assets. The Marmoom Reserve is an environmental, touristic and sporting addition to life in the UAE."

He continued, "The desert is beautiful and inspirational; it provides a peaceful shelter to plants, birds and people. Our goal is to provide a fertile and robust environment for plants, a natural reserve for animals, and an important destination for

tourists and families." His Highness concluded, "When nine government agencies work as a team, the result will be exceptional, as reflected in the Marmoom Reserve."

This project reflects Dubai's development goals to preserve the local environment, including the nature of the desert, and to enhance its aestheticism, as well as to provide a natural habitat for threatened wildlife through its natural reserves.

Al Marmoom is one of the largest protected areas in Dubai, spanning over 10% of the emirate's total

area. It is home to 26 species of reptiles, nine mammal species, and 39 species of plants. It provides a sanctuary for 19 species of endangered animals and birds.

It has the highest concentration of large flamingos in a desert region in the country, with 300 to 500 birds. It also welcomes 158 species of migratory birds every year, hosting them along 10 sq km of wetland. It contains one of the richest Houbara Bustard colonies in the region, and is home to one of the largest Arabian gazelle herds in the UAE.

The Marmoom Reserve is also



Al Marmoom is one of the largest protected areas in Dubai, spanning over 10% of the emirate's total area. It is home to 26 species of reptiles, nine mammal species, and 39 species of plants.

the site of the important Saruq Al Hadid archaeological site, which dates back over 3,000 years to the Iron Age.

The reserve will host more than 20 projects and environmental, recreational, sports, tourism and educational programmes that will engage people in unique experiences throughout the year.

On the reserve are more than a dozen wildlife and bird observation platforms, star and sunset observation decks, yoga practice areas, a theatre that will host various cultural, artistic

and recreational performances, and various sports initiatives and challenges.

The Dubai Municipality, Dubai Sports Council, Dubai Water and Electricity Authority, Roads and Transport Authority, Media Office, Department of Tourism and Commerce Marketing, Knowledge and Human Development Authority, Dubai SME and Meraas will all be part of establishing and launching the new initiatives and projects.

When complete, the Marmoom Reserve will feature more than ten observation decks scattered

across the grounds in different locations, allowing for maximum observation of nature in its various elements.

H.H. Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai; H.H. Sheikh Ahmed bin Saeed Al Maktoum, Chairman of Dubai Civil Aviation Authority and Chief Executive of Emirates Group; H.H. Sheikh Mansour bin Mohammed bin Rashid Al Maktoum; Mohammad Abdullah Al Gergawi, Chairman of the Executive Office of His Highness Sheikh Mohammed bin Rashid Al Maktoum;

Al Marmoom contains one of the richest Houbara Bustard colonies in the region, and is home to one of the largest Arabian gazelle herds in the UAE.



Mohammed Ibrahim Al Shaibani, Director-General of His Highness the Ruler's Court, and a number of officials attended the event.

Among these decks is a location to observe the Arabian gazelles, erected on the top of a slope in order to provide a panoramic view.

The observation decks will be built in the shape of Arabian Oryx heads, and will blend in harmoniously with the surrounding environment to not disrupt the wildlife.

There will be several decks to observe birds, including a bird's nest themed deck, which will allow people to observe the birds without confusing or disrupting them. The Bird's Nest platform will be located on the edge of the park's water

bodies, offering beautiful scenery for photography.

Several platforms will be erected in order to provide a space for meditation and relaxation, surrounded by peaceful and beautiful landscape. The platforms will take up 1,500 sq m, and will be inspired by the sand dunes of the desert.

The yoga practice hall will be shaded by a sand-dune designed cover, which will provide protection from the sun for yoga practitioners and yet preserve the beautiful view, especially during sunrise and sunset. An air-conditioned yoga lounge will also offer a spectacular view of the desert with all its captivating charm. Another multi-level outdoor podium for yoga

will also open, allowing people to practice outside amidst the desert nature where practitioners can relax in the serene environment and take in the beauty.

For astronomy enthusiasts, five star observation decks will be included, in an order inspired by the solar system. The decks' unique locations in the middle of the desert will offer clear visibility. The location will be far from the noise of the city, and will be a true experience for people who are looking to star gaze.

The Marmoom Reserve will also be an incubator for the largest plant nursery in the UAE, covering an area of 40 hectares. The nursery will seek to contribute to Dubai's strategic objectives to increase



its green areas, to preserve and protect local plant species, to document local plants as part of the preservation of the national heritage and to expand the product of tree for use in horticulture and landscaping projects, as well as to make horticulture and afforestation projects more affordable.

The nursery will also serve as a training and educational centre for school and university students, researchers and academics in the field.

The Marmoom Reserve will host a series of annual sporting events. The programme will include more than 20 sports events and competitions, which are expected to attract more than 20,000 people annually.

Some of the events will include the Dubai International Cycling Tour, organised by the Dubai Sports Council, and the Sandstorm Marmoom Challenge.

The design of the outdoor theatre is consistent with the desert nature of the reserve; it is inspired by the formation of desert shrubs above the sand dunes. The theatre consists of a platform for performances and art, with a full-screen display, as well as service rooms and terraces of varying levels to give different perspectives to the audience.

The stage is topped by an open dome, also inspired by sand dunes, giving a desert colour to the design, and providing a silhouette for the general public.

The 350-person theatre will host a variety of artistic and lyrical performances from across the region and the world, within a year-round artistic and entertainment schedule.

The Marmoom Biosphere Centre will mainly be dedicated to studying the sustainable development and management of the protected area within policy in Dubai.

It will serve as a centre for sustainable ecotourism, and will seek to be the main source of specialized ecosystem management practices in the UAE and the region. The Marmoom Reserve will also develop and provide expertise in the environmental field, serving as a reliable reference for best

Covering over 40 hectares of shrub land and fertile area, the reserve will be home to over 204 species of native birds, 158 species of migratory birds, and over 10km of lakes, encompassing Al Qudra Lakes.



practices for environmental conservation.

The Marmoom Reserve Protection Scouts is a result of the cooperation between Dubai's Knowledge and Human Development Authority (KHDA), the Dubai Scout Commission and the Emirates Scouts Association.

It will aim to develop the outdoor skills of the younger generation, and to foster the spirit of connecting with the natural environment. The ultimate goal is to enhance conservation, wildlife and desert protection, and to instill positive values including self-exploration and problem solving.

As part of the Marmoom Reserve project, the Mohamed bin Rashid

Solar Power Complex will be connected to the protected area, which will be provided with clean energy to conserve the environment and promote sustainable development.

The Mohammed bin Rashid Al Maktoum Solar Complex will be the largest of its kind in a single location in the world with a capacity of 5,000 MW by 2030. Phase one and two are completed, with a capacity of 213 MW. Phase three is currently being implemented with 800 MW, to be followed by phase four with 700 MW of concentrated solar power.

Clean energy will be produced over the protected facilities through the Shams Dubai initiative for the installation of a photovoltaic solar

system. Green Charger stations will be installed at the Electric Vehicle Park to encourage people to use environmentally friendly vehicles. State-of-the-art Smart Meter technology will also be available in the reserve, which will include advanced features that contribute to an intelligent and environmentally friendly lifestyle.

The Marmoom Reserve will be the largest sustainable environment, tourism and recreational project in the UAE. It will aim to become one of the most important desert reserves in the UAE and the region, which will host eclectic and diverse wildlife, provide shelter for a wide variety of endangered animals and birds, combining education, environmental awareness, tourism and leisure.

Zayed Foundation unveils 'Zayed Smart Platform'



Zayed International Foundation for the Environment launches 'Zayed Smart Platform' on the occasion of National Environment Day and to mark the Year of Zayed celebrations in the UAE.

The #SpecialSmartEvent app has been designed specifically for smart game players around the world. This smart app seeks to test one's knowledge of the environment through the #KnowledgeHunt game and offers a chance to win prizes through participation.

As part of its initiatives to mark the Year of Zayed 2018, announced by UAE President His Highness Sheikh Khalifa bin Zayed Al Nahyan, as a national event to celebrate the 100th anniversary of the birth of the founding father, Sheikh Zayed bin Sultan Al Nahyan, the Zayed International Foundation for the Environment has launched the 'Zayed Smart Platform' in cooperation with the Dubai Police Academy.

Announcing the launch, Major General Mohammed Ahmed bin Fahd, Chairman of the Zayed International Foundation for

the Environment, and Assistant Commander-in-Chief of Academic Affairs and Training at the Dubai Police Academy said it is significant that the unveiling of the new initiative (the Zayed Smart Platform) to celebrate the Year of Zayed is held on the occasion of National Environment Day and as per the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates and Ruler of Dubai, to send a message to the world in 2018 that "Zayed is alive and will always remain in the heart of every UAE citizen and admirer."



THE UAE's key role in international environmental action, the protection of the environment and natural resources, and promoting renewable energy solutions was in focus at Davos

“The late Sheikh Zayed was not only a great and compassionate leader, but also a champion of the environment who laid the foundations of this nation by integrating the principles of sustainable development into its policies and programmes,” said Mohammed bin Fahd.

The ‘Zayed Smart Platform’ was unveiled by Mohammed bin Fahd in the presence of Brig Mohammed Al Shamsi, deputy director of the Dubai Police Academy, Dr. Meshgan Mohammed Al-Awar, Secretary General of the Zayed International Prize for the Environment, Dr.

Eisa M. Abdellatif, Chief Technical Advisor, Zayed International Foundation for the Environment, and faculty, academic staff and students of the Dubai Police Academy.

Speaking at the event, Dr. Meshgan Mohammed Al-Awar said that the green progress of the UAE, which was initiated by late Sheikh Zayed bin Sultan Al Nahyan, Mercy be on His Soul, is committed to the principles of sustainable development as envisioned by the Founding Father of the UAE.

“It is therefore to mark the spirit and respect that Sheikh Zayed bin

Sultan Al Nahyan instilled in us about the preservation and conservation of our natural resources, and to commemorate the UAE National Environment Day, that the Zayed International Foundation for the Environment has launched a #SpecialSmartEvent app for smart game players around the world,” she said.

Elaborating on the new initiative, she explained, “Under the ‘Zayed Smart Platform’, the #SpecialSmartEvent app has been designed specifically for smart game players around the world. This smart app seeks to test one’s knowledge of the environment



through the #KnowledgeHunt game and offers a chance to win prizes through participation. Held over two days from 4th to 5th February, this global event features many questions related to Sheikh Zayed's innumerable contributions to sustainability."

Dr. Al-Awar also said the partnership between the Zayed International Foundation for the Environment and the Dubai Police Academy seeks to preserve and protect the environment for future generations by creating and spreading a culture of environmental awareness. "This initiative is part of many innovative strategies to stimulate, assess and promote the environmental achievements of all segments of society among adults and young

people. Knowledge and innovation play an important role in shaping a sustainable future and the Zayed Smart Platform is an educational initiative to spread knowledge

and environmental awareness for all age groups, using smart applications and interactive tools through social media," Dr. Al-Awar concluded.





UAE scores top regionally in Ocean Health Index

The UAE outperformed all other Gulf and Arab countries and was ranked 28th in the world in the Ocean Health Index (OHI), a tailorable marine assessment framework to comprehensively and quantitatively evaluate ocean health. The UAE scored 77 points out of 100, although the global average of the Ocean Health Index requires only 70 points.

Commenting on the new achievement, Dr. Thani Al Zeyoudi, UAE Minister of Climate Change and Environment, said that the UAE scored top on the OHI, as a result of its commitment to sustaining marine biodiversity and ecosystems. Al Zeyoudi also pointed out that, “Business has a clear interest in

reversing the decline in ocean health. The GDP derived from the ocean amounts to 5% of the world’s total GDP. The ocean is also the world’s biggest employer, directly supporting the livelihoods of more than three billion people. Restoring the ocean thus amounts to an unparalleled business opportunity. However, the ocean’s value goes far beyond economics. It provides half of the air we breathe and governs our weather.”

The Ocean Health Index reports current scores and annual changes since 2012, which were recalculated using updated methods and data based on the best available science, for 221 coastal countries and territories. The Index measures performance

of ten societal goals for healthy oceans. These goals include: Food provision (UAE scored 56 points), artisanal fishing opportunities (UAE scored 100 points), natural products (UAE scored 35 points), carbon storage (UAE scored 92 points), coastal protection (UAE scored 93 points), coastal livelihoods & economies (UAE scored 100 points), tourism & recreation (UAE scored 61 points), sense of place (UAE scored 68 points), clean waters (UAE scored 70 points), and biodiversity (UAE scored 90 points).

The OHI measures and monitors oceans sustainability around the world to provide governments and economic institutions with ample information on the current state of these oceans.

