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Zayed International Prize for the Environment



Together for a green century



Chairman's Message



**Prof. Mohammed
bin Fahad**
Executive Editor

For years now, Dubai has cultivated a distinct identity as a leading hub for pioneering innovative business models that balance sustainable economic growth with the stewardship of natural resources. In doing so, it is actively shaping the global response to climate challenges, seamlessly integrating innovation, cooperation, and investment to drive tangible progress towards a greener future.

This strategic leadership is the direct outcome of the wise leadership's visionary goals, which is aimed at enhancing global collaboration to achieve net-zero goals and accelerate the transition to a green economy. Platforms like the World Green Economy Summit (WGES) exemplify this commitment and encourage the implementation of green policies, fostering innovation and investment in technologies for generating and storing clean energy, and advancing the development of artificial intelligence (AI) and circular economy models that minimise waste and environmental impact. This proactive approach underscores a fundamental belief: the transition to a green economy is not merely a necessity but a profound global opportunity to stimulate economic growth, create jobs, and ensure a resilient future for all.

The overarching theme and discussions at WGES 2025 and the event's success powerfully affirm the UAE's unwavering commitment to a sustainable future. The country's robust national frameworks, such as the Net Zero by 2050 initiative and the Circular Economy Policy, are escalating investments in renewable energy and groundbreaking sustainable solutions, spurring innovation and empowering communities.

The green economy, as Dubai and the UAE have demonstrated, is not only sustainable but also represents a huge economic opportunity, enabling the emergence of new industries and employment sectors. This transformative approach, rooted in the spirit of cooperation and collaboration, is driven by the UAE's belief that unifying resources, exchanging invaluable insights, and actively promoting robust public-private alliances will significantly accelerate the global shift to a truly green economy.

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WGES 2025 spotlights AI, regenerative agriculture, and critical climate finance to accelerate global sustainability

The 11th World Green Economy Summit (WGES) drew more than 3,300 participants from over 30 countries, including policymakers, business leaders, investors, and innovators



Under the patronage of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, H.H. Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, inaugurated the 11th edition of the World Green Economy Summit (WGES) in Dubai. The summit, organised by the Dubai Supreme Council of Energy, Dubai Electricity and Water Authority (DEWA) and the World Green Economy Organisation (WGEO), was held this



year under the theme 'Innovating for Impact: Accelerating the Future of the Green Economy'.

WGES 2025 explored how cutting-edge technology is driving climate resilience and sustainability, with a particular focus on artificial intelligence (AI) and smart innovations. Discussions highlighted how the Internet of Things (IoT) and AI-powered solutions optimise renewable energy integration, improve resource efficiency, enhance predictive analytics for environmental risk mitigation, and boost carbon

emissions monitoring. The role of energy storage innovation and public-private collaboration in advancing green technologies was also examined, showcasing real-world AI-driven projects that align with long-term sustainability goals.

Global shift to clean and renewable energy

In his opening speech, Saeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme Council of Energy, MD & CEO of DEWA and Chairman of WGEO, highlighted that AI is projected to contribute AED350 billion to the UAE's economy by 2030, underscoring the critical need for robust, sustainable infrastructure.

With investments in the low-carbon energy transition growing by 11% to a record \$2.1 trillion in 2024, the momentum underscores the global shift to clean and renewable energy, he said, adding that renewable generation capacity is expected to grow by 84% in the five years up to 2030, before doubling by 2050.

Al Tayer noted that Dubai is leading the clean energy transition, with 21.5% clean energy already in its mix. Celebrating the Mohammed bin Rashid Al Maktoum Solar Park's 10th anniversary, he announced its capacity will exceed 8,000 MW by 2030, achieving 36% clean energy and cutting 8.5 million tonnes of carbon annually. Innovations like AI and sun tracking have doubled PV panel efficiency, while Dubai also pioneers energy storage. He stressed that integrated funding, resilient infrastructure, and empowering youth are crucial for a sustainable future.

Resilience and innovation

Saeed Al Abbar, CEO of AESG; Stuart Peña Feliz, co-founder and CEO of MacroCycle Technologies; and Seneca Cottom, Head of Sustainability at Alshaya Group, were among the speakers at the main plenary session, 'Green Technology for Resilience: Innovations in Smart Climate



Solutions'. They highlighted that climate impacts cost the global economy over \$320 billion in 2024, making resilience and innovation imperative.

The speakers identified the primary challenge as integration - effectively deploying capital, aligning technology with regulations, and coordinating urban upgrades. Circular materials face hurdles due to weak supply (e.g., only 20-30% PET collection), costly manufacturing, and hesitant adoption driven by price and quality concerns.

The speakers urged companies to accelerate progress by offering pilot "sandboxes" and investing attention, not just money. They

advocated for private sector leadership, with governments codifying gains into mainstream building codes. The discussion highlighted the GCC, particularly Dubai, as a leader in rapid, sustainable urban development. With consumers increasingly aware of sustainability, the speakers called for companies to provide superior sustainable products, educate staff, and incentivize returns and recycling.

Agriculture and climate change

During the opening ceremony, Michael Pollan, a renowned author and food sustainability advocate, highlighted that food production accounts for 20% to 50% of global greenhouse gas emissions, encompassing carbon dioxide

Held under the theme, 'Innovating for Impact: Accelerating the Future of the Green Economy', WGES 2025 reflected Dubai's positioning as a global hub for sustainable development and climate action



from farming activities, methane from livestock, and nitrous oxide from fertilizers. He noted that a third of humanity's atmospheric carbon originated in the soil, largely released by intensive farming. Pollan emphasized that agriculture can actively combat climate change by sequestering significant carbon from the atmosphere back into the soil.

In a subsequent "Fireside Chat," Pollan detailed the perils of the current food system: ultra-processed diets contributing to obesity and chronic diseases, and industrial farming, heavily

reliant on fossil fuels, wasting 40% of all food. He pointed out that government incentives favor overproduction of corn and soy, prioritizing cheap calories and meat, while hunger persists due to inequity. Pollan expressed optimism for regenerative agriculture practices like reduced tillage and cover cropping, but acknowledged that scaling these solutions demands greater mechanization and investment.

Sheikha Dr Shamma bint Mohammed bin Khalid Al Nahyan, Chairperson of the Sheikh Mohammed bin Khalid Al Nahyan Institutions, delivered a keynote address highlighting the importance of social media platforms as effective tools for raising environmental awareness, engaging youths in climate action, and promoting a culture of sustainability.

In the 'Global Leadership and the Climate Challenge' session, former Finnish President Sauli Niinistö warned that the Arctic's fate concerns everyone, warming four times faster than the global average, with black carbon and melting permafrost creating dire consequences. He stressed that climate change is about self-preservation, urging that governments act when people demand, and businesses seize green opportunities. Niinistö noted AI's potential, but only if powered by renewables, emphasizing that promises must be matched by action. "This is our common task, and we must act now."

Role of AI

The session titled 'The Role of AI in Shaping a Sustainable Future for Tech' featured Amr Kamel, General Manager of Microsoft UAE; Dr Carlos Alvarez, Director of Grid Connection at Huawei; and Mohammad bin Sulaiman, CEO of Moro Hub.



The panel explored AI's promise and its environmental trade-offs. While AI enhances productivity, optimises supply chains and supports renewable integration, it also drives high energy demand in data centres. Microsoft emphasised aligning AI growth with sustainability through green infrastructure, recycling and partnerships.

Meanwhile, a session titled 'Heat, Hunger, and Health: How Climate Change is Impacting Human Health' featured the participation of Olaf van der Veen, founder and CEO of Orbisk.

The discussion focused on the effects of climate change on human health, particularly the increase in heatwaves, the decline in food security and the rise in environment-related diseases. The speakers emphasised the need for international co-operation to reduce risks and protect the most vulnerable groups.

Climate finance

On the second day of the summit, high-level discussions tackled urgent climate challenges, notably the vast financing gap and the need to accelerate international commitments to address the escalating impacts of climate change.

A key session on financing the green transition

stressed the urgent need to scale up climate finance. Speakers highlighted a \$2.4 trillion annual investment gap and underlined the importance of blended public-private funding.

Sessions on loss and damage, nationally determined contributions (NDCs), and food and water security examined mounting climate risks—from rising seas to extreme weather—emphasising the need for resilient infrastructure, ecosystem restoration, and accessible finance, particularly for vulnerable island and regional economies.

Youth engagement, regional climate initiatives, and the role of trade in advancing the green economy were also highlighted, with UAE Minister of Foreign Trade Dr. Thani bin Ahmed Al Zeyoudi stressing green solutions as drivers of technological progress and economic growth.

Other sessions addressed voluntary carbon markets, AI in climate action, and renewable energy project viability, while emphasising cooperation, innovation, and science-based targets to achieve net zero. The day concluded with a call to shift from pledges to tangible action, reaffirming the UAE's commitment to achieving climate neutrality by 2050.

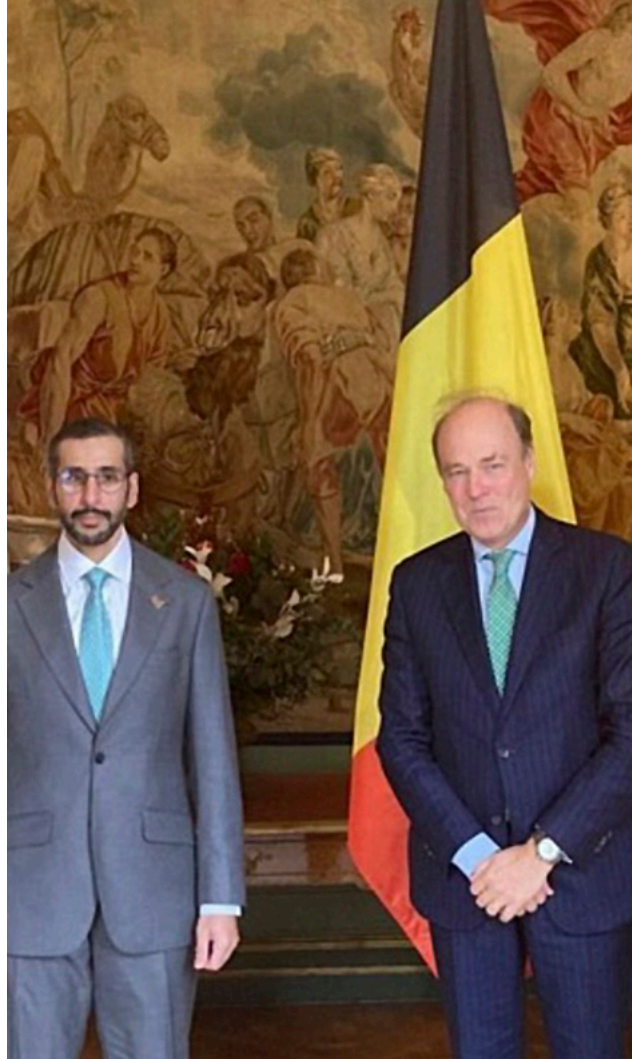
UAE and Belgium to enhance cooperation in energy, sustainability

A high-level UAE delegation led by Abdulla Balalaa, Assistant Minister of Foreign Affairs for Energy and Sustainability, concluded a successful official visit to the Kingdom of Belgium aimed at deepening bilateral cooperation in the fields of energy, water, and sustainability.

The visit followed the recent official visit to Abu Dhabi by Maxime Prévot, Deputy Prime Minister and Minister of Foreign Affairs, European Affairs and Development Cooperation of Belgium, during which he met with H.H. Sheikh Abdullah bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Foreign Affairs.

During the visit, the UAE delegation held high-level engagements with senior Belgian officials, including Mathieu Bihet, Minister of Energy, and Ambassador Willem van de Voorde, Special Envoy for Climate and Environment, alongside other industry leaders from Belgium's energy, sustainability, and academic sectors. Discussions emphasized the UAE's commitment to enhancing strategic partnerships that support energy security, accelerate the clean energy transition, and advance the United Nations Sustainable Development Goals (SDGs).

As part of the visit, Abdulla Balalaa toured the Port of Antwerp-Bruges, accompanied by Johan Klaps, Chairman of the port authority. The visit also included the signing of a Memorandum of Understanding between Khalifa University and the Flemish Institute for Technological Research, a leading sustainability research institute in Flanders, to enhance joint research and innovation



for the transition to a sustainable future.

Furthermore, the visit featured a high-level reception that brought together senior Belgian and Emirati stakeholders from government, business, and academia.

The event provided a platform to highlight opportunities for UAE-Belgium collaboration and to reinforce bilateral ties across energy, water, and sustainability sectors.

The visit reaffirmed the UAE's role as a trusted international partner in advancing the global energy transition and laid the foundation for long-term institutional, scientific, and commercial collaboration with Belgium. The UAE delegation included senior representatives from Masdar, the Emirates Nuclear Energy Corporation (ENEC), and Khalifa University.



