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creating green communities for a better tomorrow

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06

**'The UAE will be a strong supporter of
humanity and its development':
President on 51st National Day**



14

UAE President Addresses World Leaders Summit at COP27



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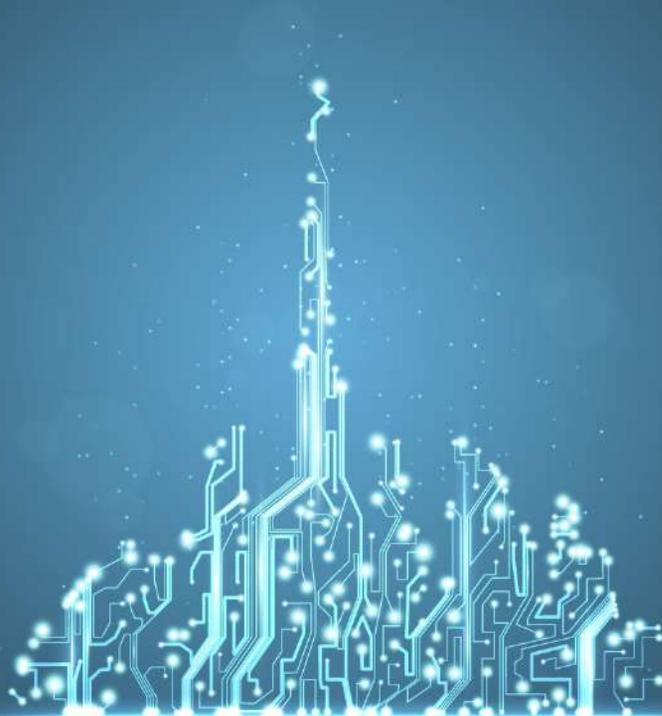
Chairman's Message

As we reflect on progress over the past 51 years this month in honour of the UAE's National Day, the nation's unprecedented achievements and its varied initiatives and projects that have cemented the nation's status as one of growth and opportunity will continue to build our momentum for the future.

The UAE's National Day not only blends joy and pride but is also an affirmation of relentless efforts that has seen the nation grow to become the second-largest Arab economy and the third-largest economy in the Middle East.

These milestone achievements have come not through reliance on oil and gas or trade alone, but also through the nation's diversified investments in science, knowledge and innovation. As a nation that invests in the future, the UAE is today collaborating with other countries to find practical climate action solutions to address the complex and unprecedented challenges impacting our planet.

At the recently concluded United Nations Framework Convention on Climate Change (COP27) in Egypt, the UAE asserted itself as a leading global partner on



**Prof. Mohammed
bin Fahad**
Executive Editor

environmental issues and a responsible energy provider. The UAE is further enhancing its role as a global facilitator of sustainable solutions for all as it successfully transitions from a hydrocarbon economy to a future fuelled by clean and renewable energies, advanced technologies and innovative climate-smart solutions.

At COP 27, UAE President His Highness Sheikh Mohamed bin Zayed Al Nahyan outlined the nation's clear vision and strategic approach to climate action and sustainability, and underlined how effective climate action can accelerate opportunities for sustainable economic and social development.

Next year, as the nation hosts COP28, all eyes will be on the UAE as it leads efforts to turn the tide on climate change through an inclusive and equitable global energy transition that benefits all people, the planet and our shared prosperity.

Contents

4
WHAT'S INSIDE



08 COVER STORY
UAE will remain an essential partner and supporter of human progress: President on 51st National Day



20 LAUNCH: Sharm-El-Sheikh Adaptation Agenda outlines 30 Adaptation Outcomes to enhance resilience for 4 billion

24 LAUNCH
UAE unveils National Net Zero by 2050 Pathway at COP27



28 GREEN ECONOMY: Ministry of Climate Change and Environment launches UAE Green Business Toolkit 2.0 at COP27

32 COP27 OUTCOMES
COP27 Reaches Breakthrough Agreement on New "Loss and Damage" Fund for Vulnerable Countries



38 MoU
UAE, Jordan and Israel sign MoU to advance Project Prosperity



40 ALLIANCE
UAE, Indonesia unveil Mangrove Alliance for Climate at COP27

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44



INITIATIVE: AWARe Initiative to address water security as part of climate change adaptation

50

FOOD TECH

Global FoodTech Challenge focuses on solving hunger and food waste problems

56



REPORT: 'Nature-based solutions in coastal areas can help address global crises'



Upcoming events

UN Biodiversity Conference

Date: December 7 - 19

Location: Montreal, Canada

Despite on-going efforts, biodiversity is deteriorating worldwide and this decline is projected to worsen with business-as-usual scenarios.

The UN Biodiversity Conference convenes governments from around the world to agree to a new set of goals for nature over the next decade through the Convention on Biological Diversity post-2020 framework process. The framework sets out an ambitious plan to implement broad-based action to bring about a transformation in society's relationship with biodiversity and to ensure that, by 2050, the shared vision of living in harmony with nature is fulfilled.

The Conference will also look at the implementation of the protocols of the Convention on Biological Diversity (CBD) that deal with the fair and equitable sharing of benefits from the use of nature, and the safe transport, handling and labelling of Living Modified Organisms.

ASEAN Regional Webinar Series on Sustainable Blue Economy: Session 3

Date: December 7

Webinar

The core value of the blue economy lies in the balance between maintaining a healthy marine ecosystem and ensuring economic benefits from coastal and marine resources for inclusive growth. This Webinar titled, 'Financing the Sustainable Blue Economy in ASEAN Region: Opportunities and lessons learned from emerging initiatives' aims to increase awareness and catalyze action among ASEAN Member States for financing a blue economy by addressing the following issues:

1. Existing tools related to financing for a sustainable blue economy (e.g. Sustainable Blue Economy Finance Principles, guidance materials, etc.)
2. Opportunities, challenges, and lessons learned related to financing for a sustainable blue economy in ASEAN Region, together with case studies from other regions
3. The way forward for scaling up the finance for a sustainable blue economy in the ASEAN region

'COP27 a starting point for joint action as UAE prepares to host COP 28': Zayed International Foundation for the Environment

6

ZAYED FOUNDATION



The UAE was the first in the region to sign and ratify the Paris Agreement in 2015 and the first MENA nation to embark on the ambitious goal of achieving net-zero emissions by 2050

Ahead of the 2022 United Nations Climate Change Conference (COP27) held in the Arab Republic of Egypt from November 6 until November 20, Prof. Dr. Mohamed Ahmed bin Fahd, Chairman of the Higher Committee of the Zayed International Foundation for the Environment, said that the Sharm el-Sheikh conference is a starting point for joint action between the UAE and Egypt towards reaching practical and impactful solutions to tackle climate change, adding that the collaboration is in line with the UAE's efforts to limit global warming and accelerate the green energy transition.

The UAE's strategic leadership in climate action aims to ensure a practical and realistic transition in the energy sector, support economic growth, and enhance access to technology as it prepares to host COP28 next year.

The UAE has invested more than USD 50 billion over the past 10 years in clean energy technologies and solutions around the world



Bin Fahd praised the exceptional role played by the wise leadership of the UAE, led by HH Sheikh Mohamed bin Zayed Al Nahyan, President of the UAE and Ruler of Abu Dhabi, and HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and their keenness to reaffirm the UAE's role as a global leader in the energy transition.

The UAE was the first in the region to sign and ratify the Paris Agreement in 2015 and the first MENA nation to embark on the ambitious goal of achieving net-zero emissions by 2050. The country has also invested more than USD 50 billion over the past 10 years in clean energy technologies and solutions around the world, building three of the largest and lowest-cost solar projects in the world.

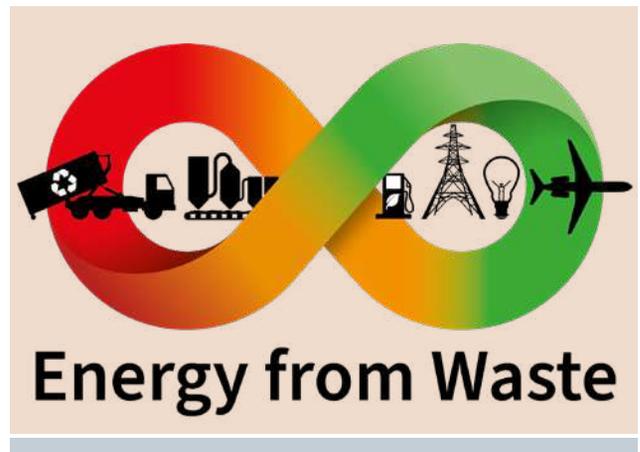
He added that the UAE's contingent of 1,000 plus

delegates at COP27 - the largest country delegation by far - confirms the depth of strong ties between the UAE and Egypt and the desire of the two countries to consolidate this close partnership by continuing to drive the process of environmentally-friendly sustainable development.

Climate action leadership

Bin Fahd emphasized the role of the leadership of the UAE in diversifying energy sources through large-scale clean energy projects and emerging as a leading global investor in renewable energy projects in more than 70 countries to empower communities and deliver sustainable solutions. The UAE's Peaceful Nuclear Energy Programme further emphasises the UAE's energy diversification strategy.

He concluded: "The path of sustainability continues to remain a top priority in the UAE and the nation is well placed to lead long-term sustainable transformation in the region and the wider world as it prepares to host the Climate Change Conference next year. Encouraging global cooperation to address global issues, the UAE will deliberate with the greatest minds to consolidate its leadership in inclusive climate action as hosts of COP 28."



UAE will remain an essential partner and supporter of human progress: President on 51st National Day



HH Sheikh Mohamed bin Zayed has given his first National Day address as President, emphasising that the UAE will be a strong supporter of humanity and its development

United Arab Emirates President His Highness Sheikh Mohamed bin Zayed has said the country's 51st National Day is a time to look to the future with hope, optimism and confidence, recall lessons of the past, and look at the present with awareness and contemplation.

"Taking care of our citizens and opening up all avenues of development, creativity and self-affirmation before them has been, and will always remain, our top priority and we will spare no effort to achieve this goal," he said in a speech.

HH Sheikh Mohamed bin Zayed went on to assure that the UAE will remain a key partner and supporter of everything that brings about progress and development for humanity, and enhances the world's ability to meet its challenges, foremost of which are climate change,

"As we celebrate our 51st UAE National Day, we pledge to continue our country's progress and to keep striving to fulfill our shared ambitions"



food security, diseases, epidemics and poverty.

"The National Day is an occasion filled with pride and joy. It is also an opportunity to re-energize and look into the year ahead with a renewed sense of vision and determination."

Sheikh Mohamed also paid tribute to the late UAE President Sheikh Khalifa bin Zayed Al Nahyan, who passed away in May. "He left in our hearts, and the hearts of many across the world, the cherished memory of his good journey, after he placed indelible imprints on every corner of the UAE. He was by the side of the late founder Sheikh Zayed bin Sultan Al Nahyan at every step in building the UAE we all know today."