UAE Environment Day

16 creating green commitments

HH Sheikh Khalifa calls on UAE people, private sector to preserve natural resources



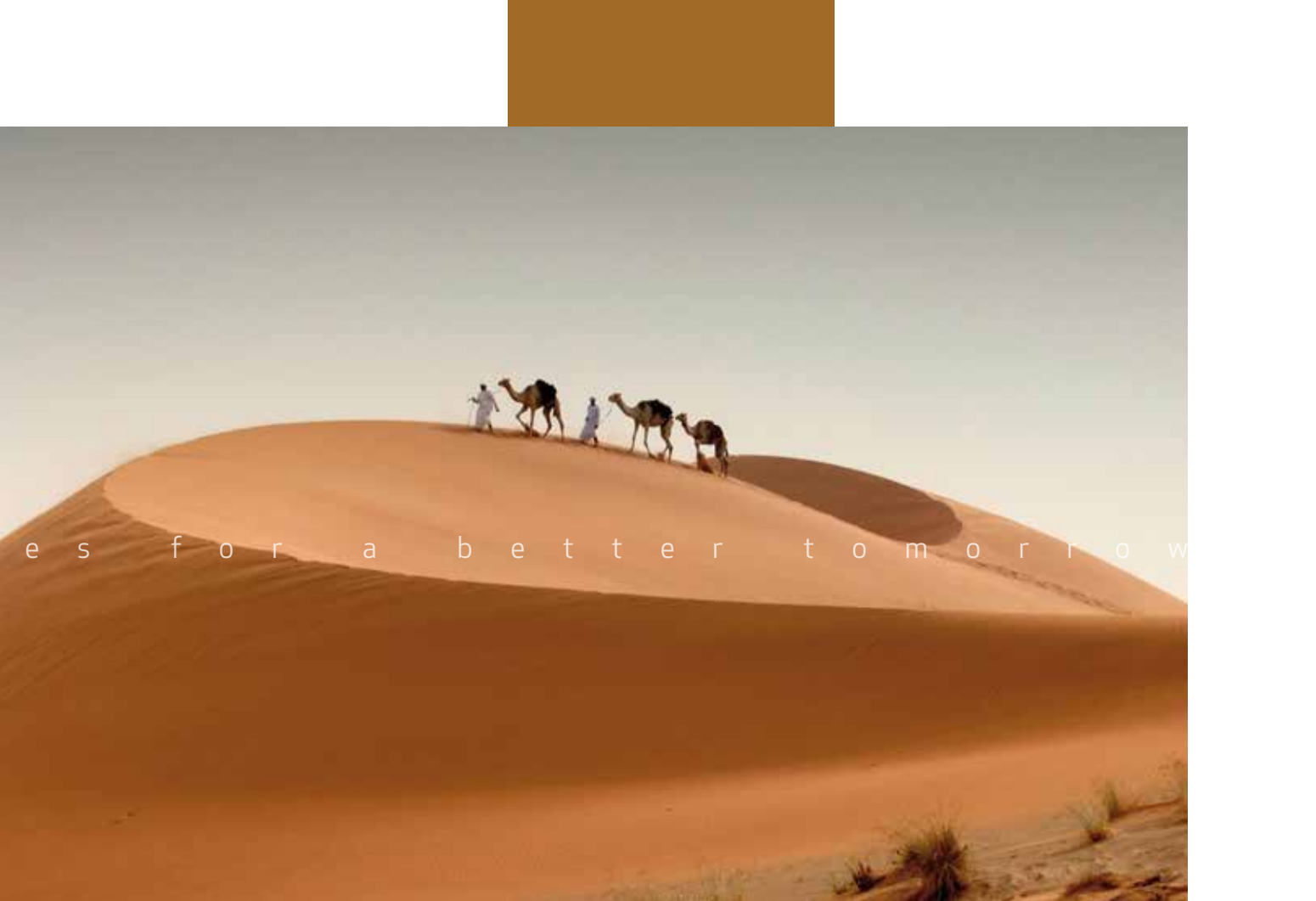
On the occasion of the 21st UAE National Environment Day, the UAE President reiterates the need to double efforts to achieve sustainable development objectives in line with the UAE Vision 2021 National Agenda.

“Improvement of consumption patterns and optimised management of our energy and water resources are a national imperative and an important source of giving.”

UAE President His Highness Sheikh Khalifa bin Zayed Al Nahyan has said that the impressive achievements made by the country in areas of environmental protection and preservation of natural resources are in continuation of the course laid down by the ancestors and founding fathers. Ranking high amongst these visionary luminaries is the late Sheikh Zayed bin Sultan Al Nahyan, who gave prudent directions to ensure long-term ecological balance, integrate the principles of sustainable development into the country’s policies and

programmes, and reverse the loss of environmental resources to protect the rights of future generations to a healthy, bountiful environment.

In a message to the nation marking the 21st National Environment Day observed on 4th February every year His Highness President Sheikh Khalifa said, “We celebrate this national occasion for the 21st year running to renew, as government and people, our national and ethical commitment to preserving our natural resources and reviewing the achievements we have made



es for a better tomorrow

OVER THE past years, the UAE government has made significant efforts to preserve its natural resources both on land and under the sea

over the past years. On this day, we reiterate our determination to double efforts to achieve our sustainable development objectives in line with the UAE Vision 2021 National Agenda with regards to ensuring a clean and safe environment that is conducive to providing continued prosperity and happiness for us and for generations to come.

“This year’s celebration of the occasion, marked under the theme ‘Sustainable Production and Consumption’, coincides with the Year of Zayed, the Founding Father and the Champion of

the Environment who was keen since his establishment of the nation to cultivate a culture of environmental protection among different segments of society.

“Improvement of consumption patterns and optimised management of our energy and water resources are a national imperative and an important source of giving. We are looking forward to seeing all segments of society develop a rationalised pattern of consumption that still does not contradict with the welfare state we have secured over the years, but rather goes in

line with a sustainable lifestyle that prevents and reduces waste in a way that ensures our future generations will continue to enjoy and benefit from their homeland’s natural wealth and resources.

“Over the past years, the government has made significant efforts to preserve its natural resources both on land and under the sea. We have issued several legislations that ensure the sustainability of these resources and developed a number of ambitious national strategies to build a green economy that prioritises the



protection of the environment and the preservation of natural resources.

“We have developed the water sector to protect the country’s underground water reserves and the agricultural sector by encouraging farmers to develop and adopt modern approaches that are relevant to and match our climatic conditions. We have established a number of natural reserves and programmes to protect endangered species inside and outside the country and issued clear directives to develop all necessary measures conducive to preserving our fishing and agricultural resources,” he added.

H.H. President Khalifa affirmed

that the government will continue to double efforts in order to protect “our civilisational and cultural legacy and our coveted international ranking by utilising the capabilities of our youth in employing state-of-the-art technology and applying best international practices in line with our National Agenda objectives, especially those with relevance to innovation and delivering the future.”

The President called upon all state departments to intensify efforts in order to complete all necessary legislation needed to fulfil the National Agenda objectives and boost public awareness, especially among students in order to motivate them to meet their national,

environmental and humanitarian obligations.

He also urged the private sector to assume an effective role in meeting its CSR obligations, calling upon all segments of society to develop sound environmental patterns that ensure sustainability of the country’s natural resources.





Book on Zayed, 'Father of Our Nation', launched

Coinciding with the designation of the year 2018 as the 'Year of Zayed', Dubai-based publisher Motivate Publishing has issued a new book, 'Father of Our Nation: Collected Quotes of Sheikh Zayed Bin Sultan Al Nahyan', which celebrates the thoughts and ideas at the heart of Sheikh Zayed's legacy. The year 2018 is the 100th anniversary of his birth.

The Arabic and English language coffee-table book is illustrated with rare historical and contemporary photographs of Sheikh Zayed as well as images of different aspects of the country. The book includes 55 quotations on various themes, including environment, heritage, education and progress, leadership, the nation, values and women.

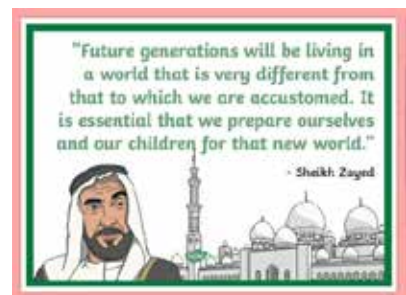
An introduction notes that, "Father of Our Nation' celebrates the thoughts and ideas at the heart of Sheikh Zayed's remarkable legacy," adding that the book "embodies the words of the UAE's President His Highness Sheikh Khalifa bin Zayed Al Nahyan, who said 'Zayed will always be with us. His memory is immortalised in our souls and hearts with his great works, and he will be present among us and with us forever and ever.'"

It also quotes the Vice President and Prime Minister of the UAE and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum, as stating, "History does not forget great men or their contribution to its existence, and the Emirati identity will

remain faithful to Zayed because he dedicated his life to the construction of man."

The book, in both Arabic and English, has been produced with the support of the Ministry of Human Resources and Emiratisation.

The book is available at all leading bookstores in the region, and on www.booksarabia.com.





UAE Environment Day

20 c r e a t i n g

g r e e n c o m m u n i t y

UAE marks 21st National Environment Day



Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, calls for considering natural resources as a national heritage.

The United Arab Emirates celebrated its 21st National Environment Day, observed annually on February 4, under the theme “Sustainable Production and Consumption” for the second consecutive year, to continue efforts to stimulate the move towards sustainable production and consumption patterns in the UAE.

In a statement marking the occasion, Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, expressed his deepest gratitude to the UAE President HH Sheikh

Khalifa bin Zayed Al Nahyan for his patronage of the National Environment Day, and his continued support for environmental protection and sustainable development in the UAE.

Dr. Thani bin Ahmed Al-Zeyoudi also thanked His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, and Members of the

Federal Supreme Council, Their Highnesses the Rulers of the Emirates, for their special interest in the country’s efforts to preserve the environment.

“Celebrating the National Environment Day in the Year of Zayed adds considerable value to the occasion. The UAE founding father and visionary leader had always considered the environment part and parcel of his philosophy and day to day practices. Sustaining the environment for generations to come was among the top priorities in his endeavors to



es for a better tomorrow

THE UAE'S ecological footprint per capita has decreased from about 12 global hectares in 2006 to less than 8 global hectares in 2014.

build the country, paving the way for the country's sustainable development," Dr. Al-Zeyoudi said.

"Sheikh Zayed's widely-acclaimed contribution to the local, regional and international efforts to achieve sustainable development was acknowledged worldwide, as he received numerous prestigious accolades, including the Gold Panda, UNEP Champion of the Earth, Man of Environment and Development, among many more," he added.

Dr. Al-Zeyoudi indicated that population growth and a surge in

income levels due to the economic boom the UAE witnessed in the past four decades have given rise to non-sustainable production and consumption patterns. These are among the main challenges we face in our efforts to conserve our resources and ecosystems today. Their negative impact is apparent in many areas, such as high ecological footprint per capita, high water, energy and food consumption rates, as well as high waste production and carbon emissions rate.

"To address these challenges, the UAE has implemented a wide

variety of policies and measures to promote sustainability of production and consumption to maximize our contribution to the global efforts to achieve sustainable development. The most prominent among them is the UAE Energy Strategy for 2050 that aims to diversify the country's energy sources. Its objectives involve bringing the share of clean energy in the national energy mix up to 27% by 2021 and 50% by 2050," he explained.

"Other policies include the UAE Green Growth Strategy that



focuses on transforming our national economy into a low-carbon green economy.

“This includes adopting a sustainable approach to architecture and transport, enhancing the efficiency of resource consumption, especially energy and water. And raising awareness on the economic, social and environmental risks of non-sustainable production and consumption is also an integral part of the strategy,” he added.

The Minister stressed that although it is too soon for us to see the full impact of the policies and measures, there are many signs that testify to their efficiency, especially at the production level.

“There is a significant decrease in per capita waste generation rate, from 2.06 to 1.8 kg per person per day, and the country’s ecological footprint per capita also decreased from about 12 global hectares in 2006 to less than 8 global hectares in 2014. In the UAE, we believe that sustainable production and consumption is an essential part of national responsibility for institutions and individuals alike. The consumer society is increasingly gaining importance in this regard, as it dictates production trends and influences producer responsibility. Ultimately, consumption is an individual choice that depends on a combination of factors, such as desire – often influenced by advertising, purchasing power

and awareness,” he elaborated.

“As a government, we continue to work relentlessly towards reducing the negative effects of production and consumption patterns and transforming them to sustainable ones that contribute to realizing sustainable development in the country, in line with UAE Vision 2021.”

“I urge you to consider our natural resources as a national heritage that we live with today and later pass on to future generations. We are confident that the collaboration of the government and the community will have a substantial influence on stimulating more sustainable production and consumption pattern,” he concluded.



EPAA celebrates National Environment Day

The Environment and Protected Areas Authority (EPAA) organised a celebration for the 21st National Environment Day in the Natural History & Botanical Museum in Desert Park, Sharjah. The celebration consisted of many activities and events to raise awareness on the importance and status of the environment and to intensify the EPAA's efforts to protect and preserve it.

Speaking at the event, Hana Saif Al Suwaidi, EPAA Chairman, said, "We celebrate National Environment Day in order to achieve several goals, including placing emphasis on the importance of the environment. The wise leadership in the UAE pays great attention and

care for the environment and supports such celebrations that contribute to raising the level of environmental awareness among the public. It also introduces the efforts of various stakeholders to preserve the environment, contribute to highlighting the importance of the environment and its issues, and encouraging individuals and groups to positively participate in the protection of the environment."

Al Suwaidi pointed out that the National Environment Day, which falls on February 4th of each year, focuses on the national commitment on the conservation of natural resources and the efforts to protect the environment with a view to achieving sustainable

development and the green economy. She indicated that the UAE, over two decades, has dedicated this day to the environment in light of the official and public interest in environmental issues, and the UAE's commitment to the efforts for the environment preservation and development.