Dubai leads global dialogue on sustainable future at WETEX 2025

WETEX is one of the world's leading specialised exhibitions, encompassing a broad range of sectors, including energy, water, clean and renewable technologies, sustainable cities, decarbonisation, green hydrogen, digital transformation, cyber security, AI, and more

The 27th edition of the Water, Energy, Technology and Environment Exhibition (WETEX), organised by Dubai Electricity and Water Authority (DEWA), successfully concluded on Thursday, October 2nd, 2025, after three dynamic days of discussions, innovation showcases, and specialised knowledge exchange. Held under the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, and the patronage of H.H. Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, WETEX 2025 served as a pivotal platform for accelerating the energy transition and progress towards net zero, reflecting the UAE's unwavering commitment to a sustainable future.

This year, WETEX witnessed a noticeable expansion in the future-oriented sectors and fields it showcased. In line with the latest global trends, WETEX strengthened preparedness for the future while accelerating the energy transition and progress towards net zero. The

exhibition served as an ideal platform for exploring promising opportunities arising from rapid global shifts, in addition to identifying proactive solutions to mitigate the effects of climate change and ensuring stakeholders remain at the forefront of sustainability.

The spotlight at WETEX 2025 was on the latest artificial intelligence (AI) innovations that support green mobility, digital transformation, and clean energy adoption. With enhanced interactive platforms, WETEX aimed to promote awareness and international cooperation in areas such as green finance, smart and sustainable cities, and health and safety, thereby laying the foundation for inclusive and sustainable development.

Saeed Mohammed Al Tayer, MD and CEO of Dubai Electricity and Water Authority (DEWA) and Founder and Chairman of WETEX, said the exhibition consolidates the UAE's position as a reliable partner in efforts to shape a more sustainable and resilient future for all, "by pushing our thriving economy towards new horizons, empowering national and local companies, and strengthening our nation's economic, trade and investment partnerships with countries around the world."

Al Tayer added, "The exhibition supports the goals of the UAE's Net Zero 2050 Strategy, the Dubai Clean Energy Strategy 2050 and the Dubai Net Zero Carbon Emissions Strategy 2050, and translates national and global climate ambitions into a tangible reality. In light of the rapid global changes and the urgent need for immediate and innovative solutions to reduce greenhouse gas emissions, the exhibition becomes increasingly important annually as a global platform for exchanging achievements in this field, mobilising efforts to conserve resources, decarbonise and accelerate digital transformation."

Suhail bin Mohammed Al Mazrouei, Minister of

The 27th WETEX showcased innovations, technologies, and projects from more than 3,100 companies from 65 countries



Energy and Infrastructure, stated that WETEX embodies the UAE's commitment to enhancing investment in innovative solutions and clean technologies – including AI, green mobility and digital transformation – to accelerate the shift towards a sustainable green economy. He highlighted its role as a key milestone in supporting the UAE's sustainability and climate neutrality goals.

Al Mazrouei added: "The UAE has established itself as a global model in climate action through pioneering national strategies and advanced projects in renewable energy and smart cities. WETEX drives these efforts by strengthening international partnerships, facilitating



knowledge exchange and supporting initiatives that balance economic growth with environmental protection.”

Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology, said, “WETEX reflects the UAE’s holistic vision of aligning industrial growth with sustainability objectives, while catalysing investment in clean technologies and cutting-edge solutions that form the backbone of a low-carbon economy and the foundation for building smart, future-ready cities. The UAE is accelerating the integration of innovation across vital sectors, reaffirming its global leadership in renewable and low carbon energy, artificial intelligence (AI), and sustainable manufacturing.”

Dr. Al Jaber added, “WETEX amplifies these efforts by fostering dialogue, collaboration, and joint action among international partners, advancing cooperation and technological progress in support of global sustainable development. We remain committed to strengthening a competitive, sustainable, and resilient industrial ecosystem, and to reinforcing the UAE’s role at the forefront of smart urban and industrial development.”

Dr. Amna bint Abdullah Al Dahak, Minister of Climate Change and Environment, said, “In the face of climate change’s intricate challenges,

WETEX offers a powerful platform to present the groundbreaking technologies and cohesive planning methods that strengthen our water and energy resilience. From leading the way in reverse-osmosis desalination and sophisticated agri-tech solutions, to our bold objectives for repurposing wastewater and extensive solar installations, the UAE illustrates how sustainable practices propel economic advancement. Our dedication to the environment and climate action underpins our national frameworks, which secure an equilibrium between economic expansion, environmental stewardship and prosperity.”

Dr. Thani bin Ahmed Al Zeyoudi, Minister of State for Foreign Trade, said, “This exhibition is not just a showcase of cutting-edge technologies - it is a vital forum for addressing the pressing challenges of our time. The focus on artificial intelligence and sustainable practices underscores our dedication to developing future-oriented sectors, reinforcing the UAE’s role as a beacon of progress in the global pursuit of a sustainable future.”

The final day of WETEX featured 37 seminars that brought together experts and specialists from leading local and international companies. These seminars addressed a wide spectrum of vital topics, including ethical planning for electric vehicle infrastructure, disruptive technologies in energy, water and environment, sustainable

WETEX remains a premier platform for forging partnerships, promoting innovation and strengthening Dubai's role as a global hub for sustainability and the green economy



cables, digitalisation in accelerating energy transition, and extended reality applications in power transmission. Other sessions examined renewable energy pathways, industrial efficiency, decarbonisation strategies, and governance frameworks to reduce supply chain emissions and advance net-zero goals.

Experts also explored smart quality management systems, energy-efficient wastewater treatment, and new technologies to expand the adoption of advanced water solutions. Innovation-focused discussions highlighted artificial intelligence applications in IT services and safety, predictive maintenance of solar panels, next-generation global networks, robotic cafés, and novel recycling practices. The health and safety

programme shed light on DEWA's wellness initiatives, the evolving role of occupational safety specialists, and AI-driven solutions for construction site safety and workforce empowerment.

The exhibition's closing day also featured interactive workshops and networking sessions aimed at strengthening collaboration between DEWA and its suppliers, with a focus on enhancing partnerships, promoting sustainability and advancing the circular economy.

UAE hosts 'Nature Guardians Majlis' at UNGA 80, fostering global dialogue on biodiversity conservation

The inaugural Majlis, co-hosted by MOCCA and IUCN, convened ministers and experts in New York to bridge ambition and delivery in tackling climate change and biodiversity loss

The Ministry of Climate Change and Environment (MOCCA), in cooperation with the International Union for Conservation of Nature (IUCN), hosted the inaugural Nature Guardians Majlis in New York on the sidelines of the 80th edition of the United Nations General Assembly (UNGA).

Introducing the Emirati majlis model to a global audience and to the heart of multilateral diplomacy, the Nature Guardians Majlis featured a high-level gathering designed to foster open dialogue and collaborative action in the lead-up to the IUCN World Conservation Congress 2025 in Abu Dhabi.

The Majlis convened a high-level assembly of decision makers and experts, including ministers, ambassadors, and nature envoys from various countries participating in UNGA 80. They were joined by representatives from prominent international organisations, notably IUCN, to



deliberate on strategies for tackling the pressing crises of climate change and biodiversity loss.

Dr. Amna bint Abdullah Al Dahak, Minister of Climate Change and Environment, opened the session emphasising the UAE's unwavering commitment to multilateralism and environmental stewardship.

Underscoring the importance of biodiversity and building collective momentum to preserve it, Dr. Amna Al Dahak stated, "The UAE, with its deep-rooted legacy of environmental stewardship and innovative action, stands as a leading force in global conservation. The IUCN World Conservation Congress in Abu Dhabi in October will accelerate transformative conservation efforts and foster the crucial collaboration needed to address the urgent crisis of biodiversity loss through immediate unity, multilateral action, and robust partnerships."

She underscored the importance of bridging the gap between ambition and delivery in conservation, adding, "We believe that by uniting our efforts, we can drive tangible commitments and initiatives for conservation, ensuring a sustainable future for both nature and humanity."

IUCN President Razan Al Mubarak said, "The IUCN World Conservation Congress 2025 in Abu Dhabi will be a moment to elevate ambition and turn collaboration into action. Together we can deliver bold, transformative solutions that address the interconnected needs of nature and people, ensuring our efforts are inclusive, equitable, and grounded in science. More than ever, we must act as one community to secure a thriving future for all."

The Majlis featured three preselected interventions by a representative of Indigenous People, a youth leader, and a UN Representative, followed by an open Majlis round where all attendees had a chance to speak. The discussions

Discussions emphasized multilateral action and transformative solutions, directly informing the narrative and priorities for the 2025 IUCN World Conservation Congress

resonated with powerful calls for transformative action, showcasing examples of leadership and innovation that serve as blueprints for a nature-positive future.

The insights, connections, and commitments formed at the Nature Guardians Majlis in New York will directly inform the narrative and priorities for the IUCN World Conservation Congress 2025 in Abu Dhabi, aiming to drive significant commitments and tangible impact.

The partnerships and frameworks established are expected to be instrumental in advancing a nature-positive agenda at the climate-biodiversity nexus, emphasising resilience, equity, and innovation for years to come.



Hamdan bin Mohammed inaugurates Dubai World Self- Driving Transport Exhibition

Event hosted 55 leading exhibitors showcasing innovations in self-driving vehicles and buses, robotics, AI, and smart and sustainable mobility



His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, Deputy Prime Minister, Minister of Defence, and Chairman of The Executive Council of Dubai, in the presence of His Highness Sheikh Ahmed bin Mohammed bin Rashid Al Maktoum, Second Deputy Ruler of Dubai, inaugurated the Dubai World Self-Driving Transport Exhibition, organised by the Roads and Transport Authority.

Speaking on the occasion, HH Sheikh Hamdan bin Mohammed said: “Dubai continues to strengthen its status as a global hub for innovation and future-driven technologies. Guided by the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, we are working to make Dubai the world’s most future-ready city, the best place to live, and the fastest in adopting innovations that enhance quality of life.”

“The Self-Driving Transport Strategy is a key part of the Dubai Economic Agenda D33, which seeks to double the size of the emirate’s economy and consolidate its global leadership across sectors. We have adopted an integrated approach that prioritises research and development, attracts investment, and embraces cutting-edge technologies to ensure Dubai remains at the forefront of global transformations, especially in the digital economy and emerging technology sectors such as artificial intelligence.”

“Our goal is to present the world with a model for autonomous mobility, reinforcing Dubai’s status as a pioneer in sustainability and a living laboratory for the future.”

The exhibition hosted 55 exhibitors representing leading companies showcasing innovations in self-driving vehicles and buses, robotics and artificial intelligence technologies, as well as smart and sustainable mobility. TENSOR unveiled its self-driving vehicles for the first time in the region, while the Chinese company XPENG

Dubai Self-Driving Transport Strategy 2025–2040 aims to make 25% of trips in Dubai autonomous by 2030 and 36% by 2040



showcased its autonomous aircraft. The exhibition also featured vehicles from five consortia and companies participating in the Dubai World Challenge for Self-Driving Transport.

The exhibition was held as part of the Dubai World Congress and Challenge for Self-Driving Transport, with the participation of more than 3,000 attendees from across the globe and over 80 speakers, including senior officials, researchers, experts, and developers of advanced self-driving technologies.



Their Highnesses were briefed on the latest updates regarding the launch of the self-driving taxi service, where three leading global companies — Baidu Apollo Go, WeRide, and Pony.ai — have begun pilot operations of more than 60 self-driving vehicles in Jumeirah and Umm Suqeim. The service is scheduled to be launched commercially without a driver in 2026.

Their Highnesses listened to a briefing from His Excellency Mattar Al Tayer, Director General, Chairman of the Board of Executive Directors of Dubai's Roads and Transport Authority, on the unified visual identity to be applied to all self-driving vehicles operated by companies in Dubai under the name, 'Dubai Future Ride'.

These vehicles will offer passengers an exceptional experience through interactive entertainment screens powered by AI.

They were also briefed on the Dubai Self-Driving Transport Strategy 2025-2040, which aims to raise the proportion of trips made via autonomous transport from the current 20.4% to 25% by 2030 and 36% by 2040.

Key lessons on AI

In a keynote address at the fourth Dubai World Congress for Self-Driving Transport, Sol Rashidi, recognised as the world's first Chief AI Officer and a former senior executive at several leading technology companies in North America, highlighted key lessons learned from the use of artificial intelligence and its applications across different sectors. She also presented a framework outlining practical cases for deploying AI technologies and integrating them effectively into daily life to enhance services and improve quality of life.

In addition, she discussed the readiness of governments and cities to adopt such future-oriented technologies through strengthening digital infrastructure, updating legislation, and building human capabilities to engage with this technological revolution.

Rashidi emphasised the importance of striking a balance between accelerating innovation and ensuring the responsible and ethical use of these technologies to guarantee sustainable benefits and strengthen public trust. She noted that the

The Dubai World Challenge for Self-Driving Transport offers prizes totalling USD 3 million



Dubai World Congress for Self-Driving Transport provided an opportunity to gain specialised insights into the future of artificial intelligence, along with the challenges and opportunities it presents to governments, the private sector, and individuals.

