

creating green communities for a better tomorrow

A monthly publication issued by Zayed International Foundation for the Environment



UAE Announces Launch
Of UAE Rail Programme

The Pickup Reimagined:
All-electric Chevrolet Silverado



he launch of Etihad Rail marks a milestone moment in the UAE's history as it creates a united transport and passenger structure and changes the way passengers across the nation travel forever, profoundly impacting the future of the country and beyond. Very soon, it could also bring together nations of the GCC as goods and people begin to travel quickly and conveniently across this region.

The announcement of Etihad Rail - originally designated as a freight project - to also include a passenger service that runs across the country, is cause for celebration considering the vast convenience and benefits it will bring. Travelling at speeds of around 200 kilometres per hour, the journey from Abu Dhabi to Dubai is expected to take just 50 minutes. Officials also estimate the number of passengers to reach 36.5 million a year by 2030.

Chairman's Message

The environment-friendly vast rail project will connect 11 key cities and communities and will bring about huge reductions in carbon emissions as it





Prof. Mohammed bin Fahad **Executive Editor**

removes thousands of freight trucks from our roads and highways daily. The longterm sustainable development goals it seeks to achieve further reinforces the UAE's commitment to a carbon-neutral future. On a broader scale, the boost to the economy is estimated to be at least AED 200 billion.

Announced at the global platform of Expo 2020 Dubai days after the UAE turned 50, the launch sends out a strong statement of how the young nation continues to forge ties and connections to usher in a future of growth and prosperity.

As His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has rightly said: "The new railway is the largest project to consolidate the strength of the union for the next 50 years".

Contents



COVER STORY

UAE announces launch of UAE Rail Programme



EXPO 2020

World leaders hail Expo 2020 Dubai as beacon of hope, resilience and international solidarity



INITIATIVE: Dubai becomes the world's first government to turn 100% paperless



HEALTHCARE

WHO partners with UAE to support global health sector



AGRICULTURE: UAE, FAO join forces to eradicate Red Palm Weevil



NATURE TRAIL

Fujairah opens Al Bithnah Nature and Heritage Trail



ELECTRIC MOBILITY

The 2024 all-electric Chevrolet Silverado is loaded with high-tech innovations

CONSERVATION: New batch of Scimitar-Horned Oryx and Addax translocated to Chad



PUBLISHED BY



Executive Director

Prof. Mohammed Bin Fahad

Advisors

Dr. Hamdan K. Al Shaer Dr. Eisa M. Abdellatif

Marketing

marketing@zayedprize.org.ae

Editor

Sangeetha K editor@zayedprize.org.ae mail@zayedprize.org.ae

Design Director

Nash - Intoto Marketing Communications editor@zayedprize.org.ae



GREEN CITY: Adelaide is adapting to climate change, reducing carbon emissions, using resources wisely, and supporting biodiversity



AWARD

Transformative changemakers named UN's 2021 Champions of the Earth



SUSTAINABILITY: 2022 is the International Year of Basic Sciences for Sustainable Development



Upcoming events

International Conference on Earth Science and Climate Change

Date: January 14-15

Location: Zurich, Switzerland

The International Conference on Earth Science and Climate Change is the premier interdisciplinary platform for the presentation of new advances and research results in the fields of Earth Science and Climate Change. The conference will bring together leading academic scientists, researchers and scholars in the domain of interest from around the world.

Abu Dhabi Sustainability Week

Date: January 15-19

Location: Abu Dhabi, UAE

Facilitating dialogue and inspiring action, the Abu Dhabi Sustainability Week (ADSW) has grown to become one of the largest platforms of its kind in the world since its inception in 2008. Through its year-round initiatives and events, ADSW brings members of the global community together to accelerate sustainable development.

Working with its public and private partners, ADSW hosts a series of events that welcome heads of state, policy makers, business leaders and technology pioneers, providing them with a global platform to share knowledge, showcase innovation and outline strategies for delivering climate action.

World Built Environment Forum 2022

Date: January 23

Location: Expo2020 Dubai

Join global top leaders from the private, public, academic and not-for-profit sectors. Their common aim will be the creation of stable, smart and healthy places as the urban century unfolds, in the theme of 'The Liveable City: Stable, Smart and Healthy'.

2022 Environmental Summit – Climate Change

Date: January 25
Virtual Event

The impacts of extreme weather events and evidence of climate change are continuing to grow. So too is our understanding of the challenges we face, collectively, but the good news is that none of this is inevitable if we start making changes in our own backyard. Building resilience — the ability to adjust.

UAE Announces Launch Of UAE Rail Programme

In the presence of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, the UAE Government announced the launch of the UAE Railways Programme, the largest integrated system for transporting goods and



The UAE Railways Programme is the largest integrated system for transporting goods and passengers across the country

passengers across the country.

The programme constitutes an integrated strategy for the railway sector in the UAE for the coming decades, as it includes a national network of railway projects that link the emirates and the key cities of the country. The first phase of the Etihad Rail has been fully operational since 2016, with opportunities to expand beyond the borders of the UAE.

The UAE Railways Programme falls under the 'Projects of the 50' which is a series of developmental and economic projects that aim to accelerate the UAE's development, transform it into a comprehensive hub in all sectors and establish its status as an ideal destination for talents and investors.

The UAE Railways Programme was launched during a special event on 5 December 2021,

Passengers will be able to travel from Abu Dhabi to Dubai in 50 minutes, and from Abu Dhabi to Fujairah in 100 minutes



celebrating the projects of the 50, held at Dubai's EXPO 2020. The event highlighted the objectives of the programme and the phases of the "Etihad Rail" project, which connects Ghuwaifat on the border with Saudi Arabia to the port of Fujairah on the Eastern Coast.

His Highness Sheikh Mohammed bin Rashid Al Maktoum said, "The Etihad Rail is the largest project to consolidate the strength of the union for the next fifty years. It will connect 11 key cities and regions across the UAE."

His Highness added, "The UAE's infrastructure is among the best in the world, and the Etihad Rail will further enhance UAE excellence in the logistical field. The project comes in line with the environmental policy of the UAE and it will reduce carbon emissions by 70-80 percent,".

His Highness Sheikh Mohamed bin Zayed Al

Nahyan said, "The National Railways Programme reflects the true meaning of integration into our national economic system, as we see the largest partnership between government entities at the federal and local levels. It comes to support a national vision to connect the country's key centres of industry and production, open new trade routes and facilitate population movement, creating the most developed work and life environment in the region."

Qualifying and training national cadres Shadi Malak, Chief Executive Officer of Etihad Rail, said that Etihad Rail is operated by Emirati talents who possess exceptional experience gained during Phase one and two, pointing out that the UAE Railways Programme will provide more than 9,000 jobs by 2030.

Malak added that the Rail Passenger Services



will enhance the transportation system across the UAE allowing passengers to travel from Abu Dhabi to Dubai in 50 minutes, and from Abu Dhabi to Fujairah in 100 minutes.

Kholoud Al Mazrouei, Deputy Project Director of Etihad Rail said that Etihad Rail supports the public transport system in the UAE, pointing out that the key milestones are achieved during the current stage including the transportation of more than 30 million tonnes of granulated sulphur.

The investments of the UAE Railway Programme amount to AED50 billion, 70 percent of which targets the local market. The programme contributes to providing more than 9,000 jobs in the railway sector and supporting sectors by 2030. The programme contributes to reducing 70-80 percent of carbon emissions over the next 50 years, a move that supports the UAE's efforts

to preserve the environment and achieve its goal of carbon neutrality.

The UAE Railway Programme includes three key projects; the first project is the Freight Rail, which includes the Etihad Rail freight services.

The second project is the Rail Passenger Services that aim to connect 11 cities with the UAE from Al Sila to Fujairah. At a speed of 200 km/h the Rail Passenger will connect 11 cities within the UAE, where passengers can travel from Abu Dhabi to Dubai in 50 minutes, and from Abu Dhabi to Fujairah in 100 minutes. By 2030, the number of passengers is expected to reach more than 36.5 million annually.

The third project is the Integrated Transportation Service, where an innovation centre will be established to ensure the integration of the

The Railway programme contributes to reducing 70-80 percent of carbon emissions over the next 50 years



smart transportation solutions. A network of light rail will be connected to the Rail Passenger System to facilitate transportation in the UAE.

The UAE Railway Programme creates enormous economic opportunities amounting to AED200 billion; the estimated benefits of reducing carbon emissions amount to AED21 billion, road maintenance accounts for AED8 billion, in addition to achieving tourism benefits estimated at AED23 billion during the next 50 years. Meanwhile the public benefits on the UAE economy will reach AED23 billion.

The Stage One (commercial activity) of Etihad Rail commenced in January 2016. Etihad Rail has transported more than 30 million tonnes of granulated sulphur (the equivalent of around 2.8 million truck trips). Stage Two construction phase was launched in 2018, where 70 percent of it was

achieved in less than 24 months, despite the challenges presented by the COVID-19 pandemic. Etihad Rail has continued to forge ahead and complete the project according to its clearly defined goals and comprehensive work plan.

180 entities have been cooperating and more than 40 thousand official papers have been issued. 27 thousand people are working in more than 3,000 constructions sites across the country achieving 76 million working hours.



Dubai Reduces 33% Of Carbon Emissions

aeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme Council of Energy, has announced that Dubai reduced its carbon emissions by 33 percent in 2020, exceeding the target of the Dubai Carbon Abatement Strategy 2021 by more than double.

The Dubai Carbon Abatement Strategy aims to reduce carbon emissions by 16 percent by 2021.



This new achievement emphasises that Dubai is moving steadily towards becoming a carbon-neutral economy by 2050.

Al Tayer said, "All organisations under the umbrella of the Dubai Supreme Council of Energy work together to achieve the vision and directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, to make Dubai a global hub for green economy and sustainable development and achieve the Dubai Clean Energy Strategy 2050 and the Dubai Net Zero Emissions Strategy 2050 to provide 100% of energy from clean energy sources by 2050, as well as the Dubai Demand Side Management Strategy, which aims to reduce electricity and water demand by 30% by 2030.