May God have mercy on Sheikh Khalifa and Sheikh Zayed and their brothers, the founding leaders, and reward them with the best for what they have done for this country and its people. Their efforts

will remain a beacon and a source of inspiration for generation after generation. When we reflect on the progress and prosperity we enjoy today, we realise with pride the magnitude of December 2, 1971, and the value of unity we see today. Our respect and deep admiration for them continue to grow, in appreciation for what they have done, and so does our commitment and determination in carrying their legacy forward.

Looking to the future

During the past 50 years, our country has gone through many stages in its triumphant journey from "establishment" to "empowerment", each stage with its goals, facets and course of action.

"The UAE will continue its steadfast approach of construction and development, of consolidating gains and raising its ambitions to make an even greater development leap."



“The UAE will continue to focus on science and technology and capitalise on opportunities in these areas so that current and future generations can benefit. It is working to achieve the maximum investment of our most valuable resource, our people, and in their best interest, deepening the partnership between the public and private sectors.”

“The UAE is meticulously defining development priorities, and making a qualitative leap in the outputs of the educational process by enhancing this sector as it is our main way to achieve all our goals and ambitions.

“We must make learning a lifetime pursuit for us all, so we can contribute intellectually, socially, and morally as global citizens. The UAE is also diversifying its sources of income, building a knowledge-based and globally competitive

economy. The UAE is fully aware of the nature of the transformations around it, and the challenges and opportunities it enjoys. We are leveraging these opportunities and will address any challenges with a clear, effective and comprehensive approach.”

He continued to say that taking care of the UAE’s citizens and opening up all avenues of development, creativity and self-affirmation before them has been, and will always remain the country’s top priority.

“We will continue to develop and implement plans that revolve around empowering citizens and expanding the opportunities available to them in all fields without exception, because empowerment is not an interim policy with a specific time frame, but rather an ongoing approach.”

"The UAE is precious to us all – a nation formed by our founding fathers and its legacy continues through us all and the generations to come who will carry the flag forward"



“At the heart of this, the youth enjoy exceptional interest in our vision for the present and future of our country, because they represent a creative energy for bringing about development and progress, and they have proven their worth in all fields of national action during the past years. The future of this young nation is in the next generation’s hands—which is why we must support and empower them.”

Sheikh Mohamed said during the next stage of the country’s development the role of Emirati women will be strengthened in all fields. “No society can advance to the level it aspires to without the participation of women,” he said.

“Our country will continue to attract talents, competencies and bright minds from all over the world, and welcome every hand that builds and innovates, to contribute to our development

process and to work and live on our land in dignity and peaceful coexistence. Diversity built this nation, and our journey of inclusivity must shape its future.”

Sheikh Mohamed said, despite the adverse consequences of COVID-19 and other regional and global crises, including an economic downturn, the UAE economy has progressed rapidly.

“Our indicators of global competitiveness, strength of influence, economic growth, optimism for the future and others have improved from what they were before the pandemic, according to reports by specialised international institutions.”

“This reinforces the status of the 'Emirati exception' not only in the region, but in the whole world, due to the strength of the foundations on



which the state was built, its long-term and wise vision for the future, its efficiency in dealing with crises of all kinds, and directing its resources optimally to achieve sustainable development for current and future generations.”

He said that the UAE will remain a key partner and supporter of everything that brings about progress and development for humanity, and enhances the world's ability to meet its challenges, foremost of which are climate change, food security, diseases, epidemics and poverty, among others.

“The UAE will continue to call for peace and stability, and work to resolve disputes and conflicts, regardless of their type, location and degree of complexity, through diplomatic means. It will move in every direction to enhance opportunities for understanding and dialogue in

the regional and international arenas, and will call for peace, moderation and anti-extremism.”





نتقدم بأسمى
آيات التهاني والتبريكات

إلى مقام صاحب السمو الشيخ

محمد بن زايد آل نهيان

رئيس الدولة - القائد الأعلى للقوات المسلحة

و إلى مقام صاحب السمو الشيخ

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'World Must Work Together To Tackle Climate Change': UAE President At COP27

UAE President His Highness Sheikh Mohamed bin Zayed Al Nahyan delivered a speech at the 27th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) in Sharm El Sheikh, Egypt, emphasising the importance of international cooperation to tackle climate change for the sake of future generations.



The UAE is a responsible energy provider and will continue to supply oil and gas for as long as the world needs it.
- UAE President HH Sheikh Mohamed bin Zayed Al Nahyan

His Highness Sheikh Mohamed's address came during the opening session of the Leaders' Summit at COP27, in the presence of President Abdel Fattah El Sisi of Egypt and other world leaders, heads of state, and invited dignitaries.

The UAE President emphasised the need for the international community to collaborate on finding practical climate action solutions, telling the assembled audience they are meeting at a critical time for our planet and our future generations.

His Highness spoke of the UAE's position as a responsible energy provider, with a realistic view of the present as it invests in the future. He reiterated the UAE's support for efforts to accelerate the global energy transition and enable sustainable economic growth, highlighting recent initiatives such as the

World leaders gathered in Egypt to discuss climate change at COP27



Partnership for Accelerating Clean Energy agreement signed between the UAE and the US.

His Highness concluded by thanking Egypt for its efforts in hosting COP27 and extended an open invitation for everyone to continue collaboration towards finding and implementing practical solutions when the UAE hosts COP28 in 2023 at Expo City Dubai, emphasising the importance of ongoing cooperation and communication within the international community.

The UAE President commenced his address by thanking the Arab Republic of Egypt and the Secretariat of the United Nations Framework Convention on Climate Change for organising and hosting the 27th edition of the Conference of the Parties (COP27).

His Highness said: "I applaud this year's conference for its focus on implementation,

which allows Egypt and Africa to set an example in terms of climate priorities."

"We meet here today at a critical time for our planet and our future generations. Our world is faced with complex and unprecedented challenges, most notable among them being climate change, which now affects the world's stability and security - including food security."

The UAE President continued, "We have only one planet, ladies and gentlemen, and with that in mind, it is imperative that we partner and work together in a spirit of determination and optimism to address this common challenge through climate action. We look at this as an opportunity for innovation, and a chance to find new solutions and diversify our economy."

"The UAE is a responsible energy supplier, and we will continue to play that role as we pursue a



transition to alternate resources and technologies,” said the President. “By virtue of our geology, the oil and gas we have in the UAE is among the least carbon-intensive in the world. Nevertheless, we will continue to work towards reducing carbon emissions in the sector.”

His Highness Sheikh Mohamed bin Zayed Al Nahyan added: “This is not a new role for us; our Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan, directed us to stop all gas flaring decades ago, laying the foundations of sustainability in the UAE and guaranteeing the protection of both the environment and our natural resources.

“As a result, we have spent decades working towards diversifying our economy, and building our capabilities in the renewable and clean energy sector, in an effort to drive sustainable economic

and social growth for the benefit of the UAE and the wider world, and for current and future generations.

“To that end, the UAE became the first country in the region to sign and ratify the Paris Agreement, committing to its requirement to cut carbon emissions across all areas of our economy. The Emirates then went on to announce the UAE Net-Zero by 2050 Strategic Initiative.”

His Highness added: “On the same note, a recent partnership agreement we have signed with the United States will help accelerate this transition towards clean and renewable energy sources. The agreement aims to raise USD100 million in investments to generate 100 gigawatts of renewable energy in the UAE, the US, and developing economies around the world by 2035. These initiatives, projects, and protocols create

UAE President emphasizes importance of international cooperation to tackle climate change for the sake of future generations



new sectors and new jobs that require new kinds of knowledge and skills. They pave the way for us to accomplish our common goal and prevent the Earth's temperature from rising more than 1.5 °C."

Reiterating UAE's commitment to climate action, the President said: "The UAE remains committed to its collaborative approach, building bridges for cooperation and communication with the international community. We believe in the importance of consistency and perseverance in climate action.

"As we prepare to host COP28 in 2023 at Expo City Dubai, we increasingly focus on supporting the implementation of recommendations from previous conferences, and we are working to complete the first global stocktake of emission pledges under the Paris Agreement. Moving forward, we will support efforts to organise a

global dialogue to expedite progress in implementing the agreement by 2030.

"We strive to make it as inclusive and diverse as possible, ensuring that women are well represented, while working to engage youth from around the world, channelling their energy and passion towards finding sustainable solutions."

The UAE President said: "We want to bring everyone on the same page to collectively drive an organised and effective transition in the global energy sector with a realistic, pragmatic, ambitious, and economically feasible plan.

"The dangers of climate change affect everyone without exception, and the future of our children and grandchildren depends on the measures we take today," His Highness concluded.

Abdullah bin Zayed meets Tunisian PM on sidelines of COP27

H.H. Sheikh Abdullah bin Zayed Al Nahyan, Minister of Foreign Affairs and International Cooperation, met with Prime Minister of Tunisia, Najla Bouden, on the sidelines of the 2022 United Nations Climate Change Conference (COP27) held in Egypt.

During the meeting, the two sides discussed the close relations between the UAE and Tunisia and



ways of strengthening them in all fields. Sheikh Abdullah and Bouden also discussed several topics listed on the agenda of COP27, in addition to the UAE's preparations to host COP28.

The UAE's top diplomat highlighted the importance of COP27 in supporting the global efforts to address climate change and increase dependency on renewable and clean energy, to encourage sustainable economic growth.

He also expressed his appreciation for the close ties between the UAE and Tunisia and his best wishes to the country and its people, stressing the importance of forging further partnerships between the two peoples.

The meeting was attended by Sheikh Shakhboot bin Nahyan bin Mubarak Al Nahyan, Minister of State, Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology and UAE

Special Envoy for Climate Change, and Mariam bint Mohammed Almheiri, Minister of Climate Change and the Environment.

At COP 27, the UAE diplomat visited the pavilions of the UAE, Saudi Arabia, Bahrain, Qatar and Egypt, where he was introduced to the latest innovations in the areas of the environment, sustainable development and climate action.

He also explored clean and renewable energy projects and learned about several initiatives to raise public awareness about climate change.

Sheikh Abdullah lauded the widespread Arab and international participation in COP27, and the successful organisation of the event by Egypt, and affirmed the UAE's commitment to aligning the outcomes of COP27 with COP28, which will be hosted by the UAE next year.



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Congratulations
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H.H Sheikh Mohammed Bin Zayed Al Nahyan

President of United Arab Emirates

and

H.H Sheikh Mohammed Bin Rashid Al Maktoum

Vice President, Prime Minister and Ruler of Dubai

on The Auspicious Occasion of

The 51st National Day



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COP27 Presidency launches Sharm El- Sheikh Adaptation Agenda

In response to the devastating impacts of climate change affecting vulnerable people all over the world, the COP27 Presidency launched the Sharm-El-Sheikh Adaptation Agenda on November 8, 2022, in partnership with the High-Level Champions.

The Sharm El-Sheikh Adaptation Agenda outlines 30 Adaptation Outcomes to enhance



The Sharm El-Sheikh Adaptation Agenda represents a significant contribution to enhancing global action on adaptation and resilience as an utmost priority

resilience for 4 billion people living in the most climate vulnerable communities by 2030.

