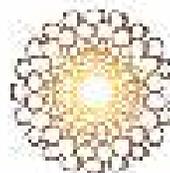


JANUARY 2019

# Society & Environment

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إكسبو 2020  
EXPO 2020  
دبي، الإمارات العربية المتحدة  
Dubai, United Arab Emirates

Issue 497 creating green communities for a better tomorrow



UAE President declares 2019 as  
**'Year of Tolerance'**

50  Years  
of Achievements

HH Sheikh Mohammed issues 8 principles of governance



## **Emirates Appreciation Award for the Environment**

**Together for a green home**

# Chairman's Message



creating green communities for a better tomorrow

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**Prof. Mohammed bin Fahad**  
Executive Editor

2019 is the year when the UAE embarks on a year-long journey celebrating the values of harmony, peace and coexistence both here in the UAE and around the globe, as the nation marks the Year of Tolerance under the directions of President HH Sheikh Khalifa bin Zayed Al Nahyan.

Last year was dedicated to honoring the memory and values of the late Sheikh Zayed bin Sultan Al Nahyan. This year too, we continue to carry forward the ideals with which he, as the Founding Father of this nation, set the homeland on a course of unity. Today, more than 200 nationalities call the UAE home, embracing the values of coexistence and acceptance as embodied by the Founding Father of the UAE.

It is thanks to the efforts of the wise leadership to foster such values that the UAE has emerged as a nation where the values of tolerance and humanity are upheld with great fervor. In 2016, the UAE became the first country in the world to set up a Ministry of Tolerance in its government which was supported by laws that combat discrimination and hatred. The country has also launched a series of effective initiatives to promote dialogue among peoples and religions, such as the National Tolerance Programme and The Sheikh Mohammed bin Rashid Award for Tolerance, thereby earning it a top slot in the Global Index of tolerance in 2017 and 2018.

Nations across the world can learn from the UAE's approach of openness of cultures and religions and its cherishment of the values of equality. I sincerely hope that the seeds of tolerance planted by the UAE will serve as a role model of peaceful coexistence and that people across the world will benefit from the virtues of mutual respect, cooperation and affirmative action all through the New Year.

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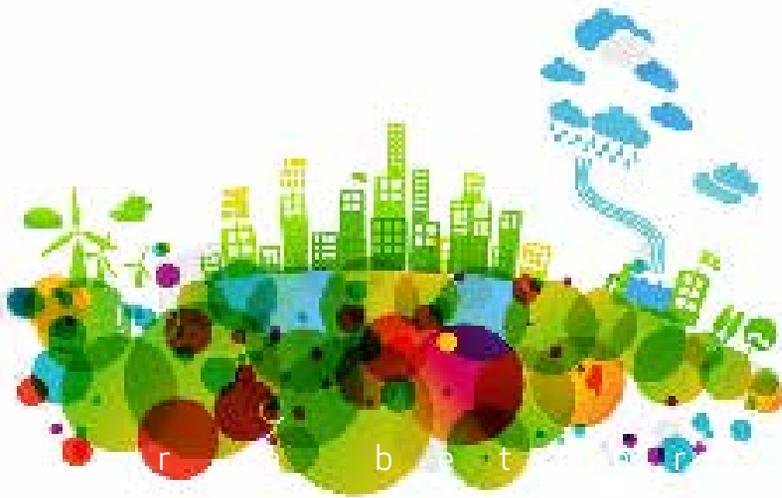
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**Dr. Meshgan Al Awar**  
Secretary General  
Zayed International Prize  
for the Environment

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. As we celebrate the beginning of a New Year, let us resolve to mobilise behind the Sustainable Development Goals and implement this global blueprint to achieve a better and more sustainable future for all.

In 2019, the Zayed International Foundation for the Environment will continue its sterling work in this direction, as it channels its efforts towards translating this shared vision into developing approaches that lead to innovative solutions and strategies in partnership with its global affiliates. Heeding the call for action to protect the planet,

the Zayed Foundation will explore and strengthen ways of working better together at all levels - national, regional and international - to realise the objectives of the SDGs.

Last month at the COP24 annual UN climate conference, the UAE joined more than 190 countries to advance endeavors to achieve the objectives of the Paris Agreement worldwide. Here, the country's experience in adopting energy transition plans and deploying clean and renewable energy on a mega scale was lauded by the international community.

The UAE's ambitious visions and strategies to promote sustainability stems from the legacy of the late Sheikh Zayed bin Sultan Al Nahyan who championed the cause of the environment from a very early age. This year, we will celebrate yet another abiding value instilled by our Founding Father as we mark the "Year of Tolerance" in the UAE as announced by President HH Sheikh Khalifa bin Zayed Al Nahyan.

Outlining his 8 strategic principles of governing Dubai, HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, stated the need to work towards maintaining the prosperity of future generations through sustainable practices. This roadmap to foster development and sustainability will guide the future success of the Emirate.

On that note, I wish you and your families a happy and sustainable New Year!

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Cover Story

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## UAE President declares 2019 as 'Year of Tolerance'



The UAE government has announced that 2019 will be officially proclaimed the Year of Tolerance to strengthen the nation's role of encouraging stability and prosperity in the region.

President His Highness Sheikh Khalifa bin Zayed Al Nahyan, has declared 2019 as the 'Year of Tolerance', highlighting the UAE as a global capital for tolerance, via its various legislative and policy-oriented goals to enhance the role of the country in instilling the values of co-existence and peace in local, regional and international communities.

His Highness said that the Year of Tolerance is an extension of the Year of Zayed, as it upholds the values of tolerance and co-existence that the late Sheikh

Zayed bin Sultan established among the people of the UAE. "Instilling values of tolerance carries on Sheikh Zayed's legacy and teachings," Sheikh Khalifa bin Zayed affirmed, adding that it is one of the most important attributes that we can impact on our people and the global community to ensure the safety, stability and happiness of peoples across the world.

The Year of Tolerance will focus on five main pillars. First, to deepen the values of tolerance and co-existence among cultures and peoples by concentrating on

teaching the youth on the values of tolerance.

The second pillar seeks to solidify the UAE as the global capital for tolerance, via a series of initiatives and projects specialised intolerance and dialogue between various cultures and civilisations. Third, enacting multiple cultural programmes and contributions to build tolerant communities.

As for the fourth pillar, a focus on legislative and policy-oriented objectives that contribute mandating cultural and religious



LEADERS SAY the Year of Tolerance will honour the late Sheikh Zayed's belief that the UAE should welcome all nationalities and religions.

tolerance, via dialogue. Lastly, the fifth pillar will focus on promoting tolerance and co-existence via targeted media initiatives and projects.

His Highness, the UAE President, affirmed that declaring 2019 as the Year of Tolerance reflects the approach adopted by the UAE since its establishment, to be a bridge of communication between the peoples of world, and their various cultures, in an open and respectful environment, that rejects extremism, and emphasises acceptance of the other. Sheikh Khalifa bin Zayed

noted the critical role the UAE plays in building global tolerant societies, adding that the country has for decades “carried a global message” for tolerance and cohesion.

President Sheikh Khalifa went on to say, “We look forward to further contributing towards building societies that believe in the values of tolerance, cohesion and dialogue, and establishing concrete models improving tolerance and co-existence both regionally and internationally.”

“Here in the UAE,” Sheikh Khalifa

concluded, “the Year of Tolerance will be celebrated as a national effort towards further advancing a decades-long dream of creating a tolerant and cohesive society, open to peoples of varying cultures and religions from around the world. The UAE and Tolerance go hand-in-hand.”

For his part, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, said, “We want government policies that further consolidate tolerance and a deep sense of community, and to spread these values



among our youth and future generations.”

His Highness called for making the Year of Tolerance a year of achievements, filled with programmes and projects that reflect the importance of the values of tolerance, especially in the Arab world, the birthplace of religions and cultures.

“The UAE must lead the way for intellectual, cultural and media initiatives that further consolidate the values tolerance and co-existence, opening up to cultures of the region and the world as a whole,” he said.

Commenting on the announcement, His Highness Sheikh Mohamed bin Zayed Al

Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, stressed that nations built on values of tolerance, love and respect are those that can achieve lasting peace, security and stability on their development journeys.

“The UAE is a place of tolerance, co-existence and openness to other cultures,” Sheikh Mohamed bin Zayed affirmed, adding that tolerance, pluralism, and societal integration are among the most important indicators of a country’s development.

He noted that the Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan, established the UAE as a global model for

tolerance, co-existence and cooperation, and was keen to inculcate these values among his people, who to this day, continue to embody their meanings in every way both within the UAE and beyond.

In July 2015, His Highness Sheikh Khalifa issued Federal Decree Law No. 02 of 2015 on Combating Discrimination and Hatred, which aims to protect everyone in the UAE, via a solid legislative ground for the environment of tolerance, co-existence and acceptance. The law aims to fight discrimination against individuals or groups based on religion, caste, doctrine, race, colour or ethnic origin.

Also, in 2016, the UAE Cabinet

“The UAE is a place of tolerance, co-existence and openness to other cultures.”  
- Sheikh Mohamed bin Zayed



introduced the first post of the Minister of State for Tolerance. In the same year, the UAE Cabinet launched the National Tolerance Programme, to boost the values of tolerance and co-existence and to reject attitudes of discrimination and hatred. The UAE also established various centres to counter extremism, including the International Institute for Tolerance, the Hedayah Centre, and Sawab Centre.

The country was also recognised for its initiatives and programmes to advance tolerance and to counter terrorism and extremism in global indices. In 2016, the UAE ranked first regionally and third globally in the Tolerance Index

of the 2016 Yearbook issued by the International Institute for Management Development, IMD, in Switzerland.

**‘Tolerance represents Zayed’s legacy, Emirati values’**

H.H. Sheikh Sultan bin Zayed Al Nahyan, the President’s Representative, has praised the recent decision to declare 2019 as the ‘Year of Tolerance’ by the UAE President HH Sheikh Khalifa bin Zayed Al Nahyan.

His Highness said the Year of Tolerance carries on the message of the late Sheikh Zayed bin Sultan Al Nahyan’s legacy and is a true reflection of Emirati customs and heritage. Sheikh Sultan bin Zayed affirmed that the UAE was built on principles

of good faith, building bridges of peace and co-existence among regional and international global partners. He added that the nation continues to carry its commitment to values and teachings of Islam and the Arab world, renouncing violence and extremism, and building a cohesive society of over 200 nationalities.



Cover Story

10 c r e a t i n g g r e e n c o m m u n i t i e s

## VP directs formation of 'Supreme National Committee for Tolerance'



The newly formed Committee for Tolerance will be chaired by H.H. Sheikh Abdullah bin Zayed Al Nahyan, Minister of Foreign Affairs and International Cooperation, and have ministers and representatives from UAE civil society organisations as its members.

Following the decision by President His Highness Sheikh Khalifa bin Zayed Al Nahyan, declaring 2019 as the 'Year of Tolerance', the Vice President, Prime Minister and Ruler of Dubai, directed the formation of the 'Supreme National Committee for Tolerance'.

The newly formed Committee for Tolerance will be chaired by H.H. Sheikh Abdullah bin Zayed Al Nahyan, Minister of Foreign Affairs and International Cooperation, and have ministers and representatives from UAE civil society organisations as its members.

"We want the UAE to be the global reference point for a tolerant culture, via its policies, laws and practices," His Highness Sheikh Mohammed bin Rashid said, adding that tolerance increases strength and resilience, and helps establish a global, cohesive society.

The Supreme National Committee for Tolerance's mission during the Year of Tolerance is to consolidate values of tolerance within the UAE community, and spread this unique model to our global neighbours, His Highness explained.

The Committee members include: Sheikh Nahyan bin Mubarak Al Nahyan, Minister of Tolerance; Noura bint Mohammed Al Kaabi, Minister of Culture and Knowledge Development; Nasser bin Thani Al Hamli, Minister of Human Resources and Emiratisation; Hessa Essa Buhmaid, Minister of Community Development; Jameela Al Muheiri, Minister of State for Public Education, Dr. Sultan bin Ahmad Sultan Al Jaber, Minister of State and Chairman of the National Media Council; Ohoud bint Khalfan Al Roumi, Minister of State for Happiness and



THE SUPREME National Committee for Tolerance's mission is to consolidate values of tolerance within the UAE community, and spread this unique model to UAE's global neighbours.