A film on the Dubai World Challenge for Self-Driving Transport was also screened during the opening ceremony. The Challenge offers prizes totalling USD 3 million, of which USD 1.2 million is allocated to honour the first and second place winners, while US\$1.8 million is dedicated to supporting the operation of the Dubai Self-Driving Transport Zone.

The fourth cycle of the Challenge drew an impressive response, with participation requests exceeding the target by 170 percent. Five local and international consortia and companies qualified for the final stage.

The film highlighted field tests carried out across

four Chinese cities: Guangzhou, Xi'an, Guiyang, and Suzhou. These tests were categorised into three main groups based on the operating environment. They included five stationary tests with limited vehicle movement, 17 tests for land vehicles operating within mixed road traffic on public roads, and six tests for marine vehicles. Additional controlled environment trials were also conducted, comprising three tests for each land vehicle and seven for the marine vehicle.





29th IRENA Council advances global dialogue on energy security and supply chains

The 29th meeting of the International Renewable Energy Agency (IRENA) Council opened on September 11 in Abu Dhabi. Over the course of two days, more than 400 government officials from IRENA's Members, comprising 169 countries and the European Union, gathered to provide strategic guidance on the Agency's work programme and to address pressing issues shaping today's global energy transition.

A key highlight for the 29th Council was a programmatic discussion on energy security, exploring pathways to diversify supply chains, support next-generation technologies, and strengthen regional manufacturing capabilities.

The session featured IRENA's latest analysis on the evolving geopolitical and economic landscape of renewable energy supply chains, with a specific focus on the solar PV sector.

"Diverse, resilient and transparent supply chains are essential to achieve the tripling renewable power capacity target by 2030," said IRENA Director-General Francesco La Camera. "While the shift toward renewables is a key enabler for

energy security and independence, global supply chains remain concentrated in a few nations. Efforts to diversify them, however, must contend with complex economic realities, making the 29th IRENA Council an important opportunity to advance this discussion collectively."

IRENA Members also discussed advancing investments in sustainable aviation fuels (SAF), recognised as central to decarbonising long-haul aviation by IRENA. The Agency presented its latest work on supporting SAF projects and mobilising investments through its financing platforms, helping countries and developers move projects from concept to bankable ventures.

The 29th Council closed by setting out priorities for IRENA's future work, key institutional matters, and preparations for the 30th session.



EMSTEEL launches 'TrueGreen', setting a new global standard for sustainable steel

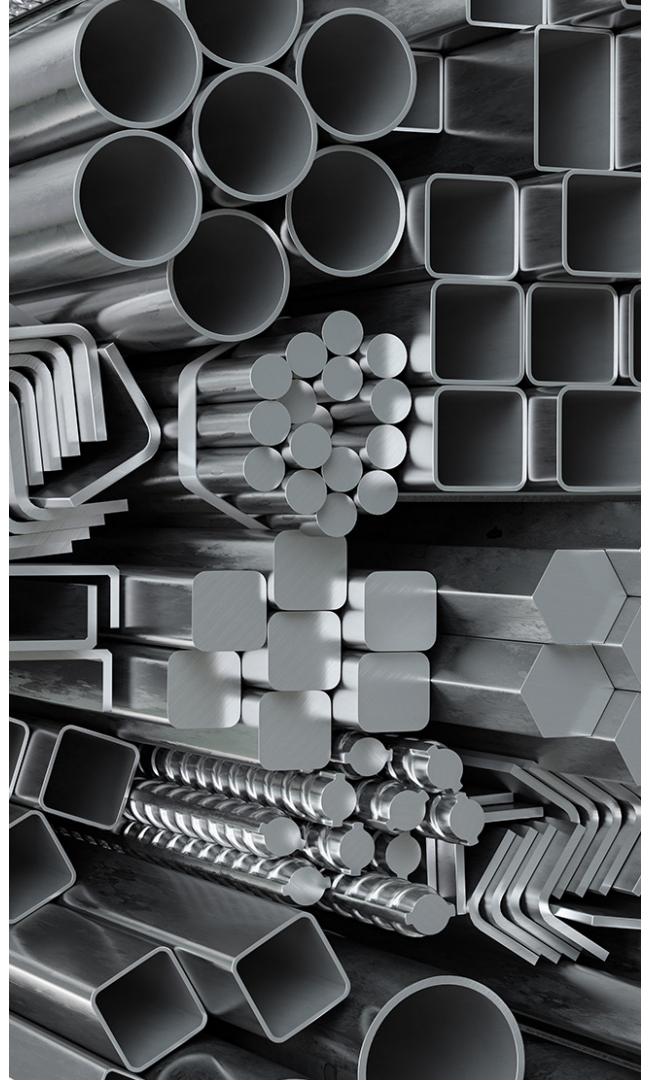
EMSTEEL Group, one of the region's largest publicly traded steel and building materials manufacturers, has launched TrueGreen™, a strategic sustainability identity that unifies its decades of decarbonisation initiatives.

This new identity establishes industry standards for transparency and accountability in sustainable steel production.

The launch follows a series of recent milestones, including becoming the first company in MENA to earn ResponsibleSteel™ certification and launching the world's first pilot of electric process gas heaters in the steelmaking industry.

These achievements build upon a long-standing history at the forefront of industrial decarbonisation, from its pioneering CCUS Project with ADNOC's Al Reyadah, sourcing clean energy, and launching the region's first hydrogen-based steelmaking pilot with Masdar. These collective efforts have already delivered tangible outcomes, enabling Aldar to use EMSTEEL's low-carbon rebar in the construction of Abu Dhabi's first net-zero carbon mosque on Yas Island, a regional milestone that reaffirms the UAE's leadership in innovation and sustainability.

Through TrueGreen™, EMSTEEL equips developers, contractors and financiers with internationally recognised sustainability credentials to meet emissions targets, strengthen bids in sustainability-driven tenders and comply with international regulations such as the European Union Carbon Border Adjustment Mechanism (CBAM).



All TrueGreen™ steel products are accompanied by independently verified EPDs and supported by advanced digital monitoring systems that provide batch-specific carbon data, ensuring precision and accountability.

TrueGreen™ aligns directly with the UAE's Net Zero 2050 strategy and supports NDC 3.0, which calls for a 79 per cent reduction in built environment emissions by 2035. With an emission intensity of just 0.67 tonnes of CO₂ per tonne of steel, already significantly below global averages, EMSTEEL is positioning the UAE among the world's pioneers of industrial decarbonisation.

EMSTEEL's leadership has been recognised globally, including being named a Steel Sustainability Champion, ranked among the top five steelmakers worldwide for decarbonization.



Mohamed bin Zayed Water Initiative, World Bank convene high-level roundtable on water reuse

Four billion people face water scarcity globally, while 80 per cent of wastewater in developing countries is discharged untreated into the environment, according to the UN

The Mohamed bin Zayed Water Initiative and the World Bank's 2030 Water Resources Group convened a high-level roundtable on water reuse on the sidelines of the 80th United Nations General Assembly (UNGA).

The session brought together over 45 public sector, private sector, philanthropic and youth leaders to explore pathways for scaling water reuse as a critical solution to global water scarcity.

Titled "What if Water had a Second Chance? Scaling Reuse to Secure the World's Future Water", the roundtable underscored the urgency of action in the face of rapidly growing demand for freshwater. According to the UN, four billion people already face water scarcity globally, while 80 per cent of wastewater in developing countries is discharged untreated into the environment.

By 2050, 70 per cent of the global population will live in cities, with more than 280 large urban centers expected to face acute water risks. Water reuse, participants stressed, is not only a

viable sustainability solution but can also be a powerful driver of economic resilience, agricultural productivity, and industrial growth.

The session opened with keynote remarks from Dr. Amna bint Abdullah Al Dahak, UAE's Minister of Climate Change and Environment, and Axel van Trotsenburg, the World Bank's Senior Managing Director. The session then highlighted the World Bank Group's newly launched flagship report, 'Scaling Water Reuse,' which calls for bold action to scale water reuse as a critical solution to growing water scarcity. It set the stage for substantive discussions on the policy reforms, technological innovations, and financing models necessary to accelerate adoption. Participants explored actionable pathways to scale reuse in municipal and industrial systems, and discussed

By 2050, more than 280 large urban centers globally are expected to face acute water risks

the importance of global multistakeholder platforms and innovative funding mechanisms, including philanthropy, prizes, and catalytic investment, to drive progress.

During the session, Dr. Amna Al Dahak said, "Water scarcity is one of the most urgent and defining challenges of our time, deeply intertwined with climate, health, and economic stability. The UAE believes that meaningful progress requires global collaboration, backed by innovation and inclusive platforms for dialogue such as this roundtable."

She added: "As we look toward the 2026 UN Water Conference, we must raise ambition and deliver tangible, lasting impact for communities around the globe. Water reuse presents a critical opportunity, not just to help address water scarcity, but to redefine how the world values this precious resource. We are proud to contribute to this effort alongside international partners committed to sustainable development and resilience."

Axel van Trotsenburg said, "Across many regions, water scarcity is no longer a distant risk—it is already constraining human potential and economic growth. Water reuse can change that, offering a practical and scalable solution to secure reliable water supplies while sustaining economic progress. But success depends on strategic partnerships. We need governments, the private sector, and development partners





pulling together with a shared commitment to expand water access, create jobs, and drive inclusive, sustainable growth.”

Commenting on the event, Ayesha Al Ateeqi, Executive Director of The Mohamed bin Zayed Water Initiative, said: “Water reuse represents one of the most promising opportunities to address the urgent challenge of global water scarcity. By reimagining used water as a valuable resource rather than a waste product, we can unlock solutions that not only secure water supplies but also drive innovation, resilience, and economic growth. The roundtable marked an important milestone on the road to the 2026 UN Water Conference in Abu Dhabi and a further step towards creating a global movement that can help transform the way the world manages and values water.”

In a wide-ranging agenda, participants in the roundtable also examined approaches to bolstering national water security through reuse,

tackling the risks of “Day Zero” in cities, and mobilising the private sector to develop bankable reuse projects.



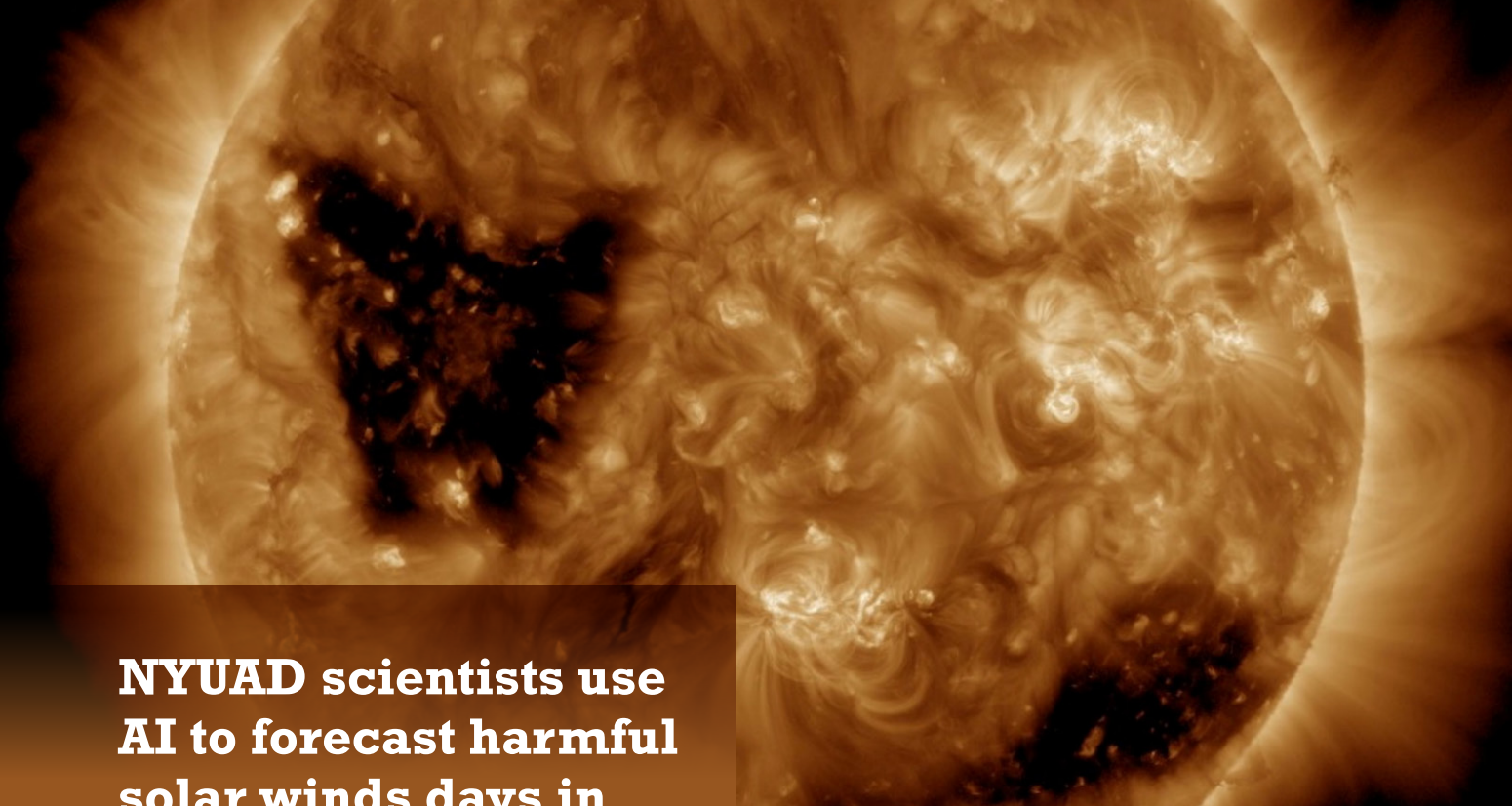
Scientists develop cleaner coal processing technology for high-tech carbon materials

Scientists from the Krasnoyarsk Science Centre of the Russian Academy of Sciences, working with colleagues from Mongolia, and China, have developed a coal processing method that offers a cleaner, more efficient alternative to traditional use.

