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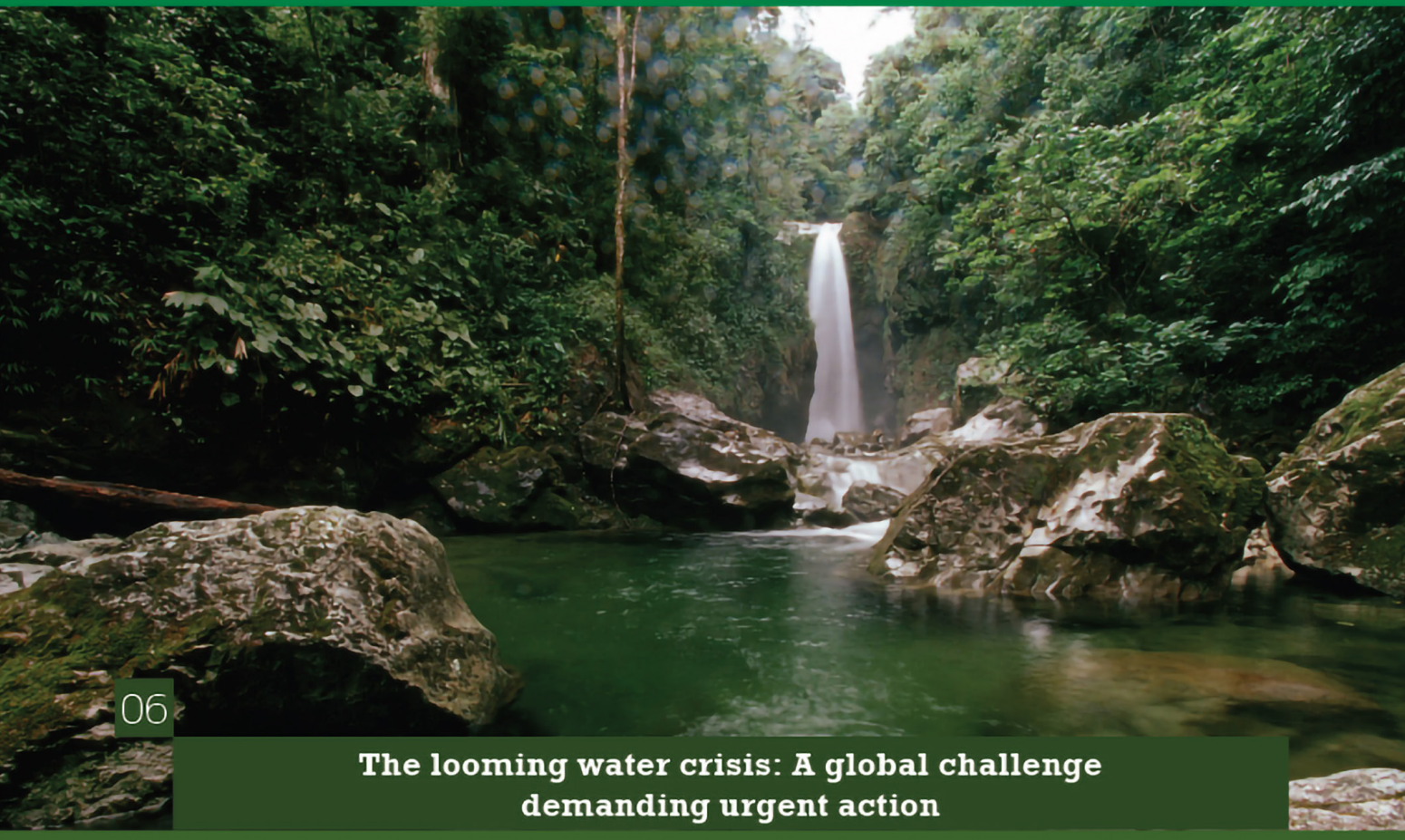

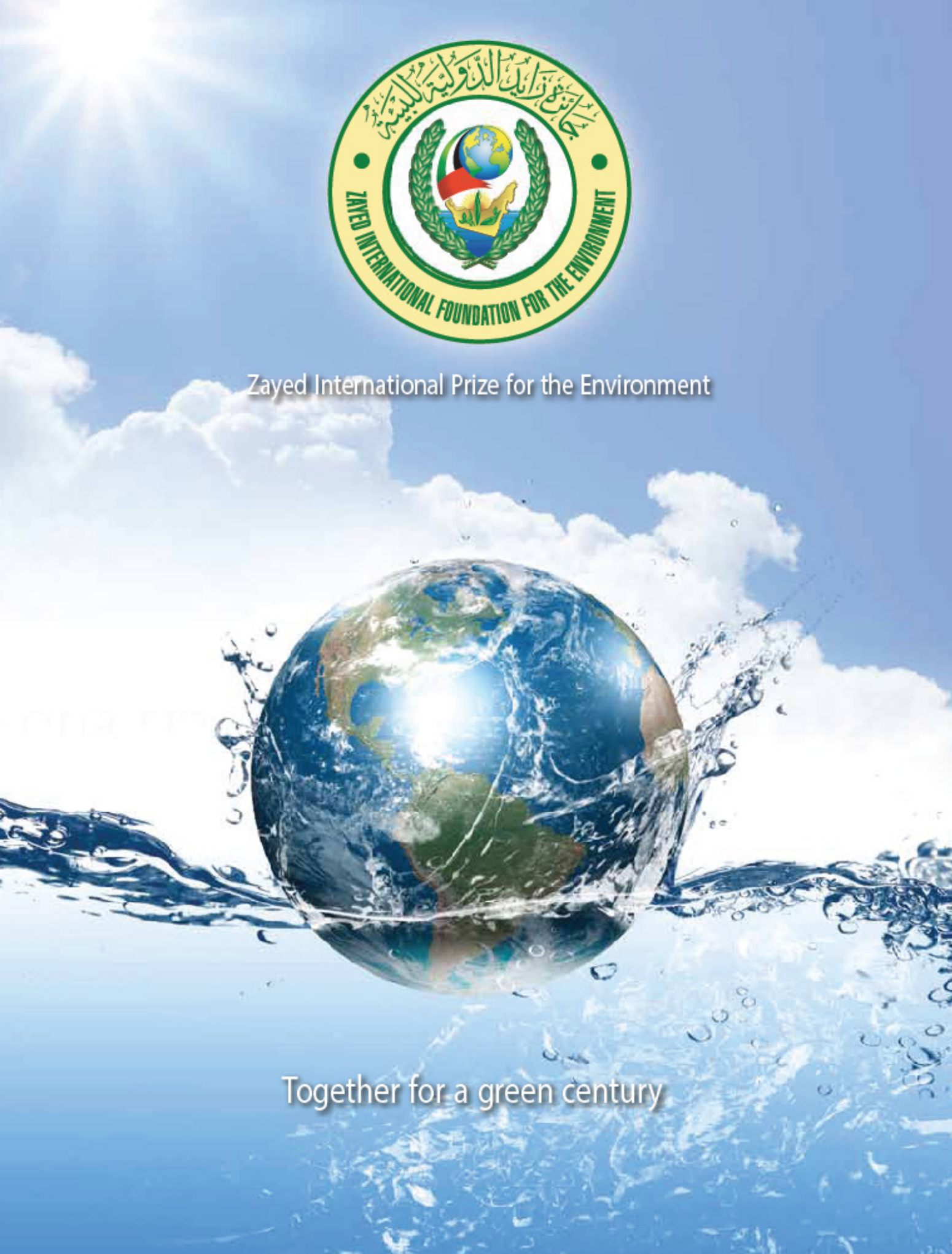
جائزة زايد الدولية للبيئة
ZAYED INTERNATIONAL FOUNDATION FOR THE ENVIRONMENT
Zayed International Prize for the Environment
Together for a green century

Chairman's Message

Prof. Mohammed bin Fahad
Executive Editor

The escalating global water crisis demands immediate and comprehensive action. From diminishing freshwater resources to the devastating impacts of drought, the challenges are manifold and require innovative solutions and collaborative strategies. In the current climate change scenario, studies have shown that almost half the world's population will be living in areas of high water stress by 2030 while water scarcity in some arid and semi-arid places is set to displace between 24 million and 700 million people.

The UAE's geographical location in an arid area where natural water resources are scarce has reinforced its commitment to prioritizing the need for water-wise solutions. Here, water is life, and the country fully understands the importance of preserving water and sustaining its resources. Water security is a top priority for the UAE government and an integral part of the country's development drive.

The UAE's approach is multifaceted, combining cutting-edge technology with forward-thinking policies to manage its water resources. The country is increasing its reliance on non-conventional water resources to produce fresh water for drinking and other purposes. The steadfast commitment to raising awareness of water conservation and achieving water security and sustainability reflects the forward-looking vision of the UAE's leadership.

Desalination, once a costly and energy-intensive process, is being revolutionized through advancements in membrane technology and renewable energy integration. Meanwhile, the country's investments in smart irrigation systems and water-efficient agricultural practices are minimizing water consumption in the agricultural sector. Through collaborations with international partners, the UAE is further helping improve water security worldwide.

The UAE's journey underscores that water security is achievable through innovation and commitment. As climate change intensifies, nations must heed the call to embrace sustainable practices and invest in water-wise solutions. By working together, we can secure a water-resilient future for all.

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The looming water crisis: A global challenge demanding urgent action

2.2 billion people worldwide – one in four – are denied access to safe, clean water.

The world is facing a water crisis of unprecedented scale. While significant strides have been made in providing access to safe water and sanitation since the adoption of the Sustainable Development Goals (SDGs), these gains are now under serious threat.

World Water Day, observed on March 22nd, highlighted the urgency of addressing water management and preservation became even more apparent. With only five years remaining to achieve the SDG targets, including Goal 6 – clean water and sanitation for all – the time for decisive action is now.

Between 2015 and 2022, over 687 million people gained access to safely managed drinking water services and 450 million gained access to improved sanitation. These are commendable milestones, but they mask a growing global challenge. The world's water demand is projected to increase by 20 to 25 percent by 2050, as water will continue to be foundational to health,

economic growth, gender equality, and climate resilience. Without a concerted effort to address the root causes of water scarcity, we risk jeopardizing these critical aspects of sustainable development.

MENA: On the brink

The Middle East and North Africa (MENA) region is particularly vulnerable to the looming water crisis. Home to approximately 6.3% of the world's population, the region has access to a mere 1.4% of the world's renewable freshwater resources.

The average water availability per person is a meager 1,200 m3/person/year, a stark contrast to the global average of 7,000 m3/year.

Rapid urbanization, population growth, and high water consumption rates are exacerbating the problem, threatening to reduce per capita water availability to alarming levels in the coming decades. By 2050, it is projected that two-thirds of MENA countries could have less than 200 cubic metres of renewable water resources per capita per year.

> *Home to approximately 6.3% of the world's population, the MENA region has access to a mere 1.4% of the world's renewable freshwater resources*

A 2023 study by the World Resources Institute (WRI) highlights the severity of the situation. The study reveals that countries in the MENA are the most water-stressed regions globally, with 83 percent of the population exposed to extremely high water stress. This means that these countries are using over 80 percent of their renewable water supply for irrigation, livestock, industry, and domestic needs.

The WRI study also projects that by 2050, 100 percent of the population in the MENA will live with extremely high water stress.

GCC: Rising toll of water scarcity

The Gulf Cooperation Council (GCC) countries are not immune to the water challenges facing the MENA region. With 90% of the population expected to live in cities by 2050, the GCC is grappling with rising water scarcity concerns. By mid-century, annual freshwater consumption rates for the GCC are predicted to reach 33.7 billion cubic meters, exceeding projected future storage levels by almost 8 billion cubic meters.

This pressure is already taking a toll on the region's existing water supplies. Four GCC countries – Qatar, Kuwait, Saudi Arabia, and the

UAE – are among the 17 countries worldwide facing "extremely high water stress." In the last decade, the GCC has invested nearly USD 80 billion in world-leading water and wastewater sustainability initiatives, demonstrating a commitment to addressing the issue.

Desalination has emerged as a major solution for the GCC's rising water shortage. GCC countries account for about half of the world's output of desalinated water, with the UAE alone depending on 42% of its potable water from desalination. While desalination has significantly improved water accessibility, it also presents challenges related to energy consumption, environmental impact, and cost. The focus is therefore now shifting towards more sustainable and efficient technologies as the region actively invests in research and development to reduce the environmental impact of desalination plants.

Human activities, such as the overuse of fertilisers and hazardous waste disposal, negatively impact groundwater quality and exacerbate water scarcity. To mitigate these effects, sustainable water management practices and stringent regulatory measures are needed including the efficient use of fertilisers and pesticides, controlled irrigation, and establishing vegetative cover around agricultural fields.

