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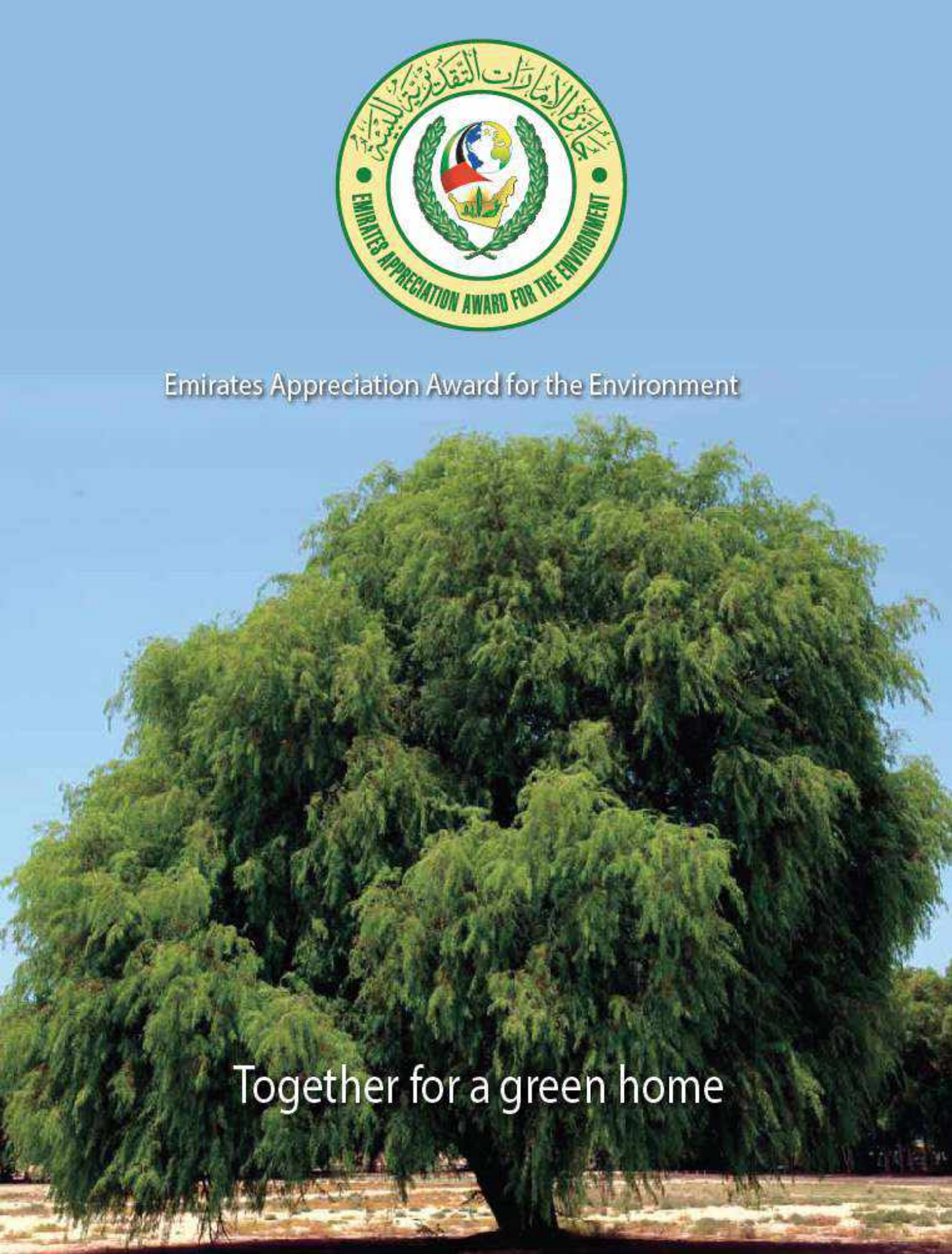
جائزة الإمارات التقديرية للبيئة

EMIRATES APPRECIATION AWARD FOR THE ENVIRONMENT

Emirates Appreciation Award for the Environment



Together for a green home

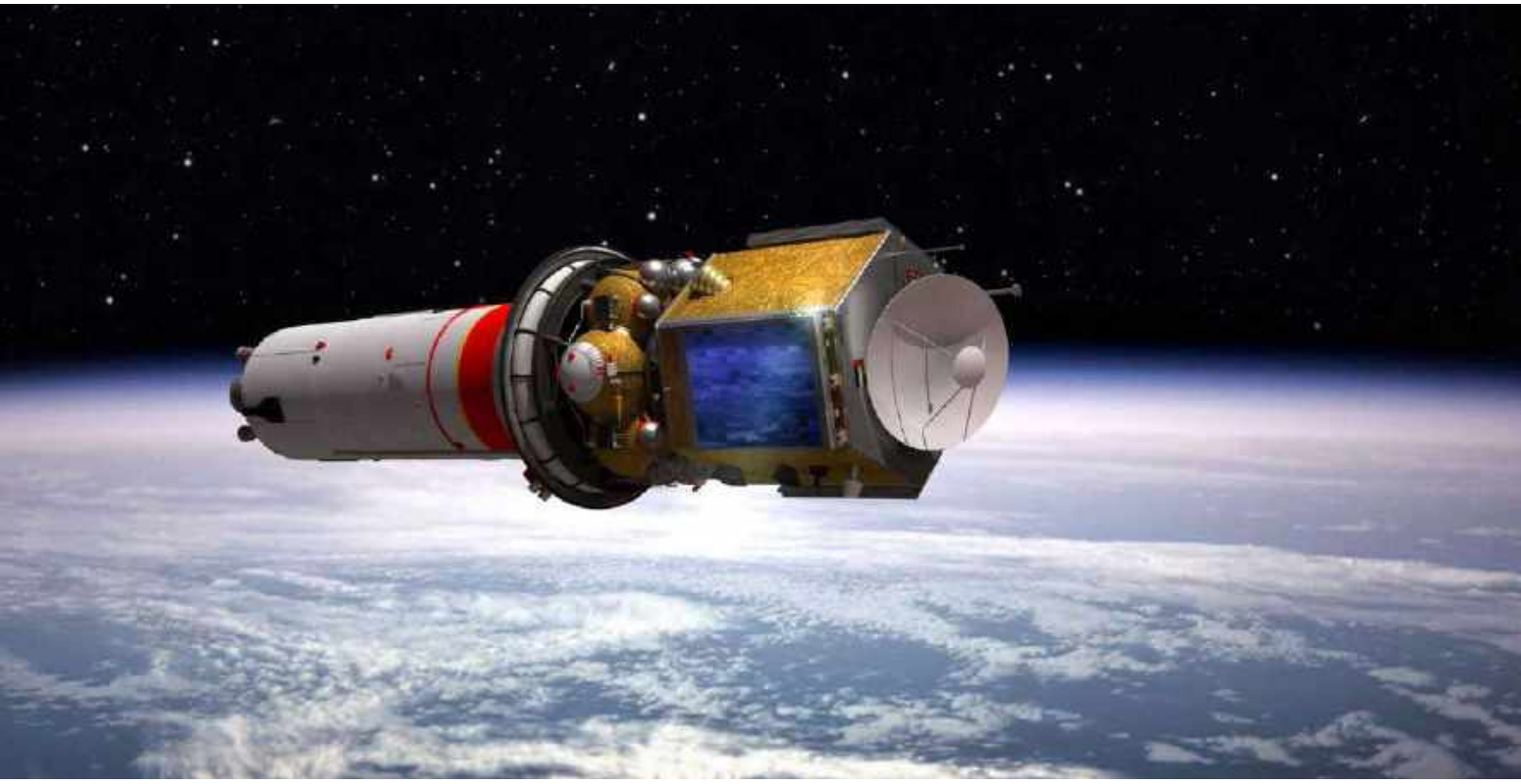
Chairman's Message

The UAE entered an exciting new era of human spaceflight when Emirati astronaut Sultan Al Neyadi joined three colleagues and propelled into the skies at more than 28,000kph in a SpaceX rocket - at 20 times the speed of sound.

The milestone moment reinforced the UAE's soft power and its rapid growth in the space sector. With Al Neyadi's successful journey into space, the UAE has become the region's first and the world's 11th country to send astronauts on long-duration space missions to the International Space Station.

The UAE's rise on the world stage from a trading hub to an oil economy and the subsequent transformation into an industrial, scientific, and knowledge powerhouse stems from the bold and far-sighted vision of its wise leadership. A firm believer in tolerance, building friendships, pursuing a policy of cooperation and collaboration, the UAE's leadership expanded trade and economic ties with countries around the world.

Today, it has become a trailblazer with its ambitious space programme. In 2021, as



Prof. Mohammed bin Fahad
Executive Editor

we celebrated the 50th year of the founding of the UAE, the launch of the 'Hope Probe' on a mission to Mars carried with it the hopes and dreams of an entire nation. The success of the space programme is not only about how far the country has advanced; it is also about how much farther it can go by equipping a generation of young Emirati men and women with advanced scientific, technical and engineering skills.

The country is today attracting both capital and talent and investing heavily in the knowledge and tech sectors for people to harness skills that benefit humanity. What makes us more proud is that the space mission carries not only the ambitions of our people to new horizons, but also aims to use scientific knowledge for the common good of mankind and for peace.

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Upcoming events

Women as Key Players in the Decentralised Renewable Energy Sector

Date: 8 March

Webinar

While women play a vital role in decentralised renewable energy (DRE) solutions and their involvement and empowerment in this sector can bring numerous benefits to both individuals and communities, women's involvement is still often limited by gender-specific barriers such as lack of access to finance, limited knowledge and skills, and cultural attitudes that restrict their participation in certain areas. It is crucial to address these barriers to increase women's involvement in DRE solutions and to ensure that the benefits of clean energy reach all members of society.

The event aims to increased awareness of the role of women in DRE and explore ways to increase their involvement in the industry. In line with the United Nations' theme for International Women's Day on 8 March - "DigitALL: Innovation and technology for gender equality" - the event will consider ways to tailor technological innovation in support of broadening women's access to renewable energy.

Sustainable Bioenergy Pathways in South America

Date: 17 March

Location: Sao Paulo, Brazil

South America is one of the most important regions for bioenergy production and consumption. Under these premises, improving the industry of bioenergy in the South American region is highly desirable.

This workshop will bring together relevant decision-makers, key stakeholders and leading bioenergy experts in major bioenergy-producing countries of the South American region. It will provide a platform for actors from industry, governments and institutes to evaluate major technology pathways and opportunities for bioenergy deployment, assess the challenges and barriers related to sustainability and deployment, discuss policies and measures specialised for the South American context, exchange knowledge and share best practices concerning the innovative technologies, financial mechanism and strategies that to support the investment and deployment of sustainably-sourced bioenergy.

UAE Successfully Launches Historic 'Zayed Ambition 2'

Emirati astronaut Sultan Al Neyadi successfully blasted off into space on Thursday, March 2, at 9:34 am (UAE time), in what is the longest Arab space mission (Zayed Ambition 2) in history.

The 6-month mission is carried out by astronaut Sultan AlNeyadi aboard the International Space Station (ISS) as part of Crew-6. President His

The Zayed Ambition 2 Mission is a part of the UAE Astronaut Programme, one of the projects managed by the Mohammed bin Rashid Space Centre (MBRSC) under the UAE's National Space Programme

Highness Sheikh Mohamed bin Zayed Al Nahyan noted that the UAE's participation in this mission reflects the country's vision and directions in enriching its contributions to future sciences.

He said, "The participation of Emiratis in this mission is seen as a step closer towards achieving our vision of ensuring a better future for generations and strengthen their participation in building the future."

His Highness Sheikh Mohamed bin Zayed highlighted the national strategy the UAE adopts to develop its scientific manpower and prepare young Emiratis to contribute in scientific research to serve humanity.

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, affirmed that the ambitions of the UAE in the space sector are a clear reflection

'Participation in this mission reflects the country's vision in strengthening its contributions to scientific research that will serve humanity'

– UAE President

of its vision of shaping the future. He said, "Our ambition in exploring space sciences is limitless, and we are keen to strengthening our position in this promising sector."

Sheikh Mohammed bin Rashid affirmed the UAE's keenness to complement the ambitions of the late founding father Sheikh Zayed. "We are always inspired by the ambitions of our founding father. This can be seen most clearly today by our participation in 'Zayed Ambition 2', the longest Arab space mission in history."

Sultan Al Neyadi, along with two NASA astronauts, commenced his mission to the International Space Station on a SpaceX Falcon 9 rocket from the Launch Complex 39A at NASA's Kennedy Space Center in Florida. Inside SpaceX's Crew Dragon capsule, the space farers spent around 24 hours in orbit lapping the Earth, before docking with the ISS on March 3 at 10:17 am. After successfully boosting the Crew Dragon carrying the astronauts into low Earth orbit, the Falcon 9 then turned back towards Earth.

'At the forefront of the global space sector'

H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Mohammed bin Rashid Space Centre (MBRSC), watched the live launch at MBRSC in Dubai.

Sheikh Hamdan dedicated the mission's achievement to President His Highness Sheikh Mohamed bin Zayed Al Nahyan; His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai; Their Highnesses Members of the UAE Supreme Council; and the people of the UAE. He expressed his pride in the capabilities of Emiratis which has

enabled the nation to be at the forefront of the global space sector, noting that the mission has been made possible by the unwavering support of the UAE leadership.

Sheikh Hamdan bin Mohammed wished Emirati astronaut Sultan Al Neyadi the best in his mission to the ISS, during which he will conduct various scientific experiments. The launch of the mission heralds a new era of scientific progress for the UAE that will see the nation making significant contributions to shaping a new future for humanity, he said.

Sheikh Hamdan was accompanied at MBRSC by Mohammad bin Abdullah Al Gergawi, Minister of Cabinet Affairs, and Vice Chairman of the Board of Trustees and Managing Director of the Dubai Future Foundation; Omar bin Sultan Al Olama, Minister of State for Artificial Intelligence, Digital Economy, and Remote Work Applications; Talal Humaid Belhoul Al Falasi, Vice President, MBRSC; Abdulla Al Basti, Secretary-General of The Executive Council of Dubai; and Omran Sharaf, Assistant Minister of Foreign Affairs and International Cooperation for Advanced Science and Technology.