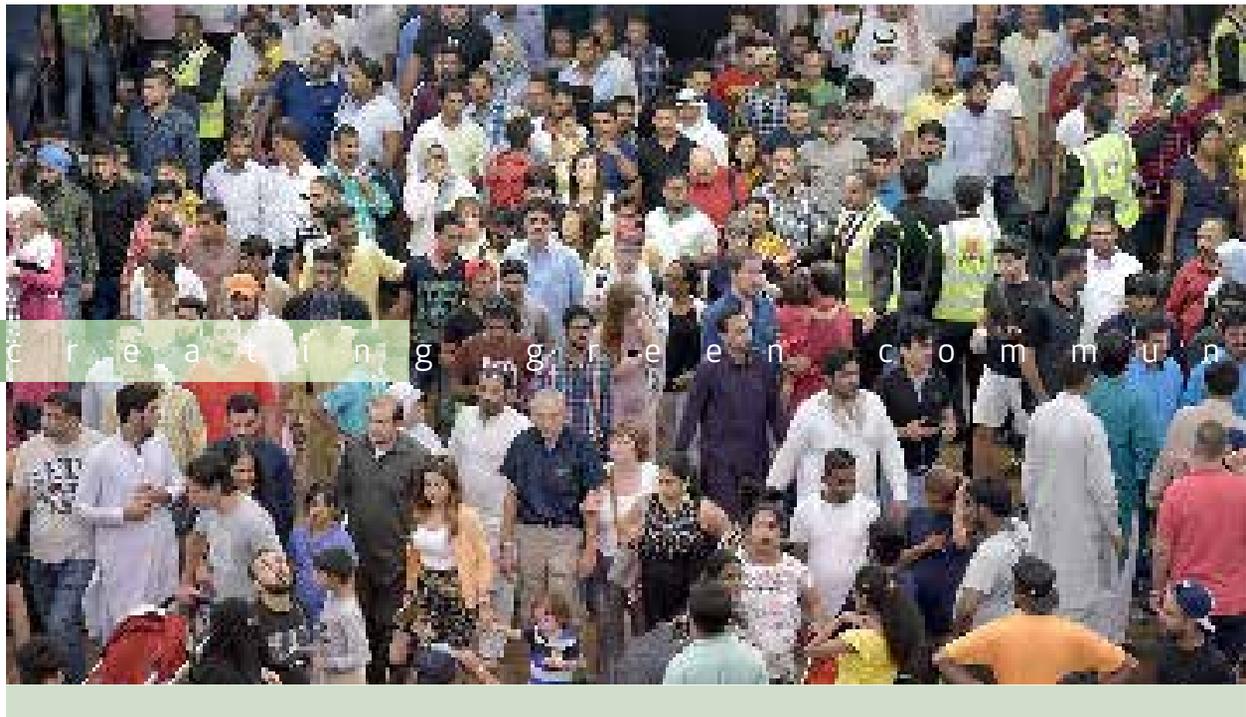
Wellbeing; Shamma bint Suhail Faris Al Mazrui, Minister of State for Youth Affairs; Zaki Nusseibeh, Minister of State; Dr Ali Rashid Al Nuaimi, Chairman of the World Council of Muslim Communities; Dr. Ali bin Tamim, Director-General of Abu Dhabi Media Company; Dr. Hamad Al Sheikh Ahmed Al Shaibani, Managing Director of the International Institute for Tolerance; Dr. Sultan Faisal Al Rumaithi, Secretary-General of the Muslim Council of Elders; Yasser Hareb, Emirati writer and media personality; Sunny Varkey, Founder of GEMS Education and Varkey

Foundation; Isobel Abulhoul, CEO and Trustee of the Emirates Literature Foundation, and Dr. Najat Makki, Emirati Conceptual Artist, along with representatives from executive boards within the country.

Sheikh Mohammed bin Rashid urged the members of the committee to work on a comprehensive framework for the Year of Tolerance, formulating a strategy to serve the main objectives behind the year, and to monitor the implementation of said strategy, ensuring that its seven pillars are applied across

programmes and initiatives on local, regional and global levels.

His Highness also directed the committee to develop a plan of action in partnership all segments of society, using innovative initiatives that will have a direct, positive impact on the UAE community as a whole. He also called for the formation of local committees in coordination with relevant authorities across each of the Emirates, within a framework bringing together local and federal efforts towards attaining the primary objectives behind the Year of Tolerance.



The Year of Tolerance revolves around seven pillars:

**Pillar 1: Tolerance in Community**

The first pillar aims to promote the values of tolerance within family members, and to consolidate them among different cultures, activating the role of UAE community centres across the country to promote tolerant, cohesive societies.

**Pillar 2: Tolerance in Education**

This pillar's objective is to solidify teachings behind the values of tolerance within education systems - across schools and universities.

**Pillar 3: Tolerance in the Workplace**

The third pillar's focus is on

creating a safe, tolerant, and cohesive workplace across public and private sector institutions and organisations, via educational programmes highlighting equal opportunities for all.

**Pillar 4: Tolerance and Culture**

The promotion of cultural tolerance is the main objective, via the launch of various events celebrating more than 200 nationalities residing in the country, and enhancing interactions between them via the arts and culture sector.

**Pillar 5: UAE Model of Tolerance**

This pillar seeks to solidify the UAE as the global capital for tolerance, via a series of initiatives and projects specialised in tolerance and

dialogue between various cultures and civilisations.

**Pillar 6: Tolerance in Legislation**

The sixth pillar will see the Supreme National Committee for Tolerance work on developing policy, legislation and executive regulations guaranteeing the sustainability of values and lessons behind tolerance, dialogue, and cohesion among cultures, including a law on multiculturalism.

**Pillar 7: Tolerance in the Media**

The media is one of the most important axis in dissemination of tolerance and co-existence values, as well as promoting the UAE Model of Tolerance across media channels and social networking sites.



f o r a b e t t e r t o m o r r o w

## Abdullah bin Zayed: 'Year of Tolerance' an extension of 'Year of Zayed' accomplishments

**H**.H. Sheikh Abdullah bin Zayed Al Nahyan, Minister of Foreign Affairs and International Cooperation, said that President His Highness Sheikh Khalifa bin Zayed Al Nahyan's decision to declare 2019 as the 'Year of Tolerance' is an extension of the lessons learnt and accomplishments gained by the nation during the 'Year of Zayed'.

His Highness added that the Year of Tolerance represents a national endeavour to instill the values of tolerance among all segments of the UAE community.

He also extended his thanks and appreciation to His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime

Minister and Ruler of Dubai, for forming the Supreme National Committee for Tolerance, and for appointing him as the Committee's Chairperson, along with formulating the Year of Tolerance's seven pillars.

Sheikh Abdullah bin Zayed asserted that the UAE was established on unique foundations based on tolerance and co-existence, gaining the respect and trust across nations.

The UAE will continue its development journey, with the goal to become the global capital of tolerance, he continued.

"The Year of Tolerance is an invitation for the UAE's sons and daughters to come together and

continue the nation's journey of hard work and giving, showing the world how the UAE is a unique model for tolerance that knows no bounds on its path of excellence," Sheikh Abdullah concluded.

Tolerance is a virtue and an intrinsic part of the Islamic culture. It is observed at all levels: individual, organisational and national.

With more than 200 nationalities living peacefully and successfully in the UAE, the UAE society has been an undisputed example of being a tolerant and inclusive country. Now, the Federal Government is keen to promote acceptance and understanding as core values of the society.

## Cover Story

14 c r e a t i n g g r e e n c o m m u n i t i e s

### HH Sheikh Mohammed issues 8 principles of governance



The eight-point action plan is aimed at the future success of Dubai and covers aspects related to economic diversification, justice, tolerance and attracting talent.

**H**is Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, has unveiled an eight-point action plan for the future success of the emirate.

In a series of tweets, Sheikh Mohammed called on all those in a position of responsibility in Dubai to abide by these principles that focus on the overall well-being of the nation and its people.

The eight principles of governance also cover aspects related to economic diversification, justice,

tolerance and attracting talent.

Sheikh Mohammed's announcement, which follows his Accession Day (January 4) as Ruler of Dubai, was made on his official Twitter account on 5th January 2019.

His Highness also thanked all his well-wishers who had acknowledged his completion of 50 years in serving the nation.

#### **The eight principles in full:**

**1. The Union is the Foundation**  
Dubai is an integral part of the UAE and a pillar of the federation.

The Emirate's destiny is entwined with the UAE's destiny, its well-being is vital to the UAE, and its people are ever-willing to sacrifice for the greater good of the country. The Union's interest is above local interest, the Union's laws transcend our laws and legislations, the Union's policy is our policy, and the Union's government priorities are our government's priorities.

#### **2. No One is Above the Law**

Justice is the basis of a strong and proud nation, and guarantees prosperity and stability. No one is above the law in Dubai, starting



THE EIGHT principles of governance covers aspects related to economic diversification, justice, tolerance and attracting talent.

with the ruling family. The law does not discriminate between citizens and residents, rich and poor, male and female, Muslims and non-Muslims. Justice delayed is justice denied. "Injustice anywhere is a threat to justice everywhere". I renounce unfair practice or conduct of any person, and the ruling family shall likewise renounce any form of injustice as long as it governs the Emirate.

### 3. We are a Business Capital

The Government of Dubai aims to improve the lives of its people through strengthening its economy. Dubai does not

invest or involve itself in politics, and does not rely on politics to ensure its competitiveness. We extend a hand of friendship to all those who hold good intentions towards Dubai and the UAE. Dubai is a politically neutral business-friendly global hub that focuses on creating economic opportunities.

### 4. Three Factors Drive Growth

Dubai's growth is driven by three factors: a credible, resilient and excellent government; an active, fair and open private sector; and public and government-owned flagship companies that compete

globally, and generate an income for the government, jobs for its citizens, and assets for future generations.

### 5. Our Society has a Unique Personality

Our society is a respectful and coherent one, bound by tolerance and openness. It distances itself from all forms of discrimination and biasness. It is a disciplined society, committed to its promises, timelines and covenants. We are modest about our successes, perseverant in dealing with challenges, charitable and generous in achieving the



greater good, and open to everyone.

### **6. We Believe in Economic Diversification**

Economic diversification has been the foundation of our unwritten constitution in Dubai since 1833. The changing times and the rapid developments make our commitment to this principle everlasting. Our new goal is to create at least a new economic sector every three years that will be productive, contribute to our GDP, and generate jobs.

### **7. A Land for Talent**

Dubai has always relied on talented tradesmen, administrators, engineers, creatives, and dreamers for

its success. The Emirate's prominence, sustainability and competitiveness depend on its capacity to continue attracting skilled and talented people, and nurturing the brightest minds to generate innovative ideas. We have to continually review and renew our policies and procedures to ensure our appeal to talented individuals. We must build the best environment in Dubai for the world's leading minds.

### **8. We Care about Future Generations**

The destiny of our future generations must not be affected by the fluctuations of regional politics and global economic cycles. We invest and create valuable assets for them.

Our fundamental rule in this regard is that the government should, under all circumstances, own economic assets that are worth at least 20 times the value of its annual budget. We work towards maintaining a secure future, and we are focused today on ensuring the prosperity of our future generations.





## Dubai Municipality removes 87 tons of waste from New Year celebration sites

After the New Year's Eve celebrations, Dubai Municipality successfully removed 87 tons of waste in record time from the various celebration sites as the city witnessed participation of people from all over the world in the night long celebrations.

Eng. Talib Julfar, CEO of Dubai Municipality for Infrastructure Services Sector, said: "The Municipality had prepared an integrated plan to secure the sites of celebrations, festivals and sports and tourism events for the cleaning and removal of waste from the New Year celebrations as Burj Khalifa, Business Bay, the beaches extending from Jumeirah Beach to Dubai Marina and Burj Al Arab,

as well as Sheikh Zayed Road, Downtown Dubai and Dubai Water Canal had become the focus of the world's attention."

"The Municipality had equipped an integrated team of 1,802 workers and volunteers and had allocated 1,066 of its cleaners and 30 specialized supervisors, in addition to distributing 200 additional waste containers of different sizes in more crowded areas. A number of sand brooms were also provided to clean the main roads," he said.

"With the cooperation of its partners, the Municipality also succeeded in securing 736 volunteers, who helped the workers in cleaning operations. A total of 87 tons of waste was

collected during the cleaning operation, which continued from 5 pm to 6 am the following day, which allowed us to complete cleaning operations in record time before 8 am," pointed out Eng. Abdulmajeed Saifaie, Director of Waste Management Department. In anticipation of any emergency, the "Sand Team", comprising of 40 officers and observers and 500 cleaners, was kept ready for emergency intervention, he added.



