



JANUARY  
2021  
ISSUE 191

# Society & Environment

creating green communities for a better tomorrow

A monthly publication issued by Zayed International Foundation for the Environment



04

In Memoriam:

**Dr. Meshgan Mohammed Al Awar (1962 - 2020)**

Director, Research & Studies Center, Dubai Police Academy and  
Secretary General, Zayed International Prize for the Environment



40

e-tron Sportback: Audi's milestone achievement in  
the age of electric mobility



# Extraordinary at first sight

The all-new Audi RS 7

 **RS 7**



**AL NABOODA**  
AUTOMOBILES

800 AUDI (2834)

[www.audi-dubai.com/RS7](http://www.audi-dubai.com/RS7)

## Chairman's Message

Every New Year brings with it a message of hope and promise to revitalize our chances of progress and to build a better future together.

The outbreak of the coronavirus pandemic has brought about a shift in the way we live, how we work, and has forced us to rethink our priorities. The pandemic has taught us lessons the hard way – disease and death have taken a toll on millions of lives the world over. Despite the huge global socio-economic disruption, we have also seen positive impacts on the environment like improvement of air and water quality, reduction of noise and restoration of ecology.

As countries resorted to lockdowns and air traffic restrictions, and with the temporary closure of industries, we have seen a sudden dip in greenhouse gases (GHGs) emissions. Vehicles and aviation are prime contributors of emissions, and overall, much less consumption of fossil fuels during the pandemic have lessened GHGs emission, helping combat against global climate change. Meanwhile, countries that once relied on tourism as a key economic driver are now finding new ways to supplement their devastated tourism-driven economies.



**Prof. Mohammed  
bin Fahad**  
Executive Editor

Reports of the return of dolphins in the coast of Bay of Bengal and canals, waterways, and ports of Venice after a long decade, gives us hope that although the environmental consequences are short-term, it is possible to bring about effective change through a proper strategy for long-term benefit. The global response of COVID-19 is also a reminder that if we work together, we can combine efforts to combat the threats of human-induced global climate change.

On a personal level, during the pandemic, the Zayed Foundation lost a trusted associate and a true crusader of the environmental cause. The demise of Dr. Meshgan Al Awar has left a deep void in the lives of all those who knew her. She was a dear friend, cherished colleague and will be remembered for her tireless efforts in taking forward the values and mission of the Zayed International Foundation for the Environment on to the international stage.

# Contents

4

WHAT'S INSIDE



06

**COVER STORY**  
In Memoriam: Dr. Meshgan Mohammed Al Awar passed away on July 25, 2020

14

UAE youth reimagines a green recovery to shape the next 50 years

18



First UAE Soil Map launched to mark World Soil Day

22

Smart new technologies to combat plastic pollution crisis in our waters

28



Making green hydrogen a cost-competitive climate solution

34

Kids' Universe: Interesting trivia, general knowledge, games, and more, for the young ones



40

Green City: Copenhagen aims to become first carbon neutral capital by 2025

Dynamic, fast, and electric - The e-tron Sportback is Audi's second fully electric, five-door SUV with quattro all-wheel drive



44

## PUBLISHED BY



## Executive Director

Prof. Mohammed Bin Fahad

## Advisors:

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

## Marketing

Fahad M. Al Ghus  
marketing@zayedprize.org.ae

## Editor

Sangeetha K  
editor@zayedprize.org

## Design Director

Nash - Intoto Marketing  
Communications  
intotoadv@gmail.com

50



International Mountain Day turns the spotlight on its rich biodiversity and the immediate threats they face

54

Virtual Climate Dialogues showcase how climate action is progressing under the challenging circumstances caused by COVID-19

60



UN observes 2021-2030 as the Decade of Healthy Ageing



## Upcoming events

### SPE Symposium: Reservoir Management and Water Flood Excellence: Present and Future

**Date:** 12 - 14 Jan

**Location:** Conrad Abu Dhabi Etihad Towers, Abu Dhabi, UAE

The symposium offers a unique opportunity for attendees to promote knowledge sharing and technology transfer with the aim of delivering world-class performance in water flooding given its criticality as an IOR method. Experts will share their recent experiences, solutions and on-going challenges associated with reservoir management and most specifically water flooding.

### International Conference on Chemical, Agricultural, Biological and Environmental Sciences

**Date:** 13 - 14 Jan

**Location:** Flora Grand Hotel, Dubai, UAE

The goal of the conference is to provide the platform for students, engineers, researchers and scientists to share the knowledge and ideas in the recent trends in the field of Chemical, Agricultural, Biological and Environmental Sciences.

### The 2021 Kingston Climate Change Symposium

**Date:** Jan 14

The virtual symposium aims to bring together climate champions and inspire action to showcase developments on local climate initiatives. The event features a keynote speech by Severn Cullis-Suzuki who gained international attention at just 12 years old when she delivered her famous speech at the Rio Earth Summit, pleading for the delegates to preserve the planet.

### Smart Cities Expo & Forum

**Date:** 18 - 21 Jan

**Location:** Abu Dhabi National Exhibition Centre - ADNEC, Abu Dhabi, UAE

The Smart Cities Forum will discuss master planning, methods to reduce a city's carbon footprint, integrating water and energy efficiency into architectural design, the technologies that underpin smart cities and smart infrastructure, and much more around the future of our built environment.

## In Memoriam: Dr. Meshgan Mohammed Al Awar (1962 - 2020)

Considered as one of the top women achievers in the UAE who has inspired a generation of future leaders, Dr. Meshgan Mohammed Al Awar has been recognized both locally and internationally, and received numerous awards and appointments from various international institutions and United Nations (UN) bodies, including United Nations Development Programme (UNDP), United Nations Environment Programme



Dr. Meshgan Mohammed Al Awar,  
Director, Research & Studies  
Center, Dubai Police Academy and  
Secretary General, Zayed  
International Prize for the  
Environment, passed away in  
Dubai, UAE, on July 25, 2020

(UNEP), United Nations Educational Scientific and Cultural Organization (UNESCO), United Nations Industrial Development Organization (UNIDO), Economic and Social Council (ECOSOC), United Nations Office for South-South Cooperation (UNOSSC).

Dr. Meshgan represented the UAE as a keynote speaker at international conferences, conventions, summits and other events on environmental awareness, sustainable development, green economy, space science and technology.

Having secured a PhD in Physical Chemistry from the University of Wales, UK, in 1996, Dr. Meshgan had previously graduated in Science with distinction from the UAE University with a major in Chemistry and a minor in Geology.

In 2000 and 2010, she had successfully completed training courses on Remote Sensing and

*"Whether it is the environment or economic empowerment of women, it is by adhering to the vision of the late Sheikh Zayed that the UAE has transformed into a unique global model in both environment preservation and women's development."*

*- Dr. Meshgan Mohammed Al Awar*



Geographic Information Systems (GIS) at the US-based Boston University Center for Remote Sensing. In 2013, she was certified 'UN Expert' to train regional and international technical teams on how to use the "Contaminated Sites Management Toolkit for POPs" by the United Nations Industrial Development Organization (UNIDO). She was also awarded a certificate on "Leadership in Crises" from Harvard Kennedy School Executive Education in 2013.

### **Awards and Honours**

In 2018, Dr. Meshgan Mohammed Al Awar was awarded the 1st Women Servant Leadership Award organised by UNESCO Hong Kong and Gratia Christian College. In 2017, she was honoured by the United Nations Office for South-South Cooperation (UNOSSC) for her "leadership role" as the General Coordinator for the GSSD Expo.

Dr. Meshgan entered into the "Arab Women in Science Hall of Fame" from UAE in 2012, following recognition by The Middle East and North Africa Environment, Science, Technology, and Health Office, US Embassy in Jordan. She was awarded

the 3rd Middle East Women's Achievement for the "Best Social Contribution" in 2004, and was awarded a Participation Certificate from the Office of Space Science (NASA) in Mars Exploration Rover Mission in 2003.

In 1999, Dr. Meshgan was awarded the best female employee in the Dubai Government Excellence Program/UAE.

### **Prestigious Appointments**

Named Co-Chair, CSR Division under WISDP initiated by UNESCO Hong Kong Association in March 2018, Dr. Meshgan Al Awar was member of the Scientific Committee for the United Nations Office for South-South Cooperation's (UNOSSC) GSSD Expo 2016 and a Scientific Committee Member and Chair of Istanbul International Solid Water, Water and Wastewater Congress in May 2013.

She served as President of Dubai Women Police Council for Community Services and as international expert in Policy and Strategy Round Table on Health and Environment in the Arab World in 2011. She was also the chosen UAE



scientist in the joint UAE team with NASA's Spaceward Bound Education Program in UAE in 2011.

In 2010, Dr. Meshgan was the UAE's Representative for the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) at UNESCO while in 2008, she was named a member of the steering committee of Al Basama Al Beeiya, a historic national initiative of the UAE to measure and understand the country's ecological footprint.

In 2005, she represented the UAE in the Arab Network for Women in Science and Technology (UNESCO).

### Notable Publications

Amongst the notable publications, authored or co-authored by Dr. Meshgan Al Awar include: Using Satellite Images in Policing Urban Environments (M. Al-Awar and F. El-Baz) In: Remote Sensing and Digital Image Processing #10: Remote Sensing of Urban and Suburban Areas, Rashed, Tarek; Jürgens, Carsten (Eds.) Springer.

She also authored "Green Technology", chapter 4 in "Inclusive Green Economy Policies and Practice", a comprehensive overview of alternative economic models that centre around

environmental sustainability. The book was published by UNEP in association with the Zayed International Foundation for the Environment and Tongji University in June 2019.

Dr. Meshgan had previously authored a chapter in "Future Perfect", a United Nations Department of Economic and Social Affairs (UNDESA) publication for RIO +20. Future Perfect is a fully illustrated 300-page book which amplify and contribute to the international dialogue and action that is being created by the United Nations Conference on Sustainable Development (UNCSD), widely referred to as RIO+20.



# In Remembrance

Environmental stalwarts from around the globe share their thoughts on the demise of Dr. Meshgan Al Awar



**Prof. Mohammed Bin Fahad**

**Chairman, Zayed International Foundation for the Environment**

In Dr. Meshgan Al Awar's passing, the UAE has lost a tireless advocate for the environment, and the Zayed International Foundation for the Environment has been deprived of an extraordinary activist whose diligent efforts have steered the vision and agenda of the organisation onto the global stage.

Dr. Meshgan will be forever remembered as a committed champion of the environment and sustainable development, and as a formidable individual who brazed a trail for Emirati women in scientific and academic pursuits.

Today, Dr. Meshgan's death has left a gaping hole among the ranks of women environment leaders in the UAE but she leaves behind a solid foundation for a new generation to build upon.

As her colleague for three decades, I have been impressed by her indomitable spirit and great determination, and the passion, energy, and dedication that marked everything she did.

I sincerely mourn her loss. May her soul rest in peace.



**H.E. Achim Steiner**

**Administrator United Nations Development Programme (UNDP)**

I am very saddened to hear of the passing of the late Dr. Meshgan Al Awar. On behalf of the United Nations Development Programme and myself, I would like to extend our deepest

condolences to the Zayed International Foundation for the Environment and to Dr. Meshgan's family.

Throughout her time as the Secretary General of the Zayed International Prize for the Environment and various activities with the United Nations, Dr. Meshgan made a lasting impact on the global sustainability agenda. She helped raise environmental awareness globally and across the Arab region, and she inspired a generation of future leaders.

Dr. Meshgan's legacy will live on as we continue the march towards achieving sustainable human development.



**Jorge Chediek**

**Director and Envoy of the Secretary-General on South-South Cooperation**

On behalf of the United Nations Office for South - South Cooperation (UNOSSC), I would like to express our deepest sadness and sincere condolences on the demise of Dr. Meshgan Al Awar, Secretary-General of Zayed International Foundation for the Environment.

During this difficult time, our thoughts and prayers are with her family, friends and colleagues.

UNOSSC will always cherish and value, Dr. Meshgan's exceptional leadership and unparalleled support for environment conservation as well as youth empowerment, leadership and education.

Her diligence, partnership and commitment towards South-South and triangular cooperation, especially during the Global South-South Development Expo 2016, will be deeply missed and forever remembered by UNOSSC. May her soul rest in peace.



**Jane Lubchenco**  
**Under Secretary of  
Commerce for Oceans  
and Atmosphere**  
**9th Administrator of  
the National Oceanic  
and Atmospheric  
Administration**

I had great admiration for Dr. Meshgan Al Awar and I greatly appreciated her deep knowledge, thoughtful approach, and efficient manner. She was devoted to making the Zayed International Prize for the Environment and the broader work of the Foundation truly special and impactful.

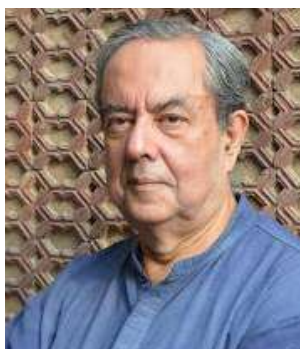
I send condolences and best wishes to her family and to the Foundation team. Your work is of vital importance today.



**Zakri Abdul Hamid**  
**Former Science Adviser  
to the Prime Minister of  
Malaysia**  
**Chairman, Atri Advisory**

Inna Lillahi wa inna ilaihi  
raji'un...

