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Issue 151

creating green communities for a better tomorrow



HH Sheikh Mohammed bin Rashid  
receives **NASA** administrator

The impressive story of the glorious heritage of the UAE coast





## **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

Two years ago when the UAE announced its ambition of launching a mission to Mars by 2021, and setting up the national space agency, it launched a new era in space exploration as it sought to inspire a new generation of Emirati scientists and engineers.

Apart from marking a turning point in the country's development establishing space technology as a new drive for diversified economic growth, the Mars mission will also enrich Emirati capabilities as well as increasing human knowledge about space exploration and distant planets.

The Arab civilization once played a great role in contributing to human knowledge and the region was the world's centre of learning and produced invaluable contributions to medicine, mathematics and astronomy. Through the UAE's ambitions to launch a scientific voyage of discovery to the red planet by 2021; we are reclaiming that coveted position once again and hope to keep alive the golden age of scientific discovery.

The UAE's space ambitions are still in their infancy, but advancing rapidly. Last month it signed an agreement with NASA to collaborate on a range of aerospace and space exploration projects. Previously, the UAE Space Agency had signed partnerships with the UK's Space Agency and France's CNES. It has also committed resources to Red Planet research and has thus made a bold start in becoming part of the world space community.

By competing with the greatest of nations in the race for knowledge, the UAE is proving beyond doubt that nothing is impossible if you have the vision and the zeal.

The UAE is one of only nine countries with ambitions for Mars and as it builds a new history for our nation, the hopes of the country, region and Arab and Muslim worlds are heavily pinned on it.



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## From the Managing Editor



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

As you all know, the Zayed International Foundation for the Environment will be hosting the eighth annual Global South-South Development Expo from 30th October to 3rd November 2016 on behalf of the Government of the UAE. Preparations are on in full swing as we are gearing up for this mega event that will strategically engage all development actors, including the private sector and civil society, to scale up concrete Southern-grown initiatives to help achieve the goals of the 2030 Agenda for Sustainable Development.

The Zayed Foundation has put in concerted efforts to deliver on its environmental and sustainable development commitment and we are indeed proud to host this global high-profile event which until now had only been hosted by UN entities. As we build it up on a national level, the Zayed Foundation has been working in tandem with the federal government of the UAE and internationally, with the United Nations Office for South South Cooperation.

By addressing eight main themes in relation to sustainable development: poverty eradication, food security, public private partnerships, green technology transfer, economic growth, industrial innovation, green economies, and global health, the Global South South Development Expo exemplifies the UAE Vision 2021 wherein the Government wants to ensure sustainable development while preserving the environment, and to achieve a perfect balance between economic and social development.

The Zayed Foundation has established the groundwork for South-South Cooperation, through its prestigious award which recognizes the efforts made by scientists, institutions, and environmental advocates to promote sustainable development.

South South countries can draw in from the experiences of the UAE as the nation has become a front-runner in the environmental arena on an international level. We look forward to meeting each one of you at the South South Expo as we showcase the success the UAE has achieved in the field of sustainable development.

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Cover Story

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

HH Sheikh  
Mohammed  
receives NASA  
administrator



HH Sheikh Mohammed meets with Charles Bolden of NASA to speak about scientific issues and efforts to harness space technology for peaceful purposes.

**H**is Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, received Charles Bolden, Administrator of the U.S. National Aeronautics and Space Administration (NASA) and members of the delegation accompanying him on 13th June.

The pair spoke about scientific issues and efforts to harness space technology for peaceful and non-politicised purposes to serve all humanity. Sheikh Mohammed welcomed all forms of constructive cooperation between the UAE

Space Agency, the Mohammed bin Rashid Space Centre and other relevant institutions in the UAE, on the one hand, and NASA on the other, to serve science, scientists, common interests and all humanity.

He noted that these institutions signed agreements with NASA. These include an agreement to train UAE nationals at NASA and specialised universities, exchange of expertise and knowledge and encourage Emirati scientists' innovation and creativity to enhance the UAE's stature at the forefront of countries involved

in space exploration for purely scientific purposes.

Sheikh Mohammed also highlighted the positive role that private national companies should play in training and supporting the Emirati youth to contribute towards enhancing the UAE's global stature.

The meeting was attended by H.H. Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai and Chairman of the Dubai Technology and Media Free Zone Authority; Reem bint Ibrahim Al Hashemi, Minister of State for





The UAE and the US have agreed to work together in the areas of aeronautics research and space exploration.

International Cooperation; Hamad Obaid Al Mansouri, Chairman of Mohammed bin Rashid Space Centre; Khalifa Sulaiman, Director-General of Dubai Protocol and Hospitality; Jasim Mohammed Al Zaabi, member of the board of the UAE Space Agency; Barbara A. Leaf, US Ambassador to the UAE, and Paul Malik, US Consul-General in Dubai.

#### **Visit to MBRSC**

NASA Administrator Charles Bolden visited the Mohammed bin Rashid Space Centre (MBRSC) accompanied by a number of NASA officials and representatives of

the United States Embassy in the UAE and the United States Consulate in Dubai. Bolden and the accompanying delegation met with Yousuf Hamad Al Shaibani, Director General of MBRSC, project managers and a number of officials.

The two parties discussed various issues related to the space sector, as well as the centre's achievements in promoting the cultures of scientific innovation and technical development in Dubai and the UAE, and utilising space science and industry to support economic development in the country.

#### **Cooperation agreement**

The UAE and the US have agreed to work together in the areas of aeronautics research and space exploration. UAE Space Agency Chairman Dr. Khalifa Al Romaithi and NASA Administrator Charles Bolden signed an agreement at a meeting in Abu Dhabi.

The first field of cooperation will be in the exploration of Mars, with a joint group to be set-up to guide discussions on potential projects. The deal also covers collaboration in space science, operational Earth observation, space operations, safety and mission assurance.

## Cover Story

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creating green communities

### The glorious heritage of the UAE coast



The UAE has taken advantage of its location mid-way between Asia and Europe to become a strategic hub for foreign investments and leading international establishments.

The UAE coast stretches for more than 650 km (404 miles) along the southern shore of the Persian Gulf, where most of its major cities are situated, as well as many ports. While most of the coast consists of salt pans that extend far inland, the largest natural harbor is at Dubai where the creek, running through the heart of the city, segregates the emirate into two major districts.

The coasts and waterways of this nation have allowed the UAE to trade and connect with other nations in the region and with the

rest of the world. Trade along its waterways has also contributed to the transmission of diverse influences on its heritage and civilization, leaving a distinct imprint on Emirati cuisine, language, customs and lifestyle.

The history of the UAE spans to nearly 7000 years as proved by the engravings, drawings and archaeological finds collected by the international missions during the period from the early fifties of the last century up to the present day.

Archaeological excavations began in the United Arab Emirates with

the discovery of the tombs of Umm al Nar in Abu Dhabi that had a significant impact in revealing the historical depth of the UAE. The various archaeological finds on this island show the ancient civilizations that flourished in the region for a considerable time, starting from either the Neolithic or Paleolithic Ages (6000 B.C. - 3500 B.C.) up to the end of the Iron Age (1300 B.C. - 300 B.C.).

The first evidence of the Paleolithic Age was the human settlement in the UAE region. Remains of Bedouin communities were found. These communities





Towards the end of the 3rd millennium, global aridity led the Bronze Age communities to reorganize themselves into the Wadi Suq culture.

lived on fishing and plant collecting. There were also many tombs in Jebel Al Buhais in Sharjah and tools and spears heads in Dalma and Marawah islands in Abu Dhabi.

This era was characterized by the emergence of pottery, evidence of which was found in Sharjah, Umm al Quwain, Ras al Khaimah and Abu Dhabi.

Discoveries made at Dalma include stone artefacts and beads in addition to fragments of Ubaid pottery imported from Mesopotamia some seven

thousand years ago. It is believed that settlements along these lands near the sea coast formed the basis of links to the sea trade heritage of the UAE.

Stone Age sites have also been recorded near Al Hamra Island to the south of Ras Al Khaimah, along its coastline. During the Bronze Age, 1300-3200 BC, the UAE was a well-developed trade center and was involved in the regional export of copper and pearls to the Mesopotamian Empire. It imported ivory, crockery and other goods from the regions of Afghanistan, Iran and the Indus Valley.

The island of Umm an Nar remains the most important and interesting focal site of a culture which thrived in the region around 45 centuries ago. During the Umm an Nar Period (2700-2000 BC), people were farmers and traders and they were also engaged in the copper industry.

The extensive presence of tombs and settlements belonging to the Umm an Nar culture in the Eastern region of Abu Dhabi indicates that the region played a major role in communications between the coast and the interior. High groundwater level, good soil and



the need for copper mining in the adjacent Oman had helped the establishment of permanent settlements. The distribution of these settlements in the interior and along the coastal areas led to an interaction within the different communities of the UAE and with the other civilizations of the time such as Mesopotamia and the Indus Valley.

During the late Bronze Age between 2000 and 1000 B.C., the area of the present-day UAE seems to have been extensively settled by people whose lifestyles were affected not only by climate changes but also by the rise and fall of the earliest civilizations. Sites of the period in Al Ain, Ras al Khaimah, Fujairah and Dubai as well as from Tell Abra in Umm

al Quwain indicate that trade relations were maintained with the Mohenjo-Daro and Harappa civilizations in India, and with the Sumerian, Akkadian, Assyrian and Babylonian civilizations in Iraq.

The Bronze Age blended into the Iron Age in the UAE between 1000 and 500 BC, to be followed by a civilization that was influenced by the Hellenistic empires founded by successors to Alexander the Great of Macedonia, who sailed down the Gulf in 324 BC.

By Roman times a new port had emerged on the Arabian Gulf coastline at Ad Door in Umm al Quwain. A cemetery at the site contains as many as 40,000 graves, glass vessels

and oil lamps which indicate a substantial population linked to Syria and other Mediterranean lands. Ad Door had declined by the third century AD, about the time that Arab tribes began to migrate into the UAE. Among new settlements that emerged during this period was one on Abu Dhabi's island of Sir Bani Yas dating to 5th century BC.

Even during this period, the UAE was an "incubator of civilisations" as results of archaeological excavations in the Sir Bani Yas Island unearthed a Christian monastery that was built between the six and seventh century.

Sir Bani Yas Island had an important commercial history



Thanks to its strategic location and since ancient times to the present day, the land of United Arab Emirates formed a connection point and commercial passage linking the three old continents - Asia, Europe and Africa.



as it was on the trade route between Iraq, the Arabian Gulf and then on to India and China. This is the only evidence to date of the presence of Christianity in the area of the UAE in the pre-Islamic period.

The advent of Islam from nearby Saudi Arabia was a peaceful one in which the local population voluntarily converted to the new religion.

It was during the pre-Islamic period that the Gulf coast reached its highest levels, about 80 centimeters above the present coastline. The sabkha salt flats along the present coast line were submerged areas that have emerged as the sea level has fallen during the past 1,500 years.

Artefacts uncovered in the UAE show a long history of human habitation and the area was settled by a number of tribes along both the coast and interior.

In 637 AD, Julfar (today Ras Al Khaimah) was used as a staging post for the conquest of Iran. Over many centuries, Julfar became a wealthy port and pearling center from which dhows traveled throughout the Indian Ocean.

A number of incursions and bloody battles took place along the coast when the Portuguese, invaded the area. Conflicts between the maritime communities of the Trucial Coast and the British led to the sacking of Ras Al Khaimah by British

forces in 1809 and again in 1819, which resulted in the first of a number of British treaties with the Trucial Rulers in 1820. These treaties, including the Treaty of Perpetual Maritime Peace, signed in 1853, led to peace and prosperity along the coast which lasted until the 1930s, when the pearl trade collapsed, leading to significant hardship among the coastal communities.

A British decision, taken in early 1968, to withdraw from its involvement in the Trucial States, led to the decision to found a Federation. This was agreed between two of the most influential Trucial Rulers, Sheikh Zayed bin Sultan Al Nahyan of Abu Dhabi and Sheikh Rashid bin Saeed Al Maktoum of Dubai.



Today, the UAE is a modern, oil exporting country with a highly diversified economy, but there is no denying that even in the increasingly global market place, the UAE continues to attract cultures from across the world as it has entered global supply chains and achieved international economic integration in a relatively short span of time.

Thanks to its strategic location - forming a connection point and commercial passage linking the three old continents of Asia, Europe and Africa, the UAE has been able to develop its business relationships with the civilizations that arose and flourished in those continents. The materials of commerce such as crude copper, spices,

incense, dates and leather had been transferred among those nations and peoples across the sea and land routes. In addition, the availability of oases in UAE helped the boom of land trade routes thus bringing in more prosperity to the region.

Water was a priority and its sources were closely guarded in earlier times. Qasr al Hosn, the fort in Abu Dhabi, was built around the only freshwater source in Abu Dhabi and was designed to control access to this source. Further north, water was found due to runoff from the Al Hajar mountain range, which caused the underlying water table to be closer to the surface, making wells possible. Thus, the cities that we know now began to

be built along the Arabian Gulf.

As recently as the early 1960's Abu Dhabi was made up of a series of villages that relied on fishing and pearling along the coast and farming further inland. Abu Dhabi's economy today is made up in large part by oil exports and this continued revenue has largely fueled the rapid expansion and development of the region.