Each outcome presents global solutions that can be adapted to respond to local climate contexts, needs and risks and deliver the systems transformation required to protect vulnerable communities to the rising climate hazards.

It comes as research warns that nearly half the world's population will be at severe risk of climate change impacts by 2030, even in a 1.5-degree world according to analysis published by IPCC AR6 WG II Report.

Collectively, these outcomes represent the first comprehensive global plan to rally both State and non-State actors behind a shared set of adaptation actions that are required by the end of this decade across five impact systems: food

The Agenda will accelerate the Race to Resilience's global goal of making 4 billion vulnerable people more resilient by 2030



and agriculture, water and nature, coastal and oceans, human settlements, and infrastructure, and including enabling solutions for planning and finance.

The 30 Adaptation Outcomes include urgent global 2030 targets related to:

- Transitioning to climate resilient, sustainable agriculture that can increase yields by 17% and reduce farm level greenhouse gas (GHG) emissions by 21%, without expanding agricultural frontiers, and while improving livelihoods including of smallholder farmers
- Protecting and restoring an estimated 400 million hectares in critical areas (land and freshwater ecosystems) supporting indigenous and local communities with use of nature-based solutions to improve water security and livelihoods and to transform 2 billion hectares of land into sustainable management.
- Protecting 3 billion people by installing smart and early warning systems
- Investing USD 4 billion to secure the future of 15 million hectares of mangroves through collective action to halt loss, restore, double protection and ensure sustainable finance for all existing mangroves.
- Expanding access to clean cooking for 2.4 billion people through at least USD 10 billion/year in innovative finance.
- Mobilising USD 140 to USD 300 billion needed across both public and private sources for adaptation and resilience and spur 2,000 of the world's largest companies to integrate physical climate risk and develop actionable adaptation plans.

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COP27: UAE unveils National Net Zero by 2050 pathway

As part of its participation in the 27th UN Climate Change Conference (COP27), held in the Egyptian city of Sharm El Sheikh from 6th to 18th November, the UAE launched the National Net Zero by 2050 Pathway, which sets the timeframe and identifies the mechanisms of implementing the UAE Net Zero by 2050 Strategic Initiative, introduced in October 2021.



The UAE Net Zero by 2050 strategic initiative is a national drive to achieve net-zero emissions by 2050, making the UAE the first Middle East and North Africa (MENA) nation to do so

The pathway defines the country's climate ambition with an absolute emission reduction target of 18 percent compared to the UAE's updated second Nationally Determined Contribution (NDC) under the Paris Agreement by 2030, 60 percent by 2040, and 100 percent by 2050, compared to 2019.

Mariam bint Mohammed Almhairi, Minister of Climate Change and the Environment, said, "Climate change is the single most critical threat to humanity. Recognising the importance of fighting climate change on all fronts, the UAE is committed to achieving the goals of the Paris Agreement. Last year, we took a decisive step in this direction with the launch of the UAE Net Zero by 2050 Strategic Initiative. And today, we are proud to present the National Net Zero by 2050 Pathway that will drive the implementation of the Initiative."

The National Net Zero by 2050 Pathway is expected to bring significant gains in terms of job creation, GDP growth, and air quality



She added, “Powered by technology, innovation, and R&D, the Pathway is expected to bring significant gains in terms of job creation, GDP growth, and air quality.”

Following the launch of the UAE Net Zero by 2050 Strategic Initiative in October 2021 at Expo 2020 Dubai, the country founded the UAE Council for Climate Action, headed by the Minister of Climate Change and Environment and comprising representatives of 23 public and private sector entities, to serve as an umbrella for nationwide climate action. It also formed the National Committee for the Development of the National Strategy for Net Zero by 2050, tasked with working on the long-term net-zero strategy.

The strategy development comprises two phases. The first phase, completed in September 2022, defined the National Net Zero by 2050 Pathway.

This stage included benchmarking to identify best practices in the field in similar and developed countries, establishing an emission baseline, assessing the impact of existing national strategies (energy, water, demand management, waste, industry) on emission reduction until 2050, developing a model for estimating greenhouse gas (GHG) emissions and conducting modelling exercises, compiling a list of priority mitigation measures, and formulating scenarios for achieving net zero.

Using the most advanced methodology, several scenarios have been considered for the National Net Zero by 2050 Pathway. The scenario that has been selected represents a diversified and balanced pathway. It entails an accelerated implementation of economically viable mitigation measures with a focus on promoting a green economy and driving a shift to green industrial



development, which enhances exports and protects key established industries (aluminium, steel, cement, and oil and gas).

As part of this scenario, the UAE will adopt several measures to mitigate climate change, such as increasing the share of clean energy in its energy mix and scaling up the use of clean electricity in various sectors, including heavy industries. A gradual reduction in the use of fossil fuels will take place in line with the principles of a just energy transition. The measures also include expanding nature-based and industrial carbon capture, utilisation, and storage (CCUS) systems with a focus on direct air capture (DAC) technologies and ocean-based solutions, in addition to supporting climate-smart transport.

The pathway is projected to boost the national GDP by 1.8 to 3.2 percent by 2050, amounting to

a total increase between AED610 billion and AED1,080 billion, compared to 2019. It will also create and sustain an average of 200,000 jobs annually.

On the other side of the equation, the pathway will contribute to a significant improvement in air quality due to a reduction in pollution resulting from industry, energy, and transportation.

This will have a positive impact on public health and strengthen the competitive advantage of the country's low-carbon exports.

The National Net Zero by 2050 Pathway will enhance transparency and increase the UAE's chances of success in achieving the national target of limiting global warming within 1.5-2°C in line with the Paris Agreement.



Congratulations
To

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President of United Arab Emirates

and

H.H Sheikh Mohammed Bin Rashid Al Maktoum

Vice President, Prime Minister and Ruler of Dubai

on The Auspicious Occasion of

The National Day 51



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UAE Green Business Toolkit 2.0 Launched At COP27

The Ministry of Climate Change and Environment (MOCCA) introduced the second edition of the UAE Green Business Toolkit in partnership with the Global Green Growth Institute (GGGI) as part of its participation in the 27th UN Climate Change Conference (COP27).

The move aligns with the UAE’s pathway to net



The UAE Green Business Toolkit 2.0 seeks to benefit from the business sector’s increasing awareness about the importance of achieving net zero and building a low-carbon economy

zero and supports sustainable economic development. The launch took place during a fireside chat, headlined by H.E. Mariam bint Mohammed Almheiri, Minister of Climate Change and Environment, and moderated by Helena McLeod, Deputy Director-General of GGGI.

Her Excellency said: “Our ability to tackle the challenge of climate change and deliver tangible results in its mitigation and adaptation depends on the active participation of all sectors in our net-zero efforts. Therefore, the UAE prioritizes private sector engagement in all its future plans.

“The Toolkit is part of MOCCA’s efforts to enhance the contribution of private sector companies to the fight against climate change by adopting green and sustainable practices in line with the objectives of the UAE Net Zero by 2050 Strategic Initiative.”

The move aligns with the UAE's pathway to net zero and supports sustainable economic development



UAE GREEN BUSINESS TOOLKIT

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The UAE Green Business Toolkit 2.0 seeks to benefit from the business sector's increasing awareness about the importance of achieving net zero and building a low-carbon economy.

The document offers a comprehensive definition of the net-zero concept, explains its role in creating new business opportunities and reducing operating costs in the long term, and highlights the gains that come with the pursuit of a net-zero strategy. These include strengthening investor confidence and customer loyalty as well as boosting global competitiveness and the ability to attract talent.

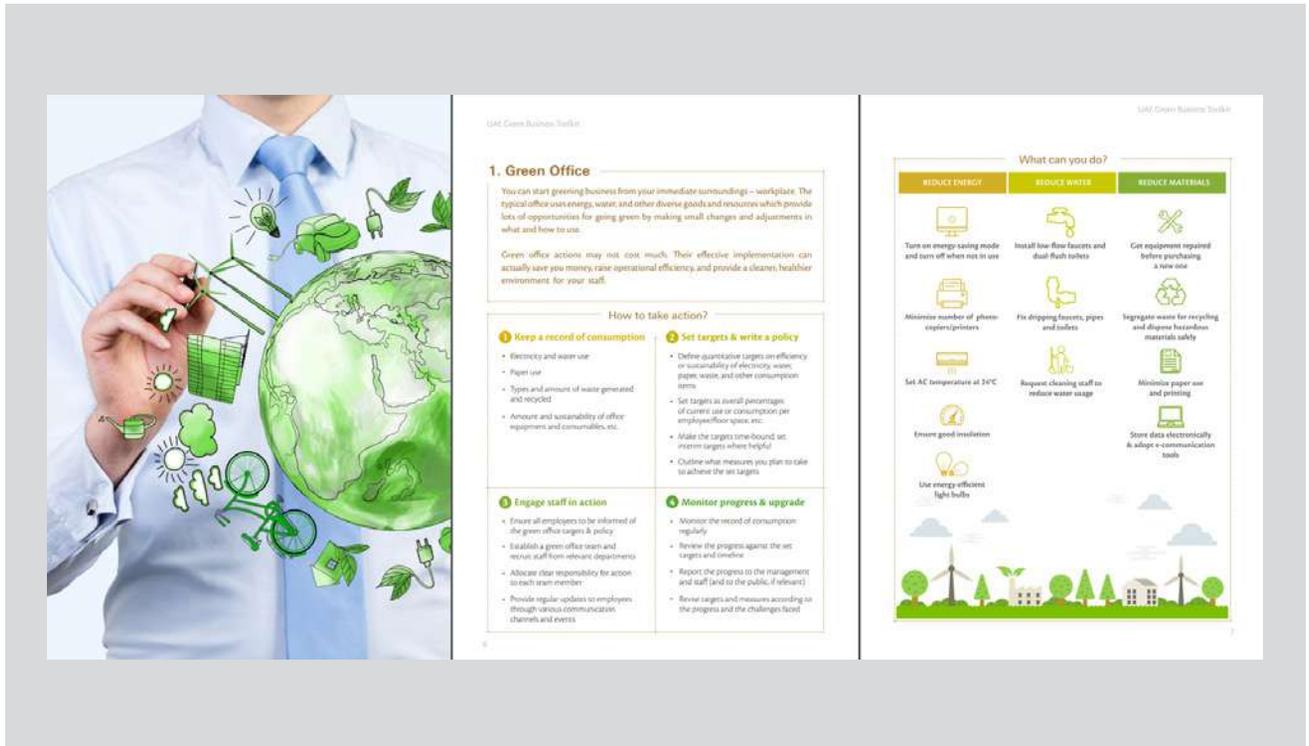
The second edition also draws a roadmap for developing an integrated company net-zero strategy.

It outlines a four-step approach that involves

measuring greenhouse gas (GHG) emissions, setting emission reduction targets, implementing measures to reach the targets, and linking the targets with the country's economy-wide decarbonization efforts.

In order to provide the private sector with a clear understanding of the benefits of the green business ecosystem, MOCCAЕ launched the National Dialogue for Climate Ambition (NDCA) in May 2022. The series of stakeholder assemblies, dedicated to a different industry every month, explores sectoral requirements, priorities, and future directions related to climate neutrality.

