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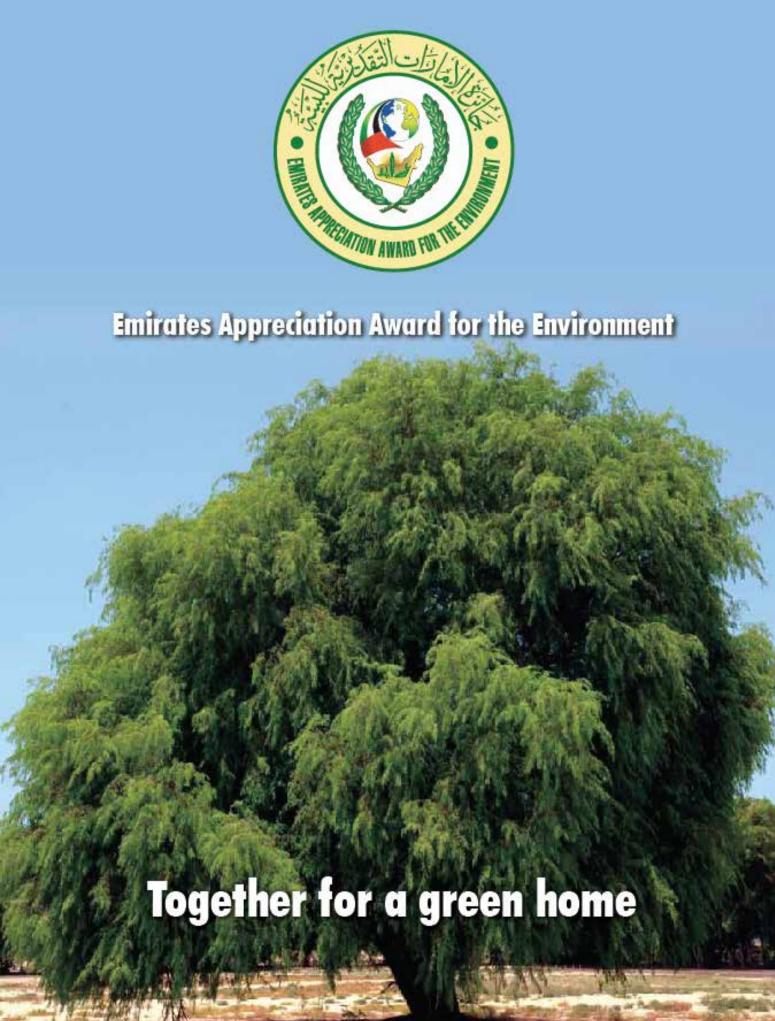
# Environment



A monthly publication issued by Zayed International Foundation for the Environment



'Solar Impulse 2 opens new horizons of renewable energy': HH Sheikh Mohammed







**Prof. Mohammed bin** Fahad **Executive Editor** 

The UAE has been globally recognized for its leadership in low carbon development with mega projects both in the capital, Abu Dhabi, and Dubai. The transition from a fossil fuel dependent economy to becoming the hub of a global energy revolution has come about largely due to the UAE's exemplary model of leadership in the green economy. As early as 2005, the UAE ratified the Kyoto Protocol to the UN Convention on Climate Change, becoming one of the first major oil-producing countries to do so.

Thanks to the leadership of HH Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE and HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai and their vision for a diversified and knowledge-based economy, that the country has become a major investor in clean energy and is today seen as a hub for dialogue on how to drive the sustainability agenda forward. Our leadership has also prioritized economic and energy diversification as fundamental pillars to achieving sustainable development.

With the UAE government driving green growth plans and pursuing groundbreaking renewable energy and energy efficiency programs, private companies have also been coming on board to invest in clean energy and renewable technologies and implement sustainable initiatives.

The UAE plans on exceeding its 'conservative' target of making 24 per cent of its energy mix come from renewable sources by 2021. It is now looking to increase its target for power generation from clean energy to 30 per cent by 2030.

The nation needs to be lauded for setting a pioneering example in responsible energy stewardship through its path breaking commitments in alternative energy development and implementation of alternative energy sources.

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## From the **Managing Editor**



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

It was an honor and a privilege to have been invited, in my capacity as Secretary General of the Zayed International Foundation for the Environment, to participate in as a keynote speaker at the Highlevel Meeting of the Development Cooperation Forum held at the UN headquarters in New York in July as part of the High-level Segment of the United Nations Economic and Social Council (ECOSOC).

The invitation came about as the Zayed Foundation is due to host the eighth annual Global South-South Development Expo (GSSD Expo) to be held from October 30 to November 3. 2016 in Dubai.

Highlighting the monumental transformation of the UAE that has come about as the result of good governance, strong investment and an emphasis on education and gender equality, I spoke about how, under the UAE's wise leadership, the nation is taking bold and transformative steps through capacity-building and innovation to shift to a sustainable and resilient path.

A key element in the UAE's progress and development has been its focus on the inclusion of women as nation builders. In the words of HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, 'We have moved beyond the phase of empowering women. Indeed, we are empowering society through women.'

The celebration of the Emirati Women's Day last month seeks to further accentuate that women in the UAE are active influencers and organic constituents of the country's progress. The establishment of the UAE Gender Balance Council will also boost UAE's efforts to evolve and enhance women's role as key partners in building the future of the nation.

As a UAE citizen, scientist and a woman, I am honored to be part of a nation that empowers women to be a powerful force for positive change and sustainable development.

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### **Cover Story**

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HH Sheikh Mohammed visits Masdar City; reviews investment projects and future plans



The UAE is at the "forefront of global development" of clean technology and renewable energy, said HH Sheikh Mohammed bin Rashid Al Maktoum, on his visit to the headquarters of Abu Dhabi's renewable energy company, Masdar, in the capital.

"Masdar has played an integral role in building a robust foundation for sustainable development within the UAE and globally, along with other clean energy projects such as Mohammed Bin Rashid Al Maktoum Solar Park in Dubai."

is Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, visited the headquarters of Abu Dhabi's renewable energy company, Masdar, in the capital Abu Dhabi, on 1st August 2016 where he was given a tour of the facilities and reviewed major clean energy projects and initiatives.

HH Sheikh Mohammed toured Masdar city, which hosts a number of international firms and R&D centers that focus on renewable energy including Masdar Institute, the world's first graduatelevel university dedicated to providing real-world solutions to issues of sustainability. He was accompanied by Sheikh Maktoum bin Mohammed. Deputy Ruler of Dubai, Sheikh Ahmed bin Saeed, Chairman of Dubai Civil Aviation Authority, Dr. Sultan Al Jaber, Minister of State and Chairman of Masdar, Mohammed Al Shaibani. Director-General of the Ruler's Court of Dubai, and Khalifa Suleiman. Director-General of Dubai's Department of Protocol and Hospitality.

During the visit, Sheikh Mohammed



HH SHEIKH MOHAMMED viewed a large model of Masdar City that depicts the city upon completion.

highlighted the importance of innovation, clean technology and 'positive energy' in promoting the sustainable development of the UAE, and said that the country, through initiatives such as Masdar, was demonstrating its capacity to lead the world in helping to secure a clean energy future.

"Masdar has played an integral role in building a robust foundation for sustainable development within the UAE and globally, along with other clean energy projects such as Mohammed Bin Rashid Al Maktoum Solar Park in Dubai. They honor the vision and legacy of the UAE's

Founder Sheikh Zayed bin Sultan Al Nahyan, and the continued support and guidance of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces." Sheikh Mohammed said.

Sheikh Mohammed viewed a large model of Masdar City that depicts the city upon completion. The city is expected to occupy an area of six square kilometres. He was briefed by Sultan Ahmed Al Jaber, Minister of State and Chairman of Masdar, about Masdar's investment projects in the field of generating solar and wind energy in the UAE and a number of friendly countries.

He reviewed these projects which are part of the UAE's strategy to increase the contribution of clean sustainable energy to the total energy mix to 24% by 2021.

HH Sheikh Mohammed then signed his name on the e-register designated for dignitaries who visit Masdar. He also visited Masdar Institute of Science and Technology, where he was briefed on the institute's future plans and

# Property &



current research and studies being carried out by Emirati and foreign employees.

#### IRENA welcomes HH Sheikh Mohammed Bin Rashid Al Maktoum to headquarters

The Director-General of the International Renewable Energy Agency (IRENA) Adnan Z. Amin received His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and H.E. Dr. Sultan Al Jaber, UAE Minister of State and Chairman of Masdar at the Agency's headquarters in Abu Dhabi on 1st August.

HH Sheikh Mohammed and Mr. Amin exchanged views on the latest renewable energy

developments in Dubai and the UAE, including Dubai's Clean Energy Strategy 2050, and the third phase of the Mohammed bin Rashid Al Maktoum Solar Park, which recently received global attention for its record-low solar power cost.

Mr. Amin provided an overview of IRENA's journey over the last five years to become the global voice for renewable energy as he and HH Sheikh Mohammed toured the Agency. Mr. Amin expressed grattitude to the UAE for contributing to the Agency's success, calling it a reflection of the UAE's renewable energy leadership.

"The UAE has become a trendsetter in renewable energy

deployment and Dubai has played a key role in making that happen, under the leadership of His Highness Sheikh Mohammed Bin Rashid," said IRENA Director-General Adnan Z. Amin.

"The UAE recognizes that an essential component for the further development of renewable energy will be the empowerment of government agencies to take a holistic approach to energy regulation."

HH Sheikh Mohammed was also accompanied by HH Sheikh Maktoum Bin Mohammed Bin Rashid AlMaktoum, Deputy Ruler of Dubai, HH Sheikh Ahmed Bin Saeed AlMaktoum, Chairman of Dubai Civil Aviation Authority and Chairman of Emirates Group and "The UAE attaches great importance to the diversification of its energy mix, and increasing the share of renewable and clean energy."



Khalifa Saeed Suleiman, Director General of the Department of Protocol in Dubai.

Sheikh Mohammed said: "The UAE's ongoing efforts in clean technology and renewable energy further reinforce the country's position on the international stage, alongside the selection of Dubai to stage Expo 2020, the choice of Masdar City to host the headquarters of the International Renewable Energy Agency, and the successful landing of Solar Impulse 2 in Abu Dhabi, completing its pioneering flight around the world using only the power of the sun.

"These achievements show that the UAE stands at the forefront of global development and that the future is full of opportunity." Sheikh Mohammed also said that Masdar, as the Middle East's first comprehensive initiative in clean technology and renewable energy, had successfully demonstrated the importance of integrating renewable energy in the energy mix, as well as clean energy's growing commercial viability, through the many projects it had developed in the UAE and around the world in the ten years since its inception.