Today the capital city is known for its cutting edge luxury architecture and design, and has emerged as a global business hub for multinational corporations. Abu Dhabi is also known for its impressive waterfront developments, including man-made island networks and lavish



Ras Al Khaimah has a rich history dating back to the Bronze Age, which makes it one of the few places in the world that has been continuously lived in for over 7,000 years.



architectural projects.

Between 1973 and 2006 dramatic changes along the coast of the United Arab Emirates followed the development of Dubai, one of the country's seven emirates. To expand the possibilities for beachfront tourist development, Dubai, undertook a massive engineering project to create artificial islands along its Persian Gulf coastline.

Built from sand dredged from the sea floor and protected from erosion by rock breakwaters, the islands were shaped into recognizable forms, including two large palm trees. The architectural marvels rising along the coasts of the UAE have thus

served as a magnet drawing both tourists and the local community to its doors.

With Expo 2020 around the corner, Dubai is also gearing up to attract families with numerous theme parks, safaris and holiday homes in the pipeline. It is expected that between October 2020 and April 2021, the Expo will attract more than 25 million visitors, 70 per cent of which will be from outside the UAE - the largest number of international visitors in Expo history.

Those arriving will no doubt be open to discovering other parts of the country and its many facets both from a cultural and tourism perspective. Leisure visitors will be able to visit

the established world-class museums within the Saadiyat Island Cultural District in Abu Dhabi which will add a cultural dimension to international visitors. By the time the Expo arrives in the UAE, there will be additional luxury resorts on Saadiyat Beach and elsewhere, and more attractions on the entertainment destination of Yas Island, all of which will also heighten Abu Dhabi's appeal.

Thus the impressive coastline of the UAE that saw human settlements thrive along its shores for more than 7,000 years is now continuing to play a mega role in the long-term vision of the nation to ensure sustainable national development and a prosperous future for the UAE.

## Zayed Prize

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

‘Partnerships enable Zayed Foundation to fulfil its role of promoting sustainable development’



Speaking to international media at UNEA-2 in Nairobi, Prof. Dr. Mohammed bin Fahad spoke of the Zayed Foundation's partnerships and collaborations that have enabled it to deliver on its environmental and sustainable development commitment.

Last month, at the second session of the United Nations Environment Assembly (UNEA-2) held at the UNEP headquarters in Nairobi, Kenya, from May 23rd to 27th, the Zayed International Foundation for the Environment garnered a strong online presence as it took its message of sustainable development and environmental awareness to a global platform on social media.

Its emphasis on advancing the environmental cause and bringing it to the attention of both policy makers and the public and its

clarion call for international concerted efforts to tackle global environmental challenges reached the next generation of development practitioners, entrepreneurs, environmentalists, thinkers and leaders through #UNEA2 on Twitter, UNEA2 Voices on YouTube and a host of international television channels.

Prof. Dr. Mohammed Ahmed bin Fahad, Chairman of the Higher Committee of the Zayed Foundation, who was prominently featured on the UNEA website as an environmental leader and participant at the event spoke to

several international media on the Zayed Foundation's partnership activities with UNEP and why the UNEP's mission is of great significance to the world at large.

“The Zayed Foundation has a long-term partnership with UNEP that dates to more than a decade of fruitful association,” said Dr. Bin Fahad. “By partnering with UNEP, the Zayed Foundation has been able to deliver on its environmental commitment to promote sustainable development through various environmental protection initiatives. As early as February 2000, we collaborated





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

Partnerships therefore offer a mechanism to foster joint action and to contribute towards the international environmental agenda.

with UNEP to host the Dubai International Conference on Desertification. Several workshops and seminars were conducted at this conference which issued a declaration named, “the Dubai Declaration on Combating Desertification”, which was later adopted by the Council of Arab Ministers Responsible for the Environment (CAMRE) – Arab League.”

In February 2006, the Zayed Foundation organised the 9th Special Session of the UNEP Governing Council (GCSS)/The Global Ministerial Environment

Forum (GMEF), he added.

“In 2007, we signed an MoU with UNEP at Nairobi to continue this fruitful partnership,” pointed out Dr. Bin Fahad. “In March 2014, during The Partnership for Action on Green Economy (PAGE) conference held in Dubai, the Zayed Foundation and UNEP had released the Arabic Version of Building Inclusive Green Economies, which presented data and success stories on green economy practices based on real-life case studies from two dozen countries engaged in South-South cooperation.”

Most recently on January 29, the Zayed Foundation signed an agreement with UNEP to produce an international textbook on inclusive green economy. “The textbook that will give a holistic overview of green economy and its role in promoting sustainable development. This new initiative also supports the UAE’s national strategy to educate, raise environmental awareness and promote positive environmental behavior among the public meet the environmental objectives and targets of UAE Vision 2021 and the Green Development Strategy,” he said.

## Food Waste

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

‘Our food is  
damaging the  
environment’



According to Dubai Carbon’s awareness campaign, an average person in the UAE generates 5.4kg of waste a day during Ramadan, most of it from food waste.

**F**ood wastage is one of the most critical problems the region faces, especially during Ramadan. The demand for meat during the holy month increases by almost 50%, similar is the fate of other related food items like vegetables, fruits, and dairy products. Sadly, almost one-third of these ends up as waste.

According to Dubai Carbon, the UAE ranks among the top nations for per capita waste generation in the world. Roughly, 38% of the food prepared every day in the emirate is

wasted, which jumps to around 60% during Ramadan. The decomposition process of food waste emits methane gas, which is reportedly 25 times more damaging than CO<sub>2</sub>.

To address the issue of food wastage this Ramadan, Dubai Carbon launched a campaign to educate people on how to reduce their ‘foodprint’. The campaign aims to encourage people to be smart shoppers as well as eco-friendly eaters and reduce their carbon footprint in the process. Dubai Carbon is encouraging all residents and

visitors to share their stories on its social media pages with hashtags #CarbonFOODprint, #kNOWWaste, and #ThinkEatSave. The think tank is also collaborating with hotels and restaurants to collect and data regarding food waste, and discussing ways to reduce its impact on the environment.

“An average person in Europe generates around 1.2kg of waste a day, which is almost double in the UAE with per capita waste generation being 2.7kg per day. However, this doubles to 5.4kg a day during





Food amounts to 40% of the average household bin, whereas there are many options to better manage excess food.

Ramadan, which is the amount of waste we generate to be hospitable to our guests. Clearly this is something that needs to be addressed, and Ramadan seems to be the perfect time for that,” says Ivano Ianelli, the CEO of Dubai Carbon.

Speaking about some of the everyday solutions to reduce waste Ivano Ianelli said that planning meals ahead and using shopping lists to avoid impulse buys can contribute to the reduction of waste. He also advises that sharing leftover

food not only feeds the needy, but also reduces a considerable amount of waste produced.

Food amounts to 40% of the average household bin, whereas there are many options to better manage excess food. A number of tips from Dubai Carbon include “buying loose, which allows you to buy only required quantities; selecting products that do not have an extra layer of packaging and composting food waste. Home composting can potentially divert up to 150 kg of food waste per household

per year from local collection authorities,” he advised.

Food wastage is generated across the different stages of the food value chain, including transportation, either by air, land or sea, as well as packaging. Packaging materials are the first to consume virgin resources that often are only applied for cosmetic purposes. Methane emissions from landfills represent the largest source of GHG emissions from the entire waste sector, contributing around 700 metric tonnes of CO2 equivalent per year.



WED 2016

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

## UAE celebrates World Environment Day

UAE Minister of Climate Change and Environment emphasizes country's commitment to fighting illegal wildlife trade.

**H**is Excellency Dr. Thani Ahmed Alzeyoudi, UAE Minister of Climate Change and Environment, inaugurated the nation's celebrations of the United Nations' World Environment Day 2016, themed 'Go Wild for Life', organized for the sixth consecutive year by the Ministry of Climate Change and Environment in collaboration with Dubai Silicon Oasis Authority.

The World Environment Day 2016 celebrations, held on June 3 and June 4 at the Festival

Square in Dubai Festival City, included the participation of various government entities and private organizations. Among the key highlights of this year's event, were a music parade by Dubai Police, a number of activities and competitions, as well as school children's workshops that focused on the distressing and rapid depletion of planet earth. Concluding the activities, giveaways were handed out to participants and children to encourage them to support the UAE's efforts in protecting the environment, limiting over consumption and

reinforcing environmental awareness.

On the occasion, Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, commended national environmental organisations for their efforts in preserving wildlife and combating all forms of its illegal trade. In a statement released on the occasion of World Environment Day on 5th June, celebrated this year under the theme, "Zero Tolerance for Illegal Wildlife Trade," Al-Zeyoudi emphasized the

05 JUNE

WORLD ENVIRONMENT DAY

"GO WILD FOR LIFE"

#WED2016 #WILDFORLIFE





The UAE has put in place regulations and legal legislations that have strict penalties for those engaging in illegal wildlife trade.

country's commitment, under the leadership of President His Highness Sheikh Khalifa bin Zayed Al Nahyan, to fighting illegal wildlife trade.

That commitment is manifested through contributing to international efforts in this area and backing related international agreements such as the CITES, and the London Declaration on Illegal Wildlife Trade.

"After it had reached unprecedented levels in recent years, illegal wildlife trade has become one of the major

concerns on the international agenda. It is a threat for biodiversity and has contributed to making several species fall under the endangered list. The size of illegal wildlife trade has reached 15 to 20 billion US\$ dollars and, according to UN data, nearly 40% of global national conflicts in the last 60 years are related to natural resources," Dr. Alzeyoudi said.

He explained that the preservation of local wildlife has always been a major concern for the UAE. Several laws and regulations to protect and

develop the indigenous wildlife have been put in place in the UAE since the early 1970s. These included developing the legislative and organizational procedures to protect biodiversity and wildlife, establishing more wildlife sanctuaries and launching programmes for the protection of endangered animals, such as the programmes for releasing falcons, the Houbara bustard and the Arabian oryx.

The efforts, led by the late Sheikh Zayed bin Sultan Al Nahyan to preserve the



endangered Arabian oryx, show the early national interest in preserving and protecting the indigenous wild life.

Dr. Alzeyoudi added, “Our concern regarding the preservation of wildlife has gone beyond our borders. The UAE has led a concerted effort over several years that led to the establishment of several programmes for wildlife protection and such as the Sheikh Zayed programme for the releasing of falcons, Sheikh Mohammed bin Zayed’s programme for the releasing of the Arabian oryx, the Mohamed bin Zayed Species Conservation Fund and the International Fund for Houbara Conservation. These

programmes and funds have contributed to an increase in the number of animals that were deemed endangered and led to their return to their original habitat as well.”

The UAE has put in place regulations and legal legislations that have strict penalties for those engaging in illegal wildlife trade. It has also developed its capability to detect the trade at the borders and the mechanisms to exchange information with the relevant regional and international organisations.

He said that the UAE continues to support international measures and standards that relate to wildlife protection

through adding an amendment to the federal law pertaining to animal protection and the issuing a federal law regarding the ownership of wild animals.

In the end of his statement, Dr. Alzeyoudi said that biodiversity, including that of wildlife, should be considered heritage and hence must be protected. “This protection requires a concerted, organised global effort in addition to building capacities in this area, developing information exchange mechanisms between countries and related organisations and putting in place national and international policies and legislations that increase the penalty of those involved in illegal trade.”





## Paving the way for hybrid transport in the UAE

In line with Ajman Municipality's environmental efforts and the Ministry of Climate Change and Environment's sustainability agenda, Al-Futtaim Motors, exclusive distributor of Toyota in the UAE, has delivered five Toyota Prius Hybrid vehicles to the Ajman Municipality and Planning Department.

The handover was done on 30th May in the presence of HH Sheikh Ammar Bin Humaid Al Nuaimi, Crown Prince of Ajman, HH Sheikh Rashid Bin Humaid Al Nuaimi, Chairman of Ajman Municipality and Planning Department, and His Excellency Dr. Thani Ahmed Alzeyoudi, UAE Minister of Climate Change and Environment. The handover of the Prius vehicles comes hot on the heels of the

latest partnership between both entities, with Al-Futtaim Motors being named the Green Sponsor of the 4th Ajman International Environment Conference, which took place in March this year.

"The Prius is the trendsetter when it comes to environmental transport, staking its claim as the best-selling hybrid in the world. The faith that Ajman Municipality has put in the Toyota Prius to support their sustainability agenda and aid in reaching their environmental goals is a testament to the Prius' renowned capabilities in reducing emissions while decreasing our reliance on fossil fuels," said Yousuf Ali Al Raeesi, General Manager, Government Relations, Health Security, Safety and Environment

at Al-Futtaim Motors. Earlier this year, the Ajman Municipality waived off parking fees for eco-friendly cars within the Emirate.

The five new Prius Hybrid vehicles will be used by the Ajman Municipality and Planning Department for environmental inspections and site visits, including the supervision and follow-up of factories operating within the emirate of Ajman to ensure they conform with Ajman's and the UAE's environmental laws and regulations.

The Toyota Prius was the world's first mass-produced hybrid vehicle when initially launched in 1997, and has since sold over 3.7 million cars around the globe.