The world will miss her leadership in the environmental realm. May Allah place her soul with the righteous.



**Ashok Khosla**  
**Development  
Alternatives & TARA**

I am shocked and devastated to know about the demise of Dr Meshgan Al Awar.

She was so passionate

and committed to her science and dynamic and energetic about her work for a better society that it is impossible to think of someone so young and intelligent not being with us anymore.

When Meshgan was in Delhi last year, and made time despite her busy schedule to visit our office, my colleagues and I discussed great collaborations for the future, where both the UAE and India could benefit from the joint strengths of our respective organizations to push the sustainability agenda forward.

It is hard to imagine the huge loss that her family and her colleagues must feel right now and I can only wish them the strength to bear it so we can continue the work that she had so deeply dedicated herself to.



**V. Ramanathan**  
**Edward A. Frieman  
Endowed Presidential  
Chair in Climate  
Sustainability**  
**University of California  
at San Diego**

My deep condolences.



**Prof. D.  
Balasubramanian**  
**Distinguished Scientist  
(& Director of Research  
Emeritus)**  
**L V Prasad Eye Institute  
(LVPEI)**

I am deeply saddened to learn about the passing away of Dr. Meshgan Al Awar, Secretary-General of Zayed International Foundation for the Environment. This truly is a great loss for the Foundation and the world of supporters, researchers and activists involved in the sustainability of our environment - water, climate, animals, farms, trees and plants. May she rest in Peace! And our sympathy to her family on this great loss.



**Mohamed Hassan**  
**Founding executive  
director of TWAS**  
**Chairman of the Council  
of the United Nations  
University (UNU)**

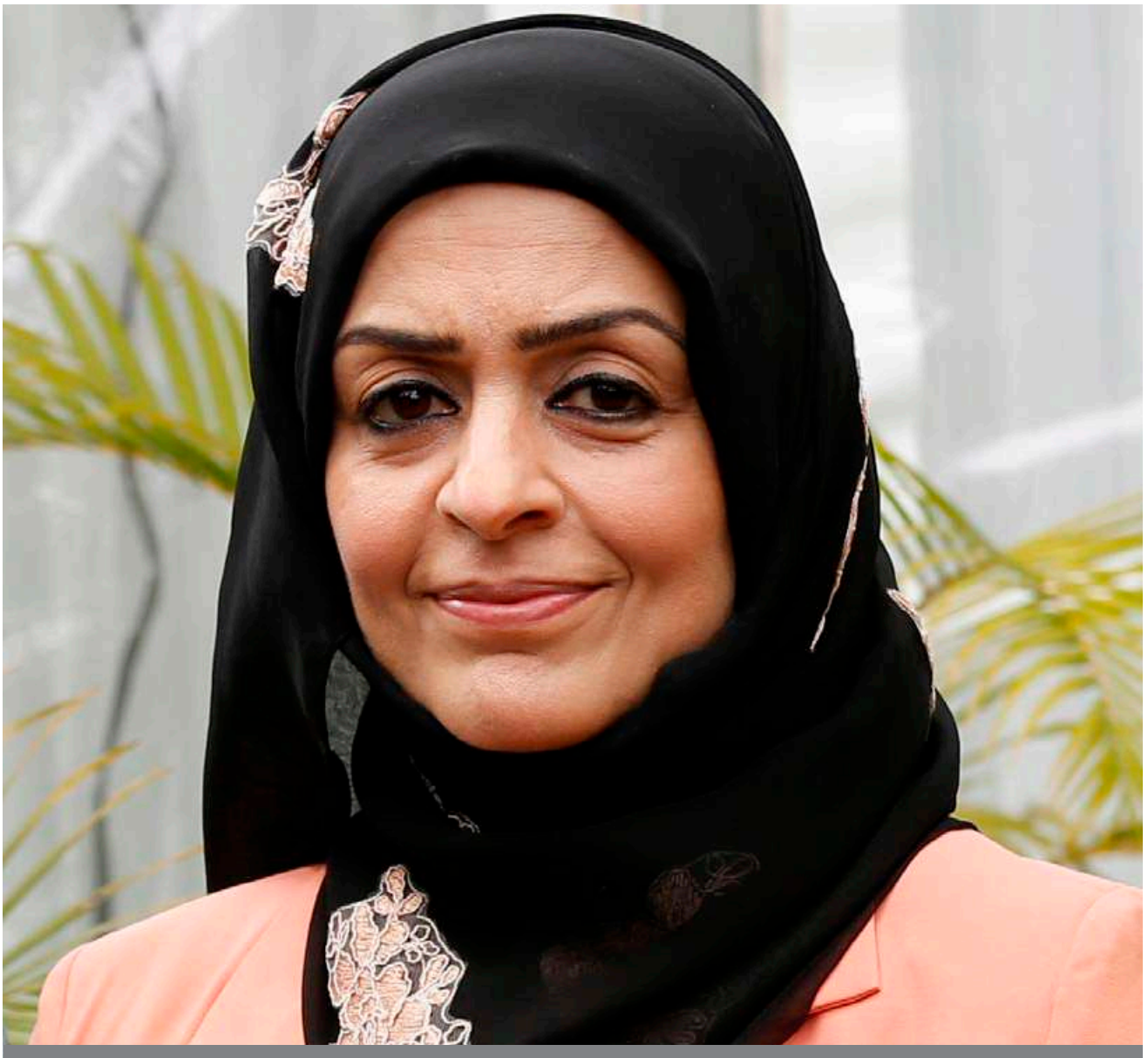
I am deeply shocked and saddened to learn about the passing away of Dr. Meshgan Al Awar. Dr. Meshgan was a remarkable promoter of protecting the global environment through the activities of Zayed International Foundation for the Environment.

She will be sorely missed by all of us who worked closely with her for many years in delivering the Zayed International Prize for the Environment.



**Christina Boelke**  
**Vice Chair, Friends of  
Karura Forest**

It is with great sorrow that we hear of the sad demise of Dr. Meshagn Al Awar. Dr. Meshgan will be remembered by us all as a champion for the environment. She will be in our prayers.



## UAE Achieves 1400Mw Of Clean Electricity As Barakah Unit 1 Reaches 100% Power

The Emirates Nuclear Energy Corporation (ENEC) has announced that its operating and maintenance subsidiary, Nawah Energy Company (Nawah), has successfully achieved 100% of the rated reactor power capacity for Unit 1 of the Barakah Nuclear Energy Plant.

This major milestone brings the Barakah plant one step closer to commencing commercial



Testing of Barakah Unit 1 safely delivers 100% power to the UAE Grid, a new milestone in safe, clean and abundant clean energy to power the growth of the nation

operations, scheduled in early 2021.

100% power means that Unit 1 is generating 1400MW of electricity from a single generator connected to the UAE grid. This milestone makes the Unit 1 generator the largest single source of electricity in the UAE.

The Barakah Nuclear Energy Plant is the largest source of clean baseload electricity in the country, capable of providing constant and reliable power in a sustainable manner around the clock. This significant achievement accelerates the decarbonisation of the UAE power sector, while also supporting the diversification of the nation's energy portfolio as it transitions to cleaner electricity sources.

The accomplishment is a strong example of the country's progress as it continues to advance towards a sustainable, clean, secure, and

## *Unit 1 is not the single largest power generator in the UAE as it steps closer to commercial operations, due to begin early 2021*

prosperous future. As the nation looks towards the next 50 years of achievements, the Barakah plant will generate up to 25 percent of the country's electricity, while also acting as a catalyst of the clean carbon future of the nation.

His Excellency Mohamed Ibrahim Al Hammadi, Chief Executive Officer of ENEC said: "Unit 1 marks a new era for the power sector and the future of the clean carbon economy of the nation, with the largest source of electricity now being generated without any emissions."

Nawah is responsible for operating Unit 1 and has been responsible for safely and steadily raising the power levels since it commenced the start-up process in July, and connection to the grid in August.

Achieving 100% power is one of the final steps of the Power Ascension Testing (PAT) phase of the start-up process for Unit 1. Nawah's highly skilled and certified nuclear operators will carry out a series of tests before the reactor is safely shut down in preparation for the Check Outage. During this period, the Unit 1 systems will be carefully examined, and any planned or corrective maintenance will be performed to maintain its safety, reliability, and efficiency prior to the commencement of commercial operations.

Eng. Ali Al Hammadi, Chief Executive Officer of Nawah, said: "This is a key achievement for the UAE, as we safely work through the start-up process for Unit 1 of the Barakah plant. Successfully reaching 100% of the rated power capacity in a safe and controlled manner, undertaken by our highly trained and certified nuclear operators, demonstrates our commitment to safe, secure and sustainable operations as we now advance towards our final maintenance activities and prepare for commercial operations in 2021."

The Power Ascension Testing of Unit 1 is

overseen by the independent national regulator the Federal Authority for Nuclear Regulation (FANR), which has conducted 287 inspections since the start of Barakah's development. These independent reviews have been conducted alongside more than 40 assessments and peer reviews by the International Atomic Energy Agency (IAEA) and World Association of Nuclear Operators (WANO).

This is an important milestone for the commercial performance of the Barakah plant. Barakah One Company, ENEC's subsidiary in charge of the financial and commercial activities of the Barakah project signed a Power Purchase Agreement (PPA) with the Emirates Water and Electricity Company (EWEC) in 2016 to purchase all of the electricity generated at the plant for the next 60 years. Electricity produced at Barakah feeds into the national grid in the same manner as other power plants, flowing to homes and business across the country.

The Barakah Nuclear Energy Plant, located in the Al Dhafra region of the Emirate of Abu Dhabi, is one of the largest nuclear energy new build projects in the world, with four APR-1400 units.

Construction of the plant began in 2012 and has progressed steadily ever since. Construction of Units 3 and 4 are in the final stages with 93 percent and 87 percent complete respectively, benefitting from the experience and lessons learned during the construction of Units 1 and 2, while the construction of the Barakah Plant as a whole is now more than 95 percent complete.

Once the four reactors are online, Barakah Plant will deliver clean, efficient and reliable electricity to the UAE grid for decades to come, providing around 25 percent of the country's electricity and preventing the release of up to 21 million tons of carbon emissions annually – the equivalent of removing 3.2 million cars off the roads each year.

## UAE Youth Reimagines A Green Recovery To Shape The Next 50 Years

Is Nature a Priority for UAE Youth in the COVID-19 Recovery?

This was the title of a white paper that examines how the UAE youth want to actively create positive change in their communities to tackle the world's most pressing issues.

The white paper, developed through a



'Connect with Nature' launches  
flagship white paper which  
reveals youth's top priorities  
and emerging trends towards  
driving change for a more  
sustainable UAE

partnership between Emirates Nature-WWF and the Environment-Agency Abu Dhabi, with the International Fund for Houbara Conservation as strategic partner, was revealed at the conclusion of the Connect with Nature Reimagine Youth Circle Series, held in collaboration with the Federal Youth Authority in November last year.

In the white paper, UAE youth have spoken and acknowledged the role they play in driving change, reimagining a green recovery for the nation, as well as drawing a roadmap of what the next 50 years could look like. The findings published in the white paper shed light upon the role young people play as the leaders of tomorrow in creating a more sustainable world.

The key outtakes were presented by youth, for youth, in a session attended by 370 young people across the nation, with special interactive sessions and messages from H.E. Dr. Abdullah

# *UAE's youth want life to change post-COVID-19 with 94% prioritising the healing of man's relationship with nature*

bin Mohammed Belhaif Al Nuaimi, Minister of Climate Change and Environment, H.E. Shamma bint Suhail Faris Al Mazrui, Minister of State for Youth Affairs, and H.E. Huda AlHashimi, Chief of Strategy and Government Innovation - UAE Government, who hosted a session focused on understanding the key findings and drawing a strategic roadmap towards designing the next 50 years.

Meeting over the course of five months, the Reimagine Youth Circle Series met approximately every two weeks, bringing together 1,600 youth to engage with key decision makers and experts from the UAE cabinet, businesses and academia about critical topics that will ultimately shape the future for our people and planet.

The youth white paper proposes focusing on four key areas of action that scale, accelerate and amplify individuals' impact for the benefit of both people and planet. These include: Preserving nature and wildlife; Stimulating a green recovery and achieving no plastic in nature; Accelerating climate action; and Ensuring food and water security.

H.E. Dr. Abdullah Belhaif Al Nuaimi, Minister of Climate Change and Environment, said: "Youth empowerment and engagement in shaping the nation's future strategies is a long-standing priority for the UAE and its wise leadership. In

this regard, the Ministry of Climate Change and Environment is keen on participating in events targeting young people, and launching initiatives that raise their awareness about environmental action and boost their ability to devise innovative ideas that support the country's sustainable development."

He noted that sessions that allow the young generation to interact with decision makers from the government and other sectors offer a prime opportunity to learn about their ideas and views of the future, and enable the new generation to actively contribute to designing the next 50 years of the nation.

H.E. Shamma bint Suhail Faris Al Mazrui, Minister of State for Youth Affairs shared an inspirational statement on the critical role that youth can play: "Nature remains the lifeline of our survival. It is vital, now more than ever to refresh the regulations that have resulted in the challenges we are battling today. However, it is not too late. I am certain that we can shift our patterns through local, regional, and global cooperation. Our hope remains on the youth and I strongly believe that with their forward-thinking mindset, together we will achieve the positive change for nature we want to see for the coming generations."