Dr. Sultan Al Jaber expressed his thanks and gratitude to Sheikh Mohammed bin Rashid for visiting the headquarters of Masdar.

He valued it as an informative visit for the young Emirati men and women who expressed their extreme delight and deep pride on the visit, which they said would

strengthen their determination and persistence to develop their works. They would also be encouraged to study hard and deliver more success and progress in the service of their nation and pave the way for promising youths to increase academic attainment and unlock their innovative energies for building a future that is full of scientific achievements and innovations, which would leverage the UAE's leading standing globally and ensure its prosperous future.





### **Cover Story**

'Solar Impulse 2 opens new horizons of renewable energy'



His Highness Sheikh Mohammed said that this global journey, from and to Abu Dhabi, opens vital new applications for renewable energy in all walks of life.

is Highness Sheikh Mohammed bin Rashid Al Maktoum. Vice President and Prime Minister of the UAE and Ruler of Dubai remarked on July 26th, 2016 that the Solar Impulse 2 More than a year after beginning its had returned to Abu Dhabi after its 40,000 kilometers round the world flight without using a single drop of fuel. He added that this global journey, from and to Abu Dhabi, opens vital new applications for renewable energy in all walks of life. July at Abu Dhabi's Al Bateen

HH Sheikh Mohammed wrote on his official Twitter account: "Abu Dhabi. capital of the UAE and home to the International Renewable Energy

Agency IRENA, stands as a global pioneer in renewable energy."

#### 'New proof of renewable energy efficiency'

25,000-mile trek around the world using only the sun as a fuel source, Solar Impulse 2 returned to the UAE where its historic flight began.

Solar Impulse 2 landed on 26th Airport, after flying around the world without using a single drop of fuel. The plane arrived in Abu Dhabi, from where Solar Impulse had started in March last year, after taking off from Cairo on Sunday and flying for about 48 hours. Solar Impulse 2 began its journey from Abu Dhabi in March 2015, with stopovers in Oman, India, Myanmar, China, Japan, the United States, Spain and Egypt.

In a statement on the safe return home of the Si2, H.H. Sheikh Hamdan bin Zayed Al Nahyan, Ruler's Representative in the Western Region, emphasized on the UAE leadership's directives to enhance the UAE's leadership in renewable energy so as to deliver sustainable development goals, deploy clean and renewable



THE 16-LEG journey around the world provides a new testimony of how clean renewable energy technologies are efficient enough to build a more sustainable future.

energy technology, and create an innovation-drive environment that generates job opportunities and stimulates economic growth.

"The landmark return of Solar Impulse 2 to Abu Dhabi serves an important message to future generations that it is time to think differently and that the humanity is capable to induce change. We need to make innovation and sustainability part of daily life and the foundation on which the future will be built." HH said.

The 16-leg journey around the world, he added, provided a new testimony of how clean renewable energy technologies are efficient enough to build a more sustainable future.

"The historic journey is a gateway to the future that counts on widespread sustainable use of clean renewable technologies to improve quality of life across the globe," HH stressed.

Sheikh Hamdan also acknowledged Masdar, official host partner of Si2, for its major contributions to deployment of the renewable energy sources and solutions across the region and globally.

As it circumnavigated the world, Solar Impulse 2 flew over countries where Masdar projects are already demonstrating the potential of renewable energy to extend energy access, reduce carbon emissions and diversify the energy mix.





## **Zayed Foundation**

Zayed Foundation invited to High-level Meeting of the Development Cooperation Forum of FCOSOC



The Zayed Foundation's participation at High-level Meeting of the Development Cooperation Forum was part of a series of promotional activities undertaken by it as host of the upcoming eighth annual Global South-South Development Expo 2016 (GSSD Expo) to be held in Dubai on behalf of the Government of the UAE.

he Zayed International Foundation for the Environment was invited in July 2016 to participate at the fifth biennial High-level Meeting of the **Development Cooperation Forum** (DCF) held at the United Nations Headquarters in New York as part of the High-level Segment of the United Nations Economic and Social Council (ECOSOC).

The invitation came about as the Zayed International Foundation for the Environment is due to host the eighth annual Global South-South Development Expo (GSSD Expo) on behalf of the Government of the

UAE which is due to be held from October 30 to November 3, 2016 in Dubai.

Representing the Zayed Foundation Environment Programme (UNEP). at the event was Dr. Meshgan Al Awar, Secretary General, who was also invited to deliver a keynote address prior to the panel discussion on "Development cooperation perspectives on capacity-building and the role of technology development and facilitation in implementing the Sustainable Development Goals". Chaired by Sven Jürgenson (Estonia), Vice-President of the Economic and Social Council, the

panel discussion was moderated by Elliott Harris, Assistant Secretary-General and Director of the New York Office of the United Nations

Dr. Meshgan Al Awar began her keynote address by expressing her gratitude to the ECOSOC President and the DCF organizers for the invitation to the fifth biennial Highlevel Meeting of the Development Cooperation Forum (DCF).

She said that the UAE was both a developing country and a major donor, and has been recognized as one of the two largest donors



worldwide for the last three years, with the highest Official Development Assistance/Gross National Income ratio.

"Our experience reinforces for us how critical development cooperation is for the 2030 Agenda - and how much we have to gain from each other, especially through ioint innovation." she said.

In October 2016, on behalf of the UAE, the Zayed International Foundation for the Environment will be hosting the 2016 Global South-South Development Expo to highlight concrete initiatives that

could be replicated elsewhere. "The Global South-South Development Expo - the first Expo following the adoption of Agenda 2030 - will focus on what has been a defining feature for the UAE's own development: capacity-building and innovation." she said. "and will be held under the theme 'South-South Cooperation: Towards Enhancing Innovations for the 2030 Agenda for Sustainable Development."

Since 1971 the UAE had been undergoing a monumental transformation that had resulted from good governance, strong investment and an emphasis on

education, she said. The United Arab Emirates was sparing no effort to implement the 2030 Agenda, she added. "This could be seen in its efforts to build capacity for women. Some 58.6 per cent of the country's science and engineering graduates are women."

In her keynote address, Dr. Meshgan also pointed to inclusive national policies such as "equal pay for equal work" in the UAE.

"The United Arab Emirates had established a Gender Balance Council and signed an agreement with UN-Women to launch the Gulf





countries' first liaison office in Abu Dhabi," said Dr. Meshgan. Citing examples of similar successes in such areas as renewable energy, she went on to underscore the importance of capacity-building for monitoring and review.

In her speech, Dr. Meshgan pointed out how the UAE has placed special focus on capacity building to form and manage public-private partnerships which has encouraged the private sector to respond effectively and consider the government as a reliable partner.

Dr. Meshgan continued: "In the UAE, we have invested heavily in training and international partnerships to create organizations that can track our development progress."

Institutions like the Federal Competitiveness and Statistics Authority and the State Audit Institution "give us an objective, credible, and immediate assessment of our effectiveness, and identify the steps we must take to improve," she said.

"It's all about continuous improvement and achieving the Goals," she said, describing the Zayed Foundation's work in awarding the Zayed International Prize for the Environment.

In conclusion, Dr. Meshgan said she looked forward to the opportunity to explore these ideas at the GSSD Expo in October, adding, "We are stronger and smarter when we work together, and it will be our honor to receive you in Dubai."

# Ministerial Declaration pledges concrete action to implement 2030 Agenda.

The Development Cooperation Forum allowed for fresh perspectives and discussions of new development cooperation paradigms as its high-level segment ended on 22nd July with the adoption of a ministerial declaration.

By the text, ministers and high representatives pledged that no one would be left behind in implementing the 2030 Agenda for Sustainable Development, a plan of action for people, planet and prosperity. While reaffirming that eradicating poverty in all its forms was the greatest global challenge and an indispensable requirement for sustainable

The Zayed International Foundation for the Environment is due to host the eighth annual Global South-South Development Expo in October in Dubai on behalf of the Government of the UAE.



development, they welcomed early efforts to address unfinished business from the Millennium Development Goals.

"Over the last two years, the **Development Cooperation Forum** has produced a wealth of inputs on the importance and tremendous potential of development cooperation as a lever for the effective implementation of the 2030 Agenda," said the Council President Oh Joon (Republic of Korea), in closing remarks.

Throughout the high-level segment, participants had looked closely at the links between sectors and policy domains, and had worked to break down silos, he said. For longer-term durability, efficiency and attaining three-dimensional

development objectives, it was essential to involve local communities, scientists, the private sector and other groups in investment decisions on sustainable development, he added.

Wu Hongbo, Under-Secretary-General for Economic and Social Affairs, said that follow-up and review of implementation of the 2030 Agenda was instrumental towards achieving its high ambitions. "We are off to an excellent start," he said, emphasizing that the high-level segment called for attention to key areas, including a strong sense of national ownership, an integrated policy response, revitalized global partnerships, inclusive followup and review, and continued alignment of the United Nations

development system.

During the two-day Forum, participants had underscored the need to work with those in deepest poverty, urged for the fulfilment of official development assistance (ODA) commitments, and exchanged ideas around the complementary contribution of South-South cooperation.



## **Zayed Foundation**

**Zayed Foundation** gears up to host Global South-South Development Expo 2016



Zayed International Foundation for the Environment holds meetings to discuss both organizational and logistical operations of hosting the Global South-South Development Expo 2016 next month.

rof. Dr. Mohammed Ahmad bin Fahad, Chairman of the Zayed International Foundation for the Environment, headed a meeting of Higher Committee members of the Zayed Foundation to discuss both organizational and logistical operations of hosting the Global South-South Development Expo 2016 next month.

Scheduled to be held from 30th October to 3rd November 2016, the eighth annual Global South-South Development Expo is hosted by the Zayed International Foundation for the Environment on behalf of the Government of UAE

and 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 Also in attendance at the meeting Development.

The meeting was held at the Dubai World Trade Centre in August in the presence of Dr. Meshgan Mohammed Al Awar, Secretary General of the Zayed International Prize for the Environment and Chief Coordinator of GSSD Expo 2016; Engineer Hamdan Khalifa Al Shaer, Secretary General of the Emirates Appreciation Award for the

Environment; Ali Ahmed Al-Najjar, Financial Advisor, and Dr. Khalid Ahmed Omer, Legal Advisor of the Zayed Foundation.

was Mr. Mahir Abdulkarim Julfar, Vice President - Commercial Venues. Dubai World Trade Centre and representatives of various hotels in Dubai associated with the organization of the Global South-South Development Expo.

The Global South-South Development Expo 2016 will run under the theme 'South-South Cooperation: Towards innovation



THE GSSD EXPO 2016 will run under the theme 'South-South Cooperation: Towards innovation and roadmap for the 2030 Agenda for Sustainable Development'.

and roadmap for the 2030 Agenda for Sustainable Development.