The UAE Green Business Toolkit 2.0 outlines 92 measures businesses can take to become greener, such as switching to clean sources of energy, electrifying the company vehicle fleet, and



replacing conventional raw materials with low-carbon alternatives.

MOCCA launched the first edition of the UAE Green Business Toolkit in 2018 with the intent to inspire all types of companies nationwide to take the first step to becoming more eco-friendly and socially responsible by creating awareness. It provided businesses, whether established or emerging, with all the information necessary to green their operations with a focus on three main areas – green offices, green procurement, and green products.

In the four years since, public awareness of sustainability has seen tremendous growth. As the UAE economy pursues its green recovery plans, increased attention is required to manage environmental, social, and climate-related risks to prevent future disruptions.

The second edition of the Toolkit supports the country's ambition to reduce GHG emissions to net zero by 2050, as well as the Principles of the 50, the UAE Green Agenda 2015-2030, and the National Climate Change Plan 2017-2050.

Going green offers businesses multiple benefits and creates new growth opportunities. In addition to protecting the environment and conserving natural resources, it cuts down on operational costs, reduces waste, and boosts product competitiveness, with environmental friendliness becoming an important global quality standard.

The UAE Green Business Toolkit 2.0 aims to build on the capacity of companies to adapt to a global economy in transition, and mobilize the private sector to dedicate resources to contributing to the country's climate targets.



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51

تتقدم مدينة الشارقة المستدامة

بأسمى آيات التهاني والتبريكات إلى مقام

صاحب السمو الشيخ محمد بن زايد آل نهيان

رئيس دولة الإمارات العربية المتحدة، حفظه الله

وإلى

صاحب السمو الشيخ محمد بن راشد آل مكتوم

نائب رئيس الدولة رئيس مجلس الوزراء حاكم دبي، رعاه الله

وإلى إخوانهما أصحاب السمو الشيوخ أعضاء المجلس الأعلى للاتحاد حكام الإمارات

بمناسبة اليوم الوطني الواحد والخمسين لدولة الإمارات العربية المتحدة.

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COP27 Reaches Breakthrough Agreement on New “Loss and Damage” Fund for Vulnerable Countries

32

COP 27 - OUTCOMES



The collective power of civil society groups and grassroots climate activists saw a historic outcome with the establishment of a loss and damage fund

The United Nations Climate Change Conference COP27 concluded on November 20, 2022, with a breakthrough agreement to provide “loss and damage” funding for vulnerable countries hit hard by climate disasters.

“This outcome moves us forward,” said Simon Stiell, UN Climate Change Executive Secretary. “We have determined a way forward on a decades-long conversation on funding for loss and damage – deliberating over how we address the impacts on communities whose lives and livelihoods have been ruined by the very worst impacts of climate change.”

Set against a difficult geopolitical backdrop, COP27 resulted in countries delivering a package of decisions that reaffirmed their commitment to limit global temperature rise to 1.5 degrees

The Loss and Damage fund aims to provide financial assistance to nations most vulnerable and impacted by the effects of climate change



Celsius above pre-industrial levels. The package also strengthened action by countries to cut greenhouse gas emissions and adapt to the inevitable impacts of climate change, as well as boosting the support of finance, technology and capacity building needed by developing countries.

Dedicated fund

Governments took the ground-breaking decision to establish new funding arrangements, as well as a dedicated fund, to assist developing countries in responding to loss and damage. Governments also agreed to establish a 'transitional committee' to recommend ways of operationalizing both the new funding arrangements and the fund at COP28 next year.

COP27 saw significant progress on adaptation, with governments agreeing on the way to move forward on the Global Goal on Adaptation, which

will conclude at COP28 and inform the first Global Stocktake, improving resilience amongst the most vulnerable. New pledges, totaling more than USD 230 million, were made to the Adaptation Fund at COP27.

COP27 President Sameh Shoukry announced the Sharm el-Sheikh Adaptation Agenda, enhancing resilience for people living in the most climate-vulnerable communities by 2030. UN Climate Change's Standing Committee on Finance was requested to prepare a report on doubling adaptation finance for consideration at COP28.

The cover decision, known as the Sharm el-Sheikh Implementation Plan, highlights that a global transformation to a low-carbon economy is expected to require investments of at least USD 4-6 trillion a year. Delivering such funding will require a swift and comprehensive transformation



of the financial system and its structures and processes, engaging governments, central banks, commercial banks, institutional investors and other financial actors.

Serious concern was expressed that the goal of developed country Parties to mobilize jointly USD 100 billion per year by 2020 has not yet been met, with developed countries urged to meet the goal, and multilateral development banks and international financial institutions called on to mobilize climate finance.

At COP27, deliberations continued on setting a 'new collective quantified goal on climate finance' in 2024, taking into account the needs and priorities of developing countries.

World Leaders Summit

The World Leaders Summit, held over two days

during the first week of the conference, convened six high-level roundtable discussions. The discussions highlighted solutions - on themes including food security, vulnerable communities and just transition - to chart a path to overcome climate challenges and how to provide the finance, resources and tools to effectively deliver climate action at scale.

COP27 brought together more than 45,000 participants to share ideas, solutions, and build partnerships and coalitions. Indigenous peoples, local communities, cities and civil society, including youth and children, showcased how they are addressing climate change and shared how it impacts their lives.

The decisions taken at Sharkm El-Sheikh also reemphasize the critical importance of empowering all stakeholders to engage in climate

Building flood defences, preserving wetlands, restoring mangrove swamps and regrowing forests – these measures can build resiliency



action; in particular through the five-year action plan on Action for Climate Empowerment and the intermediate review of the Gender Action Plan. These outcomes will allow all Parties to work together to address imbalances in participation and provide stakeholders with the tools required to drive greater and more inclusive climate action at all levels.

Role of youth

Young people in particular were given greater prominence at COP27, with UN Climate Change's Executive Secretary promising to urge governments to not just listen to the solutions put forward by young people, but to incorporate those solutions in decision and policy making. Young people made their voices heard through the first-of-its-kind pavilion for children and youth, as well as the first-ever youth-led Climate Forum.

In parallel with the formal negotiations, the Global Climate Action space at COP27 provided a platform for governments, businesses and civil society to collaborate and showcase their real-world climate solutions. The UN Climate Change High-Level Champions held a two-week programme that included a number of major African-led initiatives to cut emissions and build climate resilience, and significant work on the mobilization of finance.

Committed to climate action

Stiell reminded delegates in the closing plenary that the world is in a critical decade for climate action. A stark report from UN Climate Change underpinned his remarks, as well as discussions throughout the two-week conference. According to the report, implementation of current pledges by national governments put the world on track for a 2.5°C warmer world by the end of the



century. The UN’s Intergovernmental Panel on Climate Change indicates that greenhouse gas emissions must decline 45% by 2030 to limit global warming to 1.5°C.

Some of the other key outcomes of COP27 are:

Technology

COP27 saw the launch of a new five-year work program to promote climate technology solutions in developing countries.

Mitigation

COP27 significantly advanced the work on mitigation. A mitigation work programme was launched in Sharm el-Sheikh, aimed at urgently scaling up mitigation ambition and implementation. Governments were also requested to revisit and strengthen the 2030 targets in their national climate plans by the end of 2023, as well as accelerate efforts to phase

down unabated coal power and phase-out inefficient fossil fuel subsidies.

The decision text recognizes that the unprecedented global energy crisis underlines the urgency to rapidly transform energy systems to be more secure, reliable, and resilient, by accelerating transitions to renewable energy during this critical decade of action.

Other announcements

- Countries launched a package of 25 new collaborative actions in five key areas: power, road transport, steel, hydrogen and agriculture.
- UN Secretary-General António Guterres announced a USD 3.1 billion plan to ensure everyone on the planet is protected by early warning systems within the next five years.
- The UN Secretary-General’s High-Level Expert

Greenhouse gas emissions must decline 45% by 2030 to limit global warming to 1.5°C



- Group on Net-Zero Commitments published a report at COP27, serving as a how-to guide to ensure credible, accountable net-zero pledges by industry, financial institutions, cities and regions.
- The G7 and the V20 ('the Vulnerable Twenty') launched the Global Shield against Climate Risks, with new commitments of over USD 200 million as initial funding. Implementation is to start immediately.
 - Announcing a total of USD 105.6 million in new funding, Denmark, Finland, Germany, Ireland, Slovenia, Sweden, Switzerland, and the Walloon Region of Belgium, called for even more support for the Global Environment Facility funds targeting the immediate climate adaptation needs of low-lying and low-income states.
 - The new Indonesia Just Energy Transition Partnership, announced at the G20 Summit

held in parallel with COP27, will mobilize USD 20 billion over the next three to five years to accelerate a just energy transition.

- Important progress was made on forest protection with the launch of the Forest and Climate Leaders' Partnership, which aims to unite action by governments, businesses and community leaders to halt forest loss and land degradation by 2030.



UAE, Jordan and Israel sign MoU to advance Project Prosperity

The governments of the UAE, the Hashemite Kingdom of Jordan, and the State of Israel signed a Memorandum of Understanding (MoU) at the 2022 United Nations Climate Change Conference (COP27) to advance the clean energy and sustainable water desalination projects announced last year.

The MoU was signed in the presence of H.H.



Sheikh Abdullah bin Zayed Al Nahyan, Minister of Foreign Affairs and International Cooperation; Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology and UAE's Special Envoy for Climate Change; and John Kerry, United States' Special Presidential Envoy for Climate.

The agreement was signed by Mariam bint Mohammed Almheiri, Minister of Climate Change and the Environment; Mohammad Al Najjar, Jordan's Minister of Water and Irrigation, and Esawi Frej, Israel's Minister of Regional Cooperation.

The MoU relates to Project Prosperity, which has two components: Prosperity Green and Prosperity Blue. Prosperity Green includes a 600-megawatt (MW) solar photovoltaic plant, complemented with electric storage, which will be built in Jordan and produce clean energy for export to Israel.

Prosperity Blue is a sustainable water desalination program, located in Israel, to export to Jordan 200 million cubic metres of potable water per annum.

As per the MoU, feasibility studies for each of the projects have been ongoing and the parties affirm that both Prosperity Green and Prosperity Blue have positive potential prospects. The UAE, Jordan, and Israel will continue engaging to develop the necessary implementation plans in time for COP28, which will be held in the UAE next November.

Project Prosperity was proposed to help address some of the challenges posed by climate change on water and energy security in the Middle East, and to promote renewable energy, sustainable water supply, and stability in the region.



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Congratulations
To

H.H Sheikh Mohammed Bin Zayed Al Nahyan
President of United Arab Emirates
and

H.H Sheikh Mohammed Bin Rashid Al Maktoum
Vice President, Prime Minister and Ruler of Dubai

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UAE, Indonesia unveil Mangrove Alliance for Climate at COP27

Mariam bint Mohammed Almhiri, Minister of Climate Change and the Environment, launched the Mangrove Alliance for Climate (MAC) at the 27th UN Climate Change Conference (COP27) in Egypt.