The activities and events organised by EPAA throughout the year, whether at public or national occasions, are aimed at continuing to develop environmental awareness, emphasizing community responsibility for preserving the environment and its biodiversity, eliminating harmful activities, and raising the awareness among the younger generation.

Social Initiative

24 creating green communities

Suqia adopts 6 projects to support Year of Zayed



The programme includes 6 humanitarian and social projects and initiatives that reflect the noble values and principles of philanthropy and wisdom, instilled by the founding father, the late Sheikh Zayed bin Sultan Al Nahyan.

The UAE Water Aid Foundation, Suqia, under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives, MBRGI, has announced its Corporate Social Responsibility, CSR, programme for the Year of Zayed. The programme includes 6 humanitarian and social projects and initiatives, in collaboration with Dubai Electricity and Water Authority, DEWA, and Mohammed bin Rashid Al Maktoum Humanitarian and Charity Establishment.

Saeed Mohammed Al Tayer, MD

and CEO of DEWA and Chairman of the Board of Trustees of Suqia, said that the projects reflect the noble values and principles of philanthropy and wisdom, instilled by the founding father, the late Sheikh Zayed bin Sultan Al Nahyan in the hearts of Emirati people. It is also a continuation of Suqia's sustainable development initiatives in the Year of Giving.

He added that these projects support the UAE's position as a global model for humanitarian work. For the fourth year running, the UAE maintained its position as one of the largest

international donors compared to its national income in 2016 for the 4th year in a row, according to the Development Assistance Committee of the Organisation for Economic Cooperation and Development.

During the Year of Zayed, Suqia will implement "100 Water Projects" initiative to provide safe drinking water to unprivileged communities around the world, in collaboration with the Mohammed bin Rashid Al Maktoum Humanitarian and Charity Establishment and the Emirates Red Crescent. The projects



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

DURING THE Year of Zayed, Suqia will implement "100 Water Projects" initiative to provide safe drinking water to unprivileged communities

include providing water wagons to help women carry water from faraway water sources. These water wagons will enable them to get five times more water, while saving time for other important life events.

Through the "100 Volunteers Initiative", and in collaboration with DEWA, Suqia aims to attract 100 volunteers from DEWA, to work on various CSR initiatives during the year. These include an awareness and rationalisation programme on water for elementary and middle school students in Dubai, Ramadan

campaigns to distribute water to mosques and Ramadan tents, as well as voluntary field trips outside the UAE.

"International Initiative" includes international voluntary field visits, carried out by Suqia, in cooperation with DEWA and the Mohammed bin Rashid Al Maktoum Humanitarian and Charity Establishment to implement sustainable projects that serve the needs of needy families and involve target communities in finding appropriate solutions to water problems. It also aims to raise

awareness about the correct use of water, and informing them about the late Sheikh Zayed's life and achievements.

Through its '100 Water Endowments', Suqia will provide 100 water coolers in various parts of Dubai.

The "Suqia Zayed" campaign aims to provide drinking water in partnership with Mai Dubai, and in cooperation with various local associations. It also aims to provide water to people during the Holy Month of Ramadan in different countries.



Launch

26 creating green community

Dubai Cares celebrates 'Year of Zayed' with the launch of its Walk for Education

Dubai Cares, part of Mohammed bin Rashid Global Initiatives, has announced its second initiative this year to mark and celebrate the "Year of Zayed 2018."

The 9th edition of Dubai Cares' annual Walk for Education 2018 will take place on Friday, 16th February at Dubai Creek Park, next to Al Garhoud Bridge, Gate 2. Dubai Cares is inviting everyone to participate alongside family, friends and colleagues and walk in solidarity with millions of children in developing countries who walk long distances every day to go to school. This symbolic three-km walk also aims to raise funds to provide underprivileged children and young people around the world with access to quality education.

Speaking about this year's edition of the annual walk, Tariq Al Gurg, Chief Executive Officer at Dubai Cares, said, "With the launch of our second community engagement initiative for the year, we are delivering on our promise to continue to celebrate the 'Year of Zayed' and reaffirm our commitment to continue his legacy.

The annual Walk for Education has become a staple event in the UAE's calendar of events, however, every year we are committed to introducing new activities and attractions to

incentivise more people to join us on the day in support of our cause. Recognising the increasing importance of youth philanthropy, we have focused our efforts this year on attracting and engaging the youth through our walk."

David Healy, CEO EMEA of Aetna International, said, "We are proud to support Dubai Cares' immensely inspiring and successful Walk for Education this year. At Aetna, our mission is to build a healthier world and to help people stay healthy by focusing on wellness and prevention. That is why sponsoring the Dubai Cares



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

THE 9TH edition of Dubai Cares' annual Walk for Education 2018 will take place on Friday, 16th February at Dubai Creek Park.

Walk for Education 2018 is the perfect way for us to turn this commitment into action. We are delighted to be a main supporter of the event, which will highlight the struggles experienced by children in developing countries reaching school each day."

Rizwan Ahmed, Executive Director of IFFCO Group said, "This is the second consecutive year that we are supporting the Dubai Cares' Walk for Education, which is a testimony to our commitment to providing every deserving child, a better access to education so that we can help them in creating and

sustaining a better future. The IFFCO Group believes in investing in the future and we know that our children are our future. We are proud to be associated with this initiative and are looking forward to a successful event."

This year's main sponsors are IFFCO and Aetna, joined by Chevron. Al Tayer Group and The Kindergarten Starters are among the first organisations to sign up, confirming the participation of 2,100 staff and 1,414 students and staff respectively.

Building on the success of last

year's Walk for Education, which attracted more than 14,500 participants and 250 volunteers, Dubai Cares is expecting an increase in participation levels this year.





Initiative

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

'Emirates Red Crescent to be more responsive to country's humanitarian needs'



In honor of the late Sheikh Zayed who established the UAE's charity and humanitarian foundations, ERC will be more responsive to the country's humanitarian needs during the Year of Zayed.

H.H. Sheikh Hamdan bin Zayed Al Nahyan, Ruler's Representative in Al Dhafra Region and Chairman of the Emirates Red Crescent, ERC, stated that the ERC will be more responsive to the country's humanitarian needs and more generous, in terms of aid and local programmes, during the Year of Zayed 2018.

He added that these efforts will promote the values and principles established by the late Sheikh Zayed bin Sultan Al Nahyan, who established the UAE's charity and humanitarian foundations,

which are continuously being strengthened under the leadership of President His Highness Sheikh Khalifa bin Zayed Al Nahyan, and the Vice President and Prime Minister of the UAE and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces.

Sheikh Hamdan made his statement during the release of the ERC's annual report on its

local humanitarian aid provided last year, which amounted to AED130,828,634 and benefitted 1,840,297 UAE citizens and residents from 87 nationalities.

Sheikh Hamdan stressed that the ERC's humanitarian efforts and initiatives inside the country during the previous year promoted the goals of the 'Year of Giving' 2017, including social responsibility, volunteering and serving the nation.

He added that the ERC, due to the directives and support of the wise leadership and the assistance



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

ERC IS starting a new phase of giving inside the country and is promoting programmes to meet the increasing demand for humanitarian work.

of philanthropists, donors and local partners, has expanded its variety of programmes and presence inside the country, as well as increased its number of beneficiaries, due to its network of branches in every emirate.

Sheikh Hamdan affirmed that the ERC has prioritised its local programmes and activities, by launching more initiatives that respond to the needs of targeted categories, strengthening its responsibility towards beneficiaries, harnessing the support of donors, companies and authorities, and establishing

constructive partnerships to support its local activities.

He also explained that the ERC is starting a new phase of giving inside the country, which requires more work and promoting programmes to meet the increasing demand for humanitarian work. The ERC will exert all its efforts to fulfil its humanitarian aspirations, expand and enhance its programmes and projects, and aid its beneficiaries, he added.

At the end of his statement, Sheikh Hamdan expressed his

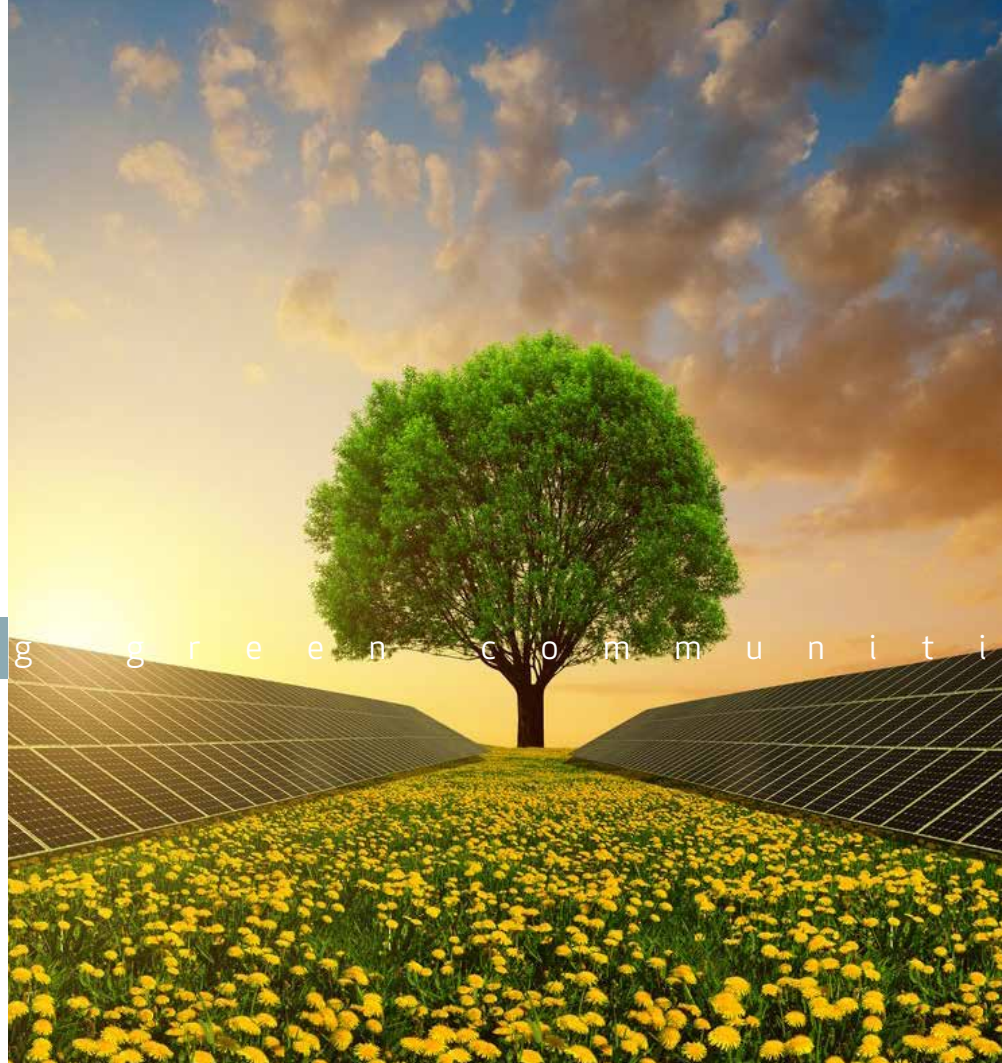
appreciation for the role of donors and philanthropists in supporting the ERC's journey towards greater excellence in performance and giving, while adding that its achievements during the previous years will motivate all who are involved to exert greater efforts and promote the UAE's humanitarian mission.



Launch

30 creating green communities

DEWA launches integrated programme to support Year of Zayed



DEWA approves 6 main programmes to implement 29 initiatives that reflect the noble principles and values instilled by the founding father to mark the Year of Zayed celebrations in the UAE.

The Dubai Electricity and Water Authority, DEWA, has approved an integrated programme for the Year of Zayed that includes 6 main programmes to implement 29 initiatives, that reflect the noble principles and values instilled by the founding father, the late Sheikh Zayed bin Sultan Al Nahyan in the hearts of citizens and residents of the UAE.

Saeed Mohammed Al Tayer, MD and CEO of DEWA, said that the initiative comes in response to the announcement of President His Highness Sheikh Khalifa bin Zayed Al Nahyan, who declared

2018 as the 'Year of Zayed' to celebrate the centennial of the birth of Sheikh Zayed bin Sultan Al Nahyan.

"In line with the vision of our wise leadership headed by President His Highness Sheikh Khalifa bin Zayed Al Nahyan; the Vice President and Prime Minister of the UAE and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum; and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, we have aligned our

Corporate Social Responsibility, CSR, strategy, with the main objectives of the Year of Zayed to commemorate the role of Sheikh Zayed in establishing the UAE, as well as his local and international achievements. This was done according to an integrated organisational approach to serve society and promote cohesion among all its members. Our CSR initiatives are an integral part of our strategic plan and efforts to serve the nation," Al Tayer said.

DEWA's programmes for the Year of Zayed includes 'Zayed's Footsteps', which consists of



DEWA WILL also launch several local and international volunteer programmes, and environmental, cultural and traditional activities to celebrate the legacy of the late Sheikh Zayed.

initiatives that contribute to consolidating the principles of the late Sheikh Zayed, such as love and loyalty to the homeland, social cohesion, and spreading love among all members of society; and 'Zayed Al Khair' to support People of Determination, charities and orphans to ensure a decent life for them and provide them with a fixed income.