With more than USD80 billion earmarked for

The UAE Water Security Strategy 2036 aims to reduce the total demand for water resources by 21%, reduce the water scarcity index by three degrees, and increase the reuse of treated water to 95% by 2036

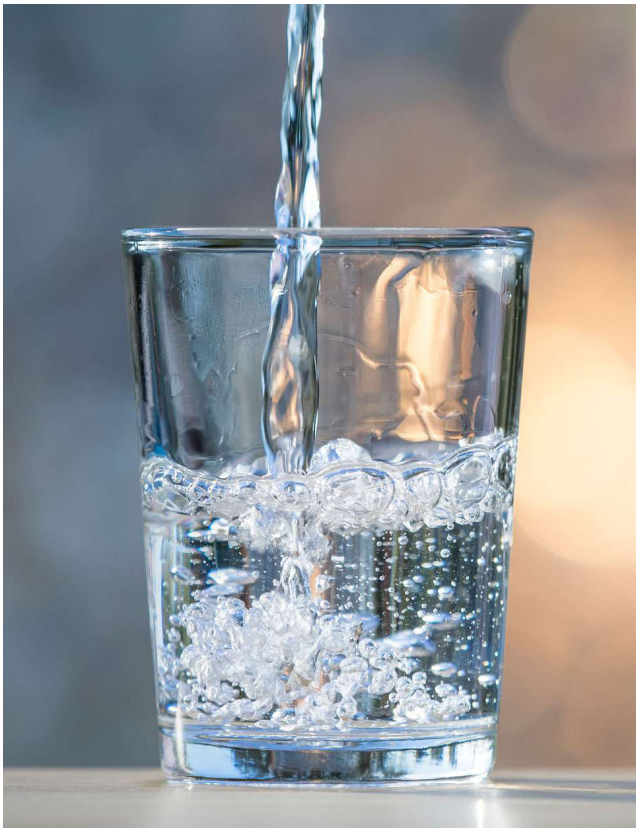
major public water and wastewater sustainability initiatives in the GCC, alongside billions in private investment, aggressive plans for redressing the balance are already underway.

UAE: Leading the way

The UAE, an arid nation, fully understands the importance of preserving water and sustaining its resources. In this context, the UAE has adopted strategies and initiatives to improve water resources management, support strategic water reserves, and increase the area and efficiency of rainwater harvesting. The UAE is also adopting advanced technical solutions to utilize wastewater to irrigate crops – a solution that contributes to cutting down environmental pollution and reducing the depletion of natural water resources.

To mark the occasion of World Water Day in March this year, His Excellency Suhail Mohamed Al Mazrouei, Minister of Energy and Infrastructure, said: "Achieving water security requires all hands on deck and calls for raising awareness of water conservation practices. The Ministry is keen on leveraging innovative high-tech solutions to ensure optimal use of water resources."

He added: "We work diligently to increase reliance on non-conventional water resources to produce fresh water. These include desalinated seawater and treated wastewater, which contribute 53% of our water supply. The UAE mostly relies on its 160 wastewater treatment plants to meet its irrigation needs. They have a total capacity of over 3 million cubic meters a day and reuse 73% of treated wastewater to irrigate landscapes in our cities."



The Minister added: "In the UAE, water is one of the most important national priority issues, given our geographical location in an arid area, the scarcity of our natural water resources, and the high demand for water for development purposes.

"The UAE Water Security Strategy 2036 aims to ensure sustainable access to water to all. The overall objectives of this milestone strategy are to reduce the total demand for water resources by 21%, reduce the water scarcity index by three degrees, and increase the reuse of treated water to 95% by 2036.

"In addition, the Ministry of Energy and Infrastructure joined forces with its partners to launch the first hydrogeological map and geo-database of the UAE, a milestone achievement in documenting and managing water sources with the goal of sustaining and conserving water. The Ministry also launched the National Energy and Water Demand Side Management Program 2050, which seeks to save energy and water resources and improve the environmental performance of energy and water plants."

The Minister further noted that the UAE is investing in modern technologies to enhance water security, such as rainwater harvesting, reusing wastewater for irrigation, and using clean energy desalination technologies. This contributes to addressing climate change challenges and reducing the depletion of natural resources. It is also noted that the country aims to improve the operational efficiency of desalination plants by using renewable energy to reduce the carbon footprint resulting from desalination processes.

A United Nations report indicated that the UAE has achieved an average of 100% in providing safe drinking water and sanitation services, and 82% in integrated water resources management, which is one of the best results regionally. The UAE seeks to improve this result in the coming years, by ensuring alignment and integration between the country's water, energy, environment, and food strategies.

Decarbonised desalination

In a statement marking World Water Day, Dr. Amna bint Abdullah Al Dahak, Minister of Climate Change and Environment, reaffirmed the UAE's dedication to sustainable water management and global water security

Highlighting the urgent need for action, Dr. Al Dahak said that 2.2 billion people worldwide – one in four – are denied access to safe, clean water. She emphasised that this year's theme, Glacier Preservation, which serves as a powerful reminder that even seemingly distant ecosystems like glaciers are intrinsically linked to our local water security and overall well-being.

Driven by rising global temperatures and a changing climate, glaciers have lost more than 6,500 billion tonnes – or 5% – of their ice since the turn of the century. This unsustainable rate of glacier melt poses a significant threat.

Highlighting the UAE's recognition of the global consequences of glacier loss, she added, "We embrace our shared responsibility through sustainable water management. The UAE Water

The UAE has achieved an average of 100% in providing safe drinking water and sanitation services, and 82% in integrated water resources management, which is one of the best results regionally

Security Strategy 2036 is guiding our efforts to implement integrated water resources management, aiming to reduce total demand for water resources by 21% and substantially increase water-use efficiency across all sectors."

Further strengthening this commitment, the country is tackling global water scarcity through the Mohamed bin Zayed Water Initiative to accelerate innovation and foster collaboration for a water-resilient future.

Dr. Al Dahak also highlighted the country's commitment to decarbonised desalination and prioritising Reverse Osmosis (RO) technology. She noted that Abu Dhabi's Al Taweelah RO plant, part of the Al Taweelah Power and Desalination Complex, is set to become the world's largest reverse osmosis facility when fully operational. By 2030, the goal is to produce 90 percent of Abu Dhabi's desalinated water through RO technology. Additionally, DEWA aims to produce 100 percent desalinated water using clean energy and waste heat by 2030.

Global collaboration

The global water crisis is a complex challenge that requires a multi-faceted approach. From improving water governance and incentivizing water efficiency in agriculture to investing in nature-based solutions and green infrastructure, there are numerous steps that countries can take to reduce water stress.

International development banks and other lenders should consider strategic debt relief programs to support countries unable to afford

improved water management on their own.

Policymakers in water-stressed countries should prioritize water-prudent energy sources like solar and wind to avoid power shutdowns caused by water shortages. Cities should develop urban water resilience action plans, and farmers should use more efficient water measures. Companies should set science-based water targets to align their operations with sustainable water management practices.

The road to water security is long and challenging, but by embracing innovation, fostering collaboration, and prioritizing sustainable water management practices, it is possible to ensure a water-secure future for all. World Water Day serves as a timely reminder of the importance of these efforts and the need for continued action.

UAE Food Bank, Ne'ma tie up to reduce food loss and waste

Initiative to provide one million meals from untouched surplus food to the needy

The UAE Food Bank has partnered with the National Food Loss and Waste Initiative, "Ne'ma," to support those in need and promote environmental sustainability. The partnership will organize two pioneering initiatives focused on managing food surplus, reducing waste, and delivering food to the largest number of targeted beneficiaries across the country. The initiative aligns with charitable and humanitarian efforts during the holy month of Ramadan 2025.

One Million Meals from Untouched Surplus Food

This initiative sought to provide one million meals from surplus food to eligible groups in the community during the holy month of Ramadan, marking the third consecutive year of its implementation. The initiative aligns with the UAE's vision to enhance social and environmental responsibility, especially following the announcement of 2025 as the "Year of the Community."

As part of the partnership between the UAE Food Bank and the National Initiative to Reduce Food Loss and Waste, "Ne'ma," over 75 hotel establishments coordinated to collect and distribute untouched surplus food to those in need. The initiative was implemented in Dubai in collaboration with the Dubai Department of Economy and Tourism.

The initiative focused on managing food surplus safely and efficiently to minimize waste. The UAE Food Bank collects surplus food fit for consumption and redistributes it to beneficiaries across the country. Meanwhile, inedible food is converted into oil and agricultural compost in collaboration with the "Reloop" application by iCycle International, contributing to environmental sustainability and supporting circular economy principles.

The "One Million Meals from Surplus Food" initiative is among the most significant efforts to rescue food from being wasted and diverted from landfills during Ramadan. Since its launch in 2022, the initiative has seen a 75% increase in participating hotels between 2022 and 2024. Data indicates that food waste has been reduced and redirected by 47% in some of these hotels over the same period.

These results highlight the effectiveness of Ne'ma's national strategy and the critical role of the UAE Food Bank in reducing food waste. The initiative has deployed hundreds of food waste collection and sorting bins at the source, trained more than 400 hotel chefs and hospitality staff in specialized food waste management techniques in 2024, and provided a record number of untouched surplus meals to beneficiaries. Additionally, during last Ramadan, the initiative achieved a high level of food waste separation, resulting in the production of over 46,000 kilograms of organic compost.

Community Fridges in Dubai

As part of efforts to enhance community collaboration, the UAE Food Bank is supporting Ne'ma's initiative to deploy "Ne'ma Community

The UAE Food Bank is supporting Ne'ma's initiative to deploy Ne'ma Community Fridges in several locations across Dubai

Fridges" in strategic locations across Dubai. These fridges will be easily accessible to individuals and target groups, containing untouched surplus food provided by hotels.

The UAE Food Bank and Ne'ma will oversee the safe collection and distribution of food in these fridges, ensuring that meals reach those in need during Ramadan while maintaining proper food safety standards.

Khuloud Hassan Al Nowais, Chief Strategy and Sustainability Officer at the Emirates Foundation and Ne'ma Committee Secretary General, added: "Our work with the UAE Food Bank is a vital step towards advancing our national objectives to reduce food waste. Through innovative and technology-driven systems, we are building a model of social responsibility that combines food security, environmental sustainability, and community impact. Following the success of last year's campaign, we look forward to expanding our reach and deepening our impact through this year's partnership."

Manal Bin Yaroof, Head of the Executive Team at the UAE Food Bank, said: "We are pleased to collaborate once again with the Ne'ma initiative to continue our efforts to reduce food waste and support vulnerable communities during Ramadan. This partnership goes beyond seasonal giving – it reflects a long-term strategic vision for tackling food waste across the country."

The collaboration between the UAE Food Bank and Ne'ma highlights the growing importance of coordinated national efforts to tackle food waste, support communities, and protect the environment.

'United in Giving' initiative

Earlier in March, the UAE Food Bank launched the 'United in Giving' initiative to provide seven million meals to those in need during Ramadan.

The initiative comprises three key sub-initiatives: 'Blessing Baskets', which focuses on distributing over 200,000 meals daily in the form of food donations, parcels, and surplus meals; 'Zabeel Iftar', an initiative providing Iftar meals for over 3,000 workers; and 'Surplus of Good', an awareness programme that educates the community on innovative and sustainable ways to repurpose surplus food.

The 'Blessing Baskets' meals were collected through food donations and parcels from retail stores, food establishments, manufacturers, and suppliers.

UAE explores waste recycling, water management, nature-based solutions in Singapore

A delegation headed by Dr. Shaikha Salem Al-Dhaheri, Secretary General of Environment Agency - Abu Dhabi recently visited Singapore to exchange knowledge, present its best practices, and learn more about the country's pioneering initiatives in waste management, water resource management, and sustainable urban development practices.

The EAD team witnessed Singapore's success in using nature-based solutions to conserve biodiversity and shared the Agency's best practices with public and commercial sector stakeholders in Singapore.

During the visit, the EAD delegation also met with representatives from Singapore's Ministry of Digital Development and Information (MDDI) and the Ministry of Sustainability and Environment (MSE) as well as the National Environment Agency (NEA). In addition, the visiting team was briefed on Singapore's best practices for lowering carbon emissions and adaptability to the negative effects of climate change.

The Abu Dhabi delegation gained insights on Singapore's integrated and interconnected approach to urban planning and environmental management which addresses the twin challenges of balancing urban development with environmental considerations.

The team also explored Singapore's approach to the research and innovation ecosystem, routed through its leading academic institutions, which drives the development and testing of innovative solutions and helps in shaping a more resilient and sustainable future for the country.

The EAD delegation conducted a focused observation of Singapore's National Water Agency, seeking to understand its innovative water resource management practices, spanning a range of integrated water management strategies, including desalination, water recycling, and conservation.

Abu Dhabi forum unites leaders for energy and water solutions

Department of Energy – Abu Dhabi organises Abu Dhabi Energy and Water Forum to advance sustainable solutions for future challenges

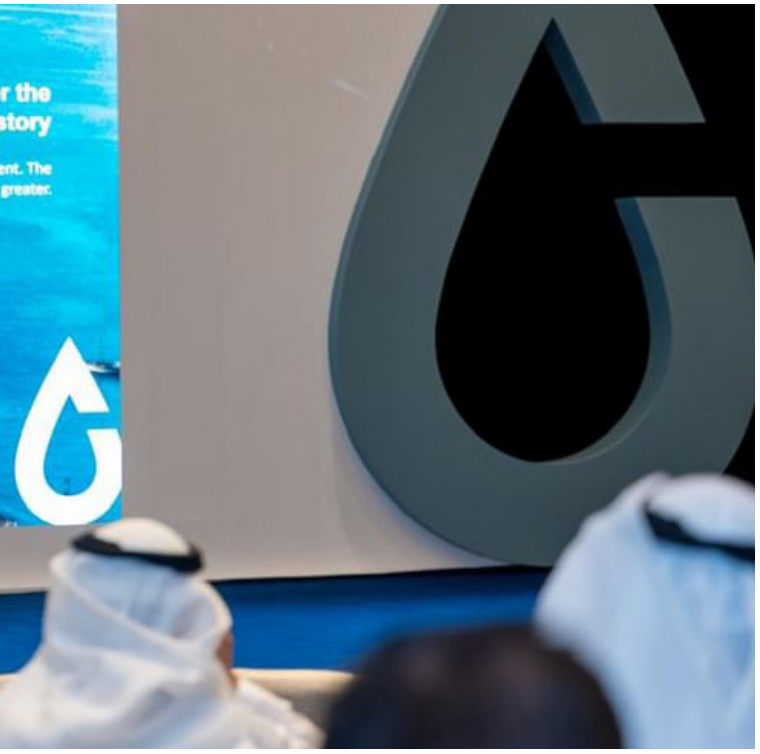
The Department of Energy (DoE) hosted the Abu Dhabi Energy and Water Forum, gathering senior officials and representatives from leading government and private sector organisations in Abu Dhabi.