Led by the UAE and Indonesia, the initiative seeks to scale up and accelerate the conservation and restoration of mangrove ecosystems for the



New alliance to raise awareness about the role of mangroves as a "nature-based solution to climate change"

benefit of communities worldwide. Five other countries – India, Sri Lanka, Australia, Japan, and Spain – have joined the Alliance.

MAC seeks to raise awareness about the role of mangroves as a nature-based climate change solution, and, through its members, will work towards expanding and rehabilitating mangrove forests globally.

Mangrove forests are among the most productive and ecologically important ecosystems. They offer significant climate change mitigation and adaptation co-benefits, as they store carbon up to 400 percent faster than land-based tropical rainforests, protect coasts from rising sea levels, erosion, and storm surges, and provide breeding grounds for marine biodiversity. Around 80 percent of the global fish population depend on healthy mangrove ecosystems.

Mangroves can absorb four to five times more carbon emissions than tropical forests and can help create new carbon sinks



Mariam Almheiri said, “Increasing reliance on nature-based solutions is an integral element of the UAE’s climate action on the domestic as well as international level, therefore we seek to expand our mangrove cover. At COP26, we presented our ambitious target of planting 100 million mangroves by 2030.”

“We are pleased to launch MAC jointly with Indonesia, and believe it will go a long way in driving collective climate action and rehabilitating blue carbon ecosystems,” she added. The Minister noted that the UAE intends to plant three million mangroves within the next two months.

Members will demonstrate their dedication to maximising the potential of nature-based solutions through mangrove planting and conservation campaigns, enhance mangroves’ climate change mitigation capabilities through

research and innovation and step up concerted efforts to advance the global climate agenda.

Kuwait commits to reaching carbon neutrality by 2050

Kuwaiti Foreign Minister Sheikh Salem Abdullah Al-Jaber Al-Sabah has affirmed Kuwait’s commitment to reaching carbon neutrality by 2050 in the oil and gas sector and in other sectors by 2060.

In remarks to KUNA on the sidelines of COP27 in Egypt, the Kuwaiti minister stated that Kuwait executed many projects to preserve the environment and reduce emissions, stressing that Kuwait sticks to all the commitments it made since the launching of the first climate conference in the Brazilian capital in 1992 all the way to the Paris conference in 2015.

High-level Chilean delegation visits Mohammed bin Rashid Al Maktoum Solar Park

A high-level delegation from the Republic of Chile, headed by Ximena Fuentes Torrijo, Undersecretary for Foreign Affairs of Chile; and Patricio Diaz Broughton, Ambassador of Chile to the UAE, visited the Mohammed bin Rashid Al Maktoum Solar Park in Dubai.

The solar park, by Dubai Electricity and Water Authority (DEWA), is the largest single-site solar



park in the world based on the Independent Power Producer (IPP) model. It has a planned capacity of 5,000 MW by 2030.

The delegation aimed to learn about DEWA's experience in developing sustainable energy technologies. The Chilean delegation also visited the Innovation Centre and the Research and Development Centre at the solar park and were briefed on the Green Hydrogen project, a first of its kind pilot project in the Middle East and North Africa to produce hydrogen using solar power.

Emphasising DEWA's commitment to exchanging expertise with stakeholders worldwide, Saeed Mohammed Al Tayer, MD and CEO of DEWA, noted that the R&D Centre at the Mohammed bin Rashid Al Maktoum Solar Park has become a global platform to enhance the operations and services of the utility sector.

He explained that green hydrogen is an eco-friendly energy source and represents one of the pillars of a sustainable future for accelerating the transition to carbon neutrality.

This supports the Dubai Clean Energy Strategy 2050 and the Dubai Net Zero Carbon Emissions Strategy 2050 to provide 100% of the energy production capacity from clean energy sources by 2050.

He said that the Innovation Centre supports clean and renewable energy innovation and develops the skills and capacity of the next generation of innovators in clean energy technologies. It also provides a unique learning environment by hosting events, conferences, seminars and workshops, building partnerships, and raising awareness about clean energy and sustainability.



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To H.H. Sheikh

Mohammed Bin Zayed Al Nahyan

President of the United Arab Emirates

And H.H. Sheikh

Mohamed Bin Rashid Al Maktoum

Vice President, Prime Minister of UAE and Ruler of Dubai

Their Highnesses the Members of the supreme council,

the rulers of Emirates

And the people of the United Arab Emirates

On The Auspicious Occasion of The

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AWARe Initiative to address water security as part of climate change adaptation

Egypt's COP27 Presidency, in partnership with World Meteorological Organization (WMO), launched AWARe (Action on Water Adaptation or Resilience), an initiative that will champion inclusive cooperation to address water related challenges and solutions across climate change adaptation.

Speaking on the initiative, COP27 President



AWARe was launched during the opening session of COP27's Thematic Day for Water

Sameh Shoukry said: "Increasing water demand from a growing population and variable supply does not make for sound economics.

As we work to design and implement solutions across adaptation, water management must feature prominently in the discussions and actions. Water is life and is vital to sustaining lives and livelihoods."

AWARe will focus on three priorities for action: Decrease water losses worldwide and improve water supply; Propose and support implementing mutually agreed policy and methods for cooperative water-related adaptation action and its co-benefits; and Promote cooperation and interlinkages between water and climate action in order to achieve Agenda 2030.

AWARe was launched during the opening session

Initiative will champion inclusive cooperation to address water related challenges and solutions across climate change adaptation



of COP27's Thematic Day for Water with addresses by Dr Hani Sewilam, Egypt Minister of Water Systems, and Irrigation; Ambassador Ayman Amin Tharwat, Deputy Director for the Department of Climate, Environment and Sustainable Development for the Egyptian Ministry of Foreign Affairs; and Dr. Elena Manaenkova, Deputy Secretary General of WMO.

Minister Hani Sewilam said: "The Global Water Crisis is affecting billions of people worldwide. The AWARe initiative will catalyze inclusive cooperation to address water as a key to climate change adaptation and its co-benefits, as well as enhanced resilience."

Dr. Elena Manaenkova, Deputy Secretary General of World Meteorological Institute also commented: "74% of all natural disasters are water related and effective disaster management

strategies will protect communities and limit climate-related hazards."

The AWARe initiative promotes measures to decouple economic growth from freshwater use and degradation; adaptation and mitigation strategies, seek cooperative analysis of river basin scale adaptation and mitigation options and risk of mal-adaptation and support mutually agreed policy solutions.

It seeks to support promotion of sustainable waste-water management, sanitation policies and strategies, and water-wise energy pathways, It will also work towards linking water resources policies with national climate action to reflect climate change long-term impacts on water resources and demand, and to support preparedness and adaptation measures.

'The Big 5' to drive ESG-focused, net-zero targets by 2050

The industry's brightest minds, disruptive thinkers, most exciting innovators, and advisors from Environmental, Social, and Governance (ESG)-focused construction businesses will gather at The Big 5, at the Dubai World Trade Centre (DWTC) from December 5-8.

On December 7, the inaugural Global Construction Impact Summit will help push a



coordinated approach to meet local and global emission and waste reduction targets.

"According to the recent WGBC Beyond Buildings Report, the macro urban built environment is responsible for 75% of annual global greenhouse gas emissions, with buildings alone accounting for 37%" said Ben Greenish, Senior Vice-President of Construction at dmg events, organizer of The Big 5.

"The industry must demonstrate a willingness to make changes if we are to meet the World Green Building Council's targets which include achieving at least 40 percent less embodied carbon emissions by 2030 and achieving 100 percent net zero emissions by 2050. By driving the shift from high-emission products for example to near-zero emission products, the industry can take a significant step forward."

Greenish added, "The sustainability spotlight on the Middle East and Africa is shining brighter with the hosting of COP27 in Egypt and the upcoming COP 28 in the UAE.

"The Global Construction Impact Summit will emerge as a green pathway for the regional industry to demonstrate international leadership by highlighting commitment to national net-zero visions," he said.

Discussion topics throughout the day will include how to advance net zero throughout the industry, ESG leadership in construction, the acceleration of change by scaling up solutions and collaboration, achieving zero waste through substitute materials use, and ESG metrics reporting - all focused on applications for the construction industry.



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We Congratulate the leaders and the people of United Arab Emirates on its 51st National Day. May U.A.E. continue to progress and prosper.



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UAE, Arctic Circle To Drive Climate Action Within Third Pole-Himalayan Region

The Ministry of Climate Change and Environment (MOCCA), in collaboration with Arctic Circle, hosted an open dialogue on the “Third Pole Process” at the sidelines of the 27th United Nations Climate Change Conference (COP27) in Sharm El Sheikh, Egypt.

The open dialogue included Mariam bint Mohammed Almheiri, Minister of Climate



The Third Pole region is a term that denotes the geographic vicinity of the Himalaya, which includes India, China, Pakistan, Afghanistan, Nepal, Bhutan, Bangladesh, Myanmar, and several countries in Central Asia

Change and the Environment; Ólafur Ragnar Grímsson, former President of Iceland and Chairman of Arctic Circle; and Guðlaugur Þór Þórðarson, Iceland’s Minister for the Environment, Energy and Climate. Other participants were representatives from Arctic countries and the Third Pole – Himalayan Region and various institutions and organisations from other countries.

In June 2022, MOCCA and Arctic Circle launched the Third Pole Process to present the Arctic model of collaboration to the Third Pole-Himalayan region, to mitigate the threats of melting glaciers and water insecurity, aggravated by climate change. The Third Pole region is a term that denotes the geographic vicinity of the Himalaya, which includes India, China, Pakistan, Afghanistan, Nepal, Bhutan, Bangladesh, Myanmar, and several countries in Central Asia.

Third Pole initiative aims to mitigate the threats of melting glaciers and water insecurity, aggravated by climate change



"The UAE is at the forefront of nations tackling the climate crisis. To support efforts aimed at mitigating the risks associated with melting glaciers, we rolled out the Third Pole Process that forges meaningful synergies and promotes experience sharing to address the effects of ice shrinking," Almheiri said.

She noted that glacier melting can considerably disturb the cycle of water, trigger higher biodiversity loss, and impede economic growth.

The Third Pole Process brings together governments, scientists, and experts to strengthen the regional knowledge of the challenges of diminishing water resources. It represents an active engagement with governments and institutions to enhance scientific research and partnerships to inform policy making, guided by the Arctic experience of

collaboration that facilitates effective communication of scientific information to policymakers specialising in addressing climate change.

For his part, Ólafur Ragnar Grímsson stated, "The escalation of the melting of the glaciers of the Himalaya-Third pole countries could, in the coming decades, become a paramount climate disaster. All the major rivers of India and China as well as the water resources of other Himalayan countries can be traced to the glaciers in the Third Pole Region. The future of over a billion people could be directly attacked by the Third Pole ice melting."

The Arctic Circle Abu Dhabi Forum is set to run in January 2023 as part of Abu Dhabi Sustainability Week (ADSW).

Global FoodTech Challenge announces 12 finalists from 8 countries

Following a rigorous and highly anticipated process to identify the most cutting-edge agri-tech and foodtech solutions in the market today, 12 start-ups have been announced as finalists of the second edition of the FoodTech Challenge.