## Campaign



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

UAE campaign encourages rational use of water and electricity



### LET'S MAKE THIS SUMMER GREEN

A change in electricity and water consumption habits can change our environment. Let's take action and make Dubai green. Unplug appliances before travelling.

TOGETHER FOR A SUSTAINABLE TOMORROW

DEWA's awareness campaign under the theme 'Let's Make this Summer Green' seeks to promote the rational use of electricity and water during the summer.

To coincide with World Environment Day on June 5, Dubai Electricity and Water Authority, DEWA, launched an awareness campaign under the theme 'Let's make the summer green', via social, as well as other audiovisual media channels to promote the rational use of electricity and water during the summer.

This includes providing tips in relation to peak load hours (12pm-5pm), setting the AC to 24C, tips for when away on summer vacation, fixing water leaks, and installing drip irrigation systems. The

campaign that commenced on June 5 will conclude at the end of August.

Accordingly, DEWA's Conservation Team will organize lectures and field visits to government organizations and departments, private companies, malls, and union centers, to raise awareness in the community about the importance of rational use, as temperatures rise and the holiday season approaches.

DEWA organises activities and workshops in collaboration with the General Authority of Islamic Affairs & Endowment, the Dubai International Holy Quran Award,

KidZania, and the Department of Tourism and Commerce Marketing's Modhesh. This helps children to engage with Hayat and Noor, the characters that represent electricity and water, to encourage their sensible use.

"The Green Summer Campaign is part of our ongoing efforts to establish the foundations of environmental sustainability and support the sustainable development of Dubai by using electricity, water, and natural resources sensibly, to ensure their sustainability for generations to come," said Saeed Mohammed Al

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



Let's Make this Summer Green' seeks to promote the rational use of electricity and water during the summer.

Tayer, MD & CEO of DEWA.

"We urge everyone to adopt a conscious and responsible lifestyle. These efforts contribute to achieving the Dubai Plan 2021, to transform Dubai into a smart city whose environmental elements are clean, healthy and sustainable, as well as the Dubai Clean Energy Strategy 2050, launched by Vice President and Prime Minister and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum, to establish a sustainable model in energy conservation which can be exported to the whole world, and support economic growth without

damaging the environment and natural resources," he said.

"The campaign also supports the Dubai Integrated Energy Strategy 2030 to reduce energy demand by 30 percent by 2030, and DEWA's vision to become a sustainable innovative world class utility," he added.

"DEWA strives to encourage all members of society to adopt rational use as part of daily life. This is achieved by encouraging customers to reduce their electricity consumption. Through the Green Summer Campaign, we

urge everyone to adopt a conscious and responsible lifestyle, and raise awareness about adopting environmentally friendly practices through simple steps," said Amal Koshak, Senior Manager of Marketing Communications at DEWA.

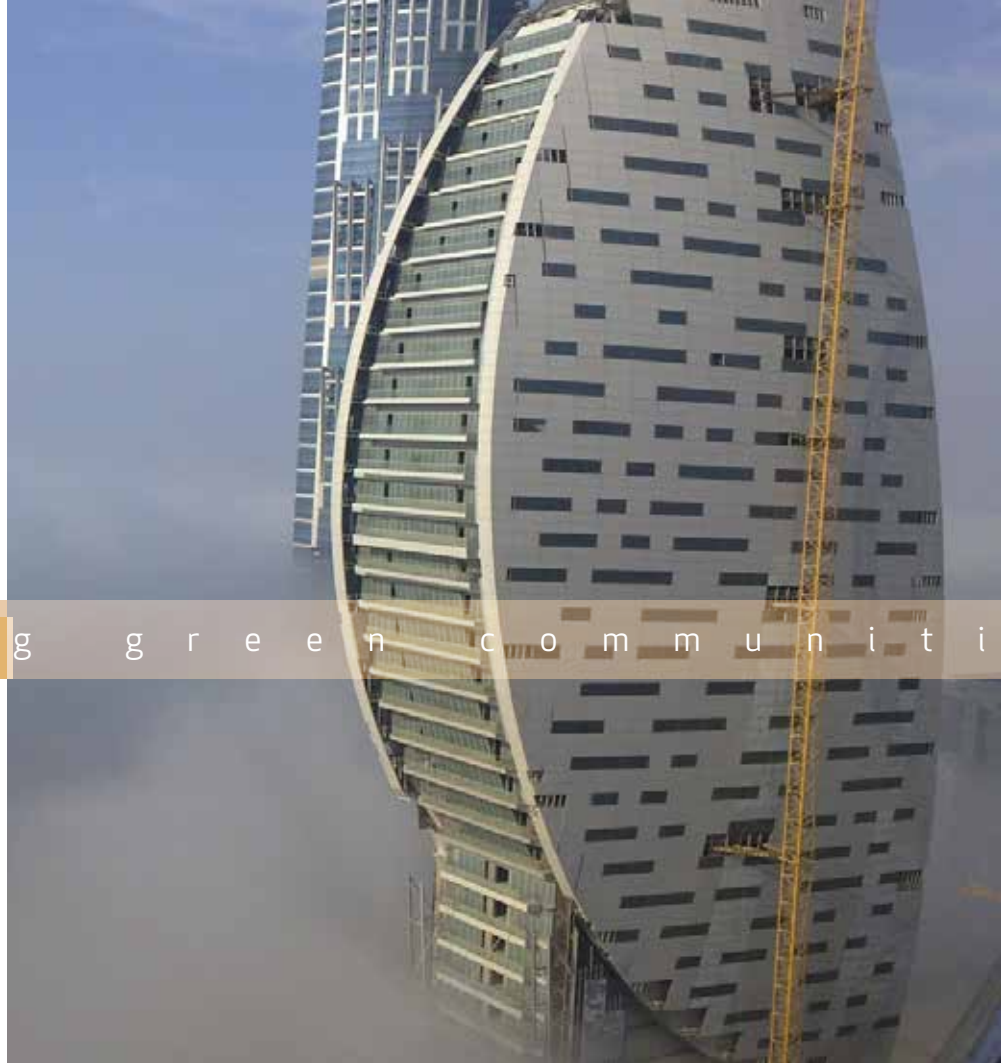
DEWA has managed to reduce water usage over the past seven years through its various campaigns, and managed to save 1,344 gigawatts (GW) of electricity, and 5.6 billion imperial gallons of water, saving AED 841 million, and limiting carbon dioxide emissions by over 715,000 tonnes.



## Sustainability

# 24 creating green communities

### Sustainability experts applaud use of Green Cement in Dubai buildings



Dubai Municipality shares its experience in using green cement in the sustainable concrete industry at the International Concrete Sustainability Conference (ICSC) held in Washington.

**A**t the International Concrete Sustainability Conference (ICSC) held in Washington, US, in May this year, Dubai has shared its experience in using green cement in the sustainable concrete industry with the world.

Dubai Municipality was invited by the US National Ready Mixed Concrete Association (NRMCA) which was founded in 1930, to transfer Dubai's experience in using green cement in the sustainable concrete industry.

The conference was attended by more than 300 specialists in

different concrete techniques from multiple countries such as the US, European countries, China, Japan, and some Arab countries, according to Khalid Mohammed Saleh Al Mulla, Director of Buildings Department at Dubai Municipality.

The Municipality presented its own experience during the conference that also saw the presence of University professors and international experts in the concrete and sustainability field.

Eng. Aida AL Harmoodi, head of Consultants and Contractors

Qualification Section at Buildings Department, added that the Municipality presented its experience in using eco-friendly cement materials in the sustainable concrete industry, and explained its leading role in transforming Dubai into a green city as well as its continuous and sustainable efforts in the improvement, development and innovation fields.

The Municipality stressed, during the conference, that the experience has succeeded thanks to the leaders' directives and support for the leading projects



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

In May, Dubai Municipality took part in the International Concrete Sustainability Conference (ICSC) held in Washington, US, where it presented its own experience.

that go in line with the strategic goals of the Emirate and the United Arab Emirates.

Eng. Aida also addressed the conferees' interest in Dubai's experience, noting that the president of the US National Ready Mixed Concrete Association (NRMCA) and Deputy Director of the conference, Mr. Lionel Lemay, praised Dubai's experience and lauded before the audience the right decision taken by the Dubai Municipality to mandatory apply green cement to all Dubai building projects, which has multiple benefits.

Mr. Lemay also expressed his admiration at the successful implementation of the decision, and hoped it will be applied in the United States of America.

Eng. Ahmad Saeed Al Badwawi, head of Research and Building Material Studies at Buildings Department, noted that the worksheet submitted by the Municipality addressed the environmental disadvantages associated with the use of ordinary cement which is considered as non-eco-friendly since its industry and applications result in the emission of carbon dioxide and other toxic

substances in huge quantities, harming thus the environment, the public health and safety.

He added that the Municipality conducted research in the building and construction field in order to apply the best international practices that go in line with the environment of Dubai, and that it launched a study of alternatives to the ordinary cement that are treated afterwards using eco-friendly concrete materials in the sustainable concrete industry.

In the framework of implementation, Eng. Al Badwawi





said the worksheet focused on highlighting the results and applications on the green cement system, in addition to the legal framework by issuing a circular compelling all buildings' construction workers to use these materials.

The worksheet also clarified the main benefits of using green cement which prolongs the life of buildings by more than 40%, in addition to preserving the environment, health and safety.

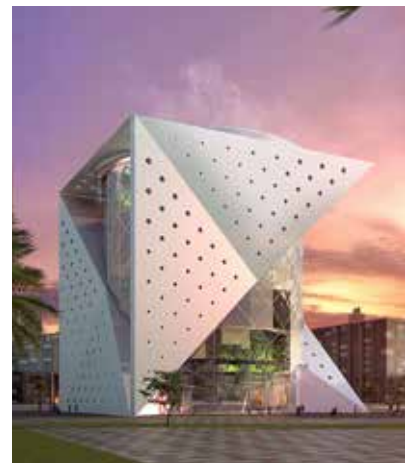
Eng. Fadel Saleh AbuShaban, Specialist in Building Studies at Buildings Department and one of the participants in the conference, pointed out that the worksheet of Dubai Municipality was widely echoed

among the specialists and researchers who attended the conference, especially that Dubai Municipality's experience was actually applied and is not a virtual experience.

Eng. Fadel also said that the participation in such conferences allows the Municipality in particular and all departments in the Emirate of Dubai, to highlight their pioneering projects and benefit from the experiences of others.

The conference presented a number of experiences and the latest developments in modern concrete technology, chief among which were the use of self-compacted concrete technique that contribute to smoothness

in the casting process, saves time and produces a sustainable concrete; the use of iron fibers in the manufacturing of reinforced concrete elements with the aim to reduce the amount of rebar and the use of 3D printing technology in construction.







## Bee'ah and Kalba Municipality sign contract to provide integrated environmental solutions

**B**ee'ah, the environment and waste management company of Sharjah, has signed a contract with Al Kalba Municipality for the provision of waste collection, management and treatment services in the city.

Khaled Al Huraimel, Group CEO of Bee'ah, and Khalfan Abdullah Al Thabahi, Manager of Kalba City Municipality, signed the contract on behalf of their respective organisations in the presence of Dr. Mohammed Abdullah Al Zaabi, Chairman of the Municipal Council in Kalba and several top officials and executives from both sides, at Kalba Municipality's headquarters.

According to the five-year contract, Bee'ah will provide

waste management services for public, residential, commercial and agricultural areas under the municipality's jurisdiction, as well as hauling services to the landfill in Kalba. Bee'ah will be committed to provide a modern fleet and work on increasing public awareness of environmental issues among Kalba's residents, urging them to keep the city clean and beautiful.

Speaking on the occasion, Al Thabahi said, "The contract supports efforts that aim to put the Emirate of Sharjah and the UAE at the forefront of environmental work in the Middle East, in line with the vision of H.H. Dr. Sheikh Sultan bin Mohammed Al Qasimi, Supreme Council Member and Ruler of

Sharjah, which aims to provide a sustainable environment for future generations."

Al Huraimel said, "Kalba Municipality will greatly benefit from our wide experience in providing high quality environmental services, encouraging the environment-friendly practices and promoting the culture of recycling amongst residents, which will pave the way for a sustainable movement."

By signing the contract, Bee'ah is committed to providing the latest and the most integrated environmental solutions and will supply Kalba Municipality with a fleet of cleaning vehicles and machines and sufficient manpower to carry out the agreed works.

## Masdar wins bid to implement third phase of Mohammed bin Rashid Al Maktoum Solar Park



HH Sheikh Mohammed bin Rashid witnesses signing of MoU between DEWA, Masdar on implementation of third phase of Solar Park in Dubai.

**H**is Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, witnessed the signing of a Memorandum of Understanding (MoU) on 26th June between UAE Minister of State and Chairman of Masdar, Abu Dhabi Future Energy Company, Dr. Sultan Ahmed Al Jaber, and Managing Director and CEO of Dubai Electricity and Water Authority (DEWA), Saeed Mohammed Al Tayer, on the implementation of the 800-megawatt (MW) third phase

of the Mohammed bin Rashid Al Maktoum Solar Park.

The MoU signing took place at the Presidential Palace in Abu Dhabi and was attended by H.H. Sheikh Hamdan bin Rashid Al Maktoum, Deputy Ruler of Dubai and UAE Minister of Finance and H.H. Sheikh Mansour bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Presidential Affairs.