Attendees included the Abu Dhabi National Oil Company (ADNOC), Abu Dhabi National Energy Company (TAQA) and its subsidiaries, Abu Dhabi Future Energy Company (Masdar), Emirates Water and Electricity Company (EWEC), Tabreed, the Federal Authority for Nuclear Regulation (FANR), as well as the Department of Municipalities and Transport (DMT), the Department of Finance (DoF), Environment Agency - Abu Dhabi (EAD) and the Abu Dhabi Agriculture and Food Safety Authority (ADAFSA). The UAE entities showcased a united effort to tackle energy and water challenges in the region.

In his opening remarks, Dr. Abdulla Humaid Al Jarwan, DoE Chairman, stated that the forum aligns with the endeavours to realise the objectives of the Abu Dhabi Energy and Water Strategy 2050 through constructive dialogue and coordination between public and private entities. He said: "Our collective undertaking centers on tackling energy challenges, including

securing supply, providing affordable energy, and enabling sustainable growth."

Al Jarwan discussed the significant transformations underway in Abu Dhabi's energy sector, most notably the transition towards renewable energy, which currently accounts for 45% of the Emirate's energy mix, consequently strengthening its global standing in clean energy adoption efforts.



He also highlighted the substantial achievements of the water desalination sector, particularly the increased use of reverse osmosis technology, projected to supply approximately 80% of Abu Dhabi's water by 2030 and reduce carbon emissions by 60%.

He pointed out that projections indicate a substantial rise in electricity and water demand, expected to double in the coming years. Abu Dhabi recognised this growth early and has successfully ensured its preparedness through integrated capabilities, a skilled workforce, and diverse resources, enabling it to fully and proactively meet these demands, whether by encouraging innovation and operational efficiency, providing smart solutions for supply sustainability, offering energy at affordable prices, or launching major, targeted projects and operational initiatives.

> *Forum participants identified and discussed technology gaps and breakthrough solutions to pave the way for a greener and more sustainable future*

In his closing remarks, Dr. Abdulla Humaid Saif Al Jarwan emphasised that future success hinges on striking a balance between economic and social sustainability, coupled with a firm commitment to developing innovative solutions that address growing global challenges.

Mohammed Jameel Al Ramahi, CEO of Masdar, said: "At Masdar, we are committed to continuing our role in developing the renewable energy sector, building effective strategic partnerships and adopting the latest clean technologies to support a qualitative transformation of energy systems and building a sustainable future for all."

"Energy is an essential pillar for achieving sustainable economic and social development. With our combined efforts, we can make optimal use of energy potential and employ advanced technology to address the challenges facing the sector and push towards achieving and reaching net zero by 2050," Al Ramahi added.

Mohamed Al Hammadi, Managing Director and CEO of Emirates Nuclear Energy Company (ENEC)

said that over the past five years, the UAE has been a global leader, adding more clean electricity generation per capita on its journey to net zero than any other nation globally, with nuclear energy accounting for 75% of this clean electricity. Nuclear thus plays a critical role in powering industries and communities with safe, reliable and clean electricity.

The forum explored future directions in energy and water, with specialised workshops featuring speakers from participating organisations focusing on six key themes. The first of these encompassed the maximisation of value and the enablement of economic growth via inventive proposals to boost economic returns from the energy and water sectors, emphasising efficiency improvements and the promotion of sustainable infrastructure investments.

The second theme explored methods for expediting the transition to clean energy and building resilience, while the third theme covered efforts to design a comprehensive and sustainable energy and water strategy, balancing the need to meet energy and water demands with ensuring resource sustainability.

The fourth theme involved a discussion of digital transformation and smart innovation using artificial intelligence, whereas the fifth theme focused on promoting policies and governance, and proposing policies that incentivise investment and regulate the sector to ensure sustainable growth.

The sixth, and final, theme discussed strengthening Abu Dhabi's energy ecosystem through collaboration between government institutions and the private sector to develop a resilient and innovative energy system.

Fujairah Hospital attains LEED Gold Certification for sustainability, energy efficiency

Emirates Health Services (EHS) has announced that Fujairah Hospital has been awarded the Leadership in Energy and Environmental Design (LEED) Gold Certification by the U.S. Green Building Council (USGBC), in recognition of its adherence to the highest standards of sustainability and energy efficiency.

With this achievement, Fujairah Hospital becomes the first government hospital in the UAE to receive this prestigious certification, underscoring EHS's ongoing commitment to sustainability, resource optimisation, and environmental impact reduction.

Dr. Ahmed Obaid Al Khadim, Director of Fujairah Hospital under EHS, said, "This milestone marks a significant step towards achieving our sustainability goals, including efforts to reduce carbon footprint and enhance the quality of the indoor environment for both patients and staff."

LEED is one of the world's most recognised rating systems for assessing buildings based on environmental efficiency and sustainability. It is awarded to buildings that meet stringent criteria in energy efficiency, the use of sustainable materials, indoor environmental quality, and environmental impact reduction.

Fujairah Hospital implemented a comprehensive plan to meet the criteria for this accreditation, which involved a thorough assessment of the Hospital's operational and infrastructural status, an analytical study of energy consumption and the adoption of green initiatives to enhance energy and water efficiency, improve waste management, and utilise environmentally friendly building materials.

The Hospital also implemented regulatory policies to monitor environmental performance and collect the necessary data to ensure compliance with the requirements of the U.S. Green Building Council, under the supervision of the Facilities Management Department at EHS.

UAE strengthens climate and water ties with EU in lead up to COP30

Abdulla Ahmed Balalaa, Assistant Minister of Foreign Affairs for Energy and Sustainability, concluded a two-day trip from March 6-7 to the European Union (EU) in Brussels, where he met with senior officials and stakeholders in the energy and water sectors.

During the meetings, Abdulla Balalaa reaffirmed the UAE's close partnership with the EU, focusing on aligning efforts, cooperation and achieving progress in the fields of renewable energy, energy efficiency and water resilience.

Balalaa's visit followed the 2026 United Nations Water Conference (UNWC26) Organisational Session in New York and coincided with EU Ocean Days in Brussels. During the visit, he was invited to take part in the EU's consultative process on reviewing the EU's water resilience strategy.

At the consultative process, Balalaa highlighted the launch of the 2026 UNWC process, outlined the UAE's priorities for the conference, and invited the international community to take part in working towards advancing innovative, inclusive, and scalable solutions to water challenges.

He further affirmed the UAE's commitment to deepening its cooperation with the EU in advancing climate action, energy transition, water resilience, and global sustainability. He also highlighted that discussions in Brussels were instrumental in driving forward the climate adaptation and energy related commitments made at the 28thConference of the Parties to the UN Framework Convention on Climate Change (COP28), which was held in Dubai in 2023, to ensure strong alignment with the EU ahead of the UN Ocean Conference 2025, COP30, and the 2026 UN Water Conference.

The visit included meetings with a number of EU officials and the European Investment Bank (EIB) reinforcing bilateral relations to explore the potential to expand investments in clean energy, infrastructure, and water sustainability.

The discussions focused on advancing joint efforts in water sustainability in the lead-up to 2026 UNWC, broader climate adaptation strategies, mitigating climate change, and enhancing cooperation ahead of the UN Ocean Conference 2025 in France.

UAE participates in high-level sessions at Petersberg Climate Dialogue

Abdulla Balalaa, Assistant Minister of Foreign Affairs for Energy and Sustainability, led the UAE delegation at the Petersberg Climate Dialogue, where he participated at the annual meeting's high-level sessions, alongside the Federal Chancellor of Germany and several ministers.

He also held a series of ministerial meetings in Berlin, reaffirming the UAE's commitment to international cooperation across climate action, energy transition, water resource management, and sustainable development.

During his visit, Balalaa met with several prominent German and international officials, including Stefan Wenzel, Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Climate Action; Jochen Flasbarth, State Secretary at the Federal Ministry for Economic Cooperation and Development; Eva Kracht, Director-General for International Affairs at the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety; and Simon Stiell, Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC).

The discussions focused on enhancing multilateral climate efforts, advancing the implementation of COP28 outcomes, and exploring cooperation opportunities between the UAE and Germany in clean energy and climate finance.

The meetings also addressed preparations for the UAE's co-hosting of the United Nations Water Conference in 2026, alongside Senegal, highlighting the critical role of water in achieving climate goals and boosting resilience to the impacts of climate change.

The meetings also reinforced the UAE's role as a strategic partner in international cooperation on sustainability, energy, and water resource management.

Abu Dhabi showcases drone-based mangrove planting tech in Bahrain

Abu Dhabi's drone-based mangrove cultivation technology aims to support the UAE's ambitious goal of planting 100 million trees

As part of the Abu Dhabi Mangrove Initiative (ADMI), the Environment Agency – Abu Dhabi (EAD) showcased its latest drone-based mangrove cultivation technologies in cooperation with Nabat, a climate tech company launched last year by the Advanced Technology Research Council's commercialisation arm, VentureOne. The demonstration was conducted during a visit undertaken by an agency delegation to present this experience to H.H. Shaikh Mohammed bin Salman Bin Hamad Al Khalifa in the Kingdom of Bahrain, reflecting EAD's vision of establishing the principles of cooperation and exchange of expertise to advance the future of the region.

The delegation included Ahmed Al Hashemi, Executive Director of the Terrestrial and Marine Biodiversity Sector at EAD, Shahab Issa Abu Shahab, Director General of the Advanced Technology Research Council, and several experts and specialists who provided details of the innovative experiment, in the presence of Dr Mohamed bin Mubarak Bin Daina, Bahrain's Minister of Oil and Environment, Special Envoy for Climate Affairs, and other officials in Bahrain.

Al Hashemi stated, "With a proven track record of rehabilitating 17,600 hectares, EAD is strategically deploying its expertise and innovative drone planting technology, in

partnership with Nabat, to amplify regional impact. Our collaboration with Bahrain establishes Abu Dhabi as a center of excellence in environmental restoration, driving measurable progress and influencing regional policy for a sustainable future." He further emphasized EAD's commitment to planting over 10 million trees using innovative solutions like drones, sharing this expertise to support regional environmental work and nature conservation.

The AI-powered autonomous drones offer a low environmental footprint, cost-effectiveness, efficiency, and scalability, enabling significant ecosystem expansion. Nabat's technology, developed by the Technology Innovation Institute, ensures data-driven mangrove restoration tailored to each unique habitat.

Reda Nidhakou, Acting CEO at VentureOne, highlighted the privilege of showcasing Nabat's technology in Bahrain alongside EAD. "EAD's ecological expertise has been invaluable in fine-tuning our technology, making ecosystem restoration data-driven, scalable, and customizable. We are committed to being part of Abu Dhabi's leadership in using technology to address global issues."

EAD's mangrove-planting efforts serve as an effective nature-based solution to mitigate climate change, supporting the UAE's ambition to plant 100 million mangrove trees by 2030.

'Rescue Night' event

The Yas SeaWorld Research & Rescue Center, the largest dedicated marine research, rescue, rehabilitation and return center in the region, in collaboration with the Environment Agency – Abu Dhabi (EAD), recently concluded the first of its new biannual event titled "Rescue Night," designed to educate the public on how to respond when spotting a marine animal in distress.

Before the discussions, guests toured the Center to gain firsthand insight into the rescue operation and rehabilitation steps with an overview of the facility, including the rescue clinic and advanced laboratories where the injured, weak, or orphaned animals are cared for before they are returned to their natural habitat.

GCC retail sector wastes USD4-7 billion worth of food annually

Western retailers in comparison are more cautious regarding stock levels, especially for perishable goods at the end of the day, backed by leading forecasting and ordering platforms

The retail sector in Gulf Cooperation Council (GCC) countries wasted approximately 1.3 million tonnes of food in 2022, corresponding to an annual loss of approximately USD 4-7 billion, which is enough to provide iftar meals for 70% of all Muslims around the world throughout Ramadan.

This was revealed in a report titled 'Reducing Retail Food Waste in the GCC' by Oliver Wyman, a global management consulting firm, detailing how GCC countries can curtail food waste, improve sustainability, and boost economic growth through innovative strategies.

According to the report, in the GCC, food waste — primarily generated by consumers, retailers, and food-service establishments — averages 150kg per capita annually, which is 14% above the global average of 132kg. 'This is significantly higher than other developed economies. For instance, it is 38% above European Union levels and nearly double that of Japan. This issue significantly affects food security, the environment, and the economy as it further exacerbates the region's substantial dependence on imported food', it stated.

While retail food waste typically constitutes a

smaller portion of total food waste — ranging from 5% to 15%, depending on the country — retail food waste in the GCC is notably 38% higher than the global average, the report revealed. 'This suggests that the retail sector in the GCC presents a critical opportunity for improvement.'

The report, focusing on the retail market, stated that in competitive markets hyper- and supermarkets try to win customers with full shelves and attractive promotions. Finding the right balance between availability and food waste is one of the key challenges in food retail.

Western retailers in comparison are more cautious regarding stock levels, especially for perishable goods at the end of the day, backed by leading forecasting and ordering platforms. Additionally, compared to Western markets, inventory is often the responsibility of the supplier with unsold goods being returned before expiry. 'This missing end-to-end perspective leads to significant buffer stocks and food waste along the value chain.'

In order to effectively address the food waste challenge, it is important for retailers and governments to implement integrated and collaborative steps in order to foster a more sustainable food system across the GCC, the report urged.

EU advancing on 2030 zero-pollution targets

The European Commission and the European Environment Agency (EEA) recently published the second Zero Pollution Monitoring and Outlook report, which provides an overview of the EU's work to meet the 2030 zero pollution targets. The Commission also published its fourth Clean Air Outlook report.

