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# Society & Environment

creating green communities for a better tomorrow

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08

## 17th Liwa Date Festival Held In Compliance With COVID-19 Norms



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The  
**PETSHOP**

The annual Liwa Date Festival transforms the date and palm tree into a symbol of Emirati perseverance in the past, a source of wealth in the present, and a guarantee of prosperity for the future.

In the UAE, this sweet little fruit has played a prominent role in society and takes its place alongside other national symbols, such as the falcon, the Arabian oryx and the dhow, as the country's national fruit. The date palm tree has a heritage and historical value in the UAE and was accorded top priority by the founding father of the UAE, Sheikh Zayed bin Sultan Al Nahyan, who encouraged farmers to embrace modern agricultural techniques alongside eco-friendly practices.

The palm tree has played a great role in meeting the nutritional and daily life needs of communities thriving in the desert. It has served as a critically important staple food, a chief source of wealth and is of unrivalled cultural importance in arid regions of North Africa and the Middle East.

## Chairman's Message



**Prof. Mohammed bin Fahad**  
Executive Editor

The UAE has more than 40 million palm trees dotted across the country and is one of the largest date-producing countries in the world. Considerable attention has been devoted by the government and by local farmers to the date-planting programme, while at the same time extensive support has been given to scientific research on date palms.

The Liwa Date Festival aims to assist the exchange of technical expertise among farmers, land-owners and agricultural industry players, and is a unique gathering place for those passionate about the role of palm trees and half-ripe dates, including individuals and companies. Over the years, the event has succeeded in raising awareness about the essential development of palm tree agriculture and the need to improve the quality of dates.

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## Upcoming events

### International Conference on Sustainable Water Management

**Date:** 02 - 03 Aug 2021

**Location:** Park Inn by Radisson Samsun, Tekkeköy, Turkey

The conference provides a platform for professionals involved in water resources management to exchange knowledge and gain an insight into the state-of-the-art in the current technology, techniques, and solutions in sustainable water management as they have been developed and applied in different countries. Participants include a wide variety of stakeholders from research and academia to industrial sectors as well as government organizations.

### Biennial Conference of Tropical Biodiversity

**Date:** 04 - 05 Aug 2021

**Location:** Makassar, Indonesia

Organized by the Faculty of Forestry, Hasanuddin University Makassar, this conference is a scientific forum to enhance science and technology, and together with researchers, scientists, practitioners, and scholars to anticipate the impacts of climate change in the field of biodiversity.

### Water Safety Conference

**Date:** 11 - 13 Aug 2021

**Location:** UiT Norges Arctic university in Narvik, Norway

The Water Safety Conference will bring together leading international experts from academia, industry, government, policymakers/authorities and other organizations to actively exchange, share, and challenge state-of-the-art research on water safety planning (WSP) that could contribute practical knowledge in the implementation of WSP to the key stakeholders involved in providing safe drinking water.



**"Dr. Meshgan Al Awar** was a dear friend and cherished colleague. She had been a true crusader of the environmental cause - both in the region and globally and supported youth empowerment.

A dedicated environmentalist, she lent her strong voice to numerous causes that continue to enrich the UAE and the region even today. She remained a driving force at the Zayed Foundation and was inspired in her work by the sustainable development ideals of the late Sheikh Zayed bin Sultan Al Nahyan, founding father of the UAE.

It was a privilege to know Dr. Meshgan; she embraced her profession and responsibilities with dignity, strength, and wisdom. Her friendship, encouragement, and guidance will always have a special place in our hearts."

**Prof. Mohammed Bin Fahad**

Chairman, Zayed International Foundation for the Environment

# IN REMEMBRANCE OF **Dr. Meshgan Mohammed Al Awar** (1962 - 2020)

In both her personal and professional life, the late Dr. Meshgan Mohammed Al Awar, former Secretary General of the Zayed International Foundation for the Environment, had displayed her principled leadership skills and was a trailblazer in fields as diverse as applied science, the environment and global sustainable development, amongst a host of others.

Apart from being a stellar mother and wife, Dr. Al Awar was an accomplished woman, who had represented the UAE on numerous occasions at various agencies of the United Nations and the Arab League. A staunch environmentalist and author of several scientific articles, Dr. Al Awar was also the Director of Research and Studies Centre at Dubai Police Academy.

As an outstanding female scientist of the Arab region, Dr. Meshgan Al Awar served as a role model for young girls to study science and pursue scientific careers. Having secured a PhD in Physical Chemistry from the University of Wales, UK, in 1996, Dr. Meshgan had previously graduated in Science with distinction from the UAE University with a major in Chemistry and a minor in Geology.

In 2000 and 2010, she had successfully completed training courses on Remote Sensing and Geographic Information Systems (GIS) at the US-based Boston University Center for Remote Sensing and earned a distinguished place in the “Arab Women in Science Hall of Fame” in 2012, following recognition by The Middle East and North Africa Environment, Science, Technology, and Health Office, US Embassy in Jordan.

However, it was in her role as a committed champion of the environment and sustainable development, that Dr. Al Awar gained greater international renown. As Secretary General of the Zayed International Foundation for the Environment, her diligent efforts had steered the vision and agenda of the organisation onto the global stage. She was instrumental in not only raising environmental awareness globally and across the Arab region but had also made a lasting impact on the global sustainability agenda.

Following her demise last year, stalwarts in the global environmental field and representatives of various UN bodies including United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), and United Nations Office for South-South Cooperation (UNOSSC), had commended her unparalleled support for environment conservation as well as youth empowerment, leadership, and education, and remembered her diligence and commitment towards South-South and triangular cooperation.

## 17th Liwa Date Festival Held In Compliance With COVID-19 Norms

The 17th Liwa Date Festival got under way on July 15, 2021, under the patronage of H.H. Sheikh Mansour bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Presidential Affairs, under preventive and precautionary measures.

Organised by the Cultural Programmes and Heritage Festivals Committee - Abu Dhabi, the



*The Liwa Date Festival is an annual event that introduces date producers to modern agricultural practices and facilitates the exchange of expertise on the best ways to produce the highest quality date*

activities of the festival were limited to date and fruit competitions, the model farm and the most beautiful handicraft. Due to the exceptional circumstances caused by COVID-19, visitors were not allowed to attend the festival.

Major General Faris Khalaf Al Mazrouei, Commander-in-Chief of Abu Dhabi, and Chairman of the Cultural Programs and Heritage Festivals Committee - Abu Dhabi, was briefed during a tour of the event about efforts made by various committees, juries and teams to run the festival activities smoothly given the exceptional circumstances of the COVID-19 pandemic.

He said that the festival embodies the vision of the late Sheikh Zayed bin Sultan Al Nahyan, the founder of the agricultural renaissance in the UAE, and the one who laid down the foundations for the expansion and development of the

*The 2021 edition featured 11 date beauty contests, seven fruit competitions, three 'best farm' competitions, and a fruit basket beauty contest*



agricultural sector. He added that "Sheikh Zayed also greatly valued the historical status of the palm tree; this tree that was glorified by the Holy Books and is rightly deserving of its esteemed status in the local and international world heritage arenas."

### **A national and heritage symbol**

Throughout the history of the UAE, the palm tree remained a national and heritage symbol and a major source of food security. The wise leadership further embedded the status of the palm tree amongst the people of the UAE through the creation of a strong and sustainable agricultural infrastructure, which also contributed to strengthening human connectedness with the earth.

Held in the Al Dhafra Region in western Abu Dhabi emirate, the Liwa Date Festival is an annual event

that introduces date producers to modern agricultural practices and facilitates the exchange of expertise on the best ways to produce the highest quality date.

### **Wide array of competitions**

The 10-day event featured a wide array of competitions, displays and activities celebrating not only dates but the UAE's broader cultural heritage. The annual heritage festival in Abu Dhabi emirate had prizes worth AED 8.2 million for 22 competitions -11 Ratab Mazayna with participation from farmers in the various emirates of the country, 7 fruit competitions, which were open to state farmers and those interested in home and garden farming, 3 competitions for the model farm (eastern and western Liwa and the cities of Al Dhafra), and the most beautiful handicraft competition targeting creators and owners of traditional crafts.



The first day saw the competition for the heaviest date branch and best dubas date. The festival also held competitions for the best mangoes and lemons and best model farm.

The 2021 edition, which allowed only participants to attend to protect the health and safety of visitors and organisers, featured 11 date beauty contests, seven fruit competitions, three 'best farm' competitions, and a fruit basket beauty contest. The competitions of the 17th Liwa Date Festival concluded on July 25.

The festival celebrates UAE culture and heritage, supports the agriculture sector and encourages farmers to exchange technical expertise to produce better quality fruit.

### **AED8.2 million in prize money**

Obaid Khalfan Al Mazrouei, Director of the

Festival and Director of the Planning and Projects Department of the Cultural Programmes and Heritage Festivals Committee, said that the festival is organised annually upon the directives of the UAE's leadership, with the aim of preserving the country's heritage and developing agriculture.

It is also being closely monitored by H.H. Sheikh Hamdan bin Zayed Al Nahyan, Ruler's Representative in Al Dhafra Region, and supported by Sheikh Mansour, he added, stressing that it achieved success despite the extraordinary global conditions caused by the COVID-19 pandemic.

The event's various competitions witnessed the participation of competitors from all emirates, showcasing distinguished varieties of dates and fruits, including dozens of types of premium dates locally produced in the UAE, he added.

*The versatile date palm and the date fruit have played an important role in fulfilling the dietary needs of generations of desert communities*



Al Mazrouei pointed out that this year's festival included 22 dates, fruits and model farms competitions, awarding 253 prizes with total prize money of over AED8.2 million.

On the first day of the competition which witnessed the Ratab Al-Dabbas Mazayna, 25 prizes worth AED446,000 were allocated. The inaugural day also saw the competition for the largest A'adj, for which 15 prizes were allocated at a total value of AED234,000.

### **Comprehensive health safety measures**

The 17th Liwa Date Festival, which celebrates the UAE's culture and heritage and supports local agriculture was closed to visitors and activities were limited in view of the prevailing coronavirus pandemic.

Comprehensive measures were in in place to

protect the health of participants, including COVID-19 countermeasures. Participants had to present a COVID-19 vaccination certificate and negative COVID-19 test results through Alhosn App 48 hours ahead of the event.

The festival shed light on the significance of palm trees in the Emirati heritage while tasting some half-ripe Ratab dates.

According to Eissa Saif Al Mazrouei, Deputy Chairman, Cultural Programmes and Heritage Festivals Committee - Abu Dhabi, the festival received sponsorship and support from 15 government and private entities, particularly national institutions which support projects that preserve UAE heritage.

### **In support of local agriculture**

For centuries, palm trees and half-ripe dates



have been an integral part of Emirati society and its deep-rooted traditions.