"The achievement of reducing carbon emissions by 33% in 2020 emphasises that we are on the right track to achieve the strategic objectives to become a carbon-neutral economy by 2050 to ensure a brighter and more sustainable future for generations to come."

Al Tayer explained that the pioneering programmes and initiatives implemented by the organisations under the umbrella of the Dubai Supreme Council of Energy have contributed to this significant reduction in carbon emission.

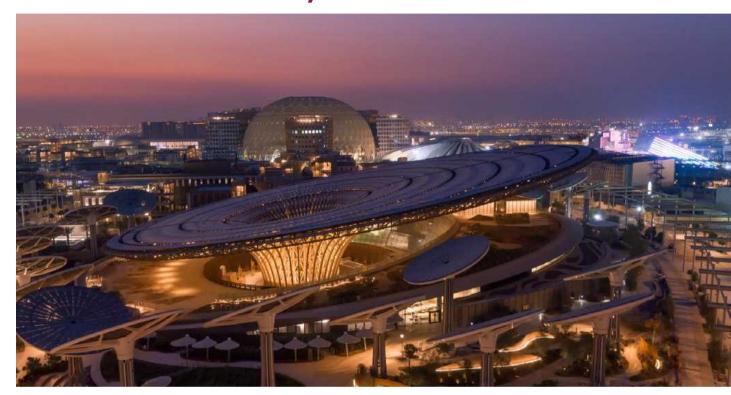
Factors for this achievement include increasing the share of clean and renewable energy capacity, which is now 11.38% of Dubai's energy mix, the expansion of district cooling which saved 650 gigawatt-hours of electricity in 2020, incentives that have increased the use of electric vehicles, and other pioneering initiatives to reduce carbon emissions in Dubai.



Expo 2020 Hailed As Beacon Of Hope, Resilience And International Solidarity

In the three months since opening its doors to the world, Expo 2020 Dubai has provided a beacon of hope for millions of people from around the world who have visited and participated, both physically and virtually, bringing together the international community in a show of resilience in uncertain times.

During those months, leaders and dignitaries



World leaders hail Expo 2020

Dubai for bringing the international community together in uncertain times

from across the planet have attended the event, and their praise has been glowing – labelling Expo "a beacon for global optimism" and "an incredible accomplishment", while highlighting its "vision" and how it has provided the world with "hope and a sense of dignity" and a "ray of light".

Expo 2020 will continue to bring the world together during challenging times, with the need for resilience continuing in the face of the global pandemic, and demonstrating that, now more than ever, we need to keep pulling together as an international community.

A key moment will see Expo host the first Global Goals Week to be held outside of the United Nations in New York from 15th-22nd January – bringing to life the Sustainable Development Goals, as the push continues apace to create a

"The UAE demonstrates its leadership as a driving force for global cooperation and unity which is true to the theme of the World Expo 2020 of 'Connecting Minds, Creating the Future'"



better, fairer and more just world by 2030.

It will be the seventh Theme Week held under Expo's flagship Programme for People and Planet, helping to drive positive action and crucial collaboration between nations from across the world, and embodying Expo's theme and purpose of 'Connecting Minds, Creating the Future'.

Amina Mohammed, Deputy Secretary-General, United Nations, said: "At a time when there is a dark cloud, you have presented a real vision for what we can do to recover better, for how the world can look beyond the UAE – beyond your neighbourhood – into this global community. You've given hope and a sense of dignity to everyone that has participated in this Expo."

Wavel Ramkalawan, President of the Republic of Seychelles, said: "[Expo 2020] is a beacon for global optimism, for responsible and sustainable

world development, for nations standing together against adversity, for personal and collaborative creativity, for the unique beauty of human harmony and – most importantly – friendship, communication and recognition that – when it comes to determining a healthy future for planet Earth – we are all in this together, from the largest nation to the smallest "

Participants are confident that Expo will spark ideas and innovations that will help create a cleaner, safer, healthier world for everyone.

His Majesty King Carl XVI Gustaf, King of Sweden, said: "Expo gives us the possibility to develop innovative solutions not just for the good of our own country but for the global market and global good. It is a true opportunity for co-creation, for innovation. I'm confident that the partnership created here at the Expo will strengthen



cooperation between Sweden and the UAE and the countries of the world, and that we will be able to generate new ideas and solutions together."

His Majesty King Letsie III, King of Lesotho, said: "Expo 2020 Dubai will succeed in its noble mission of 'Connecting Minds', and as a result of that achievement, an incubator will be created that will hatch sustainable solutions to our common problems – solutions that will hopefully create a more prosperous and peaceful future for us all."

Hosting the most significant global gathering – during a pandemic – has not been easy, but world leaders praised Expo 2020 for welcoming the world in a safe and responsible manner.

Emmanuel Macron, President of France, said:

"We're very happy to be here, and I want to congratulate the UAE for this Expo, because at a time when we see COVID-19, and so many threats and issues, organising the Expo here and making it a success – because it's already a success – is good for your country. It's good for everybody."

Dato Lim Jock Hoi, Secretary-General, ASEAN, said: "I congratulate the United Arab Emirates for successfully convening the global community together here in Dubai. By bringing the world together during this most challenging of times, the UAE demonstrates its leadership as a driving force for global cooperation and unity which is true to the theme of the World Expo 2020 of 'Connecting Minds, Creating the Future."

Federal Councillor Guy Parmelin, President of the Swiss Confederation, said: "Pulling off the organisation of such a major event would be a

"Expo 2020 is a beacon for global optimism, for responsible and sustainable world development,for the unique beauty of human harmony."



major feat at any moment in time. But doing so in a period of uncertainty, such as the last 18 months, is an incredible accomplishment."

Cooperation, resilience and solidarity will continue be of paramount importance in the second half of Expo 2020, which runs until 31st March, 2022, Expo 2020, with visitors invited to join the making of a new world in a celebration of human creativity, innovation, progress and culture.

Macky Sall, President of Senegal, said: "Our world, plunged into a deep economic gloom, certainly needs this ray of light to bring back some colour and help rebuild hope for a better future. In this sense, the universal Expo is both a showcase for nations and a factor for peace and dialogue between cultures and civilisations. This is what Expo 2020 is all about."



Bill Gates Visits Expo 2020 Dubai

Reem bint Ibrahim Al Hashemy, Minister of State for International Cooperation, and Director General, Expo 2020 Dubai, received Bill Gates, Microsoft co-founder, philanthropist, and the world's fourth-richest man at Expo 2020 Dubai on 9 December 2021.

Bill Gates' visit is significant, as Expo 2020 Dubai and the Bill and Melinda Gates Foundation



joined hands to support grassroots innovators with the ambition and potential to improve the lives of people across a variety of complex, fragile or marginalised humanitarian settings.

Accompanied by Reem Al Hashemy, Bill Gates toured the key projects of Expo Live, the global innovation and partnership programme that supports innovators who develop extraordinary low-cost solutions. During the tour, Gates was briefed on the 'Ideabatic,' a low-cost innovation developed by Kitty Liao of the UK, keeping vaccines and life-saving medicines fresh during long journeys to remote rural areas.

He was also impressed by 'Desert Control', a new technology developed by Atle Idland of Norway, to help create an agricultural revolution for arid regions. The invention uses Liquid NonoClay (LNC), a technology that converts poor soil into

fertile land. It works more quickly and uses less water than conventional agricultural methods.

After that, Gates toured the Sustainability Pavilion, which highlights technologies that consume zero energy. Speaking to Expo TV, Gates urged the world to speed up the implementation of its commitments to the Sustainable Development Goals 2030, with the deadline just eight years away.







The Sustainable City Launches The Sustainable Homes

he Sustainable City, Dubai, has launched a collection of eco-friendly short-stay studio-apartments that allow visitors, residents and international tourists to experience sustainable living and enjoy Dubai with a significantly reduced carbon footprint.

Located in Dubailand, the mixed-use development spans some 46 hectares and



provides an array of green residential facilities and amenities with no negative impact on the environment.

The building complex was designed using highly insulated materials and is powered by renewable energy from rooftop solar panels. To avoid Single-Use Plastics, the studio-apartments are supplied with filtered drinking water, and to facilitate waste recycling, the homes are equipped with two bins (recyclables and other waste). The Sustainable Homes are fitted with low flow fixtures, as well as water and energy efficient washing machines. Room cleaning services use environmentally-friendly cleaning products. To encourage sustainable practices, guests can monitor their water and energy consumption during their stay with an energy metering system, receiving a personal carbon footprint statement upon checkout.

The Sustainable Homes guests will have access to the urban farm and animal sanctuary along the green spine inside The Sustainable City as well as running and cycling tracks. Guests can also access the roof of the building which has been converted into a green relaxation area.







The Accession Day of H.H. Sheikh **Mohammed Bin Rashid Al Maktoum** 16 Years of Benevolent and Visionary Leadership

منتجاتنا إما طازجة وإما مجانية







CAP 800-PHD-LAB (743-522)































Order online at: www.freshtohome.com





The Accession Day of H.H. Sheikh Mohammed Bin Rashid Al Maktoum 16 Years of Benevolent and Visionary Leadership

- PHD, Abu Dhabi Phone: +971 2 491 9300 Mobile: +971 54 427 2728 Email: phdabudhabi@proficiencylab.org
- PHD, Al Ain Phone: +971 3 766 0992/ 0994
- Fax: +971 3 766 0901 Email: phdalain@proficiencylab.org
- PHD, Dubai Phone: +971 4 348 6645 Email: phdbarsha@proficiencylab.org
- PHD, Sharjah Phone: +971 6 544 8558 Email: phdsharjah@proficiencylab.org



Dubai: The World's First Paperless Government

is Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of The Executive Council of Dubai, announced on 12 December 2021 that the emirate has achieved the objectives of the Dubai Paperless Strategy launched in 2018 to establish itself as a leading digital capital and become the world's first paperless government.



The emirate has achieved the objectives of the Dubai Paperless Strategy launched in 2018 to establish itself as a leading digital capital and become the world's first paperless government

"This marks the beginning of a new stage in Dubai's journey to digitise life in all its aspects – a journey rooted in innovation, creativity, and a focus on the future," said HH Sheikh Hamdan.