South-South cooperation is a broad framework for collaboration among countries of the South in the political, economic, social, cultural, environmental and technical domains.

Speaking at the event, Dr. Bin Fahad reiterated that the Zayed International Foundation was indeed proud to host the global high-profile event on behalf of the UAE for South-South cooperation which until now had only been hosted by UN entities. "The South

South Expo is not to be seen as a mere conference; it 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."

Meshgan elaborated on the details of the GSSD Expo 2016 outlining that the event will address 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.

On his part, Al-Najjar focused on the services that would be provided by the hotels and reiterated on the need to make the event a grand success in keeping with Dubai's image as the world's leading global events hub.

In conclusion, Dr. Meshgan thanked Mr. Mahir Abdulkarim Julfar for facilitating the meeting at DWTC and for his support for the GSSD Expo 2016. She also thanked the staff at DWTC and representatives of the hotels for their presence and for extending support to the event.



Report

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UAE leads Arab countries in 2016 Global Innovation Index



The UAE ranked first among Arab countries and 41st worldwide in terms of overall performance on the Global Innovation Index, up from second in the Arab World and 47th globally in 2015.

he UAE showed a significant improvement in its innovation standing on the 2016 Global Innovation Index which was officially launched on 15th August at a press conference at the European headquarters of the United Nations in Geneva, Switzerland.

The UAE ranked first among Arab countries and 41st worldwide in terms of overall performance on the index, up from second in the Arab World and 47th globally in 2015.

This year's Global Innovation Index measured the performance of 128

countries and economies in the area of innovation which represents the majority of the global workforce and global GDP. The index is based on 82 sub-indices which measure innovation in detail and provide a clear understanding of how it drives economic growth and prosperity.

The index results attributed the outstanding progress of the UAE this year to its sustainable achievements in innovation inputs, especially the strengthening of institutions and market sophistication. The UAE has one of the best political and legislative

environments in the world along with outstanding development in information technology, communications, infrastructure, and innovation linkages.

Sultan bin Saeed Al Mansouri, Minister of Economy, said that the remarkable progress made by the UAE on the index in leading Arab countries and elevating its global ranking adds to its impressive track record of comprehensive development witnessed under the leadership of President His Highness Sheikh Khalifa bin Zayed Al Nahyan, Vice President and



innovation has become an integral part of the successful performance and competitiveness of the UAE.

Prime Minister and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces.

The minister added that innovation is a major pillar in advancing the state's economic development and is at the heart of good government policies aimed at placing the UAE among the top 10 countries in the world on the index by the Golden Jubilee of the Union, in line with UAE Vision 2021. Al Mansouri

emphasised that the outcome of the index, which has further strengthened the UAE's regional leadership, is consistent with the innovation-related trends and efforts exerted by the state, particularly over the past few years. Innovation has become an integral part of the successful performance and competitiveness of the UAE, in terms of both public and private sector activities.

He added that these efforts culminated in the launching of the National Strategy for Innovation in 2014 which was followed by the declaration of 2015 as 'The Year of Innovation' in the UAE under the directives of the UAE President.

The index sub-indices showed that the country ranked first globally in the cost of redundancy dismissal, ease of paying taxes, tertiary inbound mobility and state of cluster development.

Progress in innovation inputs also included a significant improvement in market sophistication thanks to growth in investment and credit. Investments have gone up from a rank of 105 to 55, thanks to market



capitalisation that increased from a rank of 73 to 32 as well as total value of stock traded that has gone up from a rank of 51 to 20 and VC deals that went up from 48 to 34.

The report said that one of the main contributors to the overall progress made by the UAE on the index this year is the robust improvement in the outputs sub-index across a number of important sectors.

Knowledge and technology outputs went up from 134 to 86. This dimension includes knowledge diffusion that has increased from 137 to 53 rank thanks among others to significant changes in FDI net outflows. Across the creativity outputs index, the country achieved a rise in the number of trademark

registration applications at the national level from 9.3 to 11.3 per billion USD GDP.

In his comment on the detailed results, H.E. Eng. Al Mansouri indicated that in light of the general slowdown in the global economy, the trend of many countries is to cut spending on research, development and the areas of innovation, while carefully considering the details of subindices of the report, which has an international credibility, especially those that measure market sophistication and investment and credit conditions in the areas of innovation, the business sophistication, R&D activities and advanced manufacturing as well as technology, knowledge and

innovation outputs. All of these, by any standards, put the UAE in front of an extraordinary result that reflects major and continuing efforts by it to enhance its innovation environment.

Eng. Al Mansouri added, "The UAE focuses on building its capabilities and legislative environment to ensure the launch of a potential wealth of creative energies that fall in line with the national strategy for innovation, which emphasises the important role of innovation, research and science in establishing a high-productivity knowledge-competitive economy, moving the country to a new phase, and spreading the culture of innovation among individuals, government institutions and private sector

The Ministry of Economy has launched 12 initiatives and 39 projects designed to drive the trend towards a knowledge economy and to support manufacturing and innovation in the UAE.



companies, while building human capital provided with the best international expertise in various development fields, particularly those identified to lead the journey of innovation, namely, clean renewable energy, transportation, technology, education, health, water and space."

Al Mansouri pointed out that the ministry is working in collaboration with all its partners, most notably the Ministry of Education, the Central Bank of the UAE and the Federal Competitiveness and Statistics Authority, to raise the index percentage to 5 per cent by 2021. This is to achieve UAE Vision 2021's objective of placing the country at the same level of member countries of the Organisation

of Economic Cooperation and Development and other developed and leading countries in the field of innovation, most of which have percentages ranging between two and eight per cent.

In line with this, he shared that the ministry has launched 12 initiatives and 39 projects designed to drive the trend towards a knowledge economy and to support manufacturing and innovation in the UAE. These cover a wide range of creative developmental activities, such as 'Young Industrial and Innovative Companies', an initiative for specialised financing of microenterprises, venture capital initiatives, and next-generation projects in the field of manufacturing, R&D and

logistics. The Ministry of Economy is continuously working to support and develop such initiatives and projects.

Al Mansouri said that "Innovation is a national approach that requires thinking ahead of the game." This year's index focusses mainly on progress in global innovation and the potentials for sharing them through the exchange of knowledge, experience and talent. The press conference included discussions on the possibility of transforming 'win-win' partnerships in the fields of science, innovation and entrepreneurship to create a new engine of growth. Switzerland ranked first worldwide in this index this year, followed by Sweden and the United Kingdom.



### **Partnership**

Masdar, DEWA explore joint co-operation in renewable energy



DEWA and Masdar discuss opportunities to enhance the scope of partnership in the field of renewable energy, and projects in the renewable energy market.

aeed Mohammed Al Tayer, MD & CEO of Dubai Electricity and Water Authority (DEWA), received a delegation from the Abu Dhabi Future Energy Company (Masdar) headed by Mohamed Jameel Al Ramahi, CEO of Masdar, at DEWA's headquarters on 30th August, 2016.

The meeting featured discussions to enhance the scope of partnership in the field of renewable energy, and projects in the renewable energy market. This supports the UAE's Vision 2021 to become one of the best countries in the world by 2021. This, in turn, strengthens

the UAE's global competitiveness, especially in renewable energy, and green economy technologies and products, DEWA press release said.

"We are proud of our ongoing strategic partnership with Masdar, and strive to exchange skills and expertise, to achieve excellence in implementing world-class projects, in adherence with the directives of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, and His Highness Sheikh Mohammed bin Rashid Al Maktoum, derive 61 percent of energy from Vice President and Prime Minister of the UAE and Ruler of Dubai. This vision recognizes the significance

of renewable energy in achieving a balance between development and sustainability," said Al Tayer.

"DEWA co-operates with different government organisations in the UAE to consolidate sustainability and to ensure a brighter and happier future. This is achieved through distinguished projects and initiatives to increase dependence on renewable and clean energy sources. DEWA is working on diversifying Dubai's energy mix to natural gas, 25 percent from solar energy, 7 percent from clean coal, and 7 percent from nuclear power



THE VISITING delegation hailed DEWA's commitment towards enhancing cooperation and strategic partnership to support national clean and renewable energy strategies for future generations.

by 2030. Gradually, the energy mix will witness enhanced component of clean energy sources, up to 75 percent by 2050, to achieve sustainable development while ensuring a sustainable future for generations to come."

"We aim to become a global role model by supporting Dubai's economic growth, securing our energy supply, using energy efficiently and meeting our environmental and sustainability goals, to make Dubai a global centre for clean energy and green economy. Through the Dubai Clean Energy Strategy 2050, we aim to

provide 7 percent of Dubai's total power output from clean energy by 2020. This target will increase to 25 percent by 2030 and 75 percent by 2050," added Al Tayer.

The visiting delegation hailed DEWA's commitment towards enhancing cooperation and strategic partnership to support national clean and renewable energy strategies for future generations.

Last June, DEWA announced the selected bidder for the 800 megawatt (MW) third phase of the Mohammed bin Rashid Al Maktoum Solar Park, which will be constructed based on the Independent Power Producer (IPP) model. The selected bidder for the project is a Masdar-led consortium including the Spanish companies FRV (Fotowatio Renewable Ventures) and Gransolar Group.

The consortium bid a Levelised Cost of Electricity (LCOE), of USD \$2.99 cents per kilowatt (kW). The Mohammed bin Rashid Al Maktoum Solar Park is the largest singlesite solar park in the world with a planned capacity of 5,000MW by 2030 with a total investment of AED 50 billion.

## **Partnership**

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Dubai to double rate of building energy efficiency by 2030



Dubai's energy efficiency is all set to double by 2030 as Dubai Supreme Council of Energy (DSCE) has joined the United Nation's Building Efficiency Accelerator (BEA) partnership to achieve this.

By joining the Building
Efficiency Accelerator
(BEA), Dubai now has access
to a global network of 30
businesses, government
organisations, and technical
experts who specialise in
improving building energy
efficiency.

he Dubai Supreme Council of Energy has joined the Building Efficiency Accelerator (BEA) partnership, launched by the United Nations (UN), to double the rate of energy efficiency by 2030.

Building efficiency policies can result in 25-50 per cent reductions in energy demand from both new and existing buildings, saving money and reducing pollution.

"DEWA adopts a clear vision based on sustainability, and develops plans and objectives according to the highest standards of efficiency. Through the Dubai Clean Energy Strategy 2050, we are working to diversify Dubai's energy mix and increase our use of clean energy sources.