The versatile date palm and the date fruit have played an important role in fulfilling the dietary needs of generations of desert communities, including those in the United Arab Emirates. It represents an integral part of the UAE's deep-rooted heritage and is the source of the most beloved fruit that is the very focus of the festival.

The fruit is highly nutritious, while the trunk, fronds and other parts of the tree were traditionally used in buildings, handicrafts and tools. The Liwa Date Festival highlights these and other important aspects of the date palm.

Held in the Al Dhafra Region in western Abu Dhabi emirate, the Liwa Date Festival is an annual event that introduces date producers to modern

agricultural practices and facilitates the exchange of expertise on the best ways to produce the highest quality date.

The festival also is one of Abu Dhabi's most significant heritage events and tourist attractions that highlights the many ways dates have impacted the cultural, heritage and economic life of the country. It provides a great place for visitors to learn about dates and to sample the most popular date varieties grown in the UAE.

The festival's main event is the competition for the best date fruit. Emirati farms vie for the title of best date grower. There also are date auctions, where dates can sell for over AED 6,000 (USD 1,650) per kilo; lectures on date farming; poetry evenings, and an exhibition space for date farming equipment and date products.

## Fifth Al Dhaid Date Festival Opens in Sharjah

The fifth edition of the Al Dhaid Date Festival began on July 22, 2021, at the Expo Al Dhaid, Sharjah.

The four-day event was organised by the Sharjah Chamber of Commerce and Industry (SCCI) and saw the participation of dozens of palm growers, along with the official entities related to palm cultivation.

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Present at the opening were, Sultan Abdullah bin Elwan, Acting Under-Secretary of the Ministry of Climate Change and Environment; Abdullah Sultan Al Owais, Chairman of the SCCI; Mohammed Ahmed Amin Al Awadi, Director-General of the SCCI; Muhammad Musabeh Al Tunaiji, General Coordinator of the Festival; Rashid Mohair Al Ketbi, Chairman of the Screening and Evaluation Committee; Khalifa Rashid Al Tunaiji, Chairman of the Events and Theatre Committee, and Jamal Saeed Bouzanjal, Head of the Media Committee amongst others.

This year's edition had two new categories, one for local mangoes and the other for yellow and red figs, in addition to other categories.

Expressing his gratitude to H.H. Dr. Sheikh Sultan bin Muhammad Al Qasimi, Supreme Council Member and Ruler of Sharjah, for his unwavering

support to the Al Dhaid Date Festival, Al Owais, Chairman of the SCCI, said that the Sharjah Chamber had first launched the event in 2016 as an annual platform to support palm growers and farmers in Al Dhaid in Sharjah, and the UAE in general.

Al Dhaid Date Festival has economic dimensions the Chamber seeks to accomplish by contributing to rising and diversifying the quality of local products, said Al Awadi, Director-General of the SCCI, explaining that the SCCI is working, through the development of the festival competitions and its prizes, to provide more opportunities for farmers.

Al Awadi mentioned that the UAE accounts for about 30 percent of the global trade volume of dates and is also among the top 10 producers of dates in the world.

## Expo 2020 And UN Global Compact To Co-curate SDG-focused Business Forum

Expo 2020 Dubai and the United Nations Global Compact are joining forces to hold a Sustainable Development Goals Business Forum during Expo's Global Goals Week (16-22 January 2022), to unite businesses and spur further action towards a sustainable and inclusive future.

The collaboration reflects a shared and urgent



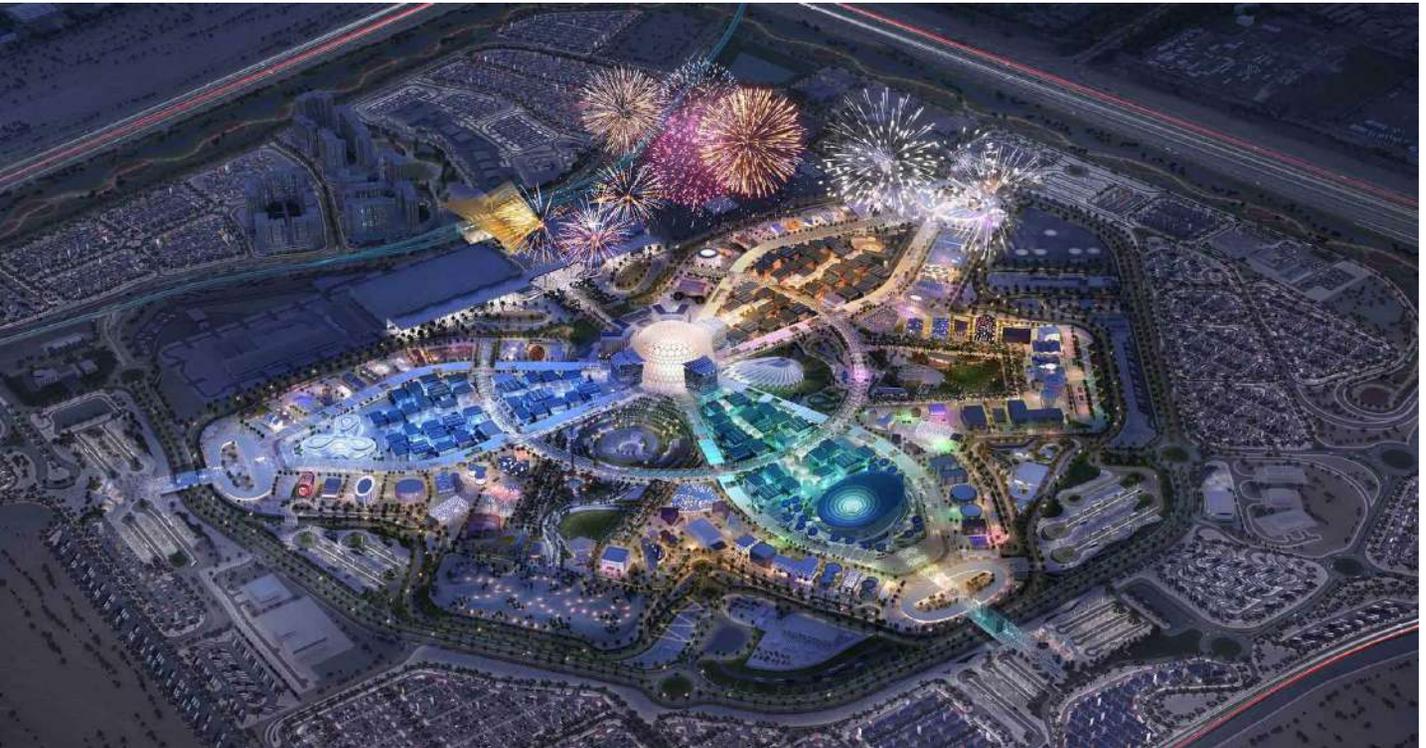
Expo 2020 Dubai and the United Nations Global Compact are joining forces to hold a Sustainable Development Goals Business Forum during Expo's Global Goals Week

commitment to advance the Sustainable Development Goals (SDGs) and drive meaningful change.

Spotlighting the work of the UN Global Compact – the world's largest corporate sustainability initiative – the business forum will examine how the global community can foster economic prosperity for all, while ensuring the SDGs are achieved by the 2030 deadline. Dubai Chamber of Commerce, Official Business Integrator of Expo 2020 Dubai, will co-curate this and all other themed business forums throughout the six-month mega event.

The collaboration will leverage the presence of more than 200 international participants at Expo 2020 to encourage a new wave of UN Global Compact membership participation and drive progress towards sustainable and inclusive

## *Collaboration to spur private sector action to achieve the Global Goals by 2030*



economic growth, in line with the UN Global Compact's mission to accelerate the collective impact of business at a global scale by upholding the Ten Principles and delivering the SDGs through accountable companies and enabling ecosystems.

### **Sustainable growth underpins philosophy of Expo 2020**

Nadia Verjee, Chief of Staff, Expo 2020 Dubai, said: "Our collaboration with the United Nations Global Compact is another milestone in Expo's wider relationship with the UN. Sustainable growth is at the heart of the UAE's strategic vision and underpins Expo 2020's entire philosophy, before during and after the event. It cuts across Expo in all manner of ways, from highlighting how countries are placing sustainable development at the core of their strategies, exhibitions and programming, to actively

engaging, informing and inspiring millions of visitors to make a conscious difference in how they live their lives."

Aiming to be one of the most sustainable, inclusive World Expos in history, Expo 2020 has aligned its sustainability strategy with the SDGs, working with international participants, commercial partners, stakeholders, and its entire supply chain to embed sustainability and inclusion into the physical site, the pavilion designs, and event operations.

### **Long-term equitable growth**

Going beyond the environmental aspects of sustainability, Expo's Better Together worker welfare strategy will leave a lasting legacy of change in the Middle East construction industry, while its policy of 'one nation, one pavilion' ensures that all countries, large or small, have an



equal chance to participate and benefit from the opportunities associated with the global event. This commitment to building long-term, sustainable and equitable growth also extends to the wider Expo family, and many of Expo 2020's commercial partners are already participants of the UN Global Compact.

The collaboration with the UN Global Compact also highlights the strength of the combined convening power of World Expos and the close relationship between the UAE, Expo 2020 and the UN. Just as the UN Global Compact brings together more than 12,000 companies and 3,000 non-business stakeholders, Expo 2020 will unite more than 200 participants, including 190-plus nations, as well as businesses, multilateral organisations and educational institutions, to form meaningful partnerships that can impact global change in an unprecedented way.

### **Forming meaningful partnerships**

Dan Thomas, Chief of Communications & Strategic Events, UN Global Compact, said: "We are pleased to partner with Expo 2020 to engage more companies in driving the SDGs. We will use this opportunity to encourage more business leaders to set ambitious, measurable targets for sustainability. Tangible progress is essential for a just, inclusive and sustainable recovery from COVID-19 and to avert the climate and inequality crises that can hold human progress back if left unaddressed."

The UN has already partnered on a number of cross-cutting thought leadership platforms. Its dedicated pavilion at Expo 2020 is an opportunity to engage millions of visitors from around the world and inspire action around the 2030 Agenda for Sustainable Development.

## ICBA To Help Bahrain Strengthen Capacity In Water Management

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The International Centre for Biosaline Agriculture (ICBA) and the National Oil and Gas Authority (NOGA) of the Kingdom of Bahrain have joined forces to enhance institutional capacities in integrated water resources management in the Kingdom of Bahrain.

The ICBA and NOGA inked an agreement to this

effect during a virtual meeting hosted by NOGA on 24th June, 2021. The agreement was signed by Dr. Tarifa Alzaabi, Acting Director-General of ICBA, and Nasser Sultan Al-Suwaidi, CEO of NOGA, in the presence of various partners and stakeholders.

Under the agreement, the ICBA will provide technical support for ongoing activities to strengthen the Water Resources Council (WRC). Chaired by the Deputy Prime Minister of the Kingdom of Bahrain, the WRC is responsible for coordinating water policy formulation and implementation. The activities under the agreement will broaden the WRC's functions and enhance its role in climate risk management and wastewater recycling, treatment and reuse.