"As we complete a full transition to a paperless government, we are proud to see the ambitious vision of our leadership being fulfilled by the people of our country who have worked hard to enhance Dubai's competitiveness as a world-leading digital capital and reinforce its profile as a role model in designing government operations and services that enhance customer happiness."

HH Sheikh Hamdan praised the teams working across all participating government entities in the emirate, whose efforts have strengthened Dubai's position as a global role model for integrated and sustainable smart cities. "We mark this achievement with our sights set firmly

All internal and external transactions and procedures in the Government of Dubai are now 100 percent digital and managed from a comprehensive digital government services platform



on the future, and we look forward to providing a fully digital life for residents of the emirate," His Highness said, adding that the next stage will be marked by advanced strategies to create and enhance digital life in Dubai over the next five decades.

The new phase of Dubai's digital journey will enable and empower future governments to meet the expectations of the residents of a thriving smart city and provide them with renewed opportunities for prosperity, sustainable development, and happiness.

Hamad Al Mansoori, Director General of Digital Dubai, said that the realisation of Dubai's vision to become the world's first paperless government is a proud moment for the country. All internal and external transactions and procedures in the Government of Dubai are now 100 percent digital

and managed from a comprehensive digital government services platforms, he noted.

"This achievement is all the more important since it coincides with the UAE's 50th anniversary celebrations when we are looking forward to another five decades of success," HE Al Mansoori added.

"This accomplishment, which reflects the determination that drives taskforces and teams across Dubai Government institutions, will have a tremendous positive impact on government efficiency. It will enable the optimal use of resources and encourage the greater use of innovation and technology to design advanced solutions and digitisation of services and procedures."

With the Dubai Paperless Strategy fully implemented, no employee or customer of the





Dubai Government will need to print any paper documents or transactions, unless they personally prefer to do so. Printing can be done at service or typing centres.

The Dubai Paperless Strategy, launched in 2018, was implemented in five consecutive phases, each of which enlisted a different group of Dubai Government entities. By the end of the fifth phase, the Strategy was fully implemented across all 45 government entities in the emirate. These entities provide more than 1,800 digital services and over 10,500 key transactions.

The collaboration and integration among participating entities enabled the automation of processes and services provided to customers, cutting paper consumption by more than 336 million papers. The Strategy also helped save more than AED1.3 billion and over 14 million man

hours across the Dubai Government.

The complete digital transformation in the Dubai Government will enrich the smart city experience for all Dubai residents, entirely removing the need for paper transactions and documents. Digitalisation will also help provide exceptional experiences for residents through the Dubai Now application, which allows access to more than 130 smart city services in 12 major categories.







WHO Partners With UAE To Support Global Health Sector

he UAE Government and the World Health Organisation (WHO) have announced a new partnership to support the global health sector. Under the newly signed Memorandum of Understanding (MoU), WHO will adopt the UAE government accelerators model to speed up the achievement of its strategic goals and initiatives, and to ensure providing of healthy lifestyles and prosperity at all ages.



World Health Organisation
will adopt the UAE
government accelerators
model to support the
global health sector under
this partnership

The MoU was signed by Mohammad bin Abdullah Al Gergawi, Minister of Cabinet Affairs, along with Dr. Tedros Adhanom Ghebreyesus, Director-General of WHO, in the presence of Ohood bint Khalfan Al Roumi, Minister of State for Government Development and The Future; Abdulla Nasser Lootah, Director-General of the Prime Minister's Office; Huda Al Hashimi, Deputy Minister of Cabinet Affairs for Strategic Affairs; as well as a number of officials from the UAE Government and WHO.

This partnership aims to promote the acceleration of service delivery in the fields of global health care by adopting the UAE government accelerators model to implement initiatives, develop solutions and projects, and build capabilities and competencies. The two parties will work to support the implementation of the WHO Work Programme 2019–2023, and

The two parties will work to support the implementation of the WHO Work Programme 2019–2023, and achieve the Triple Billion targets



achieve the Triple Billion targets.

WHO launched those targets to help countries deliver the Sustainable Development Goals; through 1 billion more people benefitting from universal healthcare coverage without financial hardship, 1 billion more people better protected from health emergencies and 1 billion more people enjoying better health and well-being.

Global cooperation is essential to enhance communities wellbeing and build comprehensive health system, said Al Gergawi.

He also added that this alliance represents a new step in strengthening the role of governments in enabling global human capital to set new directions for the future. The partnership sets a new beginning to form an integrated global chart that celebrates innovation for health, and strengthens cooperation between countries, governments, and organisations to build sustainable societies.

Dr. Ghebreyesus stated, "The need for global collaboration on data and evidence has never been felt more acutely than during the COVID-19 pandemic. WHO is committed to being a modern, data-driven organisation to make a measurable impact on the lives of those we serve."

The UAE and WHO will promote their partnership elevating efficiency for the health sector, by making health challenges a global priority and supporting the adoption of WHO strategies on a larger scale covering the areas of capacity building, preparing leaders capable of implementing strategic plans, and bringing about positive change in WHO institutions.

UAE, FAO Join Forces To Eradicate Red Palm Weevil

he UAE is taking significant steps to eradicate the red palm weevil - a highly destructive pest that blights palm trees - with the signing of a funding agreement between the Food and Agriculture Organisation (FAO) and the Ministry of Climate Change and Environment (MOCCAE) and Khalifa Center for Genetic Engineering and Biotechnology (KCGEB) at UAE University.



The UAE and the Food and Agriculture Organisation join hands to eradicate the red palm weevil – a highly destructive pest that blights palm trees in the MENA region

Through the funding agreement, MOCCAE will provide financial support to the Red Palm Weevil Trust Fund related to the FAO regional programme on red palm weevil eradication and to the KCGEB in their efforts to control the transboundary insect and reduce palm tree losses in the Middle East and North Africa. The final objective is the eventual eradication of the insect from the region, as Mauritania managed to do with technical assistance from FAO.

"The red palm weevil is an invasive transboundary insect, which afflicts more than 40 palm species - including date palms - causing considerable damage in the UAE, Gulf countries, and across the region. This agreement builds on a campaign initiated by MOCCAE in 2019 to leverage the latest technology to eradicate the weevil, thereby alleviating the socio-economic threat it poses - especially to rural communities," said

The red palm weevil is an invasive transboundary insect, which afflicts more than 40 palm species - including date palms - causing considerable damage in the MENA region



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

"This Funding Agreement emphasises the importance of improving various aspects of food security for the region and is in line with our global mandate to promote food security and agricultural development," said Dr. Abdulhakim Rajab Elwaer, FAO Assistant Director-General and Regional Representative for the Near East and North Africa.

"Our partnership aims to control the red palm weevil in the areas that are afflicted in the Middle East and North Africa – a significant problem with 90 percent of the world's dates being grown in the region. It will enhance efforts at the regional level for supporting the integrated and sustainable management programmes to control the pest, reduce its devastating impact on the

environment and food security, and alleviate its socio-economic impact on rural communities," he added.

Under the terms of the agreement, MOCCAE will channel US\$1 million to KCGEB to develop genetic methods to control the red palm weevil. The agreement aims to support the FAO regional trust fund program with one million USD to support countries to control and contain the spread of and eventually eradicate this transboundary pest, and enhance regional efforts aimed at controlling and reducing its devastating effects on the environment, food security, and livelihoods.

The partnership is a tangible result of the UAE's commitment to promoting and protecting the date palm industry.



UAE Signs MoU With French Ministry Of Agriculture and Food

he Ministry of Climate Change and Environment (MOCCAE) signed a memorandum of understanding (MoU) with the French Ministry of Agriculture and Food to collaborate on developing sustainable and resilient food systems that enhances food security for both countries.

Signing the MoU coincided with the visit of the



The Memorandum of
Understanding aims for
both countries to
collaborate on developing
sustainable and resilient
food systems that
enhances food security
for both

French President Emmanuel Macron to the UAE on 3 December 2021. Mariam bint Mohammed Almheiri, UAE Minister of Climate Change and Environment, and Xavier Chatel, France's Ambassador to the UAE, signed the MoU at Expo 2020 Dubai.

Speaking on the new partnership, Mariam Almheiri said: "Food security is a strategic priority for the UAE, and the MoU with the French Ministry of Agriculture and Food aligns with our drive to enhance food security. Sharing of knowledge and best practices between our two countries, which are known for tackling challenges through innovation, will help us develop sustainable food systems and meet our respective food security targets."

Xavier Chatel said: "Our two countries share the ambition to promote innovative and sustainable

The MoU entails joint implementation of R&D and training programs in food security



agricultural production. The MoU offers great joint perspectives in the reduction of food waste, R&D, and knowledge sharing in food technology."

Under the terms of the agreement, the two ministries will collaborate to facilitate bilateral trade in agricultural and food products, as well as contribute to the development of sustainable agricultural production with a focus on innovation and the agroecological transition of production methods. They will also join forces to combat food waste and loss, and build capacities and share knowledge in food and agricultural technologies.

To achieve these objectives, the signatories will endeavor to streamline the supply chains for essential agricultural and food products. They will forge connections between agri-food companies, importers, and distributors in the two

countries, encourage them to explore opportunities for partnerships, and promote all forms of mutually beneficial government and private sector cooperation.

To upscale food entrepreneurship, the two ministries agreed to jointly enhance their countries' appeal to food startups through driving innovation in tackling food security challenges and creating attractive business opportunities, in addition to leveraging incubation programs and other incentives to support business expansion.

The MoU entails joint implementation of R&D and training programs in food security, sharing input for protocols to reduce food waste, and fostering sustainable agricultural production, particularly regarding geographical indications and organic agriculture.

Partnership To Advance Water Management Research And Sustainability

YU Abu Dhabi (NYUAD) has partnered with Emirates Water and Electricity Company (EWEC) to support the NYUAD Water Research Center's (NYUAD-WRC) mission for water security and sustainability.