'Zayed and Giving' supports sustainable international projects that serve the national vision and translate the vision of the late Sheikh Zayed in philanthropy and giving.

It also includes 'Zayed the Leader' which includes initiatives that contribute to preparing a generation of young leaders, who work according to the principles of the Sheikh Zayed, to enable them to lead development and charity projects, and become creative Emirati leaders; 'Zayed and the Environment' which includes initiatives that support the environment, provide clean energy, and prepare a generation that realises the importance of sustainability and protecting the environment and natural resources; and 'Zayed the Inspirer' which supports students in the

UAE, and other countries, by providing a learning environment for them and fulfil their educational needs.



Campaign

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

Sharjah launches unique health campaigns to mark Year of Zayed



To promote residents' health and awareness, a series of initiatives and services will be organised by the Department of Health Promotion at the Supreme Council for Family Affairs in Sharjah.

The Department of Health Promotion at the Supreme Council for Family Affairs in Sharjah has announced the initiatives for the year, in accordance with the directives of President His Highness Sheikh Khalifa bin Zayed Al Nahyan to mark 2018 as the "Year of Zayed."

The announcement came at a press conference at the headquarters of the Consultative Council of Sharjah on 4th February 2018. It was attended by Khawla Al Mulla, Chairperson of the Sharjah Consultative Council, SCC; Iman Rashid Saif,

Director of the Health Promotion Department; Mohammed Abdul Rahman Al Jarwan, Assistant Director of Sharjah Medical District; Mohammed Al Mashghouni, Head of Government Communications and Media at Sharjah Medical District; and heads and board members of related health promotion associations.

Following a short film about the Department of Health Promotion and the related health promotion associations, Iman Rashid Saif delivered a speech in which she stated that the department will

seek to emphasise the original values of the UAE's founding father, the late Sheikh Zayed bin Sultan Al Nahyan. Saif said that due to the continuous support of H.H. Dr. Sheikh Sultan bin Mohammed Al Qasimi, Supreme Council Member and Ruler of Sharjah, and H.H. Sheikha Jawaher bint Mohammed Al Qasimi, wife of His Highness the Ruler of Sharjah and Chairperson of the Supreme Council for Family Affairs, the department has become a leader in providing public health.

Iman Turki, Head of Programmes at the Department of Health



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

THE HEALTH initiatives will be organised with the aid of health associations that promote health awareness and provide support and treatment for patients.

Promotion, reviewed the main activities that will be organised by the department, including “Sahbati”, aimed at spreading peer education and health awareness.

Khawla Al Haj, Head of the Friends for Diabetes Association, addressed the association’s main agenda, which focuses on three major initiatives.

Under “The Blue Circle”, free consultations will be organised. “Prevention and Coexistence” will provide health care for diabetes patients and “Superhero - Saeed” will educate young students in

Sharjah about diabetes.

Mona Al-Hawai, a Member of the Board of Directors of the Friends of Kidney Patients Association, explained the association’s most important initiative, which is the launch of a competition on social networking sites, on the occasion of World Kidney Day on March 8th.

Waheeda Abdul Aziz, Head of the Friends of Arthritis Patients Association, discussed its 6th marathon, which will be organised under the slogan, “Life is Movement.” Khawla Rashid, Managing Director of Friends

of Cancer Patients Association, presented the main activities, which include the “Sharjah Portage” for children with cancer in developing countries. The “Fun Vehicle” and the “Global Colour” initiatives aim to enhance the confidence of women with cancer.

Dr. Ruqaya Fikri, Vice President of Breastfeeding Friends Association, said her association, will organise home visits to breastfeeding mothers, to provide guidance to new mothers along with various events to create awareness of the importance of breastfeeding.

Initiative

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

UAE pledges AED 367 million to Global Partnership for Education

The United Arab Emirates has pledged AED 367 million (US \$ 100 million) to the Global Partnership for Education (GPE) for the next three years to improve education and learning outcomes of 870 million children and young people in 89 developing countries.

The announcement was made by the UAE during the Global Partnership for Education Replenishment Conference held between 1-2 February in Dakar, the capital of Senegal, in presence of the presidents of France and Senegal.

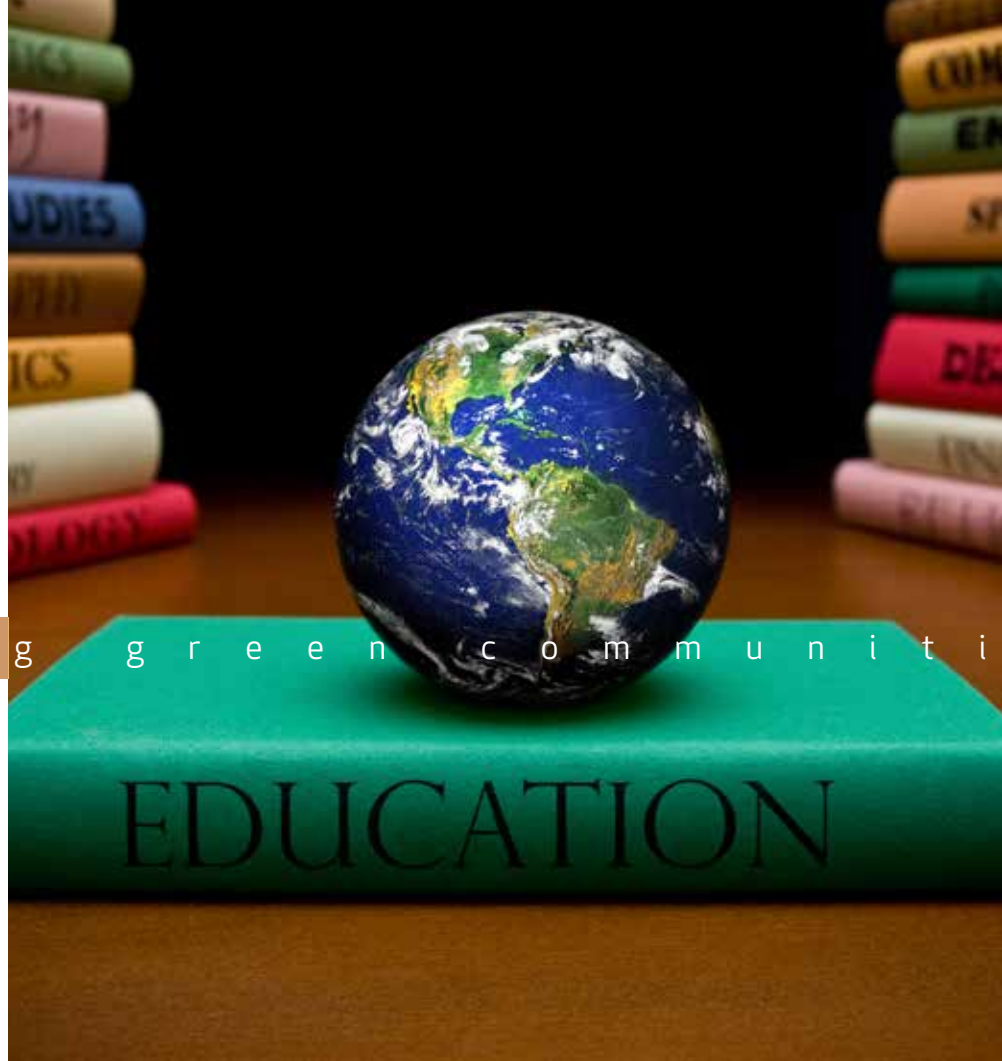
Reem Bint Ibrahim Al Hashimy Minister of State for International Cooperation, praised the directives of the UAE's wise leadership and its swift response to support education programs in developing countries as well as providing an educational environment for children and young people.

The UAE will take responsibility for ensuring education for children, especially for girls and supporting the UN 2030 Agenda's 4th Sustainable Development Goal. The UAE also plays a key role in the excellent work of the

Global Partnership for Education and the global leadership that it brings to the education sector.

Reem Al Hashimy said: "This pledge comes in a year where the UAE celebrates the "Year of Zayed", which reflects the fundamentals of wisdom, human development, sustainability and respect.

"The GPE position of prioritizing the poorest, most vulnerable, and those residing in fragile and conflict-affected countries strike a particular resonance with the fundamentals of UAE foreign





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

The UAE's contribution will help improve education and learning outcomes of 870 million children and young people in 89 developing countries

assistance," she added.

By announcing this pledge, the UAE became the first Arab and regional nation to support the Global Partnership for Education, which is a spin-off of one of the World Bank's initiatives; thereby enabling the UAE to fully participate in the GPE's governance structures.

Dubai Cares, part of Mohammed Bin Rashid Al Maktoum Global Initiatives, which works towards providing access to education for children and young people in developing countries also

participated in the conference where it announced its pledge to allocate AED 3.67 million (\$ 1 million) to the Gender Equality portfolio which is part of the GPE's Innovation and Knowledge Exchange Initiative.

Dubai Cares was the first foundation in GPE's history to commit funds to GPE at the 2nd Replenishment Conference in 2014.

Julia Gillard, Board Chair of the Global Partnership for Education and former Prime Minister of Australia said: "I am delighted

that the United Arab Emirates joined the Global Partnership for Education as its first Arab and Middle East donor. The generous contribution of US\$100 million will ensure that millions of marginalized children have a chance to go to school and learn."

The Global Partnership for Education is a multi-stakeholder partnership of developing and donor countries, multilateral agencies, civil society organizations, the private sector and private foundations supporting the education sector in developing countries.

Thani Al Zeyoudi presents UAE efforts to reduce climate change effects at Davos



Climate change, space exploration, artificial intelligence and the fourth industrial revolution were some of the topics discussed by 12 Emirati ministers attending the 46th World Economic Forum in Davos, Switzerland.

Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, participated in the World Economic Forum in Davos, Switzerland, as part of the UAE's official delegation of 12 ministers and several government officials and businesspeople.

Al Zeyoudi participated in a session, titled, 'After the Paris Agreement for Climate Change', which discussed ways of realising the goals of the agreement to combat climate change, including reducing the 1.5-degree global temperature increase above pre-industrial revolution levels, the global efforts to

reduce greenhouse gas emissions, and assessing developments following the pledges of countries to implement relevant national policies.

Al Zeyoudi highlighted the UAE's key role in international environmental action, the protection of the environment and natural resources, and promoting renewable energy solutions, by establishing partnerships with international organisations and institutions and implementing renewable energy projects in many countries. He also highlighted the country's role in encouraging investment in renewable energy projects through

initiatives by Emirati authorities and investment funds, as well as in reducing the cost of energy production using photovoltaic panels, to levels that are the lowest internationally in certain projects, such as the Abu Dhabi Solar Energy Complex, which received an offer of 2.42 cents per kilowatt-hour, and the Mohammed bin Rashid Solar Energy Complex, costing 7.3 cents per kilowatt-hour.

The Minister stated that the forum is a global gathering of international officials and experts, who aim to discuss the challenges of climate change and present successful



THE UAE's key role in international environmental action, the protection of the environment and natural resources, and promoting renewable energy solutions was in focus at Davos

experiences while adding that it is also a global platform for highlighting the UAE's leading environmental role and its efforts to ensure a balanced biological diversity, the sustainability of natural resources, and the reliance on renewable energy solutions to reduce the negative effects of climate change. The UAE fully supports potential innovations that can achieve overall sustainability, making it a leading incubator of creativity and innovation, he further added.

Al Zeyoudi also attended other sessions and meetings, including a session on the wider effects

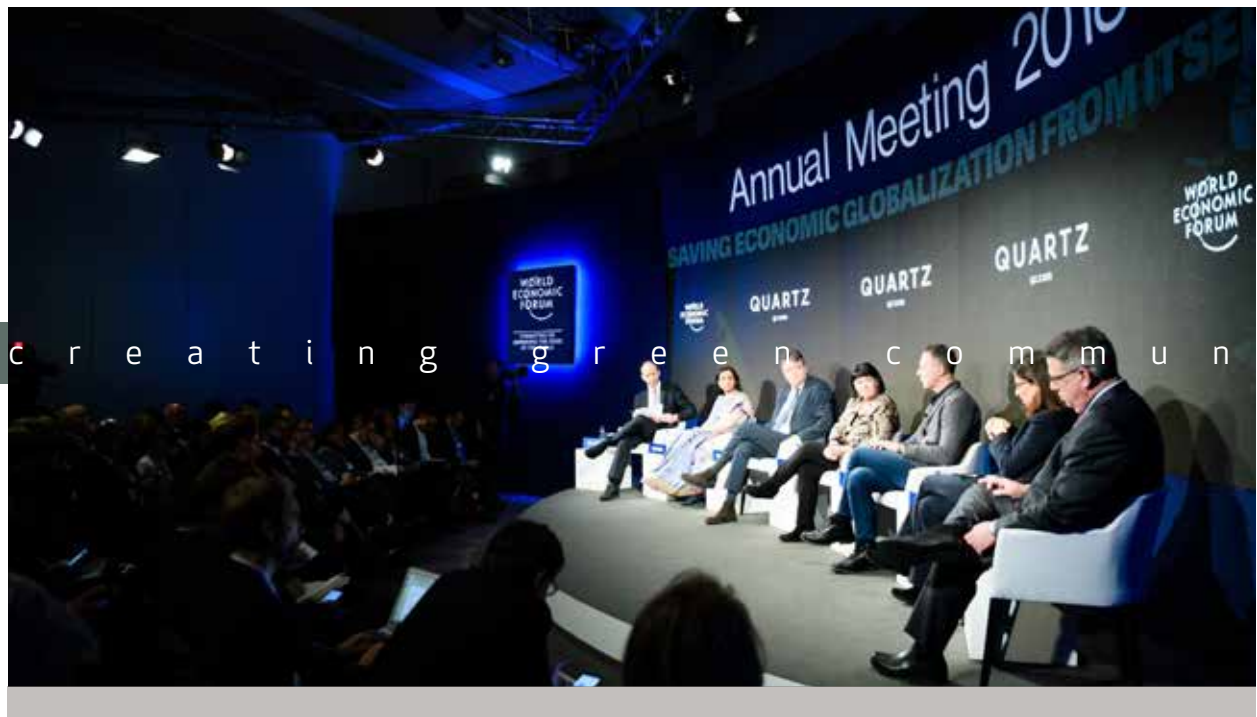
of pollution, which addressed its negative global effects such as high mortality rates, the closure of schools and the slowdown of businesses. He also attended a series of sessions, titled, 'The Fourth Industrial Revolution and Advanced Technologies: The Environment and Land and the Response to Extreme Environmental Risks'.