The 800MW third phase will be constructed based on the Independent Power Producer (IPP) model. The selected bidder

for the project is a Masdar-led consortium that includes Spanish companies FRV (Fotowatio Renewable Ventures) and Gransolar Group.

Dr. Sultan Ahmed Al Jaber said: "Masdar is proud to have been chosen to develop the third phase of the largest single-site solar park in the world. The significant scale and competitive cost of this project are a clear signal that solar energy is a reliable and commercially viable technology.

"The signing of the MoU illustrates the UAE leadership's





THE PARIS Climate Agreement will govern climate action after 2020 through a flexible framework that allows countries to determine their own measures.

clear commitment to diversifying its energy sources and promoting the widespread adoption of renewable energy by cost-effectively scaling up solar power. It also underlines the UAE's firm belief that all sources of energy are needed to meet the world's growing demand for energy.

"The selection of the Masdar-led consortium to develop the third phase of the Mohammed Bin Rashid Al Maktoum Solar Park in Dubai is a testament to the company's experience and track record over the last decade. It also reinforces Abu Dhabi's and

Masdar's growing contribution to the development of the renewable energy industry, both domestically and internationally."

"Our energy systems are evolving to be smarter and more effective. By using multiple sources of energy such as gas, nuclear and solar, we are efficiently and cost-effectively meeting our varying power needs, from base load to peak demand. This project will achieve this very objective."

The AED 50 billion Mohammed bin Rashid Al Maktoum Solar Park is the largest, single-site solar

park in the world, with a planned capacity of 5,000 megawatts by 2030. Its first phase launched operations in 2013, while the second phase is scheduled to begin next year.

Saeed Mohammed Al Tayer of DEWA said: "In line with the directives of President of the UAE HH Sheikh Khalifa bin Zayed Al Nahyan; Vice President and Prime Minister of the UAE and Ruler of Dubai HH Sheikh Mohammed bin Rashid Al Maktoum; and Crown Prince of Abu Dhabi, Deputy Supreme Commander of the UAE Armed Forces and Chairman





of the Abu Dhabi Executive Council HH Sheikh Mohamed bin Zayed Al Nahyan, we have taken further steps to achieve our goals for solar energy by signing the agreement with the selected bidder led by Masdar for the 800MW third phase of the Mohammed bin Rashid Al Maktoum Solar Park, which will become operational in 2020 to coincide with the World Expo 2020 in Dubai.

“The park supports the goal of UAE Vision 2021 to transform the UAE into one of the greatest countries in the world by 2021. It is the largest single-site solar park in the world, and will produce 5,000MW by 2030 with a total investment of AED 50 billion.

“DEWA has received a globally-competitive price of US\$ 2.99 cents per kilowatt hour (kW/h) for the park’s third phase, which will use photovoltaic technology and will be operational by 2020.

“This is based on the IPP model, thanks to the Masdar-led consortium including the Spanish companies FRV (Fotowatio Renewable Ventures) and Gransolar Group. The importance of the Mohammed bin Rashid Al Maktoum solar park lies in two points: it is the first of its kind in the region, and in its capacity. It is the first of several promising projects to use renewable energy to generate electricity in Dubai,” added Al Tayer.

“Our wise leadership has a

vision to transform the UAE into the most sustainable country in the world by launching a number of clean and renewable energy projects and ensuring the Emirate’s continuous growth, while at the same time protecting its natural resources, and shaping the future of energy in the region as a whole, to achieve sustainable development and promote everyone’s happiness, ensuring a sustainable future for generations to come,” said Al Tayer.

“We strive to implement the Dubai Clean Energy Strategy 2050 to diversify the energy mix so that clean energy will generate 25% of Dubai’s total power output by 2030 and 75%

The Mohammed bin Rashid Al Maktoum Solar Park is the largest single-site solar park in the world with a planned capacity of 5,000MW by 2030 with a total investment of AED 50 billion.



by 2050. This strategy relies on innovation, and research and development (R&D) as the basis for the future of energy.

“Since the announcement of the Mohammed bin Rashid Al Maktoum Solar Park, the project has attracted huge interest from the business and energy sector. DEWA received several offers from international solar energy companies, reflecting the trust and interest from investors in large projects adopted by the Dubai Government.

Encouraged by the favourable existing regulations and legislation in Dubai that permit private sector partnerships in power production projects in the Emirate, the 800MW third phase

of the Mohammed bin Rashid Al Maktoum Solar Park is the first project of its kind in the region with this capacity.”

“We aim to demonstrate to the world our excellence in the public utilities sector, and our focus on discovering renewable and clean energy resources,” concluded Al Tayer.

“The selection of the Masdar consortium to develop phase three of the Mohammed bin Rashid Al Maktoum solar park is a historical achievement for our company as we mark ten years of operations,” said Mohamed Jameel Al Ramahi, CEO of Masdar.

“The Masdar consortium will

devote all of its experience and expertise to realising this world-class project. It is thanks to the technical clarity and transparency provided by DEWA that we have been able to deliver such a highly-competitive bid.”

“Masdar is committed to accelerating the adoption of clean technologies and renewable energy, building on our decade-long experience and supporting the UAE’s strategy to increase the share of clean energy in its energy mix,” Al Ramahi added.

“We stand ready to develop new opportunities in the UAE and elsewhere in the GCC, including new markets such as Saudi Arabia.”

## Recycle

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

### Innovative green solution for spent CFLs launched



Imdaad & Lamps 4 U partner to ensure discarded fluorescent bulbs are collected and recycled to avoid landfill disposal.

Improper disposal of energy-efficient tube lights and bulbs, though safe to use, pose a significant risk to the environment because they can release toxic mercury into the air, soil and water, causing harm to the environment and humans. With compact fluorescent lights (CFLs) as an essential component of everyday living, it is crucial to take effective and stringent measures to ensure that burnt-out lights do not end up in landfills.

With the aim to safely recycle CFLs, Imdaad, a leading provider of integrated facilities, environment

and energy management solutions in the GCC, has signed a strategic partnership with Lamps 4 U, a sustainable solutions and technologies company, to ensure that end of life tubes and bulbs are not thrown in regular waste bins. Imdaad will provide special containers for collection of spent tubes and bulbs and recycle them at a special facility located in Dubai Silicon Oasis.

Mahesh Patel, CEO, Lamps 4 U, said: "CFLs are not only energy-efficient but also completely safe to use; however, disposing them in landfill increases the level

of hazardous toxic metal in the environment. Lamps 4 U has joined forces with Imdaad, a leader in waste management and recycling, to collect CFLs and recycle them in their facility.

"Aside from ensuring that harmful mercury does not enter the environment, their recycling will allow the reuse of glass, metals and other materials used during production. Through this partnership, we aim to collect as many CFLs as possible and at the same time, raise community awareness on the harmful effects of mercury."





Disposing CFLs in landfills increases the level of hazardous toxic metal in the environment.

“The use of CFLs is prevalent in the UAE; however, people are not aware that their disposal in landfills is toxic for the environment and humans. At the same time, there is a need to develop more facilities for the collection and disposal of discarded lights and bulbs.

“To this end, we have collaborated with Lamps 4 U to collect burnt-out CFLs in specially designed boxes and recycle them in a partner facility, contributing to the government’s goal of achieving zero-waste to landfills. Both companies have come together

in this joint effort as they share a common vision of ensuring that our environment remains safe and sustainable for present and future generations,” concluded Jamal Abdullah Lootah, CEO, Imdaad.

The sale of incandescent light bulbs and traditional filament bulbs is banned in the UAE as per the directives of the Emirates Authority for Standardisation and Metrology (ESMA).

While energy-efficient CFLs are currently being used in the country, it is vital to raise awareness about the proper disposal of burnt-out

lights and provide for separate collection bins to diminish harmful effects. It is noteworthy that mercury from one fluorescent bulb can pollute 6,000 gallons of water beyond safe levels of drinking, with just 68 grams enough to contaminate a 20-acre lake forever.



Solar energy could meet up to 13% of global power needs by 2030: IRENA

[Dramatic cost reductions could drive sharp increase in global solar PV capacity, says new report released at InterSolar Europe.](#)

Solar PV accounted for 20 per cent of all new power generation capacity in 2015. It also now represents more than half of all investment in the renewable energy sector.

The share of global electricity generated by solar photovoltaics (PV) could increase from 2 per cent today to as much as 13 per cent by 2030, according to a new report from the International Renewable Energy Agency (IRENA).

Released on 22nd June at InterSolar Europe, the report titled 'Letting in the Light: How Solar Photovoltaics Will Revolutionise the Electricity System' finds the solar industry is poised for massive expansion, driven primarily by cost reductions. It estimates that solar PV capacity

could reach between 1,760 and 2,500 gigawatts (GW) by 2030, up from 227 GW today.

"Recent analysis from IRENA finds that cost reductions for solar and wind will continue into the future, with further declines of up to 59 per cent possible for solar PV in the next 10 years," said IRENA Director-General Adnan Z. Amin.

"This comprehensive overview of the solar industry finds that these cost reductions, in combination with other enabling factors, can create a dramatic expansion of solar power globally. The





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

World electricity demand is expected to grow by more than 50 per cent by 2030, mostly in developing and emerging economies.

renewable energy transition is well underway, with solar playing a central role.”

Focusing on technology, economics, applications, infrastructure, policy and impacts, the report gives an overview of the global solar PV industry and its prospects for the future.

It includes data and statistics on:

**Capacity:** Solar PV is the most widely owned electricity source in the world in terms of number of installations, and its uptake is accelerating. It accounted for

20 per cent of all new power generation capacity in 2015. In the last five years, global installed capacity has grown from 40 GW to 227 GW. By comparison, the entire generation capacity of Africa is 175 GW.

**Costs:** Solar PV regularly costs just 5 to 10 US cents per kilowatt-hour (kWh) in Europe, China, India, South Africa and the United States. In 2015, record low prices were set in the United Arab Emirates (5.84 cents/kWh), Peru (4.8 cents/kWh) and Mexico (4.8 cents/kWh). In May 2016, a solar PV auction in Dubai attracted a bid of 3 cents/kWh.

These record lows indicate a continued trend and potential for further cost reduction.

**Investment:** Solar PV now represents more than half of all investment in the renewable energy sector. In 2015, global investment reached USD 67 billion for rooftop solar PV, USD 92 billion for utility-scale systems, and USD 267 million for off-grid applications.

**Jobs:** The solar PV value chain today employs 2.8 million people in manufacturing, installation and maintenance, the largest number





of any renewable energy.

**Environment:** Solar PV generation has already reduced carbon dioxide (CO<sub>2</sub>) emissions by up to 300 million tonnes per year. This can increase to up to three gigatonnes of CO<sub>2</sub> per year in 2030.

“World electricity demand is expected to grow by more than 50 per cent by 2030, mostly in developing and emerging economies,” said Mr. Amin. “To meet this demand while also realising global development and sustainability goals, governments must implement policies that enable solar to achieve its full potential.”

Reaching a 13 per cent share of

global electricity by 2030 will require average annual capacity additions to more than double for the next 14 years.

The report highlights five recommendations that can help achieve this increase including: updated policies based on the latest innovations; government support of continued research and development activities; creation of a global standards framework; market structure changes; and the adoption of enabling technologies like smart grids and storage.

Letting in the Light is the third solar-focused publication released by IRENA this summer. Earlier last month, IRENA released The Power to Change,

which predicts that average costs for electricity generated by solar and wind technologies could decrease by between 26 and 59 per cent by 2025. Last month, IRENA also released End-of-Life Management: Solar Photovoltaic, which found that the technical potential of materials recovered from retired solar PV panels could exceed USD 15 billion by 2050, presenting a compelling business opportunity.





## Empower saves over 892 MW, 263m gallons of water

**E**mirates Central Cooling Systems Corporation (Empower) has said that it saved 892 megawatts of electricity in 2015 in addition to more than 263 million gallons of water over the past 5 years.

“These results qualify us to be a leader in reducing carbon emissions in the UAE and scoop up many international recognitions and certificates as an environmentally friendly company,” Ahmad bin Shafar, Chief Executive Officer of Empower, said in a press release on 5th June to mark World Environment Day.

Empower, the world’s largest district cooling services provider, renewed its commitment to protect the environmental resources in the UAE in

conjunction with the World Environment Day (WED).

The company said that this commitment stems from Empower’s efforts to implement UAE Vision in adopting best sustainable solutions to save natural resources for future generations.

“Empower’s adherence to United Nation’s standards in protecting the environment is part of the vision of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to prioritize sustainability to save environmental resources for generations to come,” Safar added.

Throughout the past 13 years,

Empower worked in accordance with Dubai plans towards sustainability and green economy through applying the latest technologies and developments in the cooling system.

The company spearheaded many awareness campaigns for its customers to maximise the use of District Cooling technology that provides more than 50 per cent of energy savings compared with conventional cooling systems.

Empower operates more than 1.1 million Refrigeration Tonnes (RT), providing environmentally friendly district cooling services to large-scale real estate developments, such as Jumeirah Group, Business Bay, JBR, DIFC, Palm Jumeirah, JLT, etc.