Commenting on the agreement, Dr. Alzaabi said, "Improving water accountability, water-use

efficiency and water conservation are necessary conditions for achieving water security. Applying the principles of integrated water resources management is essential to holistically balance competing demands for water. This forms the basis for sustainable utilisation of water resources for both current and future needs."

Al-Suwaidi said, "The project's scope includes the development of institutional capacities of government sector employees in integrated water resource management (IWRM) that will aid in the management of water resources, which is considered one integrated network."

The agreement aims to equip relevant institutions with the means to conduct water resources monitoring and assessments and provide evidence to support decision-making processes.

## Sustainability At The Forefront Of Etihad Rail Project

The Environment Agency – Abu Dhabi (EAD) and Etihad Rail, the developer and operator of the UAE’s National Rail Network, have collaborated in implementing sustained environmental stewardship during the planning and construction of the Etihad Rail Project, one of the largest infrastructure projects in the UAE.

The first phase of the project is already



Sustained environmental stewardship marks the planning and construction of the Etihad Rail Project

operational, while the second phase will extend across the UAE from its border with Saudi Arabia into Abu Dhabi and further Dubai and Sharjah into Fujairah on the east coast.

Since the early stages of the project, the two entities have collaborated on a range of initiatives, including habitat conservation, animal protection, and rehabilitating native trees and shrubs across the emirate of Abu Dhabi to conserve UAE’s diverse natural heritage.

As part of collaborative efforts, EAD and Etihad Rail are actively relocating native and high conservation value trees, such as Sidr and Date Palms, with over 550 Ghaf trees being successfully translocated and a further 590 trees planted.

Additionally, EAD and Etihad Rail are constructing wildlife corridors along the nearly

*Collaboration to ensure that the development of the rail network does not impact critical habitats, plants and animal species*



1,200 km stretch of the railway line and are integrating 95 animal crossings and culverts across the project.

Eng. Shaikha Al Hosani, Executive Director of the Environment Quality Sector at EAD said: "I could not be prouder to have partnered with Etihad Rail during the construction phase of the new railway. This important partnership will ensure development of a critical infrastructure while ensuring the protection of the environment. Etihad Rail is aligned with the vision of EAD and our government and prioritises safeguarding our natural resources. Through diligent impact assessments and a flexible approach, on behalf of Etihad Rail, we were able to realign the railway to avoid our critical habitats, plants, and animal species."

Mohamed Almarzooqi, Executive Director of Rail

Relations Sector at Etihad Rail said: "Committed to being a 'Good Neighbour' to the local community surrounding the railway network, Etihad Rail enforces leading best practices in sustainability to preserve the diverse natural heritage of the UAE.

"At Etihad Rail, we actively support heritage conservation and eco-tourism projects that act as a steward for nature and the environment, creating new social and economic opportunities and boosting quality of life." Etihad Rail is playing a significant role in the UAE's sustainable development and is actively contributing to environmental preservation.

"With one fully loaded train equivalent to taking 300 trucks off the road and producing daily 70-80% less CO2 emissions than the trucks required to transport the same tonnage, the network is



reducing pollution, lowering fuel and maintenance costs, and increasing road safety.

### Protecting Animal Habitats

EAD and Etihad Rail have assigned a dedicated team of environmental impact assessment specialists, ecologists, air and noise scientists, as well as forestry specialists to manage complex review process for the project's environmental studies. They have also carried out extensive studies to understand species movement routes across the construction path of the project.

Habitat surveys were conducted, in line with Etihad Rail's and EAD's priority to protect and conserve Abu Dhabi's pristine natural heritage. In addition, detailed environmental baseline surveys were carried out for the project's terrestrial ecology that assessed species including gazelles and Dhub, as well as their habitats along the

length of the railway to identify their natural corridors.

Accordingly, EAD and Etihad Rail incorporated the design and construction of culverts and wildlife crossings that allows the animals to move beneath the track safely. The two entities also carefully organised the transport of wildlife to other suitable and protected habitats. So far over 300 animals, including 242 Middle Eastern Short-Fingered geckos, 24 Baluch rock gecko, five Saw-faced vipers, have been relocated, among others.

### Safeguarding Wildlife Reserves

Al Wathba Wetland Reserve is an EAD protected area and is located approximately 270 m away from the proposed route of the railway. Al Wathba Wetland Reserve was established in 1998 and was declared as a Ramsar site in 2013. It is also listed on the IUCN Green List of Protected and

## *Wildlife corridors to be constructed along the nearly 1,200 km stretch of the railway line*



Conserved Areas – the first protected area in the UAE to receive this recognition. Both EAD and Etihad Rail have adopted strict measures to reduce the impact on the species inhabiting the Al Wathba Wetland Reserve in Abu Dhabi, including migratory birds. These measures included speed limitations for the trains when passing by Al Wathba, and a ‘no-horn zone’ to reduce noise disturbance.

During construction, a buffer zone has been created between works and the boundary of the reserve to reduce dust pollution. In addition, the project’s schedule was calibrated to avoid construction during the breeding season of birds and in particular Greater Flamingos. Etihad Rail has furthermore invested in state-of-the-art trains, which use sophisticated noise and vibration controls, engineering design, and suitable equipment to considerably reduce noise-

pollution from the train.

In line with nature and wildlife stewardship efforts, key learnings from the development of Stage One were implemented to further enhance environment protection in Stage Two.

Additionally, to support the Houbara bustard, a vulnerable bird species which was reintroduced to the Al Dhafrah region in 2008, EAD and Etihad Rail are collaborating with the International Fund for Houbara Conservation (IFHC) for new feeding grounds for the bird. Spanning over an area of 500,000 square meters, conservationists will plant 750 Arak trees and 3,200 plants in the new grounds for feeding and habitation. The feeding grounds will support Houbara, which migrate into the UAE from Asia, as an ongoing international effort to protect this vulnerable species.

# UAE's Vast AgTech Potential Under the Spotlight At Virtual Summit

The huge potential of the UAE's advanced agricultural technology sector to meet the UN's Sustainable Development Goals (SDGs) was a key topic taking centre stage at the UAE National Food System Summit Dialogue, which was held virtually on 10th July, 2021.

Hosted by Mariam Hareb Almheiri, Minister of State for Food Security, the dialogue under the



The huge potential of the UAE's advanced agricultural technology sector to meet the UN's SDGs was a key topic at the UAE National Food System Summit Dialogue

theme 'Special Zones for Modern Farming and Access to Technology' formed a preliminary event to the UN's Food Systems Summit, which is scheduled to take place in September.

The summit was attended by representatives from federal government entities, local authorities, the private sector, international organisations, academia, farmers and the youth.

Up for discussion at the dialogue, was how the UAE's lead in implementing AgTech (agricultural technology) could see it playing an influential role in meeting the UN's 17 SDGs, all of which rely on achieving global food security to some extent.

During the conversations, Almheiri highlighted that the drive to meeting the Sustainable Development Goals was in lockstep with the UAE's ambition to be a global hub of innovation-

*FoodTech Valley aims to spearhead innovation and create collaborative networks to lead regional transformation in food systems*



driven food security, as outlined in its National Food Security Strategy 2051.

"The adoption and implementation of technology throughout the food value chain represent not only the best means of enhancing our own country's food security, but it also enables us to become a valuable knowledge resource in this vital area of agriculture - an area that the FAO recognises as essential to meeting the entire array of SDGs," she said.

The UAE minister added, "As the UN has pointed out, the global community is currently, of course, to be able to meet its Sustainable Development Agenda by 2030, with the global pandemic being one major interrupter that is threatening to push the target further into the distance. Nothing short of a sustained and concerted attempt by all stakeholders - governments, NGOs and private citizens - is needed to radically transform the

way we produce, value and interact with food.

"Research, technology and innovation are the essential underpinnings of inclusive, resilient, efficient and sustainable food systems and the UAE is committed to playing its role in accelerating this transition."

The session highlighted the role that the UAE's growing urban farming sector could play in meeting the SDGs, with Controlled Environment Agriculture initiatives that are constructed within the built environment being important food systems disruptors that place crop production at the heart of the community.

She stated that the UAE has huge potential to maximise its urban farming capacities and by bringing food closer to the table, reduce the pollution and costs associated with lengthy transport chains. When scaled up, urban farming



can better insulate countries from supply chain impacts, such as those seen when global pandemics strike.

"By taking this concept even further and encouraging citizens to produce food in their own homes, we move them from being consumers to 'prosumers,' in the process inculcating within them a heightened awareness of the value of food," Almheiri noted.

Attention was also drawn to the FoodTech Valley, a dedicated AgTech city launched on May 1 this year. Under construction in the Warsan area in Dubai, over 18 million square feet of land, FoodTech Valley has been created to spearhead innovation and create collaborative networks to lead regional transformation in food systems.

The city aims to be a hub for future clean tech-based food and agricultural products and, in the

process, enable the country to become a leading exporter of sustainable food systems. It will accelerate self-sufficiency to a certain degree in fresh food produce and reduce wastage of resources by applying research and modern technologies to the latest farming techniques, such as vertical farming, cellular agriculture and hydroponics.

The city will also produce over 300 varieties of crops using modern farming techniques and the latest agri-technologies



## 'Smart Garden' Teaches Kids About Homegrown Food

Young visitors at KidZania's outlets at The Dubai Mall and Abu Dhabi's Yas Mall learnt how to easily grow healthy fruits and vegetables at home through a unique interactive experience delivered during the month of July by Masdar City-based start-up innovation, the HydroArtPod.

As part of KidZania's 'Kids For A Greener World'

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interactive workshop, kids learnt how easy it is to grow fruits and vegetables at home using the HydroArtPod – an app-controlled smart garden that empowers and enables people to grow food and flowers indoors.

Children at each mall got hands-on experience of the HydroArtPod, giving them the opportunity to explore their natural environment and understand how they can contribute towards protecting it. They also learnt how to grow their own plants and find out more about the importance of saving water and recycling.

HydroArtPod inventor, Aline Pate said, "My inspiration for designing the HydroArtPod was to help every home be able to make a little difference toward their own health and minimize our impact on the environment. KidZania's 'Kids For A Greener World' is an important initiative to raise

awareness among younger generations about food production and the environment. We are delighted to partner with KidZania and Emaar in helping the next generation learn how to take care of our world."

The HydroArtPod has been developed by Masdar City-based tech start-up, byAlinePate, which is currently being incubated at the sustainability focused startup accelerator, The Catalyst. The automated HydroArtPod requires minimal user effort, removes the need for chemicals, packaging and transportation, and ensures a steady supply of fresh produce with minimal food waste. Users can also grow edible and decorative flowers easily at home.

The HydroArtPod can be mounted on the walls in a home for easy access, while also looking like a piece of art.