Selected from an initial submission of 667 applications across 79 countries, and then a



Three UAE start-ups focused on solving hunger and food waste problems have made it to the final round of FoodTech Challenge

further shortlist of 30, the 12 finalists now move to the concluding stage, where four start-ups will be selected to win the competition's pooled prize of up to US\$2 million.

The FoodTech Challenge seeks to find the next wave of technology innovations on the cusp of transforming traditional agricultural practices efficiently and sustainably. With interest from start-ups representing a range of geographies, the final 12 come from markets across the UAE, Israel, Netherlands, Saudi Arabia, Singapore, Spain, the UK, and the USA.

The solutions they explore span food production (5 finalists), including game-changing fog-based technology to deliver more nutritious crops using 95% less water, using insects to convert food waste into inputs for livestock and crop farming, growing plant-based protein on non-

Four winners from 12 finalists will be announced early next year



arable land, and optimising soil quality to maximise watering efficiency.

Responding to the second track of the competition, which addresses the challenge of food loss and waste (7 finalists), the innovative solutions include AI- and IoT-powered systems to minimise and quantify waste at individual and industrial levels, high-visibility and non-destructive quality control systems for fresh produce, new freezing technology enabling frozen foods to retain their original taste and nutritional value, ethylene control solutions to increase the longevity of produce, upcycling vegetable waste into sustainable protein ingredients, and intercepting near-expiry food to produce cost-effective and accessible meals.

As part of the finalist phase, the selected start-ups have been enrolled in a six-week mentorship

program with key local stakeholders in the UAE to maximise their opportunity to integrate and establish successfully. Mentoring will be delivered by previous winners, the competition's partners, and key players in the agritech ecosystem.

Dr. Agnes Kalibata, President, AGRA, former UN Secretary-General's Special Envoy to the 2021 Food Systems Summit, stated: "I am delighted to see the UAE is actively searching for food tech and agritech solutions to invest in, incubate and ultimately help accelerate and scale. The start-ups in this competition could have solutions that are applicable in other regions with similar climatic conditions."

The final four winners of the competition will be selected by nine judges from a wide range of backgrounds and areas of expertise.

Prague is the eighth most sustainable metropolis in the world, according to a 2021 study commissioned by the British comparison portal Uswitch.

Prague had one of the highest scores for green space on the index (88.9%). Since 2018, the capital city of the Czech Republic has implemented the Tree Planting Action Plan, an

Greener Than Ever: Prague, Czech Republic



Prague recognises that new planting is necessary to maintain the quality of existing wooded areas and reduce traffic noise in residential areas

eight-year scheme to plant 1 million new trees. This helps the quality of existing wooded areas and reduce traffic noise in residential areas.

The city also puts a lot of effort into their recycling as less than 10% of waste is sent to landfills. Other initiatives include citywide bio-waste collection and plan to reduce the total production of mixed city waste by at least half by 2030.

Prague, as well as the rest of the Czech Republic, has during the last decades been facing increasing frequency and intensity of some types of extreme weather events related to climate change. In 2020, the Prague City Council approved a commitment for the city to reduce CO2 emissions by 45% by 2030 and eliminate them entirely by 2050 at the latest. To reach these goals, the City has developed strategies to

The Tune Up Prague Project focuses on improving urban mobility in the capital as both resident and visitor numbers grow



existing trees and plant more.

Sustainable Mobility Plan

Prague's public transport system is already extensive and cheap to use (the City pays 80% of its operating costs), but while many Prague residents already use public transport, up to 80% of those commuting from suburban areas use private cars.

The Tune Up Prague Project focuses on improving urban mobility in the capital as both resident and visitor numbers grow. As part of this project, the City has approved a Sustainable Mobility Plan that details the measures all involved parties will take to ensure more sustainable transport in the city up to 2030.

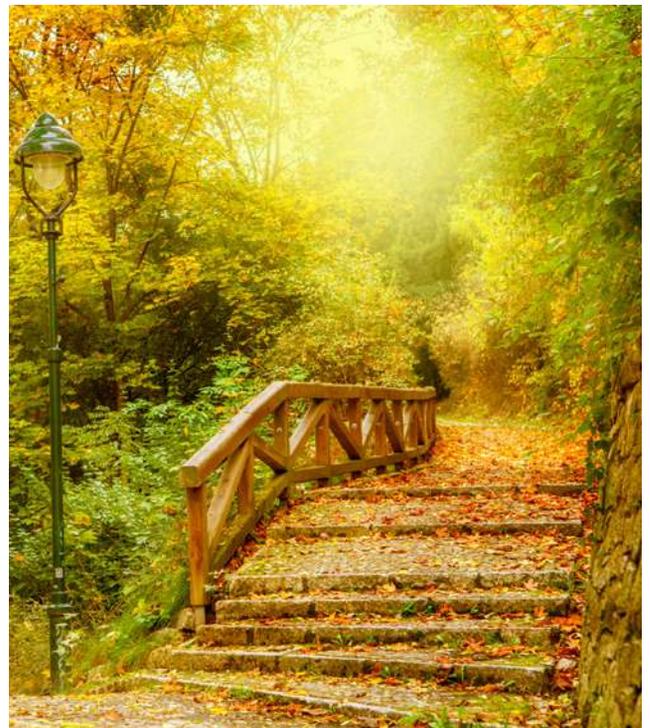
Some of these measures include construction of new, safer cycling paths, plus cycle racks and Bike & Ride facilities; a commitment to increase the

tackle the issues that contribute to CO2 emissions and build on progress it's already made.

Tree Planting

Prague's Tree Planting Action Plan recognises the positive environmental effect of larger tree groupings, which can hold large amounts of water, effectively cooling the landscape, improving the microclimate and preventing soil erosion on slopes and riverbanks. So, new beeches, oaks, firs, pines and larches have been planted every spring and autumn, when planting conditions are optimal. Despite the challenges of 2020, foresters planted nearly 250,000 new trees in the ground.

Throughout the process, the City are working to involve the public and non-profit organisations, hoping to educate people in the environmental benefits of trees, and inspire them to care for





proportion of wheelchair-accessible metro stations from 72 to 95%; increasing the number of charging stations (and fast-charging facilities) for electric vehicles; more dedicated bus lanes and more.

Waste Management

Prague already has a high waste recycling rate, with less than 10% of waste ending up in the landfill. The City plans to further refine its waste management and, above all, reduce waste generation. It has introduced city-wide biowaste collection and a pilot kitchen waste collection scheme, and it intends to reduce the total production of mixed municipal waste in the city by at least half by 2030.

The City authorities no longer use single-use plastic packages and tableware at their own events, nor do they offer support to events that

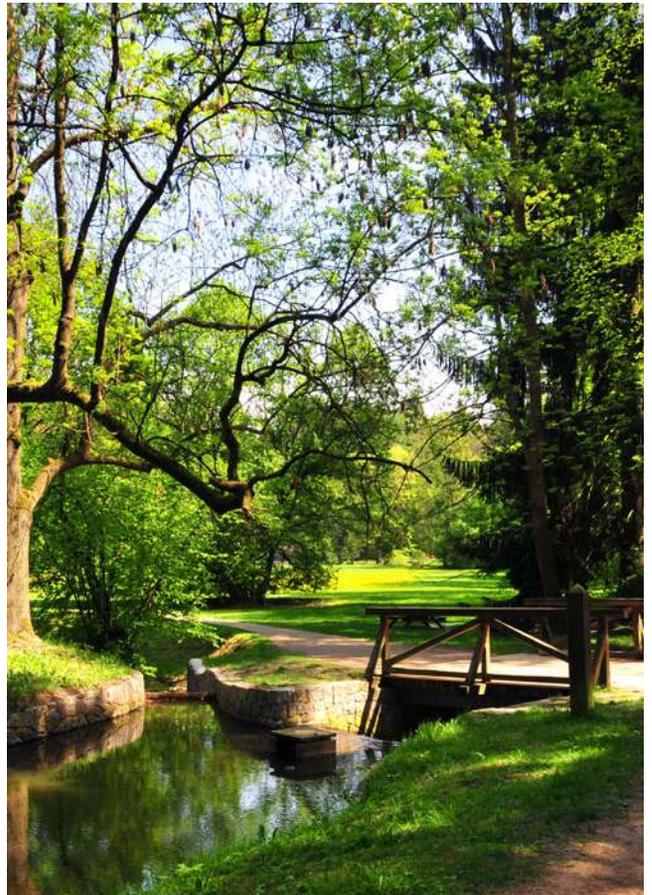
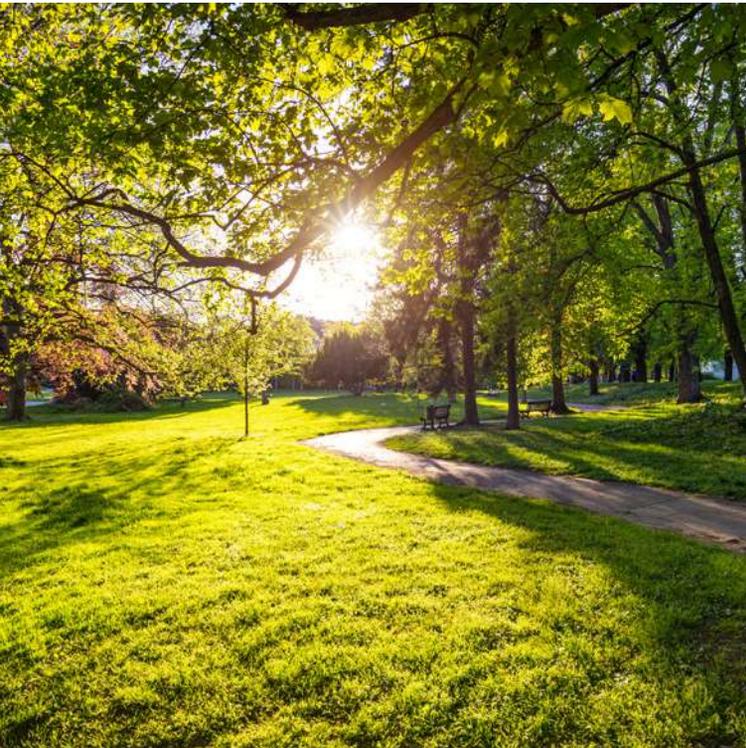
still use single-use plastic items.

Circular Economy

Prague ranks among the pioneers of the circular economy within its geographic region, as well as among European metropolises. Prague already has a vision of how to be a circular city and has implemented a number of systematic measures and projects since 2019. Currently, the metropolis is one of the first cities in the world to initiate the Circular Strategy 2030, which is also supported by the European Union and the United Nations.

The basic principles of the circular economy are very simple - minimise waste production and keep raw materials in circulation for as long as possible. No more, no less. Prague's primary vision as a circular economy is therefore the prevention of waste generation and its retention in the city or in its immediate surroundings, which promises

The city authorities no longer use single-use plastic packages and tableware at their own events, nor do they offer support to events that still use single-use plastic items



further opportunities for reuse.