Commenting on the significance of the whitepaper findings, Laila Mostafa Abdullatif, Director





General at Emirates Nature-WWF, said:

"The voices of UAE youth are crucial to ensure the environment is top of the nation's agenda as we set sail towards designing the next 50 years.

"UAE youth have told us, loud and clear, that nature matters to them.

"We know that the next few months and years are critical to put the planet on the path to a green recovery. We urge governments, businesses, financial institutions, civil society and people to come together and commit to building a safe and resilient future for the UAE, where people and nature thrive".

Connect with Nature programme aims to reconnect youth with nature through experiences and activities, equip them with knowledge and skills to make informed decisions, and to become

leaders of the community in creating a sustainable future.

Summary of top findings and trends that emerged from the Reimagine Youth series

1. **Nature is now at the heart of all decisions:** The youth want life to change post-COVID-19. 94% of youth prioritise the healing of man's relationship with nature.
2. **A mass mindset change:** The youth are most worried about the lack of widespread understanding of the risks associated with the exploitation of nature and its resources. Only 42% of youth feel prepared for another pandemic.
3. **Concern about waste & pollution:** The pandemic has heightened the concern about the quantity of waste being produced, and how it is managed.

# *Balancing modern life while protecting the integrity of species and ecosystems is important to the UAE youth*



Most of the youth avoid brands that are not sustainable. 73% of youth think reducing single-use plastic should be a priority.

4. **Food & water security in the spotlight:** Almost all are concerned about food security and in agreement that sustainable diets and nature-friendly food production should be a priority. 89% of youth say they are willing to include alternative protein in their diets like insects or algae.
5. **Conscious change in behaviours:** The youth are keen on changing behaviour and are willing to take responsibility for their actions and habits.

73% of them agree that overconsumption is the behaviour they most want to see changed for good.

6. **Rise of responsible citizens:** The youth today want to be part of a community that contributes to conservation action and supports environmental initiatives, by collaborating, inspiring others and volunteering for the common good. 96% of UAE youth favour brands that support the green recovery.
7. **Reconnect with our traditional values:** Balancing modern life while protecting the integrity of species and ecosystems is important to the UAE youth. 92% want to put more emphasis on the traditional values and practices that connect them with nature and minimise pressure on the environment. 44% of them have never had an ecotourism experience like kayaking through the mangroves or hiking in the mountains.
8. **Heightened enforcement & regulation:** 61% of youth would welcome heightened regulation, reporting and sustainability labelling and see these as solutions to enhance awareness and critical thinking.
9. **Passion for the green recovery and no plastic in nature:** Stimulating a green economy and investing in sustainable infrastructure should be a priority to ensure people evolve their lifestyles and consumption patterns. 81% of youth think that eco-tourism has a net positive impact on nature.
10. **Time to press that 'reset' button:** The pandemic has shown us how connected our health is to the health of the planet. Spending so much time indoors has amplified our concern for wellbeing. Only two out of 10 youth want life to go back to "normal" post COVID-19.

## First UAE Soil Map launched to mark World Soil Day

In a pioneering project that has made use of high-resolution satellite data, the Environment Agency - Abu Dhabi (EAD) has launched a comprehensive soil map of the UAE to commemorate annual World Soil Day on December 5.

The map provides a precision overview of the characteristics of different soil types throughout the emirates. Its multiple benefits include



The map provides a precision overview of the characteristics of different soil types throughout the emirates

improved land-use and preventing the degradation of vulnerable areas of land.

The UAE is one of the first countries in the region to produce such a map, which will be integrated into a comprehensive soil atlas of Asia. The map was developed in collaboration with the International Centre for Biosaline Agriculture (ICBA), an international not-for-profit agricultural research centre with a focus on marginal environments.

The official launch of the UAE Soil map was held at a virtual ceremony in the presence of regional representatives of GCC nations, as well as numerous institutions and UAE government agencies at federal and local levels.

Speaking at the event, His Excellency Dr. Abdullah Belhaif Al Nuaimi, Minister of Climate Change and Environment, said: "Protecting the environment,



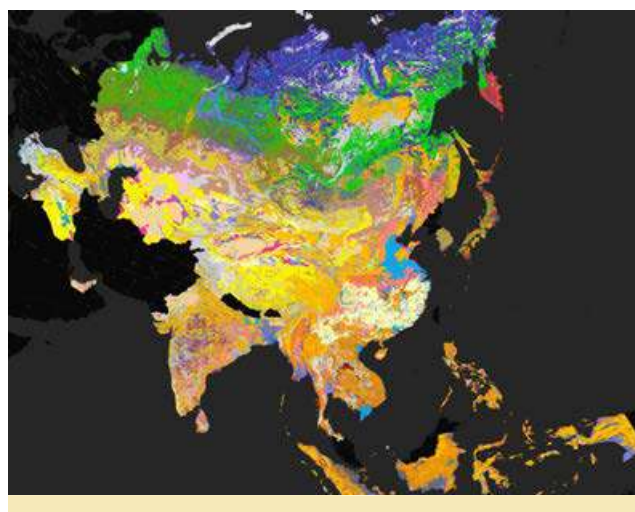
and preserving natural resources, habitats, and biodiversity has always been on top of the agenda for the UAE government. Our public and private sector entities are working together to implement the country's sustainability objectives across all sectors and ensure a better future for the next generations."

Dr. Tarifa Al Zaabi, Deputy Director General of the International Centre for Biosaline Agriculture said: "The mapping and classification of the soils in the UAE according to the World Reference Base will facilitate international collaboration on soil research and will be a significant step towards the creation of an atlas of Asia's soils. The project builds on many years of a strategic partnership between ICBA and EAD and the results of a major soil survey conducted in 2006-2009 and follow-up studies to collect soil data for the UAE."

The EAD's mapping project, which began in 2019 is a significant part of its objective to protect land resources. A first-of-its-kind project in the UAE, it follows another important development this year in the production of draft regulation around the issue of soil quality - another first for

the UAE. The regulation aims to ensure sustainable soil management to preserve its basic functions and vital services

The project provided more than 22,000 soil records that were used to classify soils using methods employed by the United States Department of Agriculture. The UAE information will be fed into an integrated soil atlas covering the entire continent of Asia, which will in turn complement soil studies in other continents.



## At 'Down To Earth', UAE's Eco-Conscious Community Celebrates All Things Green



The inaugural annual event  
focused on all things green  
for local gardening  
enthusiasts and UAE's  
growing eco-friendly  
community

'Down to Earth', a new annual event targeting the UAE's growing community of gardeners, green-fingered enthusiasts, the eco-conscious and sustainability-aware, was held at Jameel Art Centre, Dubai's contemporary art institution, on December 12, 2020.

Carefully curated and free to all, the day-long event featured exciting activities for all ages. Workshops and demos were conducted for children, teens and adults covering a range of topics such as garden-growing, potting, composting, flower arrangements, growing a forest, and more. Botanists and curators led talks and guided tours across Jameel Art Centre's seven desert courtyard garden and the commissioned artist's garden as they explored the unique history of UAE's plant ecology and nutritional habits.

Regional specialists and expert hobbyists also

spoke on sustainability, self-sufficiency, gardening, and more.

The event also featured a bustling green bazaar featuring everything one needs to grow, nurture and accessorise a broad variety of indoor and outdoor gardens. The Jaddaf Community Garden was an interesting addition to the event and is a participatory project that invited residents to

Museum and Water Alliance UAE had a live reading of their illustrated book, Cory's Adventures: the Mystery of the Disappearing Soil, featuring its young authors.

Yazen Al Kodmani led a talk on what it takes to run the UAE's largest private organic farm, Emirates Bio Farm while Ahlam Bolooki, co-founder of Mangroves 4 Mankind and Director of



grow fruits, vegetables and herbs and to connect and share tips with one another, to build a strong community amongst all local gardeners.

Other popular activities at the event included an adult workshop titled, From Naturescape to Tablescape, where participants learnt how to use fruits, vegetables and shrubbery to design their next seasonal tablescape. The Emirates Soil

the Emirates Airline Festival of Literature, shared how we can combat climate change by conserving and restoring mangrove ecosystems in every possible coastal city around the world.

Tatiana Antonelli Abella, founder and managing director of Goumbook, led a discussion on the significance of the indigenous Ghaf tree.



## Stemming The Tide - Smart New Technologies To Combat Plastic Pollution Crisis In Our Waters

From source to sea, our waters are contaminated by a plastics scourge. A new study by the UN Environment Programme (UNEP) and the International Water Management Institute (IWMI) offers a number of technological solutions aimed at tackling one of the world's most pressing issues.

Approximately 8 million metric tonnes of plastic



The global damage to marine environments from plastic pollution is estimated to be a minimum of \$13 billion per year

litter flow to the ocean annually, and only 9 percent of plastic waste ever produced has been recycled. A large percentage of the rest ends up in landfills, dumps, and the environment, often finding its way to rivers, lakes and oceans through runoff, leakage, flushing of disposable wipes and hygiene products.

Another major issue relates to microplastics – those plastics that are smaller than 5 millimetres, and that pose increasing environmental, economic and health hazards. Sometimes these are intentionally added to products, for example in cosmetics, for seed coatings, paint, washing powders, and other applications.

They are also generated from wear and tear, through the production of synthetic textiles and tyre usage. In addition, discarded plastics break down into these smaller particles through natural weathering processes. Microplastics can

# *As plastic waste accumulates in the ocean at alarming rates, the need for efficient and sustainable remediation solutions is urgent*

enter water bodies through different pathways, including atmospheric deposition, run-off from land, roads and through municipal wastewater.

Much effort has been made to both identify the scale of the threat of plastics to the health of humans, and ecosystems, along with solutions to tackle it. 'Water pollution by plastics and microplastics: a review of technical solutions from source to sea' explores a set of innovative tech solutions for use in various scenarios.

## **Among these potential technologies include:**

- Introducing debris-cleanup boats, debris sweepers and sea-bins to remove plastics and other wastes carried into water bodies;
- Protecting large bodies of water by introducing wetlands along coastlines;
- Secondary and tertiary wastewater treatment which relies on membrane filtration to prevent microplastics entering rivers and lakes;
- Advanced coagulation technology to make water contaminated with microplastics drinkable;
- Promoting sustainable waste management practices to reduce plastic leakage.



A key principle of this work is preventing untreated wastewater, which is often packed with plastics and microplastics, from entering the environment in the first place. The study details financially sustainable waste recycling that is socially and legally acceptable, and environmentally friendly.

“Waste management in most cities of developing countries is an expensive, labor-intensive and low-margin business, which explains why a large share of the generated waste is inadequately managed. The wastewater coming from urban residential, industrial and commercial settings is full of contaminants including plastics, microplastics and other debris,” said Dr. Mark Smith, Director General of IWMI. “It is very important to reduce and remove plastic before it enters into wastewater treatment plants or freshwater bodies”.

The study, composed of a toolkit and catalogue, analyses the most relevant technologies to improve current waste and wastewater management practices and presents both the pros and cons of applying specific solutions to mitigate levels of plastic pollution from source to sea.

“To effectively tackle the crisis of plastic pollution in our freshwater and marine



ecosystems, we need innovative technologies that will serve us for years to come. We need to look at how we address waste production, waste management as well as the treatment of wastewater and run-off holistically, at source, and across sectors – a key part of building healthier, more sustainable societies,” said Inger Andersen, Executive Director of UNEP. “The technologies highlighted in this study should be supported by legislation, finance and awareness in order to lead to real change on the ground”.

**“The virtual events served as a platform for party and non-party stakeholders to showcase progress and discuss the agreements and actions for achieving international climate goals.”**

Decision makers, experts and relevant stakeholders need to come together in order and to agree on the desired water quality in their local context and a sustainable combination of solutions.

‘Water pollution by plastics and microplastics: a review of technical solutions from source to sea’ is based on research funded by the United Nations

Environment Programme (UNEP) and the Water, Land and Ecosystem research program of the CGIAR.

With a focus on wastewater, the publication presents a range of solutions to reduce plastic and microplastic pollution from the source to the sea. It also encourages policymakers and practitioners to set priorities and select those that are more cost-effective and suitable for their local context. Finally, it stresses the importance of having technical solutions in addition to appropriate legislation, economic instruments, education, and awareness that force real change on the ground.





# Extraordinary at first sight

The all-new Audi RS 6

 **RS 6**



**AL NABOODA**  
AUTOMOBILES

800 AUDI (2834)

[www.audi-dubai.com/RS6](http://www.audi-dubai.com/RS6)

## Covid-19 Drives UAE Companies To Increase Tech Investment, Reveals New Study

Almost half of technology leaders, both globally and in the UAE, expect budgets for IT/technology to increase, driven by a surge in spending on operational efficiencies, customer engagement and data-driven insights. This is among the key findings of The Harvey Nash/KPMG CIO Survey 2020, one of the largest IT leadership surveys in the world, with over 4,200 responses from CIOs and technology executives across 83 countries.