## UAE Explores Cooperation In Food And Water Security With Israel

The sharing of knowledge and expertise in agricultural and water technologies were top of the agenda during the visit of Mariam Hareb Almheiri, Minister of State for Food Security, to Israel, with the trip aligned with the historic opening of the UAE embassy in Tel Aviv.

The visit, which Almheiri and her colleagues from



Mariam Hareb Almheiri, Minister of State for Food Security, led a trip to Israel which also aligned with the historic opening of the UAE embassy in Tel Aviv

the Food and Water Security Office made between 13th and 16th July 2021, aimed to kick start strategic cooperation in the vital areas of food and water security, with Israel and the UAE sharing numerous synergies in these fields. Both countries are technologically advanced and share the same challenges in ensuring their populations have ready access to adequate amounts of nutritious food and water.

"One of the main pillars of the UAE's National Food Security Strategy 2051 is to increase the UAE's use of technology across its entire food value chain, while a second is to expand our international sources of food," she said.

"With the formalising of official relations between our two countries and the opening of a UAE embassy in Tel Aviv, the UAE now has a fantastic opportunity to add value to both of

*Mariam Almheiri signed a Memorandum of Understanding (MoU) with the Israeli Minister of Agriculture to enhance cooperation in food security between the two countries*



these key pillars. We are excited about partnering with Israel and sharing our respective strengths in food security to mutual benefit," said Almheiri.

"Israel has one of the best startup ecosystems in the world and with the AgTech sector dominated by innovation, the UAE is particularly keen to explore collaboration in this area. Similarly, we have much we can offer by way of reciprocation.

"For example, our recently launched Food Tech Valley that aims to become a hub for AgTech can host both emerging and established Israeli companies that are pioneering vital initiatives that include controlled environment agriculture, seed treatment, precise irrigation, solar energy and desalination.

"We believe that partnering with Israel will be a significant boost to the UAE's National Food Security Strategy 2051, which aims to see the

United Arab Emirates as a world-leading hub of innovation food security within the next three decades," she added.

Almheiri signed a Memorandum of Understanding (MoU) with the Israeli Minister of Agriculture, Oded Forer, that aims to enhance cooperation in food security between the two countries in the areas of food production, food supply chains and research and innovations.

She also signed a second MoU with Tamar Zandberg, Israeli Minister of Environmental Protection, aimed at sharing knowledge and expertise, as well as joining research efforts for the mitigation of climate change implications and ensuring biodiversity and ecosystem conservation.

During her visit, Almheiri met Karine Elharrar, Israel's Minister of National Infrastructures,

*The UAE's National Food Security Strategy 2051 includes expanding on the country's international sources of food*



Energy and Water Resources, and Issawi Frej, Israel's Minister of Regional Cooperation, to discuss areas of mutual interest that would benefit both the UAE and Israel.

Almheiri's visit also saw her undertake business meetings with CEOs of relevant companies including Agricora, and receive a number of presentations on the food sector in Israel and the various companies operating within it.

Moreover, during her visit, Almheiri attended the historic opening event of the UAE embassy in Tel Aviv. Following the event, she went on to visit the Faculties of Agriculture at the Hebrew University, which was followed by an excursion to Ben Gurion University, where she attended the opening of the Moshe Mirilashvili Centre for Food Security in the Desert at Ben Gurion University in collaboration with Watergen.

The UAE minister then visited the Volcani Centre for Agricultural Research, after which she was taken to Mitrelli Group to meet with its President and CEO, Haim Taib, along with representatives of a number of Israeli agriculture and water technology companies to discuss the latest advances they are making in food and water security.

On the final day of the visit, Almheiri travelled to the Arava Desert, where she met with the students and staff at the Adam V'Adama school.

Later, she met with Meir Tsur, Mayor of Arava, and the central Arava agriculture manager, and took a tour of the Arava R&D centre, a leading scientific research and development centre that aims to develop and advance new materials, raise the quality of produce, find new crops and open new markets.

## UAE Launches EGS Project To Support Green Industries

To support the growth of the environmental goods and services (EGS) sector, the Ministry of Climate Change and Environment is leading a project that aims to assess the state of play in the local EGS industry.

The EGS Project will define and map the sector, assess its overall economic value, and develop actionable enabling policies to maximise its

UAE NEWS



contribution to economic diversification, industrial competitiveness, and climate action.

Eng Aisha Al Abdooli, Acting Assistant Under-Secretary of the Green Development and Climate Change Sector at MOCCA, said, "The National Climate Change Plan 2017-2050 counts private sector-driven economic diversification among its main goals. This can be achieved by tapping into the potential of businesses in the EGS market as a source of innovation that advances sustainability objectives while accelerating post-COVID-19 recovery."

The EGS Project also supports several other policies, including the UAE Green Agenda 2015-2030, the UAE Circular Economy Policy 2021-2031, the UAE Environmental Policy, the UAE Energy Strategy 2050, the National Food Security Strategy 2051, the UAE Water Security Strategy

2036, and the second Nationally Determined Contribution.

The EGS sector comprises a heterogeneous set of goods and services that protect the environment and conserve natural resources. Its market encompasses a wide range of environmental economic activities across various industries and supply chains that are related to renewable energy, pollution control, energy efficiency, climate-smart agriculture, waste recycling, resource management, and environmental consultancy, among others.

The World Trade Organisation emphasised the importance of addressing the nexus between trade and climate change through the EGS in the process of building back better after the pandemic.

## EPAA Launches Al Hamriyah Coral Reef Cultivation Initiative

The Environment and Protected Areas Authority in Sharjah (EPAA) has started implementing a coral reef cultivation project in the Al Hamriyah region of Sharjah.

The project aims to achieve sustainable development of marine life, increase biological cover and biodiversity as well as rehabilitate marine life in the area.



The Environment and Protected Areas Authority in Sharjah (EPAA) has implemented a coral reef cultivation project in Al Hamriyah to rehabilitate marine life in the area

The coral reef farming project in the Al Hamriyah region will contribute significantly to the rehabilitation and restoration of coral reef areas and will aid in the flourishing of marine life and fisheries, as coral reef farming operations have been used successfully to restore balance to the marine environment and achieve long-term sustainability.

Hana Saif Al Suwaidi, Chairperson of EPAA, said, "The coral reef cultivation project in the Al Hamriyah region is divided into two phases. The first involves the installation of bases (metal wires) in shallow areas ranging from six or seven metres deep.

"They are monitored during the growth period, which is usually in the summer after the end of the breeding season because it achieves the highest rates of growth and survival compared to the winter season."

*Coral reef farming operations can restore balance to the marine environment and achieve long-term sustainability*



The second stage involves transferring the coral colonies from their places of growth and fixing them in the places to be developed and established as well as following up on survival and growth rates. "The project works to maximise the use of biological material, such as coral reefs, to produce large quantities of colonies instead of obtaining them from where they are," she added.

The four types of hard coral reefs common in the Arabian Gulf are "Acropora", "Porites", "Turbinaria" and "Platygera".

According to Al Suwaidi, the techniques that have been used in this project are very simple, so that they can be easily replicated in the future, and during this year other techniques will be used to produce a very large number of colonies using one small colony.

Coral reefs are important elements of marine life

because they are a refuge and a haven for marine organisms and fish, and they are considered as a national wealth for future generations as they help ensure sustainable food security.

Coral reef farming is not the first project that the EPAA is working on in this regard, as it has already implemented a similar initiative on the Sir Bu Nair Island Reserve, where the coral reef is considered one of the most diverse in the Arabian Gulf. Coral reefs on the island extend to as far as 20 metres deep into the sea, but in recent decades have suffered from severe deterioration due to natural and human factors as a result of many wrong practices.

The EPAA publishes educational awareness material and implements policies for environmental awareness and programmes.

## Sea Turtles Released Into UAE Waters After Successful Rehabilitation

In celebration of World Sea Turtle Day, the Environment Agency - Abu Dhabi (EAD) launched a large and diverse group of previously rescued turtles back into Abu Dhabi's waters via the beach at Saadiyat Rotana Resort & Villas, so they may return to their natural habitats.

The released group came from a batch of 150



A large and diverse group of previously rescued turtles released back into Abu Dhabi's waters

turtles that the EAD is currently rehabilitating at the National Aquarium. From this diverse group, a loggerhead, a hawksbill and a green sea turtle were selected to be fitted with satellite tracking devices fixed to their shells, allowing the Agency to monitor their progress and collect data about their lifestyles and migration paths.

Through its strategic partnership with the Environment Agency - Abu Dhabi (EAD), The National Aquarium ambitions to create the largest and one of the most innovative rehabilitation schemes of its kind to protect wildlife in the emirate of Abu Dhabi.

Education is at the core of The National Aquarium, with an entire department dedicated to engaging and enhancing the visitor's experience, and the capacity to welcome up to 50,000 students a year. This unrivalled journey

*A loggerhead, a hawksbill and a green sea turtle have been fitted with satellite tracking devices to collect data about their lifestyles and migration paths*



around the world is brought to visitors by a multidisciplinary team of 80 professionals coming from all over the world.

H.E. Major General Staff Pilot Faris Khalaf Al Mazrouei, Commander-in-Chief of the Abu Dhabi Police and member of the Agency's Board of Directors, and Her Excellency Dr. Sheikha Salem Al Dhaheri, Secretary General of EAD attended and participated in the launch event.

The turtles' release is the final step in their rescue and rehabilitation process, significantly increasing their chances of survival. The remaining turtles are currently being rehabilitated by the National Aquarium (TNA), following the signing of a Memorandum of Understanding (MoU) between the EAD and TNA in 2020.

Since then, the collaboration has resulted in the

successful rescue and release of over 250 turtles, with the remaining turtles being cared for by the National Aquarium for future release.

The turtles were initially discovered and rescued from the UAE's shores by the Wildlife Rescue Team, a rescue and rehabilitation program developed by both parties, dedicated to preserving the health and welfare of the region's wildlife. The team supervised the monitoring and rescue of these turtles from the coasts of the Emirate. Once fully recovered, the sea turtles were transferred to the beach at Saadiyat Rotana Resort & Villas in preparation for their return to the wild.

A majority of the turtles that were rehabilitated had severe barnacle infestations on their shells, which caused slow movement, malnutrition and dehydration after entering a state of hibernation



during the winter period, as turtles are cold-blooded reptiles and are therefore easily affected by a decrease in water temperature. In addition, some turtles were rescued after becoming entangled in fishing nets.

On this occasion, Her Excellency Dr. Sheikha Salem Al Dhaheri, Secretary General of EAD said: "We in the Emirate of Abu Dhabi are proud of the efforts made to protect sea turtles and the continuation of the rescue and rehabilitation programs since 2005.

"I am pleased to witness the success of this year's programme, which was a collaboration with our strategic partners - the National Aquarium, where we launched the largest rehabilitation center for wildlife and marine life in the region. Since 2015, our tireless efforts with partners and the public, have helped us rescue, rehabilitate and

successfully release hundreds of turtles, and we are excited to now track their release back into their natural marine environment."