"We work to enhance innovation and creativity in renewable energy, sustainability, and the environment, while promoting energy efficiency as the key to reducing the carbon footprint of each individual, transforming Dubai into the city with the lowest carbon footprint on Earth," said Saeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme



BUILDING EFFICIENCY is one of the most cost-effective ways a city can reduce its GHG while benefiting the economy.

Council of Energy.

"Dubai is one of the 12 new cities to join the BEA programme, making a total of 23 cities. This reflects our commitment to a healthier, more productive, and greener future. By joining the BEA, Dubai now has access to a global network of 30 businesses, government organisations, and technical experts who specialise in improving building energy efficiency. The BEA supports local collaboration and the plan to improve buildings, lower energy costs and make people more comfortable and productive at

home, and in the workplace," Al Tayer added.

"According to a recent report released by the International Renewable Energy Agency (IRENA), the global rationalisation of consumption and management of energy demand has received a total annual investment of US\$385 hillion.

"This investment is expected to increase to \$5.8 trillion by 2030, with \$125 billion being spent on buildings alone by 2020, as buildings are one of the largest consumers of energy," he said.

Dubai is committed to speeding up the implementation of the BEA, to reduce emissions caused by the building sector, while monitoring its progress. Measures will include updating policies and building codes, developing more creative techniques to enhance efficiency, rehabilitation of existing buildings such as hospitals, schools, and government buildings, and setting regulations for energy use within buildings.

The building sector accounts for about one-third of global energy use and one-quarter of greenhouse gas (GHG) emissions.



Building efficiency is one of the most cost-effective ways a city can reduce its GHG while benefiting the economy.

For every \$1 invested in efficiency, \$2 are saved in new electricity generation and distribution costs.

"The BEA is an important programme for Dubai to achieve the Dubai Integrated Energy Strategy 2030 to reduce 30 per cent of energy demand by that year and the demand side management programmes including building retrofit, particularly in energy security, and renewable energy," said Ahmed Buti Al Muhairbi, Secretary-General of the Dubai Supreme Council of Energy.

"We are pleased to join the BEA, which will help to foster a culture of efficiency in existing and new buildings through best practices and learning from other city experiences to ensure a sustainable environment for future generations," Al Muhairbi added.

"I am delighted to announce that 12 more cities and states are prioritising building efficiency as a way to unlock a better, more sustainable future. The BEA partnership brings technical experts together with local governments to improve policies, deliver more efficient buildings and technologies, and transform cities," said Jennifer Layke, Director of the Building Efficiency Initiative at the WRI

Ross Center for Sustainable Cities.

"These cities and states have shown a commitment toward a more efficient future that deserves to be applauded. Most of them are in countries we have identified as key to unlocking the energy transition and championing more efficient and productive ways of using energy. Reducing the energy use and demand of buildings is the most cost-effective way for cities to reach a low-carbon future - and Sustainable Energy for All stands ready to help them unlock the investment needed to go even further," said Sandrine Dixson-Decleve, Chief Partnership Officer of Sustainable Energy for All.



## **Steering Committee discusses final details of 3rd World Green Economy Summit**

is Excellency Saeed Mohammed Al Tayer, on 30th August, hosted the 17thSteering Committee meeting to finalize preparations and speakers for the third World Green Economy Summit (WGES), which is held under the patronage of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE. and Ruler of Dubai. The summit is operating under the new banner theme of "Driving the Global Green Economy", and will take place from 5th to 6th October at Dubai International Convention and Exhibitions Centre.

HE Saeed Mohammed Al Tayer, Vice Energy Strategy 2050, launched by Chairman of the Dubai Supreme Council of Energy, Managing Director and CEO of Dubai Water

and Electricity Authority (DEWA). and Chairman of WGES, led the Steering Committee meeting, which was also attended by Dr. Waleed Salman, Vice Chairman of the Summit, Executive Vice President for Strategy and Business Development at DEWA: Jens Nielsen, CEO, World Climate Limited: Dawood Al Shezawi. Executive Vice President of Commercial Affairs and Business Development, Saeed Gubash, Sr Mgr - Investment Management, and members of the Support Team.

HE Al Tayer said: "The summit aims to drive the green economy, and is fully aligned with the Dubai Clean His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the announced at the Summit's close.

UAE, and Ruler of Dubai, which aims to provide 7% of Dubai's energy from clean sources by 2020, 25% by 2030 and 75% by 2050."

He added: "Concerted efforts and endeavours undertaken at all levels are important to make WGES 2016 stand out on a global platform, shedding light on the role that UAE plays in achieving sustainable development, green growth, and the nation's commitments to the UN's Sustainable Development Goals and the Paris Agreement."

The Steering Committee discussed the latest updates in preparing for the Summit, and its main topics, and key speakers confirmed to date, and also the expected outcomes and recommendations to be

**WETEX 2016** 

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Investment in clean energy tops agenda at WFTFX 2016



WETEX 2016 is expected to see the participation of over 1,900 global companies showcasing the latest and major technologies and international practices of clean and renewable energy.

nvesting in clean energy will top the agenda of discussions during the 18th Water, Energy, Technology, and Environment Exhibition (WETEX 2016) which will be organised under the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum. Vice President and Prime Minister of the UAE and Ruler of Dubai, and under the patronage of H.H. Sheikh Hamdan bin Rashid Al Maktoum. Deputy Ruler of Dubai, Minister of Finance and President of Dubai Electricity and Water Authority (DEWA).

DEWA, organisers of the event

to be held from 4-6 October, announced that the 18th WETEX 2016 is expected to see over 23,000 visitors and the participation of over 1,900 companies from around the globe. The key objective of the exhibition is to show the latest and major technologies and international practices of clean and renewable energy to save the environment for generations to come and preserve their right to live in a clean, healthy, and safe environment and a happy community.

According to Saeed Mohammed Al Tayer, MD & CEO of Dubai

Electricity and Water Authority (DEWA), Dubai Clean Energy Strategy 2050, launched by H.H. Sheikh Mohammed Rashid Al Maktoum, aims to provide 7 per cent of Dubai's total power output from clean energy sources by 2020, 25% by 2030, and 75% by 2050.

"Organising WETEX under the umbrella of Green Week and in conjunction with the inaugural Dubai Solar Show will have an instrumental role in boosting investment in clean energy and raising its returns on economy and environment. We will also benefit from the position of WETEX as an



DURING THE exhibition, DEWA's stand will feature major renewable energy projects regionally and globally.

international platform to highlight ideal investment solutions in this industry and its major investment opportunities in Dubai," he said.

"UAE Vision 2021 and the Dubai Plan 2021 have set the roadmap that includes ambitious initiatives and development projects, which clearly define government strategies, most importantly in sustainable development," Al Tayer added.

During the exhibition, DEWA's stand will feature major renewable energy projects regionally and globally. These projects include the

Mohammed bin Rashid Al Maktoum Solar Park, which is the largest single-site project to generate electricity from solar energy in the world, with a planned capacity of 5,000 megawatts (MW) by 2030, and total investment of US\$13.6 billion (AED 50 billion) to save approximately 6.5 million tonnes per annum in emissions.

Moreover, DEWA will show the potential of cooperation with specialised companies in energy performance contracts, and with suppliers of equipment and green technologies through DEWA's Etihad Energy Services Company.

Other pioneering initiatives that will be presented by DEWA this year are Shams Dubai, which allows customers to install photovoltaic panels on their rooftops to generate electricity from solar power and connect them to DEWA's grid, the Green Charger initiative, and the Smart Applications via Smart Grids and Meters.

"The UAE attaches great importance to the diversification of its energy mix, and increasing the share of renewable and clean energy. In Dubai, we have adopted the Independent Power Producer (IPP) model to drive economic



prosperity and increase investments in energy," Al Tayer concluded.

WETEX 2016 is expected to draw a large number of visitors, as it coincides with the first Dubai Solar Show, a leading platform to address the latest solar energy solutions for building, operations, distribution, storage, and solar energy management technologies.

The exhibition focuses on attracting modern technologies, and it brings together solution providers, investors, decision makers in government departments, consumers, and business partners from private and public sectors. WETEX 2016 offers an ideal platform

to discuss all topics focused on sustainability, the environment and preservation of natural resources.

"Through WETEX, we aim to support the long-term national Green Economy for Sustainable Development initiative launched by HH Sheikh Mohammed bin Rashid Al Maktoum to build a green economy in the UAE, under the slogan 'green economy for sustainable development'. We will do this by displaying the country's efforts to preserve the environment, boost partnerships with the private sector, and discussions about green technologies in all its forms," said Saeed Mohammed Al Tayer, MD and CEO of Dubai Electricity and Water Authority

(DEWA), Founder and Chairman of WETEX.

"Bringing together a large number of decision-makers and investors under one roof over three days, ensures meaningful discussions on investment in green technologies. The exhibition provides a unique opportunity for businesses to review developed techniques in relevant fields. On the sidelines of WETEX, there are workshops to discuss developments in green technology and investment solutions in sustainable projects," Al Tayer added.

#### 'Dubai Green Zone'

WETEX 2016 will showcase the 'Dubai Green Zone' project to encourage established and WETEX 2016 offers an ideal platform to discuss all topics focused on sustainability, the environment and preservation of natural resources.



start-up companies, to set up their presence in the emirate and provide them with an ideal business environment to develop and market their green, sustainable technologies.

This will be assured by providing a comprehensive solution spanning state-of-the-art infrastructure through a 'Dubai Green Zone' as Dubai aims to become the city with the least carbon footprint in the world by 2050.

Dubai Green Zone comes under the infrastructure pillar of the Dubai Clean Energy Strategy 2050 launched by H.H. Sheikh Mohammed bin Rashid that aims to transform Dubai into an international hub for clean renewable energy and green economy. WETEX will play an instrumental role in familiarising global organisations and international research bodies with the concept of the Green Zone to discuss setting up regional headquarters within the zone.

"Dubai Clean Energy Strategy 2050 launched by H.H. Sheikh Mohammed bin Rashid Al Maktoum has set an ambitious target of generating 5,000 MW of solar power through the Mohammed bin Rashid Al Maktoum Solar Park by 2030, which will represent 25 per cent of Dubai's total energy production," said HE Saeed Mohammed Al Tayer. "The infrastructure pillar of Dubai Clean Energy includes the establishment of Dubai Green

Zone, a free zone dedicated to attracting R&D centres and emerging companies in the field of clean energy. The strategy's third pillar is also related to finding funding solutions for investment in R&D in clean energy applications. Under this pillar is also the establishment of the Dubai Green Zone. The Fund worth AED 100 billion, will provide easy loans for investors in the clean energy sector in the emirate."

"Dubai Green Zone will meet those expectations as it will bring together manufacturers, solutions and technology providers, to set up a 360 degree cycle to activate a sustainable development process. During WETEX, we will showcase the complete concept of the Green Zone," he added.