The center serves as an interdisciplinary innovation hub for research in water desalination and membrane technology innovation,

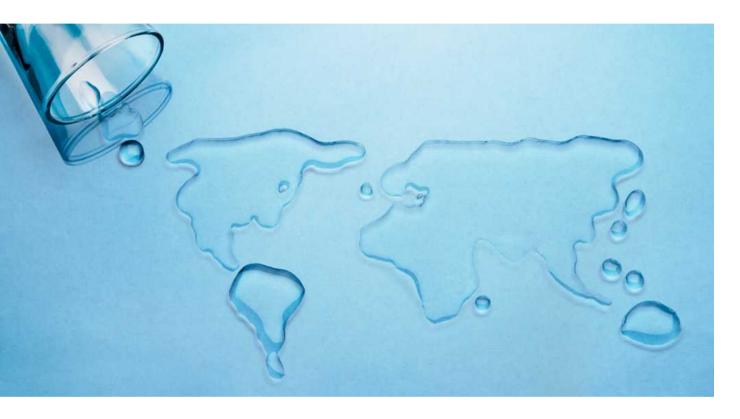


NYU Abu Dhabi's Water Research Center partners with Emirates Water and Electricity Company to enhance ongoing research on water management research and sustainability wastewater treatment, and social issues, where scientific knowledge is transformed into practical solutions. The new partnership will engage NYUAD students to contribute to the continued advancement of water research, and educate them on water management, which is especially pertinent considering the UAE's desert climate and limited fresh water supply.

The two institutions will co-host webinars, which will be open to the public, delving into water-related topics and challenges. EWEC will also join the NYUAD Water Research Center's Industry Advisory Board to share experience and knowledge.

Othman Al Ali, Chief Executive Officer of EWEC, said: "EWEC is implementing a strategic low carbon water production program using reverse osmosis technology that will decouple water and

According to UNICEF and the WHO, one in three people globally do not have access to safe drinking water



electricity production, and transition Abu Dhabi's water desalination to a more sustainable and efficient system.

Through this partnership EWEC will share expertise, co-develop engaging educational content, support the NYUAD-WRC's research and development of cutting-edge, UAE produced RO membrane technology, and inspire NYUAD students to be the next innovators and leaders in sustainable potable water production."

NYUAD Vice Chancellor Mariët Westermann said: "The Water Research Center's critical mission for water sustainability and security is fundamental for the betterment of our communities across the nation. This new agreement with EWEC can help support this work and also transition our desalination process campus's sustainable practices.

"This partnership will advance the study, reach, and effectiveness of water research within the UAE, the wider region, and the world, and drive collective action for change on the most pressing environmental issues." he said.

According to UNICEF and the World Health Organization one in three people globally do not have access to safe drinking water. To help meet that challenge, the NYUAD Water Research Center is developing a unique framework of research and education to advance integrated water research to tackle water challenges in the region and beyond.

NYUAD-Water Research Center supports cutting-edge multidisciplinary research and development in water-related technologies, environmental processes, and water policy, in line with the UAE Water Security Strategy 2036



edge low-carbon technology of reverse osmosis for water desalination



and the country's vision to achieve prosperity and sustainability.

EWEC has adopted the cutting-edge low-carbon technology of reverse osmosis (RO) for water desalination and is currently managing the development of Taweelah RO, which will be the world's largest RO desalination plant upon completion in 2022, supplying 200 million gallons per day (MGD) to meet the water demand for over 350,000 households.

Furthermore, EWEC has also announced the development of the new low-carbon water desalination projects Mirfa 2 and Shuweihat S4, which will provide up to 150 MGD and up to 70 MGD of water respectively.

Professor of Engineering and Director of NYUAD Water Research Center Nidal Hilal said: "The UAE

has a scarcity of water due to an ever-growing demand caused by commercial and urban development, industrialization, and population growth. The country needs more potable water supplies over the next 20 years to sustain this development. The provision of drinkable supplies through desalination of sea and groundwater, and through the treatment of industrial and domestic wastewater is a significant challenge.

"EWEC's support will enable us to continue to deliver the groundbreaking research required to advise on efficient and sustainable water management strategies in the UAE," he added.

In addition to the partnership, EWEC and NYUAD are announcing a Water Ambassador award. Winners will be selected from UAE national students at NYUAD through a yearly competition.

New Plastic-to-Liquid Project To Pave The Way For A Circular Economy

NOC Group, Quantafuel and Dubai Holding LLC have signed a Memorandum of Understanding (MoU) to study the potential of establishing and operating Plastic-to-Liquid production plants turning plastic waste into valuable products and a step towards a circular economy.

The UAE recently announced "The UAE Net Zero



by 2050 Strategic Initiative", a national drive to achieve net-zero emissions by 2050. The initiative aims to promote dynamic economic growth alongside positive environmental impact. Dubai's proposed Waste-to-Energy Project, which is likely to get commissioned by 2024, is expected to convert 1,900,000 tonnes of waste per year.

This project will be a major step in supporting the environment by redirecting the plastics from landfills and oceans in order to achieve Dubai government's objective of zero waste going to landfill by 2030. The Plastic-to Liquid project with Quantafuel will be a significant step towards a circular economy by converting non-recyclable plastics into valuable products.

"We are very happy to join forces with Quantafuel, a company that not only brings in a leading technology for converting plastic waste into valuable products, but also has extensive knowledge in plastic sorting and other means of recycling. Our vision is to pursue investments that champion recycling and sustainability and this partnership will help us on the way to build a circular economy in the UAE," said Ahmad Bin Fahad, CEO of Dubai Holding.

"Quantafuel looks forward to making a difference and tackle the plastic waste in the region while at the same time creating valuable resources," said Chris Lach. Ouantafuel's Chief Commercial Officer.



Beyond2020 Enhances Water Access In The Philippines

A UAE initiative, Beyond2020, returns to Southeast Asia following key sustainable engagements in Indonesia and Cambodia, with a deployment that is uplifting the lives of 18,000 people in the Philippines by enhancing water access and reducing water costs by 85 percent.

Four hydraulic ram pumps and 13 kiosks are



The UAE initiative returns to Southeast Asia with a deployment that is uplifting the lives of 18,000 people in the Philippines being used to facilitate 3,000 residents in the village of Cabagnaan in the province of Negros Occidental and 15,000 people in 14 villages across Altavista in the province of Leyte.

The innovative technology is an enhancement of a system created more than 240 years ago that brings water uphill without the use of electricity or fuel and the emission of harmful gases.

Beyond2020 was launched by the Zayed Sustainability Prize to deliver sustainable technologies and solutions to vulnerable communities worldwide.

The Philippines marks the 10th deployment of Beyond2020, which effectively addresses some of the world's most pressing sustainable development challenges by providing quality healthcare, nutritious food, essential energy,

Four hydraulic ram pumps and 13 kiosks are being used to facilitate 3,000 residents in the village of Cabagnaan and 15,000 people in 14 villages across Altavista



and access to safe water for drinking and sanitation.

Mohammed Obaid Al Zaabi, UAE Ambassador to the Philippines, said, "Beyond2020 offers crucial and life-transforming solutions to beneficiaries worldwide.

"The initiative's deployment in the Philippines offers communities innovative water technology solutions that aim to improve the health and wellbeing of rural residents through long-term impact, paving the way for an easier, safer and more sustainable lifestyle."

The communities of Cabagnaan and Altavista, that are located on different islands, share the same challenges, whereby water is not available and has to be fetched from a source located further downhill from the community. The deployment utilises a holistic ram pump water

system by the Alternative Indigenous Development Foundation, Inc. (AIDFI), a 2020 Zayed Sustainability Prize finalist under the 'Water' category.

In addition to providing clean water for drinking and sanitation, the carbon-neutral technology offers residents the opportunity to improve or pursue water-related livelihoods such as vegetable gardens, aquaculture, and livestock breeding, while facilitating a more conducive environment to avoid several waterborne diseases stemming from dirty water.

Furthermore, access to improved hygiene grows in prominence given the importance of handwashing in preventing the spread of COVID-19, which is a pressing concern for vulnerable communities worldwide.

Fujairah Opens Al Bithnah Nature And Heritage Trail

tihad Rail, Emirates Nature-WWF, Fujairah Municipality, the Fujairah Environment Authority and Fujairah Adventures Centre, supported by Fujairah Tourism and Antiquities Authority, inaugurated the historic Al Bithnah Nature and Heritage Trail in the emirate of Fujairah, in celebration of the UAE's Golden Jubilee. The emirate's 50th nature trail, which marks the UAE's 50th anniversary, is the



In celebration of the UAE's Golden Jubilee, the Bithnah Nature and Heritage Trail is the country's very first community-built tourism trail

country's very first community-built tourism trail and represents a pioneering model of 'inclusive development'.

The nature path, located in Wadi Ham, has been created as part of a wider Al Bithnah Conservation Project.

During the inauguration, the delegation visited the first section of the trail and the surrounding areas, which are rich in biodiversity and cultural heritage. The trail is set to be completed by the first quarter of 2022 and will open as an ecotourism destination for tourists.

The development of the trail marks an important milestone as part of the landmark agreement between Etihad Rail, Emirates Nature-WWF, the Fujairah Environment Authority and Fujairah Adventures Centre signed in March 2021. The agreement supports sustainable development

The Al Bithnah Conservation Project aims to support the growth of the local community, protect the environment and biodiversity and preserve the UAE's natural heritage



within the local community, provides valuable opportunities for eco-tourism, protects the environment and biodiversity and preserves the UAE's natural heritage.

The project is part of Etihad Rail's sustainability vision and commitment to being a 'Good Neighbour' to the local communities through which the UAE's National Rail network passes. Etihad Rail continues to take a lead on projects which minimise the environmental impacts of rail construction and enhance sustainable development by opening up new opportunities for economic growth and increased ecotourism.

On this occasion, Al Afkham, the Director-General of Fujairah Municipality said, "Etihad Rail plays an essential role in consolidating the position of the UAE as a global and regional centre for transport and logistics services. The UAE

National Rail Network is one of the biggest infrastructure projects in the country and serves as a major contributor to the national economy."

Following the completion of the nature trail, a comprehensive biodiversity study of the wider Al Bithnah region will be conducted to determine water quality, identify environmentally significant habitats, alongside seeking to enable preservation of local biodiversity. A socioeconomic survey will identify areas, which can further empower the local community and foster sustainable economic growth.

The agreement signed between the project partners involves three key pillars, which are: supporting the growth of the local community, protecting the environment and biodiversity and preserving the UAE's natural heritage.



