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provide sustainable food aid



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Together for a green home

Chairman's Message

The Holy Month of Ramadan symbolizes the spirit of giving. It is a month of immense blessings and a time to give hope and extend our compassion to the less fortunate.

With the launch of the '1 Billion Meals Endowment' campaign in this pious month, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, established the largest Ramadan sustainable food aid endowment fund in the region.

This initiative will not only support the world's most underprivileged populations but is also creating sustainable solutions to fight and eradicate hunger in line with the UN Sustainable Development Goals for 2030. For underprivileged populations and vulnerable groups, including victims of crises and natural disasters, this noble initiative provides a safety net especially as they struggle with food insecurity.

In the UAE, the culture of giving is rooted in its history and the wide range of humanitarian initiatives the country undertakes each year, are inspiring the world.



**Prof. Mohammed
bin Fahad**
Executive Editor

As the founding President of the UAE, Sheikh Zayed bin Sultan Al Nahyan, once said: "We believe that there is no true benefit for us from the wealth that we have if it does not also reach those in need, wherever they may be, and regardless of their nationality or beliefs."

The culture of endowment established by the UAE leadership will inspire all segments of the community to make a tangible difference in the lives of those in desperate need. The values of Ramadan that instills in every devout individual to serve as a force for doing good will be amplified this year through the '1 Billion Meals Endowment' campaign.

To continue to reap the rewards of providing food to the needy, I urge you all to contribute generously to this campaign and uplift the lives of millions around the world.

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Upcoming events

Launch 2023 – Tide Turners Plastic Challenge

Date: 20 April

Location: Online and in New Delhi, India

Since 2019, the Tide Turners Plastic Challenge Badge has educated over 580,000 youth in 40 countries on marine plastic pollution – making it one of the largest youth movements in plastics in the world. Featuring young leaders from the Tide Turners, along with senior officials from India, the United Kingdom, UNEP, and many others, this launch event will kick-start the next phase of the Tide Turners, the global youth-led movement against the plastic crisis, and funded by the government of the United Kingdom.

Sustainable Ramadan

Date: Until end of Ramadan

Online

The objective of this media campaign held throughout the Holy month of Ramadan, is to raise awareness about the adverse impacts of food waste on the environment, on food security notably in a region that relies heavily on imports, and on climate change. The campaign will also include information on ways to reduce food waste and to promote action towards achieving SDG 12.3 in an interactive and visually appealing manner.

Sustainable Food Systems Programme

Date: 24 - 27 April

Location: Ha Noi, Viet Nam

Under the theme, 'The Transformation We Need: Emerging from global crises by shaping sustainable, resilient, healthy, and inclusive food systems,' the 4th global conference will present transformational actions, tools and initiatives to promote their uptake and upscaling in national and local policy-making processes.

The conference will contribute to the 2023 Stocktaking Moment of the UN Food Systems Summit follow-up process, by focusing on how food systems need to be transformed to overcome the multiple deeply rooted and interlinked crises of climate, biodiversity, conflict, energy, prices, hunger, malnutrition, and health to achieve the SDGs. A number of sessions, including a Dialogue among National Convenors (UN FSS Dialogues) and a range of side events, will be held.

Mohammed Bin Rashid Launches 1 Billion Meals Endowment Campaign To Provide Sustainable Food Aid



His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has launched the “1 Billion Meals Endowment” campaign, which will establish a food endowment fund as a means to achieve sustainable food aid.

Coinciding with the holy month of Ramadan, the campaign aims to mobilise local, regional and international efforts for the purpose of implementing effective sustainable programmes to fight and eradicate hunger within a sustainable institutional framework.

His Highness Sheikh Mohammed bin Rashid said: “As it has become a yearly Ramadan tradition, this year we launch the “1 Billion Meals Endowment” campaign with the aim of sustainably providing hundreds of millions of meals to people in need. 828 million people suffer from hunger

around the world, this means one in 10 people. As humans and as Muslims, it is our duty to be there for those in need, especially during the month of Ramadan. Even a small but sustainable contribution makes a bigger difference than a one-time large contribution.”

A Sustainable Framework to Fight Hunger

The “1 Billion Meals Endowment” campaign is implemented under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives (MBRGI), the largest regional foundation in terms of the number of institutional initiatives that lead wide-reaching programmes and projects on a global scale.

It is an expansion of the UAE’s previous Ramadan campaigns “1 Billion Meals”, “100 Million Meals” and “10 Million Meals”, organised under the directives of His Highness Sheikh Mohammed bin

The 1 Billion Meals Endowment campaign embodies the UAE's commitment to its role in alleviating humanitarian issues across the world



Rashid Al Maktoum in the previous years to fight global hunger.

The food endowment fund, to be launched under the campaign, aims to create a sustainable and resilient food aid system, to combat hunger and contribute to the international efforts to provide a food safety net for vulnerable groups in the countries struggling with food insecurity.

It also aims to support victims of conflicts, natural disasters and crises around the world, and further enhance the UAE's contribution to international efforts aimed at eradicating hunger in line with the United Nations Sustainable Development Goals for 2030.

The campaign opens the door for institutions, companies, businessmen and individuals to contribute to sustainable humanitarian work,

through endowment funds that support community and social development projects.

The campaign stresses the significance of effective partnerships and highlights their role in creating sustainable solutions to fight hunger. It also calls for implementing clear programmes and targeted plans that fight hunger and support vulnerable groups.

Creating Hope

Mohammad bin Abdullah Al Gergawi, Minister of Cabinet Affairs and Secretary-General of the Mohammed bin Rashid Global Initiatives (MBRGI) stressed that the "1 Billion Meals Endowment" reflects the philosophy of His Highness Sheikh Mohammed bin Rashid Al Maktoum in terms of converting the act of giving into a sustainable framework that reflects the cultural and humanitarian aspect of the UAE.



He noted that the campaign helps solidify the UAE's standing as one of the first responders and most impactful in times of crises and need.

"Fighting hunger through the "1 Billion Meals Endowment" campaign comes at a time when the world is witnessing economic challenges, natural disasters, conflicts, crises and an increase in poverty, which necessitates specific programmes and initiatives that help alleviate the suffering of tens of millions of people around the world."

The State of Hunger around the World

The FAO's 'State of Food Security and Nutrition in the World' 2022 report, revealed that 828 million people were affected by hunger in 2021, which constitutes 9.8 percent of the world's population.

This means that one in 10 people does not have enough food to eat.

The report states that 45 million children under the age of five suffer from wasting – the most fatal kind of malnutrition which increases the risk of child death 12 fold.

Furthermore, 149 million children under the age of five suffer from stunted growth and development due to a chronic lack of essential nutrients in their diets.

Ongoing Success

The endowment fund campaign is an expansion of the UAE's previous Ramadan campaigns. In 2020, the '10 Million Meals' campaign, secured 15.3 million meals to low-income families and individuals, recording donations from over 115 nationalities, and the participation of more than 1,000 volunteers from the UAE.

The '100 Million Meals' campaign, launched in

The food endowment fund, to be launched under the campaign, aims to create a sustainable and resilient food aid system, to combat hunger



Donation Channels

The “1 Billion Meals Endowment” campaign continues to welcome donations and contributions to the endowment fund from institutions and individuals across five main channels including the campaign’s website <https://www.1billionmeals.ae/en/>, as well as a dedicated call centre via the toll free number (800 9999).

Donations are also possible via bank transfers to the campaign bank account number with Emirates NBD (AE30 0260 0010 1533 3439 802).

Donations via SMS give contributors the option to donate AED 1 daily through a monthly subscription, by sending the word “Meal” to 1020 for du users, or to 1110 for Etisalat by e& users. Those who wish to donate to the campaign through the DubaiNow app can do so by clicking on the “Donations” tab.

2021, has secured around 220 million meals for vulnerable groups around the world, through massive donations from 385,000 individuals, companies, businessmen and philanthropists from 51 nationalities.

The 2022 ‘1 Billion Meals’ campaign hit its target in less than one month thanks to the contributions of 320,868 donators, securing meals to those in need across 50 countries.

Campaign records AED 247 million in a week

Within a week of its launch, the “1 Billion Meals Endowment” campaign, recorded AED 247 million, and received donations from 13,220 major contributors, individuals, businesses and public and private sector players.

Among those, 13,195 contributors donated via smart channels.



Zayed International Foundation For The Environment Raises Awareness Of Sustainability At 'Innovation & Safety' Event in Abu Dhabi

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ZAYED FOUNDATION



The Zayed International Foundation for the Environment recently participated in an 'Innovation & Safety' event organized by Emirates Steel Arkan on March 8 at the company premises in Mussafah, Abu Dhabi.

A specially designed logo of the event of a robot in a safety suit holding a tree underlined the central themes of the day-long event. The tree represented 'Sustainability', the robot stood for 'Innovation and Digitization' while the helmet represented 'Safety'.

The event was organized in line with the UAE President His Highness Sheikh Mohamed bin Zayed Al Nahyan's announcement of 2023 as the 'Year of Sustainability', and the call for collective action through a nationwide commitment towards sustainable practices that draw upon the UAE's values of sustainability and the legacy of its Founding President, the late Sheikh Zayed

bin Sultan Al Nahyan. The 'Innovation and Safety' day, dedicated to sustainability, witnessed a series of engaging activities, informative workshops, and immersive experiences, while also offering the opportunity to expand knowledge and network with like-minded professionals.

As part of the shared commitment to making the world a better, more sustainable place for all, the Zayed International Foundation for the Environment held discussions with other attendees to expand scope of collaboration and used the platform to drive greater awareness of their green initiatives and ongoing sustainable projects.

Salma Moustaid, Technical Executive Officer at Zayed International Foundation for the Environment, attended the event in Abu Dhabi.

Hydrologist Andrea Rinaldo Wins Stockholm Water Prize 2023

World-renowned hydrologist, Andrea Rinaldo, was awarded the Stockholm Water Prize 2023 for his groundbreaking research on river networks, demonstrating their significance in the spread of solutes, aquatic species, and diseases.

Professor Andrea Rinaldo is a leading authority in hydrologic sciences. His pioneering research

AWARD



has led to new insights into the complex ways in which water shapes the Earth's surface and ecosystems and has provided in-depth knowledge of how solutes and populations move at varying speed, both on and beneath the Earth's surface.

Professor Rinaldo's quantitative analyses provide a fundamental understanding of rivers as ecological corridors. With the development and maintenance of such corridors being largely responsible for the spread of aquatic species and their populations, this research is key for helping policies and practices improve the preservation of species.

His models for water's role in disease transmission have been applied to real-world hotspots of diseases, such as cholera and schistosomiasis in Haiti, South Sudan, and Burkina Faso, linking fundamental research to real-life application.

In its citation, the Stockholm Water Prize Nominating Committee said: "Professor Rinaldo is a thought leader in hydrologic sciences whose conceptual and quantitative models have provided in-depth understanding to the fields of hydrogeomorphology and ecohydrology. In his research, he has uncovered the key connections between river networks and the spread of solutes, aquatic species, and diseases."

Andrea Rinaldo is a professor of hydrology and water resources at the École Polytechnique Fédérale de Lausanne and at the University of Padova. He was born in Venezia, Italy, where, he says, the power and importance of water inevitably became a significant part of his life.

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

UAE Urges Investment, Action For Water Sustainability At UN Water Conference

Mariam bint Mohammed Almheiri, the Minister of Climate Change and Environment, emphasised the importance of collaboration, data sharing and investment in achieving global solutions for promoting water sustainability in an interactive dialogue and side sessions held at the United Nations in New York. The UN 2023 Water Conference, which ran from March 22 to 24, brought together global leaders



UAE Minister of Climate Change and Environment calls for renewed commitment in taking urgent action to address water scarcity and environmental preservation intensified by climate change

and experts to identify innovative solutions to water challenges. Speaking to delegates and attendees, Mariam Almheiri expressed the urgent need for action to address water scarcity and environmental preservation intensified by climate change.