## **Sustainability**

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'Building local capacity in green growth and climate change is a priority for the UAF'



UAE Minister of Climate Change and Environment, Dr. Thani Al Zeyoudi, to lead UAE delegation at the Global Green Growth Week (GGGW) being held in South Korea this month.

The UAE's participation in the Global Green Growth Week (GGGW) is part of the country's efforts in exchanging knowledge and expertise with countries from around the world n official delegation headed by Dr. Thani Al Zeyoudi, Minister of Climate Change and Environment, will take part in the Global Green Growth Week (GGGW), which will be held in South Korea in September. The event is being organized by the Global Green Growth Institute (GGGI).

The UAE's participation is part of the country's efforts in exchanging knowledge and expertise with countries from around the world as well as government, semi-government and civil organizations working in the fields of environmental protection and

advancing sustainable solutions.

The UAE delegation will take part in the various meetings starting from 4th September and for the following five days at the Korean island of Jeju. The delegation will meet with a number of government officials and directors of global corporations involved in environmental work.

"We look forward to discussing key environmental topics with our global counterparts. We think that it is important to continue the work of the momentous Paris Agreement which took place during the COP



and directors of global corporations involved in environmental work.

21 meeting last year and to set in place the 2030 goals of sustainable to protect the environment and development. We hope that this international event will effectively contribute to global sustainable development and combating climate change," Dr. Al Zeyoudi said.

He added, "We strive to build local capacities in the fields of green growth, dealing with climate change and transferring knowledge and technology in line with our nation's vision to develop qualified national expertise. Our participation in this unique event is in line with the UAE vision 2021 and the national objective of developing

and applying innovative solutions ensure sustainable development."

Dr. Al Zeyoudi said that this event is an opportunity to find partnership prospects with participating countries and to learn more about the latest technological advancements in the field of climate change. He added that there are many potential issues of mutual interest which could open doors for collaboration in order to boost the UAF's efforts in various environmental arenas. He stressed that it is important to benefit from the international expertise

and to study the possibility of allowing private companies to carry out environmental projects in collaboration with governments.

This year, the GGGW features the Green Growth Knowledge Platform (GGKP) meeting and the fifth Global Green Growth Summit (GGGS) as well as the ninth Global Green Growth Institute (GGGI) meeting. More than 50 countries representing governments, the private sector and civil society will be part of the international event which will focus on four thematic areas: energy, water, land-use and green cities.



## Workshop

24 creatin

Creativity lab workshop discusses future of renewable energy



Held under the theme 'Envisioning the Future', DEWA, organised a 'creativity lab' workshop to discuss innovative solutions and industry solution in the energy sector.

"The role of government is to create an environment in which people can achieve their dreams and ambitions, not to create an environment that government can control."

- HH Sheikh Mohammed bin Rashid Al Maktoum he Dubai Electricity and Water Authority, DEWA, organised a 'creativity lab' workshop on 31st August themed, 'Envisioning the Future', to discuss innovative solutions and industry solution in the energy sector, 3D printing, the Internet of Things (IoT) and Big Data. IoT is the connection of everyday physical objects to the Internet in order to gather realtime data about performance, operational effectiveness, malfunctions, etc.

The workshop was attended by DEWA's Executive Vice Presidents, Vice Presidents, and senior

management, in addition to top executives from the private sector.

Saeed Mohammed Al Tayer, MD and CEO of DEWA, in his keynote speech, said, "I am pleased to welcome you to the Creativity Lab workshop in adherence with the vision of Vice President and Prime Minister of the UAE and Ruler of Dubai, His Highness Sheikh Mohammed bin Rashid Al Maktoum, to transform Dubai and the UAE into a global hub to explore and develop the future. His Highness Sheikh Mohammed bin Rashid adopts a clear vision that predicts what the future has in store,



THE WORKSHOP was attended by DEWA's Executive Vice Presidents, Vice Presidents, and senior management, in addition to top executives from the private sector.

enabling the dawn of a new era based on innovation and creativity."

He quoted Sheikh Mohammed bin Rashid, who once said, "The role of government is to create an environment in which people can achieve their dreams and ambitions, not to create an environment that government can control."

Al Tayer added, "In our efforts to enhance Dubai's position as an international platform for innovation and creativity, and to achieve the Dubai Innovation Strategy to transform the emirate into the most innovative city in the

world, and to support the Dubai Plan 2021 to enhance Dubai's competitiveness, DEWA is working to enhance the Dubai Future Agenda, to establish the most efficient government in the world.

"We adopt a clear and integrated approach based on innovation, and work to achieve all objectives set by Dubai Government, while supporting ongoing Research and Development into new technologies to streamline government work. We have established a number of teams, under the theme of 'Teams of the Future', to discuss the future of various sectors, and implement

the latest technologies, ensuring innovation."

Waleed Salman, Executive Vice President of Strategy and Business Development at DEWA, said, "DEWA has included strategic objectives within its strategy map with a focus on envisioning the future, innovation, and the happiness of stakeholders. This is achieved by organising workshops that promote innovation. Events like DEWA's creativity lab are ideal platform to exchange expertise and share best international practices, in collaboration with international experts."



Recycling

**36** creatin

More areas to come under Dubai's recycling initiative



<u>Dubai Municipality is all set to launch the third phase of 'My City My Environment project' in October.</u>

ubai Municipality (DM) will launch the third phase of its 'My City My Environment project' in October after the successful completion of the first and second phases of the project, which was launched in 2012.

Salah Amiri, Assistant Director-General of Environment and Public Health Services Sector at DM, said that this phase will cover Muhaisina, Nadd Al Hamr and Al Mizhar areas. An agreement to this effect had been signed with Averda, a company specialising in the field, he said, and added that he sought

the support of all for the success of the phase for a better future and a sustainable environment of Dubai.

"Engaging private sector companies for executing the project comes as part of an integrated plan of the municipality to privatise some of its services in order to enhance the quality of services offered to the public, especially in the field of environment," Amiri said.

He said the project is considered as a qualitative change in waste management in the emirate of Dubai as the waste will be segregated at its source, which will be useful for recycling in big quantity.

The five-year contract with Averda includes collecting recyclable domestic waste from more than 6,200 villas at an area of 24 square kilometres, in addition to electronic waste from Al Mizhar, Muhaisina and Nadd Al Hamr, which could be 200 kilogrammes a month.

Daily domestic waste collection from the said areas will come to around 90 tonnes, in addition to 20 tonnes of recyclable waste. The



company will assign 125 employees and a fleet of 21 specialised vehicles for the purpose.

AbdulMajeed AbdulAziz Sifai, Director of Waste Management Department, said the launch of the third phase of this strategic project of collecting recyclable waste and segregating waste at its source will focus on reducing the quantity of waste that will pile up in the waste bins. Previous phases of the project had covered Jumeirah 1, 2 and 3, Al Safa 1 and 2, Umm Sugeim 1 and 2. Al Manara. Umm Sheif and Al Barsha 2 and 3.

### **UAE participates in COP 22 organisers meeting**

n 20th August, a UAE delegation attended a meeting of the organising committee of the 22nd session of the Conference of the Parties (COP 22) to the Kyoto Protocol, to be held in Marrakech in November.

The delegation was headed by Dr. Thani bin Ahmed Al-Zeyoudi, Minister of Climate Change and Environment, who was briefed on the steps taken to organise this international event.

Afterwards, Dr. Al-Zeyoudi met

with Salaheddine Mezouar, the Moroccan Minister of Foreign Affairs. The meeting discussed Morocco's preparations to host the conference and areas of cooperation between the two countries to ensure the success of the event.

Dr. Al-Zeyoudi renewed the UAE's commitment to providing all support to Morocco in hosting the event. He referred to the existing cooperation and exchange of expertise between the two countries in the fields related to climate change.

### **Sustainability**

Role of youth key to achieving sustainability: Minister Al Zeyoudi



Educating the UAE youth and preparing them to lead the country's sustainable future is the first goal in the national environmental awareness strategy, said the UAE Minister of Climate Change and Environment.

r. Thani Al Zeyoudi, Minister of Climate Change and Environment, has called on the UAE youth to become part of the country's global efforts to protect the environment, achieve sustainable development and combat climate change.

He made the remark in the opening speech at the Youth Circle held at the Mleiha Archeological Centre in Sharjah on 13th August. The circle was organised by the Ministry of Climate Change and Environment in collaboration with the Emirates Youth Council under the title "Climate Change and Sustainability UAE, the late Sheikh Zayed bin

is our Shared Responsibility." Shamma bint Suhail Al Mazrouei. Minister of State for Youth Affairs also attended the event.

Dr. Al Zeyoudi told the audience that sustainability and addressing climate change are not new topics for the UAE. "Our forefathers have long embraced sustainability and were able to live in harsh climate conditions thanks to the optimal and sustainable use of the scarce available resources which they preserved for future generations," he said. He stressed that the founding father of the

Sultan Al Nahyan, took a great interest in environmental and sustainability issues. He also spoke about the transformation that the country has witnessed under the leadership of President His Highness Sheikh Khalifa bin Zayed Al Nahyan, in the areas of economic and energy diversification.

He highlighted the initiatives launched by His Highness Sheikh Mohammed bin Rashed Al Maktoum, Vice President of and Prime Minister of the UAE and Ruler of Dubai, including the UAE's Green Development Strategy.



AL ZEYOUDI stressed on the important role that the UAE youth could play in terms of putting forward ideas and innovative solutions to achieving the goals of the UAE Vision 2021.

which embraces green economy as a strategic option to direct the national economy towards a green, sustainable and low-carbon future. He spoke about initiatives and strategic solutions like green architecture, sustainable transportation and efficient resource consumption, adopted by the UAE to achieve sustainability and combat climate change.

"Innovation and creativity are the fundamental pillars of sustainable and non-traditional solutions adopted by the UAE in its journey towards sustainability and decreasing the effects of

climate change and adapting to it," Al Zeyoudi said. He stressed the important role that the UAE youth could play in terms of putting forward ideas and innovative solutions for these issues in order to contribute to achieving the goals of the UAE Vision 2021.

He explained that educating the UAE youth and preparing them to lead the country's sustainable future is the first goal in the national environmental awareness strategy and that the Ministry of Climate Change and Environment will continue to encourage the youth to innovate and be part of

global environmental efforts.

He praised the efforts of the Sharjah Investment and Development Authority (Shurooq) in facilitating the ministry's Youth Circle and the participation of youth attendees.