ADSW 2022 To Advance Global Sustainability Agenda

bu Dhabi Sustainability Week (ADSW), the global platform for accelerating sustainable development, hosted by Masdar, will be held from January 15-19, 2022.

As the first major sustainability event taking place after COP26, ADSW 2022 will bring together the global community across high-level events, with participants including heads of



Abu Dhabi Sustainability Week to be held from January 15 - 19, 2022

state, policy makers, industry specialists, technology pioneers and young sustainability leaders. ADSW 2022 will focus on delivering action across three principles; Global Collaboration & Leadership, Economic Development, and Technology & Innovation.

The ADSW Opening Ceremony and the Zayed Sustainability Prize Awards Ceremony will take place at the Dubai Exhibition Centre on 17th January, 2022, reinforcing the collective commitment of the UAE to climate action and sustainability.

All other ADSW events, including the ADSW Summit, IRENA Assembly, Atlantic Council Global Energy Forum, World Future Energy Summit, Innovate, Abu Dhabi Sustainable Finance Forum, Women in Sustainability, Environment and Renewable Energy (WiSER)

Heads of state, policy makers, industry specialists, technology pioneers and young sustainability leaders will converge at ADSW 2022



Forum, and the Youth 4 Sustainability Hub will take place in Abu Dhabi or virtually.

The UAE has always been proactive and forwardthinking in its approach to sustainability. Earlier this year, the UAE announced its Net Zero by 2050 Strategic Initiative, a national drive to achieve net-zero emissions by 2050, making it the first country in the MENA region to announce such an initiative.

Delivering global net zero commitments and the journey to COP28, which will be held in the UAE in 2023, will be key topics for driving discussions at the ADSW Summit, which will host global leaders from government, industry and technology to explore the latest technological and economic trends that are shaping the sustainability agenda.

An important enabler to delivering a sustainable future is innovation and supporting emerging technologies and start-ups. New to the ADSW programme is Innovate, a global initiative recently launched by Masdar City aimed at identifying and nurturing the next generation of sustainable technologies. The World Future Energy Summit will also host a series of industry forums that will bring together leading experts to discuss clean energy, water, ecowaste, solar, smart cities and climate and environment.

ADSW is aligned with The 'Principles of the 50', which serve as a strategic roadmap as the nation enters a new era in its development path. As one of the largest of gatherings of its kind, ADSW provides a global platform for cooperation, knowledge sharing, investment and innovation, welcoming each year more than 45,000 participants from over 170 countries, with more than 1,000 international companies represented.



The Pickup Reimagined: Chevrolet Silverado

hevrolet has introduced the 2024 Silverado EV — the reimagining of the brand's best-selling nameplate, packed with the power and capability expected of Chevy Trucks.

Developed from the ground up as a fully electric truck on GM's advanced Ultium EV Platform, the Silverado EV offers a boundary-breaking combination of capability, performance and



The 2024 all-electric
Chevrolet Silverado
offers 400 miles of
driving range, up to
10,000 pounds trailering
capacity and is loaded
with high-tech
innovations

versatility, along with advanced technologies that can evolve the vehicle over time.

At launch in 2024, the Silverado EV will be available in two configurations, an RST First Edition and a fleet-oriented WT model. Each will offer a comprehensive suite of standard and available safety technologies.

The WT will launch first for fleet customers and offer impressive capability to meet the needs of organizations with sustainable transportation goals, including 510 hp and 615 lb-ft of torque.

Ultium-powered propulsion

The Silverado EV harnesses the power of the Ultium Platform, which is the foundation of GM's EV strategy and the driver of the company's vision for a zero-emissions future.

A new body architecture, which efficiently

Silverado EV features Ultium – a groundbreaking, all-new battery platform that brings with it new power, new force, new flexibility, and a new range of possibilities



capabilities of up to 350kW enabling approximately 100 miles of range to be added in 10 minutes based on GM estimates.

When combined with the available accessory power bar, the Silverado EV's PowerBase charging system offers up to 10 outlets, to provide a total of 10.2kW of all-electric power for countless worksite or recreational needs, including powering your home, with the required equipment.

The Silverado EV is also capable of charging another EV using the available accessory charge cord, sharing its power in times of need.

RST owners also have access to Ultium Charge 360, GM's holistic approach to EV charging, which is designed to simplify the overall charging experience.

leverages the available 24-module Ultium battery pack as a part of the fundamental structure, enables the vehicle's impressive range. This structural design integrates the capability Silverado customers have come to expect from a full-size pickup in terms of strength, durability and performance, while also providing a more comfortable, confident ride both on- and offroad.

Additionally, the chassis is designed with independent front and rear suspensions, with power transferred to the available 24-inch wheels on RST via front- and rear-drive motors that compose the e4WD system. Automatic Adaptive Air Suspension enables the vehicle to be raised or lowered up to 2 inches (50 mm).

Phenomenal performance

The RST and WT feature public DC fast charging







Designed for performance and functionality

Inside and out, the Silverado EV RST and WT are thoughtfully designed for functional flexibility.

Exterior proportions and surfacing convey the truck's capability and athletic performance. The front-end design has been sculpted to efficiently direct air down the body side, significantly reducing drag and turbulence. As a result, the Silverado EV WT is estimated to have one of the lowest drag coefficients of any available production full-size pickup truck, which helps enable the impressive range.

Customizable first row storage on both RST and WT models makes the most of the interior space and provides functional solutions for a variety of customer needs. The eTrunk – a lockable, weatherproof compartment in the front of the

vehicle - provides enough space to fit a large hardside suitcase and a multitude of accessory options for both fleet and retail customers to load gear based on the unique needs of the customer.

The RST's modular console features a capacity of just over 7 gallons, meaning a lunch cooler can easily fit inside. The RST features a fixed-glass roof, which offers expansive visibility, increased headroom and an enhanced experience for both front and rear passengers.

On the RST, the storage capacity of the 5-foot-11-inch bed is maximized thanks to the innovative available Multi-Flex Midgate, which provides just over 9 feet of storage between the cab and the tailgate when the Midgate is open.

A 40/60 second row seat offers four configurations that allow users to haul gear or

The Silverado EV is packed with the latest technology, including an advanced software system that enables vehicle technologies to evolve over time





equipment while still accommodating a passenger in the second row. With the addition of the available Multi-Flex Tailgate the Silverado EV RST enables up to 10 feet, 10 inches of load floor and storage capability. An available tonneau cover allows items such as lumber or a kayak to be loaded into a fully lockable, weatherproof storage compartment.

Technologies for today and tomorrow

The Silverado EV is packed with the latest technology, including an advanced software system that enables vehicle technologies to evolve over time.

As a driver approaches the RST with an enabled cell phone or key fob, a distinctive lighting animation greets them.

Upon entering the vehicle, a bold 3D animation appears on the RST's large 17-inch-diagonal LCD

freeform infotainment screen, which is paired with a neighboring 11-inch-diagonal driver instrument display. Together with a driver head-up display with a field of view over 14 inches, a driver can't ask for more information at their disposal. With new, hands-free start, the vehicle turns on automatically after the driver enters with an enabled device, leaving hands free to buckle up and get on the road.

A major enabler of the Silverado EV's technologies will be the brand's first application of Ultifi, a new Linux-based software platform. Developed inhouse at GM, it separates the vehicle's software from the hardware to enable rapid and frequent software updates. This will give drivers the opportunity to evolve their vehicles over time, enhancing both the capabilities and accessing cloud services in a flexible and fast way.



Dubai Supreme Council Of Energy Discusses Plan For Carbon Neutrality By 2050

.H. Sheikh Ahmed bin Saeed Al Maktoum, Chairman of the Dubai Supreme Council of Energy, chaired the Council's 67th meeting in the presence of Saeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme Council of Energy.

Ahmed Buti Al Muhairbi, Secretary-General of the Dubai Supreme Council of Energy, attended



The meeting, which was held online, discussed the planning stage for the Supreme Council's Resolution regarding Dubai achieving carbon neutrality (zerocarbon emissions) by 2050

the meeting along with board members Dawood Al Hajiri, Director-General of Dubai Municipality; Abdulla bin Kalban, Managing Director of Emirates Global Aluminium; Saif Humaid Al Falasi, CEO of Emirates National Oil Company; Juan-Pablo Freile, General Manager of Dubai Petroleum; and Nasser Abu Shehab, CEO of the Strategy and Corporate Governance Sector at the Roads and Transport Authority.

The meeting discussed several topics, including the planning stage for the Supreme Council's Resolution regarding Dubai achieving carbon neutrality (zero-carbon emissions) by 2050. The meeting also discussed the implementation stage for Resolution number (6) of 2021 issued by the Executive Council of Dubai to regulate district cooling services in Dubai.

RTA presented its plan to achieve zero carbon

RTA's strategy includes increasing the number of electric and hybrid vehicles, efficiency of facilities, road lighting, waste reduction, as well as retrofitting RTA's buildings



















emissions in its fleet by 2050. The strategy was developed in line with the vision of the wise leadership to make Dubai a leading city in sustainable development. The strategy includes goals and implementation mechanisms. These include increasing the number of electric and hybrid vehicles, efficiency of facilities, road lighting, waste reduction, as well as retrofitting RTA's buildings.

Dubai Regulatory Committee for Petroleum Products Trading discussed the regulatory framework for building fixed and mobile fuel retail stations.

"The meeting reviewed the Dubai Supreme Council of Energy's in-depth study on Dubai can achieve carbon neutrality by 2050 through a clear strategy using the latest technologies in this regard." Al Tayer said.

"During the meeting, we were also briefed by the Dubai Regulatory Committee for Petroleum Products Trading. Through this Committee, we aim to set the regulatory framework, strategies, and legislation to regulate business practices and implement the highest international safety and security standards," Al Tayer added.

"Dubai has achieved a significant reduction in carbon emissions by 22 percent in 2019. This reflects the efforts made by our strategic partners to support the green economy of Dubai," Al Muhairbi said.

The Supreme Council has started evaluating carbon emissions for the next ten years to outline the necessary measures to limit the increase in emissions and then build a roadmap to achieve carbon neutrality goals by 2050.