“The challenges that were once seen as relevant only for desert countries or small island development states are now being experienced by a growing number of countries to the tune of nearly 2 billion people,” said Almheiri in the interactive dialogue, ‘Water for Climate, Resilience, and Environment: Source to Sea, Biodiversity, Climate, Resilience and DRR,’ co-chaired by Japan and Egypt.

“There is, thankfully, a flip side to these challenges – investment and action, on water supply ecosystem health and food systems have

The UAE is on track to reduce total water consumption by its food sector by more than 15% despite doubling production by 2030



never had higher returns,” Almheiri added.

The UAE is on track to reduce total water consumption by its food sector by more than 15% despite doubling production by 2030. The country also has a national plan, the Water Security Strategy 2036, which ensures that programs are implemented on the supply side demand side, and that water production and distribution are available in emergencies.

Looking ahead, COP28, hosted by the UAE in November 2023, will build on Egypt's pioneering inclusion of water at COP27.

“The UAE is committed to an inclusive and consultative process that results in enhanced financing policy and technology around water,” Almheiri said, adding COP28 will focus on the actions necessary to keep 1.5 degrees alive and address climate impacts, including water.

The minister shared four initial reflections on potential outcomes from consultations, including implementing the 30 by 30 agreement, investment in vulnerable and fragile countries, early warning and anticipatory action systems, and innovation.

Almheiri participated in a side session titled ‘From UN Water Conference to COP28: Accelerating Water and Climate Action’, co-chaired by the Permanent Mission of the UAE to the UN, Netherlands, Tajikistan, and UN Water. Almheiri shared the UAE’s experiences in addressing the challenge of water scarcity and climate change.

“What has been remarkable is how many other sectors raise water as an urgent focus; food producers, humanitarian agencies, environmental health organizations, energy producers and gender equality specialists,” Almheiri said.



"All these sectors are feeling an imminent risk from water scarcity, acidification, extreme weather, and other climate impacts," she said, adding however, there are remarkable economic, employment, and health opportunities from investing in actions ranging from irrigation innovation to mangrove restoration to early warning and anticipatory action systems.

In a session hosted by Egypt titled 'From COP27 to the UN 2023 Water Conf: Action on Water Adaptation and Resilience (AWARE)', HE Almheiri highlighted the UAE's investments in research and development and innovative water-efficient food production.

"We must collectively rethink the water challenge and recognize the impact of the three macro-trends: population growth, socio-economic development, and climate change, which each put

pressure on water supplies," Almheiri said.

"We are investing significant resources into research and development and maintain a portfolio of domestic and international initiatives aimed at addressing the pressing challenge of water scarcity," she said.

COP28 will focus on responding to the findings of the Global Stocktake, concluding the Global Goal of Adaptation, and emphasizing the importance of water-related adaptation measures.

While water scarcity is a principal threat to human life and political stability, the UAE views addressing the global water challenge as an economic opportunity to help communities progress. Almheiri encouraged all parties to align their efforts to adapt to and mitigate climate change with water and ecosystem conservation.

COP28 in Dubai will place water security and sustainability front and centre on the global climate action agenda



Water security at the heart of COP28 agenda in Dubai

UAE Minister of Climate Change and the Environment, Mariam bint Mohammed Almheiri, has highlighted the UAE's inclusive and action-orientated approach to water sustainability and its impact on the nation's security and economy-wide roadmap to achieve net-zero emissions. Delivering the UAE's national statement at the 2023 United Nations Water Conference, she stressed that responsible water management is a major issue of importance for a country with limited freshwater resources and a growing population and economy.

"As our nation's founder, the late Sheikh Zayed Al Nahyan, taught us, water is not simply a commodity; it is our lifeblood," remarked Almheiri.

Almheiri confirmed that the UAE will place water

security and sustainability front and centre on the global climate action agenda at COP28.

"We look forward to harnessing the positive momentum generated by the Water Action Decade, the UN 2023 Water Conference, and the Water Action Agenda when we welcome the world for COP28 in November," she stated.

Almheiri also represented the UAE at a ministerial-level Arrria-formula meeting of the UN Security Council focusing on the provision of water and sanitation services to civilians during armed conflict. At the meeting, convened by Mozambique and Switzerland on World Water Day 2023, the UAE Minister of Climate Change and the Environment called on the international community to scale up support for the protection of water systems and humanitarian efforts.

Earth Hour 2023 Rallies More People Than Ever

Major landmarks across the world took part in Earth Hour's iconic switch off moment, including the Sydney Opera House, China's Zhouzhuang in Kunshan and the Beijing National Speed Skating Hall, Taipei 101, the Eiffel Tower, the Empire State Building, and Christ the Redeemer.

For the first time in its incredible 17-year

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EARTH HOUR



For the first time in its 17-year history, this year's Earth Hour also encouraged people around the globe to 'switch off' themselves

history, this year's Earth Hour also encouraged people around the globe to 'switch off' themselves by taking a break from their routine and everyday distractions, and deciding for themselves what they can do to restore our one home.

From 08:30 pm local time on Saturday, 25th of March, WWF's Earth Hour, the world's largest grassroots environmental movement, created the 'Biggest Hour for Earth' yet, as more individuals, businesses and communities across 190 countries and territories came together in a powerful moment of unity to celebrate the planet and 'Give an Hour for Earth', spending 60 minutes doing something positive for our planet.

Dr. Kirsten Schuijt, Director General, WWF International: "Earth Hour is a fantastic celebration of people, planet and nature. This

Since 2007, Earth Hour has shone a spotlight on the issues of climate change and nature loss having reached over 190 countries and territories



year we created the Biggest Hour for Earth yet by asking everyone to “switch off” - their lights or their daily habits - and spending 60 minutes doing something for the planet instead. Together, we can turn a single Earth Hour into millions of hours of inspiration, inviting millions of people to act, and making millions more take notice. Our one shared home needs our help and we can ALL play a part in protecting it.”

Meanwhile, Antonio Guterres, Secretary-General, the United Nations, said: “On Earth Hour every year, millions of people in hundreds of cities around the world turn off the lights. It's a call to action to make peace with nature, massively increase climate action and save our planet. And it is a reminder that all of us can play our part in large ways and small, to protect our common home and safeguard our future. Every minute and every hour counts. From the darkness let us build

a brighter and more sustainable future for everyone, everywhere.”

Earth Hour, the world's largest grassroots movement for the environment, returned in 2023 to raise awareness and inspire collective action against climate change and nature loss.

Since 2007, Earth Hour has shone a spotlight on the issues of climate change and nature loss having reached over 190 countries and territories and millions of people around the globe. Earth Hour has featured many of the world's most iconic landmarks switching off their lights, from the London Eye in England to the Eiffel Tower in France and the 2,000-year-old Colosseum in Italy. It has also united millions around the world to push for change and inspired global initiatives since it first started.

World 'Way Off-Track' From Climate Goals: COP28 President- Designate

Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology and COP28 President-Designate, co-chaired the two-day Copenhagen Climate Ministerial held on March 20-21, alongside Sameh Shoukry, COP27 President and Egypt's Minister of Foreign Affairs, and Dan Jørgensen, Denmark's Minister for Development Cooperation and Global Climate Policy.



Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology, delivered opening remarks at Copenhagen Climate Ministerial, the first climate ministerial meeting leading up to COP28

This convening, attended by more than 40 government ministers, is the first climate ministerial meeting leading up to COP28.

Throughout the Copenhagen Climate Ministerial, Dr. Al Jaber held a series of bilateral meetings with climate leaders and government ministers from around the world, including Simon Stiell, UNFCCC Executive Secretary; Frans Timmermans, Executive Vice President of the European Commission; and Zhao Yingmin, China's Vice Minister of Ecology and Environment.

He also held talks with Jennifer Morgan, German Special Envoy for International Climate Action; Shahab Uddin, Bangladesh's Minister of Environment, Forest and Climate Change; Grace Fu, Singapore's Minister of Sustainability and the Environment; and Toeolesulusulu Cedric

COP28 President-Designate calls for finance to be much more available, accessible and affordable in this critical decade for climate action



Schuster, Samoa's Minister of Natural Resources, Environment and Tourism, among others.

In opening remarks at the climate ministerial, Dr. Al Jaber said, "We need to build on the foundation achieved at COP27 and move from goals to getting it done. We are way off track when it comes to the critical goal of keeping 1.5 alive. Incremental steps will simply not cut it, we need transformational progress in the next 7 years across mitigation, adaptation, climate finance and loss and damage."

On mitigation, the COP28 President-Designate urged countries to "Scale up all available zero-carbon energy sources, while minimising the emissions from all other energy sources. Governments should adopt smart policies to incentivise breakthroughs in battery storage and commercialise carbon capture and the hydrogen

value chain. We should inject a business mindset, short-term KPIs and an ambitious action-oriented agenda into the Mitigation Work Programme, and remember that the enemy is emissions, not progress."

Speaking to the Loss and Damage finance facility established at COP27, Dr. Al Jaber emphasised, "We must bring the Sharm El Sheikh outcome on loss and damage to life. This means the loss and damage fund must be fully operationalised, and we need the right governance and structures in place to target the most vulnerable communities."

"The lynchpin to all progress across climate pillars is finance. We have an opportunity to shape a new financial goal at COP28 that enables us to chart a new course for greater climate ambition," stressed Dr. Al Jaber, as he called for "urgent reform of international financial



institutions and multilateral development banks to unlock much more concessional capital, lower risk and attract more private finance. The bottom line is finance needs to be much more available, accessible and affordable.”

“The task ahead represents one of the greatest challenges humanity has ever faced. But, if we act with urgency, act together and act now, it also represents one of the greatest opportunities for social and economic development,” Dr. Al Jaber further said.

Unite behind 'transformational progress' for COP

At the conclusion of the Copenhagen Climate Ministerial, Dr. Sultan bin Ahmed Al Jaber urged global climate ministers to unite behind “transformational progress” for a COP of Action and a COP for All.

In his remarks, Dr. Al Jaber reminded ministers and climate leaders of the approaching Global Stocktake at COP28 and urged them to take action across a range of key areas to bring 1.5C within reach.

He said, “The new IPCC report highlighted the significant challenges ahead and the urgent need to course correct if we are to meet the goals of the Paris Agreement. But more importantly, the report identifies the opportunities and solutions that are available to reduce emissions and enhance resilience.”

Dr. Al Jaber emphasised the need to accelerate pathways to net zero by rapidly adopting renewable and zero carbon energies, decarbonizing the current energy system and investing in proven and new mitigation technologies. He said: “We have a short window of

Dr. Al Jaber urges adoption of renewable and zero carbon energies, implementing decarbonizing strategies, and investing in proven and new mitigation technologies



opportunity to deliver a system-wide transformation. But if we make the right investments, we can create a pathway for sustainable growth, where climate and economic progress go hand-in-hand.”

He also spoke about finance being the critical success factor across all pillars, saying, “We need to double adaptation finance by 2025 and we need a strong outcome on loss and damage this year, with clear recommendations from the transitional committee on the fund and funding arrangement.” Dr. Sultan in his closing remarks underscored the need to explore all networks to ensure the fund is fully operationalized by COP28.

Ambassador Majid, Director-General of COP28, accompanied Dr. Al Jaber to Copenhagen, leading a roundtable with CEOs and business executives from Danish industry spanning renewable energy,

heavy industry and transport, water systems, and energy innovation. In the meeting, Ambassador Majid linked COP28 to the real economy and discussed key components of the COP28 strategy, namely the Global Stocktake, the energy transition and partnership with the private sector in climate action.