Her Excellency added: "We named one of the turtles that we are currently tracking "Amal" (Hope); it is a green turtle that lost one of its front fins after becoming entangled in an abandoned fishing net. It was called Amal because of the meaning of the name, which means optimism and an aspiration to live despite harsh circumstances."

Her Excellency also elaborated: "Our on-going research on critically endangered species is a top priority for us which, along with our ongoing efforts, allows us to better understand and protect our environment."

Fouad Mashal, CEO of The National Aquarium said: "We are immensely proud of our collaboration

*Most of the rehabilitated turtles had severe barnacle infestations on their shells, which caused slow movement, malnutrition and dehydration*



with EAD to help the Emirate of Abu Dhabi preserve its natural treasures. Sea turtles are an essential part of our ecosystem but are also an endangered species. As a result, successfully rehabilitating a large number of turtles is a critical component in our mission to sustain and conserve the species.”

He also added: "Fishermen, residents, a number of government agencies, the private sector and public benefit associations have contributed to the great efforts of rescuing the turtles in collaboration with EAD's team, which ensures the turtles are rehabilitated and released as soon as possible so that they can easily re-adapt to being in their natural habitat again.”

EAD has been researching, monitoring and protecting marine turtles in Abu Dhabi since 1999 and has succeeded in maintaining a stable

population in our territorial waters across the emirate. Abu Dhabi waters are home to more than 5,000 sea turtles, both green and hawksbill turtles. The main threats faced by turtles are net entanglement and boat collisions. EAD has been rescuing and rehabilitating turtles since 2005 and has rescued more than 700 during this time.



Mercedes-Benz has launched the S 580 e plug-in hybrid, featuring the German manufacturer's fourth-generation hybrid system which makes its premiere in the S-Class.

## Mercedes-Benz S 580 e: 100 kilometres electric

The electrified sedan S 580 e is equipped with a 367-horsepower three-litre six-cylinder engine connected to a 150-horsepower electric motor. With a maximum electrical output of 110kW and



Mercedes-Benz has expanded the line-up of the S-Class with a plug-in hybrid: the S 580 e. The model can drive up to 100 kilometers fully electrically

an electric range of over 100km (WLTP), more than that of the previous model, the Mercedes-Benz S 580 e often operates without firing the combustion engine, consisting of a 372ps in-line six-cylinder from the current generation of Mercedes engines. The range has more than doubled compared with the previous model.

The basis for the hybrid drive system is provided by the six-cylinder in-line M 256 engine with 270 kW/367 hp from the current generation of Mercedes-Benz engines.

The high-power density of the hybrid traction head is achieved using a permanently excited synchronous motor with internal rotor. The peak torque of the electric motor, at 480 Nm, is available right from the start, resulting in high agility when moving off, along with dynamic driving performance.

## *The system power of the Mercedes-Benz S 580 e is 510 hp in combination with 750 Nm of pulling power*



Thanks to the through-loading option, there is room for bulky or awkward items such as skis. Remote closing of the boot lid works conveniently at the touch of a button.

Nautical blue metallic, designo cashmere white magno, designo kalahari gold metallic and designo selenite grey magno are the names of the new paints. And for the centre console, there is now also the option of a black dotted lines crystal-look finish

The optional E-Active Body Control active suspension offers more driving comfort and agility. It is combined with the standard Airmatic air suspension. Since the system regulates the spring and damper forces on each wheel individually, it not only counteracts roll, but also pitching and lifting movements. Innovative features include the ability to raise the body in the event of a side crash.

The top speed in the Electric drive program is 140 km/h, after which the speed is softly limited. The positioning of the battery in the vehicle brings advantages on a day-to-day basis compared with the previous model: the luggage compartment no longer has a step and offers a through-loading facility.

An 11 kW charger is on board as standard for three-phase charging from the AC grid, while a 60 kW DC charger is available for fast charging with direct current. Even with an empty battery, a full charge can be achieved in around 30 minutes.

### **New safety and comfort features for the rear**

The Load Compartment Package is standard on all S-Class Saloons and makes loading easier. Hands-Free Access makes it easy to open the boot with a kicking motion under the rear apron.





E-Active Body Control, in conjunction with Road Surface Scan and the Curve cornering function, delivers a high level of comfort. As E-Active Body Control operates on 48 volts, this optional extra is available for those models equipped with an on-board electrical system of this type and 4Matic, i.e. for the S 450 4Matic (combined fuel consumption: 8.6-8.0 l/100 km, combined CO2 emissions: 196-182 g/km), the S 500 4Matic (combined fuel consumption: 8.6-8.0 l/100 km, combined CO2 emissions: 196-183 g/km) and the new S 580 4Matic.

"Pre-installation for digital key transfer" is the name of a new service from Mercedes me. It makes the S-Class ready for car sharing, for example with family or friends. The owner can unlock the vehicle remotely via an app. A spare key stored in the interior is then temporarily activated, and the borrower can start the vehicle.

At the same time, new rear seat safety and comfort options that are already familiar from the recently launched Mercedes-Maybach S-Class can be found here:

- The MBUX Interior Assistant in the rear can detect the presence of passengers in the second seat row. In this case the head restraints extend automatically. Intuitive hand gestures can be used to control the rear roller sun blind in the panoramic sliding sunroof. This is available in conjunction with the MBUX Interior Assistant in the front and can be combined with all interior colours except Exclusive nappa leather upholstery in silver grey/black.
- The automatic seat belt feeder in the rear indirectly prompts you to fasten your seat belt and makes it more comfortable at the same time. It is no longer necessary to move from an

*Acceleration from 0 to 100 km/h takes 5.2 seconds and the top speed is 250 km/h*



adopted, comfortable seating position to fasten the belt. The seat belt feeder is integrated into the adjustable backrest of the seat and is always in the correct position in relation to the passenger. This extra is available in conjunction with electrically adjustable rear seats including memory function.

- The adaptive rear compartment lighting allows the brightness and colour temperature of the interior lighting to be adjusted in several stages. LED spotlights are adjustable in position and size, allowing use for reading or as lounge lighting
- The calf massage function in the rear stimulates the circulation and helps to prevent fatigue. This comfort function is included if the customer orders Executive seats for the S-Class with long wheelbase.



## Emirates Food Security Council Discusses Post-COVID Progress

The Emirates Food Security Council held its second meeting in 2021 on July 11 to discuss its commitment to ensuring that citizens and residents have ready access to adequate amounts of nutritious food at affordable prices, with a particular emphasis on food security during the COVID-19 pandemic.



The Emirates Food Security Council discussed the importance of food security and its commitment to ensuring that citizens and residents have ready access to nutritious food

During the meeting, the Food and Water Security Office presented the food trade data for 2020, which showed comprehensive growth in all food trade indicators. In 2020, food imports grew by 22.8 percent, exports by 49.7 percent, and re-exports by 12.7 percent, compared to 2019. The data also showed that 2020 was the highest performing of the past five years.

The meeting's agenda included a review of the recommendations from the council's previous meetings and related achievements during the intervening period, as well as a presentation of the UAE's food trade data in 2020 and an assessment of the Food Price Index of the United Nations' Food and Agriculture Organisation.

Chaired by Mariam AlMheiri, Minister of State for Food and Water Security, the meeting was

*In 2020, food imports grew by 22.8 percent, exports by 49.7 percent, and re-exports by 12.7 percent, compared to 2019*



held virtually, with the participation of representatives of the Ministry of Economy, the Ministry of Climate Change and Environment, the Ministry of Energy and Infrastructure, the Ministry of Industry and Advanced Technology, the Ministry of Health and Prevention, the Ministry of Education, the National Emergency Crisis and Disasters Management Authority, the Abu Dhabi Agriculture and Food Safety Authority, the Dubai Municipality, the Sharjah Health Authority, the Ajman Municipality and Planning Department, the Umm Al Qaiwain Municipality, the Ras Al Khaimah Environment Protection and Development Authority, and the Fujairah Municipality.

During the meeting, Almheiri noted, "The UAE has proven its ability to face and overcome various challenges, especially during this current critical period. We have succeeded in establishing

frameworks for building a resilient food system infrastructure ready to deal with rapidly changing circumstances."

"Through the council's joint efforts, we look forward to enhancing local food production in the UAE, to improve our self-sufficiency in several strategic commodities, while upgrading our infrastructure to ensure the advancement of the food supply chain and facilitates food trade. We believe that the support of our leadership and our innovative initiatives, such as the Food Tech Valley, will help transform the UAE into a leading international hub for innovation-driven food security," she added.

The Abu Dhabi Agriculture and Food Safety Authority reviewed the Agri-Food Data Dashboard, which contains all data related to food, such as population and consumption, local production, food prices and trade.

The meeting assessed the work of the National Committee to Facilitate Global Food Trade and Diversify Food Import Sources, headed by the Ministry of Economy, and its members discussed the economic feasibility of providing modern farms with carbon dioxide to improve their agricultural productivity.



## World Future Energy Summit Signs Key Stakeholder Agreements

World Future Energy Summit, part of Abu Dhabi Sustainability Week, has signed key stakeholder agreements with the Ministry of Energy and Infrastructure, Bee'ah and EDF Renewables.

The event, which provides a platform to showcase clean energy and sustainable projects, initiatives and developments for the Middle East



Ministry of Energy & Infrastructure signs up as major exhibitor along with Bee'ah and EDF Renewables

- will be held in Abu Dhabi's National Exhibition Centre (ADNEC) as part of Abu Dhabi Sustainability Week, hosted by Masdar, from 17th-19th January 2022.

The summit will host exhibitions and forums across clean energy and sustainability.

"The UAE has set itself some seriously ambitious medium- and long-term environmental targets and put in motion a strategic plan which will facilitate clean power generation and increased energy efficiency while catering for our fast economic growth," said Suhail bin Mohammed Al Mazrouei, Minister of Energy and Infrastructure.

"Despite the challenges, we are already making significant progress as we work to achieve the goals outlined in the UAE National Energy Strategy 2050. The enormous investments we

*According to IRENA, by the year 2050, sustainably produced electricity will have become the world's most important energy carrier*



are now witnessing in clean energy, energy efficiency, carbon reduction and sustainable, secure water supplies provide a clear path for the UAE's future development as a global force for driving sustainability."

According to the International Renewable Energy Agency (IRENA), by the year 2050, sustainably produced electricity will have become the world's most important energy carrier. Electricity's share of final energy use is forecast to increase from 21 percent today to 60 percent in 2050, a three-fold rise achievable through significant efforts to electrify our economies.

Current government plans call for \$98 trillion of energy system investment in the coming three decades, yet IRENA's '1.5oC scenario' requires an additional \$33 trillion related to energy transition over the planned investments and a significant

redirection of money from fossil fuels into green assets.