New Batch Of Scimitar-Horned Oryx And Addax Translocated To Chad

s part of the world's largest mammal reintroduction programme, the Environment Agency – Abu Dhabi (EAD) has completed a successful mission to translocate 25 Scimitarhorned Oryx (SHO) and 25 Addax to Chad, which will soon be released into the wild as the two species have overlapping home ranges. The Agency will translocate another 25 Scimitarhorned Oryx to Chad in February 2022.



The Environment Agency

- Abu Dhabi (EAD) has just
completed a successful
mission to translocate 25
Scimitar-horned Oryx and
25 Addax to Chad

The EAD team also successfully darted 18 wild SHO and fit them with satellite tracking collars enabling close monitoring including survival and reproduction. One herd observed was 87 animals, where over 100 calves will be born in the wild this year.

The latest release follows the success of the reintroduction programmes that aims to create a self-sustaining herd of over 500 SHO in the 77,950 sq km Ouadi Rimé-Ouadi Achim Wildlife Reserve, decades after the species was declared 'extinct in the wild' by the International Union for the Conservation of Nature (IUCN) in 2000.

Launched in 2014, with the first shipment of animals released back into the wild in 2016, the herds have been observed making efficient movements to and from the pre-release pens from far away to assure they are adapting well to

Scimitar-horned Oryx are named after their impressive blade-like horns, which are long and curved like a traditional Arabian sword



their new surroundings. In 2017, a herd of 75 SHOs arrived safely at the Ouadi Rimé-Ouadi Achim Wildlife Reserve in Chad as part of the programme, in collaboration with the Chad Ministry of Environment and Fisheries and the Sahara Conservation Fund.

In 2018, the Sahelian plains of Chad welcomed 40 SHO new calves, increasing the total herd to 180 animals at the time. Currently, there are approximately 400 Scimitar-horned oryx in the wild, thanks to the birth of over 60 new calves so far this year.

The second phase of the re-introduction includes the critically endangered Addax and began in 2019 with the translocation of the first pilot group of 15 animals in Nov 2019, followed by the second group of 25 Addax in March 2020, prior to Covid-19 travel restrictions. Currently, there are

65 Addax in the wild with 15 calves born so far this year.

Unfortunately, the Addax's impressive spiraling horns, meat and hide have been attractive to humans and their population has plummeted during the last century due to the prevalence of poaching, which has been exacerbated by ubiquitous four-wheel drive vehicles and pressures from oil extraction activities.

HE Dr Shaikha Salem Al Dhaheri, EAD's Secretary General, said: "We aim to continue the legacy of the late Sheikh Zayed who pioneered the SHO reintroduction programme. The project will serve as a benchmark for similar initiatives, and we will guide other entities in the fields of captive breeding and conservation. It is saddening to see species becoming extinct and we at EAD will do everything in our capacity to reverse this."





She added: "Next month, we will release both SHOs and Addax in Chad in collaboration with our partners, who are truly invested in ensuring the project's success, and we are on track to establish a herd of 500 SHO in the wild. Our efforts will

Scimitar-horned Oryx can survive for months or even years without drinking water.
As a grazing animal, they derive most of their daily moisture intake from the plants they eat

continue next year, and we are expecting the birth of more calves, which will help to increase herd

sizes and curb the rapid decline of these species."

According to existing data, the last SHO disappeared from Chad in the late 1980s and the species was officially declared globally "Extinct in the Wild" by IUCN in 2000, with the only surviving animals persisting in ex-situ, or in captivity in breeding programmes in zoos and private collections across the world.

The success of this project is characteristic of the vision of the late Sheikh Zayed who first noticed the rapid decline of SHO numbers in the wild during the 1960s. He immediately ordered the creation of a conservation initiative through a captive breeding programme piloted in the UAE. The animals were housed on Sir Bani Yas Island, soon expanding significantly to eventually reach over 1,000 animals.

Renewable Energy **And Innovation Spotlighted At First** LPG Week

NOC Group, the Official Integrated Energy Partner of Expo 2020 Dubai, and the exclusive host of the Middle East's first LPG Week, together with Emirates Gas, a subsidiary of ENOC Group and a leading player in the UAE's gas industry concluded the very first edition of the World LPG Association's (WLPGA) flagship event, LPG Week 2021, including the 33rd edition of the World LPG Forum.



The hybrid event took place under the patronage of H.H. Sheikh Ahmed bin Saeed Al Maktoum. Chairman of Dubai Civil Aviation Authority, Chairman of Dubai Airports and Chairman and Chief Executive of Emirates Airline and Group, from December 5 to 9 at the Dubai World Trade Centre. Held under the theme 'Energising Tomorrow, the five-day event saw over 450 exhibitors and almost 2,000 participants.

Pro. Yemi Osinbajo, Vice President of Nigeria, Gauri Singh, Deputy Director-General of the International Renewable Energy Agency and officials delivered keynote other senior addresses during the opening day of the event.

Saif Humaid Al Falasi, Group CEO, ENOC, said: "The thought-provoking discussions which took place during LPG Week will further support the industry's transformation and act as a strong

catalyst towards innovation and adopting sustainable development practices. In line with our vision to deliver sustainable value and industry leading performance, we are committed to further supporting the industry's shift towards implementing sustainable development practices and contributing towards a greener future for generations to come."

WLPGA CEO & Managing Director James Rockall, said, "Discussions between senior industry leaders and prominent intergovernmental representatives revealed that the LPG sector has a very important role to play in the global energy future, either with traditional LPG or with renewable LPG."

The next LPG Week is set to take place in New Delhi, India in December 2022.

Environment

Adelaide, Australia: A Climate Ready, Green City

Adelaide, the state capital of South Australia, has been widely cited for its comprehensive approach to sustainability.

Located in the Adelaide-Mt Lofty Ranges, one of the eight natural resource management regions in South Australia, the city is home to approximately 50 percent of native plant species and 75 percent of native bird species.



Adelaide is adapting to climate change, reducing carbon emissions, using resources wisely, and supporting biodiversity

The Adelaide Plains are the traditional lands of the Kaurna people, an aboriginal community who actively manage and live off the land and waterways of the region.

When the Kaurna people were the sole inhabitants of the Adelaide Plains, the area was one of the most biodiversity-rich areas in South Australia. At least four unique ecosystems could be found across the landscape. Since European colonisation, this city has witnessed and contributed to the decline of biodiversity in its forests and waterways through what has now shown to be unsuitable land management and habitat clearing.

To protect its natural splendors, Adelaide's many sustainability-focused organisations form a comprehensive web, championing energy policies for climate change mitigation, water

100 percent of Adelaide's power is now sourced from a mixture of wind and solar power



conservation, biodiversity, and climate change adaptation, along with other sectors.

Biodiversity

The City of Adelaide continually works on exciting projects to improve the health of their local environment. Water is an essential part of any living system and underpins many of the city's biodiversity projects. Some of these projects include:

- Native Bee BnB: This project aims to support the city's native bees by creating a corridor of flowering plants all the way from the Adelaide Hills to the ocean.
- South Park Lands Creek Revival: This creek was constructed over 100 years ago; the revival project aims to turn it into a corridor for native biodiversity and visitors. Work has already begun and includes the planting of up

- to 135,000 plants, including trees, aquatic vegetation and local native shrubs.
- Tulya Wardli Riparian Restoration Works: Bonython Park/Tulya Wardli is a natural oasis close to the heart of the city. A concerted revegetation effort has transformed this area of the River Torrens into a natural riverbank ecosystem from its degraded state.
- Kaurna Cultural Burn: The Kaurna People are the traditional custodians of the Adelaide Plains and the culture of the Kaurna People is inextricably linked with the ecology of Adelaide. The sustainable management of the land, including the use of fire, by the Kaurna People had a major impact on the evolution of the ecosystems in the area. The city of Adelaide is planning to conduct a controlled burn with the assistance of the Kaurna community, making this the first such project to be undertaken in the city.
- Carp Removal: The city of Adelaide has been







actively removing carp from the Torrens Lake for several years. This is part of an ongoing and adaptive maintenance plan to reduce the negative impact of carp on water quality and aquatic biodiversity.

Biodiverse Carbon Offset Planting: This
project aims to restore an area of Reservoir
Park with native vegetation from the Mallee
Box Woodland ecological communities and
enhance habitat quality by creating a
biodiverse carbon offset planting
demonstration site.

Carbon Neutral

Adelaide boasts a Green City Programme and a Carbon Neutral Action Plan for net zero emissions in buildings. Sustainable energy is promoted with combined heat and power, geothermal energy, energy audits, and smart meters, as well as

incentives for solar energy. From pedal powered food carts to banks and commercial property companies, Adelaide's business community is a broad and active leadership community. Organisations in the partnership actively contribute to the shared aspiration for Adelaide to be the world's first carbon neutral city.

Carbon Neutral Adelaide partner, Adelaide Festival, was certified as a Climate Active carbon neutral event in 2020 and have committed to certification in future years.

Water Management

Water is one of Adelaide's most precious resources. Living in the driest state on the driest inhabited continent, the city has taken efforts to ensure that its water resources are used wisely to thrive in the face of a changing climate. The City of Adelaide's planning for water considers

Adelaide's planning for water considers every part of the water cycle including social, environmental, and economic outcomes



every part of the water cycle including social, environmental and economic outcomes.

Careful planning and design integrate the management of the water cycle into urban development. This is known as water sensitive urban design (WSUD) and is practised by the City of Adelaide to mitigate the impacts of climate change and urban development.