The reports show that EU policies have contributed to reducing air pollution, pesticide use and plastic litter at sea. However, pollution levels are still too high, in particular from harmful noise, microplastic releases into the environment, nutrient pollution and waste generation.

According to the reports, much stronger action is necessary in the EU to achieve its 2030 pollution

reduction targets. Zero pollution principles must be integrated into all policies and efforts taken at all levels to ensure further progress. In this context, fostering the EU's circular economy will help reduce resource consumption and therefore will alleviate pressures on ecosystems and human health. Finally, action on zero pollution, notably through the Zero Pollution Action Plan, will support the sustainable transition of the EU's economy and make it more competitive.

COP30 countdown: Climate Weeks to build momentum for ambitious climate goals

The UNFCCC's revamped Climate Weeks will focus on driving climate finance, adaptation, and transparency

The UNFCCC secretariat has announced that it is resuming Climate Weeks in 2025, aligning them more closely with the intergovernmental process under the Convention and the Paris Agreement, and helping to translate decisions adopted in this process into implementation on the ground.

The approach builds on the strong foundation laid by the former Regional Climate Weeks, while also recognizing the evolving needs of the climate agenda.

Climate Weeks will be held twice in 2025, maintaining a global perspective and providing a space for dialogue, capacity-building, and showcasing innovative solutions to advance the intergovernmental process and urgent, inclusive, and coordinated climate action.

Panama will host the first Climate Week in 2025, which will take place from 19 to 23 May in

Panama City, while the second Climate Week of the year is scheduled to take place in Africa ahead of COP30.

Panama's Minister of the Environment, Juan Carlos Navarro, said "Now that COP30 is fast approaching, it is time to move from fragmented action to a truly integrated approach. Climate Week will be where policy meets investment to create an impact on the real economy. At Climate

Week, Panama will present its Nature Pledge, a unique instrument that brings together climate, biodiversity, and land objectives under a unified strategy."

The Climate Weeks will bring together representatives of Parties and non-Party stakeholders and will combine several UNFCCC-mandated events, as well as high-impact policy dialogues, whose outcomes will directly inform the COP. This consolidated approach closely aligned with the intergovernmental process, will

> *Panama will host the first Climate Week from 19 to 23 May in Panama City; the second Climate Week is scheduled to take place in Africa ahead of COP30 in November*

not only enhance ambition and delivery but also improve efficiency and streamline efforts across the climate calendar.

"Ultimately, this approach aims to help the government-led process to deliver faster progress and concrete outcomes that benefit all economies and people's daily lives, while also delivering cost-savings in the process," said Simon Stiell, UN Climate Change Executive Secretary. "I also would like to recognize Panama, a nation that has achieved carbon-negative status and has 65% of its territory covered by forests, which has committed to hosting the first Climate Week in 2025. This effort highlights Panama's dedication to strengthening and accelerating global climate action."

Climate Weeks will serve as a strategic intersessional space that will help to build political momentum, taking place prior to the UN June Climate meetings (SBs) and to the COP each year. They will contribute to advancing the intergovernmental process, elevate climate solutions, support implementation and ambition, and show the benefits of strong climate actions in people's daily life and the real economy.

The consolidated approach reduces the need for multiple, dispersed meetings, thus streamlining participation and minimizing scheduling conflicts across the climate calendar. This will significantly improve cost-effectiveness, and reduce operational complexity and travel needs.

Climate Weeks will remain highly inclusive and open, and are expected to bring together Party representatives, non-Party stakeholders, and key actors whose roles are essential to the thematic discussions, mandated events and policy dialogues that will take place.

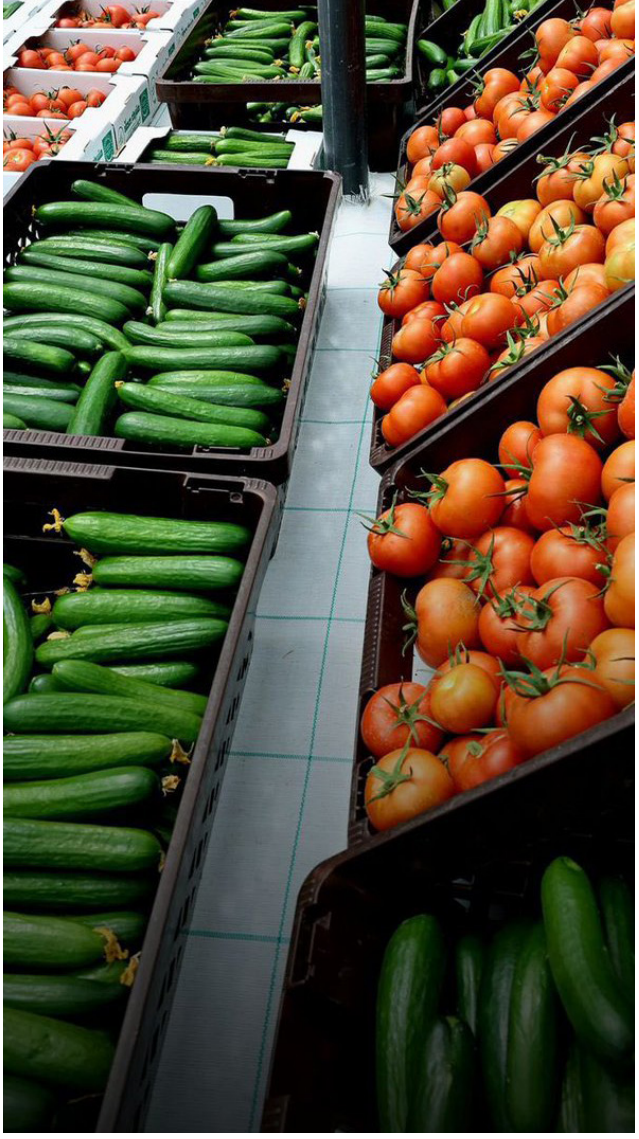
Climate Weeks in 2025

The substantive priorities identified for the 2025 Climate Weeks include fostering the space to promote, support, and accelerate the submission of ambitious Nationally Determined Contributions (NDCs) before COP30 and advancing climate finance as a driver of implementation and ambition, accelerating the submissions of National Adaptation Plans (NAPs), as well as the implementation of the Enhanced Transparency Framework (ETF) through the delivery and review of Biennial Transparency Reports, driving forward discussions on gender, inclusivity, just transition, access to public information, and promoting the implementation of Article 6, among potential others.

In addition, each Climate Week will feature policy discussions bringing together Parties and non-Party stakeholders, as well as training and capacity-building sessions, and solutions-focused exchanges.

Alongside Climate Week, Panama will host the Nature Summit, a global forum for investors to accelerate the green and blue transition.

‘Dubai's ‘Hasad’ agricultural project is a model for food security support’



Dr. Amna bint Abdullah Al Dahak, Minister of Climate Change and Environment, lauded the “Hasad” agricultural project, implemented by Dubai Police over an area of 9,600 square metres, as a practical model for supporting national food security and praised its role in enhancing local production and contributing to sustainable development.

The project, launched by the General Department of Correctional and Penal Institutions, aims to train and qualify 200 male and female inmates annually in modern agriculture. So far, 371 inmates have been trained during the pilot phases.

The total cost of the project is AED 3 million, funded through charitable contributions, with expectations to produce more than 56 tonnes of crops annually, and to generate an annual revenue of AED 1 million.

Dr. Amna Al Dahak clarified that the project supports the UAE’s “Plant the Emirates” initiative. She said: “This project serves as a model for applying modern agricultural solutions within correctional institutions and reflects the UAE’s commitment to developing a strong and sustainable agricultural sector.”

Major General Khalil Ibrahim Al Mansouri, Assistant Commander-in-Chief of Dubai Police for Criminal Investigation Affairs, emphasized that the project embodies Dubai Police’s vision to promote sustainable development and equip inmates with specialized skills to support their reintegration into society after release, through economic opportunities and hands-on training in crop cultivation and agricultural expansion.

Major General Marwan Abdul Karim Jalfar, Director of the General Department of Correctional and Penal Institutions, stated that the project relies on modern, climate-smart agricultural technologies, which help reduce water consumption and lower the carbon footprint, in line with the UAE’s National Food Security Strategy 2051.

The project includes three main sections, featuring greenhouses and open-field farming areas. The farm focuses on core crops such as tomatoes and cucumbers, with 6,508 seedlings already planted, in addition to other types of vegetables.

Record-breaking annual growth in renewable power capacity

A new report, Renewable Capacity Statistics 2025, released in March by the International Renewable Energy Agency (IRENA) shows a massive increase in renewable power capacity during 2024, reaching 4 448 gigawatts (GW). The 585 GW addition in 2024 indicates a 92.5% share of the total capacity expansion, and a record rate of annual growth (15.1%).

Although 2024 marks yet another benchmark in renewable energy capacity and growth, progress still falls short of the 11.2 terawatts needed to align with the global goal to triple installed renewable energy capacity by 2030. To reach this goal, renewable capacity must now expand by 16.6% annually until 2030.

In addition, progress yet again reflects significant geographic disparities. As in previous years, most of the increase occurred in Asia, with the greatest share being contributed by China – almost 64% of the global added capacity – while Central America and the Caribbean contributed the least at only 3.2%. The G7 and G20 countries respectively accounted for 14.3% and 90.3% of new capacity in the past year.

IRENA Director-General Francesco La Camera said: "The continuous growth of renewables we witness each year is evidence that renewables are economically viable and readily deployable. Each year they keep breaking their own expansion records, but we also face the same challenges of great regional disparities and the ticking clock as the 2030 deadline is imminent."

"With economic competitiveness and energy security being increasingly a major global concern today, expanding renewable power capacity at speed equals tapping into business opportunities

With 585 GW of capacity additions, renewables accounted for over 90% of total power expansion globally in 2024

and addressing energy security quickly and sustainably. I call on governments to leverage the next round of Nationally Determined Contributions (NDCs 3.0) as an opportunity to outline a clear blueprint of their renewable energy ambitions, and on the international community to enhance collaborations in support of the ambitions of Global South's countries," he added.

Commenting on the remarkable progress, the United Nations Secretary-General, António Guterres, said: "Renewable energy is powering down the fossil fuel age. Record-breaking growth is creating jobs, lowering energy bills, and cleaning our air. Renewables renew economies. But the shift to clean energy must be faster and fairer – with all countries given the chance to fully benefit from cheap, clean renewable power."

Solar and wind energy continued to expand

Solar and wind energy continued to expand the most, jointly accounting for 96.6% of all net renewable additions in 2024

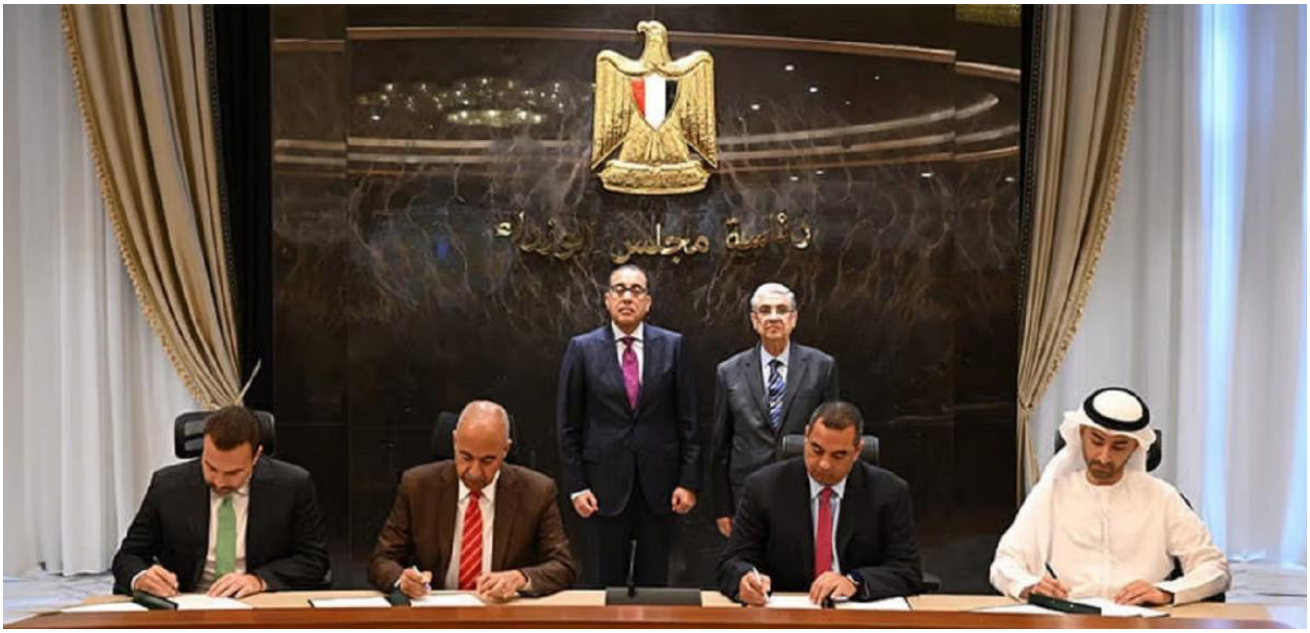
the most, jointly accounting for 96.6% of all net renewable additions in 2024. Over three-quarters of the capacity expansion was in solar energy which increased by 32.2%, reaching 1 865 GW, followed by wind energy which grew by 11.1%.

The large net decommissioning of non-renewable power in some regions has contributed to the upward trend of renewables capacity. However, more needs to be done to reach the goal of tripling renewables capacity by 2030 and the Paris Agreement. Over the past few years, IRENA has been pressing for clear, quantifiable renewable capacity targets in NDCs 3.0. To this end, the Agency has been assisting in the

enhancement and implementation of its members' NDCs with a focus on the energy sector through its country engagement.