Shamma bint Suhail Al Mazrouei. Minister of State for Youth Affairs, praised the Ministry of Climate Change and Environment for playing a role in promoting the youth's knowledge and skills when it comes to environmental issues that are crucial to the UAE. She also praised the Ministry's



efforts in preparing the youth to become innovative and active players in UAE's efforts towards a sustainable future.

She said: "The youth are an important pillar in supporting the UAE's efforts to raise awareness regarding climate change and sustainability. They play a crucial role in supporting initiatives that develop effective solutions to combat such phenomena, and play an active role in decision-making locally, regionally and globally. The youth are responsible for sustaining a more prosperous future and combating challenges that the earth is facing due to climate change."

She added: "The youth are highly capable to invest their efforts and

skills in innovative solutions that align with the global efforts to combat climate change. They are also capable of raising awareness regarding environmental issues in society through modern means of communication in order to spread positive environmental behavior and knowledge about how to protect the environment to achieve a sustainable future."

She emphasised that the youth councils and circles are great opportunities that empower the youth to express their opinions regarding current issues and enable them to find solutions for the challenges that the UAE society faces when it comes to achieving sustainable development. These events also allow them to meet with decision

makers to discuss the best ways to contribute their creative ideas to advance various sectors towards a better future.

The young audience discussed issues related to sustainability and climate change and shared ideas on their importance for achieving a sustainable future and preparing for a post-oil era.

The Ministry of Climate Change and Environment also asked the attendees to pledge to carry the responsibility, both on local and global levels, to successfully combat climate change and achieve sustainability. The attendees were asked to write their pledges and hang them on a tree made out of recycled materials.



### Al Qasba unveils electric vehicle charging stations

l Qasba, Sharjah's premier leisure, tourism and family destination, has unveiled two electric vehicle charging stations as part of the emirate's green parking initiative, launched recently by the Sharjah Investment and Development Authority, (Shurooq) with the aim of promoting a sustainable ecosystem in Sharjah.

The charging stations are also to be used to spread awareness about the importance of electric vehicles in preserving the environment, decreasing harmful emissions and reducing the carbon footprint. Al Qasba's management is keen to highlight the role played by green parking of which electric vehicle charging stations are a main component - in "This initiative is of particular

promoting sound environmental practices.

"The launch of green parking in Al Qasba, through the opening of two charging stations for electric cars, is a significant boost to the Sharjah government's efforts of adopting more sustainable methods and advancing the emirate's status as an eco-friendly at Al Qasba, and to demonstrate city. As electric vehicles become more and more established, moving forward we anticipate that i8 model- were recharged at the the number of charging stations will increase correspondingly in the emirate, with additional stations being installed at Al Qasba, as required," said Sultan Mohammed Shattaf, Manager of Al Oasba.

importance to Al Oasba, as it enables us to raise the awareness of our visitors about the significance of sustainability and the measures needed to conserve the environment." he added.

As part of the official inauguration ceremony for the two new electric vehicle stations their effectiveness, a pair of BMW electric cars - the BMW two lots in Al Qasba's car park to demonstrate the recharging technique. The event also hosted an expert in electric cars to explain how the vehicles operate, in the process explaining their technology and answering questions about the parts used in their manufacture.



#### **Conservation**

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Desert antelope leaps back from extinction



Satellite tracking critical to ensure successful reintroduction of Extinct-in- the-Wild Antelope and to collect one of the most comprehensive datasets for any wildlife species returned to its native habitat.

wenty-five years after the Scimitar-horned Oryx was and a huge steed driven to extinction, the desert antelope returns to the last-known place it existed: Chad's Sahelian H.E. Razan Khagrasslands.

reintroduction and a huge steed conservation.

H.E. Razan Khagrasslands.

This accomplishment is part of the Scimitar-horned Oryx Reintroduction Programme, which is being led by the Environment Agency-Abu Dhabi (EAD), the government of Chad and their implementing partner, the Sahara Conservation Fund (SCF).

The project is possibly the world's most ambitious large mammal

reintroduction programme and a huge step in the field of conservation

H.E. Razan Khalifa Al Mubarak, EAD's Secretary General said: "Since 2000 the Scimitar-horned Oryx has been classified as "Extinct in the Wild" by the International Union for the Conservation of Nature (IUCN) Red List. There have been no sightings for more than 25 years due to un-regulated hunting, loss of habitat and lack of resources for conservation. Leading the programme which endeavors to reinstate a viable population of this once extinct-

in- the-wild majestic creature in its home range of Chad is a dream come true. This initial release will provide us with invaluable data to develop a self-sustaining wild population."

"The project, which is part of EAD's long-term commitment to conserve biodiversity for future generations, is inspired by the late Sheikh Zayed's legacy and efforts to protect endangered species and rehabilitate them in their natural habitat. It will be considered a success when a self-sustaining population of the Scimitar-horned Oryx roams



sustaining population by releasing 300 to 500 wild oryx over the next five years.

freely in its natural habitat, and is protected and celebrated by the Chadian community and no longer considered extinct in the wild," she said.

Dr. Shaikha Salem Al Dhaheri, Executive Director, Terrestrial and Marine Biodiversity Sector at EAD said: "In preparation for the Oryx release, the first 25 animals were transported in March from Abu Dhabi to our pre-release facility in the Ouadi Rimé-Ouadi Achim Game Reserve in Chad via cargo plane.

"This was the first time in over 25 years that there was a single Oryx in horned Oryx with GPS collars.

the country. Once released, all the Oryx trotted out unscathed by their journey and very quickly settled into their expansive pre-release pen, where they started grazing almost immediately."

She added that "The animals settled into the pre-release pens for an acclimatization period of five months prior to their release into the wild".

"In July, EAD, SCF, Smithsonian Conservation Biology Institute (SCBI) and Zoological Society of London teams fitted the Scimitar-

Twice a day the team receives the position of every animal collared. Based on these coordinates, field staff can monitor the population," Dr Shaikha noted.

She added that "The 3-4 years, life span of the collars, with an ability to remotely release and program them, will help rangers to learn more about movement, behaviour and mortality and know more about the ecology of the species in the wild. Overall, the data will tell scientists where they go seasonally, how far they travel, whether they stay together or disperse into different social groups, and even if



a poacher has taken an animal."

So far the initial reports shows that a group of 19 animals, who had have ranged over 30 km from the released site, are together and with green vegetation and water. They seem alert, healthy, calm and well adjusted, acclimatised to their new surroundings.

SCBI and Zoological Society of London support post-release satellite tracking efforts that will result in the collection of one of the most comprehensive datasets for any wildlife species returned to its native habitat.

"This is an epic homecoming for this majestic species and a significant step forward for wildlife conservation." said Steve Monfort, the John and Adrienne Mars director of SCBI.

"Every conservationist aspires to ensure that wildlife thrive in their natural environment. This project was designed to ultimately give Scimitar-horned oryx that chance, while also helping restore this grasslands ecosystem and to inspire and inform similar reintroduction efforts for other species."

"This dataset is gold to any conservation researcher," Stabach said. "We know so little about this species in the wild and the data we're collecting will tell us where these animals are—and what's going on with them—in near realtime over a number of years. We're essentially opening up a window

that will help us understand how and why individuals move across the landscape, and allow us to monitor each individual in a way that was never before possible."

"If a few calves are born soon after the release, they may imprint on the release site and return periodically," Stabach said, adding that the team on the ground will provide water at the site during especially dry periods, which may also help to imprint the herd to the location. "It would be a momentous occasion—the first oryx born on native soil in decades."

The GPS collars are programmed to turn on and off at specific times, enabling scientists to monitor animal movements and compare them with landmarks in the

Climate change and human encroachment are among the primary threats to the antelope, which were also hunted to extinction and killed during times of civil unrest in Chad and neighbouring regions.



environment—from shade trees to water sources to specific kinds of vegetation they like to eat. The collars also report the temperature and the animal's activity.

An accelerometer in the collar can pinpoint an animal's movement in three directions; as an animal moves its head left to right or up and down, the accelerometer captures this information.

SCBI scientists will use this data to assess behaviours, including the amount of time an animal spends eating or avoiding predators. The collars are equipped with a drop-off mechanism that allows scientists to remove the collars without recapturing the animal. This also ensures the animal will not wear the collar for its entire life span.

The project aims to build a selfsustaining population by releasing 300 to 500 wild oryx over the next five years. The released animals come from EAD's "world herd" of oryx, including animals from the United States, Europe and United Arab Emirates.

Climate change and human encroachment are among the primary threats to the

antelope, which were also hunted to extinction and killed during times of civil unrest in Chad and neighbouring regions. They were once widely distributed across the Sahel, from Senegal to Sudan. By releasing the oryx into their native habitat during the rainy season when better resources are available, giving them time

to acclimatise in a large fenced area and hiring rangers to patrol the reserve, project partners are hopeful that the animals will now have a better chance at survival.



### Report

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Sharjah raises profile of wildlife protection and environmental conservation



Classified as centres of environmental tourism, the EPAA's protected areas are becoming a key attraction for a growing number of eco-tourists.

he wildlife and environmental conservation centres run by Sharjah's Environment and Protected Areas Authority (EPAA) are attracting huge numbers of visitors this summer.

environmental tourism, the EPAA's protected areas are becoming a key attraction f growing number of eco-tour With the increasing number visitors recorded this summer.

A series of EPAA programmes, activities and events have been credited with raising the profile of wildlife protection and environmental conservation, across Sharjah, with the authority continuing to play a role in building awareness among UAE citizens and residents.

Classified as centres of

environmental tourism, the EPAA's protected areas are also becoming a key attraction for a growing number of eco-tourists. With the increasing number of visitors recorded this summer, so far, the EPAA has announced that it has enhanced the visitor experience by offering more air conditioned areas, in order to alleviate the hot temperatures, at this time of year.

In terms of the summer events programme, the EPAA's Sharjah Desert Park, is an attraction that is home to many species of animal and has evolved into a

complex that fuses elements of scientific enquiry, culture and entertainment.

Other centres, such as the Arabian Wildlife Centre, which was officially opened in 1999 by H.H. Dr. Sheikh Sultan bin Mohammed Al Qasimi, Supreme Council Member and Ruler of Sharjah, and the Sharjah Natural History and Botanical Museum, offer visitors the opportunity to "travel through the ages" and discover the age of the dinosaurs, as well as to learn about the natural beauty, diversity and evolution of Sharjah's indigenous fauna



THE KEY centres managed by the EPAA include the Wasit Wetland Centre, Kalba Bird of Prey Centre, and Al Hefaiyah Mountain Conservation Centre.

and flora over millions of years. In addition, the Breeding Centre for Endangered Arabian Wildlife (BCEAW) is a base for scientific studies and research into the conservation of bio-diversity in the Arabian Peninsula.