The technology converts up to 97.5% of coal into polyaromatic hydrocarbons and resins – valuable raw materials for high-tech carbon products – while generating minimal waste and much lower levels of the carcinogen benzo[a]pyrene.

The international research team believes this technology could provide a sustainable option for the coal sector, due to its lower environmental impact and reduced content of benzo[a]pyrene in the processed material. Waste is kept to a minimum – no more than 8 per cent regardless of the solvent used – helping to cut down on pollutants released into the environment. The materials produced can be used in making carbon fibre and other high-tech products.

The process involves dissolving coal in special liquid. When heated to around 380°C, the coal breaks down and turns into a concentrated mixture of polyaromatic hydrocarbons. Importantly, the choice of solvent influences the quality of the final product, particularly its aromatic structure, which determines properties like heat resistance and chemical stability – essential for carbon composites.



NYUAD scientists use AI to forecast harmful solar winds days in advance

UAE NEWS

Scientists at NYU Abu Dhabi (NYUAD) have developed an artificial intelligence (AI) model that can forecast solar wind speeds up to four days in advance, significantly more accurately than current methods. The study is published in *The Astrophysical Journal Supplement Series*.

Solar wind is a continuous stream of charged particles released by the Sun. When these particles speed up, they can cause “space weather” events that disrupt Earth’s atmosphere and drag satellites out of orbit, damage their electronics, and interfere with power grids. In 2022, a strong solar wind event caused SpaceX to lose 40 Starlink satellites, showing the urgent need for better forecasting.

The NYUAD team, led by Postdoctoral Associate Dattaraj Dhuri and Co-Principal Investigator at the Center for Space Science (CASS) Shravan Hanasoge, trained their AI model using high-resolution ultraviolet (UV) images from NASA’s

Solar Dynamics Observatory, combined with historical records of solar wind. Instead of analyzing text, like today’s popular AI language models, the system analyzes images of the Sun to identify patterns linked to solar wind changes. The result is a 45 percent improvement in forecast accuracy compared to current operational models, and a 20 percent improvement over previous AI-based approaches.

“This is a major step in protecting the satellites, navigation systems, and power infrastructure,” said Dhuri, lead author of the study. “By combining advanced AI with solar observations, we can give early warnings to safeguard critical technology on Earth and in space.”

The breakthrough demonstrates how AI can solve one of space science’s toughest challenges: predicting the solar wind. Reliable forecasts help scientists and engineers to better prepare for space weather events, strengthening resilience against disruptions to critical infrastructure.

شراكة استراتيجية بين وزارة التغير المناخي والبيئة ومجموعة بيئة بشأن منصة "Tahweel"
Strategic partnership between MOCCAЕ and BEEAH regarding 'Tahweel'



28

CIRCULAR ECONOMY

MOCCAЕ launches 'Tahweel', UAE's first waste exchange platform

Developed with BEEAH, Tahweel is a transformational initiative reinforcing waste management, unlocking economic value, and aligning with the 'We the UAE 2031' vision

In a strategic move to accelerate the transition towards a circular economy, the Ministry of Climate Change and Environment (MOCCAЕ) has officially launched Tahweel, the UAE's first fully integrated national digital marketplace for recyclable materials.

Developed in collaboration with BEEAH, Tahweel is a transformational initiative for 2024-2025 by the federal government. It is designed to boost the UAE's global competitiveness by reinforcing circular economy systems and integrated waste management. The platform aims to unlock new economic value from resources and advance sustainable development goals, aligning with the UAE Government's 'We the UAE 2031' vision to establish the nation as a global hub for the new economy.

The launch was announced during a special ceremony at BEEAH's headquarters in Sharjah, coinciding with the fourth meeting of the UAE Council for Environmental and Municipal Work. The event featured the signing of a strategic partnership agreement between MOCCAЕ and

BEEAH, attended by Dr. Amna bint Abdullah Al Dahak, Minister of Climate Change and Environment, and Khaled Al Huraimel, Group CEO and Vice Chairman of BEEAH Group, and senior officials from both organisations.

Dr. Amna Al Dahak stated, “Tahweel reflects our leadership’s vision to transform environmental challenges into promising economic and developmental opportunities. We are moving waste management beyond its traditional concept into a new economic domain – one where resources create added value and drive innovative, sustainable business models aligned with our national ambitions and the ‘We the UAE 2031’ vision.”

She added, “As one of the UAE’s transformational projects, the Tahweel platform is a comprehensive ecosystem that enhances transparency and efficiency in the recyclable materials market. It

The platform offers transparent trading of diverse recyclables, connecting businesses directly to boost efficiency, reduce landfill reliance, and drive sustainable business models

enables small, medium, and large enterprises to engage directly in the circular economy, creating a regulated national marketplace that encourages higher recycling rates and reduces reliance on landfills, thereby directly contributing to our environmental and climate goals.”

Khaled Al Huraimel commented, “Tahweel marks a significant leap towards a future-ready circular economy in the UAE. BEEAH’s subsidiary re.life, specialising in trading and recycling solutions, has already achieved rapid growth locally and expanded internationally in recent years. We believe Tahweel will create new value for the circular economy on a broad scale, enhanced by advanced technologies and re.life’s expertise.

Under the MoU, MOCCA and BEEAH will coordinate with local waste management authorities to streamline recyclable material trading. As a virtual marketplace, Tahweel facilitates fair and transparent trading across a wide range of recyclables, including metals, plastics, paper, wood, e-waste, glass, and rubber. Buyers and sellers can choose from flexible trading options such as timed auctions, partial auctions, instant sales, and instant purchases – all ensuring fair pricing and equal opportunities for every participant.

The platform directly connects businesses and institutions, eliminating intermediaries and boosting transaction efficiency.



UAE completes national data collection phase for first Food Loss and Waste Baseline Study

This unprecedented national effort involved household measurements and business data across the food supply chain, ensuring statistical credibility through FCSC and local statistics centers

ne'ma – the National Food Loss and Waste Initiative – in collaboration with the Federal Competitiveness and Statistics Centre (FCSC) and local statistics centres across the UAE, has completed the data collection phase of the UAE's first-ever National Food Loss and Waste Baseline Study.

From September 8th to 21st, field teams nationwide collected primary data through household-level food waste measurement, while businesses registered in the Baseline Study entered their information directly via the ne'ma data hub. This two-week national effort marks the first time direct waste composition analysis at this scale has been conducted in the UAE, with participation from multiple sectors across the entire food supply chain.

The success of the on-the-ground data collection phase across all Emirates was driven by close coordination between FCSC and local statistics



centres. Their involvement ensures the study's statistical credibility and national representation by validating the national sample size using scientifically sound methodologies, complying with UAE survey protocols (including quality control and ethical standards), and consolidating local data into a unified federal dataset.

This dataset will form the basis of the UAE's national food loss and waste indices. As the lead federal authority on national statistics, FCSC also guides UAE reporting on the UN SDG agenda, aligning with international frameworks from FAO and UNEP.

Khuloud Hassan Al Nuwais, Chief Sustainability Officer at Emirates Foundation and Secretary-General of the ne'ma Committee, stated, "This nationwide fieldwork is an essential step in building a data-driven foundation to measure, monitor, and execute targeted strategies based on evidence to reduce food loss and waste across the UAE."

She added that the baseline study is a collective effort to assess current levels of food loss and waste through a unified approach, driven by key ne'ma stakeholders from the government, private sector, and the public. Through collaboration with FCSC and local statistics partners, ne'ma ensures the study is scientifically robust and internationally aligned.

The UAE's Food Loss and Waste Baseline Study is designed to capture both the quantitative scale and qualitative causes of food loss and waste – from farms to households. It covers all stages of the value chain: from production and import to processing, distribution, retail, and consumption.

The data gathered will feed into the development of the UAE's official food loss and food waste indices, identify geographic and demographic patterns in waste generation, support evidence-based solutions, awareness campaigns, and

The study will establish official food loss and waste indices, identify patterns, and inform targeted solutions to achieve the UAE's 2030 reduction targets, with results due in early 2026

systemic interventions. It will also build capacity for regular national reporting, with the study set to repeat every three years.

This first-ever National Food Loss and Waste Baseline Study is the result of a coordinated national effort, bringing together over 25 federal and local government entities, including strategic partners like the Ministry of Climate Change and Environment, FCSC, Abu Dhabi Agriculture and Food Safety Authority, Tadweer Group, and Dubai Municipality, among others.

The final results of the baseline study will be released in H1 2026, setting the stage for new initiatives, guidelines, partnerships, and public engagement strategies that support the UAE's food loss and waste 2030 reduction targets.



WiSER opens 2026 applications to advance global women leaders in sustainability

Year-long program targets women aged 25–35 in sustainability, STEM, and energy sectors

Women in Sustainability, Environment, and Renewable Energy (WiSER) – a global platform co-founded in 2015 by Masdar and the Zayed Sustainability Prize – has officially opened applications for its 2026 WiSER Pioneers Programme, dedicated to empowering the next generation of female sustainability leaders.

Now entering its ninth cohort, the year-long, competitive programme is dedicated to empowering emerging female leaders in sustainability.

Since its launch in 2018, the Pioneers Programme has provided 535+ hours of workshops, 515+ hours of one-to-one mentoring and welcomed more than 150 Pioneers from over 30 nationalities, equipping them with the knowledge, networks, and leadership skills to shape the global energy transformation and deliver meaningful impact in their communities.

Open to women aged 25 to 35 who are entrepreneurs or possess at least two years of

professional experience in sustainability, environment, energy, or STEM-related fields, the programme offers tailored workshops, global networking opportunities, and one-to-one mentorship from senior industry leaders.

Pioneers also participate in the annual WiSER Cares initiative, engaging directly with local communities to explore sustainable solutions on the ground.

Dr. Lamya Fawwaz, Executive Director for Brand & Strategic Initiatives, Masdar, and Programme Director of WiSER, said, “WiSER was founded on the belief that when women lead, societies thrive. Our Pioneers are a testament to this, driving innovation, influencing policy, and launching solutions. As we open applications for the 2026 cohort, we are continuing our mission in supporting a worldwide movement of women whose leadership is essential to shaping the

Since 2018, more than 150 participants from 30+ countries have received over 1,000 hours of mentoring and training

global sustainability agenda.”

Through WiSER, women have gone on to launch businesses, lead projects and influence policy in their countries, underscoring the platform’s role as one of the world’s most impactful initiatives for developing female leaders in sustainability. Alumni of the programme are now making their mark across clean energy, technology, policy, and community development.

The WiSER Pioneers Programme combines career development with real-world experience. Participants take part in bespoke training workshops covering clean energy, sustainability policy, leadership and innovation. They also engage in the annual WiSER Cares initiative, a cultural exchange and active learning programme that immerses Pioneers in practical sustainability solutions.

The 2025 WiSER Cares trip brought Pioneers to Indonesia, where they gained on-the-ground insight into Indonesia’s energy transformation through site visits to geothermal plants, floating solar projects and policy workshops on climate finance.

WiSER Pioneers also gain international exposure at global events such as Abu Dhabi Sustainability Week (ADSW) and United Nations Climate Change Conference (COP), where they actively contribute to discussions shaping the future of the energy transformation.



Sharjah Safari welcomes its fifth African Savannah elephant, first ring-tailed lemur twins

Sharjah Safari, the largest safari outside Africa and one of the flagship projects of the Environment and Protected Areas Authority (EPAA) in Sharjah, has announced the birth of the park's fifth African Savannah elephant calf, the world's largest land mammal, and the first-ever ring-tailed lemur twins, a species native to Madagascar and listed globally as endangered.

The arrival of the new elephant calf marks a significant step forward in Sharjah Safari's breeding programs. The African Savannah elephant is not only a symbol of the African wilderness but also a keystone species whose survival is vital to ecosystem balance.

Veterinary teams and nutrition experts at Sharjah Safari closely monitored the mother and calf from the moment of birth, ensuring their safety and health in line with the highest global standards of animal care.

Equally exceptional is the birth of the first ring-tailed lemur twins, known for their strong social bonds and distinctive striped tails used for balance and communication.

This rare event represents a scientific

contribution that goes beyond Sharjah Safari's breeding programs, reinforcing international efforts to protect endangered species and ensuring their survival for future generations.