WSUD incorporates all water resources including stormwater, rainwater, drinking water, groundwater, and wastewater. Examples include:

- Rainwater harvesting and reuse across urban greening areas
- Wastewater recycling
- Water conservation measures
- Projects to minimise stormwater pollution, such as wetlands and rain gardens

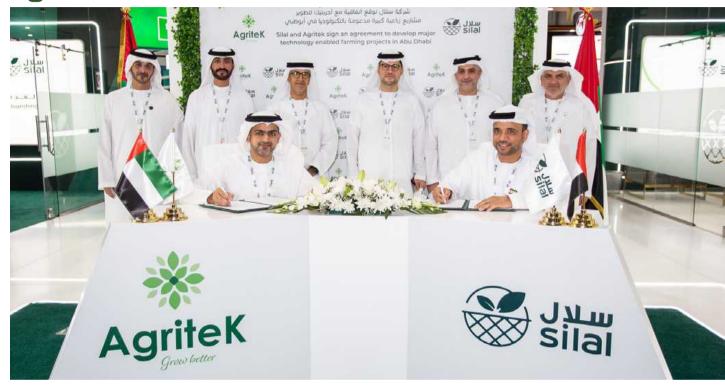
Renewable Electricity

Adelaide is the first council in South Australia to use 100 per cent renewable electricity in a power purchase agreement that ensures City of Adelaide's operations, including the Adelaide Aquatic Centre, UParks, depots and buildings, including the historic Adelaide Town Hall, are powered by 100 per cent renewable energy.

Since 1 July 2020, everything run by the City of Adelaide is powered by renewable electricity, which includes community buildings, electric vehicle chargers, barbecues in the Park Lands, water pumps, street lighting and traffic lights. This power purchase agreement is a first for any council in South Australia. This means 100 percent of the City's power is now sourced from a mixture of wind and solar power.

Silal And Agritek Sign Farm Technology Agreement

Silal's commitment to contribute to the UAE's National Food Security Strategy, which aims to



The agreement entails the building of large scale agriculture projects using the latest technology solutions on Silal's development projects in the Emirate of Abu Dhabi

ensure access to sufficient and high-quality food.

Agritek will support Silal in the farm upgrade project announced in November 2021, helping Silal to support Abu Dhabi farmers through technology deployment and increase the volume of high-quality, local production of a variety of fresh fruits and vegetables with a goal to minimise dependency on imports.

His Excellency, Eng. Jamal Salem Al Dhaheri, CEO of Silal, and Sultan Al Jaberi, CEO of Agritek LLC signed the agreement at a ceremony on the sidelines of SIAL Middle East in Abu Dhabi, in which Silal is the key sponsor. The signing ceremony was attended by H.E. Mohamed Ali Al Shorafa Al Hammadi, Chairman of Abu Dhabi Department of Economic Development, H.E. Dr. Mugheer Khamis Al Khaili, Chairman of the Department of Community Development (DCD)

The projects are in line with the UAE's National Food Security Strategy to ensure access to sufficient and high-quality food and to promote technology enabled local production for local farmers



in Abu Dhabi, and H.E. Saeed Al Bahri Salem Al Ameri, Director-General of ADAFSA, and Mansour Al Mulla, Chairman of the Chief Investment Officer at ADQ, as well as senior officials from both organisations.

His Excellency, Eng. Jamal Salem Al Dhaheri, CEO of Silal said: "At Silal, we believe that good agricultural conditions and healthy fresh produce intersect. Adopting the latest agritech solutions to overcome the challenging agricultural conditions is a prerequisite for growing crops in harsh environments, such as the UAE's.

"Collaborating with Agritek to deploy commercially feasible technologies will maximise farming productivity and improve diversity of crop production in the UAE. This falls within our remit to introduce proven technologies suitable for desert farming."

Sultan Al Jaberi, CEO of Agritek said: "Agritek aims to bring superior solutions and services to the agriculture sector in the UAE, helping local growers to maximize yield from their crops using modern technology to grow better. At Agritek, we aim to advance the future of farming and food security in the UAE using sustainable, effective, and high-tech solutions."

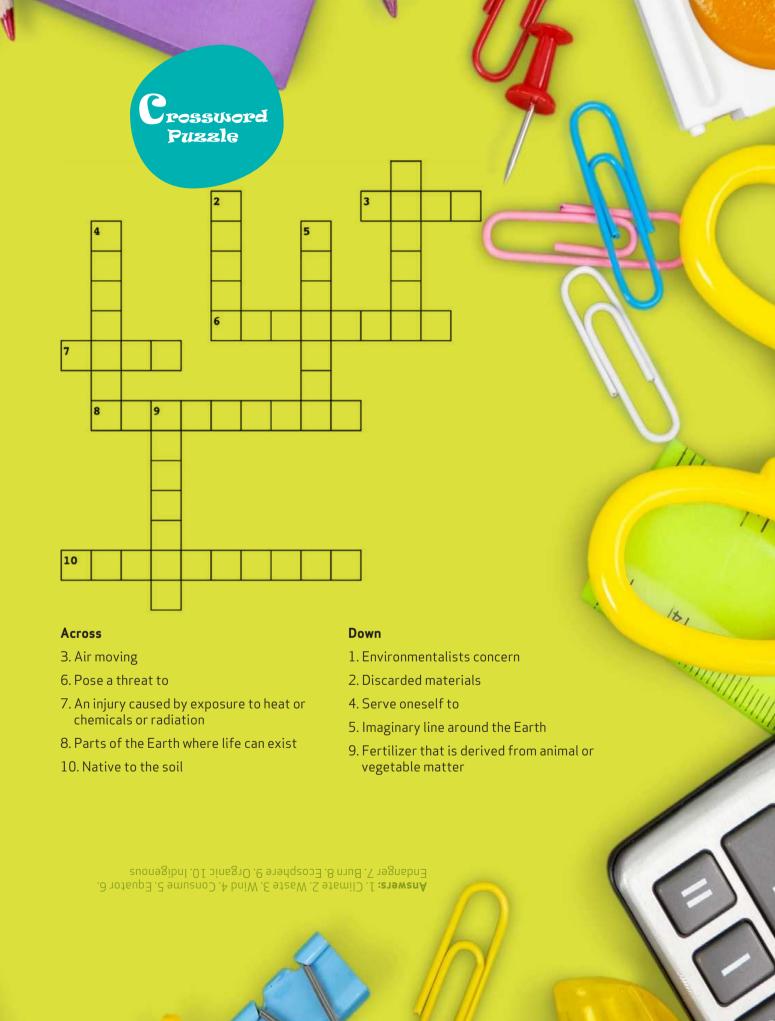
Under the agreement, Agritek will develop farms for Silal and contracted farmers leveraging modern irrigation, fertigation, and climate control management systems. These technologies will provide the optimum conditions for crops to grow, increase the efficacy of resource use, and boost farms' operational efficiency.

Modern nurseries will also be built to improve the quality of seedlings and seeds provided to farmers.





TURTLES
WHALES
REDUCE
RAINFOREST
OCEANS
RECYCLE
ENERGY
JUNGLE
FLOODS
VOLCANO
MOUNTAINS
DINOSAURS
SUSTAINABLE
EXTINCT
RENEW



Environment

WORD OF THE DAY:

BIOMASS

Biomass is organic matter that comes from living or recently living things, like plants and animals. Both the prefix 'bio' and the word 'organic' refer to living things.

Biomass is full of energy. A plant absorbs energy from the sun, and that energy is passed along to an animal when it eats the plant. Since humans are a type of animal, you could say that biomass fuels the human body, but it can also be turned into liquid fuel to run vehicles, heat to keep us warm, or electricity to light up our lives.

Biomass energy is a renewable form of energy made from recently living materials. Biomass energy is an alternative to fossil fuels, like oil, coal, and natural gas. Fossil fuels also come from living things, but fossil fuels are non-renewable. The once-living things that make up fossil fuels died millions of years ago and need to be subjected to a lot of heat and pressure to be turned into fuel. Since we can't make more fossil fuels, they could run out.

Advantages of Biomass:

- It is a renewable source of energy, which means that it will not run out as long as it is replaced, for example by growing more crops or trees.
- Although carbon dioxide and methane gases are released when biomass is burned, the plants absorbed carbon dioxide when they were growing. So the only additional carbon dioxide that is emitted is from farm machinery used in the process.
- It can use waste materials to produce electricity.
- It supports farmers because they can sell their crops for biomass fuel.

Disadvantages of Biomass:

 Burning biomass does produce some carbon dioxide and methane gas overall, which contributes towards global warming, but in general, it can be thought of as almost carbon-neutral.

- Biomass production can encourage intensive farming and may contribute towards deforestation if new trees are not planted.
- Growing and collecting the biomass can sometimes cause problems. It can be heavy and may need to be transported long distances.
- If food crops are used for fuel this can make them more expensive to buy as food.





NATIONAL BIRD DAY JANUARY 5TH

Birds have always held special place in our hearts, which is why we celebrate them on National Bird Day every January 5! While birds are amazing, they re also a massive animal group under particular threat. And the phrase canary in the coal mine was named after birds for a reason they re the barometers of our planet s environmental health. Birds are often considered living links to the past, being the closest-related animals to the evolution of dinosaurs. They re often keystone species in the ecosystems, signifiers of its health and vitality.

The fact that so many bird species are under threat thanks to the illegal pet trade, disease, and habitat loss means it s more important than ever to raise public awareness of the needs of birds. The survival of hundreds of species depends on it!

Replacing the demand for birds as pets with a demand for preserving the species in the wild will reduce inherent welfare problems associated with captive birds while increasing the support of conservation efforts, such as ecotourism, that help local communities and protect wildlife by allowing people to see that birds are more beautiful wild.

The Avian Welfare Coalition's National Bird Day campaign aims to reduce the suffering of birds by raising public awareness of the destructive bird trade, the realities of cruel bird breeding mills, and ways to improve the welfare of birds already in captivity.

PENGUIN AWARENESS DAY JANUARY 20TH

Penguins are a barometer of the effects of human activity on the poles, according to scientists from institutions around the world. Raising awareness about them, therefore, is seen by many as a way to communicate with people about the impending dangers of climate change. If people can see how these birds are being affected, perhaps they will make changes to their lives.

Laboratories and scientific institutions worldwide became increasingly interested in Penguin Awareness Day after 2010. Their main aim is to highlight their penguin-related research and get the public interested in conservation.

There are currently over 18 different known species of penguin and some of them have been around the planet for well over 65 million years. Penguin numbers around the world are dwindling. Every year, the penguin population shrinks at an alarming rate and most of the world doesn t realize this because they don t get to see real penguins in their natural habitat. That s why Penguin Awareness Day is such a good opportunity to learn more about penguins and understand the situation they re in. Penguin Awareness Day focuses on educating people on their situation, learn how climate change has affected them and to learn about the different species and where they live.