Copenhagen was the latest destination in the COP28 Presidency’s global listening tour – a series of international visits to meet with, and hear the views of, a range of partners across government, civil society, youth, the private sector and representatives of international organizations and NGOs. To date, Dr. Al Jaber and members of the COP28 leadership team have visited India, the UK, Germany, France and the US. Additional meetings are scheduled for both developed and developing countries.

UAE Researchers Develop Highly-Efficient, Non-Toxic Way to Upcycle Single-Use Plastic

A team of researchers at NYU Abu Dhabi (NYUAD) have developed a single-step, organic solvent-free, hydrothermal process to convert polyethylene-based plastic bags and polypropylene-based surgical masks into carbon dots.

An estimated 26,000 metric tons of pandemic-related plastic waste – from medical waste to



Novel approach converts single-use plastic into “carbon dots” that can be used for environmental monitoring, disease diagnosis and treatment, and more

online shopping packaging – have been released into the world’s oceans, making it even more urgent to find efficient methods to upcycle this non-degradable material. One solution is to convert the single-use plastic into so-called carbon dots, carbon nanomaterials that are biocompatible, and have applications in the fields of biological imaging, environmental monitoring, chemical analysis, targeted drug delivery, disease diagnosis and therapy, and anticounterfeiting. Existing methods to upcycle plastic into carbon dots involve multiple, time-consuming steps and utilize toxic chemicals.

In the study titled ‘High-yield, One-pot Upcycling of Polyethylene and Polypropylene Waste into Blue-Emissive Carbon Dots’ published in the journal *Green Chemistry*, the researchers present the development of a new synthesis method, which is a simple, cost-effective, and

Current methods of turning waste plastic into Carbon Dots involve multiple, time-consuming steps and use toxic chemicals



highly scalable approach to upcycling plastic waste. Importantly, this oxidative degradation method can upcycle plastics contaminated with organic waste such as food scraps, which poses a significant challenge to traditional recycling technologies. The senior author of this study is Khalil Ramadi, Assistant Professor of Bioengineering, Mohammed Abdelhameed, scientist, and Mahmoud Elbeh, an undergraduate student.

The researchers also estimated the economic feasibility of the synthetic method by comparing the variable costs of this process to existing chemical recycling processes, considering the economic value of the created carbon dots. They found that the global market value of carbon dots is expected to reach USD 6.412 billion by 2025, up from USD 2.496 billion in 2019 – a high commercial value that more than justifies the

associated processing costs.

The high volume of single-use plastics used during the pandemic, particularly surgical masks and medical waste, presents an increased need to find a solution for managing non-biodegradable waste. It is also estimated that only 14 percent of the eligible plastic packaging is recycled, with the rest ending up in landfills and oceans.

“The new method our team has developed is a cost-effective and safe method that can be easily implemented to significantly reduce the amount of harmful plastic that is released into our ecosystems,” said Ramadi. “In addition to providing a new tool to protect our ecosystems, this approach can efficiently and responsibly produce carbon dots, a versatile nanotechnology whose potential applications are nearly boundless.”

National Dialogue For Food Security Launched In UAE

The Ministry of Climate Change and Environment (MOCCA) launched the first session of the National Dialogue for Food Security with the aim of facilitating constructive discussions among stakeholders from the government and private sectors to enhance food security in the UAE.

The event was inaugurated by Mariam bint



Local farms are at the heart of the National Dialogue for Food Security, which will be supported to become major suppliers in the UAE to help reduce the reliance on imported goods

Mohammed Almheiri, Minister of Climate Change and Environment, and Mohammed Mousa Alameeri, Assistant Under-Secretary of the Food Diversity Sector at the MOCCA. Local farmers, private sector representatives, and members of the media attended the event.

Mariam Almheiri highlighted the importance of food security and praised the UAE's strategic steps to strengthen the local food production sector and reduce food loss and waste, including deploying advanced technology and launching initiatives like 'Ne'ma' to promote sustainability in national farms.

Almheiri emphasised the UAE's commitment to achieving the objectives of the National Food Security Strategy 2051 through partnerships and solutions that bring a paradigm shift in the agricultural sector and food systems. The first

The campaign aims to unite businesses with innovation and funding to reduce imports and improve sustainability in food production



session of the National Dialogue for Food Security included panel discussions on sustainable agriculture, food suppliers' contribution to national farms, agricultural innovation, and sustainable marketing of regional agrarian goods.

Mohammed Mousa Alameeri stated that to achieve food security, the Ministry aims to develop the agricultural sector and promote modern farming systems, including organic, vertical, and aquatic farming.

To improve domestic agricultural output, the Ministry has established numerous strategies, including ongoing development of agricultural legislation and services, and development of agricultural markets.

The National Farms Sustainability Initiative is one such program that aims to improve domestic

production through securing purchase agreements, increasing the UAE's self-sufficiency on selected food commodities, and increasing farmer incomes across the nation without affecting food trade.

The first phase of the initiative aims to increase the percentage of purchases by government contractors to 50% of the domestic production in 2023, followed by increasing it further to 70% by 2025, and ultimately to 100% by 2030.

The total UAE vegetable production is currently around 156,000 tons annually, with over 500 tons of field crops and feed, and fruit production of 200,000 tons. The domestic production of vegetables currently meets more than 20% of the total demand in the country, with cucumbers accounting for 80% of the production.

Zayed Sustainability Prize Adds Climate Category

The Zayed Sustainability Prize has announced the launch of a special category called "Climate Action", aimed at recognising and promoting innovative solutions that address climate change and protect the planet's natural resources.

The launch of the Climate Action category coincides with the UAE's Year of Sustainability,



a national initiative that aims to accelerate sustainable development across the country in line with the UAE's national strategy.

Dr. Sultan bin Ahmed Al Jaber, Minister of Industry and Advanced Technology, Director-General of the Zayed Sustainability Prize and COP28 President-Designate, said, "The UAE is committed to delivering a COP of Action – a solutions-focused COP that promotes inclusive sustainable development and accelerates the adoption of policies that will deliver across mitigation, adaptation, climate finance and loss and damage. The new Climate Action category reinforces this commitment by supporting the deployment of solutions the world needs today to keep the Paris Agreement alive and limit warming below 1.5 degrees Celsius."

Al Jaber added, "In this critical decade of action,

the Climate Action category is a significant addition to the Prize's mandate, and we look forward to receiving submissions from around the world. We are proud to encourage and reward innovative solutions needed to turn climate pledges into concrete action, and drive tangible, inclusive and lasting progress for our planet and communities."

The new Climate Action category will further broaden the Prize's reach and impact by rewarding solutions that protect and enhance the natural environment, while also addressing the urgent challenge of climate change. This includes organisations that promote climate adaptation, build resilience and deploy environmental solutions. Small and medium-sized enterprises (SMEs) and nonprofit organisations (NPOs) are eligible to apply to the Climate Action category.

Lebanese Chef Leyla Fathallah Appointed As Advocate On Food Waste For West Asia Region

The UN Environment Programme (UNEP) has appointed renowned Lebanese Chef Leyla Fathallah as its new advocate on food waste in the West Asia region.

As the world is trying to achieve Sustainable Development Goal 12.3 – on halving global food waste per capita at the retail and consumer levels by 2030 – Chef Leyla's appointment aims

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to call attention to the need to the fight against the problem of food waste in a region which relies on food imports and where evidence shows wastage of large quantities of food.

Chef Leyla will be supporting UNEP West Asia's campaigns on food waste through her social media accounts, recording public service announcements and carrying out speaking engagements and personal appearances at high profile events.

"We are looking forward to working with Chef Leyla to inspire and motivate individuals and the hospitality sector across the West Asia Region to take action to reduce food waste," said Sami Dimassi, UNEP Representative and Regional Director for West Asia. "Her appointment is expected to trigger behavioral change on an issue that not only impacts the availability of food

intended for human consumption, but also has ramifications for the environment, natural resources and the economy."

Based in Dubai, Chef Leyla is an influencer on social media and TV and is a staple on the Middle Eastern food scene. Since 2021, she has supported the Recipe of Change campaign focused on the topic of food waste. She has contributed to awareness raising campaigns, participated in talk shows and shared zero waste recipe ideas and tips on her social media platforms.

"I believe that reducing food waste is key to reducing hunger. Small steps can make a big difference and awareness starts from the moment we plan our meals and buy the needed ingredients to the way we consume them," said Chef Leyla.

Sharjah Ruler Witnesses Harvest Of First Phase Of Wheat Farm In Mleiha

H.H. Dr. Sheikh Sultan bin Muhammad Al Qasimi, Supreme Council Member and Ruler of Sharjah, attended the harvest ceremony of the first phase of the "Saba' Sanabel", mean seven spikes wheat farm project, in the Mleiha area.

H.H. Sheikh Abdullah bin Salem bin Sultan Al Qasimi, Deputy Ruler of Sharjah, and H.H. Sheikh



The crop's production is an agricultural milestone for the UAE and is aligned with the food security and sustainability goals of the country

Sultan bin Ahmed bin Sultan Al Qasimi, Deputy Ruler of Sharjah, attended the ceremony.

During the ceremony, Sheikh Sultan emphasised the success of Sharjah's enterprising wheat project and stated that its integration into the food security of agricultural and animal husbandry products will secure the emirate's needs for wheat.

The project is on a 400-hectare complex, about the size of 500 football pitches, in Mleiha. The project is being handled by the Department of Agriculture and Livestock in Sharjah. The germination period took 100 days and will generate 15,200 tonnes of wheat, representing the consumption of Sharjah in one year.

H.H. Dr. Sheikh Sultan addressed the specifications of produced wheat, which

Produce of the enterprising wheat project is free of pesticides and chemicals



achieved record levels in terms of quality. Sharjah Cooperative Society has reserved 9,000 tonnes; the rest will be distributed to other establishments. His Highness said, "After laboratory and field experiments, we will be able to produce 'Sharjah-1', the finest type of wheat."

The farm is equipped with state-of-the-art technology, which includes soil sensors as well as satellites that perform thermal imaging of the site. The sensors can measure the quantity of water in the soil to avoid wastage.

The Department of Agricultural and Livestock Production said that the process of harvesting wheat was carried out using the latest machinery specially prepared for harvesting with the best technology. His Highness received a sample of the first grains and had a taste of the bread made from that wheat.

His Highness toured the complex and witnessed a demonstration of the harvesting process, how to grind the crop, and how to make bread out of it.

The harvest ceremony was attended by Abdul Rahman bin Mohammad bin Nasser Al Owais, Minister of Health and Prevention and Minister of State for Federal National Council Affairs; Mariam bint Mohammed Almheiri, Minister of Climate Change and the Environment; and Abdullah Muhair Al Ketbi, Minister of Federal Supreme Council Affairs; amongst a host of other dignitaries.

The first phase of the farm was opened in November 2022 by the Ruler of Sharjah. The crop's production is an agricultural milestone for the UAE and the farm uses pivot irrigation consisting of mechanised sprinkler systems.

MOCCAIE Graduates First Batch Of Youth Food Security Stations National Project

Mariam bint Mohammed Almheiri, Minister of Climate Change and the Environment, attended the graduation ceremony for the first batch of participants in the Youth Food Security Stations national project, which the Ministry had launched in collaboration with the National Service and Reserve Authority.

The programme forms part of the Ministry's



The programme forms part of the Ministry's strategy to enhance national food security, ensure flexibility and continuity of supply chains, and empower the youth to venture into agricultural entrepreneurship

strategy to enhance national food security, ensure flexibility and continuity of supply chains, and empower the youth to venture into agricultural entrepreneurship.

The graduation ceremony was attended by Major General Staff Hassan Mohammad Bani Hammad, Chief of Force Development Authority at the Ministry of Defence, and Hamed Al-Hamed, Founder and Chairman of Gracia Group, a holding group of agriculture-focused companies, which trained the reserve service recruits.