Adding further to its success, Sharjah Safari recorded 184 new births of diverse birds and mammals in the second quarter of 2025. This achievement highlights the effectiveness of carefully managed breeding and care programs, supported by safe, natural habitats designed to replicate African ecosystems.

With these additions, the Safari now hosts 151 species, including giraffes, lions, elephants, rhinos, and rare birds, underscoring its role as a thriving sanctuary for biodiversity.



Flood warning innovation earns 2025 Stockholm Junior Water Prize



Niklas Ruf and Jana Spiller from Germany received the prestigious Stockholm Junior Water Prize 2025 from H.R.H. Crown Princess Victoria of Sweden for their work on developing a scalable flood warning system for small streams.

Flooding is an increasing concern worldwide, with more frequent and larger floods affecting communities. Yet on smaller streams, real-time data is often lacking, limiting the possibility of early warnings. Over four years of work, Ruf and Spiller created a network of sensors linked to an app that provides live alerts to both experts and the public. Their system is already being scaled up across their region in consultation with multiple partners.

The Jury noted that the project “addresses a critical challenge we are seeing around the globe: more frequent and bigger floods. Yet on smaller streams, we often lack the data needed to provide real-time warnings. The students have built a functioning system and an app that notifies experts and the public, and are working to scale this system across their region.”

Diploma of Excellence – Türkiye

The Diploma of Excellence was awarded to Kagan

Mehmet Ozkok from Türkiye for pioneering work that combines AI and water efficiency. By training AI on the sound of leaking water, Ozkok built and deployed two prototypes to detect leaks in public spaces. Tested under real conditions, the prototypes demonstrated significant water savings and are now being developed further in collaboration with local government for possible city-wide implementation.

People’s Choice Award – United Kingdom

The People’s Choice Award, voted on by the global public, went to Divyasri Kothapalli from the United Kingdom for her project, *Sun-based water distillation system*.

This research project presents the development of a low-cost solar water distillation system designed to improve access to clean drinking water in off-grid and rural communities.

Using a Fresnel lens to focus sunlight onto a metal boiling pot, the resulting steam passes through food-grade silicone tubing and condenses into clean water. The system operates without electricity, avoiding additional carbon emissions.

21 global teams advance to the next stage of the Al Miyah Challenge for Agriculture with pioneering water-saving innovations

The Mohamed bin Zayed Water Initiative has announced the qualifying teams advancing to the next stage of the Al Miyah Challenge for Agriculture, the first in a series of competitions launched under its Al Miyah Challenge programme.

Selected from a competitive pool of hundreds of international applicants spanning 54 countries, the 21 qualifying teams have proposed promising innovations aimed at reducing water consumption in agriculture while maintaining or increasing crop yields, a critical priority for water-scarce regions.

The qualifying teams form a truly global and diverse cohort, representing 13 countries across the Middle East, Africa, Asia, Europe, and the Americas. They include startups, established enterprises and research groups, all dedicated



to addressing water-related challenges in agriculture. Their approaches span the innovation spectrum, from precision irrigation, greenhouse automation, and AI-driven analytics to biodegradable water-retention materials, microbial enhancers, atmospheric water generation, wastewater reuse, plant biosensors, and water storage infrastructure. Together, these teams' innovations reflect ingenuity and a commitment to producing more with less water.

This announcement marks the first major milestone of the Challenge, following the registration deadline announced on 30 June 2025. The qualifying teams will now advance to the next stage: pitching their proposed solutions to an esteemed panel of judges starting this month.

Following the pitches and site visits in the UAE and internationally, a select group of finalists will be invited to move forward with piloting their technologies for indoor and outdoor farming solutions in the UAE from November 2025.

The next stage of the competition will involve the announcement of finalists in January 2026. The winning team and runners-up will be announced in December 2026. The competition is designed to support real-world testing of novel approaches, including smart irrigation, precision agriculture, greenhouse cooling, and circular water use systems.

Launched in partnership with the Abu Dhabi Agriculture and Food Safety Authority (ADAFSA), ASPIRE, the innovation acceleration arm of Abu Dhabi's Advanced Technology Research Council (ATRC), and Silal Food and Technology, Al Miyah Challenge for Agriculture is offering a prize purse of AED 8 million. It seeks to identify solutions ready for field application in the UAE and with potential for scalability in other arid and water-scarce regions.

The breadth of participation from around the world underscores the importance of global and cross-sector collaboration to accelerate solutions at the intersection of water and agriculture. From entrepreneurs in emerging markets to young deep-tech companies and established agribusiness leaders, the Challenge has brought together a truly international and varied group of problem-solvers dedicated to driving forward scalable solutions to reduce and improve water usage in agriculture.

Ayesha Al Ateeqi, Executive Director of The Mohamed bin Zayed Water Initiative, said: "Water use in agriculture remains one of the greatest areas of opportunity to move the needle on global water scarcity. The ingenuity demonstrated by these teams reflects the kind of bold, scalable thinking that is essential to tackle this urgent challenge and will empower the agricultural sector. We look forward to seeing how these technologies perform and evolve through the Challenge process."



The Kia EV4: Infusing modern design and advanced technologies



Dynamic and sophisticated, the EV4 reflects Kia's 'Opposites United' design philosophy, with an advanced interior and distinctive silhouettes

The Kia EV4 is the brand's first all-electric hatchback, engineered on the dedicated Electric Global Modular Platform (E-GMP) to deliver class-leading performance and efficiency. Produced in Žilina (Slovakia), the long-range version is powered by an 81.4-kW battery that charges from 10-80 per cent in 31 minutes and delivers up to 625 kms of range.

Customers can opt for a 58.3-kWh standard battery, which charges from 10-80 per cent in just 29 minutes. Both battery options power a front-mounted 150-kW motor, allowing the EV4 to accelerate from 0-100 km/h in as little as 7.7 seconds and reach a top speed of 170 km/h. Finally, an ultra-low drag coefficient of 0.27 Cd maximises aerodynamic efficiency. With up to 435 litres of luggage space, a stable ride, and segment-leading range, the EV4 is versatile for both city and long-distance journeys.

The EV4 delivers stable handling, precise cornering, and a blend of safety and driving pleasure, and is specially tuned for European roads



The EV4 Hatchback is joined by the EV4 Fastback, produced at Kia's Gwangmyeong EVO Plant in Korea. This model features the same two batteries and motor as the hatchback, providing a maximum range of up to 633 kilometres. The Fastback also has a luggage capacity of 490 litres.

Both variants feature Vehicle-to-Load capability for powering external devices and Vehicle-to-Grid technology for energy sharing.

Two design approaches to electric mobility

The EV4 embodies Kia's 'Opposites United' design philosophy in two distinct ways. The EV4 hatchback showcases agility and sporty character

with its sloping rear glass, elongated proportions, and wide-set taillights. Its bold EV Tiger Face, vertical headlamps, and Star Map lighting signature give it a futuristic look. In contrast, the EV4 Fastback is sleek and refined, with a long-tail silhouette and minimalist rear design that emphasize elegance and aerodynamic efficiency.

Inside, the cabin combines comfort with high-tech usability: a free-floating interface, asymmetric two and three-spoke steering wheels, an intuitive mix of touchscreens and physical controls with haptic feedback, and customisable ambient lighting create a futuristic yet welcoming environment. The optimised seating architecture further enhances flexibility and convenience.



Maximum user-friendliness

European engineers at the Hyundai Motor Europe Technical Centre (HMETC) in Rüsselsheim, Germany, optimised the EV4's handling specifically for European roads. The result is a vehicle with stable, confident handling, precise cornering, and balanced weight distribution, delivering an athletic yet safe driving experience. Special focus was given to cornering performance and high-speed stability.

The EV4's carefully tuned chassis enhances both comfort and handling. A MacPherson strut front suspension and multi-link rear setup are complemented by third-generation frequency-responsive dampers and hydro-G suspension bushings, reducing noise, vibration, and harshness. The result is a model that embodies Kia's driving pleasure in everyday life.

Engineered for endurance

The EV4's fourth-generation battery system features advanced thermal management and optimised coolant distribution to maintain consistent performance under high stress and extreme conditions. Rigorous testing, including a 110,000-kilometre accelerated public road simulation and a 10,000-kilometre Nürburgring campaign run at up to 95 per cent of maximum output with repeated hyper charging sessions, demonstrated minimal wear and outstanding efficiency.

Safety as a core principle

The EV4 comes equipped with a comprehensive suite of advanced driver assistance systems. Using a network of cameras and radars, it monitors its surroundings to help detect potential hazards. Features include Forward Collision

Validated by extreme endurance testing, the EV4's fourth-generation battery guarantees long-term durability, efficiency, and reliability



Disney+, and *YouTube*. All those are available now in the EV4.

Drivers can efficiently locate charging stations, monitor their charging sessions, and plan routes with designated charging stops using the Kia App.

The integrated Google Places deliver reliable navigation data regarding parking availability, operational hours, pricing, and user reviews. Furthermore, the EV4 represents Kia's inaugural vehicle equipped with factory-installed online navigation, enabling customers to navigate with the latest map throughout the year.

The EV4 includes Digital Key 2, which allows users to unlock the vehicle with a compatible smartphone or smartwatch instead of conventional keys. The Kia Digital Key also supports remote access sharing with others, such as family members or friends.

Avoidance Assist, Blind-Spot Collision Avoidance Assist, and Lane Keeping Assist.

More advanced functions, such as Highway Driving Assist, Navigation-based Smart Cruise Control, and Remote Smart Parking Assist, further enhance convenience by making motorway cruising, city driving, and parking less demanding.

Ultimate connectivity

Key features that the Kia App unlocks in the EV4 include remote vehicle access, driving insights, and maintenance tools. In addition, Over-the-air (OTA) updates continually enhance functionality after purchase. For example, recent updates added a generative AI assistant and in-car entertainment streaming options, such as *Netflix*,



UAE to host IUCN World Conservation Congress 2025 from 9-15 October

The Congress will unite leaders, researchers, and civil society to launch impactful initiatives and accelerate solutions for nature, people, and sustainable development

Organised by the International Union for Conservation of Nature (IUCN) and co-hosted by UAE Ministry of Climate Change and Environment and Environment Agency - Abu Dhabi, the IUCN World Conservation Congress 2025 will take place in Abu Dhabi from 9-15 October 2025.

This Congress is expected to launch impactful international initiatives, attracting wide global attention for their pivotal role in shaping environmental action and advancing nature conservation worldwide. It will bring together government leaders, indigenous communities,

youth, researchers, civil society, and the private sector to catalyse a new era of transformative conservation, shaped by innovation, shared purpose, and bold environmental leadership.

The Congress presents a crucial opportunity to accelerate action and scale up collaborative solutions for the interconnected needs of nature, people, and sustainable development, especially as the 2030 deadlines for the Paris Agreement, Sustainable Development Goals, and the Kunming-Montreal Global Biodiversity Framework rapidly approach.

Among the significant announcements will be an



update to the IUCN Red List of Threatened Species, the world's most comprehensive source on global extinction risk. This will be complemented by a new edition of the IUCN European Red List, focusing on pollinators. The latest IUCN World Heritage Outlook, providing a global overview of natural World Heritage sites and their pressures, will also be unveiled.

IUCN will also announce the recipients of the

Key announcements include updates to the IUCN Red List, the World Heritage Outlook, and prestigious conservation awards



Coolidge Memorial Medal and the John C. Phillips Memorial Medal for outstanding conservation contributions, alongside the 2025 winners of the International Ranger Awards, honoring frontline protectors of vulnerable ecosystems. The host country for the next IUCN World Parks Congress will also be revealed, reflecting the scale of global ambition and the growing need to reconnect with nature and protect biodiversity.

A line-up of global changemakers and decision-

makers will headline the Congress. Confirmed speakers include Dr. Amna bint Abdullah Al Dahak, UAE Minister of Climate Change and Environment; Juan Carlos Navarro, Minister of Environment, Panama; Razan Al Mubarak, President of IUCN; and Dr. Grethel Aguilar, IUCN Director General. They will be joined by Dr. David Obura, Chair of IPBES; Andean activist Alessandra Yupanqui; and Eric Jing, Chairman and CEO of Ant Group. These leaders will offer insights and perspectives across key conservation themes, helping shape future policy and practice through collaboration and shared knowledge.

The IUCN Congress 2025 will also convene the Members' Assembly - its highest decision-making body - where member organisations will debate and vote on motions, which once approved, define the IUCN's policy agenda. A total of 200 draft motions have already been proposed, reflecting the breadth and urgency of conservation action needed to meet global biodiversity and sustainable development goals.



Young voices lead dialogue on food waste at ne'ma-led Youth Circle

The event was convened to mark the International Day of Awareness of Food Loss and Waste



ne'ma - the National Food Loss and Waste Initiative- convened a Youth Circle in Abu Dhabi on September 29, to mark the International Day of Awareness of Food Loss and Waste (IDAFLW), placing young voices at the heart of the national dialogue on food sustainability.