Some of the city's specific measures to assist this include:

- Biogas from bio-waste as car fuel
- Less waste produced by the city hall and from events supported by the city
- Introduce multimodal sorting of plastic, metal, and beverage cartons
- Build a modern sorting line for plastics, metals, and beverage cartons
- Move most recycling from the streets into courtyards (door to door)
- Support a second life for furniture and other goods
- Introduce principles of circularity into Prague's construction and demolition sector
- Introduce ecological and circular public

procurement policies

- Capacity building for circular economy in the internal structures of the Prague City Hall

Green Airport

Prague Airport is working to achieve carbon neutrality by 2030. It is involved in the Airport Carbon Accreditation (ACA) initiative, which independently evaluates airports around the world for their efforts to reduce their carbon footprints, since 2009, and achieved level 3 accreditation in 2016. To achieve level 4—zero emissions—by 2030, it is involving its partners, including airlines, handling and catering service providers and land transport users.

'Nature-based solutions in coastal areas can help address global crises'

A report released by the World Government Summit (WGS) Organisation focuses on introducing working Nature-based Solutions (NbS) to address the harmful effects of climate change in the Gulf Cooperation Council (GCC), African, and East Asian countries.

The research – done in partnership with advisory firm PwC – pointed to the “moral duty” of local



Nature-based Solutions can help the world address multiple overlapping crises, including climate change, loss of biodiversity, pandemics and economic shocks

and global legislators to provide a resilient future for the next generation, given the unprecedented crisis of natural environment ecosystems in coastal areas, including mangroves, coral and oyster reefs, and seagrass meadows.

Launched in conjunction with the 27th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27), held in the Arab Republic of Egypt, the "Frontiers of Change: How Nature-Based Solutions in Coastal Areas can Help Address Global Crises" report examines how coastal ecosystems provide a wide range of benefits for our planet and humankind.

Case Studies

Through a series of case studies led by governments in East Asia, Africa and the GCC, the research makes the case for how NbS offer a

Ecosystem services provided by nature are a hugely under-rated asset



unique, low-tech and cost-effective opportunity to tackle current and future global crises.

The report also explains that if implemented cohesively and in an integrated manner, NbS can address multiple overlapping challenges simultaneously, as they can help mitigate climate change, reverse biodiversity loss, help prevent future pandemics and support economic development.

The paper calls on Governments to prioritise NbS as a way to tackle key global crises, integrating them into national development planning across government departments, not just environment ministries, and considering economic development through an NbS lens.

Prioritise natural environment

Furthermore, a fundamental reset of how governments value the natural environment is

required to recalibrate national spending priorities, and the full value of ecosystem services should be calculated to allow transparent cost comparisons between NbS and traditional approaches.

Additionally, the report highlighted that regional and international collaboration is mandatory, especially as ecosystems often cross national boundaries, and are affected by both public and private sector actions. “NbS are an important means for governments to meet their international obligations, including the Paris Climate Accord, the Convention on Biological Diversity (CBD) and the UN’s Sustainable Development Goals (SDGs).”

Proactive solutions

Mohamed Yousef Al Sharhan, Deputy Managing Director of WGS Organisation, noted that



launching the report is part of Summit’s efforts to enable governments to foresee challenges in various sectors and design proactive solutions, while developing effective strategies aiming to adapt and mitigate the effects of climate change. It also aims to achieve balance between economic growth and environmental stability, while actively developing new initiatives and programs integrated for the future growth.

Andrew Thurley, Senior Director of Economics and Sustainability, PwC Middle East, said, “Increasingly, and thankfully, environmental, social and governance (ESG) factors are at the top of both public and private-sector agendas. As the momentum behind ESG as a force for positive and lasting change continues to grow, we will see a growing demand for NbS initiatives, both from policy-makers and capital markets. Governments and the private sector should work together to

implement and scale up a green recovery.”

He added: “The solutions can address social and economic distress in the short-term, drive economic, humanitarian and environmental recovery in the medium-term and ultimately build a more robust and sustainable foundation to weather global crises in the future.”

The report also presents practical checklists for the national governments to consider. “First, encourage partnerships among government, businesses, NGOs and local communities to find common goals that can be delivered by projects. Second, invest in research to gather data about the value provided by NbS and promote knowledge sharing, and finally, ensure local community engagement as a critical part of the process,” the report explained.

Sustainable food cold chains reduce waste, fight climate change: UN report

Greater investment in sustainable food cold chains is needed to reduce hunger, provide livelihoods to communities, and adapt to climate change, two UN agencies said in a report launched at the COP27 climate change conference in Egypt.

These systems are critical to maintaining the quality, nutritional value and safety of food,



especially as an estimated 14 per cent of all food produced for human consumption is lost before it even reaches consumers. The increased investment is also required if the world is to meet the challenge of feeding an additional two billion people by mid-century, according to the report by the UN Environment Programme (UNEP) and the Food and Agriculture Organization (FAO).

“Sustainable food cold chains allow us to reduce food loss, improve food security, slow greenhouse gas emissions, create jobs, reduce poverty and build resilience,” said Inger Andersen, the UNEP Executive Director.

Food waste is happening as the number of hungry people worldwide rose to 828 million in 2021, or 46 million more than in the previous year. In 2020, nearly 3.1 billion people could not afford a healthy diet, up 112 million from 2019, as the impacts of

the COVID-19 pandemic drove up inflation. This year, the crisis in Ukraine has threatened global food security.

The report argues that developing countries could save a staggering 144 million tonnes of food annually if they reached the same level of food cold chain infrastructure as richer nations. The report contains recommendations that include quantifying the energy use and greenhouse gas emissions in existing food cold chains, establishing benchmarks, and identifying opportunities for reductions.

FAO Director-General Dongyu Qu said: “Implementing the findings of this report will transform agrifood systems to be more efficient, more inclusive, more resilient and more sustainable.”



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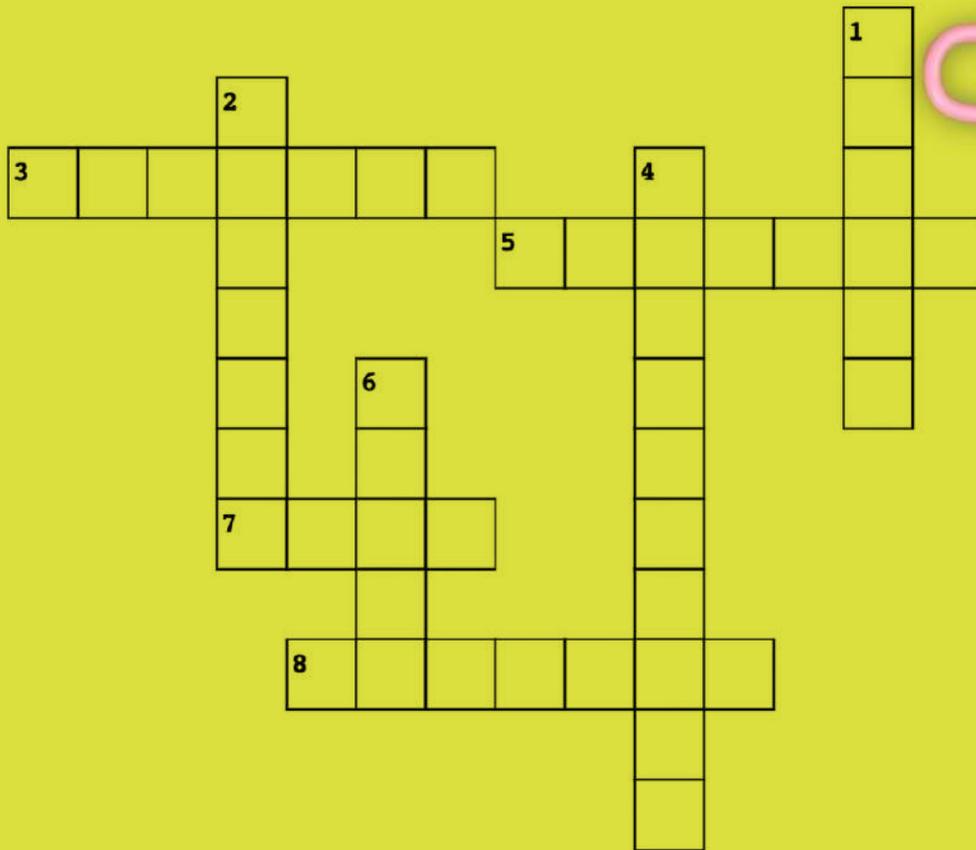
Answers: 2 a1) Sustain, 2) Plastic, 3) Climate, 4) Reuse, 5) Destruction, 6) Extreme, 7) Wildlife, 8) Policy



W S L X Q K C E W G O O G P Y
 C I G C F O F W F K A K Z R O
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- LIFESTYLE
- WILDLIFE
- POLICY
- GOVERNMENT
- HORTICULTURE
- QUALITY
- GREENERY
- CONTROL
- PANDEMIC
- WETLANDS
- PLASTICS

Crossword Puzzle



Across

- 3. Water related
- 5. Earth substance
- 7. Rife with vegetation
- 8. Wreck completely

Down

- 1. Study of plants
- 2. Not artificial
- 4. Native to the soil
- 6. Unwanted material

Answers: 1) Botany, 2) Natural, 3) Aquatic, 4) Indigenous, 5) Mineral, 6) Waste, 7) Lush, 8) Destroy

WORD OF THE DAY:

CIRCULAR ECONOMY

Currently, humans produce WAY too much waste. We make products, consume them and then chuck them away, littering our planet in the process. But what if there was a different way to do things? In the natural world, there isn't any rubbish or landfill. Energy is provided by the Sun, one species' waste is another's food and when things die, their nutrients return to the soil — in a circle of life. Unfortunately, humans do things in a more linear way...

When we want the latest phone or computer, we tend to bin the old one. When our dishwasher breaks, we buy a brand-new one. But this wasteful approach, known as the linear economy isn't working! We're running out of resources to make new things with, and we're producing too much toxic waste. That's why we need to move to a circular economy, inspired by the natural world — where everything has value and nothing is wasted.

The circular economy is an economic concept that fits into the framework of sustainable development and which is inspired in particular by the notions of green economy, economy of use or economy of functionality, and industrial ecology (which wants the waste of an industry to be recycled as raw material by another industry or the same).

Its objective is to produce goods and services while strongly limiting the consumption and waste of raw materials, and non-renewable sources of energy.

A circular economy aims to redefine growth, focusing on positive society-wide benefits. It is based on three principles:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems



WORLD SOIL DAY – DECEMBER 5

Did you know that there are more living organisms in a tablespoon of soil than people on Earth? Soil is a world made up of organisms, minerals, and organic components that provides food for humans and animals through plant growth.

Like us, soils need a balanced and varied supply of nutrients in appropriate amounts to be healthy. Agricultural systems lose nutrients with each harvest, and if soils are not managed sustainably, fertility is progressively lost, and soils will produce nutrient-deficient plants.

Soil nutrient loss is a major soil degradation process threatening nutrition. It is recognized as being among the most critical problems at a global level for food security and sustainability all around the globe.