Crew-6 Mission

Sultan Al Neyadi, undertaking the UAE Astronaut Mission 2, is the Mission Specialist of the Crew-6 mission, along with NASA astronauts Stephen Bowen (Spacecraft Commander) and Warren Hoburg (Pilot), and Roscosmos cosmonaut Andrey Fedyaev (Mission Specialist). Crew-6 is part of Expedition 68/69 to ISS.

During the mission, Sultan Al Neyadi will collaborate with NASA, the European Space Agency (ESA), the Canadian Space Agency (CSA), Japan Aerospace Exploration Agency (JAXA) and

Crew-6 astronauts will conduct several scientific experiments, some of which will include new scientific research to prepare for human missions outside low Earth orbit

the National Centre for Space Studies (CNES) to conduct 19 scientific studies across a wide range of topics.

The experiments will cover the areas of cardiovascular and immune system health, back pain, technical demonstrations, epigenetics, fluid science, plant biology, material science, sleep analysis, and radiation.

In addition to the scientific research, the mission also includes educational outreach efforts designed to inspire and engage the next generation of scientists and explorers.

'Hopes and dreams of a nation'

Hamad Obaid Al Mansoori, Chairman, MBRSC, said, "As we venture into the depths of space, we carry with us the hopes and dreams of our nation, and the determination to make history. Today, we celebrate not just the successful launch of the longest Arab space mission in history, but the realisation of a vision that will inspire generations to come.

"We are highly grateful of our wise leadership whose constant support is a source of strength and inspiration for the team to constantly take on new challenges. Our mission through these scientific endeavours is to keep the UAE flag flying high and be at the forefront of countries contributing to scientific achievements."

Salem Humaid Al Marri, Director-General, MBRSC said, "With the successful launch of the UAE's second manned space mission and the longest Arab space mission in history, we have proven that our aspirations and the will to achieve them are limitless. Congratulations to Sultan Al Neyadi and the entire team behind the mission, who have worked tirelessly to make this historic moment a reality. We are looking forward to the 180 days

on board the International Space Station."

Scientific experiments and research

Crew-6 will carry out innovative scientific research aimed at preparing for human exploration beyond low-Earth orbit and benefiting life on Earth. There will also be 13 live calls and 10 ham radio interactions, and sessions for a community outreach programme.

The experiments include the study of materials burning in microgravity, tissue chip research on heart, brain, cartilage functions, and an investigation to collect microbial samples from the exterior of the space station. These are a mere sampling of over 200 science experiments and technology demonstrations slated for the mission. Expedition 68/69 will also potentially continue to install the final pieces of iROSA, the roll-out solar arrays on ISS.

The MBRSC is currently funding two research projects from the Mohammed bin Rashid University of Medicine and Health Sciences (MBRU), both of which will be included in the Crew-6 mission. The first project will assess how the microgravity environment of spaceflight affects cardio-postural interactions, while the second will investigate dental/oral cells in a simulated microgravity environment on Earth. These projects will engage students and researchers, enabling the development and qualification of future generations of scientists.

The Zayed Ambition 2 Mission is a part of the UAE Astronaut Programme, one of the projects managed by MBRSC under the UAE's National Space Programme and funded by the ICT Fund of the Telecommunications and Digital Government Regulatory Authority (TDRA).

Critical Role Of Women In Addressing Nature And Climate Crisis In The Spotlight

The Zayed International Foundation for the Environment attended an insightful discussion on the critical role of women in leadership, sustainability and safeguarding our planet, hosted in February at the Women's Pavilion at Expo City Dubai. The fire-side chat with HE Razan Al Mubarak, UN Climate Change High-Level Champion for COP28, was part of the "In Conversation With" session, organised as

ZAYED FOUNDATION

part of the new programming at Women's Pavilion throughout 2023, featuring leaders and pioneers from different sectors.

Elaborating on her deep-seated love of nature while growing up, HE Razan Al Mubarak, who is only the second woman to be President of the International Union for Conservation of Nature in its 72-year-history, said that integrating diverse gender perspectives across holistic and enduring climate and environmental policies and programmes is critical to make headway in the fight against climate change.

Describing the Women's Pavilion as a "unique venue that helps frame discussions around issues and opportunities central to women and girls," Al Mubarak highlighted the critical role of women in leadership, sustainability and safeguarding our planet. She said: "Women and girls, especially those in developing countries face the worst consequences of climate change and are also critical to making decisions and developing policies to help solve both the climate and biodiversity crises in an inclusive way that leaves no one behind."

She added that empowering women as decision makers and genuinely including them in all sectors of the economy enhances both diversity of gender and perspectives. "Women must be included by design, not by default," said the IUCN President, adding that the three pillars critical for a more equal future were "Consistency, Collaboration, and Communication".

Salma Moustaid, Technical Executive Officer, Zayed International Foundation for the Environment, attended the discussion at the Women's Pavilion.

'WGS Helps Unite The World, Shape The Future': HH Sheikh Mohammed Bin Rashid Al Maktoum

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has stated that the UAE will continue its strategic mission to promote international cooperation, enhance government excellence and foster inspiring initiatives to meet people's aspirations for development, wellbeing, social stability and future security. He was speaking at the conclusion of the World Government Summit (WGS) 2023, held from 13-15 February in Dubai under the theme 'Shaping Future Governments'.

His Highness Sheikh Mohammed bin Rashid said: "Today, we concluded the 10th edition of the World Government Summit, which saw the participation of 10,000 experts and government officials, 80 international organisations, and the signing of 80 international agreements. The Summit represents our country in uniting the world, shaping the future, and serving humanity."

"The WGS brought together 20 heads of states and governments, and more than 250 ministers, entrepreneurs, government officials, thought leaders and experts. The event, now entering its second decade with a stronger will to make an impact, showcased successful experiences from across the world. New challenges cannot be addressed using old tools, and successful government strategies are our means to secure a better future," His Highness added.

His Highness further noted: "We are optimistic about the future. Every year at the World Government Summit, we witness success stories and inspiring ideas that support our optimism. Exceptional government work is the only way to build the future, and every government achievement in any country acts for the greater

World Government Summit 2023 brought together more than 10,000 international government officials, thought leaders, global experts and decision makers

good of us all. Through governments' cooperation and their unified vision, the future of humanity will become much better."

Exceptional Summit

Mohammad Abdullah Al Gergawi, Minister of Cabinet Affairs of the UAE and Chairman of the WGS Organisation, highlighted that the World Government Summit 2023 was exceptional in every way, especially the number of participants, sessions and forums, marking 10 years of success and global influence.

"The WGS 2023 was exceptional not only in terms of the large number of participants, sessions and forums, but also in the range of global issues addressed. Reflecting the humanitarian mission of the WGS, it acts as a platform for harnessing global efforts and international partnerships to help those in need, as we have recently witnessed in our response to the unfortunate incidents in Syria and Turkey," he said.

"Every year, the WGS is keen to provide insights, launch initiatives, and conduct in-depth analysis of key international trends, contributing to the development of government plans to deal with future requirements," Al Gergawi added.

Large participation

The end of the third day marked the conclusion of the WGS 2023, which witnessed the participation of 10,000 people from 150 countries, and featured 220 main addresses, panel discussions and interactive sessions, during which 20 heads of state and governments and more than 250 ministers convened to discuss key issues.

Participants in the 10th edition of the Summit, representing 80 international, regional and

government organisations, discussed key current and future global challenges, and ways to enhance governments' readiness to anticipate and address rapid changes. The WGS tackled issues shaping the future through six main themes: Accelerating Development and Governance, Future of Societies and Healthcare, Exploring the Frontiers, Governing Economic Resilience and Connectivity, Global City Design and Sustainability, and Prioritising Learning and Work.

Global leaders

The Summit was attended by a number of distinguished leaders, including Abdel Fattah El-Sisi, President of the Arab Republic of Egypt; Mario Abdo Benítez, President of the Republic of Paraguay; Recep Tayyip Erdogan, President of the Republic of Türkiye, who delivered a recorded speech in which he hailed the efforts of the World Government Summit; Macky Sall, President of the Republic of Senegal and Chairperson of the African Union, who presented the investment potential in Africa; and Wavel Ramkalawan, President of the Republic of Seychelles, who showcased the challenges facing his country as a result of global climate change.

The WGS 2023 also witnessed the participation of H.H. Sheikh Ahmad Nawaf Al-Ahmad Al-Sabah, Prime Minister of Kuwait; Dr. Maeen Abdulmalik Saeed, Prime Minister of Yemen; Najla Bouden, Prime Minister, Republic of Tunisia; Irakli Garibashvili, Prime Minister, Georgia; Ali Asadov, Prime Minister, Republic of Azerbaijan; Her Excellency Ana Brnabić, Prime Minister, Republic of Serbia; and Akylbek Japarov, Chairman of the Cabinet of Ministers, Kyrgyz Republic.

Kristalina Georgieva; Managing Director of International Monetary Fund (IMF), Dr. Tedros

Global leaders participate in stimulating sessions to discuss ideas and strategies for a better future through international cooperation

Adhanom Ghebreyesus, Director-General of the World Health Organisation (WHO); and Gilbert F. Houngbo, Director-General of International Labour Organization (ILO), also participated in the 2023 edition of WGS.

In addition, the Summit hosted Professor Klaus Schwab, Founder and Executive Chairman, World Economic Forum, and Ahmed Aboul Gheit, Arab League Secretary-General.

The Summit witnessed the signing of 80 bilateral agreements, including a bilateral agreement between the UAE Government and the Republic of Georgia; a partnership between the UAE Government and the Republic of Rwanda; an agreement between the UAE Government and the UN Sustainable Development Solutions Network.

During WGS 2023, H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, Chairman of The Executive Council of Dubai, and Chairman of the Board of Trustees of the Dubai Future Foundation (DFF), launched the Dubai Future Readiness Index.

During the Summit, the United Nations Industrial Development Organization (UNIDO), the Department of Health Abu Dhabi (DoH), the regulator of the healthcare sector in Abu Dhabi, and the Global Manufacturing and Industrialization Summit (GMIS) signed an agreement to establish the UNIDO International Centre for Industry Readiness in the UAE.

The World Government Summit 2023 also witnessed the launch of a global initiative led by the UAE, in partnership with the United Nations Office on Drugs and Crime (UNODC) and their international partners, aimed at raising awareness and building global research capabilities for law enforcement agencies to address crimes affecting the environment.

The World Government Summit saw seven global awards being presented in appreciation of government ministers, representatives of the private sector, innovators and creators for their exceptional contributions to building a better society for humanity.

The Summit also issued 20 knowledge reports, in cooperation with the most important international research institutions. The agenda included more than 22 international forums focused on developing policies, strategies and future plans that enhance the readiness and flexibility of governments for the next stage of development.

More than 300 speakers including heads of states, ministers, government officials and thought leaders discussed pressing issues and reviewed current and future challenges.

H.H. Sheikh Saud bin Saqr Al Qasimi, Supreme

Council Member and Ruler of Ras Al Khaimah, participated in the WGS 2023 sessions. H.H. reviewed the emirate's experience, addressing the most important factors of its success and distinction.

H.H. Sheikh Mohammed bin Hamad Al Sharqi, Crown Prince of Fujairah, presented Fujairah's Strategic Outlook at the Summit.

Lt. Gen. H.H. Sheikh Saif bin Zayed Al Nahyan, Deputy Prime Minister and Minister of the Interior, highlighted Emirati culture and values during his keynote at the Summit.

Mohammad Abdullah Al Gergawi, Minister of Cabinet Affairs, and Chairman of the World Government Summit Organisation participated in a number of sessions, including a virtual plenary session with Elon Musk, CEO, Twitter, Tesla and SpaceX, and a session titled 'Governments and the Changing World Order' with Ray Dalio, Founder of Bridgewater Associates.

Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology, and President-Designate of COP28, also delivered a keynote speech at the Summit.

REPORT

New IRENA Report Highlights Hydropower's Evolving Role

Current trends in the power sector have prompted changes in the role of hydropower, creating a need to adjust the way these assets are designed, operated and maintained, according to a new report by the International Renewable Energy Agency (IRENA). "The changing role of hydropower: Challenges and opportunities", produced in the context of IRENA's Collaborative Framework on

Hydropower, provides a snapshot of the current status of hydropower and lays out a vision of how to realise its potential.

"Hydropower has been an effective source of clean power generation for more than a century," said IRENA Director-General Francesco La Camera. "In a rapidly evolving energy landscape, it is important to reevaluate its future role and leverage technological advancements to maximise its potential while ensuring its sustainability and climate resilience."

According to IRENA's 1.5°C Scenario, if the world is to completely decarbonise and meet the climate goals set in the Paris Agreement, hydropower installed capacity, including pumped storage hydropower, should more than double by 2050. This will require annual investments in hydropower to grow roughly fivefold.

However, the report underscores that most hydropower potential lies in developing countries, and financing institutions need to work together with governments to overcome local risks and limitations.

According to the report, hydropower, despite being the most mature renewable technology, faces several challenges including: modernising ageing fleets to meet modern power system requirements; attracting new investments; and updating market structures and business models that do not reward all of the services provided by hydropower beyond power generation.

The report also emphasises that the planning and development of hydropower will only be successful if aspects of sustainability and resilience are taken into consideration.

Over 7 Million Single-Use Plastic Bottles Saved Through Dubai Can Initiative

Dubai Can, the citywide sustainability movement launched on 15 February 2022, has successfully reduced the use of an equivalent of more than 7 million 500 ml single-use plastic water bottles in its first year.

The exceptional success of the initiative is reflected in the fact that Dubai Can has been widely adopted in the city, with participation

Sustainability movement marks first anniversary, having successfully reduced the use of an equivalent of more than 7 million 500 ml single-use plastic water bottles

from homes, offices, hotels, schools, and the installation of 50 water fountains in different locations.