Technology highlights

- **Solar:** Solar photovoltaics increased by 451.9 GW in 2024. China alone added 278 GW to the total expansion, followed by India (24.5 GW).
- **Hydropower** (excluding pumped storage hydropower): Capacity reached 1,283 GW, demonstrating a notable rebound from 2023, driven by China. Ethiopia, Indonesia, Nepal, Pakistan, Tanzania, and Viet Nam added more than 0.5 GW each.
- **Wind:** Wind energy expansion declined slightly, to a total of 1 133 GW capacity by the end of 2024. Expansion was once again dominated by China and the United States (US).
- **Bioenergy:** Expansion rebounded in 2024, with an increase of 4.6 GW of capacity compared to an increase of 3.0 GW in 2023. The growth was driven by China and France with 1.3 GW of additions each.
- **Geothermal:** Geothermal energy increased by 0.4 GW overall, led by New Zealand, followed by Indonesia, Türkiye, and the US.
- **Off-grid electricit**y (excluding Eurasia, Europe, and North America): Capacity expansion nearly tripled, growing by 1.7 GW to reach 14.3 GW. Growth was dominated by off-grid solar energy which reached 6.3 GW by 2024.



Masdar completes acquisition of Valle Solar project in Spain

Abu Dhabi Future Energy Company PJSC – Masdar has announced the investment through its subsidiary Saeta of one of the largest solar PV projects in Spain's Valencia region, Valle Solar. This landmark project, initially promoted by the joint venture of Genia Solar Energy and Solar Ventures, is the next step in Masdar's commitment to expansion in Spain, driving growth across the renewable energy sector.

This agreement is a further step towards securing the construction of the plant, which is located in the municipalities of Ayora, Jarafuel and Zarra. It is expected to be operational in the first half of 2027 and will consist of a 234 megawatt (MW) photovoltaic plant, with the potential to add the hybridisation of Battery Energy Storage Systems (BESS) of 259MW.

Valle Solar integrates initiatives supporting biodiversity and local communities, showcasing a best-in-class example of integration between local wildlife protection and renewable energy production, reflecting Masdar's commitment to sustainability and social responsibility.

Masdar is one of the world's fastest-growing renewable energy companies. The acquisition of Valle Solar by Saeta underscores Masdar's commitment to Spain's energy transformation, while progressing its growth plans in the Iberian Peninsula and Europe as the company targets a global clean energy portfolio capacity of 100GW by 2030.

The agreement between Saeta Yield, Genia Solar, and Solar Ventures establishes Valle Solar as an exemplary model of sustainable development, where clean energy production is combined with respect for the environment and commitment to the community.

This project represents a significant step towards decarbonization and the strengthening of the local economy, becoming a benchmark for future initiatives in the field of renewable energies. Furthermore, this investment agreement not only advances the energy sector, but also establishes a model of collaboration that can be replicated in future projects.

Range Rover Electric: Elegance in extremity

Range Rover Electric advances through pivotal development phase – with prototypes completing testing on the frozen lakes of Sweden and in the UAE's deserts in temperatures exceeding 50°C

Range Rover Electric will lead the way for electric propulsion capability, refinement, and luxury travel, with the first vehicle prototypes having been deployed at some of the world's most challenging test locations. The all electric drivetrain was put through its paces at extremes of temperatures, from 40°C in the Arctic Circle, to +50°C in the searing deserts of the Middle East, ahead of its launch in 2025.

The first tests have focused on the capability of the battery and Electric Drive Unit (EDU) effectively the vehicle's core components including the transmission, electric motor and power electronics in extreme sub zero temperatures as low as -40°C. Both the battery and EDU are assembled in house by JLR in a first for the brand.

Testing on the frozen lakes of Sweden has

Release of the first Range Rover Electric vehicles on road follows a year-long component and virtual development process which is on track to deliver the quietest and most refined Range Rover ever created

demonstrated Range Rover's new in-house all-electric propulsion system, which will allow Range Rover to exceed its already renowned performance on low grip surfaces, ensuring the all-terrain, all-weather, and all-surface capability of the Range Rover remains unparalleled.

In a first for Range Rover, a new traction control system delivers exceptional levels of performance on icy or low-grip surfaces. Rather than a traditional traction control setup based solely on the ABS unit, Range Rover Electric distributes the wheel slip management task directly to each individual electric drive control unit, reducing the torque reaction time at each wheel from around 100 milliseconds, to as little as 1 millisecond.

Innovative software, developed in-house by JLR, enables precise EDU speed control for accurate management of wheel slip, reducing the need for ABS intervention. Traction is maximised on all surfaces with exceptional response and composed refinement, significantly enhancing the Range Rover drive experience. This system works in harmony with the stability control and chassis systems to provide an even more overall refined drive.

As part of the gruelling development of the first all electric Range Rover, the UAE was also the proving ground for a searing desert assessment. Vehicle performance and efficiency were fiercely challenged to ensure the entire propulsion system is reliably temperature-controlled and built to support longevity and optimum range.

Range Rover subjected its newest and most intelligent thermal management system to arduous testing in merciless temperatures of

50°C and up to 90% humidity. In a testing environment that all Range Rovers are subjected to, there is no place more challenging for a climate system. From dynamic desert climbs to sun soaked city cycles, nothing is left unexplored in pursuit of maximum client cabin comfort and vehicle capability.

Thomas Müller, Executive Director, Product Engineering, explained: "A hot climate is one of the most challenging for any battery electric vehicle, because of the need to cool the cabin and optimise battery performance at the same time.

"The additional challenge of driving on sand requires controlled low speed torque, so our specially developed traction control and thermal management systems work in harmony to ensure power delivery is unaffected. Our tests have shown that in this climate, repeatedly driving the equivalent of 100 metres uphill on fine sand, Range Rover Electric matches the performance of its ICE equivalents; in some instances, even surpassing them – thanks to the introduction of these new features."

Well-balanced weight distribution and an advanced suspension system maintain control and stability effortlessly through the sand, performing with ultimate composure. Uncompromised traction systems provide instant torque allowing for quick acceleration, responsiveness, and a refined drive even when navigating diverse dune formations.

Range Rover Electric's new Intelligent Torque Management system distributes the wheel slip management task directly to each electric drive control unit, reducing the torque reaction time at each wheel from around 100 milliseconds, to as

Range Rover with electric power – means customary Range Rover luxury, refinement, and capability plus near silent fully electric propulsion; with effortlessly smooth and relaxed journeys

little as 1 millisecond, offering improved traction control while driving on fine sand.

In the heart of Sharjah's Al Badayer desert, 'Big Red' stands tall amongst saffron-coloured dunes. The natural 300ft dune formation is the emirate's greatest desert hill climb. All Range Rover vehicles were subjected to completing the ascent five times without showing any reduction in performance before proceeding to the next testing stage. Range Rover Electric completed the feat with flying colours.

Range Rover Electric is JLR's first electric car launch for this year and is being built in Solihull with 57,000 clients on the waiting list.

COP29 extends gender focus: A new decade of climate justice begins

The Enhanced Lima Work Programme gets a 10-year extension, ensuring gender mainstreaming remains central to climate policy. This means fairer, more effective, and sustainable climate action for all

UN Climate Change is doubling down on gender equality, recognizing that a gender-responsive approach unlocks broader benefits for everyone – from job creation to healthier communities

As the world marked International Women's Day on March 8, UN Climate Change celebrated a new decade of action to advance gender equality in the face of climate change.

At COP29, Parties decided to extend the Enhanced Lima Work Programme on Gender and Climate Change for another 10 years. The decision acknowledges the critical role of gender mainstreaming into all relevant goals and targets outlined in the Convention. This integration is seen as contributing towards enhancing the effectiveness, fairness, and sustainability of climate policy and action.

"As we know, stronger climate action delivers huge benefits for people in their daily lives. More jobs, more economic opportunities, and lower health costs." said Simon Stiell, Executive Secretary of UN Climate Change. "Applying a gender-responsive approach ensures that those benefits are shared equally."

Recent UN climate change reports highlight the benefits of including a gender perspective in various areas of climate action, demonstrating how such inclusion improves efficiency and provides broader social benefits. For example:

- **Gender-responsive low-carbon mobility** can improve access to and use of low-carbon climate-friendly options by all.
- Prioritizing projects that consider the unique vulnerabilities, needs and contributions of all people can **increase the effectiveness of adaptation finance.**
- **Indigenous women's expertise** in areas such as seed-saving techniques and weather forecasting enhance their communities' food security and improve their ability to prepare and respond to rain and drought.
- By adopting a gender-lens, j**ust transition policies** can reduce occupational gender stereotypes and increase the chances that women and men equally benefit from new jobs created in the emerging green and blue economy.

In 2025, under the Paris Agreement, countries will submit new national climate action plans (NDCs 3.0), which must be more ambitious and robust than the previous ones. Parties are also developing new national adaptation plans. While developing these strategies, they have a unique opportunity to prioritize policies that promote climate and social justice. These policies can help pave the way for a just transition that offers significant benefits for society as a whole.

As a result of years of work to

implement the mandate of mainstreaming gender across all areas of the Convention, UN Climate Change has developed a range of tools and knowledge products that include gender- and social-inclusion considerations.

hese resources can help policymakers identify entry points and best practices for integrating gender into climate policy and action, including in areas such as adaptation, loss and damage, technology, and mitigation.

2025: A key year for advancing climate action that benefits women and girls worldwide

At COP29, Parties also committed to developing a new gender action plan to be adopted at COP30, which will outline concrete measures for the effective implementation of gender-responsive climate action moving forward.

As this new gender action plan is developed in 2025, Parties can shape an ambitious roadmap to implement the new decade of action on gender and climate change in a way that benefits all women and girls worldwide. They can thus contribute to advancing gender equality, a human right and foundational piece for sustainable, peaceful, and prosperous societies.

The European Commission and the European Environment Agency (EEA) recently published the second Zero Pollution Monitoring and Outlook report, which provides an overview of the EU's work to meet the 2030 zero pollution targets. The Commission also published its fourth Clean Air Outlook report.

The reports show that EU policies have contributed to reducing air pollution, pesticide use and plastic litter at sea. However, pollution levels are still too high, in particular from harmful noise, microplastic releases into the environment, nutrient pollution and waste generation.

According to the reports, much stronger action is necessary in the EU to achieve its 2030 pollution reduction targets. Zero pollution principles must be integrated into all policies and efforts taken at all levels to ensure further progress. In this context, fostering the EU's circular economy will help reduce resource consumption and therefore will alleviate pressures on ecosystems and human health. Finally, action on zero pollution, notably through the Zero Pollution Action Plan, will support the sustainable transition of the EU's economy and make it more competitive.

Unsustainable fashion and textiles in focus for International Day of Zero Waste 2025

Ahead of the International Day of Zero Waste 2025—officially observed on 30 March each year—events in Nairobi, New York, and across the world have shone a spotlight on waste in the fashion and textiles industry, highlighting the environmental and social challenges of overproduction and overconsumption caused by the sector's linear business model.

Every year, 92 million tonnes of textile waste is produced globally. Production doubled from 2000 to 2015, while the duration of garment use decreased by 36 per cent. Eleven per cent of plastic waste comes from clothing and textiles, with only 8 per cent of textiles fibres in 2023 made from recycled sources.

Discarded clothing often ends up in low-income countries, where lack of waste management infrastructure leads to dumping, burning, and severe environmental and social consequences. Additionally, textile and fashion waste in cities often ends up in landfills, where it takes decades to decompose and releases harmful greenhouse gases. A zero-waste approach is key to the required transition to more circular approaches.

"Unsustainable fashion is aggravating the triple planetary crisis of climate change, nature, land and biodiversity loss, and pollution and waste," said Inger Andersen, Executive Director of UNEP. "We need to focus on a circular economy approach that values sustainable production, reuse, and repair. By working together, consumers, industry, and governments can support genuinely durable fashion and help reduce our fashion footprint."

"The rising tide of waste is straining urban infrastructure, public health, and the environment—especially for 1.1 billion people in informal settlements and slums with limited waste collection and sanitation services," said Anacláudia Rossbach, Executive Director of UN-Habitat.

The International Day of Zero Waste was adopted by the UN General Assembly on 14 December 2022 to promote sustainable production and consumption patterns and encourage a shift towards a lifecycle approach, so no materials or resources go to waste.

REPORT

G20+ countries hold the key to the global renewable target by 2030

New data set and policy recommendations by IRENA outline 2025 priorities to keep 1.5°C within reach

To achieve the global goal of tripling renewable power capacity by 2030, the world's largest emitters of CO2 emissions in G20 and beyond would need to more than double their annually added installed renewable capacity by 2030.

Yet, progress falls short and is unevenly spread in a few economies according to data published by IRENA in its capacity as Custodian Agency tasked with monitoring progress towards the UAE Consensus reached at the Climate Summit COP28 in Dubai. The 2030 target is crucial to limiting global temperature rise to below 1.5°C.

Released at the Berlin Energy Transition Dialogue (BETD) in March 2024, the Agency's new data collection and policy recommendations look at key performance indicators for the 2030 milestone and assess progress against 1.5°C-aligned transition pathways in the G20 including the European Union. G20 nations

represent 80% of global energy consumption and contribute to over 80% of global energy-related CO2 emissions worldwide.

The new dataset also assesses the deployment of renewable power capacities and the gap to reach the global tripling target not only in the G20 but in 15 additional countries from Asia and Central America. These G20+ countries would have to provide as much as 80% of total installed renewable power capacity by 2030.