"Food security has certainly created an urgent need to involve the youth in efforts to achieve the UAE's vision to enhance food security, relying on innovation to address a range of challenges facing this sector," Almheiri said.

"Our role in the UAE is to sustainably increase

*Food security needs to involve nation's youth to achieve the vision to enhance innovation-driven food security:
H.E. Mariam Almheiri*



food production in a way that helps minimise the impact of climate change and protects the environment,” she continued. “Ahead of COP28, the UAE is working on innovative, hi-tech solutions to meet its climate and environmental commitments, all the while providing a global example in enhancing food security.”

Almheiri went on to note that: “The young graduates from this national project are the seed for the Emirati farmers of the future and will support them in establishing their projects and activities to increase agricultural and food production and narrow import gaps.”

The first batch of graduates from the Youth Food Security Stations national project consisted of 50 reserve service recruits. The project aimed to develop integrated modern agricultural stations that use the latest technologies, adapting them

to the UAE’s climate conditions, train them to implement and manage advanced agricultural systems, and enhance the production capacities of these systems and market their products.

The goal is to boost their entrepreneurial abilities, encourage them to invest in sustainable food production systems, help support food security and sustainability goals, and ensure the flexibility and continuity of supply chains.

The project is designed to build the youth’s capacities in agricultural production and food investment. Theoretical and practical studies are offered in a broad range of topics including agricultural entrepreneurship, designing modern farms, principles of sustainable agricultural production and post-harvest technologies, promotion and marketing, and forecasting the future of agricultural innovations.

Climate Change Poses Threat To World's Well-Being: New Study

As the world's investors continue to navigate an increasingly complex international investment landscape and deploy capital for a sustainable future, Mubadala Investment Company (Mubadala) has launched its Megatrends Study with Bloomberg Media, showing how climate change is a growing threat to the world and digital technologies serve as the greatest opportunity for a better future.



Digital technology emerges as the greatest opportunity to counter climate change, Mubadala and Bloomberg Media Megatrends study finds

Based on a survey of over 1,800 global investors, engaged and informed Millennials, and Gen Z consumers from the UAE, UK, US, China, France, and India, the study finds climate change outstrips other megatrends as the greatest risk to the well-being of the world, impacting health, the environment, and business.

France (52 percent), the UK (50 percent), the UAE (41 percent), and India (39 percent) agree most strongly that climate change is the biggest threat, while the US (29 percent) and China (27 percent) see climate change almost on par with the impact of demographic shifts and inequalities.

In response to climate change, the need for a transition to a low carbon economy is highlighted, with the UAE and India feeling most strongly, at 93 percent and 92 percent respectively.

More than 1,800 global investors, millennials and Generation Z consumers from the UAE, the UK, the US, China, France and India were surveyed



To support the creation of a sustainable future for all, the study finds that digital technologies is the megatrend most likely to advance the well-being of the world, led by India (34 percent), the US (34 percent), China (32 percent), and the UAE (31 percent).

The study also notes the significant expectations for business to help lead the way to the future. India (95 percent) and the UAE (91 percent) feel most strongly, followed by the US (85 percent), France (84 percent), the UK (84 percent), and China (81 percent).

The Megatrends Study follows the publication of the report by the UN Economist Network for the UN 75th Anniversary, which focused on five megatrends: climate change; demographic shifts, particularly population ageing; urbanisation; the emergence of digital technologies and

inequalities. According to the UN Economist Network, the megatrends “are the result of human activity, and as such, they can be shaped by human decisions and policy choices.”

Respondents to the Mubadala and Bloomberg Media survey in all markets agree that all five megatrends are important to achieving a sustainable future both today and in 2030.

However, while most markets feel optimistic about the current state of megatrends, especially digital technologies, investors across the board are more optimistic than either Millennials or Gen Z.

For instance, investors (91 percent) feel more empowered to respond to megatrends through their choices than either Gen Z (77 percent) or Millennials (73 percent).



Other key findings noted by the Megatrends Study include:

- Respondents strongly agree that inequalities impact the economy, society, and the political environment
- Respondents agree urbanisation brings significant economic and social advantages and disadvantages
- Respondents are mixed on impact on quality of life of demographic shifts. While India and the UAE feel this most strongly at 93 percent and 91 percent respectively, France and the UK rate the impact lower at 82 percent and 79 percent

In recent months, Mubadala has executed a number of deals in line with its convictions. In October 2022, Mubadala completed the

acquisition of a 100 percent interest in Skyborn Renewables alongside Global Infrastructure Partners (GIP), to access the largest private offshore wind developer globally with a long track record of development and an established presence in Europe and Asia Pacific. This followed the USD525 million acquisition of a stake with BlackRock Real Estate in Tata Power Renewable Energy Ltd. (TPREL) in April 2022 to support India's energy independence and transition.

Mubadala's interest in renewable energy spans more than 15 years and began when it founded Masdar, which is active in more than 35 countries across six continents, ranging from the world's largest single-site solar power plant in the UAE with a capacity of 2GW to Indonesia's first floating solar power plant, which will provide enough electricity to power 50,000 homes.

First 100% Plant-Based Meat Factory In Middle East Opens In Dubai

The IFFCO Group, one of the UAE's largest producers of food products, has opened the first 100-percent plant-based meat factory in the region, in Dubai.

Located in the Dubai Industrial City, the THRYVE factory will catalyse the move towards a more sustainable and healthy food chain in the Middle East, actively supporting the United Nations'



Sustainable Development Goals and the UAE's Vision 2051 initiative to bolster food security through diversity and innovation.

Mariam bint Mohammed Almheiri, Minister of Climate Change and the Environment, said, "The opening of this innovative new facility supports our efforts to protect the country's ecosystems and enhance its food and water security and diversify our food sources. By fostering such robust research and development focused on producing innovative food products, we seek to raise the UAE's ability to move up the global food industry value chain and achieve first place on the Global Food Security Index by 2051."

The THRYVE plant-based venture, developed using cutting-edge food technology, contributes to at least three UN's SDG's: good health and well-being, responsible consumption and

production, and climate action.

The only 100 percent plant-based meat factory in the Middle East, IFFCO's THRYVE will leverage advanced food technologies to produce tasty, healthy, sustainable and culturally relevant food that meets the needs of the local consumer. In addition, IFFCO is working closely with the government to create regulatory standards for plant-based food products.

The global plant-based meat market was estimated to be worth USD7.9 billion in 2022, and is forecast to reach USD15.7 billion by 2027, according to a report from ResearchAndMarkets.com. The newly opened THRYVE factory will cater to 30 percent of the GCC population, stimulating the development of the market for local plant-based products.

ADQ's AgTech Park Rolls Out Vertical Farming Project

Al Ain-based AgTech Park, the agricultural venture of Abu Dhabi holding company ADQ, has announced the operational phase of its cutting-edge AgTech Park ecosystem as the UAE seeks to enhance food security by developing local supply chains.

ADQ has launched the vertical farming project in partnership with ZERO, a high-impact technology



Project is in line with UAE's agenda for reliable crop production all year round and a stable local supply chain

company headquartered in Italy. The ZERO project is the first of several controlled environment agricultural concepts that will be housed in the AgTech Park and will aim to enhance indoor farming locally.

The inaugural farming facility is situated in Khalifa Economic Zones Abu Dhabi Group (KEZAD), the UAE's largest operator and developer of fully integrated and specialised economic zones. Additional sites exploring different technologies will be launched in Al Ain Industrial City within the coming year.

Set to strengthen the local production of crops, fruits and vegetables for multiple applications including fresh food, nutraceuticals and biopharmaceuticals, the first joint project between ADQ and ZERO draws on the benefits of growing crops in vertical layers in a controlled

Vertical farming has a significantly smaller carbon footprint than traditional agricultural methods



environment, which includes higher yield, shorter growing times and lower water usage.

The ZERO project is retrofitted in a 1,000 square metres warehouse and will achieve an initial production volume of approximately 10 tonnes per year at the proof-of-concept stage. Following the pilot phase, a 40,000 square metres commercial phase of the vertical farm will be launched in Al Ain, alongside other projects featuring controlled-environment technologies.

At full scale, the 200-hectare AgTech Park will target production volumes of over 40 kilotonnes of fresh fruits and vegetables annually, which would account for up to 6 percent and 12 percent, respectively, of the UAE's total consumption and import of the produce grown within the park.

Aiming to spearhead a variety of sustainable farming techniques and localise the food supply

chain in line with the National Food Security Strategy 2051, the park was first revealed in August 2021 and is estimated to contribute more than 7 percent to the UAE's agriculture GDP once operating at full scale.

Gil Adotevi, Executive Director of Food and Agriculture at ADQ, stated, "The breakthrough technology explores new solutions to help tackle the challenge of sustainably farming in arid and desert climates. This enables shortening and 'greening' the food value chain, which is top of the agenda for policymakers on our net-zero journey."

Daniele Modesto, CEO, ZERO, added, "Vertical farms respond to the urgent need to rethink agriculture, making it more environmentally friendly and sustainable in a world prioritising the responsible use of resources."

Arab Women Leaders In Agriculture Fellowship Program Opens Call For Applications

During an online event dedicated to the International Women's Day on March 8, the International Center for Biosaline Agriculture (ICBA) announced the launch of the third edition of the Arab Women Leaders in Agriculture (AWLA) fellowship program for women scientists in the Middle East and North Africa (MENA) region. AWLA aims to help early- and mid-career professionals in agriculture to



AWLA fellowship program aims to help women researchers in agriculture secure leadership roles by encouraging gender-responsive working cultures and creating platforms that showcase their intellect, capability, and contribution

secure leadership roles by encouraging gender-responsive working cultures and creating platforms to showcase their intellect, capability, and contribution. AWLA's fellows will help establish a unique R&D forum for women scientists in the MENA region to address pressing agricultural challenges and take part in a regional networking platform for women researchers across agricultural disciplines.

H.E. Razan Khalifa Al Mubarak, UN Climate Change High-Level Champion for COP28 and Chairwoman of ICBA's Board of Directors, said: "Women in agriculture have unique skills and knowledge that can support critical decision-making for impactful climate action, especially in rural areas where it is needed most. According to the World Food Program, women make up around 40 percent of the workforce in farming and agriculture globally, reaching up to 60

*Applications closes on 31 May 2023
and can be made through
www.awlafellowships.org*



percent in developing countries. They also play the lead role in caring for children and family – this puts them at the centre of their communities and gives them a rich understanding of the complex relationships between their own communities, nature, and climate. AWLA seeks to leverage this understanding and empower women in their efforts to help their communities thrive and become more sustainable.”

Dr. Tarifa Alzaabi, Director General of ICBA, said: “Women-led contributions to farming and agricultural science are essential components of food security. In the MENA region, women make up over 40 percent of the labor force in agriculture and contribute around 18 percent to the region’s overall GDP. Through our program, we hope to encourage more women take an active role in science and innovation for sustainable agricultural development and food security.”

The call for applications for the third edition of AWLA, funded by the Bill & Melinda Gates Foundation, will lead to the selection of a group of 20 fellows from the MENA region. The program will be delivered online over an eight-month period, starting from September 2023.

Empirical evidence indicates that a disproportionately low number of women work in senior research and leadership positions in the region, including in agricultural research and the current policy and investment measures may not fully reflect gender perspectives.

The AWLA program aims to contribute to the achievement of the UN Sustainable Development Goal (SDG) on gender equality and women’s empowerment and aspires to have a positive impact on the SDGs on Climate Action; Life on Land; and Partnerships for the Goals.

Proceeds Of 'Designs Of Hope' Exhibition To Support Of Climate Change Education

The eighth edition of the "Designs of Hope" charity exhibition will be held by the Al Manal Humanitarian Initiative from 5th to 7th April 2023, at the Dubai Ladies Club (DLC).