Dubai Can has placed water fountains in strategic places across the city, including public parks, beaches, and popular tourist destinations, with the help of its partners and sponsors. The fountains can be found in well-known neighbourhoods such as Kite Beach, Dubai Marina, and Downtown Dubai. Working together with talabat, a leading online food delivery service, Dubai Can has expanded its fountain locations and improved awareness. Fountains were recently added in four additional prominent locations: Hatta, Dubai Sports City, Port Rashid, and Dubai Internet City.

Yousuf Lootah, Acting CEO of Corporate Strategy and Performance sector at Dubai's

Initiative has placed water fountains in strategic places across the city, including public parks, beaches, and popular tourist destinations

Department of Economy and Tourism (DET), said: "In line with the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to make Dubai a leading sustainable destination and with the support of His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Dubai Crown Prince and Chairman of the Executive Council of Dubai, the Dubai Can movement has experienced considerable success since its launch one year ago.

"We are extremely proud of the progress the initiative has made and we hope that during this year and beyond, the initiative will continue to encourage residents and tourists to adopt greener practices and lifestyle choices contributing to the Dubai Economic Agenda D33's goal of consolidating Dubai's status as one of the world's top three global cities."

"The success of this initiative could not have been possible without the wholehearted support of our valued city stakeholders and partners, as well as the city's public-private partnerships that significantly contributed to Dubai's sustainability strategy.

"As we strive to achieve all of the city's sustainability goals and position it as the best city in the world to live in, work and visit, we look forward to the continued success of Dubai Can, particularly in 2023, which has been declared as UAE's 'Year of Sustainability," said Lootah.

Changing mindsets and creating conscientious consumers

The Dubai Can initiative has inspired significant change at both the individual and community level over the past year, extending beyond the installation of fountains. Its objective is to

increase awareness of the harmful effects of single-use plastics and promote the use of reusable bottles not only at water fountains but also in homes, hotels, and elsewhere, aiming to change people's mindsets.

Many private companies in Dubai have been inspired by Dubai Can to install water fountains in their offices, reducing single-use plastics in the workplace. Above all, the movement has encouraged residents and visitors to the UAE to adopt more sustainable behaviours and become conscientious consumers.

Refill for life

The initiative is in line with Dubai's commitment to achieving the United Nations Sustainable Development Goals (UNSDGs) and becoming a fully sustainable destination, especially since the city is the host of COP28 this year. As part of the UAE's Year of Sustainability in 2023, the campaign has entered its second year and has become a driving force for the city's sustainability strategy. The initiative's momentum seamlessly aligns with the ban on single-use plastic bags, which came into effect on June 1, 2022, demonstrating the UAE's commitment to environmental protection and waste reduction.

Dubai Can's environmental impact on the city remains significant, and the initiative is poised to continue its positive influence for years to come. All water stations throughout the city adhere to the highest hygiene standards and comply strictly with municipal, healthcare, and federal regulations. The stations provide clean and safe drinking water, which is tested in accordance with DEWA, GCC, and World Health Organization standards.

New Collaboration To Convert Waste To Alternative Fuels

LanzaTech NZ, Inc., an innovative Carbon Capture and Transformation (CCT) company, and the Abu Dhabi Waste Management Company (Tadweer), the leading entity responsible for the development of waste management services in Abu Dhabi and a main key player that supports the adoption of the Emirate's circular economy, have announced a collaboration to explore business opportunities

to develop a large-scale conversion plant for transforming solid municipal waste into sustainable alternative fuel. LanzaTech transforms waste carbon into materials such as sustainable fuels, fabrics, packaging, and other products that people use in their daily lives.

Eng. Ali Al Dhaheri, Chief Executive Officer of Tadweer, said: "This is another great partnership we are exploring in 2023 – the UAE's Year of Sustainability."

He added, "It exemplifies our commitment to partnering with leading waste management entities and driving sustainability across our organization. We believe that waste is a resource to be harnessed, and with LanzaTech's support, we aim to make this a reality".

"The project represents a tremendous opportunity to protect the planet by turning waste carbon into sustainable aviation fuel, keeping fossil fuels in the ground," said Jennifer Holmgren, Chief Executive Officer of LanzaTech.

She added: "The carbon found in municipal solid waste, which is piling up in landfills or being incinerated globally, can play a critical role in eliminating the virgin fossil resources used to make fuels and chemicals.

It is a testament to the UAE's leadership and strong sustainability agenda that our technology has found a home here. This collaboration further advances the US and UAE's Partnership for Accelerating Clean Energy (PACE) and provides a foundation for deepening cooperation on circular economy and low-carbon fuels."

New Three-Phase Organic Solution To Combat Red Palm Weevil

A symbol of UAE heritage and a rich source of nutrition, the date palm tree has a vital and indispensable role in the social and cultural fabric of the nation, and that of many other Arab countries.

With seeds having been discovered on Dalma Island, Abu Dhabi, that are more than 7,000 years old, the cultivation of date palms – known for their resilience to high temperatures and harsh climatic conditions - can be traced back to the Neolithic era in the UAE. Indeed, dates and the date palm have shaped culture and history in the UAE for millennia and continue to do so as date palm oases across the nation play an ecologically delicate role in conserving biological diversity.

Nisha M.M.,
Founder and Managing Director,
AgFerm Innovations Pvt. Ltd.

Manufactured through a unique and proprietary technology platform – BPT (BioProcess Technology), organic solution is eco-friendly, non-toxic

Hence, the detection of the Red Palm Weevil, also known as red date weevil, in the Middle East and North Africa region during the mid-1980s, raised alarm bells for an industry that is deeply rooted in the economies and cultures of the people of this region.

The MENA region is where an estimated 90 percent of the world's date palms are grown, and these trees are at the centre of the livelihoods of an estimated 50 million farmers.

Agricultural scientist introduces three-part integrated control mechanism to counter the various stages of the Red Palm Weevil

The Red Palm Weevil, a creature native to South Asia, is regarded as the most dangerous and destructive pest of date palms worldwide as it feeds on the trees' growing tissue from the inside. In a span of three decades, the red palm weevil spread over 60 countries, and monitoring and control strategies have till date only met with limited success largely because it is not easy to detect the small insect entry holes made by the weevils in the base or crown of each tree. The problem is compounded as the invasive pest also moves from one country to another mainly through infested planting material.

Today, an ecofriendly, non-toxic and sustainable three mode control strategy developed by an Indian agricultural scientist through a research-based program is showing promise as an effective measure to address the alarming expansion of both the Red Palm Weevil and Rhinoceros Beetle, a pest that causes date palms to have slower growth, lower yield, and frond damage resulting in gradual death of the palms.

The solution, developed by Nisha M.M., Founder and Managing Director, AgFerm Innovations Pvt. Ltd., Bangalore, in the Indian state of Karnataka, was manufactured through a unique and proprietary technology platform – BPT (BioProcess Technology) wherein selective microorganisms, in combination with plant metabolites - chemical compounds produced during the growth and development, processes - are biologically processed to derive safer products that can enrich the ecosystem with improved carbon cycle.

An entomologist with cross functional expertise in Insect Ecology, Plant Biotechnology, Microbiology, Fermentation Technology and

Formulation Sciences in the field of agriculture, Nisha MM received her post-doctoral fellowship in Plant Biotechnology & Molecular Biology from the Indian Institute of Science in 2005.

During her nearly two-decade-long career in the field of R&D and manufacturing in the agri-biotech industry, Nisha, who currently owns 16 patents in India, has isolated around 25,000 microbes out of which 7 to 8 have been commercialized. An advocate of responsible agricultural practices, the startup founder says the Bio Process Technology aims at delivering 100% water soluble products that enrich the ecosystem and drastically reduce the usage of harmful pesticides.

Her integrated crop management solutions therefore focus on three interrelated elements: research, capacity development, as well as transfer of knowledge and technology.

When it comes to the Red Weevil, Nisha explains that it is critical to have a continuous integrated control mechanism to counter the various stages of the pest. She explains: "Our three-pronged strategy has had excellent results on coconut plantations and yielded proven results for date palms in simulated lab conditions. However, to implement a control strategy, it is also important to better understand the life cycle of the pest. What makes Red Palm Weevil infestations so difficult to detect in the early stages, especially in large plantations, is because there are few externally visible symptoms that indicate the presence of the pest in a host tree."

Adult females lay eggs in any wound, crack, or crevice in the trunk of the palm and in the next stage, the larvae feed on the surrounding palm

The Red Palm Weevil, a creature native to South Asia, is regarded as the most dangerous and destructive pest of date palms worldwide

tissue and bore their way into the center of the palm. These larvae pupate in the palm trunk, or in concealed places at the base of palm fronds - a stage that may last from 11 to 45 days. The entire life cycle, egg to adult, can take 45 to 139 days.

"Our three-stage target specific goals comprises of soil drenching in the first phase where we aim to manage the larvae in the root zone to ensure the protection of this region from insect attack. The second phase consists of spray application. Here, we spray the trunk with the product to kill the larvae present on the stem and to avoid fresh boring of adult beetles."

She continues: "The third phase of management is fumigation with an organic repellent that prevents adult insects from going near the palm. Additionally, it will also instantly kill the eggs and larvae already present inside the trunk. Together, the three phases provide long time protection as it kills the insect population at various stages of their lifecycle – in the larvae and pupae stage to adult stage."

Nisha, who was on a visit to the UAE recently is looking to do a 3-month pilot study to ascertain the efficacy of the solution in real-life conditions. "While this has been tested and achieved promising results in simulated lab conditions and a pilot test on ground will reinforce the efficacy of our organic solutions."

AgFerm also has several other organic products including fertilisers, fungicides and pesticides for general crop management that have helped increase productivity by 15 percent, reduce pest and disease by more than 80 percent and use of chemical fertilisers by 50 percent, and increase yield by around 20 percent across countries in Asia, Africa and North America.

Amongst the company's range of animal probiotics is a natural antibiotic for complete protection of poultry and efficient feed supplements for livestock such as Clean Meat Probiotic, which fights climate change by reducing methane and nitrous oxide emission from cattle and poultry farming.

Dubai Future Foundation, MIT Launch Senseable City Lab

The Dubai Future Foundation has signed an agreement with the Massachusetts Institute of Technology (MIT) to launch the Middle East's first-ever Senseable City Lab, a global MIT initiative that researches and tests pilot projects for planning urbanisation and the rapid growth of cities.

In the presence of Abdulla Al Basti, Secretary-General of The Executive Council of Dubai; and Mattar Al Tayer, Commissioner-General for Infrastructure, Urban Planning and Well-being Pillar and Chairman of the Supreme Committee of Urban Planning in Dubai; the MIT agreement was signed at the World Government Summit (WGS) 2023 by Khalfan Belhoul, Chief Executive Officer of DFF, and Professor Carlo Ratti, Director of the Senseable City Lab at MIT.

The global MIT initiative researches and trials pilot projects for planning urbanisation and growth of cities

Senseable City Lab conducts interdisciplinary research in Singapore, Stockholm, Amsterdam, Lagos, and now Dubai, where it will play a crucial role in addressing the challenges faced by cities in a fast-changing world.

While cities occupy only 3 percent of the Earth's land, they consume 70 percent of energy sources and account for 80 percent of CO2 emissions. To address this urgent and unsustainable imbalance, the Lab aims to find

Cities occupy only 3 per cent of the planet, but consume 70 per cent of energy sources, and account for 80 per cent of CO2 emissions

innovative solutions to make cities more resilient and efficient.

Abdulla Al Basti, the Secretary-General of The Executive Council of Dubai, applauded the partnership and its potential to develop the technological skills needed to enhance future urban planning. He said that the partnership aims to create a scientific platform that harnesses the vision of the emirate's leadership to make Dubai a testbed and laboratory for scientific innovation.

He added, "The agreement with MIT emphasises Dubai's focus on transforming innovations from concepts into reality, while developing new knowledge and tools to better serve our world and keep pace with Dubai's future ambitions. The partnership's research and development strategy focuses on finding solutions to the most pressing challenges, working towards increasing productivity, developing services, enhancing economic resilience, and preparing for the future."

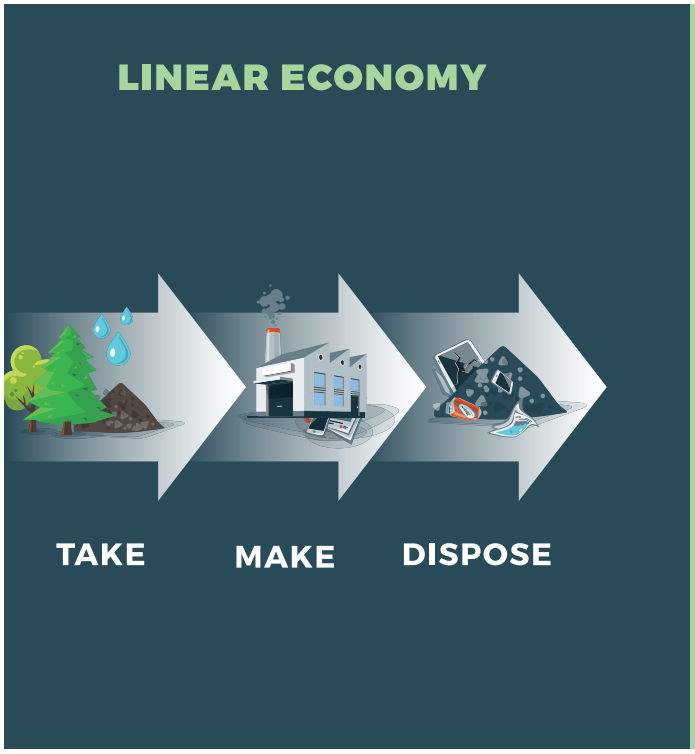
Fellowship Programme

The launch was accompanied by the establishment of the Senseable City Consortium Fellowship Programme, which aims to empower and guide partners to implement actionable ideas to create change. It will also provide opportunities for companies in Dubai to engage with this interdisciplinary research to inform potential future innovations.

The Senseable City Lab in Dubai is expected to have a significant impact on the development of smart cities in the region and the world. The launch of the MIT Lab represents a significant step forward in addressing the challenges of the future, and a commitment to making cities more sustainable and efficient for future generations.

New Policies, Initiatives Announced To Support UAE's Sustainability Efforts

H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of The Executive Council of Dubai, chaired a meeting of the Council, which explored opportunities emerging in the circular economy and adopted a new Green Procurement Policy for Dubai government and a Shared Services function designed to enhance the efficiency of government services.