Cover Story

18 c r e a t i n g g r e e n c o m m u n i t i

## Mohammed bin Rashid launches 'Fifty-Year Charter' to improve life in Dubai



[The Fifty-Year Charter undertakes to improve the quality of life, develop the community of Dubai, and ensure the future of generations to come.](#)

**H**is Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, has announced the 'Fifty-Year Charter' which promises to improve all aspects of life in Dubai in 2019.

"This is a charter that represents our pledge and promise towards enhancing the life of people in Dubai in 2019. A new charter shall be launched on Jan 4 every year," said HH Sheikh Mohammed. The pledge comes a day after he shared his eight defining principles of governance for Dubai.

**Below is the full text of the "The Fifty-Year Charter":**

In the Name of Allah, and praise be to Him! From Mohammed bin Rashid Al Maktoum, to the people of Dubai and its residents is a document that represents our pledge and promise, on behalf of myself and the ruling family of Dubai, of what we will undertake to improve the quality of life, develop the community of Dubai, and ensure the future of generations to come.

It is an annual document that I have named 'The Fifty-Year Charter' to mark my 50th

anniversary of assuming my first official post in serving my country, and in the hope of another 50 years during which we will maintain a city governed by law and bound by the spirit of compassion, love harmony and tolerance.

A prosperous city where future generations achieve their dreams and aspirations. On January 4, 2019, I declare my commitment, as well as the commitment of the ruling family of Dubai, and the commitment of our government and all our teams to the vision presented in this document.



THE CHARTER announced by Sheikh Mohammed represents the emirate's pledge and promise towards enhancing the life of people in Dubai in 2019.

We have divided this document into nine articles in order to facilitate its implementation, follow-up, and accountability. This document does not replace the government's strategies, but it is a document that includes some aspects of our vision for the future city of Dubai and the life we wish to maintain for everyone living in this community.

We will release The Fifty-Year Charter on January 4 each year to announce exceptional projects in Dubai. Our guidance to everyone is to act in accordance with this charter, and in accordance

with the Eight Principles of Dubai document, which we have launched, to ensure continued prosperity.

The following are the nine articles, which I will personally observe, and will be overseen by H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of Dubai Executive Council.

**Article 1: Dubai Silk Road:** Dubai is destined to be a crossroad between East and West, and between North and South. We have the largest international

airport in the world. It connects us with more than 200 cities.

Over the next 10 years, more than one billion passengers will pass through our airports. Worldwide, we operate around 80 ports that are connected to hundreds of cities.

Our next goal is to build our own Silk Road in cooperation with our friendly neighbours who share our vision. Our region has historically been a region of civilisation and trade, and this role must be restored. We will seek to build international cooperation to support these aspirations.



### **Article 2: A Geo-Economic Map for Dubai**

In the coming phase, we will work to develop a geo-economic map for the city of Dubai and set up specialised, integrated economic zones in the whole city. Each geo-economic sector in the city will have its own council, which manages and markets it.

Each geographical sector will have its own economic and investment goals. A Governor will be appointed for each economic zone to oversee the achievement of its goals, as well as its progress and success.

### **Article 3: First Virtual Commercial City**

Dubai will lead the establishment of the first virtual commercial

city in the region that grants commercial licenses without having to reside in Dubai. The city will allow investors to open bank accounts and grant e-residencies according to best international laws and regulations. We aim to have 100,000 companies in the virtual city.

### **Article 4: A Central Education File for Every Citizen**

We aim to develop a centralised education database for every citizen to document all the academic degrees obtained, classes and training taken, and conferences attended.

We aim to build an educational and learning system that explores and develops people's skills. Our goal for our citizens is

to have life-long learning so they can continue to improve their skills and capacities to adapt to the rapid global changes.

### **Article 5: A Doctor to Every Citizen**

We aim to provide citizens with medical consultations 24/7 through hundreds of thousands of doctors, specialists and medical consultants across the globe. Our goal is to transform the medical system to bring doctors closer to individuals, enhance awareness, and utilize top medical minds globally to serve the health of our citizens.

### **Article 6: Free Economic and Creative Zones in Universities**

Dubai's foundation is rooted in trade. We will announce our

Article 7 of The Fifty-Year Charter seeks to develop an integrated program that allows at least a tenth of the emirate's homes to be self-sufficient in terms of water, food and energy.



public and private universities as free zones that allow students to carry out business and creative activities, make these activities part of the education and graduation system, and shape integrated economic and creative zones around the universities.

These zones will support students with education, research and funding during the launch of their projects.

#### **Article 7: Self-sufficiency in Dubai Homes**

We will develop an integrated program to build a comprehensive system that allows at least a tenth of our citizens' homes to be self-sufficient in terms of water, food and energy.

The achievement of this goal will help change lifestyles and contribute to the preservation of our environment. We aim to create a new economic sector that supports energy, water and food self-sufficiency in the houses of Dubai, for at least a month, to be increased later.

#### **Article 8: Cooperative Companies in Various Sectors**

This is a long-term programme that aims to provide new sources of income to our citizens, improve the quality of some services through privatization, and establishes cooperative companies owned by citizens in a number of vital sectors.

#### **Article 9: Annual Growth in Philanthropy**

Our daily businesses and projects should not let us forget about giving to those who need help.

We pledge to increase philanthropic initiatives every year and grow them by at least an equal percentage of our annual economic growth.

Charity is indeed a major factor in the happiness of societies and the continuity of progress and prosperity.

These are some highlights of our future vision reflected in a number of practical programs that can be implemented and measured. A new Charter shall be launched in January 4, every year to sustain the welfare and happiness of our society."

## 'Year of Tolerance will reinforce UAE's social, ethical principles'



Rulers of various emirates in the UAE and leading dignitaries welcome the announcement of 2019 as the Year of Tolerance by President His Highness Sheikh Khalifa bin Zayed Al Nahyan.

### **Year of Tolerance will reinforce UAE's social, ethical principles: HH Sheikh Saud bin Rashid**

H.H. Sheikh Saud bin Rashid Al Mu'alla, Supreme Council Member and Ruler of Umm Al Qaiwain, stated that President His Highness Sheikh Khalifa bin Zayed Al Nahyan declaring 2019 as the 'Year of Tolerance' will reinforce the UAE's social and ethical principles, established during the era of the Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan.

He added that this approach highlights the country's cultural

and social legacy, which were strengthened by the wise leadership and promotes the values of justice and tolerance, to serve as a beacon of light to the entire world and help its peoples to achieve coexistence, security, peace and stability.

The UAE supports the culture of dialogue among the community, as confirmed by its religion and community traditions, and believes in the importance of equality and supports the right of everyone to communicate and live in peace, Sheikh Saud noted, welcoming the announcement.

### **UAE is a homeland of tolerance, coexistence and openness: HH Sheikh Saud bin Saqr Al Qasimi**

H.H. Sheikh Saud bin Saqr Al Qasimi, Supreme Council Member and Ruler of Ras Al Khaimah, has said that due to the legacy of the Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan and wisdom of President His Highness Sheikh Khalifa bin Zayed Al Nahyan, the UAE has become a homeland of tolerance, coexistence and openness.

Sheikh Saud said that the declaration of 2019 as 'Year of Tolerance' by President His



TOLERANCE IS a deep-rooted humanitarian approach instilled by the Founding Father of the UAE, the late Sheikh Zayed bin Sultan Al Nahyan, since the establishment of the Union.

Highness Sheikh Khalifa bin Zayed Al Nahyan, “reflects the existing UAE noble message to extend bridges of love and peace with various peoples of the world, and it also emphasises that the UAE is the capital of tolerance in the whole world.”

He also stressed that tolerance is an essential component of the UAE society and Emirati culture, which was gleaned from the teachings of Islam and the deep-rooted Arab values. He added that this component, which is protected by a legal system that guarantees justice and equality

and rejects violence, extremism and hatred, has created an attractive environment for more than 200 nationalities living peacefully on this precious land.

**Year of Tolerance crowns UAE’s efforts to become incubator of tolerance: HH Sheikh Hamad Al Sharqi**

H.H. Sheikh Hamad bin Mohammed Al Sharqi, Supreme Council Member and Ruler of Fujairah, said that the UAE is continuing its efforts to promote tolerance and encourage peaceful coexistence and unity among cultures, through the

announcement of President His Highness Sheikh Khalifa bin Zayed Al Nahyan declaring 2019 as the ‘Year of Tolerance’.

“Tolerance is an integral part of our inherited values. Therefore, it is a daily culture of the Emirati people.

“Declaring that the Year of Tolerance aims to strengthen the values of tolerance in the UAE further and reinforce its role as an incubator of tolerance, not only because it welcomes over 200 nationalities who live peacefully on its land, but also because it is influencing the rest of the world



by implementing a cultural and intellectual strategy.

This strategy supports the culture of coexistence and peace between its people and those from the rest of the world, and combats terrorist and extremist ideas," His Highness added.

"Due to the open-minded mindset of the UAE's leaders, the country has reached advanced levels of tolerance, and it is the first federal government in the world to appoint a minister for tolerance and launch a national tolerance programme.

Now, it has declared 2019 as the Year of Tolerance, and has become the global capital of tolerance, due to its actions and

practices," noted Sheikh Hamad bin Mohammed.

**UAE a key partner in achieving global peace: Mohammed bin Rashid Tolerance Award**

Khalifa Al Shaer Al Suwaidi, Acting Secretary-General of the Mohammed bin Rashid Al Maktoum Tolerance Award, said that the announcement of President His Highness Sheikh Khalifa bin Zayed Al Nahyan declaring 2019 as the 'Year of Tolerance' is an essential step in promoting tolerance and encouraging it to become a community practice.

In a statement, Al Suwaidi stressed that the UAE's approach is based on moderation and tolerance, which has made it a

beacon of security and peace. He also urged academic, media and religious authorities to support the declaration.

He added that the UAE has demonstrated the meanings of



'The UAE supports the culture of dialogue among the community, believes in the importance of equality and supports the right of everyone to communicate and live in peace'.



tolerance and coexistence in all its actions, confirming that it is a crucial partner in achieving global peace, which was reinforced by the declaration.

He noted that the approach of the wise leadership has made the country an oasis of security, peace and coexistence, while indicating that the award is keen to cooperate with all authorities, to achieve the interests of the nation.

**'Declaration of 2019 as 'Year of Tolerance' strengthens UAE position as a global role model for peace'**

Sheikh Nahyan bin Mubarak Al Nahyan, Minister of Tolerance, has expressed pleasure over the declaration of the 2019 as the

'Year of Tolerance' by President His Highness Sheikh Khalifa bin Zayed Al Nahyan.

Sheikh Nahyan referred to Sheikh Khalifa's statement that the Year of Tolerance is an extension of the Year of Zayed, as it upholds the values of tolerance and co-existence that the late Sheikh Zayed bin Sultan established among the people of the UAE.

He said the upcoming visit of His Holiness Pope Francis to the United Arab Emirates in February 2019 will strengthen the UAE's position as a global role model for peace, amity and tolerance.

Sheikh Nahyan indicated that the announcement of 2019

as the Year of Tolerance puts great responsibility on the Ministry and on the government authorities and the community at large to emphasise the importance attached to tolerance in the UAE.

The values of tolerance will be upheld as envisioned and supported by President HH Sheikh Khalifa bin Zayed Al Nahyan, HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, and Their Highnesses the Supreme Council Members and Rulers of the Emirates.

COP 24

26 creating green community

UAE stresses importance of accelerating international efforts to achieve SDGs



[Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, has stressed the need to accelerate international efforts to achieve the terms of the Paris Agreement and sustainable development goals.](#)

The UAE reiterated its position on the issue of global warming and climate change at the closing meetings of the 24th Conference of the Parties, COP24, to the United Nations Framework Convention on Climate Change, UNFCCC, calling for quick enforcement of the procedures and global standards adopted by the nearly 200 nations and territories to implement the provisions of the Paris Agreement.

The final meetings of the conference on 16th December, in Katowice, Poland, lasted late

into the night. The two-week event, that ran into overtime, ended with the adoption of a set of strong guidelines to ensure the implementation of the terms of the 2015 Paris Agreement, aimed at containing global temperature rise this century to below 2 degrees Celsius over pre-industrial levels.

Dr. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment and head of the UAE delegation at the conference, said, "The final meetings confirmed the UAE's statement during the conference that time is

no longer with us, and the need for decisive climate action has never been more crucial. We managed to forge a global commitment to implement the terms of the Paris Agreement, and pursue the goals of sustainable development to reduce the effects of global warming and climate change and protect the lives of millions of people who are exposed to the negative consequences of this change annually."