## DEWA to implement Taqat energy project



### [Mohammed Bin Rashid Centre for Government Innovation signs MoU with DEWA to implement new sustainable energy project.](#)

**T**he Mohammed Bin Rashid Centre for Government Innovation (MBRCGI) has signed a Memorandum of Understanding (MoU) with Dubai Electricity and Water Authority (DEWA) to implement projects designed by a group of MBRCGI graduates under the Taqat energy project that employs solar energy and kinetic energy to generate electricity.

The MoU, signed by Ohoud bint Khalfan Al Roumi, Minister of State for Happiness and Director General of the Prime Minister's Office, and Saeed Mohammed Al

Tayer, Managing Director and CEO of DEWA, is the first such deal for the implementation of innovative projects by MBRCGI graduates.

The projects were chosen based on the 'Contest of Ideas' organised by the Centre in the presence and patronage of Vice President and Prime Minister of the UAE and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum.

The MoU signing ceremony was attended by Huda Al Hashimi, Assistant Director-General for Strategy and Innovation in the

Prime Minister's Office, and Hazza Al Nuaimi, Senior Manager of Excellence Programme at the Executive Council of Dubai, along with a number of officials from MBRCGI and DEWA.

On the occasion, Al Roumi said the UAE government is focused on adopting innovation as a community culture, considering its fundamental role in future development. She added that the projects of the MBRCGI graduates must be supported as they reflect the creative efforts of a group of citizens who are prepared to lead the march of innovation to meet





The Taqat energy project employs solar energy and kinetic energy to generate electricity.

the needs of the UAE society.

The UAE government believes that successful innovations are not just theoretical ideas but applicable in real lives and capable of meeting the demands of the future, Al Roumi added.

She stressed the importance of supporting innovators and developing innovation incubators to translate innovation ideas to real projects to achieve the government vision to make the UAE one of the most innovative countries in the world. Al Roumi also called for efforts

to accelerate the shift to the future using knowledge tools as well as diversified economic and energy resources and supporting entrepreneurship.

Al Roumi also highlighted DEWA's efforts to equip youth at the scientific and practical levels to ensure their ability to compete in the labour market as well contribute to the development of the UAE.

Saeed Mohammed Al Tayer commended the Mohammed Bin Rashid Centre for Government Innovation for its role in

developing the framework for innovation and creating a supportive institutional environment. He added, "We are keen to cooperate with all government and private entities to support the development of Emirati cadres and their capabilities."

The Taqat energy project focuses on the future of the planet, and ensures energy sustainability by employing solar energy, and the energy generated by the movement of cars, bicycles and pedestrians to generate electricity.

## MoU to reduce violations against natural environment



Ministry of Interior signs MoU with Sharjah Environment and Protected Area Authority to integrate fines for environmental violations in the Emirate of Sharjah in the police e-violations system across the UAE.

The Ministry of Interior has signed a memorandum of understanding (MoU) with the Sharjah Environment and Protected Area Authority to integrate fines for environmental violations in the Emirate of Sharjah in the police e-violations system across the UAE. Such a measure would facilitate payment of fines, and help reduce acts of environmental degradation in the UAE.

The MoU, signed by Lt. General Saif Abdullah Al Sha'far, Undersecretary at the Ministry of Interior (MoI), and by HE Hana Saif Al Suwaidi, Chairperson of

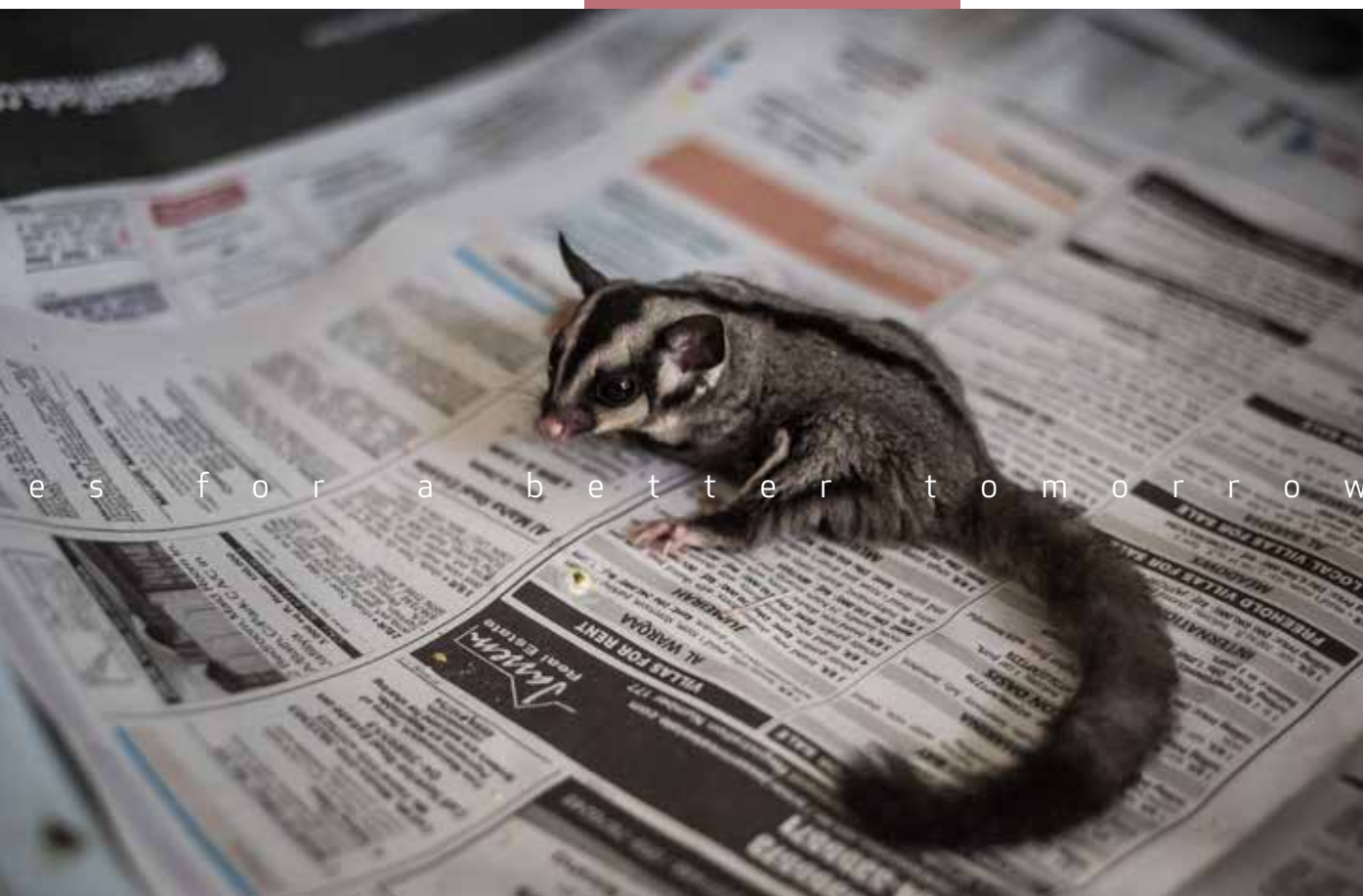
the Sharjah Environment and Protected Areas Authority (EPAA), aims to facilitate the collection of fines for environmental violations issued by the authority, by linking these electronically with the federal traffic system and the MoI's service centres.

This pioneering system, implemented for the first time in the UAE, is a significant milestone and would support the EPAA's efforts to protect the environment from pollution, based on the administrative resolution No.(9) of 2012 about prevention of environmental degradation in the

wilderness areas in the Emirate of Sharjah.

The MoU would also allow payment of fines for violating the law against being in possession of dangerous animals and predators in Sharjah. All of these measures are a testament to the leading role of the EPAA and the Emirate of Sharjah in preserving natural environmental resources and maintaining the ecosystem's natural balance.

Lt. General Al Sha'far said, "The MoU is an important component of community work and reinforces



The MoU would also allow payment of fines for violating the law against being in possession of dangerous animals and predators in Sharjah.

joint action between the Ministry of Interior and national authorities. It also provides a framework to determine the necessary requirements and steps to be taken to protect the environment from pollution, an objective that requires concerted efforts amongst all entities to make remarkable achievements in the service of the country.”

He also noted that promoting partnership with federal and local ministries and authorities achieves the common goals and serves the objectives of the federal government.

Lt. General Al Sha’far reiterated the keenness of the Ministry of Interior to support environmental protection efforts, in response to the directives of Lt. General HH Sheikh Saif bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Interior, of the importance of environmental life, and the need to maintain it, to achieve sustainable development in the country. He also noted that preserving the environment and planet earth is a shared responsibility between members of society.

Hana Saif Al Suwaidi, Chairperson of the EPAA said that signing

the MoU will integrate payment of environmental violations on the police e-violations system of police. This process reflects the keenness of the Emirate of Sharjah to abide by the directives of H.H. Dr. Sheikh Sultan bin Mohammed Al Qasimi, Supreme Council Member and Ruler of Sharjah, to protect natural environment and reduce environmental deterioration. It also contributes towards reducing violations against natural environment, based on the administrative resolution No.(9) of 2012 about prevention of environmental degradation in the wilderness areas in Sharjah.



## Water

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

### UAE continues efforts to find solutions to water challenges



On the occasion of Zayed Humanitarian Day, Suqia, the UAE Water Aid Foundation, has noted that the issue of water scarcity is not only a threat to international security, but also hampers development.

Observing Zayed Humanitarian Day on the 19th day of the Holy Month of Ramadan on 24th June this year, Suqia, the UAE Water Aid Foundation, has highlighted that the issue of water scarcity is growing in the region, and rest of the world, noting that it is not only a threat to international security, but also hampers development.

Suqia, a non-profit organisation, has stressed that the UAE continues its role to tackle water problems and contribute to finding sustainable solutions. As a result of an increase in population,

and an increase in demand for water in addition to the changing climate, the challenge to provide clean drinking water has made itself more present than ever before.

In 2013, the World Bank issued a report containing the results of climate change in the region, warning that the region will face an increase in temperature, and other destructive circumstances that will heavily affect tourism and agriculture. The region can expect scarcity of pure water due to a decrease in precipitation, while flooding will become more

apparent in other regions.

The international community has joined efforts to find solutions to water scarcity, while the UAE plays a major role to support international efforts to provide clean drinking water to people in need all over the world, as well as contributing to finding sustainable solutions for global water scarcity. The wise leadership of the UAE provides aid to people in need, and works to find long-term sustainable solutions to water scarcity.

The Zayed Future Energy Prize



The UAE has worked diligently to take all the necessary steps to rationalize water usage for both irrigation and drinking purposes.

was launched in 2008 to embody the vision of the founding father of the UAE, the late Sheikh Zayed bin Sultan Al Nahyan, and to find solutions to the challenges created by climate change, energy security, and the environment. In May 2016, the Khalifa bin Zayed Foundation launched a project to provide drinkable water to several provinces in Afghanistan.

In June 2014, Vice President and Prime Minister of the UAE and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum, launched the UAE Water Aid Foundation (Suqia) to

provide clean water to five million people worldwide. Suqia managed to raise AED 180 million in 18 days, to provide clean drinking water to 7 million people around the world, in cooperation with the Emirates Red Crescent Authority.

In March 2015, Sheikh Mohammed bin Rashid Al Maktoum issued a law establishing Suqia as non-profit organisation, to enhance the sustainability of the initiative. Today, Suqia is under the umbrella of the Mohammed bin Rashid Al Maktoum Global Initiatives, and strives to find sustainable solutions to the issue of water

scarcity, and promotes happiness within poor and disaster-stricken communities. Suqia works to tackle international poverty and sickness through various humanitarian aid initiatives and Research and Development (R&D), to find sustainable solutions to water scarcity.

In cooperation with DEWA, Suqia's R&D projects include reverse osmosis of seawater by a photovoltaic desalination plant, and water purification using solar technology with a capacity of 7.7 cubic meters per day. Suqia uses solar energy to desalinate seawater



at the Mohammed bin Rashid Al Maktoum Solar Park, which is capable of storing electricity at 50 cubic metres per day.

In 2015, Suqia launched six projects to provide safe drinking water in Somalia, Tajikistan, Afghanistan, Ghana, and Benin, benefitting over 60,000 people. Suqia provided relief assistance to Yemen in cooperation with the Ministry of Development and International Cooperation. According to the Ministry, the number of beneficiaries was 1,087,500.

“This year during the Holy Month of Ramadan, Suqia aims to reflect an image that enhances the Dubai, and the UAE’s position as a hub for humanitarianism

and philanthropy. Suqia works alongside 14 charitable organisations in the UAE. Clean water was distributed to mosques and Ramadan tents throughout the UAE,” said Mohammed Abdul Kareem Al Shamsi, Acting Executive Director of Suqia.

Suqia also launched the Mohammed bin Rashid Al Maktoum Global Water Award, to find sustainable solutions to water shortages, develop international partnerships, and invest in technologies that provide clean and drinkable water.

The initiative has allocated US\$1 million to find sustainable solutions to water shortages internationally, particularly

by using solar energy for desalination and purification.

“The National Innovation Strategy, was also launched by Sheikh Mohammed bin Rashid Al Maktoum, to make the UAE one of the most innovative nations in the world, and focuses on seven national sectors to stimulate innovation. These include encouraging innovative solutions to the challenge of water scarcity. This Award will help to achieve this objective by driving the search for sustainable solutions to address water scarcity around the world,” said Al Shamsi.