The program will be held under the patronage of Sheikha Manal bint Mohammed bin Rashid Al Maktoum, President of the UAE Gender Balance Council and wife of Sheikh Mansour bin Zayed Al



Al Manal Humanitarian Initiative intends to support Dubai Cares in its efforts towards integrating climate change issues into educational curricula to achieve global educational transformation that will benefit the whole of humanity

Nahyan, Deputy Prime Minister and Minister of the Presidential Court.

The exhibition proceeds will be directed to Dubai Cares, part of Mohammed Bin Rashid Al Maktoum Global Initiatives, to support programmes on integrating climate change issues into the curricula and the educational system.

Through this collaboration, the Al Manal Humanitarian Initiative intends to support Dubai Cares in its efforts towards integrating climate change issues into educational curricula to achieve global educational transformation that will benefit the whole of humanity.

The Al Manal Humanitarian Initiative's campaign in the UAE's "Year of Sustainability" will feature initiatives, activities and events that draw upon the UAE's deep-rooted values of sustainability.

The eighth edition of the “Designs of Hope” charity exhibition will be held from April 5 to 7 at Dubai Ladies Club (DLC)



The 2023 campaign will contribute to supporting global efforts aimed at integrating climate issues into educational curricula and systems – with a focus on empowering girls in this field by providing them with the necessary academic skills and tools to enhance their contribution and participation towards efforts to deal with climate change issues for a more sustainable future.

“The time has come for educational systems all around the world to address climate change urgently as it is a fundamental issue related to the sustainability of humanity and it is of great importance to inform new generations through advanced and effective educational systems that persuade participation and acting responsibly, whether through public behaviour or innovation,” Sheikha Manal bint Mohammed emphasised.

She further stressed that the governments'

interest in including climate-related education in their national strategies and goals is a step in the right direction for more practical and rapid steps to provide a healthy and safe environment for society and future generations.

As the exclusive Education Partner for COP28, Dubai Cares will be convening a climate-focused second edition of its flagship RewirEd Summit at the conference to position education at the forefront of the global climate agenda.

Sheikha Manal emphasised the importance of collaborative international efforts to find solutions to climate change. The exhibition proceeds will go towards supporting the integration of climate change issues in education to contribute to the SDGs related to health, education and gender balance.

Fully Electric Volvo EX90: The Start Of A New Era Of Safety

As a true seven-seater, all-electric SUV that further raises standards in safety and a more sustainable lifestyle, the new Volvo EX90 represents the start of a new era for the company which is setting a decisive course for a fully electric future.

Starting with the Volvo EX90, the company plans to reveal one new fully electric car each year. By



The Swedish automaker's new flagship electric vehicle will have 300 miles of range and a host of high-powered tech from suppliers like Google, Qualcomm, Luminar, Nvidia, and more

2030, the goal for Volvo is to sell only fully electric cars, one of the most ambitious electrification blueprints in the automotive industry and crucial to its ambition of being a climate-neutral company by 2040.

The new fully electric flagship SUV reflects the brand's Swedish roots. Reflecting its global footprint as a company, the Volvo EX90 will be built in the USA in 2023 and later also in China. These two production facilities aim to eventually become climate neutral.

A new instant classic in Scandinavian design, the Volvo EX90 defines the principle of form following function. It's a versatile, stylish family car with modern proportions, combined with cutting-edge technology in core computing, connectivity and electrification to optimise safety, efficiency and aesthetics.

The Volvo EX90 is equipped with a truly advanced sensor system that sets new standards for safety in the automotive industry



Prioritising safety

The standard safety in the Volvo EX90 is also higher than any Volvo car before it. It's designed to understand the driver and its surroundings to help keep every occupant in traffic safe. It can also get smarter and safer over time, as it learns from new data and receives updates.

The Volvo EX90 has an invisible shield of safety enabled by the brand's latest sensing technology, inside and outside. State-of-the-art sensors like cameras, radars and lidar (light detection and ranging), are connected to the car's high-performance core computers, where NVIDIA DRIVE runs Volvo Cars' in-house software to create a real-time, 360-degree view of the world.

The new EV features "one of the most advanced sensor sets on the market," including eight cameras, five radars, 16 ultrasonic sensors, and a

cutting-edge lidar sensor. A lidar sensor mounted on the roof of the EX90 will aid the driver in avoiding exterior obstacles, while two cameras inside the vehicle will monitor the driver's eye behavior to determine whether they are paying attention or even perhaps impaired. It can see small objects hundreds of metres ahead, creating more time to inform, act and avoid. The sensors also contribute to improve the reliability and overall performance of the assisted driving function Pilot Assist, with a new steering support while changing lanes.

Depending on the driver's attention, the EX90 will be able to take action when needed. If the driver is distracted, the cameras will pick up on it and the vehicle will issue a series of warnings intended to bring the focus back on the road. If the driver still isn't responding, the vehicle will begin to slow down, eventually coming to a full stop on the side of the road and activating the hazard lights.

Finally, thanks to the state-of-the-art sensor set including lidar, the Volvo EX90 is the first Volvo that's hardware-ready for unsupervised driving in the future.

Technology with a purpose

A core system – powered by NVIDIA DRIVE AI platforms Xavier and Orin, Snapdragon® Cockpit Platforms from Qualcomm Technologies and in-house developed software by Volvo engineers – runs most of the core functions inside the car, from safety and infotainment to battery management. The end result is a more responsive and enjoyable experience inside the car.

In other words, the Volvo EX90 is a highly advanced computer on wheels. Even better, it is designed to get better over time, thanks to regular over-the-air software updates.

By combining the state-of-the-art computing power from Snapdragon® Cockpit Platforms with



the visualisation capabilities of Unreal Engine, the 3D tool developed by Epic Games and used to power some of the world's largest games, to give you lightning-fast computing power and high-quality graphics on the in-car screens and head-up display.

A 14.5-inch centre screen is the gateway to one of the best infotainment systems on offer, with Google built in. Google apps and services including hands-free help from Google Assistant, Google Maps navigation and more apps on Google Play all come built in.

The displays in the Volvo EX90 helps keep the driver's eyes on the road by offering the right information at the right time. The Volvo EX90 will also be compatible with wireless Apple CarPlay.

Thanks to the standard 5G connection where

available, it is easy to install the apps from the home screen and enjoy highly intuitive navigation. Occupants can also stream their favourite music through the new, reference-quality Bowers & Wilkins audio system featuring Dolby Atmos as a Volvo-first, plus head rest-integrated speakers for immersive sound.

All of this technology comes together in one of the most pleasant and elegant car interiors on the market, full of natural and responsibly sourced materials. That interior composition also reflects the brand's sustainability ambitions, such as being a fully circular and climate-neutral company by 2040.

Supporting a more sustainable lifestyle

With its brand new, in-house developed fully electric technology base, the Volvo EX90 is the perfect companion for a more sustainable family

The Volvo EX90 is equipped with a truly advanced sensor system that sets new standards for safety in the automotive industry



lifestyle. Delivering up to 600 kms of tailpipe emission-free driving range on a single charge, according to the WLTP test cycle, it charges from 10 to 80 per cent in around 30 minutes.

The initially available twin-motor all-wheel drive version is powered by a 111kWh battery and two permanent magnet electric motors together delivering in its performance version 380 kW (517 hp) and 910 Nm of torque. In combination with the brand-new chassis, this creates a great and smooth driving experience.

The Volvo EX90 contains approximately 15 per cent of recycled steel, 25 per cent of recycled aluminium as well as 48 kilogrammes of recycled plastics and bio-based materials, which corresponds to around 15 per cent of the total plastic used in the car – the highest level of any Volvo car to date.



UN 2023 Water Conference: Watershed Moment For Water- Secure Future

The three-day UN 2023 Water Conference in New York culminated in March with a breakthrough response to the global water crisis, with governments, businesses and civil society committing billions of dollars to advance the water agenda, a dealmaker for accelerating sustainable development overall.

Some 10,000 participants gathered at UN



The UN 2023 Water Conference, co-hosted by the Governments of Tajikistan and the Netherlands, mobilized Member States, the UN system and stakeholders alike to take action and bring successful solutions to a global scale

Headquarters and online from 22 to 24 March 2023, to urgently scale up action to address the water crisis and ensure equitable access to water for all. Co-hosted by the Kingdom of the Netherlands and the Republic of Tajikistan, the Conference brought together world leaders, civil society, business leaders, young people, scientists, academics, the UN System and others from across sectors — agriculture, energy, environment and water — around a common goal: to urgently tackle the water crisis and set the world back on track to achieving Sustainable Development Goal 6 - On Clean Water and Sanitation.

“The commitments at this Conference will propel humanity towards the water-secure future every person on the planet needs,” noted UN Secretary-General António Guterres at the closing ceremony in New York.

Around 2 billion people around the world still lack access to safe drinking water and 40 per cent of the world's population are affected by water scarcity



To achieve this, the Secretary-General highlighted key game-changers: from reinforcing water's place as a fundamental human right and reducing the pressures on the hydrological system, to developing new, alternative food systems to reduce the unsustainable use of water in food production and agriculture and designing and implementing a new global water information system to guide plans and priorities by 2030.

The Secretary-General also advocated for integrating the approach on water, ecosystems and climate to reduce greenhouse gas emissions and strengthen communities — from resilient infrastructure, water pipelines and wastewater treatment plans, to ensuring every person in the world is protected with early warning systems against natural disasters by 2027; and continued to press for climate justice and global action to limit global warming to a 1.5-degree rise. Lastly,

he called for a dramatic acceleration in resources and investment into the ability of all countries to reach SDG 6.

A watershed moment for the SDGs

Access to safe water, sanitation and hygiene is the most basic human need for health and well-being, and a declared human right. But some 2 billion people around the world still lack access to safe drinking water and 40 per cent of the world's population are affected by water scarcity. Agriculture demands alone account for some 70 percent of water usage.

Adding to the pressure, more than 90 percent of disasters are water-related, with climate change hitting hardest through water. And humanity's demand for water keeps growing, with pressure on freshwater projected to increase by more than 40 per cent by 2050.



Against this background, conference deliberations ranged from the urgency of the water crisis, including its role in forced migration, climate change and conflicts to stressing its critical link to good health, poverty reduction and food security. Attention was also given to solutions, with deliberations spanning the need for better data collection, enhanced governance systems, capacity development opportunities and funding gaps in the water sector. With financing needs at between USD182 to more than USD600 billion annually, the importance of unlocking financing and innovative funding schemes, calling for new innovations and investments at scale in the water economy was also underscored.

Transformative Water Action Agenda

Responding to this, the Water Action Agenda, the key outcome of the Conference, captured over

700 commitments aimed at driving transformation from a global water crisis to a water-secure world. The agenda represents the global community's bold resolve to address the water challenges through a more coordinated and results-driven approach. A number of other follow-up steps are also under consideration – including the appointment of a Special Envoy on Water.

The conference outcomes will also receive concrete follow-up in three key upcoming Summits: the SDG Summit during the UN General Assembly in September 2023, the Summit of the Future in 2024, the World Social Summit in 2025, and through the annual High-level political forum on sustainable development, Conference of Parties and other United Nations processes, as well as the Dushanbe Water Process.

Nominations Open For UNEP's 2023 Champions Of The Earth Award

The UN Environment Programme (UNEP) has launched a call for nominations for its annual Champions of the Earth award to recognize outstanding leaders from government, civil society, and the private sector for their transformative impact on the environment. The UN's highest environmental honour seeks nomination of individuals, organisations and governments developing and implementing

AWARD



innovative and sustainable solutions and policies to eliminate plastic pollution.

Following a historic UN Environment Assembly resolution in 2022 to develop an international legally binding instrument on plastic pollution, including in the marine environment with the ambition to complete the negotiations by end of 2024, the year 2023 is critical to ensuring the world comes together to end the scourge of plastic pollution. This year's World Environment Day, hosted by Cote d'Ivoire, will also focus on efforts to #BeatPlasticPollution.