The most prominent points and criteria agreed upon at COP24 included a detailed transparency framework meant to promote



AT COP 24, Al Zeyoudi recounted the UAE's experience in working towards achieving sustainability in all sectors and committing to implement the provisions of the Paris Agreement globally.

trust among nations that they are doing their part in addressing climate change. It sets out how countries will provide information about their national action plans, including the reduction of greenhouse gas emissions, as well as mitigation and adaptation measures.

The guidelines also spell out how to uniformly count greenhouse gas emissions. If poorer countries feel they cannot meet the standards set, they can explain why the reasons for their non-compliance and present a plan to build up their capacity in that regard.

Another notable achievement was that the nations agreed on how to collectively assess the effectiveness of climate action in 2023, and how to monitor and report progress on the development and transfer of technology. Other points include the development of a new vision and mechanisms for global funding for climate action and the implementation of the Paris Agreement.

In his speech at the conference, Al Zeyoudi recounted the UAE's experience in successfully dealing with the challenges of

climate change, working towards achieving sustainability in all sectors and committing, through specific national contributions, to implementing the provisions of the Paris Agreement globally.

The UAE delegation held a number of joint meetings on the sidelines of the conference. This included a meeting with Henryk Kowalczyk, Polish Minister of Environment, where they discussed ways of achieving innovative and sustainable solutions.

Al Zeyoudi also met with Masagos Zulkifli, Minister of Environment



and Water Resources of Singapore, and discussed ways to enhance cooperation between the two countries in the fields of waste management and sustainability, and on innovations related to climate action.

He also held discussions with Jennifer Morris, President of the nonprofit Conservation International, on cooperation in the conservation of marine life. Talks were also held with Erik Grigoryan, Armenian Minister of Natural Protection, on ways to leverage the UAE's experience in protecting biodiversity and achieving sustainability of natural resources.

Siim Kiisler, Estonian Minister of Environment and Chairman of

the fourth session of the General Assembly of the United Nations Environment Programme, UNEA4, met the Minister to discuss the main proposals and themes to be addressed at the event scheduled to run in March 2019.

Al Zeyoudi also met with Malik Amin Aslam, head of the Pakistan delegation and Advisor to the Pakistan Prime Minister on Climate Change, and discussed cooperation between the two countries in various environmental fields.

The Minister also met with Antonio Guterres, UN Secretary-General, who praised the UAE's prominent role in combatting global warming and its efforts

globally in supporting initiatives to reduce the consequences of climate change.

The UAE delegation organised a number of events on the sidelines of the conference, including the second session of 'Youth Dialogue' in cooperation with the Youth Climate Lab.

The event highlighted the progress of the UAE's Youth Climate Mentorship Programme that was launched at COP23 in Bonn, seeking to bolster youth engagement in international climate negotiations and national climate change policy development processes, as well as increase youth contribution in achieving the objectives of the Paris Agreement.



## Ministry of Climate Change and Environment hosts Youth Dialogue at COP24

The Ministry of Climate Change and Environment, MOCCA, and the Youth Climate Lab, YCL, an international organisation dedicated to creating collaborative youth projects to advance climate action, hosted a Youth Dialogue titled 'Climate Mentorship for Youth'.

The session ran on the sidelines of the 24th Conference of the Parties, COP24, to the United Nations Framework Convention on Climate Change, UNFCCC, in Katowice, Poland.

The side event highlighted the progress of the UAE's Youth Climate Mentorship Program, launched at COP23 in Bonn, Germany. The Programme seeks

to bolster youth engagement in international climate negotiations and national climate change policy development processes, as well as increase youth contribution to achieving the objectives of the Paris Agreement and the Sustainable Development Goals, SDGs.

The session allowed the young participants to interact with ministers and other high-level attendees, and discuss issues related to climate change and mentorship. It also explored opportunities to increase youth participation in UN climate negotiations and national policy processes.

The UAE delegation to COP24 participated in Global Climate

Action Energy Day, held under the theme 'Enabling Change through Energy Transition'.

The delegates presented an overview of the UAE's experience in adopting energy transition plans and deploying clean and renewable energy on a mega scale.

Furthermore, the UAE delegation outlined the country's ambitious clean energy targets of 27 percent by 2021 and 50 percent by 2050, and the role of public-private partnerships in achieving these targets, using the experience of the Abu Dhabi Future Energy Company, Masdar, in deploying renewable energy solutions at home and abroad as a case in point.

## UAE shares experience in mitigating climate change effects, adopting climate action at COP24



[The UAE experience in reducing and adapting to climate change was lauded by the UN Secretary General at the 24th Conference of the Parties, COP24, to the United Nations Framework Convention on Climate Change, UNFCCC, in Katowice, Poland.](#)

**D**r. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, has called for an acceleration in global efforts to ensure that the terms of the Paris Agreement on climate change are implemented without further delay.

Dr. Al Zeyoudi conveyed the UAE's message to the international community in his address at the 24th Conference of the Parties, COP24, to the United Nations Framework Convention on Climate Change, UNFCCC, in Katowice, Poland, on 12th December, 2018. Delegates from more than 190

countries and territories were part of the audience at the event that aims to formulate the required legislation to ensure the implementation of the Paris Agreement.

The minister met with Antonio Guterres, Secretary-General of the United Nations, on the sidelines of the conference and discussed the challenges posed by climate change and the ways for the international community to cooperate in mitigating its effects.

The UN Secretary-General praised the UAE's prominent role

in combatting global warming and its efforts globally in supporting initiatives to reduce the consequences of climate change.

In his speech, Dr. Al Zeyoudi pointed to the importance of experimenting with models that have proved successful in reducing the effects of climate change, across several sectors. In addition, he called for the adoption of renewable and clean energy projects and called for the dissemination of solutions through effective international initiatives.

The UAE has adopted a series of



DR. AL Zeyoudi met with the UN Secretary General, Antonio Guterres, and discussed the challenges posed by climate change and ways of cooperating in the effort to stem it.

ambitious visions and strategies, including the UAE Vision 2021, to promote sustainability. The UAE Energy Strategy 2050 seeks to bring the share of clean energy in the total energy mix to 50 percent, while the National Climate Change Plan of the UAE streamlines the concept of climate change mitigation and adaptation across the government and private sector.

The minister said, “The UAE has supported these strategies and plans with robust and long-standing initiatives on the ground such as the Mohammed Bin Rashid

Al Maktoum Solar Park and Noor Abu Dhabi, the world’s largest solar power plant that is being built in the UAE capital at a cost of AED3.2 billion.

“We are currently in the process of assessing the adaptability of our environmental and economic systems to climate change impacts in a bid to boost their efficiency. In addition, we are about to issue the first law on climate change.”

“The UAE has also – through its government and semi-government entities – helped deploy

renewable energy solutions across the world. The work of the UAE-Caribbean Renewable Energy Fund, which allocates millions of dollars to execute renewable energy projects that help reduce carbon dioxide emissions in the Caribbean island countries, testifies to the country’s efforts,” he added.

Dr. Al Zeyoudi noted that in early 2018, the ministry launched the Climate Project on a global scale with the objective of positively influencing 10 million people around the world and helping them become resilient to climate



change impacts.

The minister pointed out that the impacts of climate change, highlighted in previous cycles, were growing in intensity and frequency, and adversely affecting the lives of millions of people.

He said, “The warning signs are becoming more evident and dramatic - the devastating forest fires, droughts, floods, and hurricanes are now the norm rather than the exception across the globe.

“Such climatic catastrophes reaffirm to the international community that we were not blowing the matter out of proportion when we warned

against the considerable risks that climate change poses to human lives and property. They also make it very clear for world nations that they have no choice but to intensify their efforts to cut down carbon emissions and expedite climate adaptation measures, both at home and abroad.”

Dr. Al Zeyoudi concluded his speech by inviting the delegates to attend the upcoming edition of Abu Dhabi Sustainability Week in Abu Dhabi, in January 2019. The annual global platform will bring together thousands of world leaders, businesspeople and experts to engage in high-profile conferences, exhibitions and activities aimed at identifying innovative solutions to global

sustainability issues, with climate change at the forefront.

He also met with Erik Grigoryan, Armenian Minister of Nature Protection, on the sidelines of the conference. They discussed ways in which Armenia could leverage the UAE experience in protecting biodiversity and achieving the sustainability of natural resources.

In a separate meeting with Siim Kiisler, Estonian Minister of Environment and Chairman of the fourth session of the General Assembly of the United Nations Environment Program (UNEA-4), Dr. Al Zeyoudi discussed the main proposals and themes to be addressed at the event scheduled to run in March 2019.



## 1,000 indigenous Sidr trees planted in Ras Al Khaimah

**T**he Emirates Environmental Group, EEG, organised its annual 'For Our Emirates We Plant' on 18th December, under the umbrella of the Clean Up UAE Campaign and under the patronage and presence of Sheikh Salem Bin Sultan Bin Saqr Al-Qasimi, member of the Executive Council of the Government of Ras Al-Khaimah and Chairman of the RAK Department of Civil Aviation, at the Sidr Nature Reserve in Al Minei.

During the event, environmental enthusiasts representing different sectors of society – governments private entities, academic institutions, officials and students – from all over the UAE, planted 1,000 indigenous Sidr trees. When these trees

mature in five to seven years they will help eradicate six metric tonnes of CO2 emissions annually.

Under the umbrella of the campaign that kicked off in 2007, EEG has managed to plant over 2,096,802 indigenous trees in the country. This has resulted in the mitigation of 12,364 MT of CO2.

Habiba Al Mar'ashi, Chairperson of EEG said, "The movement towards a deeper commitment to environmental protection through planting new trees and taking care of the existing ones is gaining great interest across the UAE."

The Sidr tree has grown in the deserts of this region for

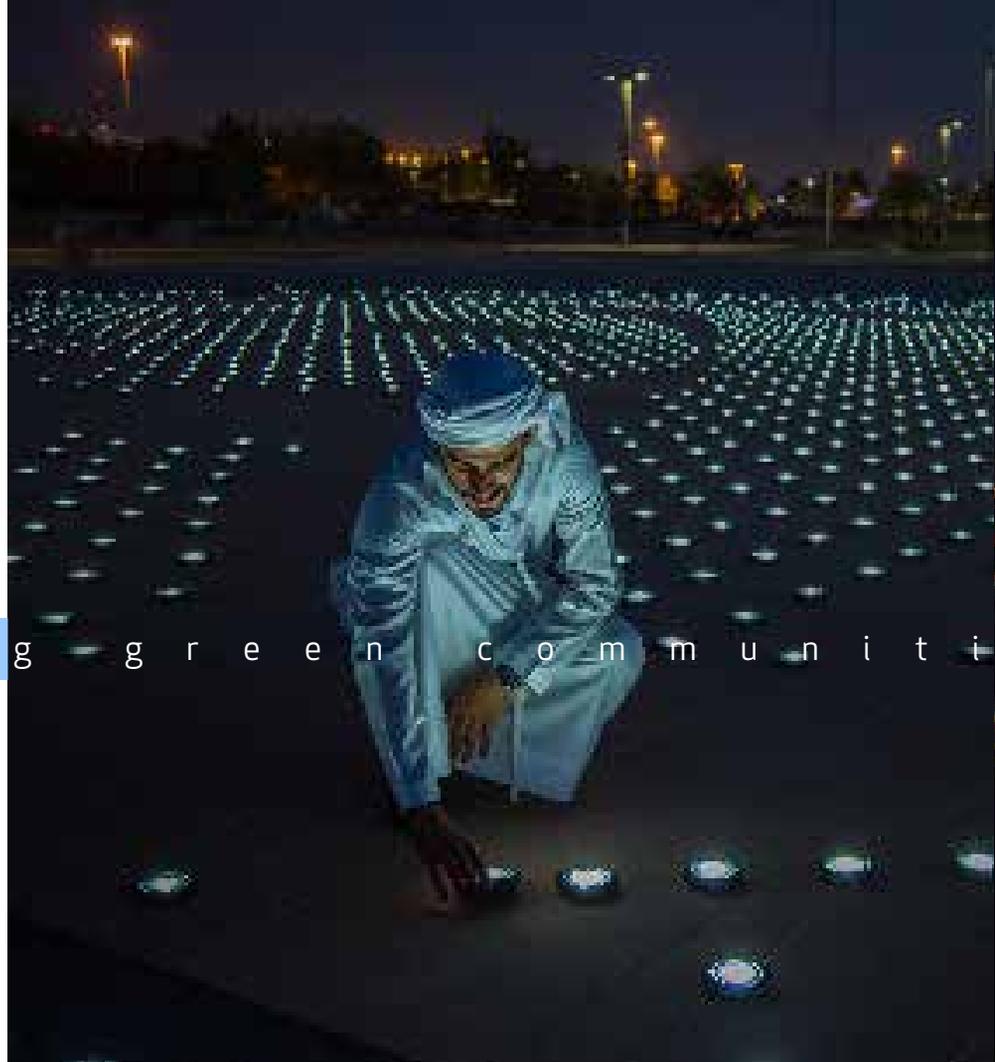
thousands of years. The tree can withstand any weather condition, creating a beautiful and safe habitat for numerous species including the native species of bees who feed on the pollen of the tree and produce the exquisite Sidr honey which possesses unparalleled medicinal and nutritional value.