The Mohammed bin Rashid Al Maktoum Global Water Award comprises of three



“Water in our land is a great blessing... We have to thank God for this blessing by preserving it and helping those who are in need around the world.”

*HH Sheikh Mohammed bin Rashid Al Maktoum*



categories. These are the Innovative Projects Award (Small and Large projects), the Innovative Research and Development Award (National and International institutions), and the Innovative Youth Award. “Suqia is accepting applications from 22 March 2016 to 31 July 2016,” he added.

**‘Generous legacy of the late Sheikh Zayed is deeply-rooted in UAE society’**

Dr. Thani Ahmed Alzeyoudi, Minister of Climate Change and Environment, has stressed that the 19th of Ramadan is a great opportunity to commemorate the legacy of humanitarian aid instilled by the late founding father of the UAE, Sheikh Zayed bin Sultan Al Nahyan.

It is also a chance to reflect on the values and morals which he had embedded in the UAE, making it a pioneer in humanitarian aid worldwide, he said.

In his statement on Zayed Humanitarian Day, on 24th June, Dr. Alzeyoudi said, “The humanitarian initiatives and development projects that the UAE has been implementing around the world, especially within under-developed and poor countries, serve as a tangible proof of this legacy and underline our commitment to humanitarian aid in ensuring delivery of the basic needs, including food, shelter and education.”

He indicated, in addition to this

noble legacy, which is deeply rooted in UAE society, the initiatives and projects bolster the UAE’s global position and strengthen the country’s international presence.

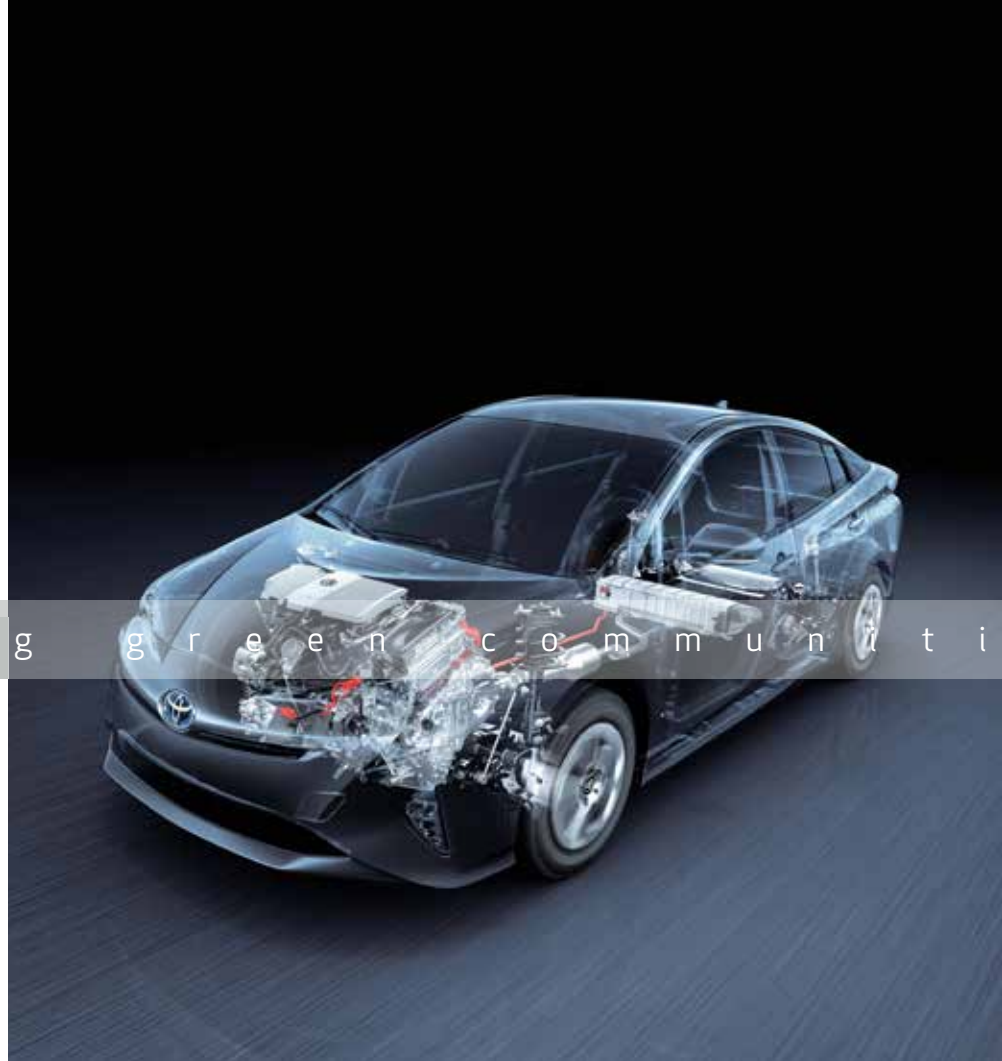
Alzeyoudi announced the UAE’s plan to increase the humanitarian funding in the coming four years.

The Minister of Climate Change and Environment concluded that “the UAE has always been inspired by the generous legacy of the late big hearted Zayed in establishing a unique model for humanitarian aid that combines immediate physical support in emergencies and disasters and the development of sustainable projects in several key areas around the world.”

## Hybrids

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

### Hybrid vehicles gain worldwide appeal



Worldwide sales of Toyota Hybrids surpass 9 million units as customers accept hybrids as a viable and sophisticated motoring alternative.

**T**oyota Motor Corporation has announced that the cumulative figures for global sales of its hybrid vehicles reached 9.014 million units as of April 30, surpassing the 9 million-unit mark<sup>1</sup>. This latest million-unit milestone was achieved in just nine months.

Helping to mitigate the environmental effects of automobiles is a priority for Toyota. Based on the stance that eco-friendly vehicles can only truly have a significant positive impact if they are widely used, Toyota has endeavored to encourage the mass-market adoption of hybrid

vehicles across the globe. As of the end of April 2016, Toyota is selling 33 hybrid passenger car models and one plug-in hybrid (PHV) model in more than 90 countries and regions.

Commenting on this milestone, Takayuki Yoshitsugu, Chief Representative of Middle East & North Africa Representative Office, Toyota Motor Corporation said, "The steady increase in hybrid sales reflects the worldwide appeal of hybrid vehicles backed by Toyota's significant efforts in developing ever better cars. Hybrid is the practical way towards green

motoring and it actually delivers a more relaxed and rewarding drive than a conventional car. Our constant efforts in developing the most innovative technology combined with customer acceptance of hybrid vehicles as a viable and sophisticated motoring alternative has enabled us to reach this prominent milestone. We sincerely appreciate the support of our customers for our environmentally friendly initiatives, which have encouraged us to continue our efforts in developing hybrid technologies."

Toyota announced the Toyota



As of the end of April 2016, Toyota is selling 33 hybrid passenger car models and one plug-in hybrid (PHV) model in more than 90 countries and regions.

Environmental Challenge 2050 in October of last year, setting challenges that it will undertake in order to reduce the negative impacts automobiles have on global environmental health to as close to zero as possible, and to contribute to the creation of a sustainable society.

In order to fulfill these challenges, Toyota is working to expand its lineup of hybrid vehicles even further and will work to contribute to the environment by achieving annual sales of 1.5 million units, and cumulative sales of 15 million units by 2020.

Toyota calculates that as of April 30, the use of Toyota hybrid vehicles<sup>2</sup> in lieu of conventional vehicles of similar size and driving performance has resulted in approximately 67 million fewer tons<sup>3</sup> of CO<sub>2</sub> emissions—believed to be a cause of global warming. Toyota also estimates that its hybrid vehicles have saved approximately 25 million kiloliters of gasoline compared to the amount used by gasoline-powered vehicles in the same class.

Toyota launched the Coaster Hybrid EV in August 1997 and the Prius—the world's first

mass-produced hybrid passenger vehicle—in December of the same year. Since then, Toyota hybrid vehicles have received tremendous support from consumers around the world.

<sup>1</sup>Including plug-in hybrid vehicles; Toyota data

<sup>2</sup>Excluding the Coaster Hybrid EV and "Quick Delivery 200"

<sup>3</sup>Number of registered vehicles × distance traveled × fuel efficiency (actual fuel efficiency in each country) × CO<sub>2</sub> conversion factor





WED 2016

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creating green communities

## World Environment Day celebrations pledge to fight illegal trade in wildlife



World Environment Day (WED), celebrated on 5th June, is the world's biggest day for positive environmental action celebrated across the globe.

On 5th June, Angola kicked off global celebrations of World Environment Day with a pledge to combat the illegal trade in wildlife, which is part of wider global environmental crime, costing up to \$258 billion per year.

World Environment Day (WED), the world's biggest day for positive environmental action, was officially hosted by the southern African nation, which is attempting to overcome issues related to the WED theme of ending the illegal trade in wildlife.

"We are all aware the world faces

challenges in preserving natural heritage and biological diversity, which is seriously affected by the illegal trade in wildlife," Angolan Vice President Manuel Domingos Vicente said at the opening of celebrations. "The joy of future generations relies on actions taken today. For this reason, the Republic of Angola has established an environmental crime unit to eliminate poaching and put an end to the killing of species that are crucial for ecosystems."

Angola lost many of its elephants during a long civil war, which ran on-and-off from 1975 to 2002.

It is unclear how many elephants remain, but those that do are facing pressure from poachers. The nation is also a transit country for ivory, with carved goods coming over the border from the Democratic Republic of Congo for re-sale, largely to Asian nations.

Angola is introducing tougher penalties for poaching, shutting down its domestic illegal markets, and looking to provide alternative livelihoods for those at the bottom of the illegal wildlife trade chain. They are also training former combatants to become wildlife rangers and have opened new



More than one quarter of the world's elephant population has been killed in a decade.

tourism lodges in the southeastern Cuando-Cubango province.

As a further signal of its intent, Angola has joined 12 other nations as a signatory to the Elephant Protection Initiative (EPI), which focuses on protecting African elephants through measures such as closing domestic markets.

"There is no doubt that human activities are responsible for species loss," said Environment Minister Maria de Fátima Jardim. "We all have to take measures to preserve species of flora and fauna. Poaching and the illegal

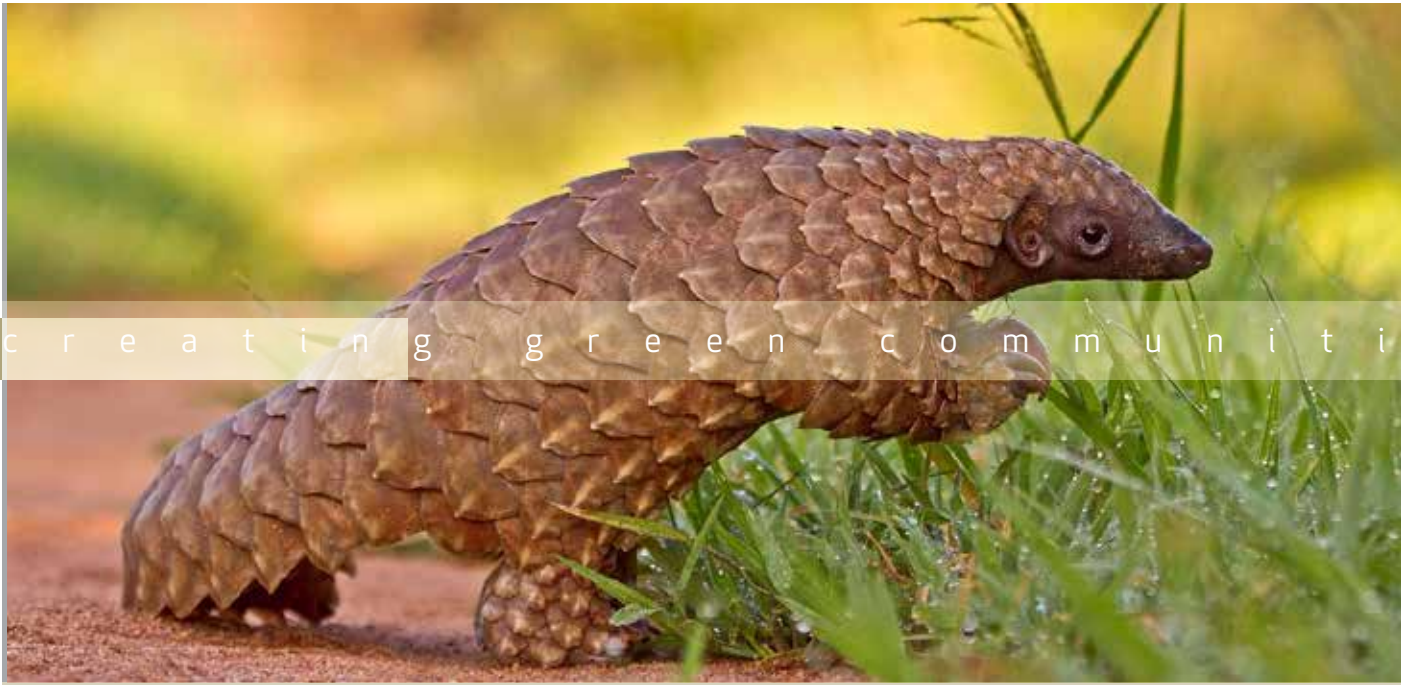
trade in ivory is a concern for our government; we have a plan for environmental management, which includes conservation areas and a national strategy for biodiversity."