Youth are powerful agents of sustainable development: Minister of Climate Change tells CNN

Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, described the youth as

"the powerful agents of sustainable development". This statement was made in an interview with the CNN's Eco Solutions, a program which highlights innovative environmental solutions being offered by the global community. In the interview, he shared his insights on major environmental and current topics.

When asked how the UAE develops the creative and innovative potential in young people, he explained that the UAE Government pays a lot of attention to empowering the youth and providing them with the tools to innovate. "On the sidelines of Abu Dhabi Sustainability Week, the



Ministry organised the Climate Innovations Exchange (CLIX) to connect young entrepreneurs and investors to help drive sustainable climate change solutions.

“As it turned out, we received as many as 364 submissions from young innovators and entrepreneurs in 65 countries. That platform was brimming with innovation,” he said.

Dr. Thani Al-Zeyoudi, further detailed that funding has always been a challenge for taking the ideas of young innovators to the next level. However, CLIX offered a cutting-edge solution to overcome this hurdle, by bringing together investors and young innovators on the same platform. CLIX initially sought to secure funds valued at

\$2.2 million, but by the end of CLIX, investors have already expressed their intent to invest \$17.5 million in these innovations in the first year alone.

The intended investment figure has the potential to grow to \$45.5 million over a three-year period, according to the investors.

And when asked how aggressively the UAE is pursuing renewables deployment, he said that the UAE started focusing on renewables in 2005, and it was the construction and property booming era in Abu Dhabi and Dubai.

Despite the high cost at the time, the UAE leadership gave the directions to adopt renewable solutions. Ever since then, the UAE has made

an impressive track record of accomplishments in this area.

“Reliance on renewables will grow tremendously in the upcoming few years, as investors are taking note of renewable projects and how lucrative they can be. But to be realistic, fossil fuels will always be there on the energy mix grid,” he added.

Talking proudly about Solar Impulse 2, the first plane powered by renewable energy to tour the globe without a single drop of fuel, he said: “The amazing journey of Solar Impulse 2, which took off from and eventually landed in Abu Dhabi, has sent a clear message to all that renewables can be as reliable as any other source of energy in mobility.”



EPAA, EWS-WWF launch study to protect green turtles

The Environment and Protected Areas Authority, EPAA, has launched a study on turtles in collaboration with the Emirates Wildlife Society, EWS-WWF. The study aims to discover more about the living and feeding habits of the juvenile green turtles that can be found in high densities in the waters of the Al Qurm creek and mangroves adjacent to Khor Kalba, in Sharjah's eastern region.

In order to carry out the study, environmental specialists from both organisations set out to capture and tag the turtles in January at Khor Kalba, a designated nature reserve. Information from the study, combined with other EPAA work, will help shed light on the threats

to turtles in the area and guide development of a more detailed turtle conservation plan.

Hana Saif Al Suwaidi, EPAA Chairperson, said, "Juvenile Green Turtles feed in the waters of the Al Qurm mangroves but it is unknown whether the turtles remain in the mangroves for most of their life, or leave daily to feed in the open ocean. It is not known where these turtles were born or where they go when they become adults. This study will help us to answer some of these questions."

Al Suwaidi added that the study will combine with other EPAA and EWS-WWF research in order to understand the importance of the Al Qurm mangroves for turtle protection. "It will also be

the first attempt to gather long-term information on green turtle movements on Sharjah's east coast," she said.

Once captured, the turtles are fitted with a tag that transmits information on their movements to a satellite. EWS-WWF are providing the satellite transmitter and will use the study to gather more data for their long-term turtle research projects throughout the UAE.

Environmentalists from the EPAA and EWS-WWF have attached a satellite transmitter to one juvenile green turtle to track its movements for the next six months and also took tissue samples from turtles for a genetic study.

WFES 2018

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

Investments exceeding US\$15 billion announced during World Future Energy Summit 2018



[Masdar, Adwea announce new projects as part of their growth strategies, Saudi to launch up to \\$7 billion worth of renewable energy projects in 2018](#)

More than US\$15 billion worth of projects and funding was announced at the World Future Energy Summit (WFES) and its co-located events, the International Water Summit and EcoWASTE Exhibition, which took place during Abu Dhabi Sustainability Week 2018 from 15th to 18th January, hosted by Masdar.

The deals, which combined a number of local, regional and international agreements, have strengthened the UAE's position for advancing renewable energy and clean technology.

With WFES entering its 11th year, the event established a new direction for the energy ecosystem, bringing together global innovators, industry leaders and policy makers to shape the transformation of the industry. Over the four days, 850 exhibiting companies from 40 countries welcomed more than 33,000 attendees. More than 100 start-ups participated in WFES 2018, where over 10,000 pre-arranged business meetings were held. Exhibiting companies and a total of 18 national pavilions showcased some of the world's latest and most advanced

technologies, which are expected to play an integral part in the future of the energy industry.

Naji El Haddad, Group Event Director for the Middle East at Reed Exhibitions, said, "The business successes at the World Future Energy Summit 2018 were bolstered by new additions, including the Climate Innovations Exchange, pairing cleantech innovators with international investors. Our new Dialogue Hall that hosted the conferences also brought a cutting-edge and engaging platform for speakers and delegates."



es for a better tomorrow

MASDAR IS planning to double its current portfolio size in the renewable energy over the next five years

During the four-day World Future Energy Summit, the International Solar Alliance hosted its first-ever gathering in Abu Dhabi, and signed a letter of intent with YES Bank for its first financing commitment of up to \$5 billion by 2030. The organisation also signed nine solar projects across five ISA member countries, including UAE, Saudi Arabia, Nigeria, India and Spain.

Saudi Arabia announced its intention to launch up to \$7 billion worth of renewable energy projects in 2018, as part of the country's plan to have

9.5 gigawatts (GW) of solar and wind capacity installed by 2023. The majority of the funding is expected to be spent on solar plants, with four (GW) of solar energy projects to be contracted throughout the year.

Held in the Dialogue Hall at ADNEC, the WFES conference hosted high-level speakers, including local ministers and foreign dignitaries, such as Dr. Thani bin Ahmed Al Zeyoudi, UAE Minister of Climate Change and Environment, and Turki Al Shehri, Head of the Renewable Energy Project Development

Office (REPDO) at the Ministry of Energy, Industry and Mineral Resources (MEIM) in Saudi Arabia. A range of experts presented at the new Dialogue Hall, including Tarik Hamame, an advisor at the Moroccan Agency for Sustainable Energy (Masen), and technology futurist Ian Khan.

The sixth edition of the International Water Summit, held in strategic partnership with Abu Dhabi Water & Electricity Authority (ADWEA), saw the announcement of two landmark water-related projects. Firstly, ADWEA announced



the completion of a \$435 million strategic desalinated water reserve in the capital. Constructed in the Liwa region, the megaproject will house 26 billion litres and is the world's largest manmade water reserve.

On day two, ADWEA announced a \$1.2 billion project to build the world's largest reverse osmosis water desalination plant in Abu Dhabi, with operations set to begin in October 2021.

The greenfield reverse osmosis seawater desalination plant will have a capacity of 200 million imperial gallons of water per day, and will be located at the Taweelah power and water complex, approximately 45 kilometres north of the capital.

IWS saw the third edition of the Rain Enhancement Awards celebrate the most promising research projects, with three research groups from the USA, Russia and China receiving grants of \$5 million. The annual award programme helps tackle challenges surrounding global water stress by encouraging and facilitating innovative solutions.

Abu Dhabi's Centre of Waste Management (CWM) - Tadweer announced five contracts totaling \$45 million of investment in waste management projects during the EcoWASTE Exhibition. The contracts are set to expand environmental waste solutions as well as generate significant job opportunities.

Contractors that signed with CWM Tadweer include Green Energy Solutions & Sustainability LLC, which will implement the Middle East's first Landfill Gas to Energy project that will produce around 5 megawatts of energy by September 2018.

Masdar and Bee'ah announced financing commitments that had been secured for the Sharjah Multi-Fuel Waste-to-Energy Facility. The facility comes as part of the Emirates Waste to Energy Company and will have the capacity to treat 300,000 tonnes of waste and a power capacity of 30 MW.

WFES will return in 2019 from January 14th to January 17th.



Shark fishing banned in the UAE from 1st February to 30th June

The Ministry of Climate Change and Environment, MOCCA, has announced that shark fishing is banned during the period from 1st February until 30th June, which coincides with the shark breeding season.

Salah Abdallah Al Rayssi, Director of the Fisheries Sustainability Department at MOCCA, said that the ban aims at reducing risks facing rare species of sharks.

He said that sharks play a crucial role in maintaining a healthy habitat by 'cleaning-up' the reefs and preying on weak and sick fish populations, keeping coral reefs free of disease.

"UAE waters are home for as many as 30 shark species, which

are classified as endangered or critically endangered. Illegal fishing practices, global spread of unethical and uncontrolled fishing methods, as well as the rise of the shark fin trade, are putting some shark species on the edge of extinction. Global efforts must be intensified to prevent that from happening," he said.

Ministerial Decree No. 500 of 2014 limits the hunting of sharks in fishing waters not less than five nautical miles from the shores of the UAE and not less than three nautical miles from the islands of the UAE. This will prevent fishing of sharks for their fins and thwart the practice of throwing them back into the sea.

The regulation stated that sharks

must be brought whole into the port. It also aims to prevent the trading of live sharks caught in the UAE waters unless a special permit has been issued by the ministry.

The Decree allows fishermen who are operating boats with long lines and multiple hooks to catch sharks from the 1st July each year until the end of the following January, as long as they do not exceed 100 hooks per line. The hooks should be curved and biodegradable.

The import of sharks - fresh, frozen, dried, salted, smoked or canned, or in any other form - is also allowed by the Decree. The shipments must be accompanied with the original certificate of source of origin related for each shipment.

WiSER Conference
explores
opportunities
for women
advancement in
clean energy



The third annual Women in Sustainability, Environment and Renewable Energy (WiSER) conference was held under the theme, 'Women of Easternisation', focusing on the impact on women advancement through renewable energy and sustainability initiatives.

Global leaders from business, government and academia gathered in Abu Dhabi in January 2018 for the third annual Women in Sustainability, Environment and Renewable Energy (WiSER) conference under the theme, 'Women of Easternisation', focusing on the impact on women advancement through renewable energy and sustainability initiatives. The event was organised by Masdar in partnership with the Zayed Future Energy Prize.

The rise of Easternisation due to rapid growth of domestic

economies, particularly in India and China, has seen heavy investments in renewables. China's announcement of the "The Silk Road Economic Belt" initiative sees a trillion-dollar infrastructure plan and ample opportunities arising in efforts to shift trade flows towards Asia and revitalise the old Silk Road stretching from Asia and the Middle East, to the Mediterranean.

This shift in geopolitical and economic power from the west to the east also presents unparalleled opportunities for

women to enter the clean energy industry and support the global energy transition to new, clean forms of energy.

Mariam bint Mohammed Saeed Hareb Al Mehairi, UAE Minister of State for Food Security, delivered a keynote address focusing on the crucial role of women in transforming the world's food, energy and water systems and the role Easternisation has to play in achieving women empowerment and a sustainable future for all.

Dr. Nawal Al-Hosany, WiSER Programme Director, Deputy



FOUNDED BY Masdar and the Zayed Future Energy Prize, WiSER is an initiative that aims to empower and inspire women to be catalysts of innovation and the drivers of commercial solutions.

Director-General Emirates Diplomatic Academy, and Director of the Zayed Future Energy Prize, said, "Easternisation will involve major economies investing and the opening trade routes that spans several regions extending beyond 65 countries.

"China's progress in solar power plants development and its export of its skills and capacity, especially to Central Asia and Africa, not only presents energy access but will stimulate growth opportunities in these regions. It is essential that policy makers and corporations leverage this

growth opportunity to overcome the barriers that have historically prevented women's participation and leadership in clean energy-related fields.