The challenge of the triple planetary crisis of climate change, nature loss and pollution and waste is not insurmountable. People around the world are stepping forward every day to innovate and implement ways to support nature's extraordinary capacity for renewal. The Champions of the Earth help lead that push.

Since the award's inception in 2005, a total of 111 laureates have been honoured as Champions of the Earth: 26 world leaders, 69 individuals and 16 organizations.

In 2022, the Champions of the Earth Award received a record number of nominations from all over the world. The growing interest over the years reflects the increasing number of people standing up for the environment and greater acknowledgement of the value of this work.

Individuals, government entities, groups and organisations may be nominated under the categories of Policy Leadership, Inspiration and Action, Entrepreneurial Vision, and Science and Innovation. Nominations are open from 14 March to 14 April 2023 to everyone; the Champions of the Earth will be announced in late 2023.

The Green City Of Tomorrow: Stockholm, Sweden

Stockholm is one of Europe's most environmentally friendly cities, and an international role model of global environmental and climate action. The city is renowned for its beauty and its many green spaces and above all for its proximity to water. Stockholm combines great expanses of water and greenery with a mixture of historic medieval buildings and contemporary architecture.



Stockholm has had ambitious environmental and climate plans for many years. With new policies, the city will increase its efforts even more

Stockholm has a long history of ambitious environmental and climate plans. The first environment programme was adopted as early as 1976, and a number of policies have followed ever since. Thanks to many years of dedicated and successful environmental efforts, Stockholm was awarded Europe's first European Green Capital in 2010.

Stockholm has had ambitious environmental and climate plans for many years. The Environment Programme and The Climate Action Plan are two new policies that the city is undertaking. With these new policies, the City of Stockholm will increase its efforts even more. Stockholm will adopt a climate budget and sets out to be climate positive by 2040.

Fossil-Free and Climate Positive by 2040

The goal is that the City of Stockholm and its residents will have reorganised their energy use

The city of Stockholm and its residents are reorganising their energy use so as to be fossil-free by 2040



many challenges to meet the goal of being a long-term sustainably growing city. The Stockholm Royal Seaport is a current testbed where new ideas are tried out with the goal to also inspire other cities, companies, and researchers. The project is located at a former industrial site and brownfield-area and is one of the largest urban development areas in northern Europe.

It is being transformed into a waterfront urban district with social facilities, 12,000 new homes and 35,000 workplaces. The large space offers opportunities to try out new materials and construction methods for low-energy buildings, waste management and circular resources.

The people of Stockholm are put at the centre of the district's transformation. To actively include residents in all phases of the urban planning also plays an important role for the many climate-smart solutions that are being tested within the project.

so as to be fossil-free by 2040. This means that energy used for heating, as well as transport, electricity and gas use in Stockholm, do not generate any net greenhouse gas emissions and also that the city works to ensure that the global climate impact of its consumption is sharply reduced. Working with the goal to make Stockholm climate positive by 2040 calls for development of new technology and business models. The goal of a fossil-free and climate-positive Stockholm by 2040 includes two milestones for the programme period:

- Reduced greenhouse gas emissions — maximum 1.5 tonnes CO₂e per resident
- Reduced climate impact from consumption

Stockholm Royal Seaport

Stockholm is a fast-growing city and 140,000 new homes are planned until 2030. This entails





Green Transport

Trains and buses in Stockholm have been using 100% renewable energy since 2017 and the city aims to provide the most sustainable public transport in the world.

The Stockholm public transport system (SL) consists of around 450 bus lines, three shuttle boat lines and a metro system covering a total of 100 kilometres, in addition to other trams and local trains. Every day almost 800,000 people travel by public transport in the Stockholm region. The journey towards fossil-free, low-carbon public transport began way back in the 1980s. Thanks to hard work, a long-term approach and clearly defined interim targets, the goal of 100 percent renewable energy for the metro, buses and local trains was achieved in 2017. The next goals for 2030 are to have fossil-free maritime traffic, cut emissions by 75 percent compared

with 2009 levels, and to use 15 percent less energy per passenger kilometre than in 2011.

District Heating Systems

In central Stockholm, you find one of Europe's largest district heating and cooling systems. Close to 90 percent of the city's buildings are connected to the district heating network, which uses several innovative energy sources, such as excess heat and wastewater.

Stockholm Exergi is responsible for heating and cooling production in the region of Stockholm. The district heat distribution network has a length of 3,000 km, and after the last coal-fired plant in Stockholm was closed down in April 2020, the heat supply system is primarily based on renewable energy sources such as biofuel and waste from households and industries. With several innovative solutions, Stockholm has

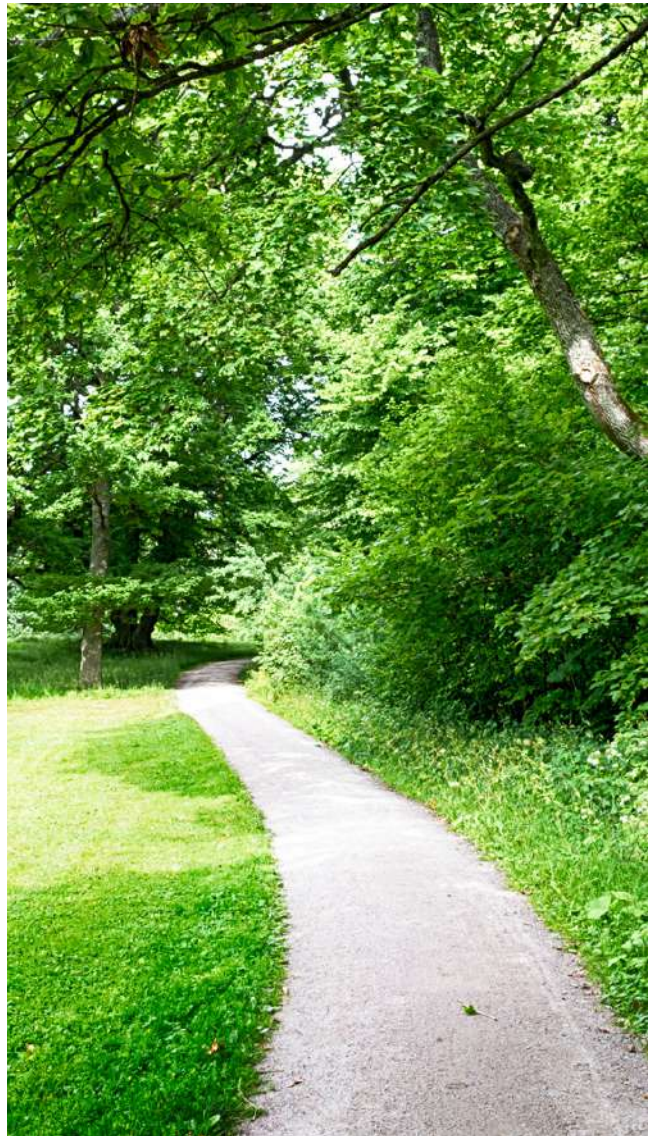
Trains and buses in Stockholm have been using 100 percent renewable energy since 2017



continuously improved the system's sustainability and low climate impact.

Hammarbyverket is the world's largest heat pump plant that extracts district heating and cooling from purified wastewater. The plant has seven heat pumps with a total power of 225 MW, which is enough to heat 95,000 two-room apartments during a normal cold winter. The purified wastewater comes from Henriksdal's wastewater treatment plant to the Hammarby plant heat pumps, that utilise the energy contained in the received purified wastewater.

The heat produced goes into Stockholm's district heating network. At the same time, the process generates cold water, which in the next step is used to produce cooling in the district cooling network. The continuous development of new solutions within the district heating system makes Stockholm an example of how coal can be



replaced with renewable sources to heat and cool entire cities.

Stockholm is growing rapidly and enjoying a positive stage in its development, the high ambitions within the area of climate and the environment must be matched by efforts for a socially cohesive city.

Largest River And Wetland Restoration Initiative In History Launched

A coalition of governments have launched the Freshwater Challenge - the largest ever initiative to restore degraded rivers, lakes and wetlands, which are central to tackling the world's worsening water, climate and nature crises. Announced at the UN Water Conference in New York, the Freshwater Challenge aims to restore 300,000km of rivers - equivalent to more than 7 times around the Earth - and 350

54

INITIATIVE



The Freshwater Challenge launched at the UN Water Conference is the largest ever initiative to restore degraded rivers, lakes and wetlands

million hectares of wetlands - an area larger than India - by 2030.

Along with water supplies, healthy freshwater ecosystems provide a wealth of benefits to people and nature, and are critical to mitigating and adapting to climate change, and achieving the Sustainable Development Goals (SDGs). Yet one-third of the world's wetlands have been lost over the past 50 years. Rivers and lakes are the most degraded ecosystems in the world, with fish populations, many of which are vital for community food security, pushed to the brink.

Released in March, the IPCC's sixth assessment report outlines the serious impacts of climate change on freshwater ecosystems, highlighting the need to protect and restore them to enhance adaptation and build resilient societies, economies and ecosystems.

2.3 billion people, or around one quarter of the global population, live in water-stressed countries



Championed by the governments of Colombia, the Democratic Republic of Congo, Ecuador, Gabon, Mexico and Zambia, the Freshwater Challenge calls on all governments to commit to clear targets in their updated National Biodiversity Strategies and Action Plans, National Determined Contributions and National Implementation Plan for the SDGs to urgently restore healthy freshwater ecosystems.

The Freshwater Challenge is a country-driven initiative with an inclusive, collaborative approach to implementation, where governments and their partners will co-create freshwater solutions with indigenous people, local communities, and other stakeholders.

Building on the Global Biodiversity Framework agreed in Montreal in December 2022, which included the restoration of 30% of the world's

degraded 'inland waters', the Challenge will contribute to the UN Decade on Ecosystem Restoration.

Inger Andersen, UNEP Executive Director said, "Healthy rivers, lakes and wetlands underpin our societies and economies, yet they are routinely undervalued and overlooked. While countries have pledged to restore one billion hectares of land, the Freshwater Challenge is a critical first step in bringing a much-needed focus on freshwater ecosystems."

Stuart Orr, Freshwater Lead at WWF International said, "The clearest sign of the damage we have done - and are still doing - to our rivers, lakes and wetlands is the staggering 83% collapse in freshwater species populations since 1970.

The Freshwater Challenge puts the right goals



and frameworks in place to turn this around - benefiting not only nature but also people across the world."

The Freshwater Challenge will focus on providing the evidence needed at country level to effectively design and implement restoration measures, identify priority areas for restoration, update relevant national strategies and plans, and mobilise resources and set up financial mechanisms to implement the targets.

The new initiative comes against the backdrop of evidence-based studies that state that about 4 billion people, representing nearly two-thirds of the global population, experience severe water scarcity at least one month of the year.

In addition, 2.3 billion people, or around one quarter of the global population, live in water-

stressed countries. Almost three quarters of all recent natural disasters are water related, including floods, droughts and storms. These disasters have destroyed lives and livelihoods, impacted millions and caused USD700 billion in economic damage in the past 20 years.

UN reports also suggest that by 2050, five times as much land is likely to face "extreme drought", 5.7 billion people are likely to live in water scarce areas, and the number of people at risk from floods is projected to rise to around 1.6 billion.

Championed by the coalition of countries, the Freshwater Challenge is supported by the UN Decade on Ecosystem Restoration, the Secretariat of the Convention on Wetlands, WWF, IUCN, The Nature Conservancy, Wetlands International and ABinBev.

Dubai Municipality Celebrates Global Recycling Day

Dubai Municipality celebrated Global Recycling Day on March 18 by organising various activities and programmes in cooperation with the private sector.