The Harvey Nash/KPMG CIO Survey 2020 is one of the world's largest IT leadership surveys, with over 4,200 responses from CIOs and technology executives across 83 countries

Farhan Syed, Partner, Head of Advisory at KPMG Lower Gulf, explained: "The coronavirus pandemic disrupted every sector around the world, and has catalysed digital transformation. While the pandemic may not have necessarily altered business strategies, it has reaffirmed the importance of data, cloud and cybersecurity. Technology is thus helping businesses to adapt and anticipate better in a volatile business environment."

According to the KPMG study, organisations have been impacted by the coronavirus pandemic in different ways. Almost half of UAE respondents expect a slow recovery and are implementing a flexible, experience-centric technology transformation to emerge stronger from the crisis.

### Managing technology

The KPMG study notes that UAE digital leaders outperformed their global counterparts when it

*UAE's technology leaders are seeking enterprise architecture skills above all else (30%), followed by AI expertise (25%)*



comes to investing in customer experience and engagement.

For UAE businesses, data is the new oil – 63% of CIOs rated data collection as their most successful digital offering, as compared with 42% of global CIOs. The KPMG study notes this has further led to the emphasis on the critical nature of data and how valuable it is to companies in generating actionable insights.

29% of the UAE's digital leaders thought they were extremely effective in implementing enterprise-wide digital strategies, against the global average of 17%. This is not surprising, given rapid innovation amongst local companies, reinforced by government initiatives.

Almost two-thirds of UAE digital leaders stated that the pandemic has likely permanently increased the influence of their role. As technology has become increasingly important over the last six to eight months, so has the role of the technology leader. According to 70% of those surveyed by KPMG in the UAE, the pandemic has fostered a culture of inclusivity in technology teams—a full 20% higher than the global average.

Wejdi Harzallah, Partner, Head of Digital Strategy at KPMG Lower Gulf, elaborated: "To overcome new challenges, organisations continue to



accelerate technology adoption, requiring increased collaboration between the business and technology teams. As many organisations evolve into technology-led companies, we expect to see the future of IT as a connected enterprise that is free of siloes, agile and customer obsessed."

### **Resourcing tech teams**

When it comes to talent, UAE technology leaders are seeking enterprise architecture skills above all else (30%), followed by AI expertise (25%). Globally, 35% of the respondents believe that cyber security is the most sought-after skill.

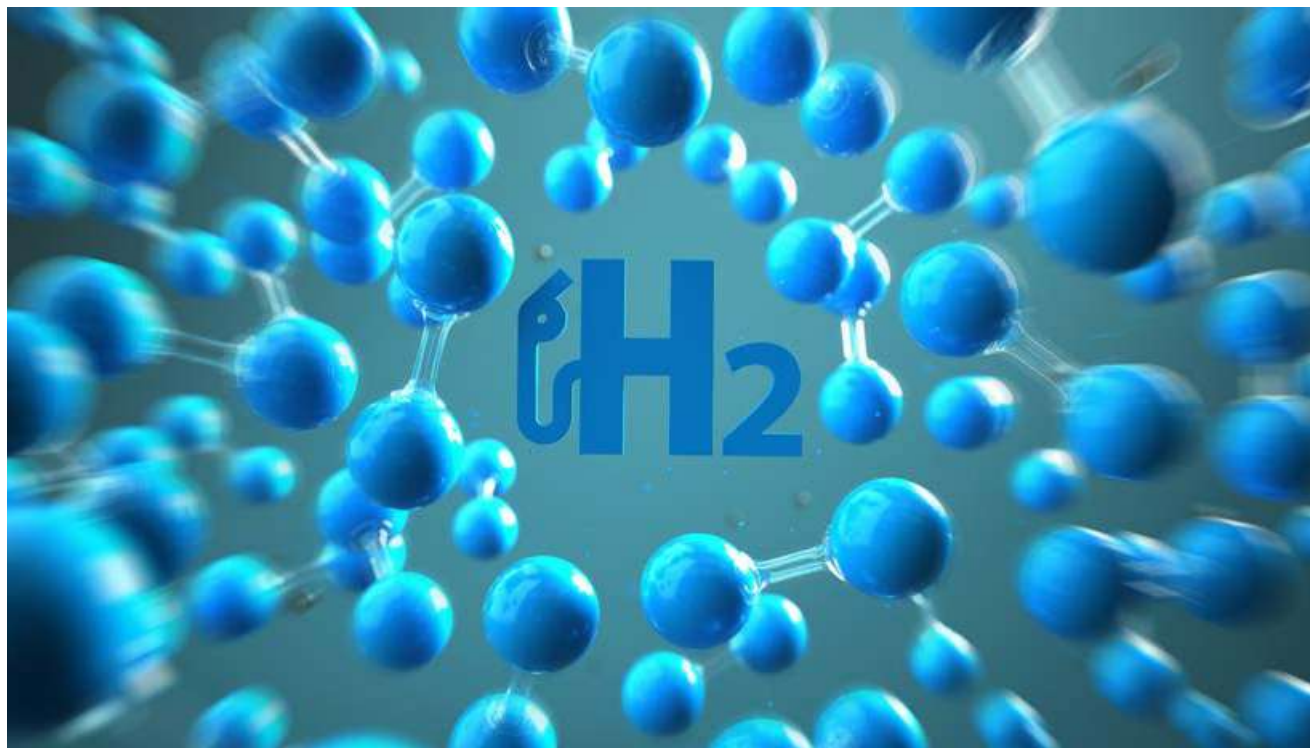
According to the KPMG study, COVID-19 shifted employee priorities. While remuneration was valued most pre-pandemic, it was replaced by well-defined culture and strong leadership after the pandemic.

Widespread adoption of remote working practices has benefited both employers and employees, opening doors to new opportunities. In the UAE's competitive IT talent market, digital leaders are prioritising flexible working conditions over more traditional perks to retain and attract talent.

## Making Green Hydrogen A Cost-Competitive Climate Solution

Hydrogen produced with renewable electricity could compete on costs with fossil fuel alternatives by 2030, according to a new report from the International Renewable Energy Agency (IRENA) published in December 2020.

A combination of falling costs for renewable energy such as solar and wind power, improved



As global economies turn increasingly carbon neutral, IRENA drives hydrogen agenda and sees renewable hydrogen at least cost possible within a decade

performance, as well as economies of scale for electrolyzers could make it possible.

‘Green Hydrogen Cost Reduction: scaling up electrolyzers to meet the 1.5 C climate goal’ looks at drivers for innovation and presents strategies that governments can peruse to reduce the cost of electrolyzers by 40 per cent in the short term and by up to 80 per cent in the long term.

Green hydrogen could play a critical role in decarbonisation strategies, particularly so where direct electrification is challenging in harder-to-abate sectors, such as steel, chemicals, long-haul transport, shipping and aviation. However, regulations, market design and the costs of power and electrolyser production are still major barrier to the uptake of green hydrogen.

# *Green hydrogen could play a vital role in decarbonisation strategies, particularly in industries whose emissions are difficult to abate, such as steel, chemicals, long-haul transport, shipping, and aviation*



“Renewable hydrogen can be a game-changer in global efforts to decarbonise our economies”, said Francesco La Camera, Director-General of IRENA. “Levelling the playing field to close the cost gap between fossil fuels and green hydrogen is necessary. Cost-competitive green hydrogen can help us build a resilient energy system that thrives on modern technologies and embraces innovative solutions.”

Today, green hydrogen is two to three times more expensive than blue hydrogen, produced from fossil fuels in combination with carbon capture and storage (CCS). The production cost for green hydrogen is determined by the renewable electricity price, the investment cost of the electrolyser and its operating hours.

Renewables have already become the cheapest source of power in many parts of the world, with auctions reaching record price-lows. While



low-cost electricity is a necessary condition for competitive green hydrogen, investment costs for electrolysis facilities must fall significantly too.

IRENA's new study identifies key strategies and policies to reduce costs for electrolyzers through innovation and improved performance aiming to scale up electrolyzers from today's megawatt to multi-gigawatt (GW) levels. Standardisation and mass-manufacturing of the electrolyser stacks, efficiency in operation as well as the optimisation of material procurement and supply chains will be equally important to bring down costs. For that, today's manufacturing capacity of less than 1 GW would have to massively grow beyond 100 GW in the next 10 to 15 years.



In the best-case scenario, using low-cost renewable electricity at USD 20 USD/MWh in large, cost-competitive electrolyser facilities could produce green hydrogen at a competitive cost with blue hydrogen already today. If rapid scale-up and aggressive electrolyzers deployment take place in the next decade, green hydrogen could then start competing on costs with blue hydrogen by 2030 in many countries, making it cheaper than other low-carbon alternatives before 2040, IRENA's analysis shows.

## Innovative Use Of Commercial And Industrial Waste Powers Sharjah's Zero-Waste Strategy

Bee'ah, the Middle East's award-winning sustainability pioneer, and Sharjah Cement Factory have signed a long-term contract for the supply of alternative fuel from Bee'ah's Solid Recovered Fuel (SRF) plant, in line with the UAE's commitment to promote the use of cleaner fuels and protect the environment.

The agreement bolsters Bee'ah's efforts to achieve



Bee'ah and Sharjah  
Cement Factory partner  
to offer cleaner power  
sources

a zero waste-to-landfill target in

Sharjah and will result in a reduction in the carbon footprint in the emirate. It involves the innovative use of commercial and industrial waste as well as mixed household waste from Bee'ah's state-of-the-art waste management complex to develop an even cleaner power source than Recovered Derived Fuel (RDF), another common alternative fuel used in cement factories.

Bee'ah's supply of the fuel to Sharjah Cement Factory, is powering the entity's cement factory and reducing the use of traditional fuels. At minimum, 73,000 tonnes will be provided each year – the equivalent weight of over 460 houses. This translates to 73,000 additional tonnes of waste being diverted from Sharjah landfills and being reused by the UAE's industries.

H.E. Khaled Al Huraimel, Group CEO of Bee'ah, said:

## *73,000 tonnes of waste to be diverted from landfills each year and supplied as clean and efficient alternative fuel to Sharjah Cement Factory*



“Bee’ah believes in using innovation and creativity to solve the environmental and waste challenges we currently face. As a result of our tireless efforts, we have enhanced our capabilities to offer clean and high-quality alternative fuels to industrial companies in the UAE, and work towards a circular economy in the country. In supporting Sharjah Cement Factory’s sustainability efforts, we are also contributing to making Sharjah the first zero-waste city in the region.”

Sharjah Cement Factory’s use of SRF from Bee’ah also complies with the UAE government’s objectives to replace 10 percent of current fuel sources with alternative fuels produced by waste treatment to protect the environment and the health and well-being of the people in the UAE. While the resolution refers to the use of RDF, Bee’ah has used a more technologically advanced process to produce an even cleaner fuel.

Pravinchandra Batavia, CEO, Sharjah Cement Factory said: “Companies and industries in the UAE must work together to realise new efficiencies and achieve the country’s sustainability objectives. We thank Bee’ah for its support and provision of a more environmentally responsible fuel that will allow us to reduce our carbon emissions and improve our environmental performance. With this agreement and other

ongoing arrangements with Bee’ah and other public and private sector establishments, Sharjah Cement Factory will replace more than 30% of fossil fuel with alternative fuels.”

Bee’ah, in line with its commitment to the UAE’s sustainability and zero-waste goals, owns and operates several waste treatment and recycling plants that produce alternative fuels for industries. The company has launched a biomass facility that generates cleaner fuel from cellulosic and carbon-based waste and an alternative raw material facility that turns marine waste into an alternative fuel for cement and papermill factories.

The company, in partnership with Masdar, is also set to launch the first Waste-to-Energy plant in the region by 2021, that will catapult Sharjah’s waste diversion rate to 100 percent.



## Emirates To Air Nature Documentaries Inflight

Passengers onboard Emirates flights have been arriving at their destination inspired by environmental causes as part of a collaboration with Environment Agency – Abu Dhabi (EAD).

Two EAD documentaries - *Back to the Wild* and *Zayed's Antarctic Lights* - included in the inflight entertainment package on Emirates flights cover such topics as a reintroduction programme for an



*Back to the Wild* and *Zayed's Antarctic Lights* are now included in the inflight entertainment package on Emirates flights

endangered species of the Oryx, Antarctica's incredible biodiversity, and issues around climate change and single-use plastics.

With an international audience flying Emirates ever year, the partnership fulfils the EAD's objective of raising awareness of key regional environmental issues and initiatives among as wide an audience as possible.

Ahmed Alhashmi, Acting Executive Director of the Terrestrial and Marine Biodiversity Sector at EAD said: "We strive to spread dynamic content and relevant information about the environment in the most appealing manner possible. *Back to the Wild* and *Zayed's Antarctic Lights* will allow viewers onboard with Emirates to learn about the environment through two remarkable productions."

The ground-breaking documentary *Back to the Wild* highlights the Abu Dhabi-led reintroduction programme of the Scimitar-horned Oryx in the



African country of Chad.

Inspired by the late Sheikh Zayed's legacy of protecting endangered species and sustaining them in their natural habitat, the 30-minute film narrates the story of Nya, a scimitar-horned oryx, and her herd as they adapt to their new home in central Chad. Each oryx is fitted with a GPS collar that allows scientists to track their journeys across the 78,000 sq km Ouadi Rimé-Ouadi Achim Game Reserve.