Khaled Al Huraimel, Group CEO of Bee'ah, said "We have been developing clean energy projects in the Middle East for over 25 years, actively strengthening our leading ambition," commented Laurent Clement, CEO and Managing Director of EDF Middle East. "Building a net-zero energy future with electricity and innovative solutions and services is EDF's purpose, its "raison d'être". It is a privilege for us to bring our vast experience and technologies to this world-leading event in the UAE's capital.

In the previous edition, the Summit hosted 34,000 attendees from 125 countries - including 10 heads of state - and featured 840 exhibiting companies and brands.

## AUS Study Gives Clean, Efficient Energy A Boost

A successful collaborative research study led by American University of Sharjah (AUS) has taken a significant step towards finding solutions to some of the global problems facing fuel cells. Fuel cells, which are a clean, efficient and reliable source of power, have various applications and can be used to operate vehicles while producing electricity. They run on various types of fuel, such as hydrogen, natural



The research study led by American University of Sharjah has taken significant steps towards finding solutions to the problems facing fuel cells

gas, ethanol, and methanol, and they continuously need to be fueled.

New research from AUS – held in collaboration with University of Sharjah, UAE University, and the University of Wisconsin – looks at how changing the fuel cells’ membranes can make the cells more efficient and last longer at a lower cost. Research Team Leader and Associate Professor in Chemical Engineering at AUS, Dr. Amani Al-Othman explains the challenge.

“Fuel cell cars run on hydrogen fuel and can be filled from a hydrogen station (like a petrol station). As a result, the car will emit water from its exhaust, as opposed to polluting gases, because of the electro-chemical reaction. However, the problem with current polymer electrolyte fuel cells is that they function at a temperature of 80C because their membranes cannot tolerate higher temperatures. At the

## *Fuel cells facilitate the transition from fossil fuels towards clean energy in transportation in the UAE*



same time, this low temperature leads to liquid build-up inside the cell. In the long run, this can limit the fuel cell operation and lead to corrosion,” he said.

“Our research focuses on developing new and less expensive membranes that can sustain higher temperatures of 200 C to maintain operation, which means that water vapor will be produced rather than liquid. This way the fuel cells will last longer, be available at a lower cost and produce clean energy,” Dr. Al-Othman said.

Highlighting the importance of the research, Dr. Al-Othman said, “We used state-of-the-art synthesis techniques developed at AUS laboratories to develop these membranes. The UAE has prioritized seven key areas of research for its strategic roadmap, including energy and health. The successful implementation of the

novel fuel cell membranes will contribute to the UAE’s efforts in achieving its energy and sustainability vision.”

Dr. Al-Othman noted that the outcome of this research could have a significant impact on the energy and power generation sector in UAE. Fuel cells are an important technology facilitating the transition from fossil fuels towards clean energy in transportation in the UAE. The research was recently published in the prominent International Journal of Hydrogen Energy.

Dr. Al-Othman, who is looking to further test the membranes, added: “The membranes are made up of lower-cost composite materials, and we now need to identify the best combination of low-cost materials to use and test that in a high-temperature hydrogen fuel cell.”

## Embracing Sustainability: Hong Kong

According to design consultancy firm Arcadis, Hong Kong ranks second in Asia's most sustainable cities and ninth in the world amidst the city's steady investments in digital technologies to improve citizen experience.

Hong Kong took a big leap for sustainability when it formed the Council for Sustainable



Hong Kong has paved the way for sustainable living in a fast-paced concrete jungle where skyscrapers exceed the number of trees

Development in 2003. But what other key lessons other cities can learn from Asia's second most sustainable city?

### **Sustainable Skyscrapers**

Hong Kong is a small city with just over 1,000 sq kms of land. It is home to more skyscrapers than anywhere else. While many are impressive feats of construction and have become iconic features of the skyline, the city's 42,000 buildings - including about 8,000 high-rises, of which more than 1,500 are skyscrapers exceeding 100 metres (328ft) in height - consume up to 90% of the city's electricity and contribute to 60% of the city's greenhouse gas emissions.

With limited land supply, building upwards is Hong Kong's only option. But in a world responding to the climate crisis, towering skyscrapers that use massive amounts of energy

# *The International Commerce Centre in Hong Kong is recognised in the top 3 percent of green buildings around the globe*



and materials to construct and operate may look increasingly out of place – particularly given that Hong Kong itself has set a target to be carbon neutral by 2050.

## **Energy efficient skyscrapers**

Hong Kong strives for a thriving green building movement and is committed to making its vast number of skyscrapers more energy efficient. The International Commerce Centre (ICC) for example, is the city's tallest skyscraper and also its tallest green building. Making use of the latest smart technologies to be more energy efficient, the ICC is recognised in the top 3% of green buildings around the globe.

Inside the 118-storey building, a network of sensors is installed, often wirelessly, across different facilities and equipment, including lighting, elevators, escalators, and air-

conditioning units. This network provides large quantities of data that enable real-time energy consumption monitoring. Informed by the data, the property management team is able to shut down certain facilities, including lights, lifts and escalators when they are not needed, in order to save energy.

Keeping skyscrapers cool is perhaps the most difficult challenge, especially since most are covered in glass. While floor-to-ceiling windows enable better views and natural light, this can also create a greenhouse effect caused by solar radiation, and air-conditioning systems require huge amounts of energy to operate.

At ICC, air-conditioners consume a staggering 70% of the building's total energy. But with smart IoT devices built into the building's air-handling systems, the building's team is able to monitor each floor in real-time to see the temperature, levels of pollutants, and how much cooling energy is being used. It also means they can control the air distribution to different office floors in order to further optimise the energy usage of the building.

Since 2012, through various energy saving measures, ICC has conserved 15 million kWh of energy, equivalent to the total annual electricity consumption of more than 4,500 three-member households, and a reduction of 10,000 tonnes of carbon emissions. And the team is committed to achieving the net zero carbon emissions by 2050 target set by the government.

## **Air Quality**

Hong Kong's air pollution is mainly contributed by motor vehicles, marine vessels and power plants. The two greatest challenges are local street-level pollution and regional smog. Diesel vehicles, particularly trucks, buses and light buses, are the main source of street-level pollution.

In March 2021, the Environment Bureau



announced the first Hong Kong Roadmap on the Popularisation of Electric Vehicles, setting out the long-term policy objectives and plans to promote the adoption of electric vehicles and their associated supporting facilities in Hong Kong. The implementation of a comprehensive vehicle emission control programme has brought along substantive air quality improvement.

As of 2020, the roadside levels of nitrogen dioxide, respirable suspended particulates, fine suspended particulates and sulphur dioxide have reduced by 40, 48, 47, and 50 percent respectively compared with 2010.

With regard to improving regional air quality, the Government has long been collaborating with the Guangdong Provincial Government to implement a wide range of measures and set jointly a number of 5-year emission reduction targets. Both sides

have commenced a study on “Post-2020 regional air pollutant emission reduction targets and concentration levels” with a view to formulating emission reduction strategies and targets for 2025 and 2030.

### **Nature Conservation**

To better achieve its nature conservation objectives, the Government promulgated a new policy in 2004. The policy involves the regulation, protection and management of the natural resources that are important for the conservation of Hong Kong's biodiversity. The aim is to do this in a sustainable manner, bearing in mind social and economic considerations.

More specific conservation measures include:

- Conserving the natural environment through the identification, designation and management of suitable areas as country

*Hong Kong's 'smart, green and resilient city strategy' permeates all aspects of the built environment, from land use planning to transport infrastructure and buildings*



Sustainable development for Hong Kong means simply finding ways to increase prosperity and improve the quality of life while reducing overall pollution and waste, meeting citizen's needs and aspirations without doing damage to the prospects of future generations; reducing the environmental burden put on the planet and helping to preserve common resources. Hong Kong has set an example for cities across the world, continuing to make strides in protecting its world-class status through its sustainable development.



parks, special areas, marine parks and marine reserves.

- Conserving important marine fauna and flora.
- Offering advice on development proposals, planning strategies and environmental impact assessments.
- Identifying and managing sites of special scientific interest.
- Monitoring the ecology of the Mai Po Inner Deep Bay Ramsar Site.
- Developing and managing the Hong Kong Wetland Park.
- Promoting public awareness and participation in nature conservation through publicity and educational activities.

## Environment Business Majlis Holds Session For Dialogue On Energy

The Environment Business Majlis held a special session dedicated to the High-level Dialogue on Energy (HLDE), co-hosted by Damilola Ogunbiyi, CEO and Special Representative of the United Nations (UN) Secretary-General for Sustainable Energy for All (SEforALL) and Co-Chair of UN-Energy.

The meeting brought together stakeholders



The Environment Business  
Majlis held a special  
session dedicated to the  
High-level Dialogue on  
Energy (HLDE)

from the UAE's energy sector, such as the Abu Dhabi Department of Energy, Tabreed, the Emirates Nuclear Energy Corporation (ENEC), Masdar and Bee'ah. Representatives of the World Green Economy Organisation (WGEO) also attended the event.

The session aimed to brief its audience on the HLDE, which will be hosted during the UN General Assembly, as well as their potential contributions to the UAE energy sector.

The UAE is a "Global Theme Champion" of the HLDE, leading the process of achieving the Sustainable Development Goals (SDG) through inclusive and just energy transition.

The meeting began with opening remarks by Dr. Abdullah Belhaif Al Nuaimi, Minister of Climate Change and Environment, Suhail bin Mohammed Al Mazrouei, Minister of Energy and

## *The UAE's clean energy capacity has witnessed considerable growth over the past decade and is on track to reach 14GW by 2030*



reduces pollution, improving public health. And from an environmental perspective, using renewable sources of energy and increasing energy efficiency are the only ways for us to have a fighting chance of countering the existential threat of climate change," he added.

Al Nuaimi also called on the session's participants to join forces and work towards a rapid reduction in energy-related greenhouse gas emissions.

"The UAE's ambition to achieve an inclusive and clean energy transition raises the bar for other countries to follow ahead of the HLDE in September. We look forward to working with energy stakeholders in the UAE, to help them advance their clean energy profiles and connect them with partners in other regions," Ogunbiyi said.

The UAE's clean energy capacity has witnessed considerable growth over the past decade and is on track to reach 14GW by 2030.

Infrastructure, Ogunbiyi and Mohamed Al Hammadi, CEO of ENEC.

"We are strong believers in the ability of clean energy to empower communities and change lives, as well as its instrumental role in tackling climate change. With this belief, the UAE has embarked on a transition from complete reliance on hydrocarbon energy to a diversified energy mix, which includes solar and nuclear power," Al Nuaimi said.

"As major players in the country's energy space, you play a key role in this transition. It is evident that the benefits of shifting to clean energy greatly outweigh the costs. From a financial perspective, every US dollar spent on the energy transition is estimated to generate benefits valued at between US\$2 and \$5.5. From a social perspective, switching to clean energy sources

Established in 2016, the Environment Business Majlis serves as a platform for encouraging private sector entities to invest in various environmental and economic projects and contribute to the UAE's sustainability agenda.