Dubai announces a new Green Procurement Policy and a Shared Services function designed to enhance the efficiency of government services

Sheikh Hamdan said: "The UAE has created the ideal conditions for promoting environmental protection and sustainability. We have also developed an agile legislative framework that allows us to keep pace with new developments and changes in the environmental sphere. With the leadership's support, Dubai has emerged as a business and investment destination that is at the forefront of promoting sustainability, encouraging green projects, and embracing the concept of the circular economy."

His Highness added: "The private sector is a strategic partner in this journey to build an environment-friendly city and create an attractive business destination."

Circular Economy Opportunities

The Executive Council approved plans to take advantage of opportunities in the circular

Initiatives aim to improve environmental footprint of various industries and key sectors like construction, food, packaging, and waste management

economy by reducing the total demand for consumables and limiting the disposal of these materials so that they can be reused. In addition, the meeting explored how the environmental footprint of various industries and key sectors like construction, food, packaging, and waste management can be reduced.

The Executive Council also approved the Green Procurement Policy, a key initiative to support the circular economy, which aims to stimulate the local supply chain, adopt more sustainable practices, broaden the use of sustainable materials, create a competitive environment, reduce the environmental footprint, and enhance financial efficiency.

The Policy, which was piloted with several government entities, includes the development of measurable environmental and technical standards for procuring green products in line with Dubai's efforts to boost environment protection and encourage the private sector to adopt green technology, green products, and green services, as well as high sustainability standards in all government procurement.

The Green Procurement Policy will focus on four categories for government purchases in its first phase of implementation: construction materials, information technology devices, lighting materials, and waste management.

The Executive Council also approved a Shared Services function which focuses on providing proactive, specialised, and seamless services for customers and government entities, leading to enhanced efficiency and effectiveness of the government.

Masdar Grows Clean Energy Portfolio, Enters Geothermal Energy Sector

Masdar, a global clean energy powerhouse, is entering the geothermal energy sector, through a strategic investment in Indonesia's Pertamina Geothermal Energy (PGE), one of the world's largest geothermal players.

The investment marks Masdar's entry into geothermal energy, in the second-largest geothermal market in the world.

Strategic investment in Indonesian-based Pertamina Geothermal Energy, one of the world's largest geothermal players, marks Masdar's entry into geothermal energy

HE Dr. Sultan Al Jaber, UAE Minister of Industry and Advanced Technology, and Chairman, Masdar, said, "Achieving the 1.5C target set out in the Paris Agreement will require humanity to leverage all sources of low-carbon energy, including sources that are currently under-utilized, like geothermal. Through its investment in PGE, Masdar is demonstrating its continuing commitment to Indonesia's energy transition and its support to provide practical energy security solutions while reducing emissions."

Ahmad Yuniarto, CEO, PGE, said, "We look forward to working with Masdar to further our capabilities to be a world class green energy company, with the largest geothermal capacity globally. We endeavor to develop 600 megawatts (MW) in additional installed capacity over the next five years to support Indonesia's renewable energy mix."

Geothermal is a stable, dispatchable, clean renewable resource, which helps to balance intermittency of wind and solar

Mohamed Jameel Al Ramahi, Chief Executive Officer, Masdar, said, "We are especially excited to add geothermal energy to our clean energy portfolio, a clean energy source that can deliver dispatchable power 24 hours a day, which further underscores our position as a global leader in delivering clean energy solutions that help drive the global energy transition."

Indonesia has a goal of increasing its installed geothermal capacity from 2.8 gigawatts (GW) in 2022 to 6.2 GW by 2030. The Government is targeting net-zero emissions by 2060 and having renewables provide 23 percent of the energy mix by 2023. PGE has been operating geothermal facilities in Indonesia for the last 40 years, with a portfolio capacity exceeding 1.87 GW.

Geothermal energy harnesses the heat generated within the Earth's core to provide a constant energy source, unlike solar or wind, which are intermittent in nature. Geothermal energy plants also have high-capacity factors, meaning they can run at maximum power for longer periods. This enables geothermal energy to play a significant role in the clean energy transition, helping nations with a high concentration of geothermal activity to reduce carbon emissions.

The PGE investment is the latest in Masdar's ongoing effort to expand and increase its strategic partnerships in the Asia-Pacific region. Masdar is already developing the region's largest floating solar facility – the 145-MW Cirata Floating Solar PV Plant in Indonesia – and last year signed an agreement with Tuas Power, EDF Renewables, and PT Indonesia Power to explore development of up to 1.2 GW solar capacity in Indonesia for export to Singapore.

New Citizen Science Initiative Launched In UAE

A new, comprehensive citizen science programme, under the name Sahim, has been launched in the UAE. An initiative of the Environment Agency – Abu Dhabi (EAD) and Emirates Nature- WWF, the programme will engage volunteers and harness large-scale public participation in a series of projects that address real-world environmental problems, in ways that include formulating research questions, collecting and analysing data, interpreting results, and making new discoveries.

Programme named Sahim (meaning "contribute" in Arabic) is a comprehensive citizen science initiative that allows the public to participate in scientific environmental research

Citizen Science is a way to contribute to real science and act for the environment while learning something new directly from scientists. It brings everyone into the important work of learning more about and protecting our planet. Volunteers and scientists work together to answer real-world questions.

Sahim's approach serves the dual purpose of gathering useful data to support decision-making and engaging the community in a meaningful way to participate in environmental causes they care about; therefore, translating awareness and advocacy into meaningful action with tangible and far-reaching impacts.

H.E. Dr. Shaikha Salem Al Dhaheri, Secretary General, EAD, said: "The value proposition for

Sahim aims to harness the power of community participation, which supports the national drive to utilise science in combating climate change and nature loss

Sahim is clear and easily demonstrated; as an environmental regulator, we need to access large sets of data that inform our environmental policies, which we can expedite through the citizen scientists. Their contributions towards a diverse range of missions, including tracking waste and observing birds, marine animals, and other species will help us understand trends and act based on these insights."

"The UAE's leadership has announced environment and sustainability as key priorities for 2023, a critical year in a critical decade for climate action and biodiversity loss, as the nation sets the groundwork to meet 2050 net-zero goals and to host COP28 later this year. Scientific expertise and rigour are needed, and Sahim projects will support in filling knowledge gaps and collecting data to support robust environmental decision-making for the UAE," H.E. Dr. Al Dhaheri concluded.

Laila Mostafa Abdullatif, Director General of Emirates Nature-WWF said: "Around the world, citizen science programmes have proven to be a diverse and scalable tool with a huge range of applications.

"Not only will these projects contribute to raising public knowledge of science, but also allow the community in the UAE to be part of the solutions to the dual threat of biodiversity loss and climate change. Participants will take an active role in advancing progress by participating in real scientific research–observing, gathering, and even analysing data,"

"In partnership with EAD, we will roll out several projects over the next 12 months. We encourage the entire community to join Sahim projects and be part of the study and protection of nature. You will generate invaluable insights through participation —giving back to the community and

giving back to science — and even greater, you will learn more about the UAE's unique and diverse environment and help to conserve it, working alongside environmental specialists and scientists," Abdullatif concluded.

Enabling public participation in data gathering means a larger volume of valuable data can be collected, much of which can be conducted close to home, sometimes in backyards or even in living rooms and kitchens, with guidance from professional scientists and using established protocols and tools.

Citizen science brings everyone into the important work of exploring and protecting our planet. Volunteers and scientists work together to answer real-world questions. Key projects over the next 12 months, under the umbrella of Sahim, include: waste collection and analysis from marine, coastal or terrestrial sites; using cameras to identify and monitor terrestrial wildlife; and monitoring mangrove forests and their associated species.

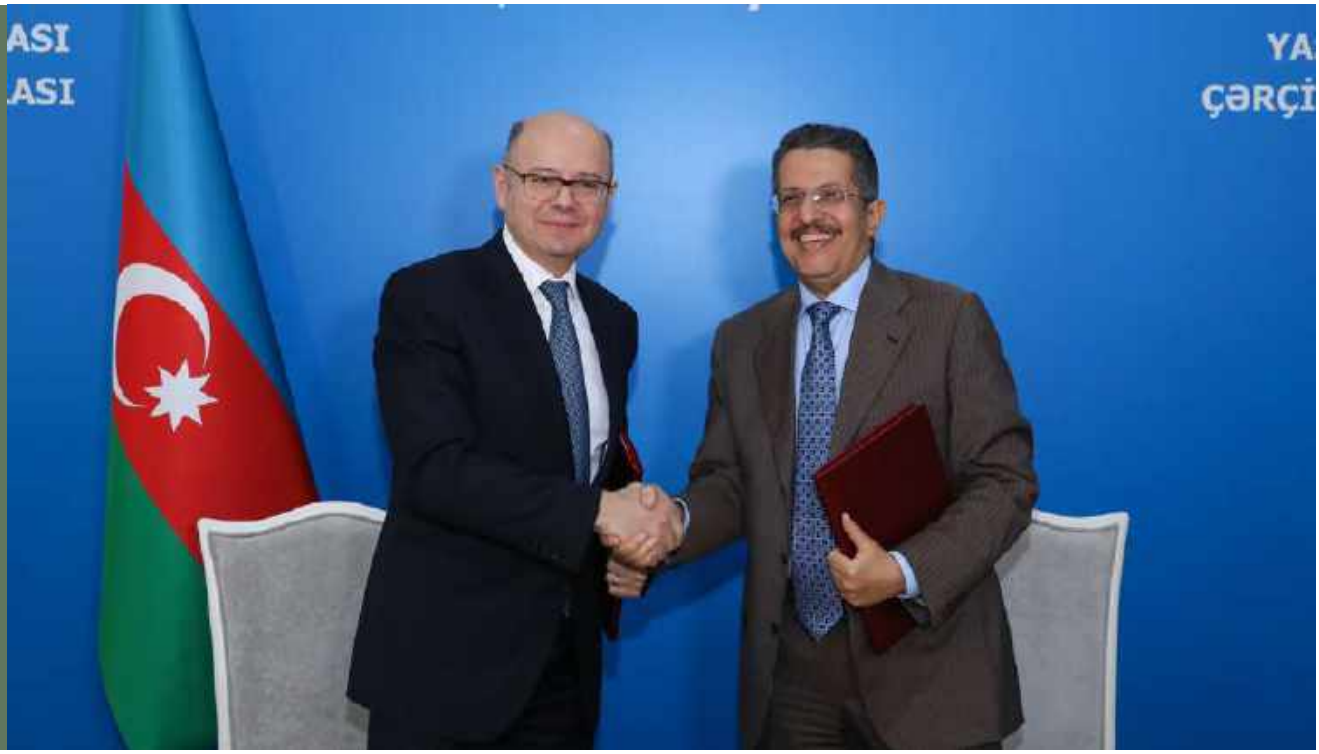
Suaalif 'ajdadina Program which sees volunteers conduct interviews to gather oral history and traditional knowledge about the historical state of the environment in the UAE.

People of all ages across the community – youth, parents, corporate and government employees – can volunteer on a diverse portfolio of projects, with rigorous citizen science principles, that contribute towards the UAE's environmental goals. The public can find out more by visiting https://connectwithnature.ae/sahim-x-citizen-science and detailed information on volunteering opportunities at environmental projects, under the umbrella of Sahim, will also be available through volunteers.ae

Renewable Energy Partnerships To Aid Azerbaijan's Decarbonization Efforts

ACWA Power, a leading Saudi developer, investor, and operator of power generation, water desalination and green hydrogen plants worldwide, has announced that four separate agreements have been finalised for the development of new renewable energy in the Republic of Azerbaijan.

In line with ACWA Power's commitment to lead



and enable energy transition underpinned by its robust public-private partnership model, the company has signed key implementation agreements with the Ministry of Energy and cooperation agreement with State Oil Company of Azerbaijan Republic (SOCAR).

Following on from recent collaborative efforts between the two parties for the SAR 1.1 billion 240 MW wind power plant project, the new MoU entails the development of a battery energy storage system, together with implementation agreements for 1GW and 1.5GW of onshore and offshore wind, respectively. The new agreement will ensure collaboration and exploration in the fields of renewable energy and green hydrogen.

His Excellency Parviz Shahbazov, Minister of Energy of Azerbaijan, said: "These projects aim to develop Azerbaijan as a country of "green growth". The collaboration will reduce carbon emissions, accelerate energy transition and ensure new capacities for the planned green energy corridor from the Caspian to Europe."

The agreements will enhance the Republic's national electricity grid by integrating additional renewable energy sources. It positions the country as a broad export market and ensures the population benefits from battery storage and offshore wind capabilities.

ACWA Power is currently implementing a 240 MW wind farm project in Azerbaijan, expected to produce around one billion kilowatt-hours of electricity per year. The plant will save about 220 million cubic metres of natural gas and reduce carbon emissions by more than 400,000 tonnes per year upon completion.

Carbon-Intensive Industry Executives Call For Financing To Support Decarbonization

Executives from 'hard-to-abate' industries have called for increased financing to support decarbonisation efforts, following the release of a landmark report that outlines less than a third believe they have adequate budgets to do so, and over half have not yet set net-zero targets.

Reducing emissions in the hard-to-abate industries – cement, steel, aluminium, petrochemicals, shipping, aviation, heavy industry, and manufacturing – is vital in the effort to combat climate change, with industry and transport accounting for almost half of global emissions.

'Hard to Abate, Ready to Start', a new report published by Masdar, in partnership with FT Longitude, furthers the discussion on decarbonisation by identifying the biggest hurdles on the path to net zero

The findings from 'Hard to Abate, Ready to Start', published by Masdar, a global clean energy powerhouse, in partnership with FT Longitude, furthers the discussion on decarbonisation by identifying the biggest hurdles, and what is needed to drive greater action in the lead up to the 28th session of the Conference of the Parties to the UNFCCC (COP28) in the UAE.

Although challenging, the report finds that half of senior industry leaders are more confident that net zero in their business is more achievable

Despite emergence of innovative new technologies to capture and store carbon, reliable finance remains a major barrier for accelerating progress

today compared to a few years ago.

Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology, COP28 President-Designate, and Chairman of Masdar, said, "COP28 will see the conclusion of the Global Stocktake, offering a review of progress against the Paris Agreement. The significant gap in results will show where we are and where we need to be. The UAE is committed to addressing this and to bringing the goal of 1.5 within reach. Addressing carbon emissions in hard-to-abate sectors is a priority in that regard. There is simply no path to net-zero that does not include decarbonising these essential industries."

Despite the optimism that exists across the industry, and the emergence of innovative new technologies to capture and store carbon, reliable finance remains a major barrier for accelerating progress. The report states that 60 percent of organisations surveyed across Europe, Asia-Pacific, the Middle East, and North America have still not set decarbonisation targets, and leaders from those organisations cite a lack of reliable finance as the main barrier for committing to targets.

83 percent and 62 percent of senior executives from the Middle East and Asia-Pacific respectively highlighted that they are taking steps to reduce emissions but have not set a target date for completion. Further, only 30 percent of senior executives overall, indicated their budgets will be able to meet decarbonisation needs, and more than 50 percent are concerned about the impact of global economic headwinds on decarbonisation investment.

Ahead of COP28, the UAE Presidency has made

clear that access to finance and capital will be a priority, noting that both governments and private sector partners require the resources needed to commit to transformative action. This includes investing in the breakthrough technologies and innovations needed to drive ambition, such as carbon capture and storage, and other forms of decarbonisation.

The report also highlights the disparity in available technologies to accelerate decarbonisation. The research has outlined the gap in "frontier" technologies available at a commercial scale, delaying energy-intensive industries in ramping up decarbonisation efforts.

Mohamed Jameel Al Ramahi, Chief Executive Officer of Masdar, said, "This report is a vital tool to drive forward decarbonisation in hard-to-abate industries. We intend to seize the opportunity of utility-scale renewable energy and focus our investments in frontier technologies like sustainable aviation fuel and green hydrogen to help accelerate global progress ahead of COP28 and beyond."

As well as calling for greater industry collaboration, the report highlights the importance of increased public sector support and calls upon governments to deliver innovative incentives across funding, legislation, and taxation to support national net-zero targets.

Publication of the report comes ahead of the UAE's preparations to host COP28 later this year. This global event will convene key players from all sectors, including hard-to-abate industries to progress conversations, accelerate climate action and deliver concrete outcomes and solutions for climate change.

AstraZeneca To Open New Sustainable Office In Dubai Science Park

In line with this year's focus on sustainability in the UAE, AstraZeneca has announced plans to construct sustainable offices at Dubai Science Park, a member of TECOM Group.

Set to open in Q3 2023, the move is part of the biopharmaceutical giant's global green agenda. The new office design, construction, and materials will meet platinum standards in

Leadership in Energy and Environmental Design (LEED) set out by the U.S. Green Building Council (USGBC). The Green Building Classification System is one of the most widely used worldwide and a marker of healthy, efficient, and carbon-saving buildings.

Marwan Abdulaziz Janahi, Senior Vice President of Dubai Science Park, part of TECOM Group, said, "Health and sustainability go hand-in-hand. We cannot improve our collective wellbeing without putting the planet's health first. Such foresight is what puts AstraZeneca among the world's leading biopharmaceutical firms and their new offices will add another benchmark for the industry. By joining our community of global and regional businesses across the health, energy and environment sectors, AstraZeneca can amplify their green efforts while promoting excellence in healthcare and research."

Sameh El Fangary, GCC and Pakistan Cluster President – AstraZeneca, commented, "Everyone involved in the delivery of healthcare has a role to play in addressing the global threat of climate change. Our new green offices will help us expand our local footprint in the UAE and demonstrate our support for the government's ambition to drive and accelerate sustainable development in healthcare, aligning with 'We the UAE 2031' vision. We are taking bold action, guided by our 'Ambition Zero Carbon' strategy, to reduce our environmental footprint and inspire continued collaboration globally and in the region."

The new offices represent AstraZeneca's commitment to the UAE Sustainability Goals and its global "Ambition Zero Carbon" strategy, which aims to eliminate carbon emissions from their global operations by 2025.

2024 Cadillac XT4: Elevates The Drive With Luxury And Tech Additions

Cadillac has introduced the 2024 XT4 — a bold, modern take on the compact luxury SUV brimming with curated design updates and an extensive suite of technology and safety features.

"The XT4 continues to be a top-selling vehicle in its class, year over year," said Rory Harvey, Global Cadillac Vice President. "It's balance of dynamic style, drivability and luxury has made it a favorite for many new Cadillac customers. Now with enhancements including our 33-inch-diagonal LED Color Touchscreen Display and safety features, it will further demand a second look."

New XT4 will offer a 33–inch-diameter LED Color Touchscreen Display, AKG Studio 13-Speaker Audio System and revamped interior and exterior designs

Offered in Luxury, Premium Luxury and Sport trims, highlights of the XT4's new and enhanced features include:

- Front and rear design updates, including new grille designs and new LED headlamps
- A fresh new interior design featuring a 33-inch-diagonal interface/display with 9K resolution
- New interior color and trim choices
- Over a dozen standard safety and driver assistance technologies including Blind Zone Steering Assist, Rear Cross Traffic Braking, and Lane Keep Assist with Lane Departure Warning
- New lineup of 18- and 20-inch alloy wheels

The compact luxury SUV is getting a long-awaited facelift which includes restyled front and rear fascia and updated LED running lights

Luxury and design take precedence

A more distinguishing, more contemporary pose is struck with the 2024 Cadillac XT4 with a new exterior appearance as well as a revamped interior. "The 2024 XT4's exterior styling — with signature vertical lighting cues and enhancements — advances Cadillac's design standard," said Bryan Nesbitt, Executive Director, Global Cadillac. "Complemented with a redesign of the interior instrument panel, fashionable embroidery patterns on seating, and a feeling of front row spaciousness — the new XT4 is distinctive and audacious."

On the exterior, the XT4's all new front fascia features the unmistakable Cadillac vertical signature lighting which is sleeker now with refreshed headlamps and daytime running lights. The XT4's new grille is a fresh reinterpretation of the classic Cadillac chevron embedded in a highly dynamic parametric pattern and crafted with ultra-precision.

Each cell of the grille is unique in shape, size and curvature and dipped in deep black gloss. The styling in the Premium Luxury trim has exclusive wheels, grille, fascia, roof rails, and side body accents where the Sport has its own exclusive wheels, fascia and body-side dark accents, and dark finish roof rails.

There's also a new lineup of 18- and 20-inch alloy wheel designs across the portfolio as well as three new exterior colors: Emerald Lake Metallic, Midnight Sky Metallic and Deep Sea Metallic.

Inside, the XT4 has a more tech-forward ambience with a redesign of the instrument panel that incorporates a bold, 33-inch-diagonal LED display inspired by the Cadillac LYRIQ. It is the interface for a new, advanced Virtual Cockpit System that is the foundation for the vehicle's infotainment system and connectivity features.

The XT4's cabin also features authentic brushed aluminum décor across the full width of the newly styled instrument panel accented with contemporary embroidery patterns on the seats.

Interior décor varies based on the trim:

- Luxury — features classic Piano Black appointments with laser etching
- Premium Luxury — offers genuine wood or aluminum trim, depending on the color combination
- Sport — includes genuine carbon fiber or genuine wood, depending on the interior color.

Next-gen connectivity

The XT4's new, expansive 33-inch-diagonal LED color touchscreen display is the focal point of the refreshed interior and the command center for

its infotainment system and suite of advanced safety features.

This artfully integrated advanced display is capable of a stunning 9K resolution and curves toward the driver in a single continuous screen, spanning the driver's viewing area. It also incorporates a customizable user interface designed to offer a technology-forward and personalized experience, with selectable display themes that can be tailored for the user's mood or personality.

The 2024 XT4 will offer intuitive access to the vehicle's infotainment and connectivity features, including:

- Google built-in compatibility that offers a helpful, personalized, and seamless way to enhance the vehicle experience. With Google Assistant, Google Maps and Google Play users have access to hands-free help, live traffic updates some favorite apps and more
- Wireless Apple CarPlay®, Wireless Android Auto™ compatibility

When it comes to music, news, podcasts or driving directions delivered by the infotainment system, the metal speaker mesh with bespoke patterns on the pillars of the new AKG Studio audio system offers an immersive listening experience. The 13-speaker system is available on Platinum and Sport trims.

Safety and driver assistance technologies

The Cadillac Smart System™ suite of safety and driver assistance features is standard on the XT4 and helps enhance confidence on the road. The following features are also standard:

- Blind Zone Steering Assist
- Rear Cross Traffic Braking

New luxury and fresh design and technology upgrades mirror that of the iconic LYRIQ and Escalade

- Front Pedestrian and Bicyclist Braking
- Following Distance Indicator
- IntelliBeam automatic high beams
- Lane Keep Assist with Lane Departure Warning
- Second Row Seat Belt Indicator

The Active Safety Package is available on Premium Luxury and Sport. Its roster of features includes several new and updated technologies:

- Adaptive Cruise Control
- New Intersection Automatic Emergency Braking
- Enhanced Automatic Emergency Braking
- Reverse Automatic Braking
- HD Surround Vision
- Rear Pedestrian Alert
- Enhanced version of Lane Keep Assist with Lane Departure Warning
- Side Bicyclist Alert

Proven performance

What hasn't changed with XT4 is the proven performance and responsive driving experience driven by a propulsion system that includes Cadillac's 2.0L Turbo engine (235 HP) with Active Fuel Management and an advanced nine-speed automatic transmission with electronic shift control. The Active Fuel Management system helps reduce fuel consumption by temporarily deactivating some of the engine's cylinders certain driving conditions.

A Driver Mode Selector is also standard, allowing the driver to tailor the XT4's responses to different driving conditions. Tour, Sport and Snow/Ice modes are available on all trims.

Additionally, the XT4's available twin-clutch all-wheel-drive system helps traction and vehicle control, whether the road is dry, wet, snowy, or icy. It is available on all trims and enhances performance by delivering torque to the wheels that need it the most.

Coming end of 2023

The 2024 Cadillac XT4 goes on sale in the Middle East by the end of the year, with production at GM's Fairfax assembly facility in Kansas. Pricing will be announced closer to the start of production. Additional details will be available at www.cadillacarabia.com.

BEEAH Receives 'Blueprint Of The Future' Award

The BEEAH Headquarters in Sharjah, the first fully AI-integrated building in the Middle East, has been awarded the OpenBlue Pioneer "Blueprint of the Future" award from Johnson Controls, the global leader for smart, healthy and sustainable buildings.

Operating at LEED platinum standards and targeting net-zero emissions, the BEEAH headquarters uses an on-site solar power plant to meet a large portion of its power requirements. An on-site grey water recycling plant and water-efficient systems for landscaping applications also ensure ultra-low water consumption.

Operating at LEED platinum standards, the BEEAH headquarters uses an on-site solar power plant and grey water recycling system to minimise emissions and water consumption to meet net zero targets

BEEAH joins a select group of award winners using the Johnson Controls OpenBlue suite of connected building solutions to set new benchmarks for smart, healthy, and sustainable buildings in a net-zero age.

Set against the backdrop of the Sharjah desert, the new BEEAH headquarters was designed to look like intersecting sand dunes, blending in with the desert landscape. The unique structure is fully integrated with artificial intelligence (AI)-driven solution powered by OpenBlue to enable energy efficiency, friction-free access and security, and connected building

The BEEAH Headquarters in Sharjah is the first fully AI-integrated building in the Middle East

management and employee service systems. Powered by Johnson Controls' OpenBlue digital technology, the seamless interaction within the building provides personalised experiences for visitors, employees and management.

The rooms automatically adjust light and temperature settings to make occupants as healthy and comfortable as possible, dynamically responding to movement and setting personal preferences. Facial recognition and automated security allow people to move seamlessly through the building, while also monitoring for safety.

The "Blueprint of the Future" award was presented by George Oliver, Chairman and CEO of Johnson Controls, to Khaled Al Huraimel, Group CEO of BEEAH Group.

"BEEAH Group has set a new benchmark for sustainable workspaces of the future. The BEEAH Headquarters is an iconic piece of architecture that provides a key blueprint for offices in a net zero world. We congratulate BEEAH for powerfully combining visionary thinking and digital building technology to create spaces that serve people and the planet," said Oliver.

Al Huraimel, in turn, said, "Powered by next-generation technologies that are integrated with energy and water-efficient systems, the building demonstrates how technology can help us accelerate towards sustainability targets. While preserving resources and protecting the environment, the building inspires people inside and out. We believe the BEEAH Headquarters is the ideal example of the smart built architecture in tomorrow's sustainable cities, where environmental responsibility and quality of life are paramount."

Sustainable Food Production And Consumption In Focus At Gulfood 2023

Gulfood, the largest annual global food and beverage sourcing event in the world organized in Dubai, has cemented the city's position as the food capital of the world.

In the UAE's Year of Sustainability, the event held in February had a special emphasis on sustainable initiatives and unveiled several projects aimed at promoting sustainability.

Largest annual global food and beverage sourcing event in the world cements the city's position as the food capital of the world

Gulfood 2023 launched its new global sustainability initiative, Gulfood Green, to promote more sustainable food production and consumption and topics related to sustainability, such as reducing food waste and building a more sustainable food business were in focus throughout the event.

Gulfood also launched its international tree-planting campaign called Gulfood Forest to help conserve, restore, and grow trees globally, thereby reducing carbon emissions.

Helal Saeed Al Marri, Director General, Dubai World Trade Centre Authority, organisers of the event, said: "The sustainability initiatives unveiled at Gulfood 2023 will promote responsible and sustainable practices across the F&B industry. From reducing food waste and promoting healthy eating to sourcing sustainable

Gulfood Green and Gulfood Agrotech, to be held from 24 to 26 September 2024, will showcase smart agriculture technologies and innovative practices that support climate-friendly food production

ingredients and reducing carbon footprints, these initiatives will ensure that Dubai remains at the forefront of the global F&B industry, while also supporting the city's sustainability goals."