The Islamic Botanical Garden is also the first of its kind in the Middle East and lends a focus to essential Islamic teachings and perspectives, based on the contemplation of Quranic verses and their meaning, in connection with modern science. At the Children's Farm, visitors will discover a diverse

environmental, educational and entertainment garden geared specifically towards families and students. The Botanical Garden contains 87 species of local plants, distributed in flowerbeds representing the different indigenous environments of Sharjah.

The EPAA seeks to translate its strategy for the conservation of its natural bio-system and, where relevant, encourage biodiversity via several programmes, initiatives and ideas that assist and develop the nature reserves under their management. The key

centres managed by the EPAA include the Wasit Wetland Centre, Kalba Bird of Prey Centre, and Al Hefaiyah Mountain Conservation Centre.

Hana Saif Al Suwaidi, Chairman of the EPAA, said, "We are keen that EPAA centres play a key role in raising awareness and through various activities, programmes and events we hope that such initiatives, aimed at promoting conservation of the environment, becomes a productive and ultimately interactive process between the public and their natural habitat."



### **Sustainability**

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Majid Al Futtaim sets ambitious renewable energy targets



The company seeks to use solar PV technology at existing assets to generate 38,000 megawatt hours per year by 2018.

ajid Al Futtaim, the leading shopping mall, retail and leisure pioneer across the Middle East and North Africa, plans to use solar photovoltaic technology to generate at least 5 percent of its total energy consumption at existing developments by 2018.

The power that will be generated at existing developments is equivalent to 38,000 megawatt hours per year, and is comparable to the amount of energy produced by the largest power station in Bahrain, Al Dur, running at full capacity for over a day.

"Majid Al Futtaim has consistently made bold statements on sustainability. We are fully committed to supporting the UAE government's development priorities and the Paris Agreement reached at COP-21.

"We can do this best by setting an example and taking actions that will encourage other stakeholders within the private sector to invest in renewable energy," said Robert Welanetz, Chief Executive Officer at Majid Al Futtaim – Properties.

"The decision to invest in renewable energy comes as we approach

the midway point in our fiveyear sustainability strategy. Solar technology at existing developments will help us to reduce our carbon footprint by 27,000 absolute tonnes of carbon emissions annually," he added.

A white paper on Renewable Energy published by the company in August 2016 suggests this emissions saving could be achieved for an investment of AED152 million, with returns delivered in as little as 9 years. This estimate is based on a 10.6 percent internal rate of return – the interest rate at which the value of cash flows from an



has reduced energy consumption by 9 percent across the 12 hotels in its portfolio.

investment equal zero.

In the last three years, Majid Al Futtaim has reduced energy consumption by 9 percent across the 12 hotels in its portfolio. It expects to save a further AED3 million by installing LED lighting at the 19 shopping malls that it manages across the region.

In line with this environmental commitment, Majid Al Futtaim will source a minimum of 7.5 percent minimum of its energy consumption in renewable energy is strong, but at all new developments from solar energy. Integration of solar thermal and ground source cooling

capacities at future projects is another option the company is looking into.

The company is also exploring offsite energy production, primarily concentrated solar power, wind power plants and large scale solar PV power installations. To support this process assessments are focused on identifying potential partnership opportunities.

"The business case for investing the environmental case is equally as strong. United Nations officials have warned the populations of 22

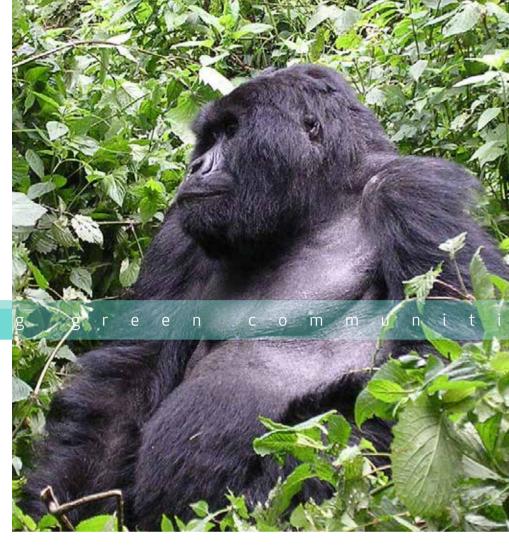
Arab countries could hit 600 million by 2050 and that energy demand will place increasing pressure on existing infrastructure. However, renewable energy sources have the potential to meet 80 percent of global demand by the same year," said Ibrahim Al-Zubi, Head of Sustainability at Majid Al Futtaim -Properties.

"Fortunately we live in a time where renewable technology and the cost of producing renewable energy have never been more competitive. We also have a government that is fully committed to renewable energy," he added.

### **Conservation**

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Four out of six great apes one step away from extinction - IUCN Red List



The giant panda has been moved off the endangered species list and is listed as "vulnerable" on the IUCN's "Red List," which classifies species according to population sizes and threats they are facing.

he Eastern Gorilla - the largest living primate - has been listed as Critically Endangered due to illegal hunting, according to the latest update of The IUCN Red List of Threatened Species<sup>™</sup> released on 4th September at the IUCN World Conservation Congress held in Hawai. Four out of six great ape species are now Critically Endangered - only one step away from going extinct - with the remaining two also under considerable threat of extinction.

The latest IUCN Red List update also reports the decline of the

Plains Zebra due to illegal hunting, made up of two subspecies and the growing extinction threat to Hawaiian plants posed by invasive species. Thirty eight of the 415 endemic Hawaiian plant species assessed for this update are listed as Extinct and four other species have been listed as Extinct in the Wild, meaning they only occur in cultivation.

The IUCN Red List now includes 82,954 species of which 23,928 are threatened with extinction.

### Mammals threatened by illegal hunting

The Eastern Gorilla - which is

has moved from Endangered to Critically Endangered due to a devastating population decline of more than 70% in 20 years. Its population is now estimated to be fewer than 5,000. Grauer's Gorilla, one subspecies of Eastern Gorilla - has lost 77% of its population since 1994, declining from 16,900 individuals to just 3,800 in 2015.

Killing or capture of great apes is illegal; yet hunting represents the greatest threat to Grauer's Gorillas. The second subspecies of Eastern Gorilla - the Mountain Gorilla -is faring better and



has increased in number to around 880 individuals. Four of the six great apes - Eastern Gorilla, Western Gorilla, Bornean Orangutan and Sumatran Orangutan - are now listed as Critically Endangered, whilst the Chimpanzee and Bonobo are listed as Endangered.

"To see the Eastern gorilla - one of our closest cousins - slide towards extinction is truly distressing," says Inger Andersen, IUCN Director General. "We live in a time of tremendous change and each IUCN Red List update makes us realize just how quickly

the global extinction crisis is escalating. Conservation action does work and we have increasing evidence of it."

The once widespread and abundant Plains Zebra has moved from Least Concern to Near Threatened. The population has reduced by 24% in the past 14 years from around 660,000 to a current estimate of just over 500,000 animals. In many countries Plains Zebra are only found in protected areas, yet population reductions have been recorded in 10 out of the 17 range states since 1992. The Plains

Zebra is threatened by hunting for bushmeat and skins, especially when they move out of protected areas.

Three species of antelope found in Africa - Bay Duiker, Whitebellied Duiker and Yellow-backed Duiker - have moved from Least Concern to Near Threatened. Whilst the populations of these species within protected areas are relatively stable, those found in other areas are decreasing due to continued illegal hunting and habitat loss.

"Illegal hunting and habitat loss are still major threats driving



many mammal species towards extinction," says Carlo Rondinini, Coordinator of the mammal assessment at Sapienza University of Rome "We have now reassessed nearly half of all mammals. While there are some successes to celebrate, this new data must act as a beacon to guide the conservation of those species which continue to be under threat."

# Hawaiian plants threatened by invasive species

Invasive species such as pigs, goats, rats, slugs, and non-native plants are destroying the native flora in Hawai'i. The latest results show that of the 415 endemic Hawaiian plant species assessed so far for The IUCN Red List (out of ca. 1,093 endemic plant

species), 87% are threatened with extinction, including the Endangered 'Ohe kiko' ola – a beautiful flowering tree found only on the island of Kauai.

Thirty Eight have been listed as Extinct, including the shrubs 'Oha Wai and Hibiscadelphus woodii. Four species have been listed as Extinct in the Wild including the Haha last seen in the wild in 2003. Invasive species are the main threat to all of these species, with many being threatened by more than one invasive species.

The IUCN Species Survival Commission (SSC) Hawaiian Plant Specialist Group anticipates the remaining species to be assessed will also be highly threatened. "Hawai is an example of nature at its best with spectacular examples of evolution, yet it is facing an uncertain future due to the impact of invasive species - showing how unwittingly, human actions can make nature turn against itself," says Matt Keir, a member of the IUCN SSC Hawaiian Plant Specialist Group.

"What we see happening in Hawai is foretelling what will happen in other island or contained ecological systems. Hawai and other nations must take urgent action to stop the spread of invasive species and to protect species with small population sizes."

The Critically Endangered

Over the last 14 years, zebra population has declined by 24 percent and the species has now moved from Least Concern to Near Threatened on the IUCN Red List.



flowering Haha plant Cyanea remyi, is one of the 105 extremely rare Hawai'ian plant species on the Red List with less than 50 mature individuals. Alula has moved from Critically Endangered to Critically Endangered (Possibly Extinct in the Wild), and is one of 38 Red Listed species with less than five individuals remaining. The Alula has been so impacted by invasive species and landslides. that only one plant remained in the wild in 2014 and it has not been seen since.

This new data will be used to influence action such as listing species on the US Endangered Species Act which will assist in securing funding for conservation programs to target and control invasive species, and to fence wild change is predicted to eliminate

areas to protect them from large mammals. Improved biosecurity to stop invasive species entering the country is essential, according to IUCN experts.

#### Good news for Giant Panda and Tibetan Antelope

This update of The IUCN Red List also brings some good news and shows that conservation action is delivering positive results.

Previously listed as Endangered, The Giant Panda is now listed as Vulnerable, as its population has grown due to effective forest protection and reforestation. The improved status confirms that the Chinese government's efforts to conserve this species are effective. However, climate

more than 35% of the Panda's bamboo habitat in the next 80 years and thus Panda population is projected to decline, reversing the gains made during the last two decades.

To protect this iconic species, it is critical that the effective forest protection measures are continued and that emerging threats are addressed. The Chinese government's plan to expand existing conservation policy for the species is a positive step and must be strongly supported to ensure its effective implementation.

Due to successful conservation actions, the Tibetan Antelope has moved from Endangered to Near Threatened. The population



underwent a severe decline from around one million to an estimated 65,000-72,500 in the 1980s and early 1990s. This was the result of commercial poaching for the valuable underfur – shahtoosh – which is used to make shawls.