Considered to be the world's most ambitious large mammal reintroduction programme, the initiative has been a success with Chad now boasting about 320 Scimitar-horned oryx in the wild. The programme was developed on behalf of the UAE government in close partnership with the Government of Chad and the Sahara Conservation Fund (SCF).

From the Sahara to cooler conditions, *Zayed's*

*Antarctic Lights* follows the UAE Year of Zayed adventure of three EAD Ambassadors to Antarctica – also known as Team Zayed - to learn about Antarctica's biodiversity, the global challenge of climate change and the issue of single-use plastics. Team Zayed were accompanied by the prominent explorer Sir Robert Swan, who was the first person to walk to both the North and South Poles.

The feature documentary won a Bronze World Medal at the prestigious New York Festivals TV & Film Awards. One of its most famous scenes shows members of Team Zayed using solar lights to form a message calling for action on important climate issues.

Both documentaries are currently being aired on Etihad Airways as well.



WATERASFRHE  
ISYEITDRV  
RLRUA  
SEONAC  
**FODDO ERTISUCY**  
**ATTSBSUNLIIAY**  
**IHUYMANT**

---

---

---

---

---

---

---

---

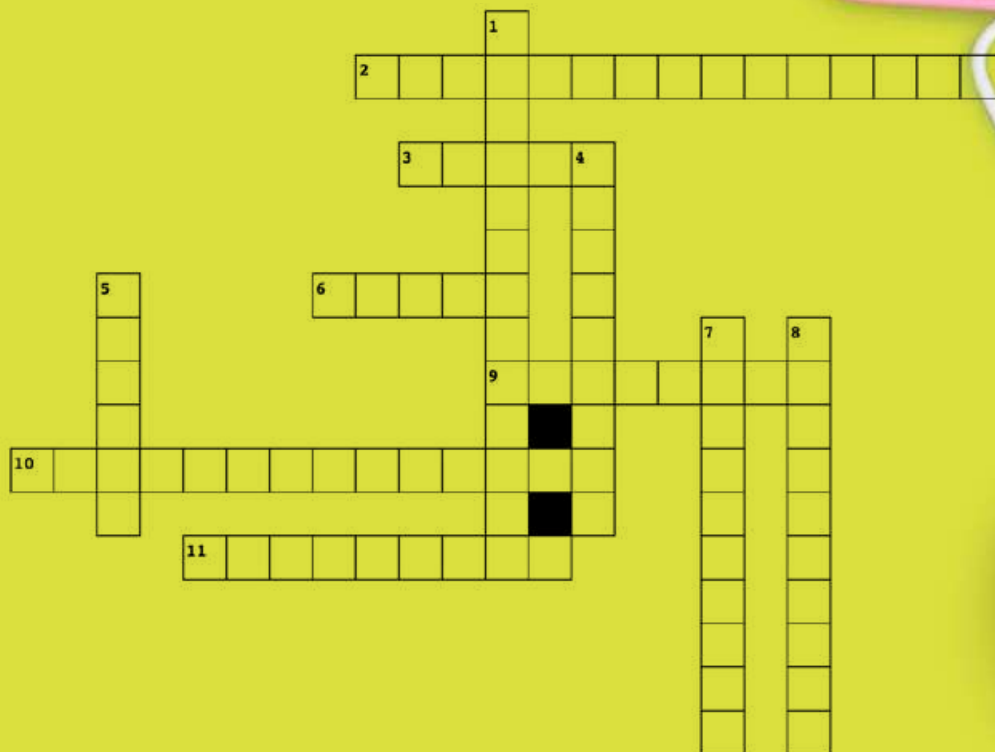
Answers: 1. Food Security 2. Rural 3. Sustainability 4. Diversity 5. Oceans 6. Resources 7. Humanity 8. Freshwater



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

- BIODIVERSITY
- GREENHOUSE
- ENVIRONMENT
- SEA
- GLACIERS
- SEASONS
- MOUNTAINS
- HORTICULTURE
- BACTERIA
- POLLUTION
- LAND
- CLIMATE
- SOIL
- SLOPE
- WILDERNESS
- COMMUNITY
- FOOD
- EARTHWORM

# Crossword Puzzle



## Across

2. Methane, CO<sub>2</sub>, Hydrogen, and Fluorine are what type of gases
3. \_\_\_\_\_ layer has been destroyed by CFCs
6. This clear material can be recycled multiple times
9. A type of rain that is caused by air pollution
10. Increasing population to unsustainable levels
11. Any substance or form of energy that can cause harm to the environment and make it unfit for use by organisms

## Down

1. The process of cutting down or burning a forest
4. The release of a substance/gas into the atmosphere
5. Air pollution can cause lung \_\_\_\_\_
7. Water that runs into drains that may contain sewage and chemicals from homes and businesses or pollutants from industries
8. Temperatures have been rising since which revolution?

Answers: 1. Deforestation 2. Greenhouse gases 3. Ozone 4. Emissions 5. Cancer 6. Glass 7. Wastewater 8. Industrial 9. Acid rain 10. Overpopulation 11. Pollutants

Did u know?

## FACTS ABOUT MOUNTAINS



Of the 20 plant species that supply 80% of the world's food, six originated and have been diversified in mountains: maize, potatoes, barley, sorghum, tomatoes, and apples.



More than half of humanity relies on mountain freshwater for everyday life



Mountains host about half of the world's biodiversity hotspots

1 in 2 rural mountain people in developing countries is vulnerable to food insecurity.

Mountains cover 27% of the earth's land surface.

Mountains are home to 1.1 billion people.



One hectare of soil contains the weight equivalent of two cows of bacteria.

## FACTS ABOUT SOIL

Did u know?



An earthworm can digest its own weight in soil every 24 hours. 50% of the planet soil passes through the gut of earthworms each year.



In just 3 inches of soil, there are 13 quadrillion living organisms, weighing 100 million tonnes.

Soil is a living resource, home to more than 25% of our planet's biodiversity.

It is estimated that only 1% of soil microorganism species are currently known compared to 80% of plant species.

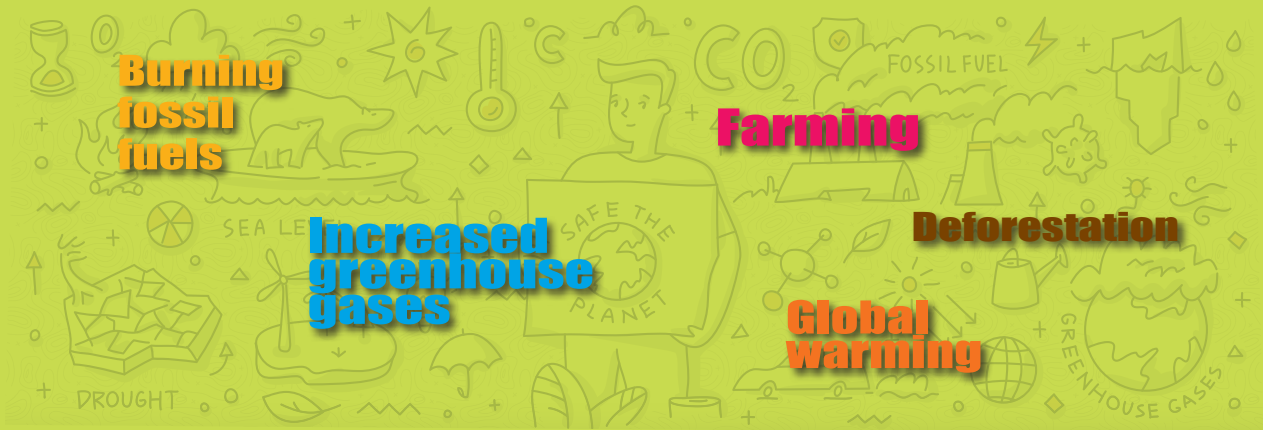
Up to 90% of living organisms live or spend part of their lifecycles in soil.

## CLIMATE CHANGE

Climate change includes both the global warming driven by human emissions of greenhouse gases and the resulting large-scale shifts in weather patterns. Climate change is one of the most defining issues of our time. From shifting weather patterns that threaten food production, to rising sea levels that increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in scale.



Some causes of climate change are:



## The direct effects of climate change are:

- Rising maximum temperatures, rising minimum temperatures and rising sea levels
- Higher ocean temperatures
- An increase in heavy precipitation (heavy rain and hail)
- Shrinking glaciers
- Thawing permafrost

What can you do to help?

## Things to Do...

- ☒ Turn off lights when you do not need them!
- ☒ Unplug all electronics when not in use.
- ☒ Walk or ride your bike around!
- ☒ Do not leave the tap running!
- ☒ Recycle your waste.

COLOUR ME!





**Charge the future.**

**The all-electric Audi e-tron Sportback.**

[www.audi-dubai.com/e-tron-sportback](http://www.audi-dubai.com/e-tron-sportback)  
800 AUDI (2834)



**AL NABOODA**  
AUTOMOBILES

## Dynamic, Fast, and Electric – Meet Audi's e-tron Sportback

"The future is electric" - Audi is staying consistently true to its strategic alignment with the second model in its e-tron product line.

The e-tron Sportback combines the functionality of a spacious SUV with the elegance of a four-door coupe, all with the underpinnings of the most progressive brand in electrified mobility.



The sportiest manufacturer in the premium segment, the success of the Audi brand lies in its motorsport history that hinges on three crucial factors - sportiness, advanced technology, and emotive design

The Audi e-tron Sportback impresses with its sharply designed dynamic SUV coupé offering up to 300 kW of power from a single battery charge. Its digital matrix LED headlights are a new feature now available for the first time in a mass-production vehicle.

The S line model is equipped with 21-inch wheels and sport air suspension. The distinctively contoured bumper is flanked by expressive air curtains, which improve the airflow. At the rear end, the spoiler fitted as standard as well as a striking diffuser that extends across the entire vehicle width contribute to the outstanding vehicle aerodynamics.

The Audi e-tron Sportback 55 quattro allows the driver to savor the interaction of efficiency, performance, and supreme calm, thanks to the electric all-wheel drive and the sophisticated suspension. Each axle is fitted with an asynchronous

*With its sculpted, coupé-like looks, the e-tron Sportback is Audi's second fully electric, five-door SUV with quattro all-wheel drive*



electric motor that is fed with three-phase current by the power electronics.

Driven in boost mode, the e-tron delivers an output of 300 kW and 664 Nm (489.7 lb -ft) of torque and it takes just 5.7 seconds to attain 100 km/h.

The interior of the Audi e-tron Sportback is an

elegant lounge featuring a seamless blend of design and technology and has plentiful space for five people. A generous arc that spans the instrument panel, extending from door to door, harmoniously integrates the cover for the Audi 12.3-inch virtual cockpit. Its sleek display stands visually free in space. The wrap-around in the door trims also integrates the screens for the virtual exterior mirrors.

### **Check out e-tron models at Al Nabooda Automobiles**

For four decades, Audi has been setting the pace with permanent quattro all-wheel drive and thus initiated a paradigm shift in powertrain technology in the automotive world and in motorsport. The brand is now using the knowledge it has accumulated in this area since 1980 for the next step. The electric quattro in the models of the e-tron range marks Audi's next milestone





achievement in the age of electric mobility. Enjoyable driving and efficiency are fused into a total package.

The e-tron models at Al Nabooda Automobiles offer two charging points on the vehicle, allowing for a more flexible and convenient charging process. On long-distance routes, the Audi e-tron can charge with direct current (DC) at up to 150 kW at fast-charging stations. In just under half an hour, the battery reaches 80 percent of its capacity.

The Audi e-tron Sportback 55 quattro is available at the Al Nabooda Automobiles dealerships in Dubai and Northern Emirates at AED 456,750.

### **Why does Audi use electric all-wheel drive?**

"For us, the electric quattro is the perfect combination of powerful performance and high

efficiency," says Michael Wein, Project Leader All-Wheel Drive Control Systems. "We combine the efficiency advantages of a driven axle with the traction and dynamic performance of an all-wheel drive system."

In the current e-tron model range, only the rear wheels propel the car in good traction conditions, while the motor for the front-wheel drive concurrently runs without being energized. Since the motor is an asynchronous type, there are no inherent electrical drag losses, so that this drive layout consumes a correspondingly low amount of energy.

The front axle - within milliseconds and unnoticeably for the driver - is additionally activated only as needed - for instance, when there is a demand for high driving dynamics, high torque transfer, or in the case of a low coefficient of friction due to wetness, mud or snow.

# *The electric quattro in the models of the e-tron range marks Audi's next milestone achievement in the age of electric mobility*



## **What is so unique about electric quattro drive compared to competitors?**

Audi is the first manufacturer to enable highly variable torque distribution in the e-tron S due to the drive topology featuring one motor at the front axle and two electric motors installed in a housing on the rear axle. In combination with sophisticated control and regulation, the electric quattro, due to its single-axle operation with variable, unnoticeably additional activation of the front axle, resolves the conflicting aims of dynamic performance and efficiency.

Audi integrates functions such as electric torque vectoring on the rear axle, wheel-selective torque control due to a braking intervention with the mechanical differential, and high recuperation performance in an electric powertrain.

What opportunities does electric quattro open up compared to conventional all-wheel drive?