## NYUAD Leads Scientific Study For Sea-level Rise Adaptation

A new study led by NYU Abu Dhabi (NYUAD) and three other UAE universities has found that the UAE's access to the coast, and commitment to a sustainable future, makes it uniquely positioned to lead scientific advancement for sea-level rise adaptation.

The paper is the first academic output from the UAE Climate Change Research Network,



The UAE's access to the coast, and commitment to a sustainable future, makes it uniquely positioned to lead scientific advancement for sea-level rise adaptation

established by the Ministry of Climate Change and Environment, and provides recommendations on key challenges for sea level science including policy coordination, data collection, and funding.

Titled 'A roadmap for policy-relevant sea-level rise research in the United Arab Emirates' and published in the journal, 'Frontiers in Marine Science', the paper lays out a potential roadmap for the UAE to capitalize on its strengths to create relevant sea-level projections for the region, which includes several coastal cities that are similarly vulnerable to rising sea levels. By consolidating ideas from scientists within the UAE, the paper identifies promoters and barriers to data gathering, information sharing, science-policy communication, and funding access.

Some of the paper's key findings include:

- Although the UAE is susceptible to flooding from sea level rise, it is very well positioned

# Establishing an Antarctic research program makes the UAE the first in the region to grapple with the core uncertainties driving global sea level change



to lead scientific advancement for climate adaptation due to its long-term policy horizon, financial capital, and vision for a sustainable knowledge-based economy.

- The single most important step for developing accurate flood projections is overcoming the Arabian Gulf’s data gap for ocean, land, and atmospheric measurements.
- Universities can drive cost-effective science by sharing equipment, connecting with private sector funders, and participating in multinational expeditions.
- Establishing an Antarctic research program would make the UAE the first in the region to grapple with the core uncertainties, driving global sea level change.

for Global Sea Level Change Hannah Melville-Rea said: “The UAE is no stranger to investing in ambitious science, as seen by our success in space exploration.”

Fatin Samara, co-author said “This collaboration demonstrates how the newly established Climate Change Research Network provides a strategic platform for scientists to jointly pursue policy-relevant climate research.”

“The UAE is poised to be the leader in advancing our understanding and ability to project global sea level rise. Investing in Arctic and Antarctic science efforts, such as those carried out by the Center for Global Sea Level Change at NYUAD, will only lead to greater success in protecting our coastlines,” added co-author and Professor of Mathematics and Climate Science David Holland.

Lead author and researcher at NYUAD’s Center

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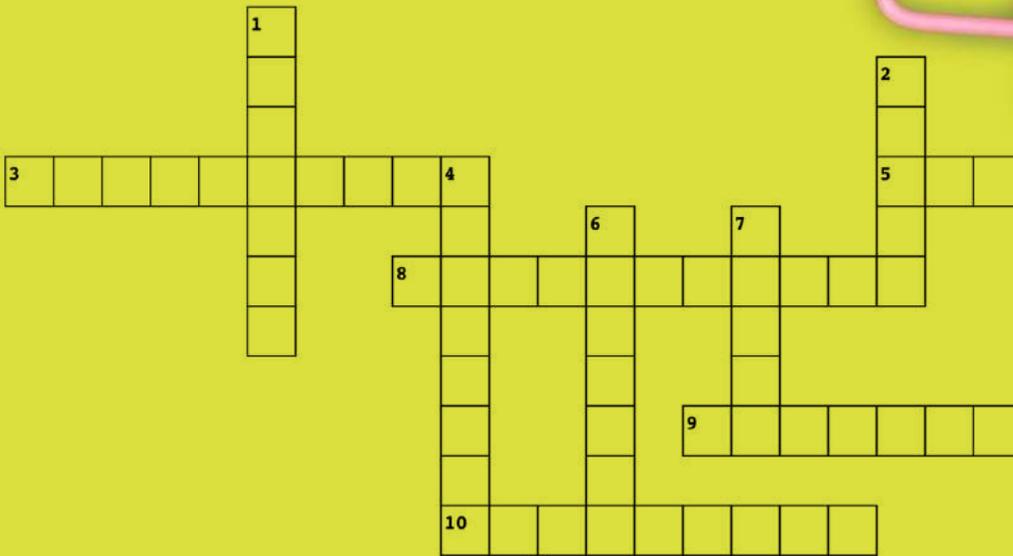
Answers: 1) Greenery 2) Globe 3) Protect 4) Fauna 5) Oceans 6) Afforestation 7) Energy 8.) Noise

Word Search

I	E	V	R	E	S	N	O	C	R	N	W	E	R
E	R	Y	S	E	W	T	C	N	I	T	X	E	E
N	E	V	E	G	A	N	I	S	M	C	R	R	N
R	W	C	C	E	B	R	N	R	S	G	E	E	E
E	I	D	X	N	E	L	C	Y	C	E	R	R	R
S	L	B	N	E	G	Y	X	O	P	E	I	Z	G
T	D	N	D	E	L	I	I	E	R	E	N	O	Y
O	O	N	O	B	R	A	C	N	E	T	S	O	E
R	E	C	E	L	A	N	X	O	S	O	S	V	Y
E	R	S	L	Y	E	E	R	E	E	N	O	Z	O
Z	E	E	E	R	T	Y	S	C	R	X	C	R	T
N	T	A	N	A	R	Y	R	C	V	N	C	T	N
E	N	N	T	E	T	O	O	E	E	E	O	Y	Y
I	T	A	A	S	S	R	T	X	O	G	Z	C	C

- CARBON
- OZONE
- PRESERVE
- OXYGEN
- ENERGY
- RESTORE
- VEGANISM
- SEA
- EXTINCT
- WILD
- CONSERVE
- RECYCLE

# Crossword Puzzle



## Across

3. A natural or artificial substance added to soil to make it more fertile.
5. Provides the planet with heat and light.
8. That does not harm the environment.
9. Produced without artificial chemicals.
10. A person who studies the relationship between organisms and their environments.

## Down

1. The scientific study of animals and their behaviour.
2. Material/ food that is no longer needed and thrown away
4. That can be used again and again.
6. Can be damaging or cause injury.
7. A colourless liquid that falls as rain and is found in lakes, seas, rivers etc.

Answers: 1) Zoology 2) Waste 3) Fertilizer 4) Reusable 5) Sun 6) Harmful 7) Water 8) Sustainable 9) Organic 10) Ecologist

**WORD OF THE DAY:****ECOLOGY**

Ecology is the study of the relationships between living things and their surroundings, or environment. Scientists who work in ecology are called ecologists. Ecologists examine how living things depend on one another for survival. They also study how living things use such natural resources as air, soil, and water to stay alive.

Ecologists study the interactions between living things and their environment. These interactions occur at different levels. Individuals, populations, communities, and ecosystems experience different kinds of interactions with their environment.

A population is made up of all members of the same species living within a given area. A single member of a population is called an individual. The area where a population lives can vary in size. The pine trees in a forest are a population as are the great white sharks in an ocean. Bacteria that live in a person's large intestine are another example of a population. A population is described by its size and by how its individuals are spread out over a given area. The many different populations that interact with one another in an area are called a community. For example, a forest community contains trees, plants, mammals, insects, earthworms, and many tiny living things, such as fungi and bacteria, in the soil. The members of a forest community rely on one another for survival.

An ecosystem is made up of all of the communities and nonliving materials in an area. Ecosystems on land can be found in forests, grasslands, tundra, and deserts. Saltwater and freshwater ecosystems exist in oceans, lakes, rivers, and wetlands.

**WHY IS ECOLOGY IMPORTANT?**

Ecology is important because it shows how changes in the environment affect the survival of living things. For example, when pollution kills certain living things, the animals that feed on them also may die. The work of ecologists has convinced many people to conserve, or protect, the environment and all the ecosystems that it supports.

**INTERNATIONAL  
DAY OF THE  
WORLD'S  
INDIGENOUS  
PEOPLE**

August 9th is observed as the International Day of Indigenous Peoples.

The 2021 theme for the Day is ““Leaving no one behind: Indigenous peoples and the call for a new social contract.” But, what does it mean?

A social contract is an unwritten agreement that societies make to cooperate for social and economic benefits. In many countries, where indigenous peoples were driven from their lands, their cultures and languages denigrated and their people marginalized from political and economic activities, they were never included in the social contract to begin with. The social contract was made among the dominant populations.

There are over 476 million indigenous peoples living in 90 countries across the world, accounting for 6.2 per cent of the global population. Indigenous peoples are the holders of a vast diversity of unique cultures, traditions, languages and knowledge systems. They have a special relationship with their lands and hold diverse concepts of development based on their own worldviews and priorities. Although numerous indigenous peoples worldwide are self-governing and some have been successful in establishing autonomy in varying forms, many indigenous peoples still come under the ultimate authority of central governments who exercise control over their lands, territories and resources.

The COVID-19 pandemic has exposed and exacerbated many existing inequalities, disproportionately affecting populations all over the world that were already suffering from poverty, illness, discrimination, institutional instability or financial insecurity. From the perspective of indigenous peoples, the contrast is even starker. In many of our societies, the social contract, at the very least, needs some revision.



# INTERNATIONAL YOUTH DAY

International Youth Day is commemorated every year on 12th August. International Youth Day (IYD) gives an opportunity to celebrate and mainstream young peoples’ voices, actions and initiatives, as well as their meaningful, universal and equitable engagement.

The theme for 2021 is, “Transforming Food Systems: Youth Innovation for Human and Planetary Health”, with the aim of highlighting that the success of such a global effort will not be achieved without the meaningful participation of young people. It has been acknowledged that there is a need for inclusive support mechanisms that ensure youth continue to amplify efforts collectively and individually to restore the planet and protect life, while integrating biodiversity in the transformation of food systems.

This year’s IYD seeks to put the spotlight on youth engagement through the following three interconnected streams:

- Engagement at the local/community level;
- Engagement at the national level (formulation of laws, policies, and their implementation); and,
- Engagement at the global level.

## What can you do to help?

### Things to Do...

- Do not leave the tap running!
- Carry a water bottle!
- Ride your bicycle or take the metro around!
- Do not waste food!
- Unplug all electronics when not in use



COLOUR ME!



# UAE Launches Portal For The World's Waterbird Populations

The Environment Agency – Abu Dhabi (EAD) and Wetlands International launched the Waterbird Populations Portal (WPP), an online interactive platform containing the most recent data on the status and distribution of the world's waterbird populations.

The launch was held at a global webinar, organised by the Wetlands International in

UAE NEWS



partnership with EAD. With over 870 waterbird species, the newly launched Waterbird Populations Portal will provide the latest population size estimates and trends of over 2,500 populations. These range from the beautiful Greater Flamingos, which are regularly seen in the coastal and inland wetlands of the UAE, and the majestic Sarus Crane that stands at over 1.5m tall, making it the tallest flying bird inhabiting wetlands and rice fields in South East Asia and Australia.