The 28th edition of the show was 30% larger than the previous edition, with more than 5,000 confirmed exhibitors, including 1,500 first-time exhibitors. The event brought together F&B communities from around the world in Dubai to discuss the future of the rapidly evolving sector.

While Gulfood Green Awards recognised excellence in sustainability across the F&B industry, the Gulfood Inspire Conference, featuring ministers, F&B leaders, entrepreneurs, and industry experts, discussed sustainable food production, food security, nutrition education, waste reduction, securing international supply chains, and food service trends.

The event's thought leadership programme for the F&B industry, Gulfood Green, sought to help shift towards more resilient and sustainable food production and consumption to reverse the trends of inflation and rising costs of consumer goods, food, utilities, and fuel.

Gulfood 2023 gathered the global F&B industry to offer a platform for business opportunities and innovations while leading the way in sustainability.

Gulfood is also set to launch two new events, Gulfood Green and Gulfood Agrotech, which will be held in September 2024 and will focus on showcasing smart agriculture technologies and innovative practices that support climate-friendly food access, sourcing, production, transportation, logistics, and distribution.

Clean Energy Meets 80% Of Abu Dhabi Demand: EWEC

Emirates Water and Electricity Company (EWEC) has, for the first time, met 80 percent of total power demand in Abu Dhabi using renewable and clean energy from its solar and nuclear energy plants.

In the process, EWEC supplied approximately 6.2 gigawatts (GW) of the total 7.7GW system power demand from its solar and nuclear energy

Emirates Water and Electricity Company achieves a new record in its delivery of renewable and clean energy in UAE capital

plants. EWEC is accelerating the strategic implementation of Abu Dhabi's energy transition to reduce the reliance on hydrocarbons and decouple water production from power generation by investing in the development of utility-scale solar power and low-carbon intensive reverse osmosis (RO) water desalination projects.

By 2030, EWEC aims to raise Abu Dhabi's solar power generation to approximately 7GW and produce more than 90 percent of its water using RO plants. EWEC's strategy supports the realisation of the Department of Energy – Abu Dhabi's Clean Energy Strategic Targets 2035 and UAE Water Security Strategy 2036, ultimately contributing to the achievement of UAE Net Zero by 2050 goals.

Othman Al Ali, Chief Executive Officer of EWEC,

By 2030, EWEC aims to raise Abu Dhabi's solar power generation to approximately 7GW and produce more than 90 percent of its water using RO plants

said, "Having supplied 60 percent of total power demand in December 2022 using renewable and clean sources and now meeting 80 percent in February 2023 is indicative of our at-pace deployment of sustainable energy and an example to the world of the UAE's strategic net-zero ambitions in action ahead of COP28."

He continued: "Growth in our diverse portfolio of world-leading utility-scale renewable projects will play an integral role in accelerating the country's energy transition and decarbonisation of the energy sector. We look forward to continued collaboration with our project partners as we pursue the advancement of a sustainable, efficient water and power supply in Abu Dhabi and across the UAE."

Easa Alzarooni, System Operations Executive Director at EWEC, said, "EWEC's meeting over 80 percent of total power demand from solar and nuclear energy sources was enabled by the flexibility of System Operations, coordinating with other control centres across the UAE to provide integrated, sophisticated real-time applications, and advanced analytical capabilities and operational planning to balance supply demand with our sustainability goals."

The delivery of renewable and clean energy was enabled by solar power generation connected to the grid, which includes power from Shams CSP, Noor Abu Dhabi, in addition to power from the Barakah Nuclear Energy Plant. EWEC's current and future renewable energy projects, combined with Barakah Nuclear Energy Plant, are forecast to reduce carbon emissions by 50 percent, from more than 40 million tonnes in 2020, to approximately 20 million tonnes by 2025.

Milan, Italy: At The Forefront Of Eco-Friendly Thinking

Financial and fashion capital of Italy and home to the country's only stock exchange, Milan, is a bustling business and leisure destination that actively invests in its sustainability. Milan aims to transform the urban landscape into a leading player in eco-friendly design. Thanks to green mobility projects and the urban regeneration of entire areas, Milan has become a true model of a sustainable city.

Milan plans to plant 3 million trees by 2030 and the increase in greenery is expected to have a positive effect on the quality of air, and consequently on the health of the people

The Department of Environmental has recently launched a new project for ecological transition, the Milano MIX, that focuses on waste management, zero carbon transportation, the empowering of public transportation, bikes and vehicle-sharing services, etc. The City Council of Milan has also approved the Air and Climate Plan (PAC), an action plan to become fully carbon neutral and a cycle-pedestrian city by 2050.

Forestami Project

Picking up on the need for planting more trees, Milan has set out on an ambitious decade-long urban forestry project. Called Forestami, the initiative launched in 2020 with the promise to plant a new tree for every inhabitant – aiming for three million by 2030.

Under the direction of Politecnico di Milano, which is researching the most appropriate

A new social housing project in Milan aims to be zero-carbon by 2050

species of tree and the best planting locations, a quarter of a million trees have already been planted through the Forestami scheme.

Such an increase in the trees' presence over the city's soil, about a 30% expansion, could absorb 5 million tons of carbon dioxide every year while reducing PM10 small particles by 3,000 tons in the next ten years. This pollutant is responsible for respiratory disorders and has been linked to higher risks of cancer: diminishing its presence in the air that Milan's inhabitants breathe every day would make them less exposed to health problems related to polluted air, diseases that are killing more people every year all over the world, as the planet struggles with climate change and extreme pollution.

In collaboration with the city's 133 municipalities, Forestami plans to fill out Milan's streets, squares, courtyards and parks with new trees. But the project will also get creative, planting trees on rooftops and fitting them on to the façades of homes.

Zero Carbon Social Housing

A new social housing project in Milan aims to be zero-carbon by 2050. The buildings will use energy, heating, and cooling from renewable sources, 100% reused water, and be built with green roofs. The surrounding area aims for 60% green spaces and is accompanied by a green mobility strategy that has just one parking spot for every seven residents, as well as goals to keep the air clean.

L'INNESTO, the zero-carbon social housing project in Milan is a showroom for the city's new sustainability strategies. One of these strategies is the development of an innovative, fourth-generation district heating system powered by renewable sources, which includes an urban

wastewater heat-recovery system. This district heating system will enable the social housing project to be carbon neutral in 30 years.

The district is designed with nearly zero-energy buildings combined with pre-assembled construction technology with an optimal bio-based material mix, allowing structures to be disassembled and fully recycled at the end of their life. The aim is a long-term, responsible, resilient management of resources, spaces, and the community.

Smart Mobility

Milan's Sustainable Urban Mobility Plan (SUMP) represents an important change to the city's mobility and transport policy. It is aimed at enhancing public transport, giving value to urban space and shifting the urban mobility focus from private car ownership to a model based on shared mobility services (such as car- and scooter-sharing) across the whole metropolitan area.

The SUMP was developed with citizens, local authorities, stakeholders and a Scientific Committee in an open discussion on relevant thematic areas. By combining urban development, innovation and sustainability; putting the policy focus on environment and life quality; adopting an integrated approach to urban mobility management; and defining priorities, tools and resources, the SUMP aims to make the city more liveable, safe and accessible, and will ensure social equity and sustainable mobility.

Smart mobility is defined as intelligent and sustainable transport, made possible by digital technology: in fact, thanks to the development and introduction of on-line platforms, the possibilities for alternative transport increase greatly. Car, scooter, and bike-sharing, but also

Milan's Sustainable Urban Mobility Plan (SUMP) represents an important change to the city's mobility and transport policy

shared travelling through carpooling are the new leaders of change in Milan's switch to green.

Low Emission Zones

Milan's Low Emission Zone, Area B, came into force in February 2019, banning the most-polluting vehicles from an area covering 75% of the city. The standard that vehicles must meet will progressively increase to 2030, by which time all diesel vehicles will be banned.

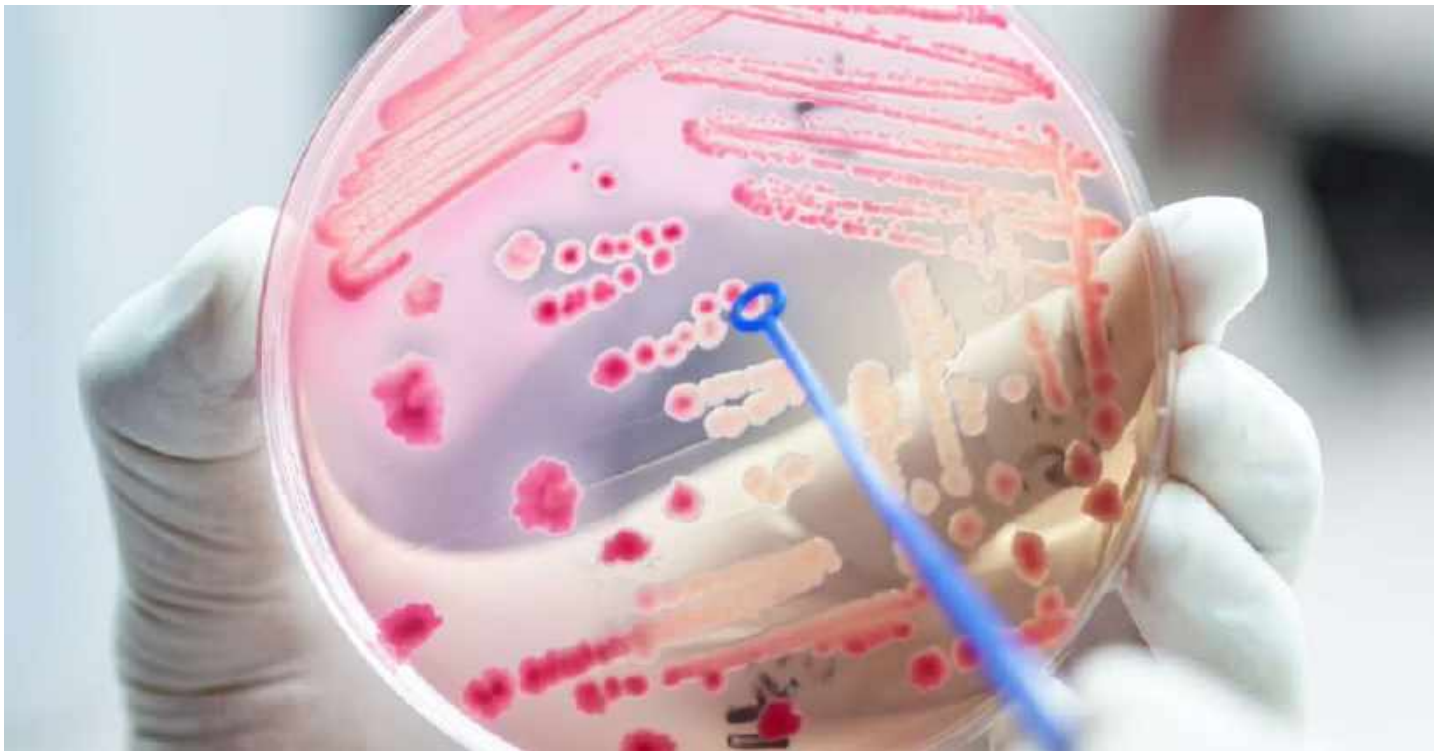
While Area B is primarily a regulatory policy, Milan has also introduced some incentive and subsidy policies, such as a $7.7 million fund to assist small- and medium-sized enterprises with the purchase of low-carbon vehicles. This approach enables city governments to set stricter regulations, while offering financial support to those least able to comply.

Similarly, Area C was also proposed to drastically

reduce the chronic traffic jams that take place in the city of Milan, to promote sustainable mobility and public transport, and to reduce the dangerously unhealthy smog.

Milan is conscious of the key to making a sustainable city, is by collaboration between different community stakeholders. There's much more to be done, but Milan is firmly on the path and to become a sustainable resilient city.

World Must Cut Pollution To Reduce 'Superbugs': UN



Curtailing pollution created by pharmaceuticals, agricultural and healthcare sectors is essential to reduce the emergence, transmission, and spread of superbugs – strains of bacteria that have become resistant to every known antibiotic – and other instances of antimicrobial resistance (AMR).

This is the key message of a report released by the UN Environment Programme (UNEP) on the environmental dimensions of AMR, which already is taking a serious toll on the health of humans, animals, and plants, as well as the economy.

Up to 10 million deaths could occur annually by 2050 due to antimicrobial resistance (AMR), on par with the 2020 rate of global deaths from cancer

The report, 'Bracing for Superbugs: strengthening environmental action in the One Health response to antimicrobial resistance' was launched at the Sixth Meeting of the Global Leaders Group on AMR, held in Barbados. It calls for a multisectoral 'One Health response'. This is in line with the work of the Quadripartite Alliance, including UNEP, the Food and Agriculture Organization (FAO), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH).

"The environmental crisis of our time is also one of human rights and geopolitics – the antimicrobial resistance report published by

AMR's economic toll could result in a GDP drop of at least USD 3.4 trillion annually by 2030, pushing 24 million more people into extreme poverty

UNEP is yet another example of inequity, in that the AMR crisis is disproportionately affecting countries in the Global South countries," said Prime Minister Mia Amor Mottley, Chair of the One Health Global Leaders Group on Antimicrobial Resistance. "We must remain focused on turning the tide in this crisis by raising awareness and by placing this matter of global importance on the agenda of the world's nations."