Data shows that under IRENA's 1.5°C scenario, installed renewable power capacity would need to grow current levels from 3.4 TW to 9.4 TW across G20 and from 3.5 TW to 9.7 TW across G20+ by 2030, the bulk of installed renewable power needed to meet the global goal of 11.2 TW by 2030.

"It all hinges on progress in G20 and beyond," said IRENA Director-General Francesco La Camera. "The largest economies in the world hold the key to tripling renewables by 2030 globally. IRENA's data clearly shows that renewables represented almost 90% of the world's total power capacity additions, a veritable historic milestone for renewables. But to implement the global goal, progress must be balanced across multiple countries and regions. 1.5°C calls for more ambition and more action in G20+ countries."

La Camera added: "It is time to systematically integrate renewables into the next round of national climate plans. By enhancing their NDCs 3.0 and accelerating action in 2025, G20+ can assume responsibility and achieve the critically needed CO2 emission cuts through renewables.

"Yet, among the 13 submitted NDCs so far, only five have renewable capacity targets for 2030. IRENA´s Regional Energy Transition Outlooks currently in progress will help to improve the NDC target setting. I strongly encourage countries to develop clear renewable energy roadmaps that

G20 nations represent 80% of global energy consumption and contribute to over 80% of global energy-related CO2 emissions worldwide

align with the 1.5°C goal and that encompass solid investment plans to attract and mobilise financing at scale."

Indeed, in 2023, the annual renewable power generation capacity investment reached USD 547 billion for G20, marking a significant step forward. However, to triple global renewable power by 2030, average annual investment between 2024 and 2030 in G20+ countries must double to over USD 1080 billion, calling for close collaboration among governments, private sector players, multilateral organizations, countries, and regions.

IRENA also outlined additional recommendations on priority actions for 2025. Selected indicators and their targeted global values for 2030 reflect a combination of implementing factors in support of the global tripling goal:

- Electrification of key end-use sectors such as mobility, heating, and cooling requires the development of grids, digitalisation, and flexibility solutions.
- Direct use of renewables in end-use sectors such as increased use of sustainable biofuels in shipping and aviation requires targeted investments and policy interventions.
- Energy efficiency must double and clean hydrogen and its derivatives as well as other clean technologies will require further technological advancement.

Ithaca, New York: Taking a humanized approach to climate action

The Green New Deal is a whole-of-society mobilization to reach carbon neutrality, stop the climate crisis, and create a more socially and economically just Ithaca

Renowned for its gorges, waterfalls, and a strong commitment to sustainability, the City of Ithaca in New York is a college town that is home to Cornell University, Ithaca College, and Tompkins Cortland Community College. With a population of approximately 32,000 people, this city boasts about having the comforts of a small city with all the luxuries that can be found within a big city environment.

Ithaca's sustainability commitment was reinforced on June 5, 2019, when the city's Common Council unanimously adopted the Ithaca Green New Deal resolution, a government-led commitment to community-wide carbon neutrality by 2030 with a focus on addressing historical inequities, economic inequality, and social justice. Two years after the resolution was signed, Ithaca established itself as a world leader in climate mitigation planning and

The Green New Deal is a comprehensive program with two key objectives: achieve carbon neutrality and climate justice by 2030

continues to pave the path forward as a blueprint for other cities across the U.S. and the globe.

Green New Deal

In March 2020, the Town of Ithaca adopted a resolution in support of a Green New Deal (IGND). It is a comprehensive program with two key objectives: achieve carbon neutrality and climate justice by 2030.

The resolution included the development of a GND Action Plan, which describes how to achieve the goals for government operations and the broader community. The Action Plan is a road map that provides a path for implementation by detailing specific actions and deliverables.

Key Goals

- Community-wide carbon neutrality by 2030
- Meet the electricity needs of government operations with 100% regionally sourced renewable electricity by 2025
- Reduce emissions, or create offsets, from the fleet of city vehicles by 50% from the 2010 levels by 2025
- Achieve an equitable transition to carbon-neutrality town-wide by 2030: Reduce net emissions by at least 85% through efficiency, conservation, and renewable energy
- Ensure benefits are shared among all local communities to reduce historical social and economic inequities
- The city has achieved many important milestones of progress on the IGND since 2019, many of which provide critical waypoints in the development of the Climate Action Plan. Some of these successes include:
- Adoption of the Ithaca Energy Code Supplement, requiring all new buildings to meet net-zero energy requirements by 2026
- Launch of the Electrify Ithaca program to reduce building electrification costs
- Completed comprehensive greenhouse gas inventories that capture the full lifecycle of methane and emissions from the electric grid
- Accepted a definition of “climate justice communities” that contextualizes social and economic vulnerabilities in the local landscape
- Passed a Community Choice Aggregation (CCA) local law to leverage affordable access to 24/7 carbon-free energy

LEED Certification

In December 2024, the U.S. Green Building

Council awarded The City of Ithaca a gold certification under its Leadership in Energy and Environmental Design (LEED) for Cities program. Cities apply to receive the designation and are scored on a series of criteria ranging from natural systems and ecology to quality of life.

Ithaca will join the ranks of over 300 other LEED-certified cities and communities worldwide, earning itself a spot among leaders in creating a sustainable urban environment. Ithaca achieved the gold designation after receiving 60 out of 110 points across nine credit categories. The city performed particularly well in the categories of energy and greenhouse gas emissions, and transportation. Gold is the second highest designation that can be awarded.

In Ithaca, there are over 150 LEED-certified projects, including commercial office buildings, retail spaces, and residential projects. Ithaca is one of the few cities under 50,000 people that have received the gold designation.

To reach the City of Ithaca's decarbonization goals, the city needs to collectively electrify at least 6,000 buildings within the city's geographic boundaries. This means replacing all fossil fuel infrastructure with electric equivalents, like heat pumps, induction cooktops, and air sealing to ensure that conditioned air is kept indoors.

EcoVillage

The EcoVillage at Ithaca (EVI) is a 175-acre co-housing community located 2.5 miles from downtown Ithaca, New York. The EcoVillage consists of three smaller, 5-acre neighborhoods that support the ideals of being a sustainable, accessible, and affordable community. Each neighborhood is made up of privately owned

For 30 years now, the EcoVillage in Ithaca has become a model for developing sustainable co-housing communities

residences, approximately 100 residences in total. It also has play areas, community gardens, a community center, and access to large open spaces and native wildlife conservation areas. The EcoVillage at Ithaca also contains four working organic farms on site.

The idea for the EcoVillage at Ithaca stemmed from a desire for a more walkable way of life, which led the community to be developed in tight-knit structures, shifting the emphasis away from car dependency. The community will have the latest technologies, and the village will be a model for innovation and sustainability.

The goals of EcoVillage are to:

- Serve as an example of a cohousing community that is sustainable, accessible, and affordable so that people may "Live, Learn, and Grow" (The EVI motto)
- Be a pedestrian-oriented social neighborhood
- Develop housing on 10% of the land and reserve the remaining 90% for wildlife habitat, open space, and agriculture

Emissions from the building sector stopped rising for the first time since 2020: UN

The *Global Status Report for Buildings and Construction 2024-2025 - Not just another brick in the Wall* highlights progress made on related global climate goals and calls for greater ambition on six challenges, including building energy codes, renewable energy, and financing

A growing number of countries are working to decarbonize buildings, but sluggish progress and financing put global climate goals at risk. These are the key findings of an annual review of the buildings and construction sector, published recently by the UN Environment Programme (UNEP) and the Global Alliance for Buildings and Construction (GlobalABC).

The *Global Status Report for Buildings and Construction 2024-2025 - Not just another brick in the Wall* highlights progress made on related global climate goals and calls for greater ambition on six challenges, including building energy codes, renewable energy, and financing.

Global frameworks and initiatives such as Intergovernmental Council for Buildings and Climate, the Buildings Breakthrough, and the Declaration de Chaillot are sustaining momentum towards adopting ambitious climate action plans, Nationally Determined Contributions (NDCs), for net-zero buildings ahead of the UN Climate Change Conference (COP30) in Belem, Brazil.

"The buildings where we work, shop, and live account for a third of global emissions and a third of global waste," said Inger Andersen, Executive Director of UNEP. "The good news is that government actions are working. But we must do more and do it faster. I encourage all countries to include plans to rapidly cut emissions from buildings and construction in their new NDCs."

Reviewing the decade since the signing of the Paris Agreement in 2015, the report finds 2023 was the first year when continued growth of building construction was decoupled from associated sector greenhouse gas emissions, which have previously plateaued.

By adopting mandatory building energy codes aligned with net-zero emissions, mandatory performance standards, and seizing energy efficiency investments, the sector's energy intensity has reduced by almost 10% while the renewable energy share in final energy demand has increased by nearly 5%.

Additional measures such as circular construction practices, green leases, energy-efficient retrofitting of existing buildings, and prioritizing the use of low-carbon materials can further reduce energy consumption, enhance waste management, and reduce emissions overall.

Despite this progress, the sector remains a key driver of the climate crisis, consuming 32% of global energy and contributing to 34% of global CO2 emissions. The sector is dependent on materials like cement and steel which are responsible for 18% of global emissions and are a major source of construction waste.

Given nearly half of the world's buildings that will exist by 2050 have not yet been built, the adoption of ambitious energy building codes is critical. However, data points to a recent decline in highly effective measures like heat pump installations, and over 50% of newly constructed floorspace in

emerging and developing economies is still not covered by building codes.

The report sets out a challenge to major carbon-emitting countries to adopt zero-carbon building energy codes by 2028, to be followed by all other countries no later than 2035. Building codes and integrating building code reform plans in the ongoing submission of NDCs are critical to achieve the COP28 Global Renewables and Energy Efficiency Pledge.

Finally, all governments, financial institutions and businesses need to work together to double global building energy efficiency investment from USD 270 billion to USD 522 billion by 2030.

Adoption of Extended Producer Responsibility measures, and circular economy practices - including longer building lifespans, better material efficiency and reuse, recycling, passive design, and waste management - are key to help bridge gaps in financing, while workforce development programmes are essential to fill skill gaps in the sector.

Construction materials like cement and steel are responsible for 18% of global emissions and are a major source of construction waste

UNEP, GlobalABC members, and other partners will continue to support countries and businesses to decarbonise new and existing buildings and the entire building value chain, including using this data to support ambitious NDCs ahead of COP30 in Brazil.

GCC calls for enhanced global cooperation to combat pollution and climate change

The Gulf Cooperation Council (GCC) has emphasized the importance of strengthening international cooperation to tackle pollution, climate change, and environmental degradation in the oceans while addressing their causes and impacts in line with relevant global frameworks and initiatives.

This came in a speech delivered by Kuwait's Permanent Representative to the United Nations and other international organizations in Geneva, HE Ambassador Nasser Al-Hein, in his capacity as Chair of the GCC Ambassadors Council. He spoke during an interactive dialogue at the 58th session of the United Nations Human Rights Council, held in March in Geneva.

Ambassador Al-Hein reaffirmed the GCCs strong commitment to protecting oceans, recognizing them as a vital component of the global ecosystem and a key source of livelihood and food security for millions of people.

He underscored that the right to a clean and healthy environment is fundamental to ensuring other human rights, including the rights to food, health, and sustainable development.

Al-Hein highlighted the GCCs ongoing efforts to safeguard marine environments by adopting decisive policies and measures to combat marine pollution, promoting sustainable fishing practices, and launching initiatives to protect biodiversity and coastal ecosystems. He also pointed to the council's commitment to supporting the blue economy and protecting oceans from pollution.

He further noted the active participation of Gulf states in global efforts to preserve marine environments, particularly through the Regional Organization for the Protection of the Marine Environment (ROPME), and their support for policies aimed at reducing marine pollution.

Additionally, he emphasized the GCCs engagement in global ocean governance initiatives and cross-border partnerships to address environmental threats facing oceans. Al-Hein reaffirmed the councils unwavering commitment to strengthening these efforts, ensuring environmental protection, and safeguarding the rights of future generations.

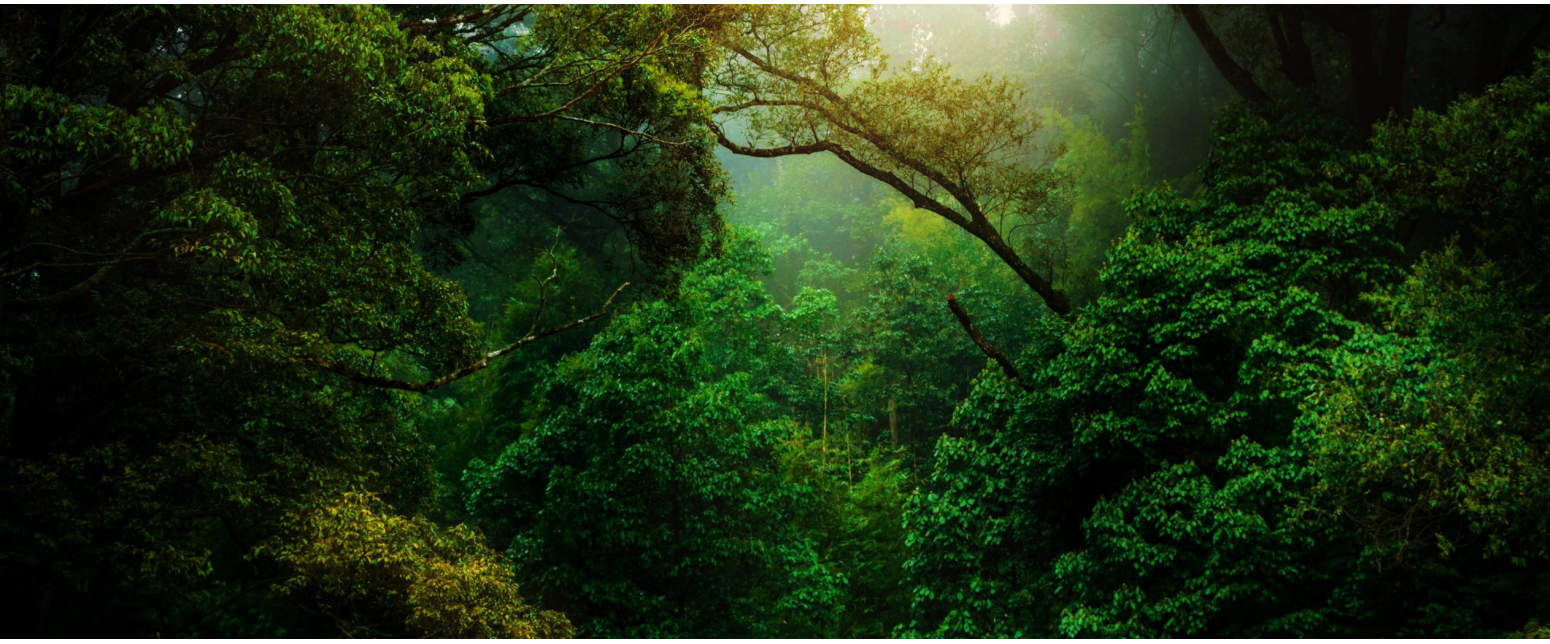
FEATURE

Unlocking the hidden power of forests for food, water and biodiversity

The International Day of Forests celebrates and emphasizes the vital role of forests globally

The Food and Agriculture Organization of the United Nations (FAO), in collaboration with the Municipality of Rome, kicked off celebrations for the International Day of Forests (IDF) 2025 by engaging young students in exploring the connection between forests and foods at the Global Library of Trees and Flowers - FAO Park in Villa Doria Pamphilj.