This year, the 'For our Emirates We Plant' project saw the participation of 50 companies, 24 schools and 163 families. The participants had the liberty to choose the names under which the trees were planted. Further, a hands-on activity enabled the participants to understand the importance of trees and its lasting benefit to the environment.

Campaign

34 c r e a t i n g g r e e n c o m m u n i t i e s

## Zayed Sustainability Prize concludes “Guiding Light” global campaign in UAE



### [UAE's Special Olympics Athletes help arrange the 2,000 solar lanterns in light installation finale.](#)

Signalling the end of its one-month, five-country, global campaign by illuminating 20x20-metre, outdoor light installations of its logo, the Zayed Sustainability Prize’s “Guiding Light” campaign concluded its international tour, in the UAE capital, on 9th January.

With a total of 10,000 solar-powered lanterns donated to off-grid communities, around the world, the campaign started in the Kingdom of Bahrain on 5th December 2018, moving to Bolivia (6th December), Bangladesh (18th December), Kenya (4th January),

before the concluding event held at Masdar Park, in Abu Dhabi’s purpose-built, sustainable city development, Masdar City.

2,000 solar lanterns were used for each light installation and after each event they were donated to off-grid communities in Indonesia, Bolivia, Bangladesh, Kenya and Pakistan.

Further highlighting the global impact of the Prize, since its establishment in 2008, each of the events taking place outside of the UAE were held in partnership with a previous Prize

winner who acted as organisers, on the ground. In Bahrain and Bolivia, they were with previous winners of in the Global High Schools Category: Bahrain Bayan School (2018) and Unidad Educativa Sagrado Corazon 4 (2017). In Bangladesh, the Prize co-ordinated with the Prize’s inaugural winner, Dipal Barua (2009). For the final UAE event, Special Olympics athletes, as well as volunteers from Masdar’s own employees, were part of the set-up team, in Masdar Park, Abu Dhabi.

Commenting on the conclusion



THE ZAYED Sustainability Prize is a global award inspired by the sustainability legacy of the UAE's founding father, the late Sheikh Zayed bin Sultan Al Nahyan.

of the Guiding Light campaign, Dr. Lamyia Fawwaz, Director of the Zayed Sustainability Prize, said: "Throughout this campaign we have been encouraged by the support received from our previous winners and volunteers and pleased by the immediate impact that has resulted from these donations. Inspired by Sheikh Zayed's sustainability and humanitarian vision, the Prize encourages and rewards others for affecting positive human impact. Through the 'Guiding Light' campaign, we have taken direct action to literally brighten the lives of thousands of people, in

off-grid communities."

"With regard to the Abu Dhabi light up event, we were honoured to have the assistance of athletes from the UAE's Special Olympics Team for the set-up. As a Prize that prides itself on sharing the socially inclusive values in human development of Sheikh Zayed, we thank them for contribution and their determination to make a positive difference in the world."

Following the evolution of the Zayed Sustainability Prize from the Zayed Future Energy Prize, it is now more closely aligned with

the UN Sustainable Development Goals and the UAE National Agenda 2021. Over the last decade, a total of 66 winners have received the Prize and have, directly and indirectly, provided a positive impact on the lives of over 318 million people around the world.



## UAE leads in vertical agriculture in region



The Ministry of Climate Change and Environment approved the launch of 12 vertical farms while Emirates Airline is planning to launch the largest vertical agriculture farm in the world, in partnership with Crop One Holdings.

**T**he National Food Security Strategy in the UAE aims to develop a comprehensive system, which aims to achieve sustainable food production. The system will involve 38 short and long-term initiatives, as per the “2051 Vision” and “2021 Work Agenda.”

Many specialist newspapers highlighted the UAE’s plans and projects that aim to attract major investment in vertical or horizontal agriculture, in line with related growth forecasts for the Gulf region, which amounts to US\$1.21 billion by 2021, a

compound annual growth rate of 26.4 percent. The Business Standard stated that the UAE leads in this type of investment, and has launched many recent leading projects.

Mariam Hareb Almheiri, Minister of State for Food Security, announced, during the UAE government’s annual meetings in November 2018, the “National Food Security Strategy,” which includes many related objectives, such as achieving sustainable local production through the use of technology and smart applications.

The Ministry of Climate Change and Environment approved the launch of 12 vertical farms while Emirates Airline is planning to launch the largest vertical agriculture farm in the world, in partnership with Crop One Holdings.

Food import rates amounting to 90 percent and the issues associated with the scarcity of water and arable land in the region strongly support this trend.

In August last year, Xinhua signed an agreement with China’s Chongqing University related to



THE UAE hosts many specialist forums and exhibitions, which aim to promote the latest technologies and showcase them in the region's agricultural and business markets.

the use of modern technology, to utilise sand as arable soil, and relevant field tests will be conducted in cooperation with Mawared. Almheiri raised the idea of establishing a “Food Valley” or a technology centre dedicated to developing food products and automated agriculture, to attract a new generation of farmers who can help achieve future sustainability.

Henry Gordon Smith, Founder and Managing Director of AgriDetriti, said that the Middle East has the ability to reshape its vital infrastructure, which

will support modern life. It also has the potential to transform a relatively small and conventional agricultural industry into the world's most technologically advanced agriculture industry.

Bob Honch, Sales Manager in Van Der Hoven Company, said that the UAE has already started this industry, revealing the completion of the largest glass houses project in the UAE (11 hectares), using advanced technologies allowing climate control and stressed that the project could produce around 3000 tonnes of tomatoes throughout the year.

### **Enhancing regional food security**

The Food Security Centre, FSCAD, has hosted a number of panel discussions and seminars to brainstorm on issues related to food security and ways to formulate a sustainable development strategy on the sidelines of the 9th edition of SIAL Middle East that opened on 10th December 2018 at the Abu Dhabi National Exhibition Centre, ADNEC.

For the fourth consecutive year, the expert-led sessions at the event have drawn the participation of senior



government officials, CEOs and industry experts, to identify key economic issues that may adversely impact the community.

The sessions also aimed to contribute to defining the roles of the public and private sector in developing a sustainable strategy to achieve social well-being and diversity in the national economy, in accordance with the UAE Strategy 2050.

The first session discussed the role of the retail sector in supporting local products while the second highlighted innovation as the main driving force in shaping a world free of hunger. The FSCAD's series of seminars included one titled 'Overview of the Role of

Drones in Smart Agriculture and Agricultural Sustainability', in addition to a session discussing the role of Elite Agro, the UAE's largest farm engaged in growing, sourcing, importing, marketing, and distributing vegetables, cereals, and fruits, in enhancing food security.

Khalifa Ahmed Al Ali, Managing Director of Food Security Centre, said, "Achieving food security is critical for economic growth and a top priority on the UAE's agenda. The UAE plays a pioneering role in developing a comprehensive national system to enable sustainable food production. We are also launching initiatives to invest in the agricultural sector in many countries to enhance food security."

"Today, investing in food security sectors, including agriculture and food industries, through public-private partnerships is crucial to fast track national growth.

"Doing so will develop the agricultural sector and food industries, while also aiding the marketing of agricultural products through providing a safe investment environment," he added.

FSCAD was established in 2010 as a specialist entity that aims to develop the food security system and implement a sustainable food strategy across the UAE so that citizens and residents have access to safe and nutritious food even during emergencies and crises.



## Jordanian Government names Al Quwaira Solar Project after Sheikh Zayed

In a tribute to the UAE's Founding Father, the late Sheikh Zayed bin Sultan Al Nahyan, the Government of Jordan has renamed the AED550 million (US\$150 million) Quwaira Solar Power Plant, funded by Abu Dhabi Fund for Development, ADFD, as Sheikh Zayed Solar Power Complex.

Speaking on the occasion, Mohammed Saif Al Suwaidi, Director-General of ADFD, said, "The UAE and Jordan enjoy historic bilateral relations. The symbolic gesture to honour the memory of the late Sheikh Zayed bin Sultan Al Nahyan is a true testament of the strength of these brotherly ties. It also acknowledges the spirit of the upcoming 'Year of Tolerance' that celebrates the Founding

Father's vision of acceptance, hope, togetherness and prosperity for all."

Al Suwaidi added that ADFD is proud to support the Jordanian government in achieving the country's key developmental priorities. "By contributing to development projects, we have enabled the creation of thousands of jobs, and driven growth in major socio-economic sectors."

Dr. Mary Kamel Kawar, Jordanian Minister of Planning and International Cooperation, lauded the UAE and its leadership for the ongoing support to Jordan and highlighted ADFD's role in helping the Jordanian government achieve sustainable growth.

In line with the Jordanian government's objective of generating 20 percent of energy from renewables by early-2020, the project involved the installation of 328,320 photovoltaic panels that will produce 227 GWh of solar power annually over a period of 20 years, enough to illuminate about 50,000 homes.

The works included the provision of electrical switches, a medium voltage and signal cable system, transformers and all required equipment to connect the plant to the national power grid. The support also covered civil construction works, roads and safety systems as well as overall project operation and management.

Conservation

40 c r e a t i n g g r e e n c o m m u n i t

## Emirates Golf Club commits to reducing single-use plastic



In partnership with National Geographic's Plastic or Planet Campaign, Emirates Golf Club becomes first golf club in UAE and the region to take action to reduce its usage of plastic bottles estimated at 200,000 water bottles annually.

**A**s part of its Planet or Plastic campaign, National Geographic teamed up with Emirates Golf Club Dubai to support the Club in reducing its usage of single-use plastic.

Emirates Golf Club is focusing primarily on reducing its use of plastic water bottles, which stood at 200,000 plastic bottles distributed at the Club in 2017 alone.

Plastic bottles are one of the key single-use plastic pollutants globally, with staggering statistics indicating that 40%

of plastic is used just once, then tossed, and the lifespan of a single-use plastic water bottle is 15 minutes, whereas the average decomposition rate of the same bottle is over 450 years.

In recognition of National Geographic's leading role in championing single-use plastic reduction with its Planet or Plastic campaign, Emirates Golf Club Dubai has joined forces with National Geographic to raise awareness among the community and mobilizing action.

As a result of the campaign,

Emirates Golf Club announced that it is committed to reducing its use of plastic bottles, straws and bag, across the Club and the Dubai Golf group, starting in 2019.

Emirates Golf Club Dubai becomes the first golf club in the UAE and the region as well as one of the first globally to take action to address the devastating impact of single-use plastic waste.

To bring this campaign to the community, a special National Geographic Planet or Plastic Golf Tournament was held at the Emirates Golf Club on



THE EMIRATES Golf Club has announced its commitment to reducing its use of plastic bottles, straws and bag, across the Club and the Dubai Golf group, starting in 2019.

December 15, 2018, where all players received a refillable water flask instead of the plastic bottles usually provided. Creatively placed National Geographic messages of actions and experiential zones set up throughout the course encouraged players to take the first step to make a difference.

It is estimated that 8 million tons of plastic enter the oceans every year, leading to over 1 million seabirds and 100,000 marine animals dying from ingesting plastic yearly. Today, nearly 700 species of marine animal are

affected by ocean plastic pollution and by 2050, every seabird species will be eating plastic. One in three leatherback sea turtles have been found with plastic in their stomachs.

In 2017 alone, golf clubs across Dubai used 380,000 plastic water bottles.

Some of the actions the Club will implement include providing all golf members with a refillable flask and sign a pledge to use the flask instead of reaching out for a plastic water bottle. The Club will also provide water igloos or jugs as

an option instead of plastic bottles for the various meetings and functions taking place at the Club.

Emirates Golf Club will be expanding its commitment to take other actions, including paper cups on course at the igloo stations, locker room bag for soiled clothes to be changed to bio degradable option, Golf Course maintenance to use green netting to collect debris, no plastic bags, reducing plastic use in Food and Beverage take away boxes by three quarters, as well as Jones the Grocer at Emirates Golf Club to only sell glass bottles.