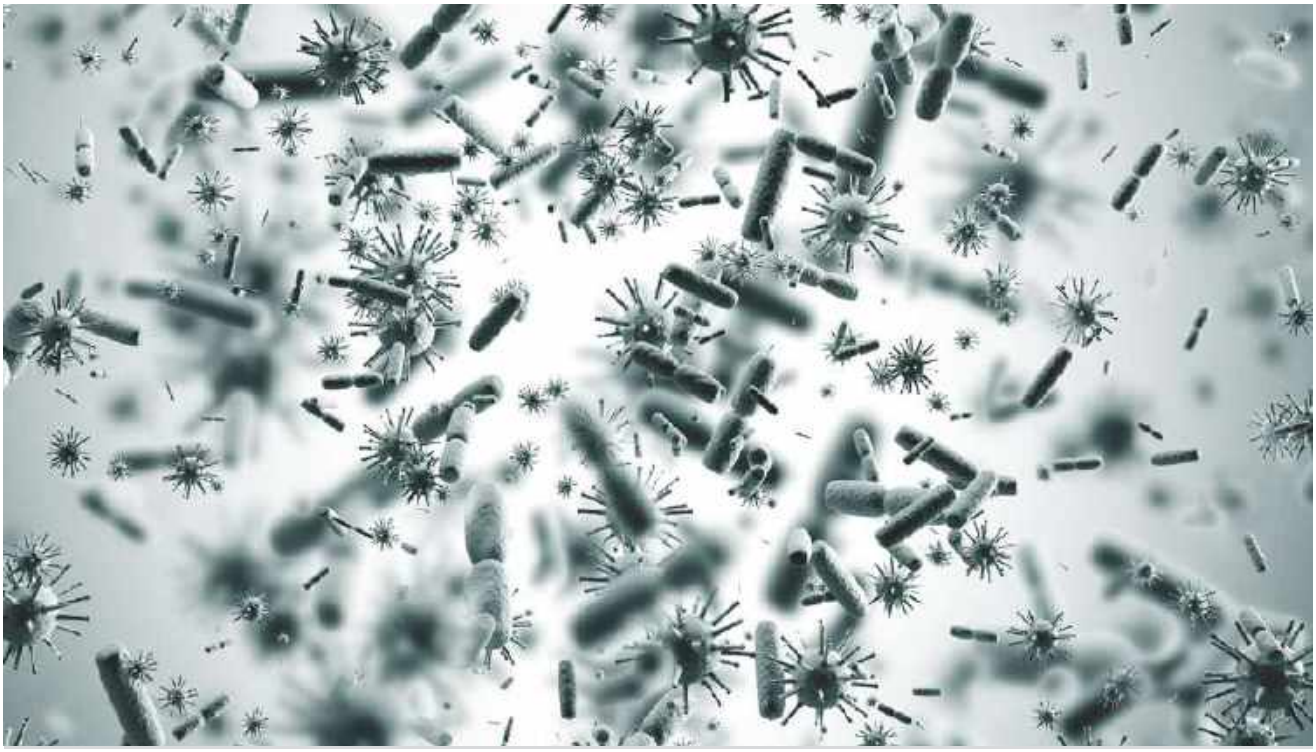
The development and spread of AMR mean that antimicrobials used to prevent and treat infections in humans, animals and plants might turn ineffective, with modern medicine no longer able to treat even mild infections.

Listed by the WHO among the top 10 global threats to health, it is estimated that in 2019, 1.27 million deaths were directly attributed to drug-resistant infections globally, and 4.95 million deaths worldwide were associated with bacterial AMR (including those directly attributable to AMR).

AMR is expected to cause 10 million additional direct deaths annually by 2050. This equals the number of deaths caused globally by cancer in 2020. The economic toll of AMR is expected to result in a GDP drop of at least USD 3.4 trillion annually by 2030, pushing 24 million more people into extreme poverty.

The triple planetary crisis entails higher temperatures and extreme weather patterns, land-use changes that alter its microbial diversity, as well as biological and chemical pollution. All these contribute to the spread of AMR.

"Pollution of air, soil, and waterways undermines the human right to a clean and healthy environment. The same drivers that cause



environment degradation are worsening the antimicrobial resistance problem. The impacts of anti-microbial resistance could destroy our health and food systems," said Inger Andersen, Executive Director of UNEP.

The report highlights the need to resolve key pollution sources to address both the decline of the environment and the rise of AMR.

To prevent and reduce such pollutants it is crucial to:

- create robust and coherent national level governance, planning, regulatory and legal frameworks, and establish coordination and collaboration mechanisms
- increase global efforts to improve integrated water management and promote water, sanitation and hygiene to limit the development and spread of AMR in the environment
- increase integration of environmental considerations into AMR National Action Plans, and AMR into environmental-related plans such as national chemical pollution and waste management programmes, national biodiversity and climate change planning
- establish international standards for what constitutes a good microbiological indicator of AMR from environmental samples, which can be used to guide risk reduction decisions and create effective incentives to follow such guidance
- explore options to redirect investments, to establish new and innovative financial incentives and schemes, and to make the investment case to guarantee sustainable funding, including the allocation of sufficient domestic resources to tackling AMR.

Blue Carbon Signs MoUs With Tanzania, Zambia

Blue Carbon, an UAE-based entity formed to create environmental assets, nature-based solutions and register carbon removal projects, has signed a Memorandum of Understanding with the Government of Tanzania.

Under the MoU, the two entities will collaborate on promoting sustainable forest management practices and reducing greenhouse gas

emissions. The MoU was signed following a visit to Tanzania where the Chairman of Blue Carbon, Sheikh Ahmed Dalmook Al Maktoum, met with Her Excellency Samia Suluhu Hassan, the President of Republic of Tanzania.

The partnership will focus on supporting the government's efforts to conserve, manage and register its forest resources of 8 million hectares in the first phase, including 56,000 hectares of mangroves and sell these credits under Article 6 of the Paris Agreement.

This will strengthen the partnership between the two countries in developing new carbon offset projects to support decarbonization targets.

The government of Tanzania recognizes the importance of preserving its forest resources and reducing greenhouse gas emissions, and the partnership will provide opportunities for local communities to participate in carbon offset projects, thereby promoting sustainable economic growth and improving livelihoods.

Blue Carbon also signed a strategic MoU to implement carbon removal projects in the forest sector. The agreement was signed in Lusaka, Zambia in the presence of His Excellency Hakainde Hichilemathe, President of Zambia.

As part of the agreement, Blue Carbon will identify and implement strategies for Zambia's forest landscapes to generate carbon credits.

The company will also create sustainable forest management practices as reforestation, forest restoration, forest conservation, and more for over 8 million hectares of forest land in Zambia.

Word Scramble

YONCEMO

GNREE

UCOYITMMN

OIPYLC

VLNGII

NNEVTRMENIO

AISNUST

HETA

_____ _____

_____ _____

_____ _____

_____ _____

Answers: 1) Policy 2) Environment 3) Community 4) Green 5) Living
6) Sustain 7) Economy 8) Heat

Word Search

O	U	H	N	O	E	T	T	T	T	W	N	T	O
Y	R	T	G	N	H	Y	T	I	N	A	M	U	H
Y	G	L	O	B	A	L	L	Y	N	N	E	E	S
G	T	M	T	L	N	O	Y	O	A	E	Q	T	N
O	O	A	U	N	T	A	U	T	A	E	M	P	G
V	A	Y	E	E	E	E	T	A	I	L	U	Y	V
E	U	N	O	N	U	N	V	U	I	L	Y	W	T
R	T	S	N	A	V	S	A	R	R	R	A	H	N
N	H	E	E	T	V	E	U	U	E	E	O	U	R
M	O	A	E	I	R	A	H	T	O	S	R	E	Q
E	R	G	R	N	N	S	E	S	L	E	E	S	E
N	I	E	G	P	N	O	H	T	T	T	O	R	N
T	T	A	L	A	T	N	V	A	A	I	M	E	P
E	Y	U	A	E	R	S	W	A	S	O	N	A	A

QUALITY

GLOBALLY

HUMANITY

HATER

PRESERVE

GOVERNMENT

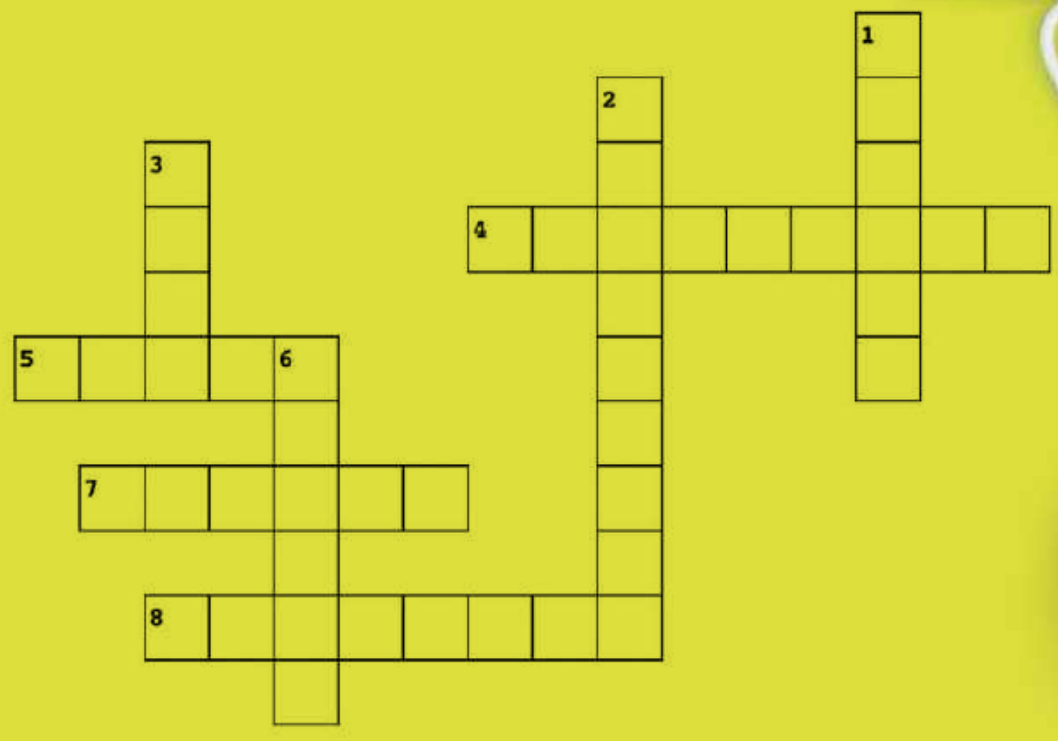
GREEN

SEASONS

AUTHORITY

NATURE

Crossword Puzzle



Across

4. Articles of commerce
5. Vast body of salt water
7. Hard shelled reptile
8. Afforestation

Down

1. The people of a state
2. People living in one locality
3. Rescue from danger
6. World of plants, animals, landscapes etc

Answers: 1) Nation 2) Community 3) Save 4) Commodity 5) Ocean 6) Nature 7) Turtle 8) Forestry

WORD OF THE DAY:

SOLAR ENERGY

Solar energy is light, heat, and other forms of energy given off by the Sun. Solar energy can be collected and used to heat buildings and to make electricity. When we use solar power, we don't use any of the Earth's resources like coal or oil. This makes solar power a renewable energy source. Solar power is also clean power that doesn't generate a lot of pollution.

Solar Power for Heating

Solar power can be used for heating up homes and other buildings. Sometimes solar power for heating can be passive. This is when there are no mechanical components used to move the heat around. Passive heating helps to keep houses warm in the winter, to heat up swimming pools, and even makes our car warm when we park it outside (which is nice in the winter, but not so much on a hot summer day).

Active heating is when there are mechanical components to help move the heat around. The sun could be used to heat up water or air that is then pumped around a building to provide even heat in all the rooms.

Solar Power for Electricity

When most of us think of solar power, we think of the solar cells that turn rays of sunshine into electricity. Solar cells are also called photovoltaic cells. The word "photovoltaic" comes from the word "photons", which are particles that make up sunlight, as well as the word "volts", which is a measurement of electricity.

Today solar cells are commonly used in small handheld devices like calculators and wrist watches. They are becoming more popular for buildings and homes as they become more efficient. One nice thing about solar cells is that they can be placed on the roof of a building or home, not taking up any extra space.

Facts about Solar Energy:

- The world's largest solar thermal plants are located in the state of California.
- Many large photovoltaic plants are being built around the world. Some of the largest are located in China, Canada, and the United States (Nevada).
- If only 4% of the world's deserts were covered in photovoltaic cells, they could supply all of the world's electricity.
- Albert Einstein won a Nobel Prize in 1921 for his research into photovoltaic power.

WORLD WILDLIFE DAY – MARCH 3

Billions of people, in developed and developing nations, benefit daily from the use of wild species for food, energy, materials, medicine, recreation, inspiration and many other vital contributions to human well-being.

The accelerating global biodiversity crisis, with a million species of plants and animals facing extinction, threatens these contributions to people.

World Wildlife Day (WWD) is an opportunity to celebrate the many beautiful and varied forms of wild fauna and flora and to raise awareness of the multitude of benefits that their conservation provides to people. At the same time, the Day reminds us of the urgent need to step up the fight against wildlife crime and human-induced reduction of species, which have wide-ranging economic, environmental and social impacts.

Every 3rd of March, wildlife is celebrated all over the world. This date was chosen as it is the birthday of CITES, the Convention on

International Trade in Endangered Species of Wild Fauna and Flora, signed in 1973.

This World Wildlife Day 2023 falls on the 50th Anniversary of CITES coming into being. Since its inception, CITES has stood at the junction of trade and conservation. It has sought to build partnerships and reconcile differences between the groups that are guided and governed by its regulations.

World Wildlife Day will be celebrated in 2023 under the theme "Partnerships for wildlife conservation", honoring the people who are making a difference.

Partnerships operate on a large scale or involve a few children or a school. For some, it could be organizing a school sale to benefit a conservation group, for others it could be posting photographs online to raise awareness of endangered species. All of them are equally valid.

GLOBAL RECYCLING DAY – MARCH 18

Every year, the Earth yields billions of tons of natural resources and at some point, in the not too distant future, it will run out. That's why we must think again about what we throw away – seeing not waste, but opportunity.

Recycling is a key part of the circular economy, helping to protect our natural resources. Each year the 'Seventh Resource' (recyclables) saves over 700 million tonnes in CO2 emissions and this is projected to increase to 1 billion tons by 2030. There is no doubt recycling is on the front line in the war to save the future of our planet and humanity.

Global Recycling Day was created in 2018 to help recognise and celebrate the importance recycling plays in preserving our precious primary resources and securing the future of our planet. It is a day for the world to come together and put the planet first.

The mission of Global Recycling Day, as set out by the Global Recycling Foundation, is twofold:

1. To tell world leaders that recycling is simply too important not to be a global issue, and that a common approach to recycling is urgently needed.