The day is observed annually to raise understanding of the environmental impact of plastic and highlight the importance of recycling as a feasible solution.

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More than 500 volunteers, representing 11 government and private entities, participated in activities held to mark the Day at Umm Suqeim Beach, Al Mamzar Beach, Al Qudra Lakes, Al Ruwaya Reserve and Al Qudra Street.

One of the highlights of the day's activities was 'An Hour with the Cleaning Worker', an on-field volunteering initiative focused on city cleanliness and environmental sustainability, which saw volunteers joining workers to support waste management efforts. After sorting 1.2 tons of general waste, the volunteers isolated 400 kg of waste for recycling.

The Dubai Municipality highlighted the importance of reducing waste, promoting its reuse and recycling, and preserving natural resources for future generations to advance the efficiency of the circular economy.

Dawoud Al Hajri, Director General of Dubai Municipality, said: "Dubai Municipality aims to make recycling an important part of daily life in the emirate by providing opportunities for volunteering and sustainable community work in waste management.

"Inculcating a recycling culture plays a vital role in preserving natural resources and reducing the carbon footprint. We seek to promote reuse of materials to optimise the consumption of new resources and encourage companies to develop new technologies that can make recycling easier and more efficient."

Since its inception in 2017, An Hour with the Cleaning Worker' initiative has seen more than 16,000 hours of volunteering work devoted to preserving the city's environment and aesthetic appearance.

IDLFILEW

NUAETR

OCASEN

UHRITAOYT

PERTOTC

YERECLC

NEXCTIT

EEGNEYRR

Answers: 1. Authority, 2. Nature, 3. Greenery, 4. Protect, 5. Recycle, 6. Wildlife, 7. Extinct, 8. Oceans

Word
Search

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GOVERNMENT

POWERFUL

NATURE

DESERT

SEASONS

WINDS

RECYCLE

WEATHER

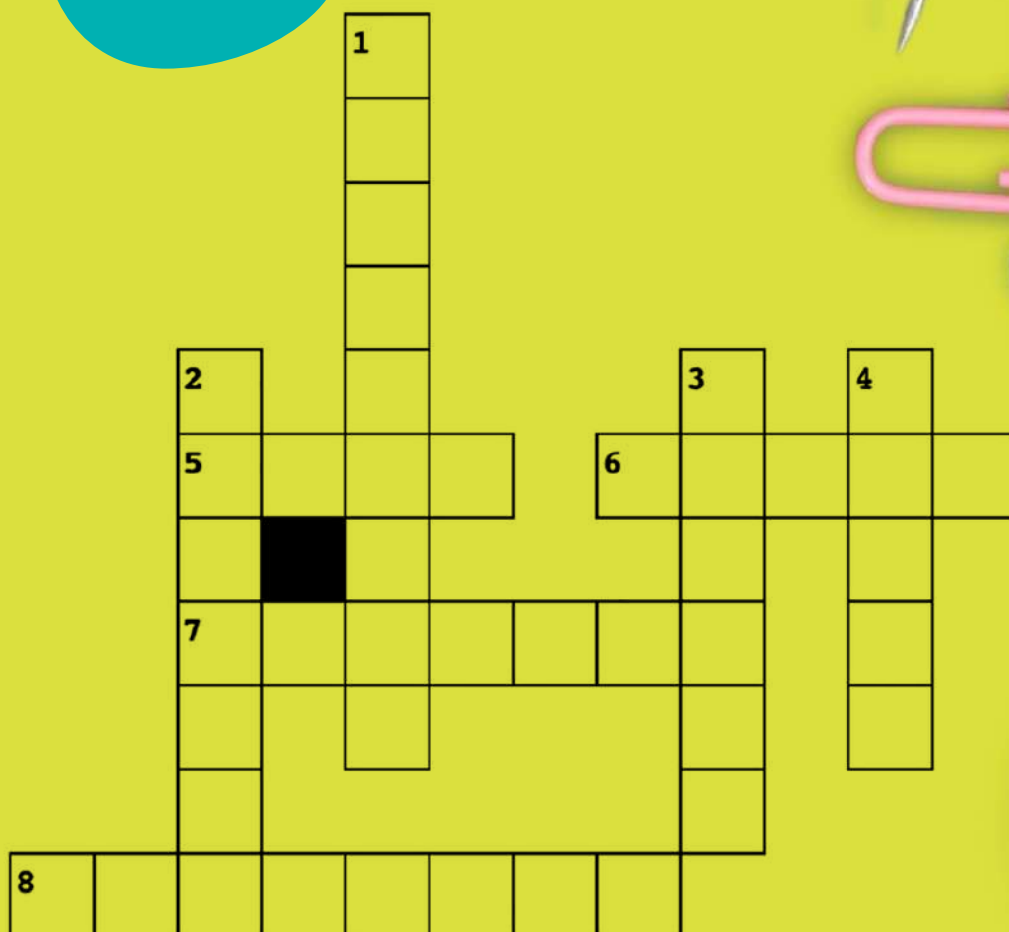
CONTROL

LIFESTYLE

MINERALS

ENDANGER

Crossword Puzzle



Across

5. Ground; country
6. Word before house or plant
7. Odourless flammable gas
8. Foliage or vegetation

Down

1. People living in one locality
2. Weather conditions
3. Large dense growth of trees
4. Suddenly take hold of

Answers: 1. Community, 2. Climate, 3. Forest, 4. Seize, 5. Land, 6. Power, 7. Methane, 8. Greenery

WORD OF THE DAY:

METHANE

Methane is a hydrocarbon that is a gas at room temperature (20°C). Its molecular formula is CH₄, so it has one carbon atom and four hydrogen atoms per molecule. It is often found as the main part of natural gas. Methane is a greenhouse gas 22 times more effective than carbon dioxide. It is also less stable and slowly oxidates by oxygen to carbon dioxide and water.

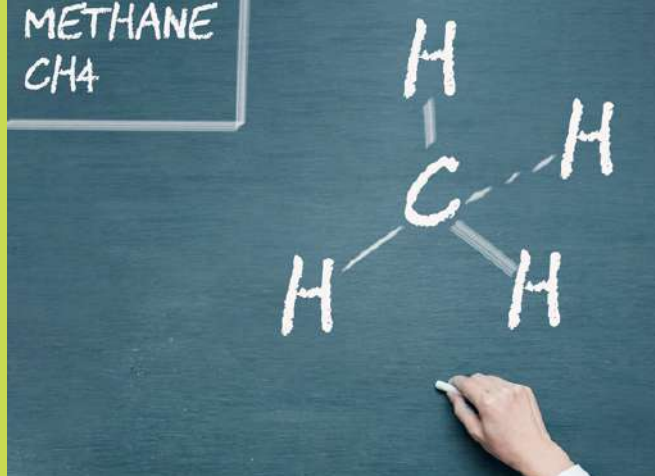
Greenhouse gases are gases in Earth's atmosphere that trap heat. They let sunlight pass through the atmosphere, but they prevent the heat that the sunlight brings from leaving the atmosphere.

Methane is used in industrial chemical processes and may be transported as a refrigerated liquid (liquefied natural gas, or LNG). Gas pipelines distribute large amounts of natural gas, of which methane is the principal component.

Methane is used as a fuel for ovens, homes, water heaters, kilns, automobiles, turbines, and other things. Activated carbon is used to store methane.

Methane is the next most common greenhouse gas emitted by human activities. It makes up 10 percent of U.S. greenhouse gas emissions. Most methane emissions come from raising livestock (like cows), but methane is also released when coal, natural gas, and oil are produced and transported, and when organic waste (like food) decays in landfills. Methane is a stronger gas than carbon dioxide, meaning it creates more warming, but it stays in the atmosphere for a shorter time.

For many years, methane was overlooked in the climate change conversation. But scientists and policymakers are increasingly recognizing that methane reductions are crucial.



Slowing today's unprecedented rate of warming can help avert our most acute climate risks, including crop loss, wildfires, extreme weather and rising sea levels.

Atmospheric concentration of methane is increasing faster now than at any time since the 1980s.

Which means that now is the methane moment: Acting now to reduce methane emissions will have immediate benefits to the climate that reductions in carbon dioxide cannot provide on their own.

World Penguin Day – April 25

Penguins are some of the most adorable, lovable and impressive creatures in the animal kingdom. What better way to celebrate the cuteness of these amazing feathered friends, than by honouring them with their very own awareness day?

World Penguin Day is a celebratory and educative initiative that encourages people to learn more about penguins and their environment, how important they are to our ecosystems and the threats they face.

World Penguin Day is celebrated on April 25 each year, as this is roughly the date of this amazing creatures annual, northward migration.

Found all over the Southern Hemisphere, from Antarctica to the Galápagos Islands, penguins are famous for their endearing waddles, their dedicated chick hatching efforts and, for those based in icy climates, their trick of huddling to



stay warm.

While the day originated from the Adélie penguin's migration habits, it celebrates all species of penguin and highlights the plight of these water-loving creatures. Of the 17 or so species around today, sadly 10 of them have been deemed endangered or vulnerable by the International Union for Conservation of Nature (IUCN) and 3 are considered near threatened.

Stop Food Waste Day - April 26

Did you know, one third of food produced for human consumption is lost or wasted globally? Food waste is central to some of the key challenges facing the world today, including hunger and poverty, climate change, health and wellbeing and the sustainability of agriculture and oceans. Wasting food is also a waste of the energy to grow, harvest, process and cook, and food waste in landfill can cause methane emissions, a potent greenhouse gas.

Stop Food Waste Day is the largest single day of action in the fight against food waste. Here are three ways by which you can take action:

- Prevent food waste at source by storing food optimally, making use of every edible part of the ingredient and planning meals ahead of time
- Inspire others to waste less, and repurpose more
- Repurpose food by redistributing any surplus to your local community, or giving a second life to ingredients that most commonly go to waste