It also includes other waterbirds species from Sandpipers to Plovers, including the unique Crab Plover, which is currently breeding on two of Abu Dhabi's offshore islands.

Conservation of all these species requires easily accessible information on their status and trends to help governments and people take action.

The WPP provides links to 160 threatened waterbird species, as per the IUCN Red List of Threatened Species. The WPP will support the development and actions of the Ramsar Convention, on the Convention on Migratory Species, and the Convention on Biological Diversity, as well as other initiatives.

The new and improved open access, WPP, features an interactive interface, and easier access to key information on waterbird populations, trends and 1% thresholds. An added feature will also provide population level boundary maps for the world's waterbird species. This can be used by national or local wetland authorities or site managers, to access a shortlist of relevant population with their 1% population thresholds, to check against available information and identify potentially internationally or nationally important wetlands.

## 'Human-Wildlife Conflict One Of The Greatest Threats To Wildlife Species'

Conflict between people and animals, from China's famed wandering elephants raiding farms for food and water to wolves preying on cattle in Idaho is one of the main threats to the long-term survival of some of the world's most emblematic species, warns a new report from WWF and the UN Environment Programme. Human-wildlife conflict - when struggles arise from people and animals coming into contact -



New WWF and UNEP report says the problem is as much a development and humanitarian issue as a conservation concern and risks derailing the UN SDGs

often leads to people killing animals in self-defence, or as pre-emptive or retaliatory killings, which can drive species to extinction.

The report, 'A future for all - the need for human-wildlife coexistence', highlights that globally, conflict-related killing affects more than 75 percent of the world's wild cat species, as well as many other terrestrial and marine carnivore species such as polar bears and Mediterranean monk seals, and large herbivores such as elephants.

"Within a human lifetime, we have already seen extraordinary and unparalleled changes to our planet. Global wildlife populations have fallen an average of 68 per cent since 1970," says Margaret Kinnaird, Global Wildlife Practice Leader at WWF International. "Human-wildlife conflict, in combination with other threats, has driven significant decline of species that were

*The report highlights that globally, conflict-related killing affects more than 75 percent of the world's wild cat species*



once abundant, and species that are naturally less abundant have been pushed to the brink of extinction. Unless urgent action is taken, this devastating trend will only worsen, wreaking detrimental and, in some cases, irreversible impacts on ecosystems and biodiversity.”

The report featured contributions from 155 experts from 40 organisations based in 27 countries.

According to Susan Gardner, Director of UNEP’s Ecosystems Division, “This report is a clarion call for the adoption of approaches that identify and address the deeper, underlying causes of conflict while developing systemic solutions with affected communities as active and equal participants in the process. As demonstrated in many of the case studies in this report, coexistence is both possible and attainable.”

According to the report, which featured contributions from 155 experts from 40 organisations based in 27 countries, human-wildlife conflict is as much a development and humanitarian issue as it is a conservation concern, affecting the income of farmers, herders, artisanal fishers, and Indigenous peoples, particularly those living in poverty. It also interferes with access to water for communities competing with wildlife for local water sources and drives inequality as those who pay the price for living with wildlife rarely receive the benefits of coexistence.

Despite being so strongly linked to the Sustainable Development Goals (SDGs), human-wildlife conflict continues to be overlooked by policymakers. While people the world over reap the benefits of maintaining flourishing wildlife populations - healthy ecosystems that allow us to



survive, provide food and enable livelihoods - catastrophic impacts such as injury and death and the loss of property and livelihoods place a strain on those who live alongside wildlife, often in developing nations rich in biodiversity, leading to financial insecurity and poor physical and mental health.

“If the world is to have a chance of meeting the SDGs by the 2030 deadline, human-wildlife conflict must be explicitly included in SDG implementation plans, as well as at the heart of the Convention on Biodiversity’s new framework,” says Dr. Kinnaird.

The report says that completely eradicating human-wildlife conflict is not possible but that well-planned, integrated approaches to managing it can reduce conflicts and lead to a form of coexistence between people and animals. Such

approaches require work on prevention, mitigation, response, research and monitoring all backed by strong policy support and the participation of local communities.

An example of this can be seen in the Kavango Zambezi Transfrontier Conservation Area in Southern Africa, where an integrated approach to managing human-wildlife conflict has led to a 95 percent reduction in livestock killings, resulting in zero retaliatory killings of lions in 2016 (at least 17 were killed in 2012 and 2013) and allowing previously threatened lion populations to recover.

Reducing human-wildlife conflict in this way can lead to opportunities and benefits not only for biodiversity and impacted communities, but for society, sustainable development, production, and the global economy at large.

# Western Indian Ocean Region Declares 550,000 sq kms As Protected

The Western Indian Ocean region has declared 143 marine and coastal areas as protected – an area covering 553,163 sq kms, representing 7 percent of the total Exclusive Economic Zone (EEZ) for the region – according to a new publication by the UN Environment Programme (UNEP)-Nairobi Convention and the Western Indian Ocean Marine Science Association.



'The Marine Protected Areas Outlook', released on July 16, indicates that almost half of the total area – an estimated 63 percent of the overall square kilometres – was brought under protection in the seven years since the 2015 adoption of Sustainable Development Goal 14.5, which committed countries to conserving at least 10 percent of their marine and coastal areas by 2020.

This Outlook examines the current and future status of Marine Protected Areas (MPAs) in Comoros, Kenya, France (in its Western Indian Ocean territories), Madagascar, Mauritius, Mozambique, Seychelles, South Africa, and Tanzania, emphasizing the increased commitment of countries to strengthen marine protection.

Marine Protected Areas are generally small, consisting of a median area of less than 5 sq kms.

In 2019 alone, Seychelles brought 30 percent of its Exclusive Economic Zone under protection, safeguarding the habitats of 2,600 species, while South Africa declared 20 new MPAs – enabling both countries to exceed the 10 percent target.

The publication further documents the dozens of proposed MPAs currently under consideration by countries, which would cover an additional 50,000 sq kms or more.

Although the ocean provides us with resources essential for survival, including food, employment, and even oxygen, the world is damaging and depleting it faster than ever. Soon, the region may no longer be able to count on the many jobs, health, and economic benefits – valued at 20.8 billion USD – that the Western Indian Ocean provides. Marine protected areas offer one of the best options to reverse these trends.

## Millions Play For The Planet At 2nd Annual Green Game Jam

Household name entertainment companies and start-up game developers assembled for this year's Green Game Jam to showcase new "green activations" in 33 new and live games, aiming to highlight to hundreds of millions of players worldwide the critical role of forests and oceans in the fight against biodiversity loss and climate change. Green Activations are new features and messaging implemented by



Participants included video game industry legends (PAC-MAN™), household names (Minecraft, Pokémon GO), unreleased console games (Riders Republic), as well as entries from new start-up companies

participating companies, which highlight environmental themes such as conservation and restoration.

The 2nd annual Green Game Jam - organised by the UN-facilitated Playing for the Planet Alliance - follows the inaugural event in 2020, which featured 11 mobile game studios. The aim of the Jam is for studios to innovate on games with existing player bases, or those which are soon-to-be-released.

This year, 26 studios spanning PC, console and mobile games submitted entries, with brainstorming and sharing sessions between different teams taking place virtually. Entries to this year's Jam included the first-ever video game climate walk, "plant a tree events" that lead to real world restoration efforts, and flipping a game's rules upside down to reward sustainable choices.

*The Green Game Jam is an annual initiative by 30 video games companies who have made specific, time-based and increasingly ambitious climate action commitments*



Video games have become one of the most powerful entertainment mediums on the planet: by the end of 2021, there's forecasted to be over 2.9 billion video game players worldwide. This enormous reach presents an opportunity to engage vast global communities in the theme of the UN Decade on Ecosystem Restoration - to prevent, halt and reverse the degradation of ecosystems worldwide.

In March this year, the studio teams convened for a series of educational workshops to learn more about the importance of conserving and restoring forests and oceans, the theme of this year's Jam. Participants then went to work and submitted their "green activations" at the end of May, with the entries judged across five categories including a "Player's Choice" award, which saw almost 100,000 votes from the video games community.

Jane Campbell, Studio Operations Lead at ustwo games, was the Participants' Choice winner.

Commenting on the UNEP Choice winner, Sam Barratt, Chief of Youth, Education and Advocacy at the UN Environment Programme (UNEP), said: "This year's Green Game Jam brought together a cadre of best-in-class game designers who've shown an unbelievable amount of creativity to adapt their games on the theme of restoration, and Anno 1800 really stood out from a high-quality field.

"As studios now move from ideas to implementation in game, we're excited to see how their activations create new conversations among their vast player communities, helping to inspire a future where online actions can deliver offline impact for nature."

## CLOUD SEEDING

The Zayed International Foundation for the Environment held a webinar in June 2021 on 'Cloud Seeding in Water-Stressed Regions' in collaboration with the UAE National Centre of Meteorology (NCM). This is an important topic related to the global issue of water security, as almost half of the world's population are expected to face water stress by the year 2030 due to climate change.

Cloud Seeding is a technology that gives a lot of hope for poor countries in the arid belts of Africa, Asia, and Latin America - which ranks high amongst those facing the serious challenges of droughts and water scarcity. The technology has the potential of developing into a simple, cheap, and environment-friendly method of securing water for arid areas.



**Dr. Eisa M. Abdellatif**

Chief Technical Advisor  
Zayed International  
Foundation for the  
Environment

The UAE is an arid country that receives under 100mm annual rainfall, experiences very high evaporation rate, and has a low rate of ground water renewal. Hence, water security is a strategic issue. The father of the UAE, the late Sheikh Zayed Bin Sultan Al Nahyan, showed interest in this technology as early as the 1980s. The Cloud Seeding Program commenced in 2003.

The UAE National Centre of Meteorology has an elaborate program, collaborating with international research centres in many countries via a very smart research fund of US\$1.5m for each innovative research project in this field for a period of 3 years. This is meant to develop cloud seeding further and encourage investment in R&D to scale up capacity building.

The rain enhancement techniques involve the study of weather conditions, the nature and structure of clouds, and offers insight into the efficacy of seeding materials. New technologies such as nanotechnology and Artificial Intelligence are being used to speed up innovations.

The UAE is a pioneer in this important field and has accumulated substantial knowledge and database that can be shared with other countries for relief of water stress, especially in the Arab region.

The Zayed International Foundation for the Environment would like to congratulate the UAE NCM for developing the potential of a viable, cost-effective technology of rain enhancement, and we thank them for their participation in our webinar on Cloud Seeding.

**THE FUTURE OF OUR WORLD  
IS IN OUR HANDS.**

**ACT NOW!**



# عيد مبارك

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X: 243 cm  
Y: 328.69 cm