In the Audi e-tron models, one electric motor each drives the front and rear axle. By contrast, the e-tron S versions use one motor on the front axle and two on the rear axle. With electric torque vectoring – in other words, specific torque development left and right – the e-tron S provides quattro drive on the rear axle with even greater agility.

The key advantage: Without a mechanical connection between the two electric motors on the rear axle, the functions of a controlled transverse differential lock and thus the functions of a sport differential have been achieved within a single system purely by means of software-based activation.

Consequently, thanks to intelligent drive control, Audi has implemented active and fully variable torque distribution in transverse direction on the rear axle.

## First Carbon Neutral Capital By 2025: Copenhagen Sets An Example For Rest Of The World

Denmark's capital, Copenhagen, has long put sustainability at the top of its agenda, as have many of its inhabitants. The city's continued investments into green alternatives is enabling it to take forward its vision of becoming one of the most sustainable and energy efficient cities in the world.

According to its Carbon Neutral by 2025 Plan,



The city's ambitious plan to become carbon neutral by 2025 has made it a beacon of urban sustainability

Copenhagen has the ambition of becoming the first carbon neutral capital by 2025. Some initiatives that have helped support this impressive goal include Copenhagen's environment friendly modes of transport, sustainable urban redevelopment, and efficient energy use tactics.

Throughout its efforts in encouraging a healthy sustainable lifestyle among its people, the city's ability to provide its citizens access to sustainable options rather than simply forcing citizens to be environmentally conscious is particularly remarkable.

A 2006 survey found that 54 per cent of Copenhagen cyclists ride because of its convenience, while only 1 per cent ride for environmental reasons.

Currently, only 29 per cent of households own a

*All buses are changing from diesel to electric, while more and more road surfaces are devoted to cycling*

car. Therefore, Copenhagen's success is attributed to how accessible and livable its planned projects are for its everyday citizens.

Denmark itself is a small country by size and its capital is home to a population of just over one million, so how does this Scandinavian city lead the way in becoming one of the most sustainable cities on the planet?

Back in 2009, Copenhagen became the first capital city in the world to set a goal to become carbon neutral. In order to reach this goal, the Climate Plan that Copenhagen adopted had a number of key goals to achieve within four areas: Energy Consumption, Energy Production, Green Mobility, and City Administration and Municipality Initiatives.

### **Energy Consumption**

Copenhagen began investing in wind energy in the 1990s and slowly drawing itself away from fossil fuels after being heavily reliant on oil and natural gas. Now, nearly 76 per cent of the electricity used in the city is generated by wind, biomass, or nuclear sources.

Copenhagen has committed to completely removing the city's 2 million tons of carbon footprint, even as the city continues to grow, with



100,000 new inhabitants and 20,000 jobs. The production of electricity and heat for Copenhageners is currently the biggest source of CO<sub>2</sub> emissions and efforts are on to replace coal, oil and natural gas with renewable energy to account for 80 per cent of the total reduction in 2025.

### **Energy Production**

In order to reform current urban structures towards smarter energy use, Copenhagen is retrofitting its old buildings with energy-efficiency in mind in such a way that it does not hinder the aesthetics of its architecture. This plan would decrease 10 per cent of the city's electricity usage and 20 per cent of its heat consumption by 2025.

Today, Denmark also has the highest rate of clean energy produced by wind turbines in the world. It makes for 22 per cent of its total energy consumption. Copenhagen is also investing efficient energy through district heating and cooling using the Combined Heat and Power (CHP) system.

The benefits of this system include creation of jobs, reduced CO<sub>2</sub> emissions, district heating costs around 45% less than oil by individual household boilers, affordable energy production without harming the environment and almost no negative impact on air quality.





### Green mobility

Copenhagen is known for its sustainable bike infrastructure. Well maintained bike paths across the city has allowed for smart mobility for its citizens. This, in turn, has resulted in Copenhagen essentially eliminating over a third of all transportation fossil fuel use which in the process, eliminated 90,000 tonnes of greenhouse gas emissions per year. This has significantly cut down the city's carbon emissions.

Copenhagen is also proposing investment into electrical and hydrogen-powered cars. By this year alone, 85% of the municipality's cars will be electrical or hydrogen powered.

### City administration and municipality initiatives

In 2009, Copenhagen proposed an action plan

called "Pocket parks, trees and other green areas," which focuses on the integration of public spaces with urban landscape planning. This has redefined the city's land use patterns.

By all accounts, Copenhagen is currently thriving and well on its way to being the first carbon-neutral capital city by 2025. The economic growth of the city since implementing its goal to become carbon neutral by 2025 has significantly risen.

Between 2005 and 2015, even in the midst of one of the biggest financial downturns in modern history, Copenhagen continued to grow economically to the point where it had grown by 24%. Prior to the recent lockdowns related to the Coronavirus, unemployment was at just 3.7% after dropping year after year since the 2008 crash. A study by the London School of Economics also found that Copenhagen has long been one of the most economically productive cities in

*Recycling is taken seriously in the city, with vending style machines returning a deposit when you insert a can or plastic cup*



**Examples of sustainable city solutions in Copenhagen:**

1. Increased mobility through integrated transport and cycling solutions has reduced congestion significantly and improved health of the citizens. Since 2005 one billion DKK have been invested in bike lanes and super cycle highways and 45 per cent of the Copenhageners are biking to work or school every day.
2. Cleaning the harbor has lead to attractive urban areas with better quality of life, improved local business life, created jobs and generated revenue in the area. The harbour is now so clean that Copenhageners swim in it.
3. A very efficient district heating system where 98 per cent of all households are connected.
4. A new district cooling system where cold is taken of the harbor water. It saves 70 % of energy compared to traditional air-conditioning.

Europe, helping contribute to Denmark's place in the top 10 countries in the world based on GDP per capita.

When the recession in 2008 took every other country's attention away from tackling climate change, towards recovering their respective economies; Copenhagen saw it as an opportunity to rebuild their entire economy with the environment at its core. The city is the perfect example of how 'green growth' is certainly possible and how mankind can better the environment whilst continuing to grow the city's economy and ultimately, providing a better quality of life for all.



Celebrated annually on 5th December, World Soil Day (WSD) is the United Nations observance that recognises healthy soils for a food secure future and advocates for the sustainable management of soil resources.

## Care For Our Planet From The Ground Up

Held in 2020 under the theme, 'Keep soil alive, Protect soil biodiversity', WSD urges us to focus our attention on the workers below ground - from



World Soil Day 2020 was held on December 5 under the theme, 'Keep soil alive, Protect soil biodiversity'

tiny bacteria to agile millipedes and slimy earthworms - all of which contribute to processes that are indispensable to life on Earth.

### **Biodiversity loss affects soil**

Soil includes a whole world of creatures in them that feeds and protects plants, and this diverse community of living organisms keeps the soil healthy and fertile.

Soil is home to more than one-fourth of our planet's biodiversity. Yet, we only know 1 per cent of this universe. There are more living creatures in a single teaspoon of healthy soil than there are people on Earth. This vast world constitutes soil biodiversity and contributes to many critical ecosystem processes that make life possible on Earth.

Soil biodiversity also contributes to the remediation of soil pollution by breaking down contaminants and purifying the soil. Soil organisms

*Soil is a living resource. A single gram of healthy soil contains millions of organisms including earthworms, mites, insects, fungi, and bacteria*

also help soils store carbon and reduce greenhouse gas emissions. In recent times, soil biodiversity has been under increasing pressure and unsustainable soil management has been severely affecting life underground.

### **Background**

An international day to celebrate soil was recommended by the International Union of Soil Sciences (IUSS) in 2002. Under the leadership of the Kingdom of Thailand and within the framework of the Global Soil Partnership, Food and Agricultural Organisation (FAO) has supported the formal establishment of World Soil Day as a global awareness raising platform.

For the International Union of Soil Scientists, World Soil Day celebrates the importance of soil as a critical component of the natural system and as a vital contributor to the human commonwealth through its contribution to food, water and energy security and as a mitigator of biodiversity loss and climate change.

### **Focus on challenges of soil management**

This year, by addressing the increasing challenges of soil management, the Food and Agriculture Organization (FAO) campaign 'Keep soil alive, protect soil biodiversity' aims to raise awareness



of the importance of sustaining healthy ecosystems and human well-being. By encouraging people around the world to engage in proactively improving soil health, the campaign also aims to fight soil biodiversity loss.

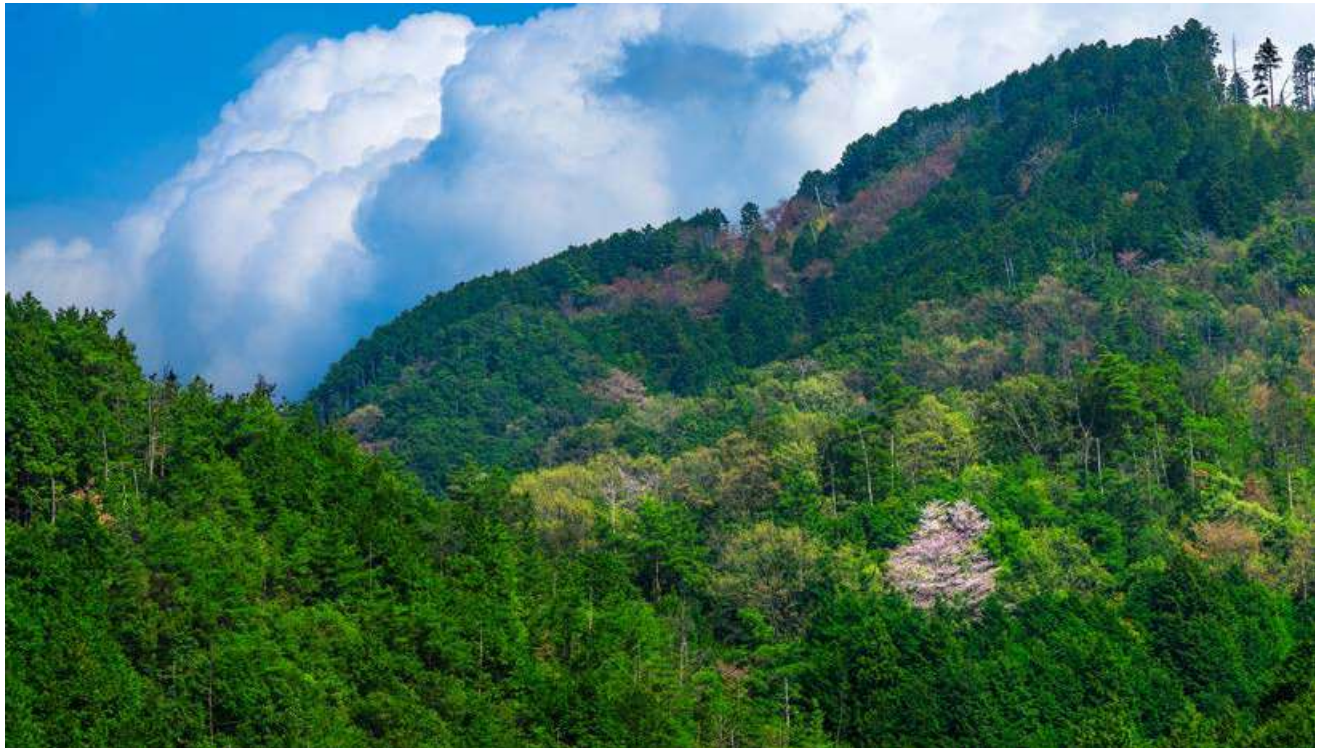
If not acted upon soon, the fertility of soil will continue to be adversely affected at an alarming rate, threatening global food supplies and food safety.

**Check out some interesting facts on soil in the Kid's Universe section!**

## Why our Mountains Matter

Mountains are home to 15% of the world's population and host about half of the world's biodiversity hotspots. Their unique topography, compressed climatic zones, and isolation have created the conditions for a wide spectrum of life forms.

They provide freshwater for everyday life to half of humanity. Their conservation is a key factor for



Observed on December 11, International Mountain Day turns the spotlight on its rich biodiversity and the immediate threats they face

sustainable development and is part of the Sustainable Development Goals.

Mountain regions host more than a quarter of terrestrial plants and animals and 30 per cent of key biodiversity areas on land. At a time of accelerating climate change and land degradation, this year's observance of International Mountain Day highlights these threats and the importance of mountain ecosystems.

According to António Guterres, Secretary General of the United Nations, "Mountains must move to the centre of our attention – and it is time to move mountains to secure the changes we need to secure the health of our planet and to build a sustainable future for all."

### Mountain biodiversity

Observed on 11th December, International

## *Covering around 27 percent of the earth's land surface, mountains play a critical role in moving the world towards sustainable economic growth*

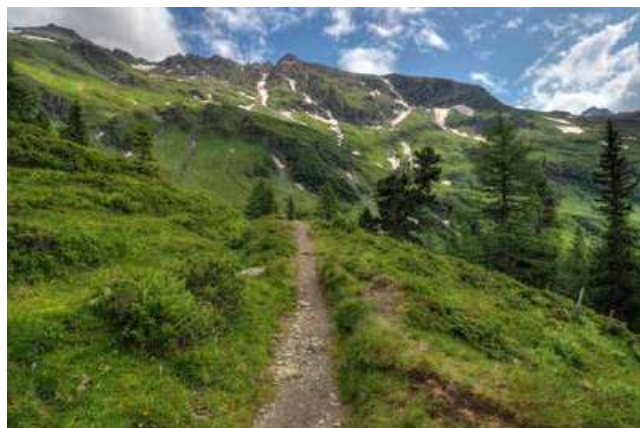
Mountain Day aims to create awareness about the importance of mountains to life, to highlight the opportunities and constraints in mountain development, and to build alliances that will bring positive change to mountain peoples and environments around the world.