"Specifically, the existing strategic energy-focused partnership between the UAE and China, which is anchored on research and development of renewable energy sources, supports the UAE's move towards achieving a competitive knowledge economy, and has created many advancement opportunities for women," she added.

The WiSER conference, a key event at Abu Dhabi Sustainability Week, also convened women leaders at a panel to discuss the impact of Easternisation on women advancement. The panelists discussed opportunities and barriers for women's entry into education, science and knowledge industries, and the critical importance of having policies that not only protect women's rights but ensure the inclusion of women at the beginning of any opportunities that arise from Easternisation.

Panelists involved were Anja-



Isabel Dotzenrath, Chief Executive Officer of E.ON Climate & Renewables (EC&R); Dr. Florence Eid-Oakden, CEO & Chief Economist, Arabia Monitor; Dr. Manar Al Moneef, CEO, Renewable Energy, GE, MENAT; Lara van Druuten, Managing Director, The Waste Transformers.

Reflecting on the opportunities for women in Asia, Dr. Wandee Khunchornyakong, Founder, Solar Power Company Group, Thailand, said, "Opportunities have risen for women in Asia with the deployment of Easternisation and the renewable energy industry. Education and self-belief amongst women are two crucial elements in their advancements. With two

thirds of bachelor and masters graduates being women, we see women pursuing higher education and advancing themselves now more than ever.

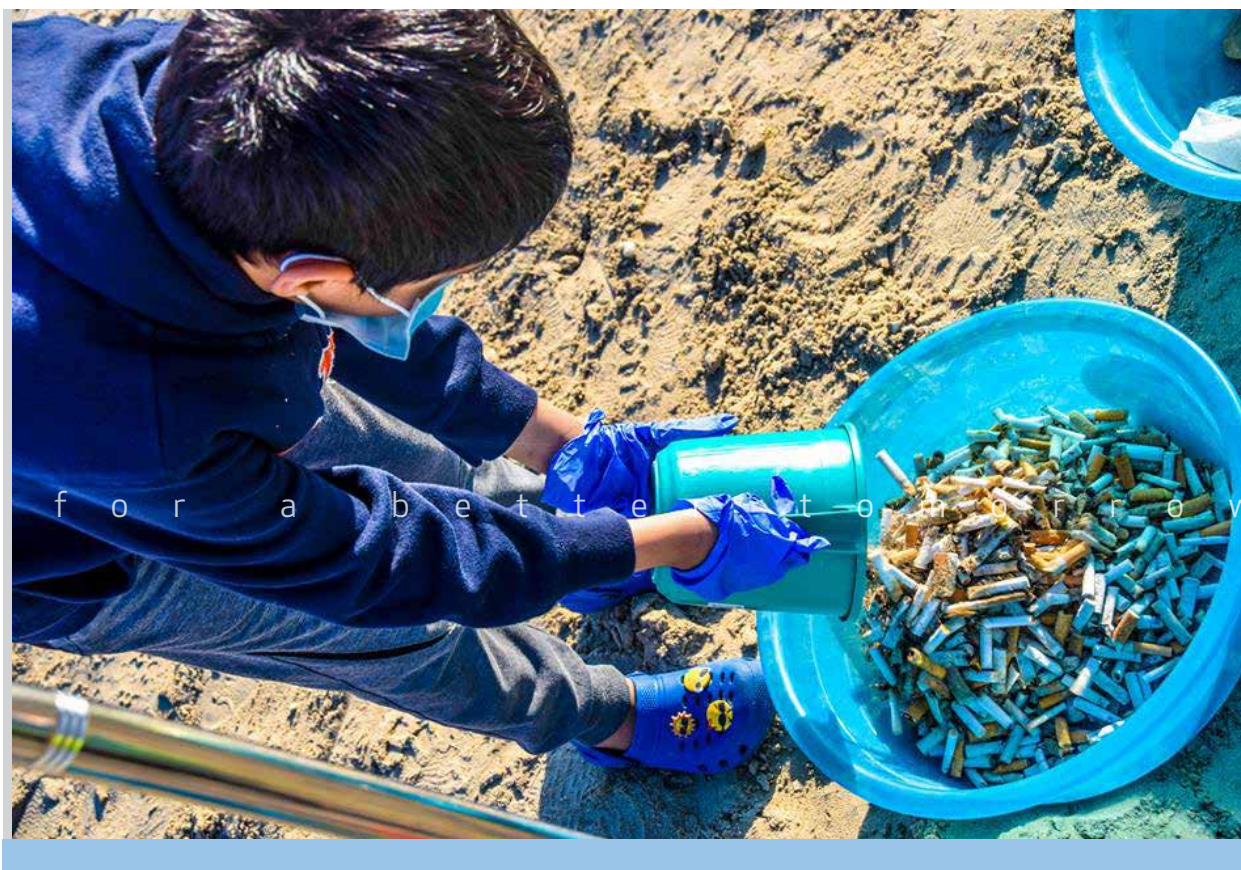
"Today, 40 percent of CEOs in Thailand's listed companies are women. Beyond this, we hope to ensure that women are better represented in boards of directors in companies too. For this to happen, we need to collectively ensure policies and organisations focus on women inclusivity and equality."

Present at the conference and presenting the youth's perspective, Fatima Al Kaabi, the UAE's youngest inventor, said, "It is essential that children, regardless of gender, receive

the support they need to pursue their passion - access to the right tools, education and opportunities to explore their full potential.

"Easternisation will see accelerated development for many parts of the world, more professional options, and hopefully better education to support ambitions of the youth.

"Beyond the support of my family and friends, I've been fortunate to have received tremendous support from the UAE government, encouraging me to develop my skills and interest in the field of technology and science to invent practical solutions that would make a positive impact in our world."



400,000 cigarette butts removed from Dubai beaches in 2017

The Waste Management Department of Dubai Municipality was successful in attracting 2,242 volunteers from various categories such as employees, students, families, People of Determination, and individuals from both the government and private establishments for its initiative titled “An hour with cleaning workers”.

“Through community participation in this initiative, we managed to collect nearly 400,000 cigarette butts while cleaning the beaches in 2017 by using 1,100 working hours,” said Eng. Abdul Majeed Sifai, Director of Waste Management Department and Head of the Awareness Team in the field of Sustainable

Waste Management at Dubai Municipality. “Team members of our major campaign last year, “A Beach Cleanup Dubai” (ABCD), participated in an organized way in 17 beach cleanup activities, in addition to leading awareness sessions for beach goers.”

“The initiative successfully utilized community participation in the maintenance of the city’s cleanliness in all its corners. The volunteers represented 48 government and private bodies with a good participation from national families.

“This year, we had more participation than the previous years, which reflects in the increased number of organizations and the great success tasted by

the initiative through excellent media marketing for the activities on social media networks,” said Sifai.

“The volunteers, who joined the community initiative helped to undertake cleaning operations such as removing cigarette butts on beaches, random posters in commercial areas and the waste on shores as well as cleaning the industrial and residential areas. They also contributed in creating awareness among the public about cleanliness,” he said.

He added that the initiative is a golden opportunity for volunteering enthusiasts and clearly contributes to spreading a culture of social responsibility among the public.

Conservation

48 creating green community

UAE unveils world's largest man-made desalinated water reserve

The reserve is being kept in a natural freshwater underground aquifer, accessed by an injection and recovery system comprising of the 315 wells.

Abu Dhabi has unveiled the world's largest reserve of high quality desalinated water, accessible by a network of 315 recovery wells lying up to 80 metres below the Liwa Desert. The wells are fed by one of the UAE's longest water pipeline networks which will take the water from the Shuweihat desalination plant, in the far west of Abu Dhabi, to the area of the underground reserve, at a rate of 7 million imperial gallons - approx. 32,000 m³ - per day over 27 months.

The announcement was made on 15th January on the sidelines of

the 2018 World Future Energy Summit in Abu Dhabi.

The reserve is being kept in a natural freshwater underground aquifer, accessed by an injection and recovery system comprising of the 315 wells. The aquifer was first investigated in 2002 and has been extensively researched by the Environment Agency - Abu Dhabi, EAD. The project was undertaken as a collaborative venture between EAD, which undertook the scientific studies, feasibility studies and risk and mitigation scenarios as well as strategic planning, the Abu Dhabi Water and

Electricity Authority, ADWEA, and its TRANSCO subsidiary, which managed the construction and on-the-ground implementation.

According to Dr. Saif Saleh Al Seairi, ADWEA's Acting Director-General, the completion of the Liwa Strategic Water Reserve project coincides with the celebration of the year 2018 as the 'Year of Zayed', and expressed his appreciation for Sheikh Zayed's vision for the future of the region and his support for the conservation of natural resources, so that they can preserved for future generations.





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

THE RESERVE acts as a safety net for the provision of water and is now being regarded as an excellent regional model for foresight and planning.

“The reserve acts as a safety net for the provision of water and is now being regarded as an excellent regional model for foresight and planning,” Al Seairi said.

“We applaud the efforts of the team that worked hard in some of the harshest desert conditions and in an environment of a constantly undulating landscape. The project team overcame considerable challenges to complete this one-of-a-kind scheme and lessons learned have been shared with our regional partners.”

“The entire project is testament

to the power of multi-stakeholder collaboration, and an exemplary case study in inter-governmental cooperation driven by environmental pillars guiding sustainable economic imperatives,” Razan Khalifa Al Mubarak, Secretary General of the Environment Agency – Abu Dhabi, EAD, said.

The project makes a major contribution to the security of Abu Dhabi’s water supplies through the recharging of depleted groundwater aquifers with high-quality desalinated water. Such water cannot be stored above

ground due to contamination and other factors.



Launch

50 c r e a t i n

Schools in UAE to lead Expo 2020's 'Sustainability Champions' programme



[The Sustainability Champions programme, launched by Expo 2020 Dubai in collaboration with the Ministry of Climate Change and Environment and Ministry of Education aims at creating a lasting renewable energy legacy for the nation.](#)

Expo 2020 Dubai, in collaboration with the Ministry of Climate Change and Environment and the Ministry of Education, have launched the "Sustainability Champions" programme for all schools across the UAE aimed at leaving a lasting renewable energy legacy for the nation.

Public and private schools have an opportunity to showcase how they are playing their part in ensuring a sustainable future in the UAE. Initially, two selected schools will benefit from the installation of photovoltaic panels by Expo 2020

and the support for the schools' sustainability programmes.

This was officially announced by Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, Jameela Al Muhairi, Minister of State for Public Education, and Najeeb Mohammed Al-Ali, Executive Director of Dubai Expo 2020 Bureau, at the Expo 2020 stand at Abu Dhabi Sustainability Week, ADSW, in ADNEC.

This is one of many initiatives that Expo 2020 Dubai's Youth Connect offers the UAE's young people to

ensure they are a core part of the journey to Expo 2020 and beyond. Other examples include the volunteers' programme, expo field trips and school roadshows.

The Sustainability Champions programme was inspired in many ways by the achievements and values of the UAE's founding father, late Sheikh Zayed bin Sultan Al Nahyan.

"Since the country's inception, the founding father of the UAE, late Sheikh Zayed bin Sultan Al Nahyan, instilled the importance of protecting the environment



THE SUSTAINABILITY Champions programme gives public and private schools the opportunity to showcase their part in ensuring a sustainable future within the UAE

and preserving its natural resources in the hearts of the UAE citizens and residents. As raising an environmentally responsible generation is among the top priorities of our visionary leadership, the Ministry of Climate Change and Environment works relentlessly to launch initiatives that contribute to achieving this crucial goal.

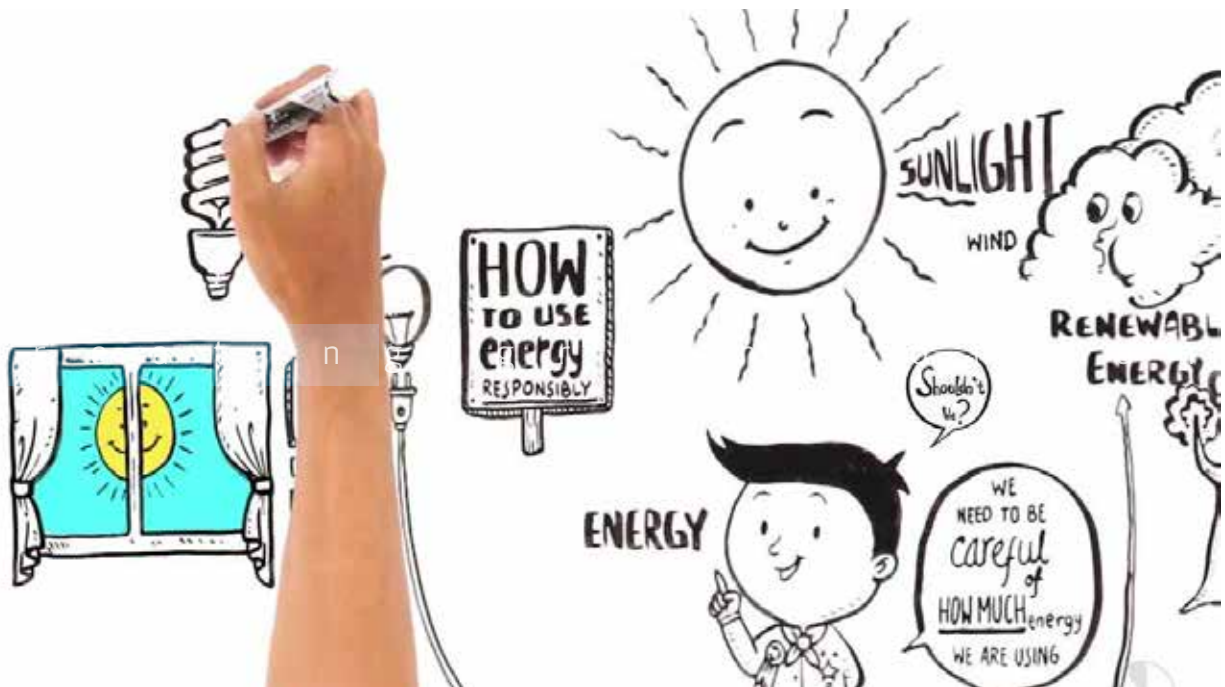
“Through the Sustainability Champions, we aim to educate the UAE youth on the vital significance of sustainable habits and environmental conservation for the future of our country.