Held at the Region Concept Space in Miza, Abu Dhabi, the Youth Circle was organised in collaboration with The Climate Tribe, Emirates Foundation, and Abu Dhabi Youth Council.

The dialogue explored how traditional Emirati practices, such as preserving dates and sharing meals, as well as reusing ingredients, promote

resourcefulness and inspire scalable modern solutions to today's food waste challenges.

Khuloud Hasan Al Nuwais, Chief Sustainability Officer, Emirates Foundation and ne'ma Committee Secretary-General, opened the Circle with a keynote framing the implications of global and national food waste and the UAE's commitment to halving food loss and waste by 2030. She highlighted the value of linking ancestral wisdom with evidence-driven action.

"Food waste reduction is not just a matter of behavior change; it is a test of our values and future resilience. By drawing from the principles of responsibility and respect for resources that

guided our forefathers and senior Emiratis, and combining them with data and innovation, the youth can help create systems that secure food sustainability for generations to come," Al Nuwais said.

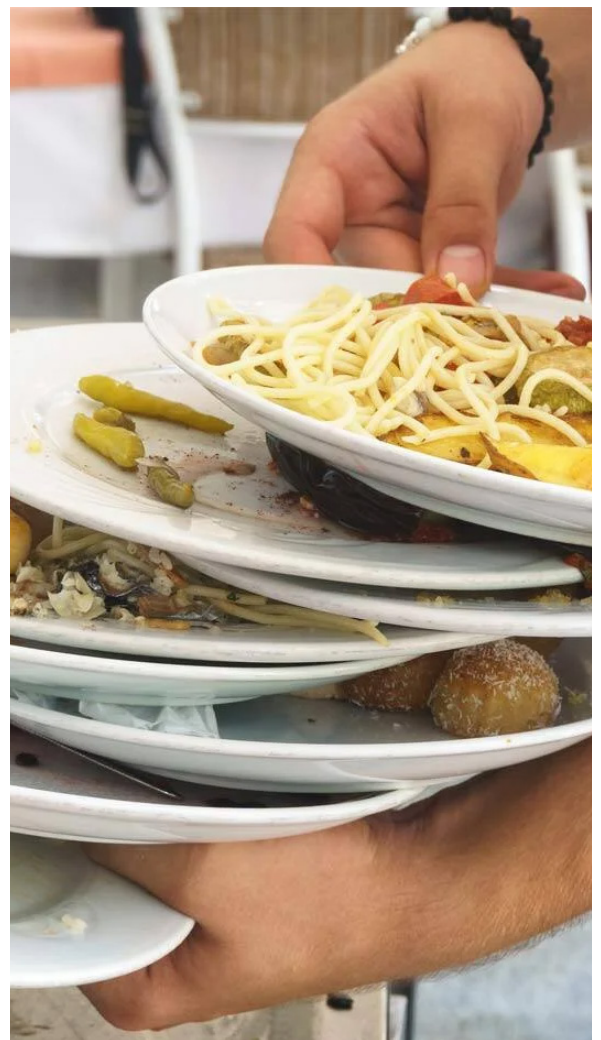
The Youth Circle engaged representatives from government, private sector, and community organisations in a dialogue on cultural wisdom, modern practices, and innovative heritage-based solutions. Youth participants co-created practical ideas, ranging from awareness campaigns and community initiatives to policy recommendations. The session also highlighted the contributions of key partners, especially The Climate Tribe and the Abu Dhabi Youth Council, underscoring their role in amplifying youth voices and connecting heritage with innovation.

Sherina AlSowaidi, Vice Chair of Abu Dhabi Youth Council, said, "Our ancestors placed sustainability at the core of their lives; they valued every resource and lived in harmony with the desert, sea, mountain, and farm. In this Youth Circle, we carried that legacy forward and turned dialogue into action. Together with our partners, we are launching Roots of Sustainability — a program that highlights the values of our four landscapes through hands-on, experiential learning. These outcomes reflect what Abu Dhabi's youth do best: honor our heritage while building a future that is sustainable, innovative, and deeply connected to our identity."

A key outcome of the event was the announcement of "Roots of Sustainability", a youth program featuring workshop series curated by The Climate Tribe in collaboration with Abu Dhabi Youth Council, Emirates

Foundation and ne'ma. The workshops will encourage young participants to actively design practical solutions rooted in Emirati heritage and connected to global best practices.

This Youth Circle reaffirmed the critical role of youth in shaping the UAE's food sustainability future. A dedicated "Solution Design" segment translated discussion into action, with small groups developing ideas that ranged from social media challenges and storytelling projects to community-based initiatives such as Zero Waste Majlis and heritage-inspired cooking classes. Participants also proposed policy recommendations, including incentives for food donation and integrating food waste measurement in restaurants.





Oman launches first utility-scale solar and battery storage project, Ibri III, to advance national renewable energy goals

Led by Masdar, a global clean energy leader, the 500MW solar PV plant with 100MWh battery storage will power 33,000 homes and cut 505,000 tonnes of CO₂ annually

Nama Power and Water Procurement (PWP) has signed an agreement for the development of the Sultanate of Oman's first utility-scale solar and battery storage project with the consortium of Abu Dhabi Future Energy Company PJSC - Masdar, Al Khadra Partners, Korea Midland Power Co. Ltd (KOMIPO), and OQ Alternative Energy (OQAE), Oman's national champion for renewable energy.

Masdar, a global clean energy leader, will lead the consortium developing the Ibri III Solar Independent Power Project, which combines a 500-megawatt (MW) photovoltaic (PV) plant with a 100-megawatt-hour (MWh) battery energy storage system (BESS). The scope of the project includes design, construction, ownership, financing, operation and maintenance of the plant and storage system.

The power purchase agreement (PPA) for the project, awarded under the auspices of Eng. Salim bin Nasser Al Aufer, Minister of Energy and Minerals, was signed at an event in Muscat by Ahmed bin Salim Al Abri, CEO of PWP, Mohamed Jameel Al Ramahi, CEO of Masdar; Ghalib Al Maamari, Acting CEO of OQAE; Hind Suhail Salim

Al Mukhaini Bahwan, Chairperson of Al Khadra Partners; and Lee Young-jo, CEO of KOMIPO.

Salim bin Nasser Al Aufi, Oman's Minister of Energy and Minerals, said, "We are pleased to celebrate the signing of the agreement for the Ibri III Solar Power Plant, a milestone in the Sultanate of Oman's transition towards renewable energy. This strategic project, covering

The AED 115 million project, a cornerstone of Oman Vision 2040, signifies a major step towards generating 30% of electricity from renewables by 2030 and achieving Net Zero by 2050



an area of nearly 10 million square meters with a generation capacity of 500MW, and battery energy storage system (BESS) capacity of 100MWh, embodies our commitment to achieving the objectives of Oman Vision 2040 and reaching Net Zero by 2050.

"With an investment of around OMR 115 million, the project reflects the confidence of our partners and investors in Oman's business environment. The project will reduce carbon dioxide emissions by approximately 505,000 tonnes annually and contribute up to an additional

4 per cent of renewable energy in the total electricity generation mix."

Ahmed bin Salim Al Abri, Chief Executive Officer at Nama Power and Water Procurement, said, "This project serves as a practical model of the Sultanate of Oman's vision to synergise efforts between the public and private sectors in the field of renewable energy and storage systems. We attach great importance to In-Country Value (ICV) and the allocation of a share of contracted works to local companies to ensure their economic growth, create job opportunities in the



local market, and reduce reliance on external imports.”

The Ibri III project is a key element in Oman’s policy to diversify energy resources to meet growing electricity demand, with Oman Vision 2040 including the objective of generating 30 percent of electricity from renewables by 2030. Once operational, Ibri III will produce enough electricity to power around 33,000 homes, while avoiding approximately 505,000 tonnes of carbon dioxide annually.

Abdullah Rashid Al Sawafi, PWP’s Chief Energy Transition Officer, said, “Over the past 15 years, Nama Power and Water Procurement has successfully developed 26 power generation and water desalination plants, attracting foreign investments of no less than USD 11 billion. Over the next five years, the company aims to attract a further USD 5 billion in foreign investments.

Renewable energy and storage technologies will account for the largest share of these investments, as the company plans to add renewable energy capacities of up to 9 gigawatts by 2030, representing around 60% of contracted capacities, to ensure the achievement of Oman Vision 2040’s target of 30% generation of electricity from renewable sources.”

Eco-friendly plastic revolutionises wearable electronics

Researchers at Case Western Reserve University have developed an eco-friendly plastic designed for wearable electronics, sensors, and various electrical applications. Unlike traditional materials, this innovative ferroelectric polymer contains no fluorine—a chemical often labeled as a “forever chemical” because it persists in the environment without breaking down.

As per Science X Daily, fluorine-based compounds pose significant environmental challenges due to their durability and resistance to degradation. The new polymer sidesteps this issue by eliminating fluorine altogether, offering a safer alternative that combines flexibility with sustainable chemistry.

Lead researcher Lei Zhu, professor of macromolecular science and engineering at the Case School of Engineering, explains that this material generates electric properties through a fundamentally new mechanism. This breakthrough enables the polymer to maintain its electrical functions without the rigidity associated with crystallisation.





Sustainable Aviation Fuels projects to gain new support through IRENA-ICAO collaboration

PARTNERSHIP

The International Renewable Energy Agency (IRENA) and the International Civil Aviation Organization (ICAO) launched 'Finvest@ETAF' to support Sustainable Aviation Fuels (SAF) and clean aviation energy projects globally. The portal, which is hosted on IRENA's Energy Transition Accelerator Financing (ETAF) platform, was unveiled ahead of the 42nd ICAO Assembly, which kicked off in Montréal, Canada, on September 22, 2025.

While demand reduction and energy efficiency improvements will play a critical role in aligning the sector with IRENA's 1.5 °C scenario, SAFs could account for 40-65% of the sector's emission cuts by 2050, according to ICAO.

Speaking at the launch, IRENA Director General Francesco La Camera said: "Sustainable aviation fuels will shape the future of flight, but the sector has yet to take off at the scale needed. By leveraging IRENA's financing network and ICAO's technical expertise, 'Finvest@ETAF' will support

SAF projects across their entire lifecycle, bringing visibility to bankable projects while helping promising ideas develop into fully fledged proposals ready to attract investment and move into deployment."

"This launch marks a significant milestone in aviation's net-zero carbon emission journey," said ICAO Secretary General Juan Carlos Salazar. "Our agreement with IRENA focuses on a partnership arrangement to facilitate financial resources through the ICAO Finvest@ETAF portal, for scaling up SAF and other cleaner energy solutions." He added that "this matchmaking function, using ICAO's sustainability criteria, helps de-risk investments while ensuring environmental integrity."

Finvest@ETAF will serve as a single-entry point for project developers seeking investment, linking proposals with a global network of public and private financiers.

Medellín, Colombia: Cooling the city with 'green corridors'

Medellín offers a glimpse of what's possible when cities prioritise sustainability, accessibility, and inclusion

For decades, Medellín, Colombia, grappled with profound social and economic challenges. Yet, in a remarkable testament to human ingenuity and collective will, Colombia's 'City of Eternal Spring' has undergone an extraordinary transformation, emerging as a global model of sustainable urban development and a burgeoning green city.

Medellín has a relatively constant temperature all year round of about 22-24°C, aided by its position in a valley surrounded by mountains. However, like many built-up areas across the globe, Colombia's second-largest city was warmer than surrounding rural areas. A reduction in green areas and an increase in buildings and roads were partly to blame, alongside other issues, including increased air pollution.

Green corridors reduce heat levels through a process called evapotranspiration, which introduces water vapour into the environment



Solving this issue sustainably was a key consideration for urban planners, who remained committed to integrating nature into the urban fabric. Medellín's journey offers a compelling narrative of how a city can leverage its unique geography and community spirit to pioneer a new model for urban living. Over the last 10 years, huge swaths of the city previously encased in concrete have been restored to their natural

state. Since 2016, the city has invested in greening the landscape as a way to reduce the urban heat island effect, improve air quality, prevent flooding, and restore biodiversity.

Medellín's renaturalization plan includes the creation of 30 'Corredores Verdes,' an interconnected network of greenery across the city. This ambitious initiative adds to and further connects existing green spaces, improves urban biodiversity, reduces the city's urban heat island effect, soaks up air pollutants, and sequesters a significant amount of carbon dioxide. These green corridors, featuring interconnected streets, bike paths, parks, and bridges, have helped lower temperatures by 5F (2.8C) in some areas within just three years.

The Green Corridors project demonstrates how integrated, nature-based policies like widespread urban tree planting can have a far-reaching impact on the local and global environment, as well as significantly improving citizens' lives and well-being.

To address the severe urban heat island effect resulting from 50 years of rapid urban development, the city implemented a three-year 'greener Medellín for you' programme, significantly shifting its urban design paradigm. As part of this USD16.3 million initiative, 75 citizens from disadvantaged backgrounds were trained by Medellín's Joaquín Antonio Uribe Botanical Garden to become city gardeners and planting technicians. They have helped to plant 8,800 trees and palms in the 30 corridors that cover 65 hectares. In one of the city's busier thoroughfares, 596 palms and trees have been planted, along with more than 90,000 species of lesser plants.