Mountain biodiversity was the theme of International Mountain Day 2020. Biodiversity encompasses the variety of ecosystems, species and genetic resources, and mountains have many endemic varieties.

The differentiated topography in terms of altitude, slope and exposure in mountains offers opportunities to grow a variety of high-value crops, horticulture, livestock, and forest species. Potatoes, apples, barley, maize, sorghum, and tomatoes; six of the 20 most important food crops originate in the mountains.

Family farming in particular, is the backbone of mountain economies and plays a key role in conserving agrobiodiversity and ensuring household food security. However, climate change, unsustainable farming practices, commercial mining, logging, and poaching all exact a heavy toll on mountain biodiversity.

In addition, land use and land cover change, and natural disasters, accelerate biodiversity loss



and contribute to creating a fragile environment for mountain communities.

1 in 2 rural mountain people in developing countries are vulnerable to food insecurity. Slopes with steep and differing elevations often

**“Indigenous and local populations in mountains have unique and valuable local knowledge, traditions and cultural practices that can contribute to effective land management strategies.”**

make the soil shallow, poor in micronutrients, limited and difficult to cultivate and unsuitable for mass agricultural production. Distance from roads, poor infrastructure and marginalization render access to markets more difficult. Further, the occurrence and magnitude of extreme climatic events are traditionally higher in mountains than in lowlands, a situation that is increasing due to climate change, thus increasing food insecurity in mountain regions.

The fragility of mountain ecosystems makes the impacts of unsustainable development more severe and more difficult to correct than in other areas of the world. Sustainable approaches to



development are therefore particularly important in mountain regions.

The need to protect and conserve mountain biodiversity has been increasingly recognised as a global priority. To achieve sustainable mountain development, it is essential that all concerned stakeholders are involved, and that awareness is raised about mountain ecosystems, their fragility, and prevalent problems, and about ways of addressing them.

The wise and sustainable management of water, soils, pastures and forests is essential for avoiding environmental degradation in mountain areas. Integrated and diversified land-use systems have to be maintained and enhanced.

Sustainable Development Goal 15, target four, is dedicated to the conservation of mountains' biodiversity in consideration of its global relevance.

Biodiversity in all ecosystems is in focus, as the United Nations has declared 2021 to 2030 the UN Decade on Ecosystem Restoration and governments prepare to negotiate the post-2020 global biodiversity framework for adoption this year at the 15th meeting of the Conference of the Parties (COP 15) to the Convention on Biological Diversity.

## Background

Mountains are under threat from climate change and overexploitation. As global temperatures continue to warm, mountain people, some of the world's poorest, face great struggles to survive. The rising temperatures also melt mountain glaciers at an unprecedented rate, affecting freshwater supplies for millions of people. This is an issue that affects us all.

The increasing attention to the importance of mountains led the UN to declare to 2002 the UN International Year of Mountains. The first international day was celebrated for the first time the following year in 2003.





# Extraordinary at first sight

The all-new Audi RS Q8

 **RS Q8**



**AL NABOODA**  
AUTOMOBILES

800 AUDI (2834)

[www.audi-dubai.com/RSQ8](http://www.audi-dubai.com/RSQ8)

## Virtual Climate Dialogues Help Build Momentum For COP 26

The Climate Dialogues, a series of 80 virtual events, was held between November 23 and December 04, 2020, to help pave the way towards 2021's climate change conference (COP26) to be held in Glasgow.

It also provided a platform for countries and other stakeholders to showcase progress made in 2020 and exchange views and ideas on



The Dialogues served as a key platform for participants to showcase how climate action is progressing under the challenging circumstances caused by COVID-19

mandated work for COP26.

The Climate Dialogues brought together some 8,000 attendees from around the world, including over 3100 delegates. This indicates continued momentum on climate change action despite the postponement of COP26 from December 2020 to the end of 2021 owing to the COVID-19 pandemic.

The Climate Dialogue events covered a vast array of topics, including ambitious emission reductions, adapting to the effects of climate change, the provision of finance for climate action, technology cooperation, gender, and capacity building.

Tosi Mpanu Mpanu, Chair of the subsidiary body that provides technical and scientific advice to the COP, underlined both the importance and the success of the dialogues: "Our main takeaway message is one on the catalysing effect of the events during the dialogues for the work of these

# *The virtual dialogues affirm that despite the pandemic, work on climate change is critical for making progress towards achieving the goals of the Paris Agreement*

bodies, in particular with regard to better organising and undertaking their work in the future. We are confident that the constituted bodies are now in a better position to advance the work in 2021 in accordance with their mandates in these action areas.”

The Climate Dialogues provided a platform for advancing the implementation of activities mandated for 2020 and advanced work under the subsidiary bodies and the COP in a virtual setting, thereby paving the way for a successful COP 26.

The COP25 president, Minister Carolina Schmidt from Chile said: “The Climate Dialogues have been a great opportunity to continue our discussions towards COP26, that must go ahead even in these difficult circumstances. Although negotiations will have to wait, these virtual talks are a substantive contribution to our common understanding in a wide range of crucial issues.”

“These Dialogues have demonstrated that even through virtual modalities, Parties are willing and able to deliver progress. I am confident that this spirit will drive the hard work that lies ahead to ensure a successful outcome at COP 26,” said Patricia Espinosa, Executive Secretary of UN Climate Change.



At COP26, it will be vital that Governments agree on the full set of rules to implement the Paris Agreement. This will not depend on one or two “big” decisions. Rather, nations must achieve something much more comprehensive and advance on the intergovernmental negotiations front.

“We need a balanced package of decisions and actions reflecting expectations, concerns and needs of all stakeholders in multiple areas—this time, set against a backdrop of ambition,” Espinosa emphasised.

COP26 provides an opportunity to reach a balanced agreement that can demonstrate to the world that countries are determined to achieve the goals of the Paris Agreement and to contribute to the intergovernmental process. This includes ambition on all fronts: emission reductions, adaptation, and support for developing countries.

2020 marks the year in which countries submit more ambitious national climate action plans — or NDCs — as well as the long-term strategies (LTS). These plans and strategies, submitted once every five years, are tools for nations to specifically chart their path forward, both with respect to reducing emissions and adapting to climate change.



2020 also marks the year in which developed countries should have jointly mobilised USD 100 billion annually of public and private resources and through multilateral and bilateral channels as agreed to in Cancun in 2010. Five years later, in Paris, countries further decided that the current goal would extend through to 2025.

“That commitment has not yet been met. This has resulted in a significant lack of trust amongst Parties - specifically with respect to the scale of mobilisation and underlying reporting by developed countries,” Ms. Espinosa explained.

**“The virtual events served as a platform for party and non-party stakeholders to showcase progress and discuss the agreements and actions for achieving international climate goals.”**

“Therefore, there is an urgent need to provide predictability and assurances on the USD 100 billion goal annually from 2020, including through political statements of intent by developed countries and actions by entrusted multilateral and bilateral institutions to intensify mobilisation

and delivery of financial resources to developing countries,” she urged.

The Climate Dialogues has provided Parties to the UNFCCC and other stakeholders the opportunity to continue exchanging views and sharing information to advance work and maintain momentum in the intergovernmental climate change process. The Dialogues also served as a key platform for participants to showcase how climate action is progressing under the challenging circumstances caused by COVID-19.

The dialogues were launched by the Chairs of the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body of Implementation (SBI), in collaboration with the COP 25 Presidency and incoming COP 26 Presidency and with the support of the UNFCCC secretariat.

The organization of the dialogues is a clear response to the strong call and commitment from governments and other stakeholders around the world, that while Covid-19 rightfully takes most of the attention now, work on climate change remains urgent and the greatest long-term challenge.

# Rescued 'Al Bahiyah' Whale Shark Successfully Returned To Arabian Gulf

CONSERVATION



A six-metre-long whale shark that had lost its way and was stranded in a lagoon in Al Bahiyah has been successfully relocated back to the Arabian Gulf. The operation was carried out by Environment Agency Abu Dhabi (EAD) and The National Aquarium (TNA).

The whale shark is the world's largest fish species. It feeds on plankton and must keep moving. It is also a critically endangered species.

The sighting of the 6m shark circling inside a man-made lagoon in the Al Bahiyah area led an EAD team of scientists to monitor it closely and come to the evaluation that the animal was trapped in a space which had only a two-metre-wide access point, and hence, unable to feed.

After the assessment, EAD initiated a joint rescue mission supported by TNA's expertise and equipment.

TNA's team was a key component in the implementation of the rescue plan commenced by the joint effort of both teams. Using a soft plastic through-water transport bag developed specifically by The National Aquarium, the team of divers carefully captured the animal under EAD supervision. The first of its kind transport bag was able to move through water faster than the shark's normal swimming speed. Jet ski operators from Abu Dhabi Marine Club towed the

transport bag carefully for 20km out into the Arabian Gulf whilst rescue team monitored its vital signs by staging divers along the shark's path.

Before release, a satellite tag provided by King Fahd University in Saudi Arabia was fitted. In the first five days after the release, the animal travelled 232km into the Arabian Gulf which is a good indication of a healthy shark.



## Collaboration To Accelerate Responsible Water Use In The Region

Nestlé and the Alliance for Water Stewardship (AWS) have called on companies in the Middle East and North Africa to adopt the AWS Standard to accelerate responsible water use, positively impact local communities, and ensure watershed sustainability by joining forces to address water challenges.

Nestlé has already AWS-certified 28 of its water



Nestlé & The Global 'Alliance for Water Stewardship' join efforts to address water challenges in the Middle East North Africa region

factories around the world, including three in the region and has committed to certifying all its water factories globally by 2025. Nestlé Waters has also committed to replenishing 100% of the water it uses by the same year.

The call was launched at a virtual Water Stewardship Leaders' Forum held under Nestlé's Caring for Water initiative and organised in collaboration with the Emirates Environmental Group, which brought together more than 100 participants from the private and public sectors, academia, and non-government organisations.

"As the first company in the Middle East and North Africa to achieve AWS certification at three of our bottling sites, we are proud to be water stewardship pioneers in the region," said Carlo Galli, Water Resources Director, Nestlé. "The AWS Standard guides us in our engagement with other water users outside our factories to understand shared

*By adopting the AWS standard, companies can advance water-saving measures, track stewardship efforts, and better coordinate with other stakeholders to help promote watershed sustainability*

challenges and identify collective solutions, which is why we are committed to certifying all of our 17 water factories in the Middle East and North Africa by 2025, with our factories in the UAE and Algeria slated for certification by 2021.”

The Forum also introduced the Water Stewardship Core Group, a platform for collaboration among stakeholders in the region. Established by the Swiss Agency for Development & Cooperation, the Group aims to build stronger understanding of local and regional water challenges and develop meaningful collective actions to address them.

“Water is a precious and shared resource,” said Adrian Sym, Alliance for Water Stewardship Chief Executive Officer. “Good water stewardship needs leadership that recognises the importance of transparent, inclusive processes in delivering better outcomes that benefit all who depend on our water resources.”

By adopting the AWS standard, Nestlé has been able to advance water-saving measures, track stewardship efforts, and better coordinate with other stakeholders to help promote watershed sustainability.

Caring for Water at Nestlé is done across four key areas: in factories where the company continuously improves water use efficiency, in



watersheds where it works with partners to protect shared water resources, across its agricultural supply chains where it helps stakeholders improve water management practices, and in communities where it operates to provide access to clean water and sanitation.

Examples from the region include achieving 42 percent reduction in water withdrawal per tonne of product manufactured across the company's food factories since 2010; leading the drive for multisectoral partnership to help Lebanon's Shouf Biosphere Reserve successfully enhance the recharge of groundwater reservoirs; a project to irrigate organic agriculture with excess water in Jordan; supporting a village's vision to be 'hepatitis C free' through health programs benefiting more than 3,000 people in Egypt; and constructing a water fountain near its water factory in Algeria to provide access to clean water.

Overall, Nestlé has collaborated with local authorities to provide access to water hygiene and sanitation services to more than 30,000 people in the Middle East and North Africa.



The United Nations General Assembly has declared 2021-2030 the Decade of Healthy Ageing.

## 2021-2030 is the Decade of Healthy Ageing

“The announcement of the UN Decade of Healthy Ageing sends a clear signal that it is only by working as one, within the United Nations system and with governments, civil society and the private sector, that we will be able to not only add years to life, but



The new UN-wide initiative urges concerted, catalytic and collaborative action to improve the lives of older people, their families, and the communities in which they live

also life to years,” said Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization.

“By adopting a UN-wide approach in support of healthy ageing, we will be able to galvanise international action to improve the lives of older people, their families and communities, both during the COVID-19 pandemic, and beyond,” added Dr. Etienne Krug, Director of the Department of Social Determinants of Health at WHO.