The programme offers students an opportunity to become real partners and actively participate in developing sustainable solutions,” Dr. Thani bin Ahmed Al Zeyoudi said.

Encouraging all schools in the UAE to take part, Al Muhairi said, “Educating our students about sustainability practices and climate change has been at the top of our agenda. The Sustainability Champions programme dovetails neatly with our efforts by encouraging schools to show their strongest commitment to real changes

that reduce their environmental footprints.”

Najeeb Mohammed Al-Ali said, “Sustainability is a core pillar of the Year of Zayed and it is also at the heart of Expo 2020 Dubai as one of our three key subthemes, alongside Opportunity and Mobility. For us, sustainability is more than just conserving water and energy at the site; it is about making a tangible impact in the UAE and around the world by influencing and catalysing actions that take us a step closer to a sustainable future. It all starts with our nation’s youth.



“We are proud and honoured to launch this initiative with the Ministry of Climate Change and Environment and the Ministry of Education that supports the late Sheikh Zayed’s vision for living in harmony with the environment. Through the Sustainability Champions programme, we hope to nurture a fresh interest and enthusiasm in our schools and our youth for sustainability.”

Alya Al-Ali, Director of Youth Connect at Expo 2020 Dubai, said, “The Sustainability Champions programme is not only about providing photovoltaic panels to schools; it is about creating a meaningful legacy for sustainability in the UAE through human development, reflecting the pillars of the Year of Zayed.

We are starting the programme with two schools for now, but soon, we will welcome many more all over the UAE to join our growing network of Expo 2020 Dubai Sustainability Champions.”

Schools can participate by submitting applications through an online portal (<https://www.f6s.com/sustainabilitychampionscompetition/apply>) by 1st April and submit enquiries via email at sustainability.champions@expo2020.ae. Following a preliminary review of eligibility and compliance, two schools will be selected by a panel based on criteria such as the school’s commitment and vision for sustainability.

The chosen schools will be

announced on Earth Day (22nd April) and the planning for photovoltaic panel installations will kick off immediately afterwards.





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

Lawmakers discuss policies to accelerate global energy transformation

Lawmakers from around the world gathered in Abu Dhabi to discuss the policies needed to accelerate transformation of the global energy system, in a Legislators Forum organised by the International Renewable Energy Agency (IRENA) and a Parliamentary Forum jointly organised by the UAE’s Federal National Council (FNC).

Held the day before the opening of the Eighth Assembly of IRENA, the 2018 IRENA Legislators Forum, “Renewable Energy – the Role of Legislators in Catalysing Action to Accelerate the Energy Transformation” is the third meeting of its kind hosted by the Agency and seeks to facilitate dialogue between legislators on the deployment of renewables

and the critical challenges facing the global energy transformation.

“Legislators have a key role to play in enacting and overseeing the laws that govern the energy sector, and in widening the support for renewables through their respective constituents,” said IRENA Director-General Adnan Z. Amin at the Forum.

“As the energy transformation gathers momentum, it increasingly brings with it important economic, social and environmental benefits to citizens and communities all over the world,” he continued. “Therefore it is crucial that as our energy system evolves, lawmakers’ remain engaged and informed advocates of a low-

carbon energy future.”

In addition to covering areas of policy, legislation, and the tools necessary to support legislators, discussions at this year’s Forum focused on renewables deployment from the power sector to end-use sector, and on raising the level of ambition of renewable energy in Nationally Determined Contributions under the Paris Agreement.

Lawmakers participating in the Forum took part in a Public-Private Dialogue, consisting of a roundtable discussion with members of the Business and Investors Group of the IRENA Coalition for Action, government representatives, and parliamentarians.

Eighth General Assembly of International Renewable Energy Agency concludes in Abu Dhabi



Participants from more than 150 countries discussed global renewable energy action and took concrete steps to accelerate global energy transition.

The eighth session of the General Assembly of the International Renewable Energy Agency, IRENA, held in Abu Dhabi from 13th to 14th January, saw attendance from more than 150 countries as participants discussed global renewable energy action and took concrete steps to accelerate global energy transition.

In his opening remarks, Dr. Thani bin Ahmed Al Zeyoudi, UAE Minister of Climate Change and Environment, said, “2017 witnessed several achievements that contributed to reducing the

cost of energy production and increasing its efficiency through renewable sources. Over the past nine years, the cost of renewable energy dropped by 62 percent and it is expected to be lower than the price of coal use 10 years from now. We are optimistic about the future of renewable energy and its ability to expand in the coming years.

“Although the GCC region is among the largest oil-producing regions worldwide, the UAE and Saudi Arabia launched a host of projects that have significantly contributed to reducing the cost

of solar energy production on a global level and have broken world records three times.

“The 350-megawatt Abu Dhabi Solar Complex attracted the first record production cost bid of US\$2.42 cents per kilowatt hour, while the 700-megawatt Mohammed bin Rashid Al Maktoum Solar Park in Dubai received the second record bid of 7.3 cents.

“The third, currently unbeaten record for the world’s lowest production cost belongs to Masdar’s bid for the 300-megawatt Sakaka Solar



THE EIGHTH session of the General Assembly of the International Renewable Energy Agency, IRENA, was held in Abu Dhabi from 13th to 14th January.

Power Plant in Saudi Arabia at 1.79 cents per kilowatt hour.

“Following this achievement, the UAE has decided to increase its target for the contribution of renewable energy to the national energy mix from 24 percent to 27 percent by 2021. The UAE Energy Plan 2050 aims to grow the proportion of clean energy to 50 percent. Furthermore, the country seeks to produce 44 percent of the clean energy from renewable sources as part of its commitment to sustainability across all sectors, especially the energy industry.”

Dr. Al Zeyoudi highlighted the crucial role of the private sector as a strategic partner of the UAE Vision 2021. He praised the initiatives of companies such as Majid Al Futtaim Holding that unveiled the world’s first Net Positive strategy in 2017 with the aim of achieving a net positive carbon footprint by 2040, and Al Nabooda Automobiles that has announced the construction of the largest private sector solar power plant in the Middle East to power its operations.

“Despite these positive developments, lack of funding

and investment remains a major obstacle to realising our ambitions to expand renewable energy use. Therefore, we need to step up our efforts to generate funding for this type of projects with global benefits,” he added.

He further called on governments, the private sector and academia to strengthen existing partnerships and forge new synergies to maintain the momentum of renewable energy, facilitate financing, and enhance their contribution to achieving SDGs and reducing the impact of climate change.

UAE mangroves the largest in the Gulf: New Study



[Mangrove coverage in the UAE has nearly doubled following decades of conservation efforts.](#)

After decades of conservation, the mangroves in the UAE have grown to become the largest in the Arabian Gulf coast, according to a new study. Analysis of satellite images acquired from the King Abdul-Aziz City for Science and Technology recently published in Environmental Monitoring and Assessment show that the UAE is now home to nearly 50 percent of all mangroves in the region. The mangrove coverage in the Emirates has nearly doubled.

“Plantation and rehabilitation projects, primarily in Abu Dhabi,

have played an important role in preserving and increasing mangroves throughout the years,” The National quoted Dr. Hanan Almahasheer, Assistant Biology Professor at the Imam Abdulrahman bin Faisal University in Dammam, as saying in an article published in January called ‘Spatial coverage of mangrove communities in the Arabian Gulf’.

It read, “Where they used to cover 40 square kilometres along the UAE coastlines on the Arabian Gulf and one site on the Gulf of Oman coast, at Khor Kalba, now they are extensively found along

UAE coastlines with about 79 square kilometres, comprising 48 per cent of the overall mangroves in the region.”

The images were captured last year using the Landsat 8 observation satellite; however, since the satellite only registers images at a spatial resolution of 30 metres or higher – meaning that any mangrove clusters smaller than 30 meters would not be visible – the actual area covered by mangroves is likely to be much higher.

The Environment Agency Abu



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

OF THE 165 square kilometres of mangroves scattered across the Gulf, the UAE contained the largest portion, with 78.7 sq kms.

Dhabi, which maps the emirate's mangroves using higher-resolution satellites, estimates the coverage to be closer to 155 square kilometres, said Dr. Himansu Sekhar Das, Unit Head of Marine Threatened Species for the EAD.

"We don't blame them for not detecting that. It is because they are using satellite data with a different resolution," Dr. Das said after reviewing the report. Dr. Das said the growth of the UAE mangroves was due to a plantation programme undertaken by the Abu Dhabi Government

initiated decades ago by the Founding Father, Sheikh Zayed bin Sultan Al Nahyan.

"It has almost doubled in 20 or 30 years," Dr. Das said. "What you see today is the result of 40 years' worth of planting between the natural mangroves. During a period where we are losing mangroves in many parts of the world, here they are doing well. Due to political will and government interest, we are able to maintain this habitat and this is part of our mandate."

The extensive planting

programme had been so successful that the EAD no longer plants mangroves in new areas where they didn't previously exist.



Innovation

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

From seed to seat:
Soy foam paves
the way for use
of renewables at
Ford



Debbie Mielewski, Senior Technical Leader, Materials Sustainability, Ford Motor Company, writes on how soy foam proved key to Ford's push to use renewables.

A lot of people are familiar with soy – tens of millions of consumers eat and drink it every day. But what might come as a surprise is that many of us actually sit on recycled soy all of the time.

This year marks 10 years since Ford first used soybean-based foam in the 2008 Mustang, and since 2011, it's been a key material used in the seat cushions, seat backs and headrests of every vehicle we build in North America.

Now, 18.5 million-plus vehicles and half a trillion soybeans later,

we've saved more than 228 million pounds of carbon dioxide from entering the atmosphere. This is the same amount that would be consumed by 4 million trees per year, according to North Carolina State University.

The innovative use of soy foam as a plant-based alternative to traditional petroleum-based products is what inspired us to adopt it in 2007 – bringing key sustainability benefits to our vehicles without compromising durability or performance.

We can credit our company

founder Henry Ford with the idea of incorporating biomaterials back in the 1940s, so for us, continuing to implement his vision is the right thing to do. The research and testing of renewable, plant-based alternatives to petroleum-derived plastics has been my life's work since 2000, and I'm proud to be able to continue the vision of Henry Ford.

But just bringing the idea to market in the first place was a real challenge. Those first foams, frankly, were terrible! They met none of the rigorous requirements



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

THIS YEAR marks 10 years since Ford first used soybean-based foam in the 2008 Mustang.

of automotive seating. Early trials failed to meet durability standards for seat cushions, which need to rebound for the equivalent of 15 years. Not to mention, the soy and petroleum materials separated, and the soy foam didn't smell very good. So we set out to painstakingly explore how to improve the formulations, rebalance the chemistries and remove odorous compounds.

Just 10 years ago, the world was a different place. Oil prices were low - \$40 a barrel. Not many saw financial gain in being green at the time, so convincing suppliers that

soy foam was the material of the future wasn't easy, either.