In addition to providing food, fuel, fibre, and employment, forests support soil fertility, protect water resources, and offer habitats for biodiversity

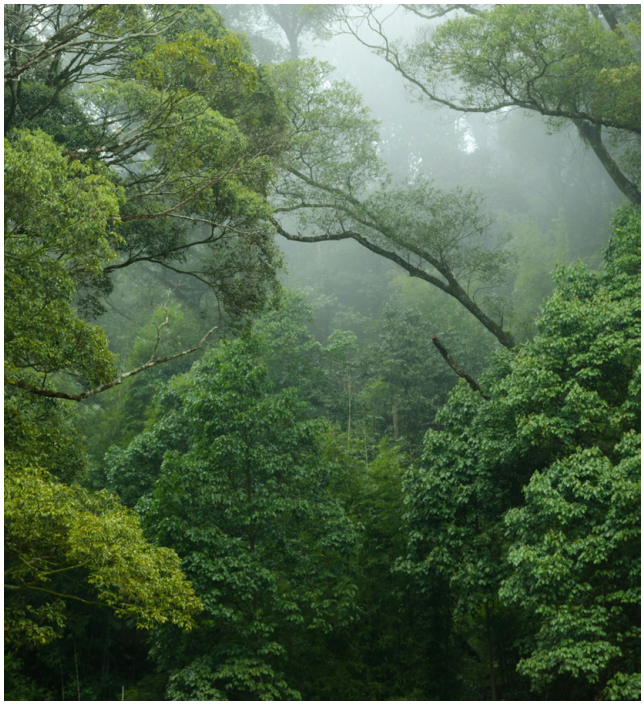


"The linkage between forests and foods goes back to our ancestors who tested all the fruits and vegetables from the forests and documented their safety for our consumption" said FAO Director-General QU Dongyu, opening the event under the theme of "Forests and Foods". "For this reason, we need to respect, learn, protect, and conserve our forests to preserve our biodiversity", he added.

The Director-General then highlighted the importance of the International Day of Forests, stating, "It highlights that we live with nature, make use of nature and should protect nature. The FAO Park is a living example of our dedication to protecting nature and promoting biodiversity". The event focused on highlighting the link between nature, culture and food culture, and how foods provide the bridge between culture and history.

The Director-General was joined by Sabrina Alfonsi, Councillor for Agriculture, Environment, and Waste Cycle, Roma Capitale, and Stefania Costanza, Deputy Permanent Representative of Italy to FAO, for the event.

The FAO Park, launched under the Green Cities Initiative, spans 2.5 hectares – and serves as an urban oasis with over 120 trees and plants



representing diverse regions of the world.

The celebration brought together approximately 250 school children (ages 8 to 15) from national and international schools to participate in an educational and interactive initiative where FAO forestry experts led guided tours of the seven geographic zones of the world featured in the Global Library of Trees and Flowers. They were joined by master ice cream maker Eugenio Morrone and environmental expert Pietro Mattei, who helped identify trees producing forest foods and explained their nutritional benefits.

An assortment of international forest foods – acai, baobab fruit, nuts, berries, mushrooms, dried mopane worms, cocoa beans and more – were on display, highlighting the crucial role of forests in food production. Morrone explained to the students how some of these ingredients are incorporated into his ice cream recipes.

As the future stewards of the world's forests, the students learned about the connection between forest plants and food security, as well as the importance of balancing tradition and innovation in sustainable forest management.

Since its proclamation in 2012, the International Day of Forests celebrates and emphasizes the vital role of forests globally. Forests and trees play a crucial part in global food security, nutrition and livelihoods, yet their importance is often overlooked. In addition to providing food, fuel, fibre, and employment, forests support soil fertility, protect water resources, and offer habitats for biodiversity, including vital pollinators, which contribute to healthy agrifood systems. Forests provide essential nutrients and income for many rural communities, particularly Indigenous Peoples.

Challenges such as deforestation, climate change, wildfires, pests and the unsustainable use of forest resources however hinder the potential of forests. The *FAO Forestry Roadmap: From Vision to Action, 2024–2031* outlines strategic actions to help guide sustainable forest management over the next decade. The roadmap highlights FAO's dual emphasis on the protective and productive functions of forests, as well as the role of science and innovation as a driver for scaling up forest solutions.

"Scientists know that forests exemplify the circular economy. Mushrooms grow in forests. Plant produce for animal feed and animal residue is composed of organic fertilisers to nourish plants, which leads us back to mushrooms" explained the Director-General.

Europe facing water stress, scarcity: EEA

REPORT

With temperatures rising every year, droughts becoming more frequent, and an increasing pressure on water resources, issues related to water exploitation and scarcity are becoming increasingly important, according to the European Environment Agency.

The Water Exploitation Index Plus (WEI+) helps to understand the level of water scarcity by measuring total water consumption as a percentage of the renewable freshwater resources available for a given territory and period.

Values above 20% are generally considered a sign of water scarcity, and values greater than 40% indicate severe water scarcity.

In 2022, the EU WEI+ was 5.8%, an increase of 0.9 percentage points (pp) since 2000. It was the highest value since this data collection started in 2000. Among the EU countries, Cyprus registered 71.0%, indicating that freshwater resources use was unsustainable. In 2000, the WEI+ in this EU country was already 59.5%.

Malta and Romania had values of 34.1% and 21.0% in 2022. Greece, Portugal and Spain with 13.8%,10.1% and 8.8% respectively, were below the threshold of 20%, but still above most EU countries.

Moreover, regional differences and the severity of water scarcity during the summer months are not visible in these annual national average values. In particular in southern Europe, water scarcity can be a severe issue in spring and summer, aggravated by high pressure on water resources through agricultural needs, public water supply, and tourism.

Latvia, Croatia, Sweden, Slovakia, Lithuania, Slovenia, Finland, and Luxembourg all recorded values of the WEI+ index under 1%, indicating they were not under water stress conditions.

AWARD

Hydrologist Günter Blöschl receives Stockholm Water Prize 2025

Professor Günter Blöschl was awarded for his world-renowned work on flood risk reduction, water resource management, flood scaling, and regional process hydrology

Professor Blöschl is a pioneer of water engineering. His comprehensive database and analysis have revolutionized and deepened the global understanding of flood risk reduction and water resource management. His contributions make him the founder of the new and growing scientific field, regional process hydrology, and cofounder of socio-hydrology, both of which advance our knowledge of flood risks under climate change on a global scale.

Professor Blöschl has contributed to global research on flood estimation, scaling, and adaptation strategies. His work has proven that a more subtle, context specific solution is needed, as flood patterns, scaling, and adaptation are much more complex than previously known. His meticulous research led to the construction of a flood database that analyzed the patterns and scales of flood movements over 500 years.

His published work brought to light the significant impacts of climate change, land use, and hydraulic structures in the causation of flooding. In particular, he was able to show that urbanization, deforestation, and agricultural practices impact smaller floods in a greater way than larger floods.

In its citation, The Prize Committe for the Stockholm Water Prize said: "Professor Günter Blöschl at the Technical University of Vienna (TUW) is the world's leading flood hydrologist. He has made groundbreaking contributions to understanding the drivers of increasing flood risks under climate change coupled with the strong influence of regional flood processes. His observation-based connection between climate and floods revealed that the last two decades have been markedly flood-prone compared to the historical record."

Professor Blöschl has worked alongside previous prize laureates, Taikan Oki and Andrea Rinaldo.

Anette Scheibe Lorentzi, Chair of SWF stated: "With his ground-breaking research, Professor Blöschl has made invaluable contributions to our understanding of flood risk reduction and sustainable water resource management. In the face of a changing climate, this knowledge is more important than ever."

About the Laureate

Günter Blöschl is a professor at the Vienna University of Technology, the current head of the Institute of Hydraulic Engineering and Water Resources Management at the Vienna University of Technology, as well as the Director of the Doctoral Programme of Water Resources Systems at the Vienna University of Technology, that he founded more than 15 years ago, and a part time professor at the University of Bologna. He grew up in Vienna, where he currently lives with his family, three children and four grandchildren. His research took him to many international locations, including the US and Canada, with two years in Australia. He enjoys being a citizen of the world, in particular working with people, gaining new international perspectives on scientific and societal issues, and believes that there is immense value in sharing perspectives and aims across disciplines and sectors of society.

The Stockholm Water Prize is awarded by the Stockholm Water Foundation in cooperation with the Royal Swedish Academy of Sciences

Word Scramble

IDLWILFE

STREE

WTARE

RTCEPTO

ROESTTP

EMAANG

EAVS

ECECYLR

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

ANSWERS: 1) PROTEST 2) TREES 3) PROTECT 4) SAVE 5) MANAGE 6) WILDLIFE 7) WATER 8) RECYCLE

Word Search

E	W	E	L	S	P	N	C	H	E	A	B	P	N
R	P	N	L	R	E	N	E	R	G	Y	H	H	W
C	A	N	A	R	A	P	W	E	S	A	W	S	E
R	E	A	D	T	T	P	A	D	A	H	T	R	A
E	T	E	E	W	P	E	S	A	A	A	E	E	W
E	P	R	B	E	R	A	E	L	L	N	L	N	W
R	R	E	R	A	C	C	E	E	E	E	T	A	R
B	L	N	E	T	L	S	L	C	A	R	B	O	N
W	E	E	G	H	E	E	A	D	H	N	N	E	E
R	R	W	L	E	A	A	S	D	E	E	A	H	L
O	C	A	C	R	N	B	O	P	L	Y	O	N	H
E	A	B	B	E	C	A	L	P	S	I	D	E	I
W	D	L	H	E	A	T	A	P	L	O	R	E	S
A	S	E	A	D	E	S	E	R	T	P	O	N	O