Health is central to our experience of older age and the opportunities that ageing brings. Initiatives undertaken as part of the Decade will seek to: change how we think, feel and act towards age and ageing; facilitate the ability of older people to participate in and contribute to their communities and society; deliver integrated care and primary health services that are responsive to the needs of

*For the first time in history at the end of 2018, people aged 60 years or over have outnumbered children under 5 years*

### **What is healthy ageing?**

Every person – in every country in the world – should have the opportunity to live a long and healthy life. Yet, the environments in which we live can favour health or be harmful to it. Environments are highly influential on our behaviour, our exposure to health risks (for example, air pollution or violence), our access to quality health and social care and the opportunities that ageing brings.

Healthy ageing is about creating the environments and opportunities that enable people to be and do what they value throughout their lives. Everybody can experience healthy ageing. Being free of disease or infirmity is not a requirement for healthy ageing, as many older adults have one or more health conditions that, when well controlled, have little influence on their wellbeing.



the individual; and provide access to long-term care for older people who need it.

The UN Resolution expresses concern that despite the predictability of population ageing and its accelerating pace, the world is not sufficiently prepared to respond to the rights and needs of older people. It acknowledges that the ageing of the population impacts our health systems and other aspects of society, including labour and financial markets and the demand for goods and services, such as education, housing, long-term care, social protection and information. It thus requires a whole-of-society approach.

The Resolution also calls upon the World Health Organization to lead the implementation of the Decade, in collaboration with the other UN organizations. Governments, international and regional organizations, civil society, the private sector, academia and the media are encouraged to actively support the Decade's goals.

"This announcement is the culmination of many years of collaboration with partners across the world," said Alana Officer, who leads WHO's Demographic Change and Healthy Ageing team. "But it also represents a new beginning. If we are to be successful in delivering the change envisaged under the Decade, we need new ways of working."

## WHO Reveals Leading Causes Of Death And Disability Worldwide: 2000-2019

Noncommunicable diseases now make up seven of the world's top 10 causes of death, according to WHO's 2019 Global Health Estimates, published on December 09, 2020. This is an increase from four of the 10 leading causes in 2000. The new data cover the period from 2000 to 2019 inclusive.

The estimates reveal trends over the last two



Ensuring healthy lives and promoting well-being at all ages is Goal 3 of the UN's Sustainable Development Goals

decades in mortality and morbidity caused by diseases and injuries. They clearly highlight the need for an intensified global focus on preventing and treating cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases, as well as tackling injuries, in all regions of the world, as set out in the agenda for the UN Sustainable Development Goals.

"These new estimates are another reminder that we need to rapidly step up prevention, diagnosis and treatment of noncommunicable diseases," said Dr. Tedros Adhanom Ghebreyesus, Director-General of WHO. "They highlight the urgency of drastically improving primary health care equitably and holistically."

**Heart disease remains the No. 1 killer; diabetes and dementia enter the top 10**

Heart disease has remained the leading cause of

# *Heart disease has remained the leading cause of death at the global level for the last 20 years*

death at the global level for the last 20 years, now killing more people than ever before. The number of deaths from heart disease increased by more than two million since 2000, to nearly nine million in 2019, and now represents 16 per cent of total deaths from all causes.

More than half of the two million additional deaths were in the WHO Western Pacific region. Conversely, the European region has seen a relative decline in heart disease, with deaths falling by 15 per cent.

Alzheimer's disease and other forms of dementia are now among the top 10 causes of death worldwide, ranking 3rd in both the Americas and Europe in 2019. Women are disproportionately affected: globally, 65 per cent of deaths from Alzheimer's and other forms of dementia are women.

Deaths from diabetes increased by 70 per cent globally between 2000 and 2019, with an 80 per cent rise in deaths among males. In the Eastern Mediterranean, deaths from diabetes have more than doubled and represent the greatest percentage increase of all WHO regions.

## **Global decline in deaths from communicable diseases**

In 2019, pneumonia and other lower respiratory infections were the deadliest group of



communicable diseases and together ranked as the fourth leading cause of death. However, compared to 2000, lower respiratory infections were claiming fewer lives than in the past, with the global number of deaths decreasing by nearly half a million.

This reduction is in line with a general global decline in the percentage of deaths caused by communicable diseases. For example, HIV/AIDS dropped from the 8th leading cause of death in 2000 to the 19th in 2019, reflecting the success of efforts to prevent infection, test for the virus and treat the disease over the last two decades.

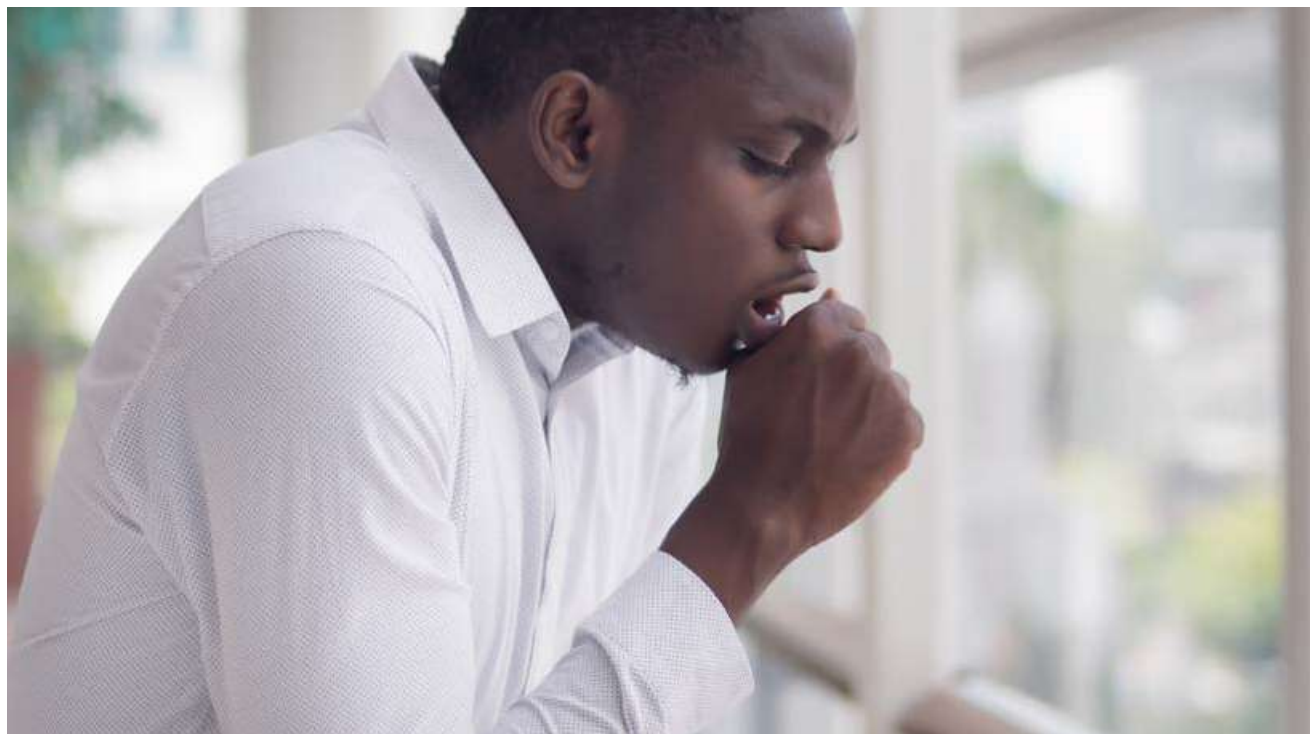
While it remains the fourth leading cause of death in Africa, the number of deaths has dropped by more than half, falling from over 1 million in 2000 to 435 000 in 2019 in Africa.

Tuberculosis is also no longer in the global top 10, falling from seventh place in 2000 to 13th in 2019, with a 30 per cent reduction in global deaths. Yet, it remains among the top 10 causes of deaths in the African and South-East Asian regions, where it is the 8th and 5th leading cause, respectively.

The new estimates also emphasise the toll that communicable diseases still take in low-income countries: six of the top 10 causes of death in low-income countries are still communicable diseases, including malaria (6th), tuberculosis



*The diseases and health conditions that are causing the most deaths are those that are responsible for the greatest number of healthy life-years lost*



(8th) and HIV/AIDS (9th). Meanwhile, in recent years, WHO reports highlight an overall concerning slow-down or plateauing of progress against infectious diseases like HIV, tuberculosis and malaria.

### **People are living longer – but with more disability**

The estimates further confirm the growing trend for longevity: in 2019, people were living more than six years longer than in 2000, with a global average of more than 73 years in 2019 compared to nearly 67 in 2000. But on average, only five of those additional years were lived in good health.

Indeed, disability is on the rise. To a large extent, the diseases and health conditions that are causing the most deaths are those that are responsible for the greatest number of healthy life-years lost. Heart disease, diabetes, stroke,

lung cancer and chronic obstructive pulmonary disease were collectively responsible for nearly 100 million additional healthy life-years lost in 2019 compared to 2000.

Injuries are another major cause of disability and death: there has been a significant rise in road traffic injuries in the African region since 2000, with an almost 50 per cent increase in both death and healthy life-years lost. Globally, deaths from road traffic injuries are 75 per cent male.

In the Americas, drug use is a significant contributor to both disability and death with a nearly threefold increase in deaths between 2000 and 2019 and is also a top 10 contributor to healthy life-years lost. In all other regions, it does not make the top 25.

## New partnership to boost UAE's energy-saving strategies

A new service is aiming to reinforce and bring to focus the next level energy-saving strategies of Dubai and the UAE.

Moro Hub (Data Hub Integrated Solutions LLC), the digital arm of Dubai Electricity and Water Authority (DEWA) and a part of Dubai 10X initiative and Facilio, a leading AI-driven property operations cloud platform, has



announced a strategic partnership, to launch Energy Management and Monitoring Services for commercial and residential buildings in the UAE.

Marwan Bin Haidar, Vice Chairman of Moro Hub, said: "Through this platform, we seek to highlight the role of technologies in maximising power utilisation in various infrastructures, including buildings, and minimising electricity consumption through higher operational efficiency of key structures and facilities. This commitment is according to our endeavours to promote energy efficiency in buildings and in line with DEWA's intensified initiatives to decrease power consumption levels of Dubai's buildings."

Energy Monitoring and Management services ensure asset reliability and reduce energy-related capital and operational expenses. This cloud-based service provides a tailored approach to the efficient management of power in buildings

by providing asset owners with the capability to control their digitised energy and assets network. The Energy Monitoring and Management service includes energy management; asset performance; fault detection and diagnostics; proactive maintenance management and Measurement & Verification.

"The Energy Monitoring and Management services leverage the Internet of Things connectivity and distributed intelligence to ensure an optimised and cost-effective performance of buildings and assets through centrally monitored and controlled operational systems. By rolling out these services, facilities managers and owners can maximise uptime and operational efficiency, reduce cost, meet sustainability goals, and enrich the overall occupant experience," Bin Haidar added.

## A Sister and an Outstanding Partner

I find it very difficult and am saddened to write about a sister and a friend who has left this troubled world to rest in peace forever. Our Secretary General, Dr. Meshgan Al Awar, has left a gaping hole in the Zayed International Foundation for the Environment where she had been instrumental in spearheading many innovative programmes and establishing international relations. We have lost an outstanding member of our team who was charismatic, dedicated, and very enthusiastic about the activities of the Foundation and its environmental cause. We will miss her passion, commitment, deep knowledge, and innovative approach in endeavouring to place the Foundation at the forefront of global environmental organizations.

In Islamic heritage, it is said that if you want to know the real personality of a human being, you either travel with them or do business with them. I have travelled with Dr. Meshgan



**Dr. Eisa M. Abdellatif**

Chief Technical Advisor  
Zayed International  
Foundation for the  
Environment

since 2002 when we first visited Scotland to attend a scientific conference on Indoor Air Quality. Later, we travelled together to several Gulf and Arab countries, and across Europe, Africa, Asia, and Latin America where we worked as a strong cohesive team in delivering the message of the Zayed Foundation and its contributions to partners, collaborators and concerned stakeholders.

Dr. Meshgan delivered excellent speeches on behalf of the Foundation which are well documented through the photos and videos available on the Zayed Foundation website. She also organised initiatives that boosted the image and credibility of the Foundation. Her mobile apps for raising awareness on spreading greenery and food security are well recognized. The Zayed Green Challenge app and the Urban Farming initiative have gained worldwide success. These must continue in commemoration of her legacy.

I still find it difficult to come to terms with her loss. She was a close friend and kind human being who cared about the poor and homeless people, especially in my country - Sudan. Dr. Meshgan has made an incredible impact on the lives of so many people that I know, including orphans, homeless, the sick and the poor. She sponsored many of these needy people and paid every year for their housing, food, education, and health. They will all miss her, never forget her, and will continue to pray with us for her soul.

Dr. Meshgan will forever be remembered by all of us at the Zayed Foundation as a champion of environmental conservation and sustainable development and a steward of women empowerment.

My heartfelt condolences to her family and colleagues. May Allah, Subhanahu wa Taala, bestow His mercy and peace on her soul.

**THE FUTURE OF OUR WORLD  
IS IN OUR HANDS.**

**ACT NOW!**





CARING FOR OUR  
**ENVIRONMENT**

نعتني بيئتنا



[www.emarat.ae](http://www.emarat.ae)



EmaratOfficial