Officials also added green roofs and vertical gardens to buildings, reducing the urban heat island effect and helping interiors stay cool.

Many of Medellín's overpasses have been greened to promote biodiversity and improve air quality. With roughly 4,000 streams, the city has also been greening embankments to keep problems like flooding at bay.

These Green Corridors provide Medellín with a host of ecosystem services: they help to reduce average city temperatures by 2°C, enable carbon uptake via plant growth, capture particulate matter to improve air quality, and increase urban biodiversity. These rapid effects demonstrate why nature-based solutions are rapidly increasing in popularity in the field of sustainable urban design. The Green Corridors project also won the 2019 Ashden Award for Cooling by Nature.

Beyond green infrastructure, the city government has leveraged the green corridor project to push other important sustainable goals, particularly in transport. A key focus is ensuring more inclusive and sustainable transport options to reduce air pollution and carbon emissions. In recent years, city dwellers and the local government have successfully advanced electric mobility across the city by replacing diesel-run public buses with electric ones. Medellín's ambitious goal is to become Latin America's leading city in electric mobility by 2030.

More than 500 public buses have been retrofitted with electric engines, reducing carbon emissions by over 4000 tons and diesel particulates in the air by 5.4 tons. All public and private companies – including universities – with more than 200 employees are now required to develop a Sustainable Mobility Plan. These plans outline

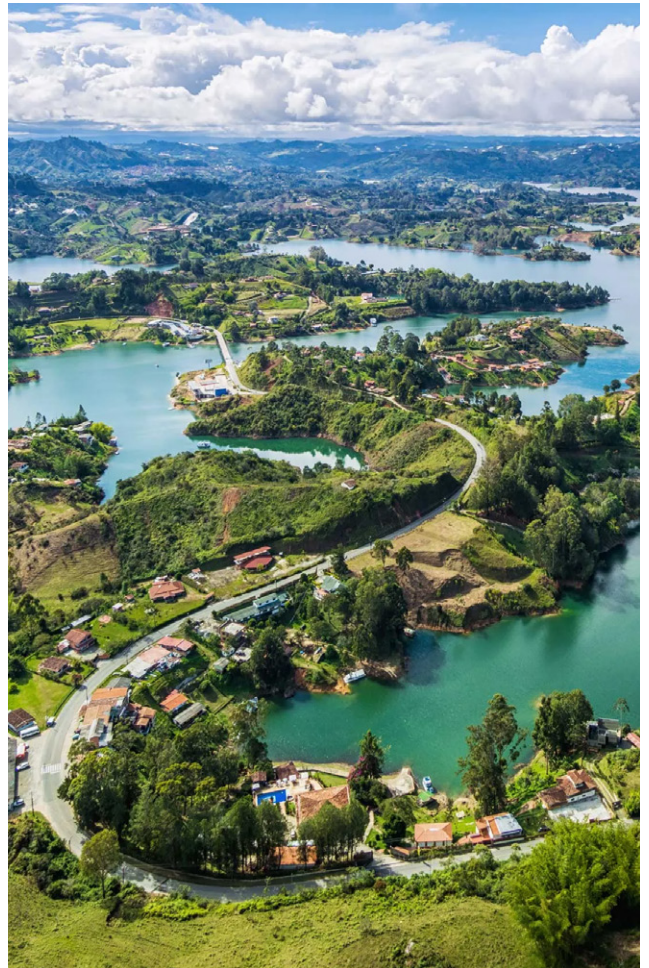
Medellín's approach to green corridors offers a low-cost, popular solution, which other cities are increasingly looking to replicate



strategies to boost air quality and ease traffic, offering options like home office, flexible working hours, and carpooling to reduce fuel consumption.

One of the most innovative mobility projects to emerge from Medellín is the Metrocable. Medellín's steep hillsides, home to many working-class communities, once made commuting to the city centre long and difficult.

The Metrocable provides a direct link between these hillside neighborhoods and the heart of the city, opening up access to jobs, services, and opportunities like never before. The system has become a symbol of the city's commitment to inclusion, giving marginalized communities the connectivity they need to thrive.



The city has also invested heavily in its metro system, which works in tandem with the Metrocable to create a seamless, integrated public transport network. Medellín is also increasingly focusing on making the city more pedestrian and cyclist-friendly. Over the past decade, the city has made significant strides in expanding its network of cycling lanes and creating pedestrian-friendly spaces.

World leaders gather in New York to drive urgent action on renewable energy

Global Renewables Summit
2025 catalyses high-level
political commitments and
private-sector leadership

President of the European Commission Ursula von der Leyen, President of Kenya William Ruto, and Prime Minister of the Bahamas Philip Davis headlined the second edition of the Global Renewables Summit (GRS25), held on 22-23 September in New York alongside the UN General Assembly and Climate Week NYC.

The Summit opened with the High-Level Session on Renewable Energy Abundance, hosted by Climate Group, Fortescue and the Global Renewables Alliance (GRA). The session featured a powerful lineup of speakers from government, business, and international organisations, including Ambassador André Corrêa do Lago, COP30 President-designate; H.E. Francesco La Camera, Director-General, IRENA; Bruce Douglas, CEO, Global Renewables Alliance; and Dr. Andrew Forrest AO, Executive Chairman, Fortescue.

Highlighting the EU's commitment to accelerating the global energy transition, H.E. Ursula von der Leyen, President of the European Commission stated: "In Europe, we know decarbonisation and prosperity go hand in hand. Already, half of our electricity comes from renewables and investments are up 63% this year alone. But the clean power transition can only succeed with truly global benefits."





Underscoring Africa's determination to lead on clean energy, H.E. Dr. William Ruto, President of the Republic of Kenya, remarked: "Africa's vision for climate-positive growth and development is anchored in renewable energy. The Nairobi Declaration of 2023 set a target of 300 GW by 2030. Yet our current trajectory falls short of our potential. We are determined to change that."

Speaking from the perspective of a climate-vulnerable nation, Hon. Philip Davis, Prime Minister of the Bahamas emphasised: "As a leader on the frontlines of climate change, I've watched the tides rise higher each year, felt the storms grow stronger and witnessed first-hand the steady advance of a warming world. This isn't just about weather: it is a direct assault on the intrinsic rights enshrined in the Universal Declaration of Human Rights, about recognizing that we are interconnected, our fates intertwined."

Building on its landmark debut in 2024, this year's Summit spotlighted the remarkable progress already driving the global renewables boom, from breakthrough investments to record levels of

deployment. It also served as a springboard for the next wave of political commitments and private sector leadership.

The high-level opening was followed by numerous roundtable dialogues focused on urgent priorities, including national energy plans, energy security, unlocking capital for emerging markets, expanding grids and storage, and accelerating green industrialisation.

The Summit spotlighted frontrunners and featured success stories, high-impact policy dialogues, and announcements from public and private sector leaders - demonstrating how solutions already transforming economies can be scaled to unlock even greater opportunities for growth, resilience, and energy security.

With COP30 fast approaching, the Global Renewables Summit served as a pivotal moment to turn global ambition into national action, mobilising investment, policy and partnerships to scale renewables at unprecedented speed.

Protecting nature boosts growth and jobs, shows new report

Safeguarding natural resources generates
high returns in some sectors

Degraded natural wealth is not just an environmental problem, it is also an economic liability

Ninety percent of the world lives with either degraded land, unhealthy air, or water stress, according to a new World Bank report. However, restoring natural systems is possible and can yield high returns.

In low-income countries alone, eight of out 10 people live without all three – healthy air, water, and land – according to the report, Reboot Development: The Economics of a Livable Planet. This poses major constraints to economic growth and opportunity. New evidence shows that the loss of forests disrupts rainfall, dries soil, and worsens droughts, costing billions of dollars.

The report also identifies a nitrogen paradox where fertilizers boost yields, but overuse in some regions harms crops and ecosystems, costing as much as USD3.4 trillion annually. And air and water pollution silently damage health, productivity, and cognition, thereby sapping human potential.

If managed well, however, nature can create jobs, drive economic growth, and build resilience. Using natural resources more efficiently could reduce pollution by as much as 50 percent.

Improving farm-level practices of nitrogen fertilizer use can deliver 25 times greater benefits than their cost, while boosting crop yields. Improving water and sanitation services could be lifesaving: chlorinating water at the point of use could save a quarter of the children who prematurely die from water-related issues. “Pollution markets” not only reduce air pollution, they are also extremely cost effective: each

USD1 spent yields about USD26–USD215 in benefits.

“People and communities around the world are not just facing an environmental crisis, but an economic one. The good news is that solutions exist. If countries make the right investments now, natural systems can be restored, with substantial returns on growth and jobs,” said Axel van Trotsenburg, Senior Managing Director, World Bank. “This report offers a new lens for looking at environmental challenges — not as constraints, but as opportunities for smarter development.”

Countries have demonstrated that it is possible to grow an economy without further degrading the environment. Lessons from their experiences show the importance of three key areas:

Information: From air pollution monitors to satellite imagery, real-time data can help governments target problems, empower citizens, and drive accountability.

Coordination: Policies work best when they work together. A systems approach can align actions across sectors. It can also help avoid unintended consequences, such as cutting pollution in one area while increasing it elsewhere, and helping manage trade-offs between efficiency and equity.

Evaluation: Learning beats guessing. Regular evaluation keeps policies on track, helps scale what works, and ensures reforms can adapt to shifting realities.

Word Scramble

NARNEDGE
YICOLP
ELNADPASC
EGYENRER
ESDSERT
RCYLCEE
CIATEML
SNUITSA

58

ANSWERS: 1) POLICY 2) DESERTS 3) GREENENERY 4) LANDSCAPE 5) RECYCLE 6) CLIMATE 7) ENDANGER 8) SUSTAIN

Word Search

I	T	C	A	E	P	C	E	M	G	I	E	C	C
C	Y	T	L	C	V	C	R	C	L	E	C	M	M
G	Y	I	I	E	E	E	C	M	C	E	C	R	E
E	G	G	E	C	S	R	C	L	C	R	R	R	N
E	R	N	N	G	E	N	Y	E	I	E	U	S	T
D	E	I	Y	E	E	L	A	E	T	M	C	I	U
A	N	L	A	E	S	U	E	R	L	L	A	S	E
R	E	C	A	V	E	G	A	N	I	S	M	T	E
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R	C	F	S	T	Y	R	T	U	R	T	L	E	S
F	E	E	T	E	E	E	R	C	Y	R	D	Y	R
P	R	E	M	I	R	C	N	S	C	R	V	R	I

FREETRADE

CLIMATE

REUSE

CYCLING

ENERGY

VEGANISM

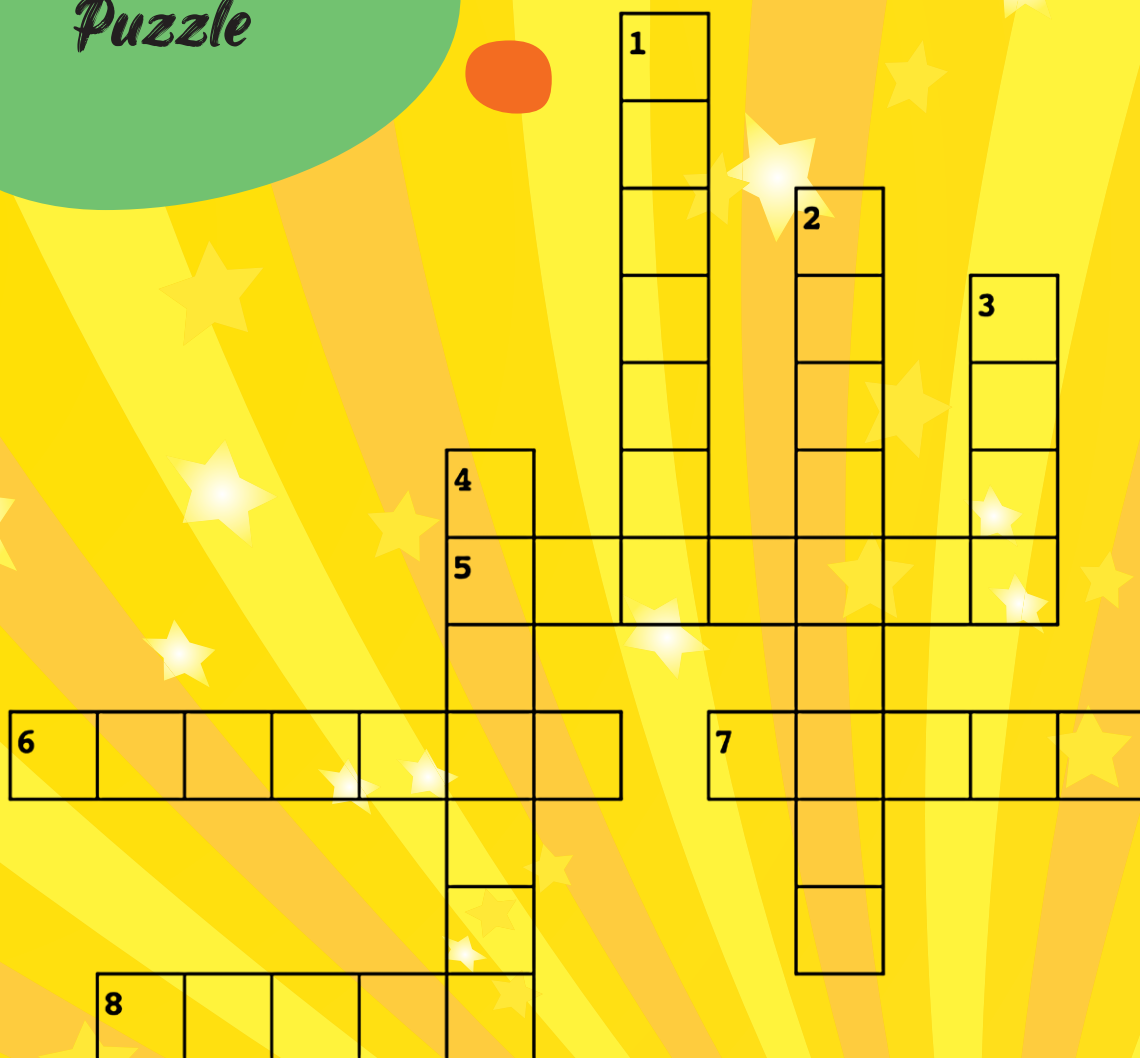
PLASTICS

TURTLES

ECONOMIC

RECYCLE

Crossword Puzzle



Across

5. Having no living representative
6. Marine reptiles
7. Not throw out
8. Tall plants

Down

1. Keep from danger
2. One raising a hand
3. Loose soil
4. Arid expanses



WORD OF THE DAY:

CORAL BLEACHING

When corals are stressed by changes in conditions such as temperature, light, or nutrients, they expel the symbiotic algae living in their tissues, causing them to turn completely white. When water is too warm, corals will expel the algae (zooxanthellae) living in their tissues causing the coral to turn completely white. This is called coral bleaching. When a coral bleaches, it is not dead. Corals can survive a bleaching event, but they are under more stress and are subject to mortality.

Healthy Coral: Coral and algae depend on each other to survive. Corals have a symbiotic relationship with microscopic algae called zooxanthellae that live in their tissues. These algae are the coral's primary food source and give them their color.

Stressed Coral: If stressed, algae leaves the coral. When the symbiotic relationship becomes stressed due to increased ocean temperature or pollution, the algae leave the coral's tissue.

Bleached Coral: Coral is left bleached and vulnerable. Without the algae, the coral loses its major source of food, turns white or very pale, and is more susceptible to disease.

The leading cause of coral bleaching is climate change. A warming planet means a warming ocean, and a change in water temperature—as little as 2 degrees Fahrenheit—can cause coral to drive out algae. Coral may bleach for other reasons, like extremely low tides, pollution, or too much sunlight.

Why does coral bleaching matter?

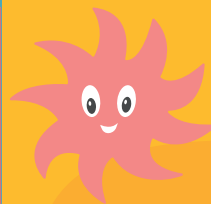
Coral bleaching matters because once these corals die, reefs rarely come back. With few corals surviving, they struggle to reproduce, and entire reef ecosystems, on which people and wildlife depend, deteriorate.

Bleaching also matters because it's not an isolated phenomenon. According to the National Oceanic and Atmospheric Association, between 2014 and 2017 around 75% of the world's tropical coral reefs experienced heat-stress severe enough to trigger bleaching. For 30% of the



world's reefs, that heat-stress was enough to kill coral.

Coral reefs support some of the most biodiverse ecosystems on the planet. Thousands of marine animals depend on coral reefs for survival, including some species of sea turtles, fish, crabs, shrimp, jellyfish, sea birds, starfish, and more. Coral reefs provide shelter, spawning grounds, and protection from predators. They also support organisms at the base of ocean food chains. As reef ecosystems collapse, already at-risk species may face extinction.



WORLD HABITAT DAY - OCT 06

World Habitat Day is marked on the first Monday of October each year and is recognized by the United Nations to reflect on the state of towns and cities, and on the basic right of all to adequate shelter.

On 6 October 2025, the Global Observance of World Habitat Day will be linked to urban crisis response. The theme focuses on addressing multiple crises affecting urban areas - including climate and conflicts - that are contributing to inequality, and promotes existing tools and approaches to effective crisis response.

The day will highlight sustainable, scalable, and transformative solutions to urban displacement

that help stabilize populations, while promoting prosperity and fostering social cohesion for all. It will put the spotlight on the importance of urban and territorial planning, inclusive urban governance, and the role of local governments in sustainable solutions for displacement.

The Day is intended to remind the world that we all have the power and responsibility to shape the future of our cities and towns; its our collective responsibility for the future of the human habitat. World Habitat Day was first celebrated in 1986 with the theme "Shelter is My Right". Nairobi was the host city for the observance that year.

OCT
23

INTERNATIONAL DAY OF THE SNOW LEOPARD

The snow leopard (*Panthera uncia*) is found in the high mountain regions of Asia. Big cats are elusive, but the snow leopard, especially so. Locals living alongside the leopards often refer to them as the 'ghosts of the mountains' as they are hardly ever seen. The snow leopard's population was Classified as "vulnerable" on the International Union for Conservation of Nature Red List of Threatened Species in 2017 and is facing a high risk of extinction in the wild in the medium-term future.

The greatest threats to the survival of the snow leopard are habitat loss and fragmentation, prey depletion and illicit trafficking, illegal hunting, including poaching, and climate change.

In 2024, the UN General Assembly proclaimed 23 October as International Day of the Snow Leopard in order to enhance international and regional cooperation in support of efforts to conserve the snow leopard, given its role in the overall ecosystem. The General Assembly stressed the urgent need to address the unprecedented global decline in biodiversity, including by preventing the extinction of



threatened species, improving and sustaining their conservation status and restoring and safeguarding ecosystems that provide essential functions and services, including services related to water, health, livelihoods and well-being.

WHAT CAN YOU DO TO HELP?

Things to Do...

- ☒ Use public transport
- ☒ Recycle plastic goods
- ☒ Switch off all lights and plugs when not in use
- ☒ Volunteer for a clean-up drive
- ☒ Use both sides of paper

A black and white line drawing of a smiling Earth with various eco-friendly symbols around it, including a recycling symbol, a wind turbine, a lightbulb, a water drop, and a recycling bin.

New UAE study reveals the role of color in driving evolution in frogs



A team of researchers at NYU Abu Dhabi (NYUAD) has uncovered how a common color variation in frogs has helped them thrive and diversify for millions of years.

Many frogs and toads (anurans) appear in either green or brown-to-grey forms, a camouflage that helps them hide from predators. This “cryptic color variation” is widespread in nature, but scientists have long debated how it persists across long periods of evolutionary time and what role it plays in evolution.

The NYUAD team, led by Research Associate Sandra Goutte and Professor of Biology Stéphane Boissinot, examined data from 2,363 species of frogs and toads. Their analysis shows that these color variations are not short-lived quirks of nature but can last over vast evolutionary timescales. The presence of both green and brown morphs is also linked to the rise of new species and the ability of frogs to adapt to new environments.

“Our findings suggest that this color polymorphism is more than just camouflage—it actively shapes the evolutionary paths of frog lineages,” said co-lead author Sandra Goutte. “It may allow populations to persist through environmental change and expand into new ecological niches.”

Published in *Proceedings of the National Academy of Sciences (PNAS)*, the researchers also studied African grass frogs (*Ptychadena*) and discovered that the genetic variants responsible for the green and brown morphs have been maintained for over 8 million years in this



group. This is one of the rarest documented cases of “ultra-long-term balancing selection,” a genetic process that preserves variation within species across multiple evolutionary splits.

“This study shows how something as simple as color can have a profound impact on survival and biodiversity,” added co-lead author Stéphane Boissinot.

The findings shed new light on how frogs adapt and evolve, providing broader insights into the processes that maintain diversity in nature.



Three innovative entrepreneurs awarded UNEP's 2025 Young Champions of the Earth prize

Winners from India, Kenya, and the United States are recognized for groundbreaking circular economy solutions, including banana leather, hyacinth-based packaging, and compact greywater reuse systems

The UN Environment Programme (UNEP) and American cleantech CEO Chris Kemper announced the selection of three environmental entrepreneurs from India, Kenya and the United States as the 2025 Young Champions of the Earth.

Winners are recognized for groundbreaking contributions that advance a global circular economy and improve environmental outcomes by treating wastewater, expanding access to clean water, tackling plastic pollution, and creating sustainable alternatives to conventional materials. Award recipients will receive seed funding, mentoring, communications support, and a global platform to showcase and scale their solutions.

The Young Champions program, which UNEP founded in 2017, was re-launched this year in partnership with Kemper, who in 2023 was designated as UNEP's Advocate for Partnerships to mobilize resources and action around today's most urgent environmental issues. Kemper is

This year's Young Champions of the Earth winners each received USD 20,000. They also have an opportunity to compete in the first-ever Planet A pitch competition for a business growth grant of USD 100,000 and a possible seed investment of USD 1 million committed to a future fundraising round.

Jinali Mody (28, India): Jinali is a biochemistry graduate from St. Xavier's College in Mumbai and the Yale School of Environment. She founded Banofi Leather, an India-based women-led company aiming to make the fast fashion business sustainable by producing leather alternatives made from banana crop waste. Compared to conventional leather, Banofi drastically reduces water use, toxic waste, and CO₂ emissions.

Joseph Nguthiru (27, Kenya): A climate-tech engineer, Joseph's company HyaPak converts the invasive species hyacinth in Lake Naivasha into packaging bags and biodegradable seedling wrappers. By replacing single-use plastic products, HyaPak makes agricultural lands healthier and offsets CO₂ emissions.

Noemi Florea (24, US): Climate innovator Noemi has founded Cycleau, a compact water reuse system, in consultation with dozens of marginalized communities. The company transforms greywater into drinking water. Retrofitted under sinks, showers, and laundry units, Cycleau significantly reduces wastewater, using much less energy than alternative systems.

Society & Environment

The Young Champions receive seed funding, mentorship, and a platform to scale their innovations



children are already being dramatically impacted by the triple planetary crisis of climate change, biodiversity loss and pollution and waste. I commend these inspiring Young Champions of the Earth for their innovations, for the benefit of this and future generations," said Inger Andersen, Executive Director of UNEP.

The Young Champions of the Earth prize is UNEP's flagship initiative on youth engagement. Since 2017, it has recognized 30 young trailblazers – activists, entrepreneurs, and environmental innovators under the age of 30 – for their outstanding ideas to protect the environment.



World Habitat Day: Addressing current challenges for sustainable living

Dr. Eisa M. Abdellatif

Chief Technical Advisor
Zayed International Foundation
for the Environment

66

GREEN FLASH

World Habitat Day, observed on October 6 this year, reflects on the state of cities and communities, accelerating efforts to promote sustainable urban development. Celebrated by the United Nations since 1985, this important event raises awareness on housing issues, addresses challenges of urbanization, and highlights the right to inclusive, safe, resilient, and sustainable human settlements. This is crucial as urbanization accelerates due to environmental crises and armed conflicts, pushing rural populations into urban areas.

Rapid urban growth is a major threat to ecological balance, transforming natural landscapes into concrete jungles. Today, more than half of the world's population resides in cities, and by 2050, this figure is expected to rise to nearly 70% as the engines of economic growth, innovation, and opportunities are more concentrated in urban centers.

Among the challenges facing urban authorities are urban overcrowding and slum development in developing countries. Slums often suffer from poor access to clean water, sanitation, education, and healthcare, making residents vulnerable to disease outbreaks and environmental hazards.

Safe, sanitary, and affordable housing is becoming increasingly scarce for low-income families due to property pricing and deepening social inequalities. Meanwhile, high energy consumption and pollution accelerate environmental degradation and exacerbate

urban vulnerabilities. Urgent investment in resilience planning is required to combat challenges such as flooding, heatwaves, and rising sea levels.

Outdated, ill-maintained infrastructure complicates daily life and increases vulnerability during disasters and crises. Short-term economic interests frequently lead to environmental problems and social inequality, underscoring the need for innovative planning strategies rooted in sustainability and inclusivity.

A collaborative, multi-dimensional approach by governments, communities, and international organizations is required to promote inclusive urban growth, affordable housing, climate resilient and sustainable infrastructure. Smart city initiatives and green building practices, alongside participatory planning, will help create sustainable habitats. Education and awareness raising are even more important in fostering environmentally conscious behaviors and policies. A conscious population will make the planning and implementation of any program easier, reducing costs significantly.

As we observe World Habitat Day, we must realize that addressing current urban challenges demands urgent action, innovative solutions, and collective responsibility to build cities that are livable, resilient, and sustainable for generations to come.

Let us all act today before it is too late.

Emirates Appreciation Award For The Environment

Together for a
green home



THE FUTURE OF OUR WORLD
IS IN OUR HANDS.

ACT NOW!