The troubles facing Angola are part of a wider global problem. A new United Nations Environment Programme (UNEP)-INTERPOL report, *The Rise of Environmental Crime*, found that transnational criminal networks are profiting to the tune of up to \$258 billion per year from environmental crimes, including the illegal trade in wildlife. This is a 26 per cent increase on previous estimates.

Environmental crime dwarfs the illegal trade in small arms, which is valued at about \$3 billion. It is the world's fourth-largest criminal enterprise after drug smuggling, counterfeiting and human trafficking. The amount of money lost due to environmental crime is 10,000 times greater than the amount of money spent by international agencies on combatting it - just \$20-30 million.

More than one quarter of the world's elephant population has been killed in a decade. Some of the world's most vulnerable wildlife, like rhinos and elephants,





are being killed at a rate that has grown by more than 25 per cent every year in the last decade.

Taking part in the Luanda event, UNEP Executive Director Achim Steiner said, "Today, on World Environment Day, thousands of people are coming together across the world to stand up and be counted to defend the environment.

"This year, we are focusing on the illegal trade in wildlife because it is a crime against nature, nations and communities, and a source of danger and financing that produces some of the greatest evils on this planet.

"We hope that, by being here in Luanda, we can speak to world

about what Angola is doing to fight the illegal trade in wildlife, including protecting elephants, forests, watersheds and the enormous ecological wealth of this nation."

To combat the illegal trade in wildlife, the United Nations system and partners have launched the Wild For Life campaign, which draws on support from celebrities such as Gisele Bündchen, Yaya Touré and Neymar Jr. to mobilize millions to take action against poaching and the trafficking of illegal wildlife products.

Already, around 25,000 people and more than 25 ministers - including Ms. Jardim - have chosen a species to show their

commitment to protecting wildlife.

Elsewhere, around the world, tens of thousands of people were actively celebrating WED at many hundreds of events from New York to Beijing, from Canberra to Kathmandu, to raise attention on the urgency of battling wildlife crime and other pressing environmental problems.

In Stockholm, school children made an animated video about the impacts of palm oil production on endangered species in Asia; in India, iconic monuments, including Kolkata's Victoria Memorial and the India Gate were lit up in green; and volunteers around the globe planted trees everywhere from Malawi to the Hindu Kush.





## Two new educational institutes set to LEED by example

In its quest to become one of the leading primary schools in the region when it opens in Jumeirah Village Triangle in August 2016, Dubai's The Arcadia Preparatory School is also striving to be one of the eco-friendliest by instigating a range of 'green' building initiatives into the construction and operation of its school premises.

The sleek, state-of-the-art school has been designed and built with environmental sustainability firmly in mind for which it is hoping to achieve Leadership in Energy and Environmental Design (LEED) recognition.

Meanwhile, Ladybird Early Learning Centre in Dubai's Jumeirah Village Circle, is aiming

to go one step further in its own green crusade: by becoming the first dedicated, early years setting in the Middle East to be LEED gold-certified for its eco-friendly building initiatives.

Set to open in July 2016, the pre-school has been designed and constructed with environmental sustainability and reduction of carbon footprint firmly in mind. Throughout the building process 25 per cent of the nursery's construction material is recycled, with 25 per cent of the actual construction material itself having been imported within an 800km radius, thereby saving on carbon emissions.

Post-construction, the AC will be switched off automatically

upon opening windows, AC drain water is recycled and re-used for irrigation and each of the 15 classrooms will incorporate energy-efficient fans and lighting.

"The importance of sustainability – whether it's recycling, reducing CO2 emissions, using energy-efficient fans and lighting or efficient water usage – is vitally important to instill within the young generation since they are the future guardians of the planet.

"By pursuing the stringent LEED-accreditation process we are committing ourselves not only to positive climate change but to the wellbeing of our children, staff and wider community," says Navin Valrani, CEO of The Arcadia Preparatory School.

## Lighting

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creating green community

A pledge to sell more than two billion LED light bulbs by 2020



Philips Lighting reaffirms commitment to 100% carbon neutrality by 2020; says achieving goal would save energy equivalent to decommissioning 60 medium-sized coal-fired power stations.

Leaders from Philips Lighting, a global leader in lighting, met recently with Energy Ministers attending the seventh Clean Energy Ministerial (CEM7) summit in San Francisco, where the company announced a commitment to sell more than two billion<sup>1</sup> energy efficient LED light bulbs by 2020.

Reaching this goal is estimated to save an amount of energy equivalent to that generated by 60 medium-sized coal-fired power stations with emissions equivalent to those from 24 million cars by 2020. The company also reaffirmed its pledge to make its global operations

carbon neutral by 2020 and said that it expects electricity for its US operations to be 100% from renewable sources later this year.

The Clean Energy Ministerial (CEM) is a forum of countries working together to accelerate the global transition to clean energy. Speaking at the summit in San Francisco, Bill Bien, Head of Strategy for Philips Lighting commented, "We plan to turn the agreement at the COP21 UN Climate Change Summit in Paris into tangible action. Energy efficiency is the low-hanging fruit in the fight against climate change.

Delivering on this pledge will be positive for our environment as well as the global economy, resulting in energy savings of around EUR 12 billion annually by 2020 that could be invested elsewhere. The clock is ticking for humanity -- action is needed now before it's too late."

The Philips Lighting pledge supports the Global Lighting Challenge – a campaign to deploy 10 billion high efficiency, high quality affordable light bulbs (such as LED) as soon as possible to combat climate change. The campaign was launched last



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

The Philips Lighting pledge supports the Global Lighting Challenge – a campaign to deploy 10 billion high efficiency, high quality affordable light bulbs (such as LED) as soon as possible to combat climate change.

December by the Clean Energy Ministerial at the COP21 UN Climate Change Summit.

### **Committed to becoming carbon neutral**

At the CEM7 summit Philips Lighting called upon other companies to follow its lead and accept the challenge of becoming a carbon neutral company. At COP21, Royal Philips pledged to become a carbon neutral company and purchase all of its electricity from renewable sources by 2020. Philips Lighting reaffirms both of these commitments and offers to share its experience and learnings

with other organizations as it works to meet these challenges.

Key to achieving carbon neutrality is the use of energy from renewables and driving down carbon emissions in operations and logistics. Philips Lighting reported progress in the US where it expects electricity for its operation to be 100% carbon neutral this year thanks to a power purchase agreement from the Hidalgo Wind Farm in McCook, Texas.

“It’s gratifying to produce LED light bulbs and connected lighting systems that reduce energy

consumption by up to 80% compared to conventional lighting. But we must be accountable for our own footprint too – that’s why we’re committed to being carbon neutral by the end of the decade. To do this we’ve had to re-examine everything we do: our operations, processes and supply chain. I’m pleased to report we’re well on the way to achieving this goal and last year increased our use of renewables globally to 60% <sup>2</sup>,” said Bien.

<sup>1</sup> The more than two billion LED bulbs pledged by Philips Lighting is calculated from 2015-2020 (inclusive).

<sup>2</sup> This figure relates to the period 2007-2015 and is in line with the information provided in the Royal Philips Annual Report 2015.



Sustainability

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creating green community

## Interface launches new collection with 100% recycled content

Interface created the styles with 100% recycled content nylon – in factories that are increasingly powered by clean energy.

Interface has introduced World Woven™, a global collection of Skinny Planks™ and squares, getting inspiration from textures found around the world throughout history.

Developed by Interface's exclusive product designer David Oakey of David Oakey Designs, the collection weaves together modern sensibilities with memories of some of the most enduring textiles of the past, including the tweeds and bespoke woven textiles of Oakey's upbringing in the UK. "The beauty of hand-weaving is that it's closer to nature than the

synthetic uniformity of 'modern' machined production," said Oakey. "In traditional Scottish tweed, for example, what looks like solid green actually has at least 10 to 15 colours, which is similar to the way nature works with colour. Other artisanal fabrics, like the freeform weaves known as Saori, are similarly diverse."

"These products lend themselves to a wide range of possibilities – from a simple neutral background, or a composition of multiple textures to create diversity and movement like that found in the natural world," continued Oakey.

"World Woven itself does not create spaces with an outdoorsy aesthetic; rather, designers may be attracted to the collection for its residential feel, or its mix-and-match capability."

Helmich Jousma, Concept Design Teamleader at Interface, explained: "The World Woven collection is a reflection of the residential-like trends we're starting to see unfold in European workplaces. There is most definitely a shift towards more comfort in commercial design. This movement clearly illustrates that the workspaces of the future will be places users





Interface was one of the first companies to publicly commit to sustainability, when it made its Mission Zero pledge in the mid-nineties.

want to be in with surroundings that make workers feel good.”

### **Heritage, Interest and Detail**

The World Woven Collection includes six 25 x 100cm Skinny Planks and three square ranges, each with eight colour options.

The three square styles in 50 x 50cm format: Collings Cottage, Mod Café and Scottish Sett, are perfect for complementing the Skinny Planks and creating contrasting areas within a carpet installation. Within the defined constraints of small scale and a neutral palette, WW890 has

more texture and contrast than the WW880, WW870 and WW860, creating a pattern that reads more strongly across the floor. Blending those same yarns into a soft rib texture produces the velvety pattern in WW880. WW870 takes cues from a boucle or knit texture, while the contrast remains relatively low, a slubby effect emerges. All of these details are stripped away for the elegance of the WW860.

To complement this carefully curated set are two colour studies – WW895 is soft and less manicured and WW865 is flat and

orderly like the warp on a loom. The Collings Cottage and Scottish Sett patterns revive the noble houndstooth and plaid, while Mod Café renews the playful and optimistic patterns of the 1950s.

In keeping with its commitment to pioneering sustainability in the industry, Interface created the styles with 100% recycled content nylon – in factories that are increasingly powered by clean energy. In fact, as part of its Mission Zero® commitment, Interface sources over 90% of its energy needs from renewable sources globally.



## World Oceans Day

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

‘Meaningful action required to protect future health of oceans’

The goal of World Oceans Day, celebrated on June 8th, is to mobilize stakeholders worldwide against marine plastic pollution and other challenges to the health of the ocean and its status as a major economic resource for humankind.

Healthy oceans are critical to sustaining life on Earth, by regulating the climate and providing a wide range of services, including natural resources, nutritious food and jobs that benefit billions of people, United Nations Secretary-General Ban Ki-moon declared on 8th June, as the UN kicked off its celebrations to mark World Oceans Day.

“Healthy oceans are essential for a healthy planet and a healthy future for us all,” the Secretary-General affirmed in his message for the Day, which is observed annually on 8 June.

This year’s theme, ‘Healthy oceans, healthy planet’, spotlights the threat of plastic pollution, which degrades very slowly, polluting waterways and impacting the health of aquatic animals, which mistake the microbeads for food, as well as the health of humans.

In his message, the Secretary-General underscored that in order to protect the health of oceans, it is crucial to know their current state, and also understand the impact that human activities and climate change are having on them.

He recalled that this past December, the UN General Assembly had welcomed the First Global Integrated Marine Assessment, a global scientific evaluation of the state of the world’s oceans.

“We now know that although the oceans are seemingly endless, their capacity to withstand human activities is limited, particularly as they also cope with the threats posed by climate change,” Mr. Ban said.

“Urgent action on a global scale is needed to alleviate the world’s







World Oceans Day is an opportunity to raise global awareness of the benefits humankind derives from the oceans and the current challenges we face to keep the ocean healthy and productive.

oceans from the many pressures they face, and to protect them from future dangers that may tip them beyond the limits of their carrying capacity,” he added.

The Secretary-General also recalled that this past year, in adopting the landmark 2030 Agenda for Sustainable Development, Member States underscored that healthy and productive oceans will play a crucial role in achieving the Sustainable Development Goals (SDGs).

“Healthy oceans will also play an

essential role in climate change adaptation and mitigation, as we strive to implement the Paris Agreement,” Mr. Ban said.

Echoing those remarks, Irina Bokova, Director-General of the UN Educational, Scientific and Cultural Organization (UNESCO), said that 2016 is the year when the world starts to implement the promises made in the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change.

“UNESCO’s message on World Oceans Day is clear – the ocean is

essential to moving forward,” she stressed.

Ms. Bokova highlighted that despite the increasing impacts of human activities on the marine environment, the ocean remains an important driver in eradicating the greatest global challenge facing the world today: extreme poverty.

“The ocean is an integral part of our planet, and an absolutely essential component of human lives, livelihoods and the environment that sustains us. From fisheries and tourism to



transportation and climate regulation, the ocean is key to implementing the new global agenda," she said.

Especially for developing countries, coasts and the ocean provide multiple economic opportunities to ensure that no one will be left behind in the pursuit of a more equitable, sustainable development, the Director-General said.

"Whether on the coast or in the high seas far away from all, safeguarding biodiverse marine sites is vital for ensuring the sustainable long-term use of precious natural resources," Ms. Bokova said.

For its part, UNESCO, through

its Intergovernmental Oceanographic Commission, is working to support its Member States in implementing SDG 14 on oceans, and all other relevant objectives and targets, in ways that are inclusive and based on an integrated scientific approach.