CLEAN

CARBON

DISPLACE

WHALES

ADAPT

RENEWABLE

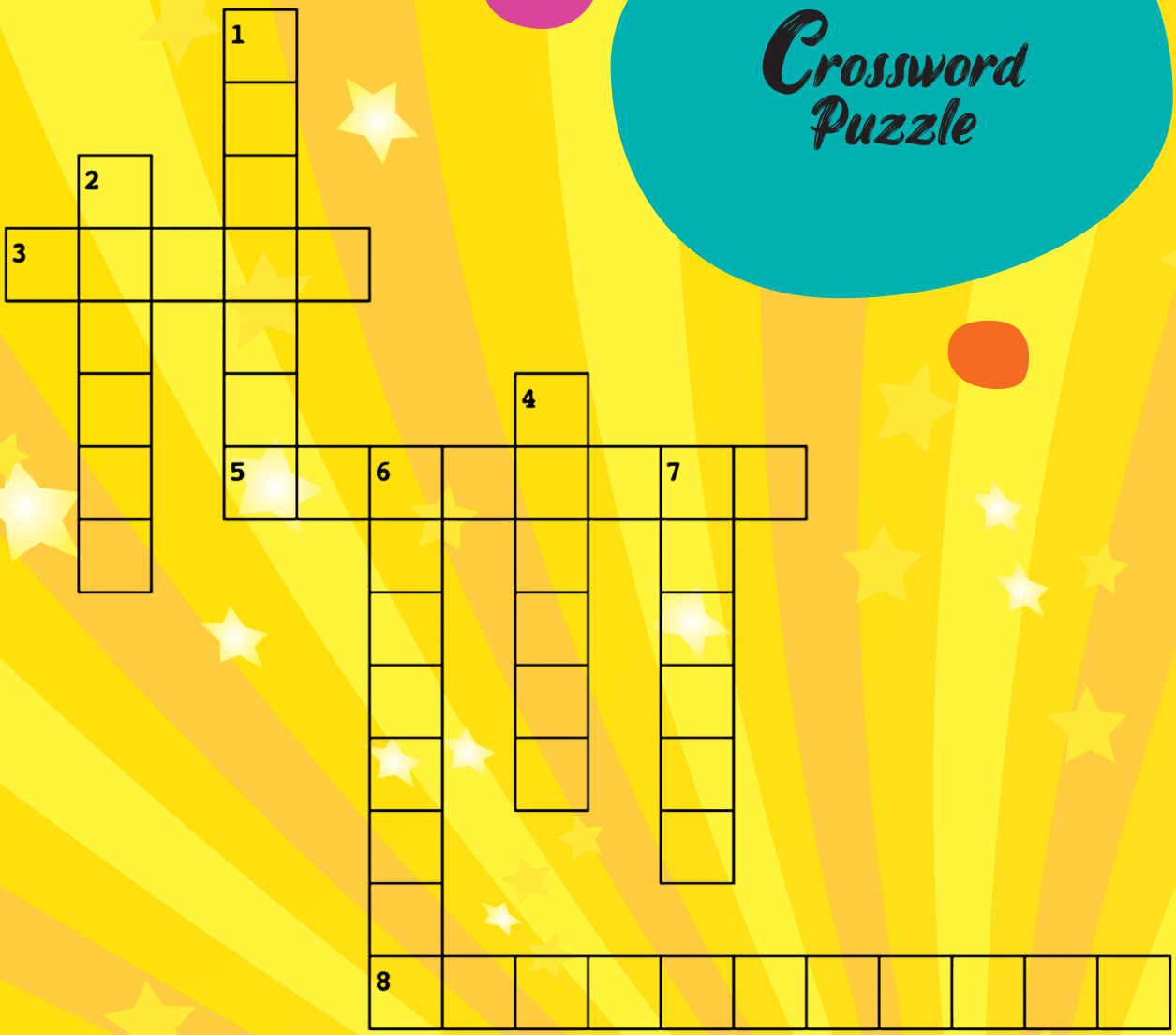
DESERT

ENERGY

WEATHER

HEAT

Crossword Puzzle



Across

3. Our planet
5. Put at risk
8. Degree of hotness

Down

1. Fairness and reasonableness
2. Non-metallic element
4. It can be conserved
6. Destroy
7. Moral justice

ANSWERS: 1) JUSTICE 2) CARBON 3) EARTH 4) ENERGY 5) ENDANGER 6) DESTRUCT7) EQUITY 8) TEMPERATURE

WORD OF THE DAY:

CARBON SEQUESTRATION

Carbon sequestration is the capturing, removal and permanent storage of CO_2 from the earth's atmosphere. It's recognised as a key method for removing carbon from the earth's atmosphere. This is important, as around 45% of the CO_2 emitted by humans remains in the atmosphere, which is a significant factor behind global warming. Carbon sequestration can prevent further emissions from contributing to the heating of the planet.

Carbon sequestration can happen in two basic forms: biologically or geologically.

Biological carbon sequestration:

Forests - Forests and woodlands are considered one of the best forms of natural carbon sequestration. CO_2 binds to plants during photosynthesis, exchanging it for oxygen as a purifying emission. On average, forests store twice as much carbon as they emit.

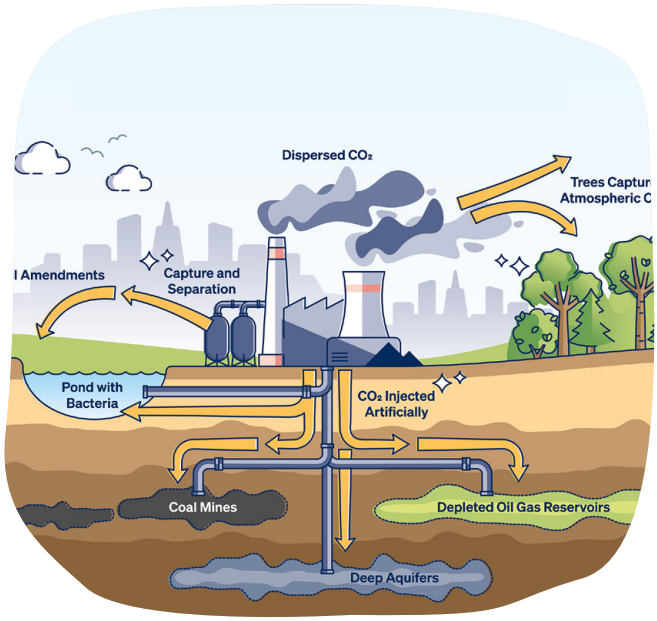
Soil - Through bogs, peat and swamps, CO_2 can be captured and stored as carbonates. These carbonates build up over thousands of years as CO_2 mixes with other mineral elements, such as calcium or magnesium.

Oceans - Aquatic environments and large bodies of water are also great absorbers of CO_2. They absorb another estimated 25% of emitted CO_2 from the earth's atmosphere. This carbon is mostly held in the upper layers of the oceans.

Geological carbon sequestration:

Graphene production - The production of graphene requires CO_2 as a raw material. It is used heavily in the production of tech devices such as smartphones or computer processors.

Engineered molecules - A fairly new science, scientists can change the shape of molecules to form new compounds by capturing CO_2 from the air. In practice, this could present an efficient way of creating raw materials while reducing atmospheric carbon.



Carbon Capture and Storage (CCS)

CCS involves capturing CO_2 that's been produced by power generation or industrial activity, such as cement or steel making. This CO_2 is then compressed and transported to deep underground facilities, where it's injected into rock formations for permanent storage.

INTERNATIONAL BEAVER DAY - APR 7

The beaver may be the national animal of Canada but the furry dam-building rodent can be found across the North American continent and Eurasia as two distinct species, but the population has been on the decline for several decades now.

International Beaver Day raises awareness of the plight of the rodent annually on April 7th. Beavers are very important for the environment, creating natural dams and helping cleanse water. Native Americans called the beaver the "sacred center" of the land because this species creates such rich, watery habitat for other mammals, fish, turtles, frogs, birds and ducks. We now know that beaver damming provides essential natural services for people too.

Beavers prefer to dam streams in shallow valleys, where the flooded area becomes productive wetlands.These cradles of life support biodiversity that rivals tropical rain forests. Almost half of endangered and threatened species in North America rely upon wetlands. Freshwater wetlands have been rated as the world's most valuable land-based ecosystem.

Beavers reliably and economically maintain wetlands that sponge up floodwaters, alleviate droughts and floods (because their dams keep water on the land longer), lesson erosion, raise the water table and act as the "earth's kidneys" to purify water. The latter occurs because several feet of silt collect upstream of older beaver dams, and toxics, such as pesticides, are broken down by microbes in the wetlands that beavers create. Thus, water downstream of dams is cleaner and requires less treatment for human use.

APR 22

INTERNATIONAL MOTHER EARTH DAY

Mother Earth is clearly urging a call to action. Nature is suffering. Oceans filling with plastic and turning more acidic. Extreme heat, wildfires and floods, have affected millions of people. Climate change, man-made changes to nature as well as crimes that disrupt biodiversity, such as deforestation, land-use change, intensified agriculture and livestock production or the growing illegal wildlife trade, can accelerate the speed of destruction of the planet.

This is the third Mother Earth Day celebrated within the UN Decade on Ecosystem Restoration. Ecosystems support all life on Earth. The healthier our ecosystems are, the healthier the planet - and its people. Restoring our damaged ecosystems will help to end poverty, combat climate change and prevent mass extinction. The UN General Assembly designated 22 April as International Mother Earth Day through a resolution adopted in 2009.

WHAT CAN YOU DO TO HELP?

Things to Do...

- [ ] Switch off all plugs when not in use
- [ ] Grow a plant
- [ ] Use both sides of paper
- [ ] Carry a water bottle
- [ ] Reuse plastics

COLOUR ME!

Three new plant species discovered in the UAE

In a groundbreaking scientific achievement that reinforces the UAE's and Sharjah's leadership in environmental research and plant discovery programmes, the Environment and Protected Areas Authority (EPAA) in Sharjah has announced the successful discovery of three plant species recorded for the first time in the UAE by a team of field researchers from the Sharjah Seed Bank and Herbarium.

The newly recorded species include *Dactyloctenium australe* (Durban Crowfoot Grass), a notable addition to the UAE's wild flora, along with two new varieties of Neurada procumbens, namely *Neurada procumbens var. stellata* and *Neurada procumbens var. al-eisawii*.

Commenting on this significant achievement, Hana Saif Al Suwaidi, Chairperson of the EPAA, highlighted that this discovery is the result of meticulous scientific exploration using advanced and innovative research techniques. The field team conducts regular expeditions to explore, collect, analyse, and document wild plant species and seed samples, reinforcing national efforts to protect biodiversity and address environmental challenges.

Expressing her appreciation for the Sharjah Seed Bank and Herbarium team, she stated: "Their ongoing efforts to explore the local environment not only expand our scientific knowledge of native plant species but also enhance research collaboration at both local and international levels. Through their work, we continue to document rare and previously unrecorded wild plants, contributing to global botanical research."

It is worth noting that the Sharjah Seed Bank and Herbarium, launched in 2018 in Al Dhaid, is a pioneering initiative aimed at preserving rare wild and desert plant species in the UAE. The Seed Bank plays a crucial role in developing a comprehensive database on plant biodiversity, contributing to the discovery and documentation of new plant species in the UAE for the first time.

Ocean degradation threatens communities, affects human rights worldwide: UN

Degradation of the ocean threatens humanity and exacerbates inequalities and disproportionately affects marginalised populations

Ocean degradation threatens communities and affects human rights worldwide, including the right to a healthy environment, said Astrid Puentes Riaño, a UN independent expert and Special Rapporteur on the human right to a clean, healthy, and sustainable environment.

"The protection of marine ecosystems is part of States' obligations to protect human rights," she added. In her report to the Human Rights Council, the Special Rapporteur stressed that the degradation of the ocean threatens humanity and exacerbates inequalities, disproportionately affecting marginalised populations.

"Knowing the interdependence and interconnectedness of humans and ecosystems with the ocean is essential to understanding the current impacts on this delicate balance, even for those living inland," Puentes Riaño said. She noted that these linkages include food systems,

healthy ecosystems, a safe climate and the work of ocean defenders.

"The ocean is the largest biome on Earth, covering 70% of its surface. One-third of the human population (2.4 billion people) live within 100 km of an ocean coast," she said.

"Despite over 600 agreements, marine ecosystems face pressing threats including climate change, overfishing, extractivism, pollution, and deep-sea mining," the expert said. Weak governance and enforcement gaps; disproportionate impacts on Indigenous Peoples, small-scale fishers, and coastal communities; escalating violence against ocean defenders, and insufficient accountability exacerbate these challenging issues.

Puentes Riaño called for a holistic, comprehensive, integrated and gender-responsive human rights and ecosystem-based approach to ocean governance. She said the inclusion of ancestral knowledge, the rights of present and future generations, and a long-term vision were crucial to solving the current triple planetary crises and addressing ocean challenges.

"We must mainstream the human right to a clean, healthy, and sustainable environment into ocean policies, strengthen international cooperation, and ensure that those most affected lead conservation efforts," she said.

In her report, the expert outlined key recommendations for States, businesses and international organisations, including: strengthening legal protections for marine biodiversity and coastal communities; implementing stricter regulations on overfishing, pollution and offshore extractive industries; enforcing the precautionary principle, all while recognising the role of ocean defenders and indigenous knowledge in marine governance.

The report also recommends for States to support developing countries in marine conservation.

One-third of the human population (2.4 billion people) live within 100 kms of an ocean coast

"Without immediate action, we risk losing marine biodiversity, which in turn will impact the lives and human rights of millions of people who depend on the ocean," Puentes Riaño said.

"We need a clear understanding that ocean issues are human rights issues, and we need to apply this to all ocean-related efforts."

Bees and biodiversity loss: A vital warning for our planet

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

A recent article in US-NBC stated that bees are responsible for USD17 billion in agricultural production each year. It noted that as U.S. honeybee deaths soar, grocery store bills could take the hit as the disappearance of honeybees will eventually lead to higher food prices.

Bees are the only insects that produce food for human consumption, but they are more than just producers of honey—they pollinate 80% of all flowering plants, including more than 130 types of fruits and vegetables. However, bee populations have been declining at alarming rates across the globe, and this decline is deeply connected to the broader crisis of biodiversity loss.

Several key factors are driving the decline of bees. Habitat loss, caused by urban expansion, deforestation, and intensive agriculture, leaves bees with fewer places to forage and nest. Monoculture farming reduces the diversity of flowering plants, leading to limited food sources. The widespread use of pesticides—especially neonicotinoids—can disorient bees, weaken their immune systems, or even kill them outright. Climate change further complicates their survival by disrupting the timing of plant flowering and altering the distribution of bee species. Invasive species and diseases, such as the Varroa mite, also pose serious threats to bee health.

The decline of bees is not an isolated issue—it has a cascading effect on ecosystems and food production. Without bees, many plant species would struggle to reproduce which, in turn, affects the animals that rely on those plants for food and shelter. This weakens entire ecosystems and contributes to the accelerating loss of global biodiversity. In agriculture, reduced pollination can lead to lower crop yields and less nutritional diversity in human diets, threatening food security.

Addressing bee decline is essential for halting biodiversity loss. Conservation efforts must focus on restoring natural habitats, promoting organic and sustainable farming practices, and regulating harmful pesticides. Urban gardens, wildflower meadows, and pollinator-friendly planting can also make a big difference. Additionally, public education and citizen science initiatives can help raise awareness and encourage community action.

Protecting bees means protecting the intricate web of life they help sustain. Their decline is a warning signal, reminding us that our health and the health of the planet are deeply intertwined. If we act now to support pollinators, we can help reverse biodiversity loss and build a more resilient and sustainable future for all.

Let us join hands worldwide to save bees.

Emirates Appreciation Award For The Environment

Together for a green home

THE FUTURE OF OUR WORLD
IS IN OUR HANDS.

ACT NOW!

مؤسسة زايد الدولية للبيئة

Zayed International Foundation for the Environment