World Soil Day 2022 (#WorldSoilDay) and its campaign "Soils: Where food begins" aims to raise awareness of the importance of maintaining healthy ecosystems and human well-being by addressing the growing challenges in soil management, increasing soil awareness and encouraging societies to improve soil health.

World Soil Day (WSD) is held annually on 5 December as a means to focus attention on the importance of healthy soil and to advocate for the sustainable management of soil resources.

An international day to celebrate soil was recommended by the International Union of Soil Sciences (IUSS) in 2002. Under the

leadership of the Kingdom of Thailand and within the framework of the Global Soil Partnership, FAO has supported the formal establishment of WSD as a global awareness raising platform.

Facts about soil:

- 95% of our food comes from soils
- Agricultural production will have to increase by 60% to meet the global food demand in 2050
- 33% of soils are degraded
- 18 naturally occurring chemical elements are essential to plants. Soils supply 15.

INTERNATIONAL MOUNTAIN DAY – DECEMBER 11

Mountains are home to 15% of the world's population and host about half of the world's biodiversity hotspots. They provide freshwater for everyday life to half of humanity. Their conservation is a key factor for sustainable development and is part of Goal 15 of the SDGs.

Unfortunately, mountains are under threat from climate change and overexploitation. As the global climate continues to warm, mountain people — some of the world's poorest — face even greater struggles to survive. The rising temperatures also mean that mountain glaciers are melting at unprecedented rates, affecting freshwater supplies downstream for millions of people.

The theme of this year's International Mountain Day is 'Women move mountains'. Women play a key role in mountains' environmental protection and social and economic development. They are often the primary managers of mountain resources, guardians of biodiversity, keepers of traditional knowledge, custodians of local culture, and experts in traditional medicine.

Increasing climate variability, coupled with a lack of investment in mountain agriculture and rural development, has often pushed men to migrate elsewhere in search of alternative livelihoods. Women have therefore taken on many tasks formerly done by men, yet mountain women are often invisible due to a lack of decision-making power and unequal access to resources.

International Mountain Day 2022 is an opportunity to promote gender equality and therefore contribute to improving social justice, livelihoods and resilience.

Facts about Mountains:

- Mountains host about half of the world's biodiversity hotspots and 30% of all key biodiversity areas
- Of the 20 plant species that supply 80% of the world's food, six originated and have been diversified in mountains: maize, potatoes, barley, sorghum, tomatoes, and apples
- Rural mountain women are vital to biodiversity conservation, and water and food security
- More than half of humanity relies on mountain freshwater for everyday life



What can you do to help?

Things to Do...

- Use public transport! _____
- Carry a water bottle! _____
- Switch off all lights when not in use _____
- Do not waste food _____
- Don't waste paper _____

COLOUR ME!



ADQ, Archireef drive innovative solutions to restore Abu Dhabi marine biodiversity

ADQ, an Abu Dhabi-based investment and holding company, announced a partnership with Archireef, a climate technology company headquartered in Hong Kong, to fund research and implement eco-engineering solutions for marine biodiversity restoration using 3D printing, IoT, and AI.

Under the partnership, Archireef will deploy

UAE NEWS



artificial terracotta-based reef tiles to support the restoration of habitats in two marine conservation sites in Abu Dhabi. As a sustainable investor creating value for the benefit of future generations, ADQ is committed to supporting biodiversity finance and contributing to the preservation of habitats and species under the umbrella of its wider ESG aspirations.

Anas Jawdat AlBarguthi, Chief Operating Officer at ADQ, said, “By harnessing and encouraging the development of R&D capabilities, we are deploying capital and cultivating mutually beneficial partnerships to tackle the key climate challenges affecting our region.”

Vriko Yu, Co-Founder and CEO at Archireef, added, “Coral reefs are crucial to supporting marine life and contribute significantly to coastal and flood protection. As Abu Dhabi actively

addresses climate change, we look forward to contributing to the UAE’s Net Zero 2050 target and helping to achieve sustainable restoration of the emirate’s marine biodiversity.”

A renowned pioneer in producing terracotta-based coral reef tiles, Archireef will lead the conservation and restoration project and has established a regional production facility in the industrial zone KIZAD, Abu Dhabi.

The emirate of Abu Dhabi is home to 34 different types of hard coral spread in several locations, including Ras Ghanada, Butinah, Alsaadiyat and Alnuf. Although coral reefs cover less than 1 percent of the Earth’s surface, they are home to 25 percent of all marine fish species and support approximately 4000 species of fish and 800 types of coral.

New Hope For Fighting Microplastic Pollution

This is an important article that I am passing on to our readers with little intervention to remove repeated information. The below article, 'Researchers Use Magnets to Remove Microplastics From Water' by Paige Bennet offers real hope for a great solution to the micro- and nano-plastic issue.

Researchers at Royal Melbourne Institute of Technology (RMIT University) have discovered a way to use magnetic materials to quickly and affordably remove microplastic particles 1000 times smaller than plastics currently detectable in existing water treatment plants.



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

They developed an adsorbent from nanomaterials, including iron, that attracts the plastic particles in water. This method removes microplastics in as little as one hour. Microplastics and even dissolved pollutants are attracted to the adsorbent in water and researchers use magnets to collect the microplastics and dissolved pollutants.

"The nano-pillar structure we've engineered to remove this pollution, which is impossible to see but very harmful to the environment, is recycled from waste and can be used multiple times," said Nicky Eshtiaghi, lead researcher and professor from RMIT's School of Environmental and Chemical Engineering. "This is a big win for the environment and the circular economy."

"Microplastics smaller than 5 millimeters, which can take up to 450 years to degrade, are not removable through conventional treatment systems, resulting in millions of tons being released into oceans annually," co-lead researcher Nasir Mahmood said. "This is very harmful to aquatic life and human health."

The research, published in Chemical Engineering Journal, explained that 4.8 -12.7 million tons of microplastics enter the oceans annually. Methods like filter papers or photodegradation, were not successful in capturing the smallest microplastics or may take a long time to remove the pollutants.

The structures of the discovered adsorbent are composed of two-dimensional metal-organic framework separated by carbon encapsulated iron oxide nanopillars. This quick, cost-effective solution cleans up microplastics and dissolved pollutants in an hour. "The results suggest a promising pathway to addressing the removal of mixed contaminants from water in a single process and highlighting its potential in resolving critical industrial and domestic wastewater treatment," says the study.



عاش اتحاد إماراتنا

Congratulations
To

H.H. Sheikh Mohammed Bin Zayed Al Nahyan

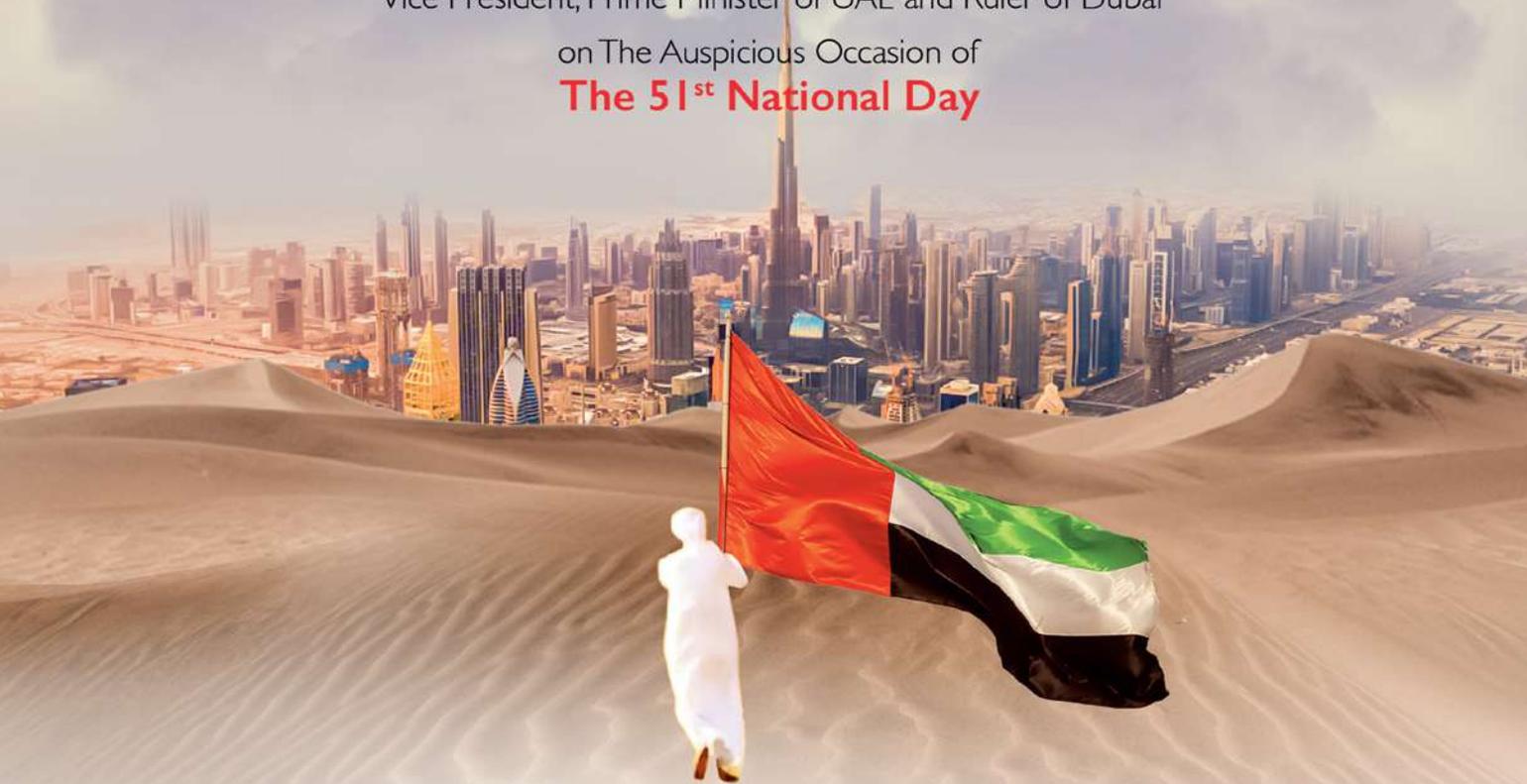
President of United Arab Emirates and Ruler of Abu Dhabi
and

H.H. Sheikh Mohammed Bin Rashid Al Maktoum

Vice President, Prime Minister of UAE and Ruler of Dubai

on The Auspicious Occasion of

The 51st National Day



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Congratulations

To

H.H. Sheikh

Mohammed Bin Zayed Al Nahyan

President of the United Arab Emirates

And

H.H. Sheikh

Mohammed Bin Rashid Al Maktoum

Vice President, Prime Minister of UAE and Ruler of Dubai

And

Their Highnesses, the Members of the supreme council,
the rulers of Emirates

And the people of the United Arab Emirates

On The Auspicious Occasion of The

51st UAE National Day

Excellency Somit Jenna

BLACKWIT

Cyber Security Solutions



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DEFENSE