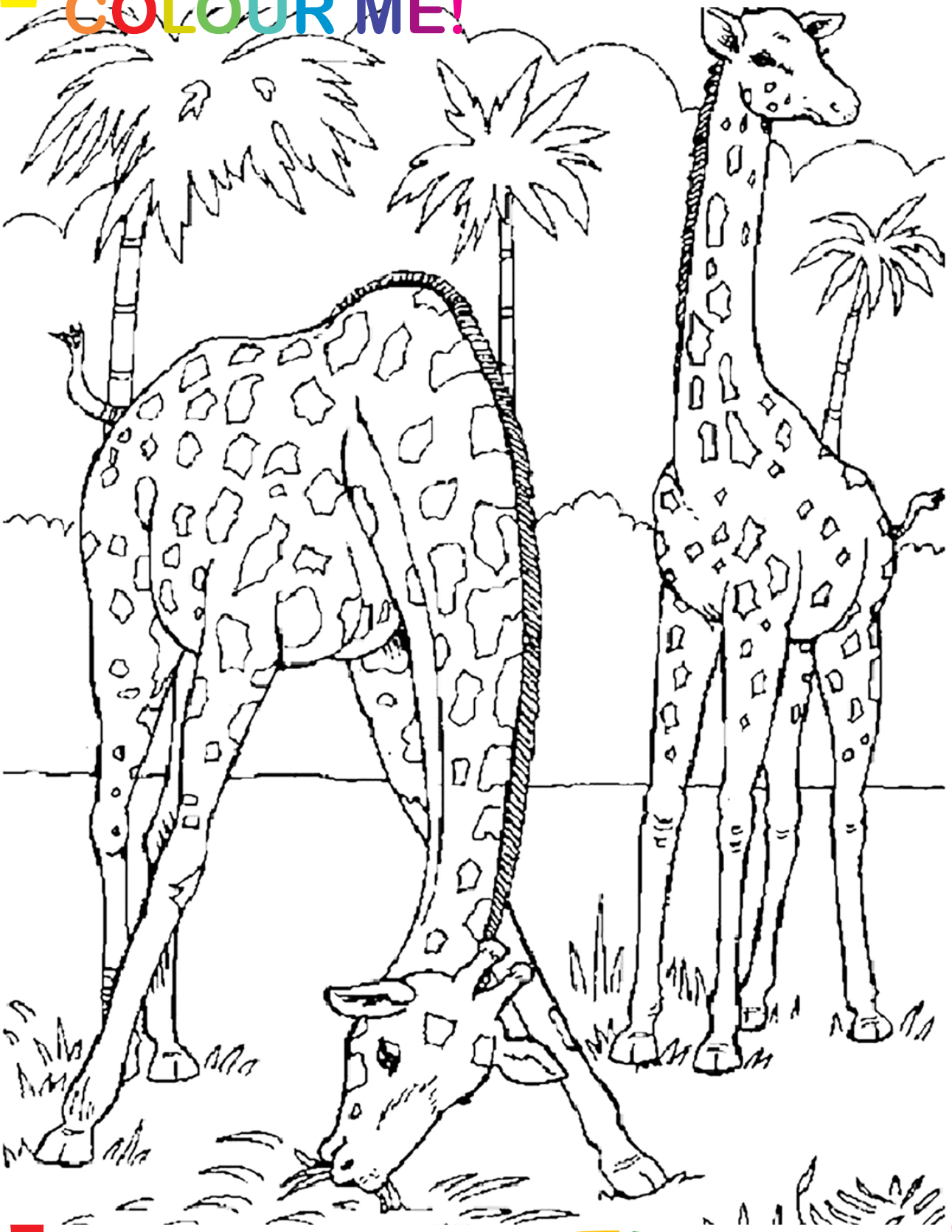
2. To ask people across the planet to think resource, not waste, when it comes to the goods around us. Until this happens, we simply won't award recycled goods the true value and repurpose they deserve.

What can you do to help?

Things to Do...

- Recycle waste papers!
- Do not waste food!
- Switch off all lights when not in use!
- Reuse plastic bags!
- Cycle around or use public transport!

COLOUR ME!



200MW Baynouna Solar Park In Jordan Inaugurated

The Baynouna Solar Energy Company (BSCE), a joint venture between the UAE's world-leading renewable energy company, Masdar, and Finnish investment and asset management group Taaleri, has announced the formal inauguration of the 200-megawatt (MW) Baynouna Solar Park – the largest clean energy project in Jordan. The inauguration was held in the presence of His Excellency Bisher Al-

Khasawneh, Prime Minister of Jordan, and was attended by HE Dr. Sultan Ahmed Al Jaber, UAE Minister of Industry and Advanced Technology, COP28 President-Designate, and Chairman of Masdar; HE Dr. Saleh Al Kharabsheh, Jordan's Minister of Energy and Mineral Resources; and HE Sheikh Khalifa Bin Mohammed Bin Khalid Al Nahyan, UAE Ambassador to Jordan.

HE Al Jaber, said, "In partnership with the Jordanian government, the Baynouna Solar Park will contribute to Jordan's climate targets, provide access to clean energy, create jobs and ensure economic growth.

"Along with our other project – the Tafila Wind Farm – Masdar is helping Jordan to produce 29 percent of its electricity from renewable sources and will support its goal of increasing that to 50 percent by the end of the decade."

He continued: "Ambitious, transformative partnerships like these are precisely what we need if we are to deliver on the promise of the Paris Agreement and continue to ensure that we are holding back emissions, not progress. COP28 will focus on moving from goals to implementation, with a clear focus on demonstrable action on mitigation, adaptation, loss and damage, and finance, as we aim to keep the objective of limiting global warming to 1.5 degrees alive."

Developed through a power purchase agreement between Masdar and National Electric Power Company, Jordan's state electricity provider, the Baynouna Solar Park produces over 560 gigawatt-hours (GWh) of energy annually – enough to power 160,000 homes. The plant also displaces 360,000 tonnes of carbon dioxide per year, equivalent to taking nearly 80,000 cars off the road.

Future Of Food And Agriculture In Focus At AgTech Innovation Summit

The 2nd Annual AeroFarms AgTech Innovation Summit, convened at the Rosewood Hotel in Abu Dhabi, and brought together 24 speakers and over 1,000 participants from 65 countries to discuss the future of food and agriculture.

The Summit, supported through AeroFarms' ongoing collaboration with the Abu Dhabi Investment Office (ADIO), saw keynote addresses by Eng. Abdulla Abdul Aziz AlShamsi, Acting Director General of ADIO; Sonny Ramaswamy, President and CEO of the Northwest Commission on Colleges and Universities and former Director of the National Institute of Food and Agriculture; and AeroFarms Co-Founder and CEO David Rosenberg.

AeroFarms, a world leader in indoor vertical farming, signs MoUs with NYUAD and ICBA to help expand Abu Dhabi's role in AgTech innovation

Roger Buelow, Chief Technology Officer of AeroFarms, said: "At AeroFarms, we are transforming the future of food and convening the leaders in the space for dialogue and discussion, to create collaborative and cohesive action including research with key companies in the region to address increasing challenges with growing outdoors and supply chain issues."

At the Summit, AeroFarms announced two signings of Memorandum of Understandings (MoUs) with NYU Abu Dhabi (NYUAD) and The

2nd Annual AeroFarms AgTech Innovation Summit hosts 24 global speakers and over 1,000 participants from 65 countries

International Center for Biosaline Agriculture (ICBA). The MoU was signed with NYUAD Dean of Science Marta Losada.

The NYUAD Dean said, "The new partnership will allow us to explore the potential of indoor vertical farming and its ability to meet the needs of global populations. This is a great opportunity to bring together our respective expertise and knowledge to develop innovative solutions for food production, sustainability, and food security."

Following the signing ceremony with ICBA, Dr. Tarifa Alzaabi, Director General of ICBA, said: "Controlled-environment agriculture systems like vertical farming have great potential for increasing food production in arid and semi-arid regions while helping to save water and other inputs. As our center has extensive research on high-, mid- and low-tech controlled-environment agriculture systems, this MoU will help to achieve greater synergy, help impact and innovate and test solutions for resource-efficient and sustainable agriculture in harsh environments."

ADIO has partnered with AeroFarms since 2020 as part of its goal to create sustainable investment opportunities that support next generation agriculture in arid and desert environments. The partnership through ADIO's Innovation Program enabled the creation of Abu Dhabi's AeroFarms AgX, the largest indoor vertical farm of its kind for research and development in the world.

By reimagining the way food is grown, AeroFarms is leading the way to elevate agriculture for people and the planet and helping address climate change by enabling local food production without pesticides to grow safe and nutritious food all year round.

Will Renewable Energy Offset the Rise in Carbon Emissions?

According to an article in *EcoWatch* by Cristen Jaynes and edited by Chris McDermott, the International Energy Agency (IEA) has stated that energy related CO2 emissions worldwide reached a record high in 2022 as fossil fuel consumption rose, but its impact was offset by an increase in green technology solutions.

The IEA said that emissions rose by only 0.9% because of the expansion in green solutions such as renewables, electric vehicles, heat pumps and energy efficient technologies, limiting the impact of increased fossil fuel use. The IEA Executive Director said that the growth in CO2 emissions could have been nearly three times as high but the planet was saved from 606 million tons of added emissions.

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

Carbon emissions from oil increased 2.5% in 2022 and oil companies made record revenues during the energy crisis caused partially by natural disasters like droughts and heat waves. These companies should increase their funding of climate change mitigations accordingly to keep their word. We must also significantly expand use of green energy technologies to limit the increase in global temperatures to 1.5°C above the industrial era ambient temperature.

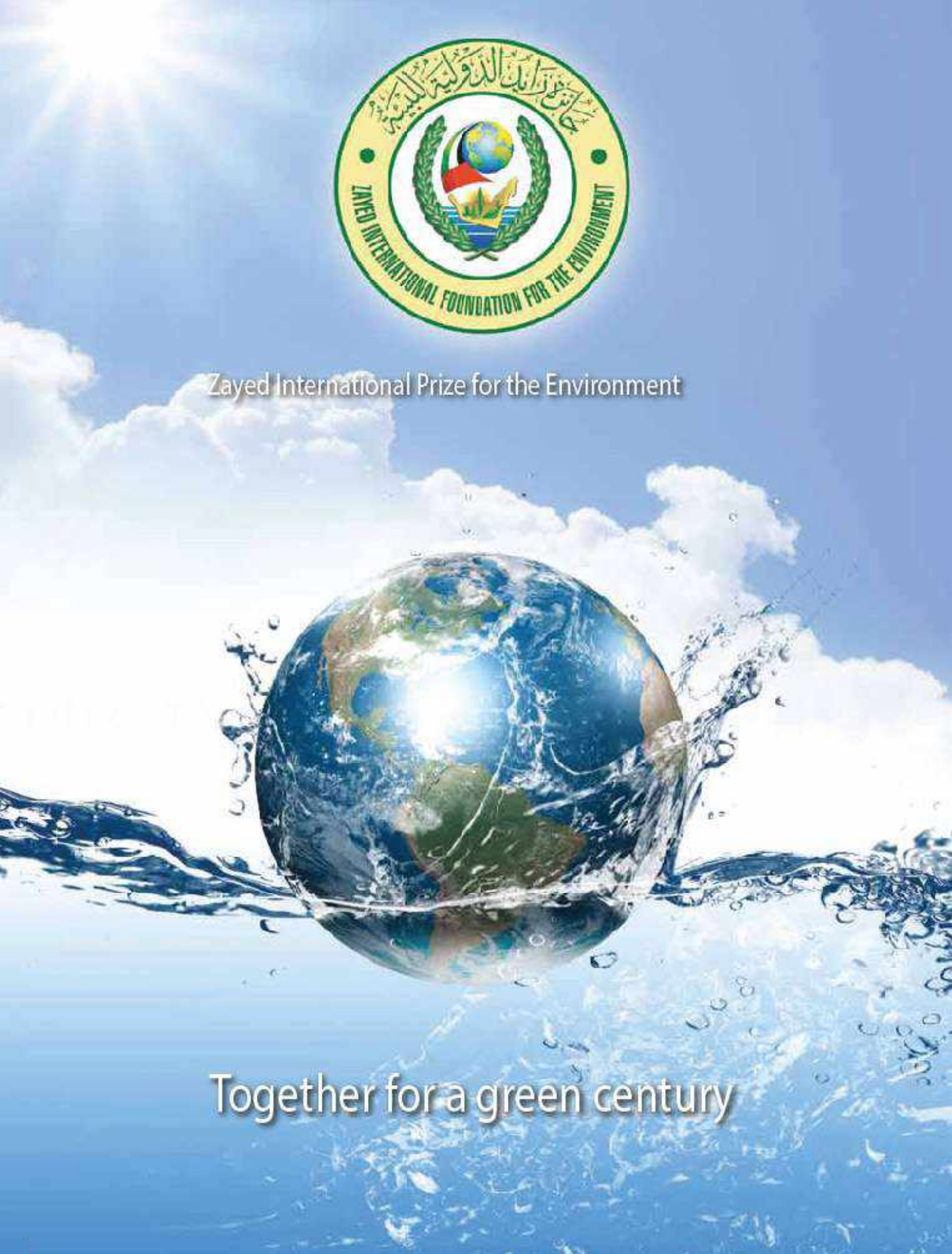
However, curbing global warming to save our planet Earth requires strong government policies that promote energy saving and green technology. The policies should focus on both humans and industrial production. We need to promote both sustainable production and sustainable consumption. Economic policies and education and awareness strategies are key to a green government. A strong political will is the need of the hour to make climate meetings deliver more impactful results.

On the other hand, this seems to be more of a consciousness problem than a climate problem. Hence, nongovernment organizations must focus more on awareness raising programs in all media so that the population can help by activating the 4Rs: Refuse – Reduce – Reuse – Recycle.

Let us keep up the positive spirit.

ZAYED INTERNATIONAL FOUNDATION FOR THE ENVIRONMENT

Zayed International Prize for the Environment



Together for a green century

THE FUTURE OF OUR WORLD IS IN OUR HANDS.

ACT NOW!

مؤسسة زايد الدولية للبيئة

Zayed International Foundation for the Environment