## Abu Dhabi Sustainability Week to address global sustainability challenges



Under the theme of 'Industry Convergence: Accelerating Sustainable Development', ADSW 2019 will explore how industries are responding to the digital transformation underway in the global economy, which in turn is giving rise to new opportunities to address global sustainability challenges.

**A**bu Dhabi Sustainability Week, which will be held under the patronage of His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, from 12th -19th January 2019, will witness significant growth in the number of participating countries and visitors, by a rate exceeding 250 per cent over the past 10 years.

The event's participation rate increased annually since its launch in 2008 until it became a major annual eight-day event.

Held under the theme 'Industry Convergence: Accelerating Sustainable Development', the week will promote eight key pillars that explore how industries are responding to the digital transformation underway in the global economy, which in turn is giving rise to new opportunities to address global sustainability challenges.

The activities will begin with the general assembly meeting of the International Renewable Energy Agency, IRENA, which will be attended by presidents of countries, ministers, high-level

figures from member countries, and monitoring organisations from around the world.

The two-day Atlantic Council Global Energy Forum will also take place, which is the first gathering of governments and leaders of relevant sectors, who will draft this year's world energy agenda to respond to the latest developments in the energy sector.

The opening ceremony will be held on 14th January at the Abu Dhabi National Exhibition Centre, ADNEC, and will be attended by



The opening ceremony will be held on 14th January at the Abu Dhabi National Exhibition Centre, ADNEC, and will be attended by over 4,000 guests.

over 4,000 guests. The inaugural ceremony will include the Zayed Sustainability Prize.

The event will witness - for the first time - the 'Future Summit', which will join policymakers, heads of sectors, academics and innovators to discuss how to create a sustainable future. It will also host the 'Abu Dhabi Sustainable Finance Forum', which is the first event of its kind in Abu Dhabi.

The event will also host the World Future Energy Summit, which will include specialist companies

that will present their latest technologies. It will also involve speakers and experts in the areas of energy, water, transport and green buildings, and will include an exhibition that will feature the participation of over 850 companies from 40 countries.

There will be a 'Women in Sustainability, Environment and Renewable Energy Forum' (WiSER), which will aim to inspire and empower women and enable them to play an effective role in facing global sustainability challenges. The week will witness the launch of many important

initiatives, including Reinforcing Awareness Through Art, which is a unique art exhibition that will showcase local and international artworks inspired by the United Nations Development Goals.



Opinion

44 c r e a t i n g g r e e n c o m m u n i t i e s

## Creating new value to renewable energy innovation hubs



With more than \$1 trillion having been invested in renewable energy around the world since 2013, and the sector now outpacing investment in fossil fuel generation for the past five years, **Hussain Al Mahmoudi, CEO of Sharjah Research Technology and Innovation (SRTI) Park**, talks about the growing trend to develop renewable energy schemes in the oil-producing heartland of the Middle East.

**R**ealizing the urgency to reduce pollution and carbon dioxide emissions caused by human activities, the historic Paris Agreement on Climate Change in 2015 which was signed by 195 countries, paved the way for stronger initiatives aimed at supporting the development of renewable energy (RE) as a means of helping curb environmental impact. However, the business case for renewable energy has

already been established over the last few decades that led to major technology breakthroughs and increased commercialization, particularly in the solar and wind energy market.

Production of solar panels have become highly competitive which has given new economic opportunity to many communities around the world that previously had no access to electricity.

With continuously increasing demand for energy, the global market for renewable energy has been expanding more than ever and businesses are positive that these technologies will be the new energy of the future. Bloomberg's New Energy Outlook 2018 revealed that wind and solar energy markets will surge up to 50 per cent of world generation by 2050 and the cost of solar technologies such as batteries



Dropping costs have made the business case for renewables increasingly bright.

and solar cells are predicted to go cheaper, as low as 71 per cent.

Oil-producing countries in the Middle East are also convinced about the future of the renewable sector, with huge investments made by some GCC governments such as the UAE and Saudi Arabia in solar energy. For example, the UAE is home to the world's largest single-site solar park and more investments are underway within the sector. The International Renewable Energy Agency (IRENA) based in Abu Dhabi underscored in a 2016 report the many benefits GCC countries can gain from

scaling renewable energy use such as reducing water usage by 11 trillion litres, saving 400 billion barrels of oil, cutting down the region's per capita carbon footprint by 8 per cent, and creating at least 2,000 direct jobs, if they will achieve their targets by 2030.

Many cleantech hubs aimed at enhancing renewable energy technologies through research have emerged worldwide with innovation communities burgeoning in Europe, US, Australia, Singapore, China, and India. Middle East nations such

as UAE and Saudi Arabia are also stepping up their efforts to capitalize on the opportunity and optimize resources, increasing their investments in research and development (R&D) and building innovation hubs that provide the ideal approach to developing RE technologies.

The Sharjah Research Technology and Innovation Park (Sharjah RTI Park), an initiative of American University of Sharjah Enterprises (AUSE), seeks to add value to the innovation field by creating an ecosystem which integrates a host of futuristic



developments, which include renewable energy, digitization, water technology, environmental solutions, production design and architecture, and transport and logistics.

Developing renewable energy technologies is an important component of Sharjah RTI Park as it seeks to push the UAE's sustainability agenda and contribute to the achievement of the United Nations Sustainable Development Goals (SDGs). The Park is being positioned to significantly contribute to a smart energy infrastructure that integrate advanced information technologies, that could also enhance the developments in other sectors such as water, land and soil, among others.

It provides an open hub that allows for conversation and exchange of knowledge among stakeholders. This approach paves the way for concerned sectors to take advantage of existing resources within an ecosystem to bring about sustainable solutions for all.

As renewable energy moves to the mainstream, its competitiveness and availability to a wide range of industry and community would vary according to their needs. Such developments require a robust engagement from key players in society, including government, business enterprises and academe.

With the region's governments keen to move towards cleaner

renewable energy sources such as wind and solar to achieve social, economic and environmental development, Sharjah RTI Park is geared up to become an effective and leading innovation hub that strengthens the role of other segments of society, particularly the young generation and the thriving entrepreneurial culture across the region.





f o r a b e t t e r t o m o r r o w

## Pearl of Sharjah Project in Sir Bu Nair Island launched

Sharjah's Environment and Protected Areas Authority, EPAA, Emirates Nature-WWF, and the Emirates Marine Environmental Group, EMEG, have launched the Pearl of Sharjah project on Sir Bu Nair Island, a three-year project aimed at preserving the island's marine ecosystems, a natural biodiversity reserve to raise awareness about the environmental, cultural and heritage of the island.

Regarding the project, Hana Saif Al Suwaidi, EPAA Chairperson, said, "H.H. Dr. Sheikh Sultan bin Mohammed Al Qasimi, Supreme Council Member and Ruler of Sharjah, declared Sir Bu Nair Island a protected nature reserve in 2000. Formerly a haven for

pearl divers and fishermen, this island is of ecological, historical, cultural and political significance.

"The goal is to use Sir Bu Nair Island as a model for the management of the UAE's Marine Protected Areas (MPAs). We also plan to emphasise the socio-economic and ecological benefits of conserving marine environments. This project will benefit the environment, society and future generations of Emiratis," said Mrs. Al Suwaidi.

At the launch, the public uploaded images to Instagram using the hashtag #pearlofsharjah. One of the participants won 2 tickets to Sir Bu Nair Festival to witness the natural legacy of the Pearl of Sharjah.

Laila Mostafa Abdullatif, Director General of Emirates Nature-WWF, who was present on the day of the event, said, "Our research in the field will commence in early 2019 with exploration and surveying of critical marine species and habitats, including sharks, rays, fish, birds and corals.

"Our aim is that our efforts on Sir Bu Nair will be showcased as a national blueprint for Marine Protected Area Management in the UAE," she added.

Recognised as a Wetland of International Importance under the Ramsar Convention, SBN Island has rich and diverse habitats and species, including turtles, birds and coral reefs.

Partnership

48 c r e a t i n g g r e e n c o m m u n i t i e s

‘Connect with Nature’ to launch at Umm Al Emarat Park



‘Connect with Nature’ is an interactive new environmental education and awareness programme geared at inspiring and encouraging youth in the UAE to explore the country’s natural heritage.

The Environment Agency - Abu Dhabi (EAD), Emirates Nature-WWF and the International Fund for Houbara Conservation (IFHC) have officially announced their partnership on ‘Connect with Nature’ – an interactive new environmental education and awareness programme geared at inspiring and encouraging youth in the UAE to explore the country’s natural heritage.

The agreement was signed on 20th December 2018 by Dr. Shaikha Salem Al Dhaheri - Acting Secretary-General of EAD; Laila Mostafa Abdullatif, Director-

General at Emirates Nature-WWF; and Mohammed Saleh Al Baidani, Director-General of IFHC. Connect with Nature will be rolled out at a federal level starting 12 January 2019, with the ultimate goal of equipping young Emiratis with the particular experiences, knowledge and skills that will enable them to become the next generation of changemakers and environmental leaders.

Connect with Nature has built three distinct pillars to pave the way for positive behavioural change: Explore, where youth can unlock the mysteries of the

natural world through experiences in nature, both on and off-line across 30 select locations in the UAE, including Al Wathba Wetland Reserve, Saadiyat Marine National Park and Al Qudra Lake; Empower, where they can increase their knowledge of the environment through advanced learning opportunities; and Engage, where informed, confident youth are provided opportunities to inspire action and change and become future leaders.

“The UAE is one of the most unique and diverse natural



THE UAE has one of the most unique and diverse natural geographies in the world, characterised by its distinct desert environment and native wildlife.

geographies in the world, characterised by its distinct desert environment and native wildlife,” said Dr. Shaikha Al Dhaheri.

“Connect with Nature will prompt more young people to discover our nation’s hidden treasures off the beaten track, as well motivate them to contribute towards proactive efforts in the protection and preservation of our environment. The programme will also build on our collective efforts to instil a profound respect for the environment among the younger generations, who will ultimately

be responsible for driving the sustainable growth of our nation, and beyond,” she said.

Commenting on the partnership, the Director-General of Emirates Nature-WWF said, “This truly iconic and innovative education initiative aims to bring to life a special journey where youth can discover the magic of nature around them while taking ownership of their conservation efforts.”

The Director-General of IFHC said, “The Houbara is an iconic species to the heritage of the

UAE and conserving it for future generations is IFHC’s overriding objective. By introducing the young people of today to our wondrous natural environment and the beauty it contains, we can inspire the environmental leaders of tomorrow.”

The programme aims to increase environmental awareness among the local youth community aged between 15 and 24 years and build a public movement of change through engagement and outreach activities, while fostering and nurturing a respect and appreciation for nature.

Initiative

50 creating green community

## Drop It Youth campaign encourages UAE youth to fight plastic pollution



[Becoming a Drop It Youth ambassador allows environmentally conscious teenagers to inspire sustainable living practices in their schools, with the unique support and guidance of Goumbook's team of professional environmentalists.](#)

**G**oumbook, the leading social enterprise promoting sustainability and green living in the UAE, has announced the launch of its second annual campaign sponsored this year again by HSBC with the support of the Moral Education Program.

The Drop It Youth campaign is a call to action for all of the youth to come together to combat one of the great environmental challenges of our time.

It is also a great motivation for the youth to be engaged in the fight against plastic pollution.

Julia Grifferty, Drop It Youth lead Ambassador, was month at the Oceans Conference in Bali in November 2018 to represent the DIY campaign and to show how youth in the Middle East are active and making a difference in the fight against plastic pollution.

“Our health is at stake” said Tatiana Antonelli, MD and Founder of Goumbook. “Tests show billions of people globally are drinking water contaminated by plastic particles.”

This year, the campaign will also focus on solutions that have

been achieved. “We are sharing the achievements and solutions achieved around the world with our youth to raise awareness on the plastic pollution at the same time,” said Antonelli.

Becoming a Drop It Youth ambassador allows environmentally conscious teenagers to inspire sustainable living practices in their schools, with the unique support and guidance of Goumbook's team of professional environmentalists, and their supporting partners at UN Global Compact, Moral Education, KHDA, EAD, Eco-



e s f o r a b e t t e r t o m o r r o w

THROUGH DROP it Youth, Goumbook aims to empower young individuals from 11 to 22 to campaign against single-use plastic pollution in their class, year group, school or larger community.

schools and Eedama. Students are invited to submit a 1-min video application through [dropityouth@goumbook.com](mailto:dropityouth@goumbook.com).

These applications will be reviewed by a jury of education and sustainability specialists, who will select the most inspiring candidates.