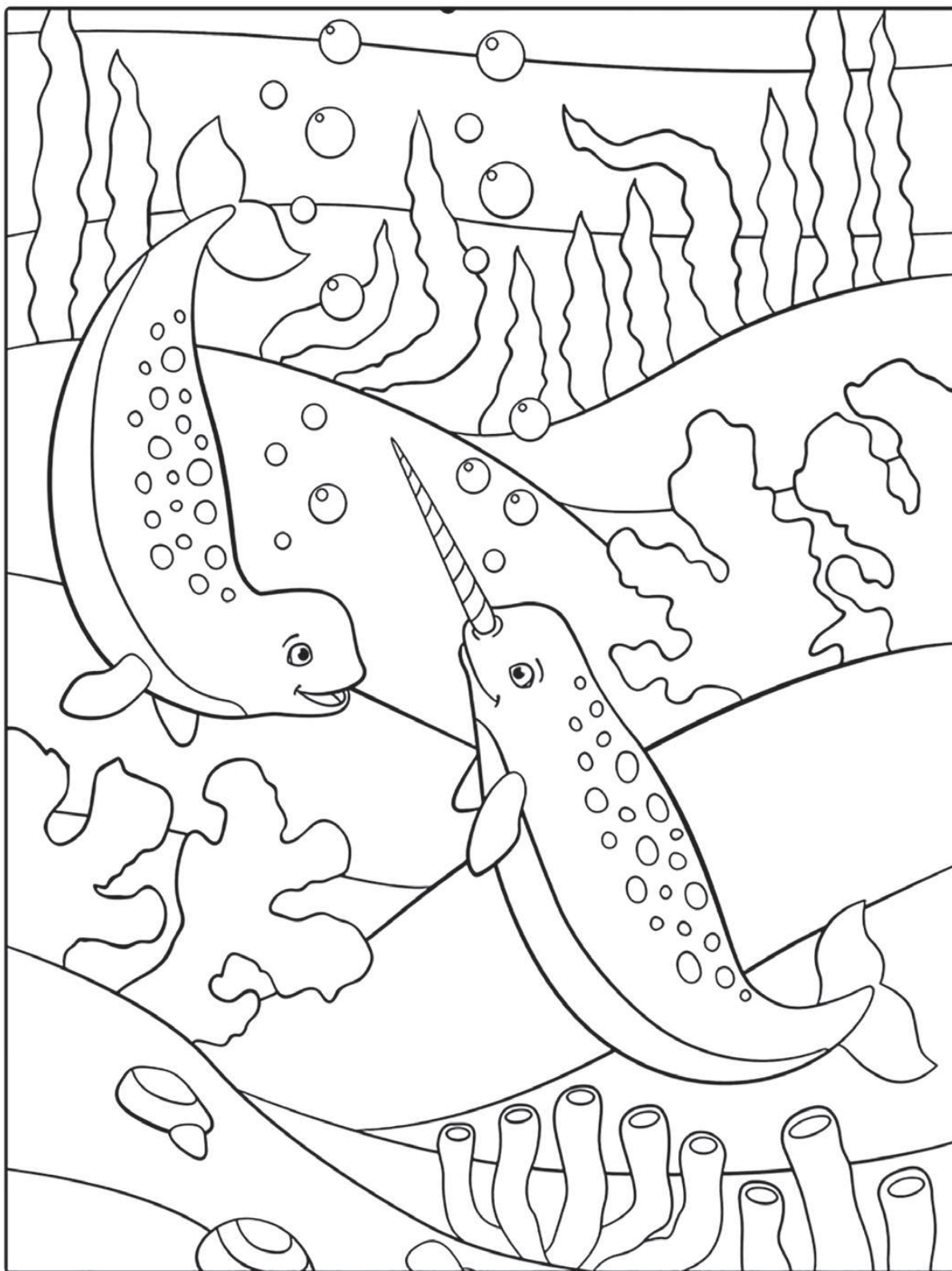


What can you do to help?

Things to Do...

- ☒ Switch off tap when brushing teeth! _ _ _ _ _
- ☒ Carry a water bottle around! _ _ _ _ _
- ☒ Use a metal straw. _ _ _ _ _
- ☒ Reuse plastic bags! _ _ _ _ _
- ☒ Use both sides of a sheet of paper. _ _ _ _ _

COLOUR ME!



Oldest Pearling Town In Arabian Gulf Discovered In Umm Al Quwain

The Umm Al Quwain Department of Tourism and Archaeology announced the latest developments in the archaeological excavation of Siniya island in its third season, indicating the existence of the oldest pearling town in the Arabian Gulf located on Siniya island, which flourished between the late 6th and mid-8th centuries CE. The town is located near the ancient Christian monastery (Siniya Monastery),

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which was discovered last year.

Sheikh Majid bin Saud bin Rashid Al Mualla, Chairman of Umm Al Quwain Department of Tourism and Archaeology, said, "This discovery is of major significance for the region as it establishes that pearling has been an essential part of the livelihood and a fundamental component of the heritage for over 7,000 years."

Rania Kannouma, Head of Archaeology section, explained that the Pearling city discovered on Siniya island covers an area of approximately 12 hectares, and was discovered during the organised archaeological excavations this year.

The latest research and archaeological excavation show that this city is one of the largest surviving urbanised settlements ever found in the UAE and is comparable to the prosperity of medieval Julfar

in Ras Al Khaimah.

The 2023 excavations reveal the existence of buildings in different designs and architectural planning. Some consist of one room while others have two rooms.

Several larger buildings containing many rooms and separated by a number of indoor squares have also been discovered. The houses were built from local beach rocks and traditional materials from the surrounding environment and the roofs were made of palm trunks.

Research and excavation work on Siniya island will continue in collaboration with the Ministry of Culture and Youth, UAE University, the Italian archaeological mission in Umm Al Quwain and Institute for the Study of the Ancient World at New York University.

Countries Unite To Fight Hazardous Skin Lightening Products

The governments of Gabon, Jamaica and Sri Lanka have joined forces to fight back against damaging beauty practices, launching a joint USD14-million project to eliminate the use of mercury in skin lightening products. Using cosmetics to inhibit the body's production of melanin, leading the skin to appear lighter, is a centuries-old practice that continues to take a toxic toll today.

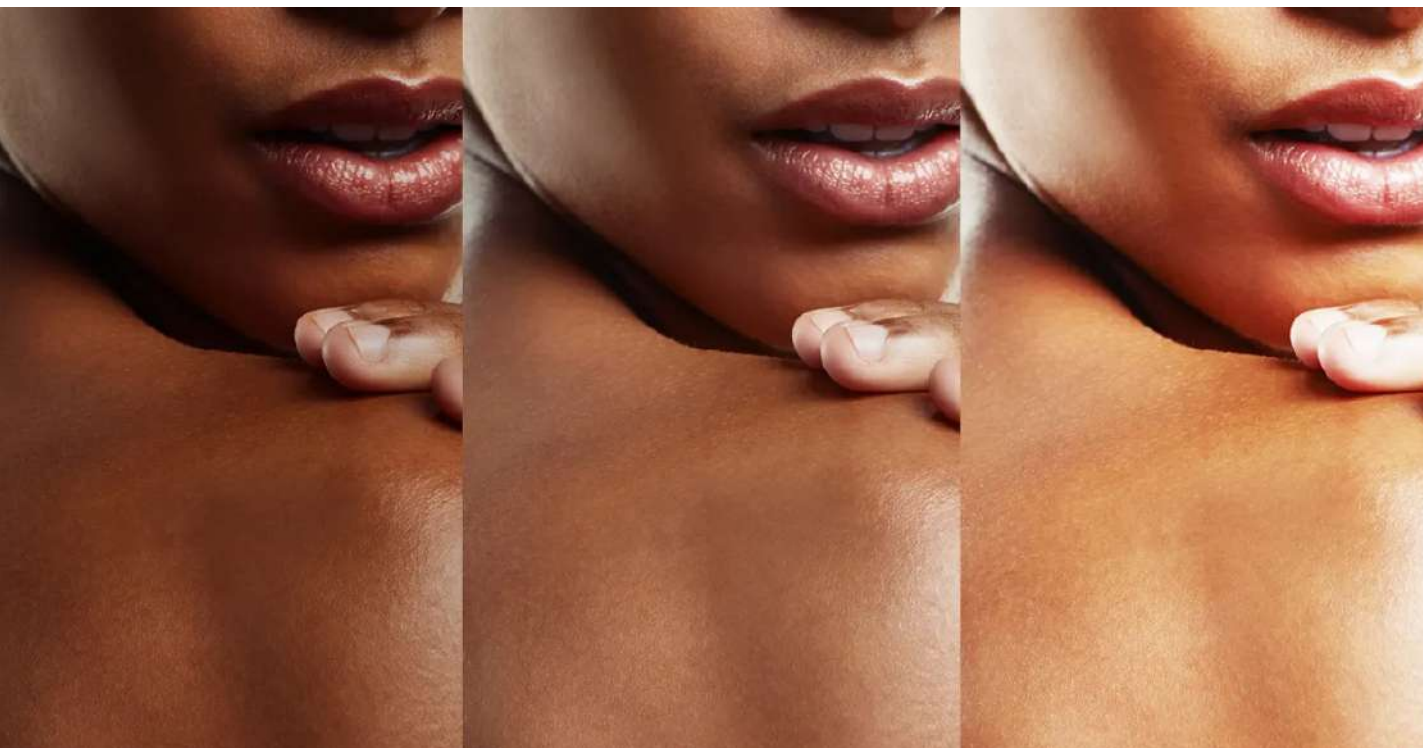


Gabon, Jamaica and Sri Lanka have joined forces to reduce the environmental and health toll of the skin lightening industry

Both men and women use skin lightening products, not only to lighten their skin but to fade freckles, blemishes, age spots and treat acne. However, consumers are often unaware that many of these products contain harmful chemicals including mercury, a toxic substance which poses risks to human health and contaminates the environment.

Skin lightening products can cause skin rashes and discolouration; scarring; nervous, digestive and immune system damage, as well as anxiety and depression. The Minamata Convention on Mercury has set a limit of 1mg/1kg (1ppm) for mercury in skin lightening products. However, a 2018 Zero Mercury Working Group and Biodiversity Research Institute test of over 300 products from 22 countries found that approximately 10 per cent of skin lightening creams exceeded this limit.

Many skin lightening products include mercury, posing significant risks to human health and the environment



Led by the UN Environment Programme (UNEP), with funding from the Global Environment Facility (GEF), the Eliminating mercury skin lightening products project will work to reduce the risk of exposure to mercury-added skin lightening products, raising awareness of the health risks associated with their use, developing model regulations to reduce their circulation, and halting production, trade and distribution across domestic and international markets.

“Mercury is a hidden and toxic ingredient in skin lightening creams,” GEF CEO and Chairperson Carlos Manuel Rodriguez said. “This initiative is significant as it focuses not only on substitutions for harmful ingredients, but on awareness building that can help change behaviours that are damaging to individual health and the planet.”

Skin lightening products don’t just pose a risk to

the user – children can be exposed through breastmilk, and food chains can become contaminated when cosmetics are washed off into wastewater. In addition, the compound can accumulate in the earth, water and soil without breaking down in the environment. With demand for skin lightening products projected to grow to USD11.8-billion by 2026, fuelled by a growing middle class, the use of harmful ingredients in skin lightening products is a global issue.

The three-year project will bring the countries together to align their policies on the cosmetic sector with best practice, creating an enabling environment to phase out mercury and attempting to shift broader cultural norms on skin complexion through engaging organisations, healthcare professionals and influencers working in the field.

Electronic Waste Dilemma

The 21st century is, by far, the century of electronics. We are fully dependent on electronic gadgets for communication, transport, construction, banking, and a host of government services. Apple alone is selling over 3 million mobile phones every week, and on average, consumers use a mobile for only 2 to 3 years as the cost of repairing a faulty device is higher than buying a new product. In addition, new software updates are incompatible with older models, and as the world upgrades to 5G, entire generations of cell phones will soon become obsolete.

Hence, e-waste is the fastest-growing waste stream worldwide, reaching almost 60 million tons annually. This includes home appliances, screens & monitors, bulbs, copying & printing machines, vacuum cleaners, microwaves, electronic toys and tools, radios, cell



Dr. Eisa M. Abdellatif

Chief Technical Advisor
Zayed International
Foundation for the
Environment

phones, GPS' and computers.

Recycling e-waste requires intensive sorting and handling and its disposal in developed countries is complicated by regulations. Most of the e-waste in Europe & the US are shipped to poor countries in Africa and Asia where it poses very serious health and environmental problems. E-waste contains hazardous materials like lead, beryllium, mercury, and cadmium, which can leach into the surrounding environment through landfills or when burnt to extract valuable materials like gold, silver, platinum, palladium and copper. Although these valuable metals can be extracted through proper recycling, less than 20% of e-waste is recycled annually. Researchers estimate that USD 57 billion worth of recoverable precious metals are dumped every year.

Legislation and policies that ban the disposal of e-waste and encourage recycling by subsidizing the equipment and materials and protect the recycling labor and the surrounding environment must be prioritized. The WHO states that around 30 million women and children work in this sector, exposing themselves to more than 1,000 harmful substances. The extraction of valuable materials from e-waste is an important source of income in many poor countries. But e-waste chemicals can leach into waterways, acidifying rivers, poisoning wildlife and contaminating drinking water supplies. The EU has banned the export of e-waste and facilitates its recycling, but the US is yet to do so. The US has also not ratified the Basel Convention which bans the export of hazardous waste.

E-waste is an economic resource that should not be dumped or exported to other countries. You can also help by buying less, repairing, reselling, recycling and advocating for better laws and policies.



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