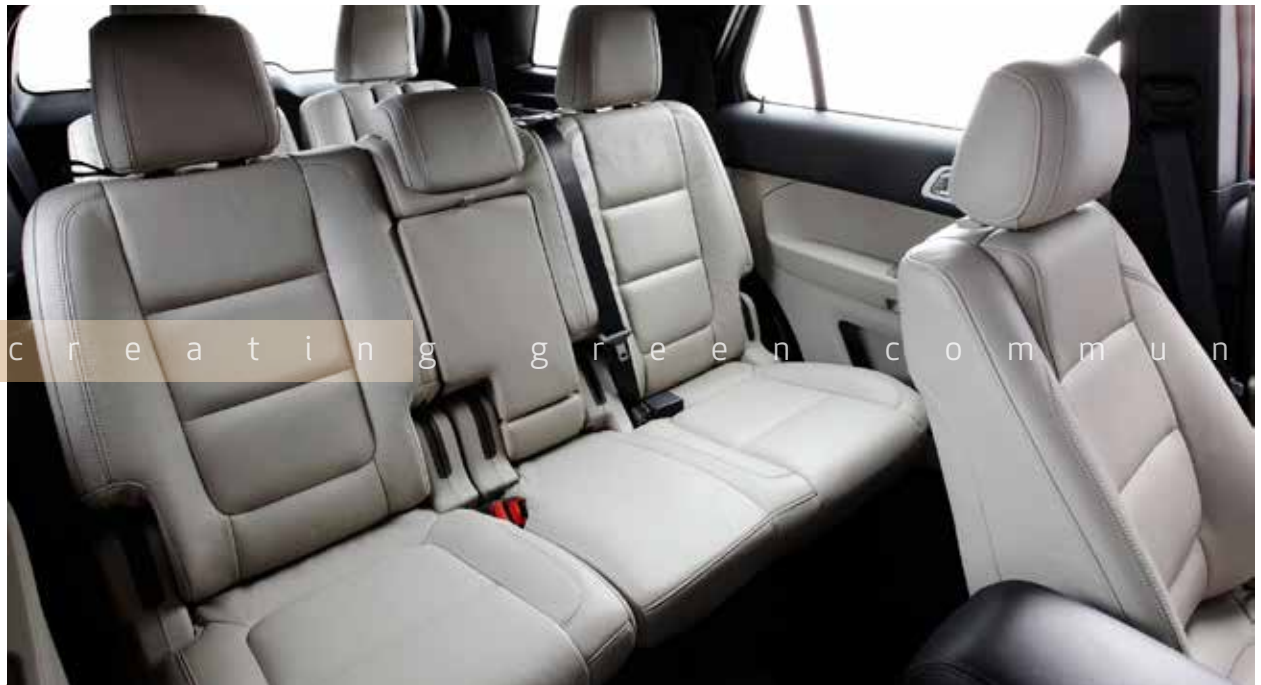
In those early days, we relied on a combination of things, including support from the United Soybean Board in funding some initial trials, as well as the personal vision and crucial endorsement of Bill Ford, then CEO.

In 2008, when oil prices skyrocketed, the value of soy foam became suddenly obvious. Not only was replacing petroleum-based polyol good for the environment, it was good for business. We'd been doing our

homework, so Ford was ready.

We were eager to share the potential for soy foam and boost sustainable applications of it wherever possible, so we worked tirelessly with other industries - agriculture, furniture and home goods - to help them formulate foams specific to their needs as well.

Building on our success with soy foam, we began to develop other renewable materials to incorporate into our vehicles, which in turn further helped us reduce greenhouse gas emissions. In some cases, the material



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

allowed for weight reductions as well, leading to improved fuel economy for many of our vehicles.

Of course, our work implementing biomaterials into our vehicles has not been accomplished overnight. We are proud to now feature eight sustainable materials in our production vehicles – soy, wheat, rice, castor, kenaf (hibiscus), tree cellulose, jute and coconut. As we continue to experiment, the list of renewable resources we are researching reads like an entire farm – wheat straw, tomato peel, bamboo, agave fiber, dandelions, even algae!

We're also exploring innovative uses of carbon itself, and are

first in the industry to develop foams and plastics using captured carbon dioxide. This is the type of innovative work I'm proud to say my team does every single day at Ford.

A decade on, we continue to collaborate with the United Soybean Board to develop soy-based materials for rubber components like gaskets, seals and wiper blades. Today, our use of soy foam looks like a landmark first step.

Soy was our introduction to sustainable materials. Now, the next 10 years promise even more radical research and revolutionary innovation, underpinned by responsible investment and pioneering

vision. We need to embrace the vast host of materials Mother Nature gives us, and employ them to their best advantage. This includes using locally sourced plants and crop waste where we assemble our vehicles, something with the potential to further reduce shipping emissions and provide area farmers with new revenue streams.

Ford intends to remain the industry leader in the use of sustainable materials as we move into a future that's guaranteed to be exciting. We've learned a lot over the past decade-plus. Most importantly, we've learned we can provide the world with a host of alternative material choices that have less impact on the environment.



Creating awareness on waste segregation culture

A two-day exhibition was organized in January 2018 by the Dubai Municipality's Waste Management Department on its Smart Sustainability Oasis project at Dubai Customs. The aim was to create awareness among the employees and customers of Dubai Customs on establishing a culture of segregating domestic waste, reflecting its importance in realizing the environmental strategic goals thereby reducing depletion of resources and expenses.

According to Eng. Abdul Majeed Sifai, Director of Waste Management Department and Head of the Sustainable Waste Management Awareness Group in the Municipality, "The two-day

event at Dubai Customs was attended by 350 employees, who were educated on the different types of wastes received at the Smart Sustainability Oasis at its locations across Dubai."

"The participants were invited to bring three types of recyclable wastes; paper, plastic and electronic wastes. The Customs employees were able to bring 860kg of recyclable waste. We also honoured two employees, Mohammed Farooq Abubaker and Mustafa Kamil with prizes from Canon for winning the competition for gathering maximum amount of recyclable waste," said Sifai.

Sifai said that the Smart Sustainability Oasis is a

pioneering project that allows the public to dispose of 18 types of recyclable materials, and also takes care of the People of Determination.

"This year, we will install 13 more centres as part of the first phase of the project. These smart sustainable centres are designed according to best international specifications and will generate clean power by using solar panels," he said.

"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," said Sifai.

MOCCAЕ signs MoU with Ramsar Convention Secretariat



Dubai to host the 13th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands, COP13, from the 21st - 30th October 2018.

The Ministry of Climate Change and Environment, MOCCAЕ, and the Ramsar Convention Secretariat have signed a Memorandum of Understanding, MoU, as the UAE is gearing up to host the 13th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands, COP13.

The conference will be hosted in cooperation with Dubai Municipality, the official sponsor, and will take place from the 21st - 30th October 2018. The MoU was signed by Sultan Alwan, Assistant Under-Secretary of the Regions Sector at

MOCCAЕ, and Jonathan Barzdo, Deputy Secretary-General of Ramsar Convention on Wetlands.

The UAE has joined and ratified the Ramsar Convention on Wetlands pursuant to the Federal Decree No. 11 of 2007, and has listed in the same year Ras Al Khor Wildlife Sanctuary, Wadi Wurayah National Park in Fujairah, Mangrove and Alhafeya Protected Area in Khor Kalba, Sir Bu Nair Island Protected Area in Sharjah, Al Wathba Wetland Reserve, Bul Syayeeef Marine Protected Area in Abu Dhabi, and Al-Zora Protected Area in Ajman, as wetland sites of international

importance. Commenting on the MoU, Alwan said, "The UAE's regional and international efforts in supporting high biodiversity and maintaining sustainable natural resources have secured it a prominent position as a world-class hub for environmental conferences and major events, such as 13th Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands.

Under the MoU, the UAE will organise and host the COP13, and is expected to draw participation from over 1200 representatives of the governments of the Contracting



MOCCA will carry out awareness campaigns to educate the public about wetlands, their environmental significance, and the best ways to conserve them

Parties. Alwan pointed out that the MOCCA will carry out awareness campaigns six months before the conference commences, to educate the public about wetlands, their environmental significance, and the best ways to conserve them.

“Wetlands have received the attention of the government, and the UAE vision 2021 confirms the importance of conserving our rich natural environment and protecting these fragile ecosystems from urbanisation and human activities.

“We always seek to increase the percentage of officially announced

natural protected areas, as per specified world ratios. The national strategies for biodiversity and sustainability of the marine and coastal environments will play important roles in preserving the said environments and enhancing their ability to cope with human and natural challenges,” he added.

Highlighting Dubai Municipality’s role in hosting the conference, Alia Al Harmoudi, Director of Environment Department at Dubai Municipality, said, “Sponsoring the COP13 affirms the municipality’s vision towards developing a happy and sustainable city. The event will see the

participation of 169 countries and this is the first time this conference will be held in an Arab country.”

In a statement, Barzdo said, “We appreciate the generosity of the UAE Government for hosting the conference. The theme of this meeting is ‘Wetlands for a Sustainable urban future’, and Dubai will serve as an excellent host city given its commitment to the conservation and the wise use of wetlands.

“It is especially relevant in this Year of Zayed to recognise the commitment to nature and wetlands of the founder of the UAE.”

Research

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

Rain Enhancement Science promises new water security solutions



[Research groups from the USA, China and Russia announced as awardees of UAE Rain Enhancement Program's US\\$5 Million Grant](#)

Under the patronage of His Highness Sheikh Mansour bin Zayed Al Nahyan, Deputy Prime Minister of the UAE and Minister of Presidential Affairs, the awardees of the Third Cycle of the UAE Research Program for Rain Enhancement Science were announced and honored at an exclusive ceremony held as part of Abu Dhabi Sustainability Week (ADSW) 2018.

Several ministers, VIPs, and senior officials attended the ceremony including His Excellency Ahmed Juma Al Zaabi, Deputy Minister of Presidential Affairs in the UAE

and Chairman of the Board of Trustees at the National Center of Meteorology; His Excellency Eng Suhail Mohamed Al Mazrouei, UAE Minister of Energy and Industry; His Excellency Dr Sultan Al Jaber, Minister of State; His Excellency Dr. Ahmad Belhoul Al Falasi, Minister of State for Higher Education and Advanced Skills; Her Excellency Mariam Al Muhairi, Minister of State for Food Security; as well as other dignitaries, a number of prominent scientists, researchers, and enthusiasts.

Three researchers from the USA,

China and Russia, respectively were named as awardees of the US \$5 million grant offered by the Program. His Excellency Ahmed Juma Al Zaabi, Deputy Minister of Presidential Affairs in the United Arab Emirates and Chairman of the Board of Trustees at the National Center of Meteorology awarded the three researchers.

The three awarded scientists leading the research teams that will share this cycle's grant of US\$5 million are:

- Professor Eric Frew, of the University of Colorado, for his

مبروك للحاصلين على منح الدورة الثالثة

CONGRATULATIONS TO OUR THIRD CYCLE AWARDEES



THE UAE Research Program for Rain Enhancement Science is an internationally-recognized initiative offering a grant of 5 million US dollars to be shared by up to five winning research proposals

project dealing with targeted observation and seeding using autonomous unmanned aircraft systems.

- Dr Lulin Xue, of the Hua Xin Chuang Zhi Science and Technology LLC in China, for a project entitled “Using Advanced Experimental - Numerical Approaches to Untangle Rain Enhancement (UAE-NATURE)”.
- Dr Ali Abshaev, of the Hail Suppression Research Center in Russia, for a project examining the creation of updrafts for the

formation of artificial clouds and rainfall.

Reflecting on the impact of the Program, His Highness Sheikh Mansour bin Zayed Al Nahyan, said: “The UAE Research Program for Rain Enhancement Science demonstrates our leadership in strengthening global water security and devising the innovative solutions needed to aid people around the world at risk of water stress.

“Through this bold and ambitious initiative, we are also fulfilling the equally important goal of

developing the capacities of the UAE’s knowledge economy while encouraging and supporting productive international research collaboration.”

“It is imperative for all of us to devote our resources and employ creative thinking to secure sustainable supplies of clean water. As rapidly expanding populations place increasing pressure on limited water sources, the UAE is playing a dynamic and imaginative role in advancing the science and technology needed to ensure water for all in need.”



Green Flash



Environmental Education

Environmental disasters are now among the most serious challenges facing humanity that is placing our one and only living planet at stake. Governments are passing laws and regulations, strengthening concerned authorities and providing funds for capacity building but not enough is being done to change the lifestyles and attitude of the population. Environmental awareness raising is receiving very little attention in mass media, even in developed countries. Civil Society Organizations, with meager resources, little support and no authority, are doing more than official organizations to raise awareness.

Environmental education is also lagging behind. It is the most important tool for changing lifestyles and attitude across generations, as it is meant to increase public awareness about environmental issues and lays the foundations for fully informed individuals thereby ensuring

active participation in environmental protection and the prudent and rational use of natural resources.

Knowledge, skill, and attitudes are the essential themes of environmental education. These form the basis for making informed judgments about the environment. Children should know the environment as a common heritage of mankind with a common duty to maintain it, protect it and improve its quality as a contribution to the protection of human health and safeguarding the ecological balance.

The long-term aims of environmental education are to improve environmental management and provide satisfactory solutions to environmental issues. It should provide opportunities to acquire knowledge, values, attitudes, commitment and skills needed to protect and improve the environment. It is closely linked to the other cross circular themes in similar subject areas. Promoting positive attitudes towards the environment is essential if students are to value it and understand their role in safeguarding it. The development of such attitudes should include appreciation of the environment and concern for other living things on earth.

Environmental education has three linked components: Education about the environment (Knowledge), Education for the environment (Values, Attitudes and Positive Actions), and Education through the environment (Resources).

Environmental education is also meant to develop environmentally literate citizens who can compete in the global economy and acquire the skills and knowledge to make well-informed choices concerning the environment, and who exercise the rights and responsibilities of the members of a community. It should contribute to an understanding of society, technology, productivity and conservation of natural and cultural resources.

Environmental education must become a vehicle for engaging young minds in the excitement of first hand observation of nature and understanding the patterns and processes in the natural and social worlds. In senior secondary stages, some of the major topics such as environmental protection, management and conservation ought to be addressed in more details. Therefore, environmental education should be regarded as a priority issue in school curriculum and training of teachers in environmental education methodologies is also vital.

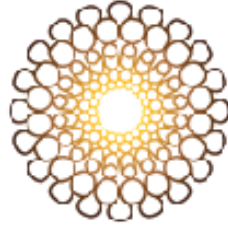
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