Upon their confirmation as ambassadors, Goumbook will supply them with a plethora of awareness tools. These will allow participating youth to become environmental advocates, aiming to reduce waste in their

community, and fight plastic pollution that is currently harming desert wildlife and marine species all over the world.

By requesting people around them to take online pledges on the Drop It Youth website, young ambassadors will be able to take stock of their immediate impact on plastic consumption and associated CO2 emissions.

Pledges are structured in 5 categories and encourage people to take a stand against single use plastic cups, bottles, bags, straws, and to drink filtered tap water in

an attempt to dramatically reduce their waste, carbon and water footprint.

“Tomorrow’s leaders need to be equipped for tomorrow’s challenges, and our duty is to adequately prepare our children for the future they will inherit,” said Tatiana Antonelli Abella, founder and MD of Goumbook.

“As climate change is being felt across the globe and its long-term catastrophic impacts have never been so scientifically clear, environmental education is the key to a better future,” she added.

Conservation

52 c r e a t i n g g r e e n c o m m u n i t i e s

## Al Ain Zoo discusses action plans for conservation of Dama Gazelle



[A workshop was held to formulate action plans over the coming years, to identify and mitigate against expected survival risks of the Dama Gazelle and discuss the successes of the mutually accomplished breeding and rescue programmes.](#)

**A**fter five years of analysis and research, on 12th December 2018, Al Ain Zoo concluded its second roundtable workshop dedicated to conserving the critically endangered Dama Gazelle, in collaboration with the IUCN Species Survival Commission and the Royal Zoological Society of Scotland, with the support of the Sahara Conservation Fund in Chad and the Al Bustan Zoological Centre.

The workshop was organised by Al Ain Zoo in order to discuss the action plans, procedures and objectives for protecting

the Dama Gazelle. After a catastrophic decline in numbers, it has been estimated to around 200 Dama Gazelles remain around the world.

Speaking at the opening of the session, Ghanim Mubarak Al Hajeri, Director-General of the Zoo & Aquarium Public Institution in Al Ain, said, "We seek global leadership in conserving endangered animals in general and Dama Gazelles in particular, which has now become one of the rarest animals in the wild. Since we have remained committed towards conserving nature, we are keen

to be present at the centre of efforts to conserve this species and help it multiply, placing our assets within the scientific and safe field research in this area."

This was followed by a speech by Dr. Thomas Rabeil, Regional Programme Officer for Sahara Conservation Fund in Chad, during which he referred to the history of the decline in numbers of Dama Gazelles in the wild, as well as other endangered animals such as addax and the lappet-faced vulture, amongst others. Mark Craig, Director of Life Sciences at Al Ain Zoo, referred to the Zoo's



e s f o r a b e t t e r t o m o r r o w

THE ROUNDTABLE event was attended by a panel of global experts from the Republics of Chad, Niger and Senegal, which are the natural habitat of the surviving Dama Gazelles.

efforts in preserving wildlife in collaboration with its global partners, as well as the specific threats which affect the Dama Gazelle and the expectations of the workshop to help in planning the preservation of the species.

The workshop was held for three days to discuss the key issues for conserving the Dama Gazelle and included discussions, meetings, research and joint work papers. In addition, the experts reviewed the successes achieved over the past five years. They also discussed the expected risks and proposed action plans to keep the red-listed

Dama Gazelle from becoming totally extinct in the wild.

The workshop included a tour of Al Ain Zoo, Al Ain Safari and the Sheikh Zayed Desert Learning Centre.

The roundtable event was attended by a panel of global experts from the Republics of Chad, Niger and Senegal, which are the natural habitat of the surviving Dama Gazelles. This is considered a qualitative shift in Dama Gazelle conservation because these countries have witnessed both negative and

positive experiences that will be useful in future experiments. They will also help to identify the best areas to release the Dama Gazelles and ensure a safe environment within these areas.

There are currently more than 100 Dama Gazelles at Al Ain Zoo, who are making great efforts to grow their numbers and release them to ensure the continuity of these species. In addition, Al Ain Zoo supports the Sahara Conservation Fund in Chad in conducting research aimed at studying the conditions of Dama Gazelles in their natural habitat, monitor



their numbers and protect them against other possible threats.

### **Arabian Oryx Housing and Husbandry Guidelines launched**

The General Secretariat for the Conservation of the Arabian Oryx (GSCAO) has launched the first-ever Arabian Oryx Housing and Husbandry Guidelines that compiles best practices in managing and breeding the species, as well as the minimum requirements for their housing, nutrition, capture and transportation, at the conference.

Sponsored by the Environment Agency - Abu Dhabi (EAD), the Guidelines were developed based on field experience in managing

Arabian Oryx collections in the UAE. Conservation managers, veterinarians, and zoologists working in the UAE and abroad, in partnership with Marwell Wildlife, Al Bustan Zoological Centre and Al Ain Zoo, all contributed to the guide – available in both English and Arabic on the GSCAO website.

The Committee meeting was organised by the GSCAO and attended by senior representatives from the Arabian Oryx range states: the UAE, Bahrain, Iraq, Jordan, Kuwait, Oman, Saudi Arabia, Syria and Yemen.

Founded in January 2000, the GSCAO serves as a regional platform to coordinate and

facilitate efforts around the conservation of the Arabian Oryx in captivity and in the wild, with the long-term objective of supporting the establishment of viable populations throughout the range states.

Since its establishment, the Secretariat has regularly organised training workshops in the areas of record keeping and genetic management of the Arabian Oryx. It has also supported the development of a regional conservation strategy and rolled out three editions of the regional disease survey of the Arabian Oryx, which has helped collection managers to share information and best practice in the species' veterinary management.



## Al Hefaiyah Mountain Conservation Centre celebrates International Mountain Day

**O**n the occasion of International Mountain Day, the Environment and Protected Areas Authority, EPAA, organised a special event on 13th December 2018 at the Al Hefaiyah Mountain Conservation Centre, raising the International Mountain Day banner on the mountains of Al Ghail.

The event was aimed at mountain climbers from Fujairah Adventure Centre and residents of the area. Fujairah Adventure Centre, Sharjah Natural History and Botanical Museum and the EPAA's branch in Khorfakkan took part in the event.

The United Nations General Assembly chose 11th December as the date for

International Mountain Day after adopting Chapter 13 of Agenda 21 - 'Managing Fragile Ecosystems: Sustainable Mountain Development' - at the United Nations Conference on Environment and Development in 1992. Celebrations of International Mountain Day began in 2003.

Dalal Al Yamahi, Director of Kalba Branch in EPAA, explained that the event reflects the EPAA's interest in raising public awareness about International Mountain Day. Although mountains around the globe are very diverse, they provide fresh water to nearly half of the world's population and play a significant role in influencing climates and regional and global weather

conditions. As mountains are high-risk environments and natural disasters can threaten life in and near mountainous regions, mountains merit attention and protection.

She added, "This event aims to raise awareness about the importance of mountains while highlighting the opportunities and challenges of mountain development and encouraging mountaineering and exploration. The government is keen to protect and preserve mountain environments."

The organisations offered different activities as part of the celebration and distributed leaflets on mountain conservation.

Motoring

56 c r e a t i n g g r e e n c o m m u n i t i e s

Role of hydrogen as a clean alternative energy in the automotive industry highlighted



[Al-Futtaim Toyota showcased Zero-emission Fuel Cell Electric Vehicles technology to a new crowd of technology influencers; continues to work with the UAE government to establish a network of hydrogen stations.](#)

A crowd of technology writers and influencers were treated to a tech presentation on Fuel Cell Electric Vehicles (FCEV) by Al-Futtaim Toyota, leader in sustainable mobility in the UAE since 2008, to explain all the environmental advantages of the zero-emission technology.

The presentation was followed by test driving the FCEV Toyota Mirai and a field trip to the first Hydrogen station at Al Badia, Dubai Festival City, where guests experienced the 3-minute Hydrogen tank filling.

This came on the heel of a business trip to Japan, where a number of Government officials were invited to learn about the Japanese Government's initiatives to support the creation of a low-emission hydrogen-based society, in collaboration with Toyota.

This followed private local showcases of the technology to over 40 high ranking government officials over the past two years, to demonstrate the vehicle's performance and the environment-friendly potentials of hydrogen as an alternative fuel in the UAE.

Unlike battery-powered electric vehicles, the four-door mid-size electric sedan with performance that fully competes with traditional internal combustion engines, Toyota Mirai, is not recharged by plugging it into an electricity grid but creates electricity using hydrogen, enabling the car to run up to 500km+, while emitting only water vapour.

Globally, Toyota's electrified vehicle strategy centers on a significant acceleration in the development and launch plans of various electrified powertrains



globally, TOYOTA TO SELL 5 MILLION ELECTRIFIED VEHICLES including more than 1 million zero-emission vehicles (BEVs, FCEVs) globally by 2030.

such as hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs), and fuel cell electric vehicles (FCEVs).

Toyota aims to sell more than 5 million electrified vehicles, including more than 1 million zero-emission vehicles (BEVs, FCEVs) by 2030.

For Fuel Cell Electric Vehicles, in addition to the Mirai introduced in 2014, Toyota Motor Corporation will expand its FCEV lineup by introducing SUVs, as well as buses and trucks and will also roll out

the FCEV technology to other industries, in contribution to a low-emission hydrogen-based society.

Addressing the attending tech experts, Saud Abbasi, Managing Director of Al-Futtaim Toyota said: "Al-Futtaim Toyota pioneered sustainable motoring in 2008, through Hybrid Electric Vehicle solutions which have so far saved the environment over 7,000 tons of CO2 through the taxi fleets of Camry Hybrid Electric.

"As a leader in sustainable

mobility in the UAE, we have a responsibility to lead the charge for greener motoring and cleaner air as a consequence.

"In our next chapter, and in line with the UAE Vision 2021, we believe that Mirai or any other FCEV in the future, once adopted on a large national scale, can actively help the UAE in its march towards a serious climate action thanks to the many practical benefits it presents, such as zero pollutants, zero behavioural change, long mileage and minimal hydrogen filling time of 3 to 5 minutes."



## Tadweer recycles 7,000 tonnes of used tires in eight months

**A**bu Dhabi Waste Management Centre, Tadweer, has announced that its Gulf Rubber Factory recycled 6,954.33 tonnes of used tires in the first eight months of 2018, averaging 28 tonnes per day.

Set up in 2011 as a public-private joint venture, the facility utilises cutting-edge tire recycling technologies from leading European companies to produce different sizes of rubber granules from recycled tires in an economically sustainable and eco-friendly process called crumbing.

Used tires undergo mechanical shredding through multiple cutting and purification rounds

to remove any traces of steel or fiber. The recycled granules are then converted into a high-quality rubber compound for use as an alternative to natural rubber as well as in molding and manufacturing value-added rubber products, such as rubber flooring for sports grounds and children's playgrounds. The granules are non-toxic, weather-proof and impact-resistant, significantly minimising injuries to players and enhancing the durability of the flooring.

Dr. Salem Al Kaabi, Tadweer Acting General Manager, said, "Tadweer established Gulf Rubber Factory in partnership with the private sector as part of its strategic plan to recycle diverse types of waste and

utilise them as raw materials in a variety of industries in line with the highest international standards, where the factory implements ISO18001, ISO14001, ISO9001 and ISO18001 quality systems.

"The facility ensures the safe disposal of used and damaged tires in the emirate, eliminating the need for methods such as burning or landfilling that have severe environmental and public health consequences.

"In addition, the factory saves millions of dirhams in raw material costs, demonstrating the economic benefits of leveraging recycled waste as an important enabler of modern industries," Al Kaabi explained.



## 'Saline water an environmental necessity to overcome desertification'

The Abu Dhabi Farmers' Service Centre, ADFSC, and the International Centre for Biosaline Agriculture, ICBA, have agreed to promote cooperation on projects aimed at improving the productivity of palm trees, vegetables and fodder crops being grown in highly saline soils, and to study water requirements for those salt-tolerant plants.

The two entities have signed a Memorandum of Understanding, MoU, to improve the efficiency of water resources using remote sensing technologies to monitor crop evapotranspiration. It also includes using sensors to track the outbreak of plant diseases and pests, and finding solutions to address those problems using mobile Apps, to improve

crop productivity, and achieve sustainable environmental and agricultural development.

Nasser Mohammed Al Junaibi, the ADFSC Acting CEO, said, "ICBA is one of the world's leading institutes in terms of biosaline agriculture and using saline water in irrigation. The move reflects our commitment to provide all types of technical and scientific support to farmers to achieve a sustainable agricultural policy by exploiting the available natural resources of soil and water."