She emphasized that the development of national capacities in marine scientific research is a precondition for understanding and preserving the ocean, its environment and the many resources it provides.

"Our message is that a healthy ocean is a healthy planet, and a healthy planet is absolutely vital for the well-being of generations to come. Whether in eradicating

poverty or regulating the climate, the bottom line is that the ocean matters," Ms. Bokova said.

"World Oceans Day is our opportunity – as decision-makers, industry, civil society, science, and you and me – to tip the balance and move from agreement to meaningful action," she added.







## EmiratesGBC marks stronger participatory role in World Green Building Council

**E**mirates Green Building Council (EmiratesGBC), an independent forum aimed at conserving the environment by strengthening and promoting green building practices, has further strengthened its participatory role in setting the global agenda for sustainable built environments.

This was underlined with Habiba Al Marashi, EmiratesGBC co-founder, board member and treasurer, being appointed to the Membership Committee of the World Green Building Council (WorldGBC), a network of national green building councils in more than 100 countries, making it the world's largest international organisation influencing the green building marketplace.

Saeed Al Abbar, Chairman of EmiratesGBC, already serves as a Board Director of WorldGBC since 2015, taking on the mantle from Adnan Sharafi, former chairman, who had been on the role from 2013 to 2015. Dr. Sadek Owainati, co-founder of EmiratesGBC, had earlier represented EmiratesGBC on the WorldGBC Membership Committee.

EmiratesGBC is the world's eighth Green Building Council and has been a member of WorldGBC since its inception in 2006. It is also a member of the WorldGBC Established GBC Network, which was founded to link all the different GBCs across the world to share best practices and initiate global projects that help to strengthen energy and water

use efficiency in the building sector and support environmental stewardship.

Over the years, it has played an instrumental role in supporting WorldGBC to set up the Middle East and North Africa (MENA) GBC Network to drive sustained dialogue and action that promote built environment sustainability across the region.

Since the establishment of the MENA Network in 2010, EmiratesGBC has been a part of its Steering Committee and takes concerted action to bring together all regional GBCs and initiate concrete action in various areas including the development of green buildings, retrofitting and green building innovation.





## UNEP Goodwill Ambassador Pavan Sukhdev wins Prestigious Blue Planet Prize

**G**reen economy pioneer and United Nations Environment Programme (UNEP) Goodwill Ambassador Pavan Sukhdev has been announced as the recipient of the 2016 Blue Planet Prize, marking the 25th anniversary of the award sponsored by the Asahi Glass Foundation.

Each year two Blue Planet Prizes are awarded to individuals or organizations for outstanding achievements in scientific research and its application to solve global environmental problems. University of Glasgow professor and former director of the Frankfurt Zoological Society Africa Program, Prof. Markus Borner of Switzerland is the other 2016 winner.

Mr. Sukhdev was recognized for pioneering the development of economic rationale and practical metrics for transition towards an inclusive green economy.

Serving as study leader for the UNEP-hosted Economics of Ecosystems and Biodiversity (TEEB) - he has shown how valuing ecosystems and their services can translate into improved public policies and business practices. By developing sustainability metrics for corporate, provincial and national levels, he has been driving the momentum for the transition to an inclusive green economy.

"The Blue Planet Prize motivates me to continue my work on making nature's economic values visible

and better responded to by policy makers and business leaders, on redesigning the corporation, and on improving and implementing metrics and accounting systems for sustainability," said Mr. Sukhdev. "These are all critical areas for transforming today's defunct yet dominant economic model into an inclusive and green economy of permanence."

Both recipients will be awarded a certificate of merit, a commemorative trophy and a supplementary award of 50 million yen (around \$470,000) at the official award ceremony in Tokyo, in November. Commemorative lectures by the prize recipients will be held at the United Nations University on November 17.



## Former Norwegian Minister Erik Solheim takes reins at UN Environment Programme

**E**rik Solheim, a former Minister of Environment and International Development in Norway, began his tenure on 27th June as Executive Director of the UN Environment Programme, with the concurrent position of UN Under-Secretary-General. Mr. Solheim assumes his new role as chief of the global authority on the environment after three years as head of the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD).

In taking up office, Solheim pledged to work with countries around the world to tackle some of the most pressing environmental challenges of our time, including ocean and air pollution, the destruction of

ecosystems, climate change and the relationship between the environment and conflict and migration.

Solheim said, "There is an urgent need to fight climate change, halt ecosystem destruction, and reduce pollution for the benefit of all peoples everywhere. By protecting our planet, we protect ourselves and in the process can help bring every last person out of poverty. We all have a stake in a healthy planet."

Solheim also underlined that issues like climate change and sustainable development are issues that no one country or organization can solve themselves, and that the world must come together to tackle environmental challenges.

"With successes like the Paris Agreement and the Sustainable Development Goals, the world has achieved a lot in recent years when it comes to the environment. We can achieve a lot more. But the only way to do this is by working cooperatively. I look forward to working with member states and welcoming voices and efforts from all parts of society to tackle our common challenges."

Solheim arrives after having served as Chair of the DAC of the OECD since 2013. Since that time, he has also served as UNEP's Special Envoy for Environment, Conflict and Disaster. Known as the 'green' politician, he held the combined portfolio of Norway's Minister of the Environment and International Development from 2007 to 2012.

Report

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

New report calls for evaluating land to halt annual loss of 24 billion tonnes of fertile soil



This year's World Day to Combat Desertification advocates for the importance of inclusive cooperation to restore and rehabilitate degraded land and contribute towards achieving the overall Sustainable Development Goals.

**T**he world needs to improve the way land is evaluated in order to unlock its true potential and reverse the alarming pace of land degradation, like the loss of 24 billion tonnes of fertile soil and 15 billion trees every year, a new report from the International Resource Panel says.

Erosion, nutrient depletion, acidification, salinization, compaction and chemical pollution have left 33 per cent of the world's soils either moderately or highly degraded. If current conditions continue, then 320-849 million hectares of land will be converted

to cropland by 2050 at the expense of the world's savannahs, grasslands and forests. As a result, greenhouse gas emissions from agriculture may increase from 24 per cent to 30 per cent.

As the global population expands, climate change intensifies and more people move to urban areas, it will become increasingly difficult to sustainably produce enough food, fuel and fibre to meet demand without further depleting the world's finite land resources.

Released on 17th June in Beijing at a high-profile event to mark

the World Day to Combat Desertification, the IRP's latest report says that evaluating the long-term potential of land will help the world sustainably meet this demand.

Unlocking the Sustainable Potential of Land Resources: Evaluation Systems, Strategies and Tools looks at a series of tools that can help policy makers and land managers unlock the full potential of land, allowing them to use resources more efficiently.

"Land potential evaluations must be completed and applied





A better understanding of the potential of the world's land resources could raise food productivity, promote biodiversity, and increase resilience to climate change.

before changes in land use or management are implemented," says the IRP, which is a consortium of 34 internationally renowned scientists, over 30 national governments and other groups hosted by the United Nations Environment Programme (UNEP). "No farmer or nation can afford to invest in land management systems that ignore existing knowledge and information."

"Despite this, land conversions to a single crop and management system continue to occur across areas in which soil, topography,

and sometimes climate conditions are so variable that failure across at least part of the project is virtually inevitable."

A better understanding of the potential of the world's land resources - at farm, watershed, country and regional levels - could raise food productivity, promote biodiversity, and increase resilience to climate change.

"To feed the world's people, we will need to get the best we can out of the land," said Ibrahim Thiaw, Deputy Executive Director of UNEP. "But to make sure that

we leave the environment in a healthy state, so that future generations can also feed their people, breathe clean air, build resilience to climate change, and use the resources nature provides to enrich their lives, we need to do the best we can for that land.

"The International Resource Panel, in this study of the benefits of land evaluation, has again shown us a way to do more and better with less, and, at the same time, deliver on the Sustainable Development Goals that the world agreed to last year."

Monique Barbut, Executive





Secretary of the United Nations Convention to Combat Desertification, said: “Land degradation and drought affect nearly 170 countries in the world. One of the pivotal targets of the SDGs is achieving land degradation neutrality by 2030.

The aim is to maintain or increase the amount of healthy and productive land available today by preventing future land degradation while increasing the efficiency of our current land management practices. Evaluating the land’s potential to ensure sustainable development in the right places, using the right practices is key to achieving this.

“The report by the IRP is a good first step in this direction; it

highlights useful tools to achieve land degradation neutrality. The UNCCD and its partners will continue to help build the capacity to ensure that these tools, where appropriate, are consistently applied on the ground at various scales.”

According to the IRP, land evaluation could:

- Increase productivity while adapting to climate change
- Minimize social, economic, and environmental risks of land use change
- Increase the success of restoration and biodiversity conservation
- Promote innovation and knowledge sharing

“A better matching of production

systems with land potential on existing agricultural lands, and increased innovation supported by carefully developed policies and strong institutions, will not by themselves allow us to live within our means - but they can make it easier,” the IRP says.





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

## FAO study identifies small fish with a big role in feeding Africa's drylands

**S**mall, fast growing wild fish could be crucial allies in the race to end hunger in some of the world's most chronically poor and underfed regions, according to a new report by the U.N. Food and Agriculture Organisation (FAO) on fisheries in the drylands of sub-Saharan Africa.

Water is an ephemeral resource in Africa's dryland regions, with water bodies forming and disappearing in a relatively short period of time. Despite this, fish - some of which weigh as little as a few grams at maturity - can survive and thrive in these environments, meaning the continent's dryland fisheries are in fact highly productive and resilient, the report says.

Output from dryland fisheries

fluctuates due to climate trends - mainly low and above all uncertain rainfall - but productive potential is very high in smaller water bodies, some of which appear only once a decade but can produce up to 150 kilograms of fish per hectare per year. Together, these small water bodies cover a much larger area than the sub-Saharan region's lakes and reservoirs.

Properly managed, these bodies in southern Africa alone could produce 1.25 million tonnes of fish - half the total recorded inland fisheries yield of the entire continent, the report found.

While the small-scale fisheries sector is often neglected by policy makers, and even dismissed for its inability to generate wealth, it

can be very efficient as a buffer resource. When mixed with crop and livestock activities allows for resilient and diversified livelihoods in an unpredictable environment, say the authors of Fisheries in the Drylands of Sub-Saharan Africa.

The report also found higher fish consumption in dryland areas than reported in official figures, indicating an unexpectedly important role in local food security, leading the researchers to explore management improvements for an inherently boom-and-bust resource. Fish offer a nutritional punch, delivering the cheapest form of animal protein as well as amino acids, fats and micronutrients that are otherwise hard to obtain in the sub-Saharan drylands.





# Green Flash

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creating green communities for a better tomorrow



## Top Solar Energy Myths

*This is a summary of an important booklet published by 'Climate Reality.'*

There is enough solar energy to power all our activities the entire year. Still some are debating the effectiveness and cost of solar power and how it fits in the energy grid. Most arguments are based on outdated or incorrect information. Hence, some of the most common solar energy myths are discussed here.

### 1. Myth: Solar energy is too expensive and isn't economically viable for most people.

Fact: This statement is out-of-date. The cost of solar panels fell 75% between 2009 and 2014, and is predicted to drop 25% by 2018. Accordingly, solar electricity is now cheaper than electricity from coal, oil, or natural gas in many parts of the world. Actually, clean energy is one of

the world's fastest growing industries, and already makes up more than 20% of the world's electricity generation as the price per watt came down from \$78 in 1977 to 30 cents in 2015.

### 2. Myth: Clean coal is the answer.

Fact: There's no such thing as "clean coal", but viable solar power is a real, clean energy technology. Coal is a dirty fuel no matter whether you look at mining which blasts mountaintops and leaves toxic slurry ponds behind or burning, which results in pollutants like mercury and smog. More carbon pollution comes from the burning of coal than any other fuel.

### 3. Myth: Solar power won't work in cloudy or cold locations.

Fact: They do and solar panels are just as effective—and usually more effective—in cooler temperatures as in hot ones. Clouds can affect the efficiency of solar panels, but they can still produce enough power to be viable sources of electricity as we see in Germany which is the world leader in solar power.

### 4. Myth: Solar panels are unreliable.

Fact: The opposite is true. Most solar panels produce electricity for over 20 years or more as their parts do not wear out easily. In fact, many of the first solar systems installed over 40 years ago are still active today.

Moreover, global solar PV capacity has increased from 3.7 gigawatts in 2004 to 177 gigawatts in 2014. That's nearly 48 times in just 10 years. It also employs over 2.5 million people around the world. Therefore, the future of solar power looks bright. Additionally, using solar power diversifies energy sources, making the entire grid more dependable. Solar and other renewable technologies are now more reliable than ever, especially integrated grids and use of energy storage technologies.

If we make the switch and rely on renewable energy, we can save billions of dollars by avoiding not only the high costs of replacing aging fossil fuel plants but also the increasingly higher costs of climate change in areas like healthcare expenses and damage from extreme weather.

Let us all use solar energy to power homes and schools to help protect humans from carbon emissions, unnecessary air pollution, and the devastating impacts of climate change.

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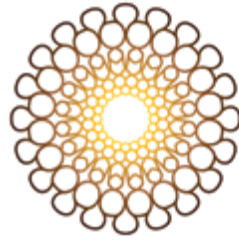


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