Penguin Awareness Day is an opportunity for everyone involved in the life of penguins to chip in and talk about this vital creature. Remember, the penguin is the largest animal to venture into the heart of Antarctica to breed. It is a tough little cookie and worth celebrating.



Don t waste food!

COLOUR ME!



JAE NEWS

Innovative Programmes For Youth Launched

bubai Safari Park organised a winter camp to educate children about the importance of protecting and preserving nature, animals and the environment. It also focused on other related science knowledge that implements the values of responsibility, self-reliance, teamwork and learning new skills.

Winter camp activities included getting to know



Dubai Safari Park and its facilities and the various types of animals in it, as well as learning about the profession of a veterinarian, in addition to organising external trips for camp participants to Al Marmoom, Hatta and Mushrif National Park.

The camp focused on the importance of protecting the animals and providing suitable environment to enhance and protect their welfare, in addition to learning about the UAE heritage and values.

Meanwhile, the Environment and Protected Areas Authority in Sharjah (EPAA) launched the "A Day in the Reserve" programme, which was held across four sites - Khor Kalba Mangrove Centre, Wasit Wetland Centre, Geological Park in Al Buhais, and Al Muntather Reserve.

The programme encouraged families to step up involvement in environmental and community programmes. It enhanced the ecological

awareness of families by accompanying them on recreational, environmental education trips, introducing them to the natural reserves in the emirate of Sharjah.

Hana Saif Al Suwaidi, Chairperson of the EPAA, said, "The 'Day in the Reserve' programme contributed to informing various segments of society about the importance of nature reserves and their affiliated centres in Sharjah.

"It also raised awareness of the importance of preserving the environment and wildlife, and enriching a culture of sustainable eco-tourism, highlighting the protected areas and environmental landmarks in Sharjah, in addition to involving families in environmental and community programmes, as it is entertainment and an investment in the children's vacation time."

Environment

Transformative Changemakers Named UN's 2021 Champions Of The Earth

he UN Environment Programme (UNEP) has announced its 2021 Champions of the Earth. The Champions were chosen for their transformative impact on the environment and their leadership in advancing bold and decisive action on behalf of people and the planet.

Since its inception in 2005, the annual award, the UN's highest environmental honour, has been



The United Nations' highest
environmental award
honours this year a prime
minister, a scientist,
indigenous women, and an
entrepreneur for their
transformative impact on
the environment

awarded to some of the world's most dynamic environmental leaders.

"As we enter into a decisive decade, to cut emissions and protect and restore ecosystems, UNEP's Champions of the Earth demonstrate that all of us can contribute. The entire spectrum of humanity has both a global responsibility and a profound opportunity," said Inger Andersen, Executive Director of UNEP. "This year's Champions are women who not only inspire us, but also remind us that we have in our hands the solutions, the knowledge and the technology to limit climate change and avoid ecological collapse."

UNEP's 2021 Champions of the Earth are: **Prime Minister Mia Mottley of Barbados**, honoured in the Policy Leadership category for her powerful voice for a sustainable world from

The new Champions of the Earth inspire, defend, mobilise and act to tackle the greatest environmental challenges of our time, including ecosystem protection and restoration



the global south, and for consistently raising the alarm about the vulnerability of Small Island Developing States due to the climate emergency. The Prime Minister is a driving force for climate action across the Latin American and the Caribbean region. Under her leadership, Barbados has adopted ambitious renewable energy targets, committing to a fossil-fuel free electricity sector and transport by 2030.

The Sea Women of Melanesia (Papua New Guinea and the Solomon Islands), honoured in the Inspiration and Action category, train local women to monitor and assess the impacts of widespread coral bleaching.

Dr. Gladys Kalema-Zikusoka (Uganda), honoured in the Science and Innovation category, was the first-ever wildlife veterinarian of the Uganda Wildlife Authority, and is a recognised world authority on primates and zoonotic diseases.

Maria Kolesnikova (Kyrgyz Republic), honoured in the Entrepreneurial Vision category, is an environmental activist, youth advocate and head of MoveGreen, an organization working to monitor and improve air quality in Central Asia.

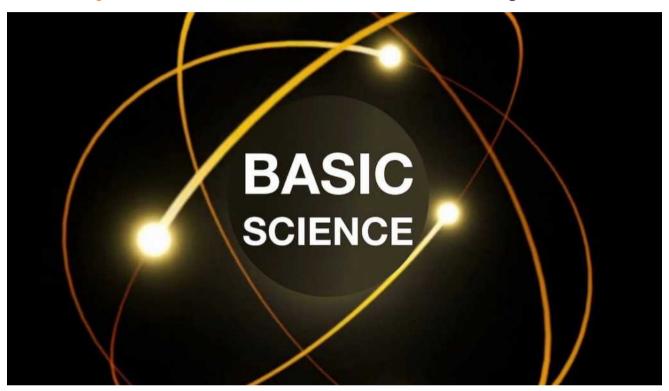
By amplifying the significant work being done on the environmental frontlines, the Champions of the Earth awards aim to inspire and motivate more people to take to address the triple planetary crisis -- climate change, nature and biodiversity loss, and pollution, chemicals and waste.

This year's awards highlight the UN Decade on Ecosystem Restoration, which runs until 2030, coinciding with the deadline for achieving the Sustainable Development Goals.

Environment 2022 Is The International Year Of Basic Sciences For Sustainable Development

he United Nations General Assembly has declared the year 2022 as the International Year of Basic Sciences for Sustainable Development, stating: "We need more basic sciences to achieve the Agenda 2030 and its 17 Sustainable Development Goals."

With this resolution, the UN has called on all Member States and organizations, and other



global, regional and subregional organizations, as well as other relevant stakeholders, to observe and raise awareness of the importance of basic sciences for sustainable development, in accordance with national priorities.

The UNGA motivated its decision with "the high value for humankind of basic sciences", and with the fact that "enhanced global awareness of, and increased education in, the basic sciences is vital to attain sustainable development and to improve the quality of life for people all over the world". It also stressed that "basic sciences and emerging technologies respond to the needs of humankind by providing access to information and increasing the health and well-being of individuals, communities, and societies".

The successes and difficulties of the global fight against the COVID-19 pandemic have been for

two years a stark reminder of this importance of basic sciences.

The vote is the result of the mobilization of the international scientific community, led since 2017 by the International Union of Pure and Applied Physics (IUPAP), CERN (The European Laboratory for Particle Physics), and 26 other international scientific unions and research organizations from different parts of the world.

Over 90 national and international science academies, learned societies, scientific networks, research and education centers support this initiative and aim to showcase and improve the links between basic sciences and the 17 SDGs.

The International Year of Basic Sciences for Sustainable Development will be inaugurated on 30 June at UNESCO headquarters in Paris.

"Shanghai Electric Day" In EXPO 2020

he China pavilion at EXPO 2020 ushered in "Shanghai Electric Day " on 1 December 2021, Shanghai Electric is building the phase four of Mohammed Bin Rashid Solar Al Maktoum Park that is aimed to be the world's largest and biggest solar power project.

The 12 billion Dirham phase that is constructed by Shanghai Electric on a landscape of 44 square



kilometers is a combination of three technologies, the Central Tower Concentrated Solar power plant (CT CSP), Parabolic Trough Concentrated Solar power plant (PT CSP) and Photovoltaic solar power plant (PV) comprising a total of 950 megawatts (MW) of clean energy.

Shanghai Electric Group is a world-class integrated high-end equipment manufacturer with a global presence in new energy, integrated energy, environmental protection, medical devices, intelligent infrastructure, and industrial automation sectors.

Zhao Hui, the project director of Shanghai Electric, said: "Shanghai Electric is proud to take part in this phase four of the Mohammed Bin Rashid Al Maktoum Solar Park. This project represents the values, vision and message of UAE in gathering the world for a better future."

Only 62 meters shorter than Paris's famous Eiffel tower, The CSP constructed tower in Mohammed Bin Rashid Al Maktoum Solar Park project is considered to be the tallest in CSP at 262 meters height. After the project comes into operation, it will reduce 1.6 million tons of carbon emissions every year.

The Construction of the phase four project began in 2018, making it the largest phase built in the Mohammed bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world based on the Independent Power Producer (IPP) model.

The park has a planned production capacity of 5,000 MW by 2030, with investments totaling AED 50 billion. When completed, it will save over 6.5 million tons of carbon emissions annually.



Plastic Waste In Oceans and Seas

5 ome scary statistics about plastic waste have been appearing in the news of late. Plastic is a major threat to marine life, fisheries resources and biodiversity. 10 million tons of plastic waste are added every year to around 269,000 tons already present in our seas and oceans.

Marine mammals and turtles can suffocate and drown as they get entangled in plastic nets and ropes. Birds and fish can mistake plastic for prey and ingest it. They can then die of starvation or incur internal injuries as plastic stays in their stomach. Birds can further feed their chicks plastic debris. One study found plastic in 98% of Albatross chicks which were tested.





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

Plastic packaging, oil companies, individual littering and the improper disposal of plastic or fishing gear lost in sea are the major sources of plastic waste damaging the environment. Fishing gear makes 80% of marine plastic waste and there are ways to avoid its loss, recycle it or clean up the sea periodically. Here in the UAE, the Dubai Voluntary Diving Team is doing a great job of cleaning the Gulf's waters of abandoned fishing gear and other plastic waste.

Even more serious is the fact that microplastic pieces are now found in our food, drinking water and beverages. A study in the USA found that 97% of bottled water contained microplastic particles. When it is less than 10 microns in diameter, microplastic can enter our body cells. Plastic waste is also contributing to climate change by increasing the carbon dioxide emissions for its production and incineration and by releasing methane gas when it is exposed to sun light.

Plastic waste is a major threat to all life on earth, and diverting ocean bound plastic is important to save the marine and coastal environment, coastal communities and the earth's climate. If we all apply the 4 Rs - Refuse/Reduce/Reuse/Recycle, we can cut down plastic waste significantly. Many organizations are now dedicated to fighting plastic waste such as Ocean Cleanup, Plastic Oceans International, Plastic Bank and Plastic Soup Foundation.

Let us all work together against improper plastic use and waste disposal.