He added that the need to develop means to optimise the use of water resources has become a global trend due to water scarcity. The search for ways to make use of saline

water is an environmental necessity that helps to overcome desertification and contributes to increasing agricultural crops' productivity, which supports food security.

Dr. Ismahane Elouafi, Director-General of ICBA, said, "Throughout its 19 years of operations in the UAE, the ICBA has had several research and development projects with the agriculture and water sectors, mainly in Abu Dhabi, which has the highest number of farmers. The ICBA's research is behind several policies in Abu Dhabi, aimed at reducing water usage in agriculture, such as the ban of Rhodes grass in 2010, a thirsty forage that was inappropriate for the environment."

Report

60 c r e a t i n g g r e e n c o m m u n i t i e s

## Abu Dhabi's first comprehensive Air Emission Maps to help support targeted mitigation measures



Energy, road transport and industrial sectors are the biggest contributors to air pollution in the Emirate, reveals new Air Emissions Inventory.

**T**he Environment Agency - Abu Dhabi (EAD), the largest environmental regulator in the Middle East, has released the results of the Abu Dhabi Air Emissions Inventory. The findings have produced over 50 high-definition sector- and pollutant-specific Air Emission Maps that identify the location and intensity of each man-made emission source in Abu Dhabi for the very first time.

This information is key to quantifying the exposure of residents and natural ecosystems to air pollution in the Emirate in

order to mitigate and manage harmful emissions effectively.

The Abu Dhabi Air Emissions Inventory was produced by EAD in close collaboration with over 90 local industrial entities and government bodies, including the Ministry of Climate Change and Environment, Statistics Centre - Abu Dhabi, Department of Transport, Department of Economic Development, Department of Urban Planning and Municipalities, Department of Energy, ADNOC and Abu Dhabi Ports. Contributions and sector-specific industry insights

from these public and private stakeholders form the basis of this report, while also encouraging future updates to the Inventory.

The report is the first comprehensive air emissions geodatabase for Abu Dhabi that will also set the foundation for air quality modelling, establish a baseline for future planning and help set reduction targets. It covers all the major sources of man-made emissions, including electricity generation, water desalination, oil and gas, road transport, industry, shipping, aviation, agriculture, livestock



THE ABU DHABI Air Emissions Inventory represents a major effort in EAD's comprehensive programme for air quality management.

and emissions found at petrol stations. The study has analysed the levels and sources of sulphur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and non-methane volatile organic compounds (NMVOCs) emitted in the Emirate.

Results show that the oil and gas, road transport and industrial sectors are the biggest contributors to air emissions in Abu Dhabi, but with varying intensities across the Emirate – this demonstrates the complexity of air emissions and the need for

a cross-sectoral management approach. Emissions of NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> were highest at areas with heavy road traffic and at industrial sites such as Musaffah Industrial Area and the Khalifa Industrial Zone (KIZAD). The largest amount of SO<sub>2</sub> and NMVOC emissions are located in areas of offshore and onshore oil and gas activity, including Al Dhafra, and near the ports.

“Air pollution is one of the main threats to public health, and as such requires coordinated cross-sector collaboration in order to mitigate the impacts

of man-made emissions that impact air quality in Abu Dhabi, as well as to achieve the air quality national target - 90 per cent - by 2021,” said Engr. Shaikha Al Hosani, Executive Director of the Environmental Quality Sector at EAD. “The results of this Air Emissions Inventory have laid solid groundwork for us to pursue targeted mitigation measures in cooperation with our public and private sector partners, which in turn will improve the environment and the lives of people living in Abu Dhabi’s rural and urban areas.”

The results of the Abu Dhabi Air



Emissions Inventory will support evidence-based policy and decision-making at both local and federal government levels, in order to facilitate cross-sector air quality management in Abu Dhabi - in line with UAE Vision 2021 and the Abu Dhabi Plan.

It will help evaluate and assess strategies currently in place to curb man-made air emissions and help municipalities in zoning and urban planning. It will also promote cost-effective initiatives to improve efficiencies and reduce emissions by updating the environmental database for industrial emissions. The Inventory will provide facilities with both information and skills to develop their own specific

emissions databases and better track their processes and emission reductions.

**Dubai crowned as the 'Champion City' for District Cooling Solutions**

The 8th edition of the International District Energy Association (IDEA) District Cooling Conference and Tradeshow 2018 ended on 11th December 2018 with a high note as Dubai was crowned as the 'Champion City' of the district cooling sector globally, showcasing a cooling capacity of nearly 2 million refrigerator tons. In addition, Ahmad Bin Shafar, CEO of Empower was named as 2018 IDEA Global leader.

Ahmad Bin Shafar, CEO of

Empower, said: "District cooling is recognized as a proven and key climate solution for cities, and we are pleased that the conference this year has been a strategic learning opportunity for industry experts to acquire global expertise, innovation and solutions. The conference has brought to focus several methods for increasing efficiency and reducing carbon emissions and has also illuminated Dubai's strength in the district cooling sector."

The conference also focused on the importance of cooling towers and also brought to light energy budgets and operational efficiency through automation and machine learning in district cooling.



## Ministry of Climate Change urges fishermen to avoid wrong fishing practices

**D**r. Thani bin Ahmed Al Zeyoudi, Minister of Climate Change and Environment, has met with fishermen from Umm Al Qaiwain and urged them to avoid unsustainable fishing practices and techniques, which apart from depleting fish stocks in the country's waters, damages marine biodiversity and creates a negative image of the UAE regionally and globally.

The move is part of the ministry's aim to promote sustainable fishing practices in the UAE.

This meeting came during Dr. Thani's tour around Umm Al Qaiwain to check the latest developments in the construction of the new port for fishing boats

in the emirate. After the tour, he met with a delegation from the Umm Al Qaiwain Cooperative Society for Fishermen which represents around 391 fishermen in the emirate.

The Minister discussed with the delegation the latest developments in the fishing sector, and the Ministry's efforts to support it. He emphasised the importance of preserving the fish stock in the UAE and outlined the initiatives being taken to ensure its sustainability, including rehabilitation of natural habitats as well as creation of artificial habitats to promote this goal.

He also affirmed the necessity of increasing the cooperative society's efforts to raise

awareness among fishermen with wrong practices that harm the sector and deplete the fish stock in the UAE waters.

He pointed out that only with education and awareness - such incidents as the one that had led to the death of a large number of fishes in the waters of the emirate - can be avoided.

His Highness Sheikh Saud bin Rashid Al Mu'alla, Supreme Council Member and Ruler of Umm Al Qaiwain, met the Minister and discussed the ministry's plans and strategies in promoting environmental projects in the emirate, including the integrated waste management strategy to operate the proposed landfill project.

## Regulatory landscape for single-use plastics shows widespread momentum with mixed results



[While China remains the largest worldwide generator of plastic packaging waste, the USA is the largest generator of plastic packaging waste on a per-capita basis, followed by Japan and the European Union.](#)

**A** groundbreaking report from the United Nations Environment Programme and the World Resources Institute, released on 6th December 2018, offers new insight on the global movement to curb single-use plastics. Through a first of its kind accounting, the report provides an overview of policy instruments and progress from countries regulating the manufacture, sale, use and disposal of single-use plastics. The assessment reveals widespread momentum for policy action, with often disparate environmental impacts.

Legal Limits on Single-Use Plastics and Microplastics was developed with support from the French government after a year in which single-use plastic pollution rose to the top of the global environmental agenda. Authors based their findings on a review of national legally-binding instruments that include bans and restrictions, taxes and levies, and waste management measures to enhance disposal, encourage reuse and recycling, and promote alternatives to plastic products.

Among the key findings, the report found surging momentum

for plastic bag bans, while other harmful single-use products, such as microbeads remain largely overlooked. 66 percent of countries worldwide have adopted some form of legislation to regulate plastic bags, while only eight out of 192 countries assessed have established bans of microbeads through national laws or regulations.

“Having one planet means that we must do all it takes to safeguard future generations. Countries must now do more to develop and implement legislation against harmful single-use



# The Lifecycle of Plastics



Plastic bag  
20 years



Coffee cup  
30 years



Plastic straw  
200 years



6-pack plastic rings  
400 years

e s f o r a b e t t e r t o m o r r o w



Plastic water bottle  
450 years



Coffee pod  
500 years



Plastic cup  
450 years



Disposable diaper  
500 years



Plastic toothbrush  
500 years

THE REPORT will inform the deliberations of the fourth UNEA, which will take place from 11 to 15 March 2019.

plastics and microplastics” said Joyce Msuya, Acting Executive Director of UN Environment. “The massive momentum we have built in our global fight against single-use plastic, must now be complimented by policies and actions that lead us in the right direction.”

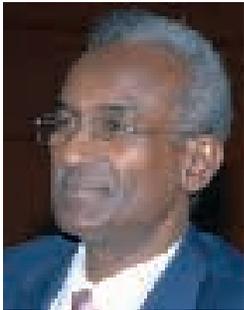
In 2015, plastic packaging waste accounted for 47 percent of the plastic waste generated globally, with half of that appearing to come from Asia. While China remains the largest worldwide generator of plastic packaging waste, the USA is the largest

generator of plastic packaging waste on a per-capita basis, followed by Japan and the European Union. Plastic bags, disposable single use plastic items, and microbeads are three important sources of plastic pollution with plastics being described as the world’s number one consumer item.

“The disastrous effects of plastic litter on beaches, rivers and ocean wildlife show that there are major gaps in the ways plastic is regulated by different countries,” said Celine Salcedo-La Viña, Research Associate,

World Resources Institute, one of the lead authors of the report. “This report suggests more comprehensive regulatory approaches must be explored that will integrate the life-cycle of plastic products: from production to use, and distribution to disposal. Countries must seriously consider alternatives to plastics that are causing at least \$8 billion of damages per year.”

If the growth in plastic production continues at the current rate, by 2050 the plastic industry may account for 20 percent of the world’s total oil consumption.



## **Carbon Trade: “The Polluter Pays”**

Global carbon emissions have reached 35.7 gigatons in 2016. This requires serious legal measures and control actions. One of the most important principles of environmental management to control pollution is the “Polluter Pays Principle” adopted by the Earth Summit 1992 to encourage the use of environment friendly practices and products.

Countries using fossil fuels produce greenhouse gases, but they do not pay for the implications, which include health and environmental costs that directly affect countries with the lowest greenhouse emissions. These high consumption countries must pay for causing such serious impact. The carbon trade, which is an exchange of credits, originated from the Kyoto Protocol (1997), to reduce carbon emissions and mitigate climate change. The target was to reduce overall carbon dioxide emissions to about 5% below the 1990 levels by 2012.

Each country has a maximum limit of carbon emissions beyond which it has to purchase the right to release more carbon dioxide into the atmosphere (carbon credit) from countries that have lower carbon emissions. Companies can also trade polluting rights through a regulatory system known as cap and trade. Companies polluting less can sell their unused polluting rights to companies that pollute more. The goal is to ensure an overall level of emissions below the baseline limit and at the same time provide financial incentives for companies to reduce pollution.

Critics of carbon trade argue that it has insignificant impact on global warming. There is also fear of corruption when big multinational companies get a grip of it and use it for profit rather than for combating global warming. However, it remains an important tool to reduce overall carbon emissions while allowing companies that may have difficulty doing so to have an outlet for transition.

The carbon trade established a voluntary market of about \$100 billion annually and it may become the largest global market soon, protecting the environment, increasing income and encouraging investment in clean technology.

In the carbon market, you can buy permissions that enable countries and companies to meet their due commitments to reduce air pollution. The Paris Accord will replace Kyoto Protocol in regulating the carbon market by 2020 with clear objectives. This provides opportunities for expanding and merging carbon markets and for companies to care more about pricing in action plans and climate related financial commitments. The effectiveness of the carbon market depends on establishing several local markets and facilitating trade among them, in addition to providing political frameworks to coordinate pricing initiatives.

Carbon trade reduces emissions on a wide scale at low cost and 80 countries are planning to use it for the implementation of the Paris Accord which provides a future framework for voluntary compensation of emissions. Financial gains are hopefully going to be used in low or zero carbon projects, in social development, in raising awareness and climate change mitigations.

According to the World Bank, we still need \$700 billion every year until 2030 in order to properly fund the transition to a low carbon economy.

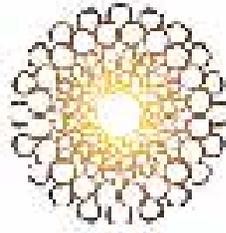
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