It takes 3-5 hides to make a single shawl, and as the wool cannot be sheared or combed, the animals are killed. Rigorous protection has been enforced since then, and the population is currently likely to be between 100,000 and 150,000.

Other conservation successes include the Greater Stick-nest Rat, endemic to Australia, which has improved status, moving from Vulnerable to

Near Threatened. This is due to a successful species recovery plan, which has involved reintroductions and introductions to predator-free areas. This unique nest-building rodent is the last of its kind, with its smaller relative the Lesser Stick-nest Rat having died out in the Twentieth Century. The resin created by the rats to build their nests is so strong that they can last for thousands of years if they are not exposed to water.

The Bridled Nailtail Wallaby, has also improved in status, having moved from Endangered to Vulnerable. Endemic to Australia, this once common species had a dramatic population decline during the 19th and early 20thcenturies due to the

impacts of invasive species and habitat loss. A successful translocation conservation programme establishing new populations within protected areas is enabling this species to commence the long road to recovery.

On September 3rd, IUCN, its Species Survival Commission, and nine Red List partner institutions forged an exciting new commitment to support The IUCN Red List. These organizations will jointly commit more than US\$10 million over the next five years towards achieving an ambitious strategic plan that aims to double the number of species assessed on The IUCN Red List by the year 2020.



### **Green Key Certification for Vida Downtown Dubai**

ida Downtown Dubai continues to set a new benchmark for hotels in the region after receiving the prestigious Green Key Certification. Therefore, it is now among a small group of hotels within the UAE to gain the eco-label which promotes sustainability within the hospitality industry. The innovative hotel is staying true to its urban roots by becoming an eco-friendly property focused on reducing chemical use, energy and waste consumption, and implementing a recycling program.

"Through our continuous work to promote sustainable development within the hospitality community, we have remained true to the contemporary ethos of the

hotel brand and positioned Vida Downtown Dubai as one of the only environmentally conscious properties within the UAE," explains General Manager of Vida Downtown Dubai, Anke Glässing, "We also educate and train all hotel associates about the small things they can do daily to contribute to the environment."

The chic boutique hotel made minor but substantial modifications to functionality of the hotel within four key areas, in order to maintain Vidas status as an eco-friendly property.

- Recycling Program
  - o All disposable cutlery and cups are 100% biodegradable
  - o Hotel waste is separated and recycled

- Reduced Energy Consumption
  - o LED lights are used throughout the hotel
  - o Guest room are paperless, utilizing smart TV systems
- Minimized Food Wastage
  - o Al La Carte menus and live stations used instead of large buffets
- Reduced Chemical Use
  - o ROX machine installed for chemical free cleaning of vegetables and fruits
  - o Non-smoking hotel

These initiatives are just a few examples of how the hotel has introduced structural eco-friendly changes in order to receive the esteemed Green Key Certification and it conveys the hotel's commitment to environmentally friendly practices.

### **Conservation**

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'A Geography of Hope'



New book spotlights incredible value of primary forests - including storing carbon, providing freshwater and supporting the livelihoods of approximately 400 million people around the world.

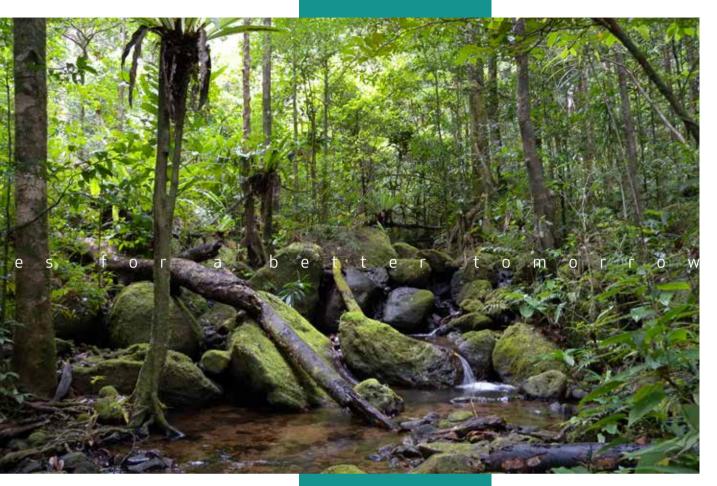
Geography of Hope:
Saving Primary Forests
illustrates the beauty,
ecological importance and
connection to humanity unique
to these nearly untouched,
"old-growth" forests. The
limited edition book — the
24th in the Conservation Book
Series — was launched on 3rd
September 2016 at the IUCN
World Conservation Congress,
by Conservation International
(CI) and CEMEX.

There are a broad range of primary forests found across tropical, boreal and temperate

climates worldwide. Despite their numerous benefits, they are under increased threat from industrial agriculture, mining, oil and gas extraction, industrial logging and infrastructure development. It is estimated that we have lost one-third of the world's original forest cover, and of the remaining forest, only a third qualifies as primary forest and of that total only 20 percent is protected.

The book's authors make the case for prioritizing the conservation of primary forests in order to preserve their rich biodiversity and the natural services they provide — including storing carbon, providing freshwater and supporting the livelihoods of approximately 400 million people around the world. Primary forests also serve as a key source of seed stock that can be used for reforestation efforts.

"We are becoming increasingly aware that the remaining primary forests of our planet are incredibly important for us all. This is not just because they are the richest



providing fresh water to nearly one-

ecosystems for biodiversity, but also because they are an essential underpinning for long-term sustainability and human well-being," said Russell Mittermeier. Executive Vice Chair of Conservation International and Chair of the IUCN Primates Specialist Group. "The simple fact that tropical forests alone may provide 30 percent — and potentially as much as 50 percent — of the solution to global climate change is just one indicator of their enormous value. They are essential to maintaining freshwater flows

for the planet as a whole, and are a last stronghold for the world's remaining indigenous peoples."

Protecting primary forests and their biodiversity is critical for securing the benefits these places provide people. Loss of biodiversity — particularly pollinator and seed disperser species — from human activity weakens overall forest health and resiliency to climate change.

Protecting the world's remaining primary forests is crucial to delivering on the 2015 Paris Agreement, which emphasized the importance of maintaining ecosystem integrity in the fight against climate change.

"What is particularly noteworthy from a climate perspective is that, at least in Amazonia, just 1% of the tree species account for 50% of the carbon captured," Mittermeier added. "These are mostly large, slow-growing hardwood species that are dispersed by animals like spider monkeys, large frugivorous birds and



forest floor tortoises — the very animals that are the first to be hunted out. And these species are often the preferred targets for loggers. We need to recognize the interconnectivity of these different parts of a tropical forest, and do everything possible to avoid having short-sighted exploitation dramatically reduce the long-term value of the forests as a whole."

Along with the benefit of storing carbon, all forests are responsible for providing fresh water to nearly one-third of the world's largest cities — including New York and Rio de Janeiro, which get a significant portion of their drinking water from protected forests.

With the collective global benefits primary forests provide, they are also critical for social and cultural reasons. Along with directly providing the livelihoods of 400 million people, the cultures of many indigenous peoples are inextricably linked to the forests.

"Primary Forests are the home of many indigenous peoples around the globe and these forests are intrinsically linked to their cultural identity and spiritual values and have been sustained by indigenous peoples over millennia," said Kristen Walker, Managing Director and Senior Vice President, The Center for Environment and Peace. "By

supporting indigenous peoples in ensuring their rights and the management of their traditional lands and territories in primary forest, we are ensuring a better future for our planet.

The conclusion the authors make is that protecting primary forests is not an insurmountable challenge. However, it is one that requires urgent action from communities, governments and business — namely, prioritizing not only the creation and management of protected areas for primary forests, but also financing and creating the investment solutions needed to make ensure protected areas are successful.



### MoU to encourage positive environmental behaviour

he Ministry of Climate Change and Environment and Al Ain Zoo and Aquarium have agreed to join forces to spread awareness about the environment.

A Memorandum of Understanding (MoU) was signed on 23rd August, 2016 by Eng. Aisha Al Abdooli, Director of Environmental Awareness and the Education Department of the Ministry of Climate Change and Environment, and Muna Al Dhaheri, Chief Operating Officer from Al Ain Zoo. Also in attendance were Dr. Thani Al Zeyoudi, Minister of Climate Change and Environment, and Ghanim Al Hajeri, Director General of Al Ain Zoo, along with other officials from both entities.

The MoU stipulated three main

areas of collaboration, including carrying out awareness campaigns and environmental initiatives, exchanging data and expertise between the two establishments to encourage positive environmental behaviour, and exchanging technical information and expertise in the field of laboratory analyses and veterinary testing.

Regarding the memorandum, Eng. Al Abdooli said, "The Ministry of Climate Change and Environment believes that raising awareness about preserving the environment and protecting the country's biodiversity is the responsibility of all individuals and establishments in the UAE. We are keen on collaborating with entities, such as Al Ain Zoo, as we work towards building a sustainable future. This

is why we consider this agreement both strategic and essential."

Earlier this year, the ministry launched the "Sustainability," a lifestyle initiative, which is part of the national awareness and educational strategy as well as the framework of national environmental awareness programmes.

The initiative, which will continue until 2020, aims at educating the UAE public and the business and industrial sectors about adopting positive environmentally-friendly practices. These include improving behaviours when consuming, in a bid to preserve resources and reduce the negative effects of human behaviour on the environment.



### **Sustainability**

60

Falling costs make renewable energy an investment in the future



10th World Future Energy Summit to demonstrate the business case for sustainability as cost of solar energy plummets.

ith the cost of solar energy plummeting, the World Future Energy Summit 2017 (WFES) will showcase an unprecedented range of financially profitable clean energy solutions, opening up opportunities for green tech companies as the MENA region moves to achieve ambitious sustainability targets.

Figures from the International Renewable Energy Agency (IRENA) show the installed cost of utilityscale photovoltaic (PV) solar generation in the UAE fell around 75 per cent between 2008 - the year of WFES' first edition - and

mid-2014, dropping from USD 7 per efficiency. This has further watt to less than USD 1.5 per watt. In late 2014, bids to build a 100 records for cost-competitiveness, with the lowest bid at US 5.8 cents per KWh. By June 2016 a Masdarled consortium won the bidding for phase three of the Mohammed bin Rashid Al Maktoum Solar Park with a levelised cost of electricity of just US 2.99 cents per KWh.

Masdar CEO, Mohamed Al Ramahi, said: "The MENA region's appetite for investment in renewables has grown with the decline in cost and advancement in technological

driven the growth of the market. Renewable energy is now an MW PV project in Dubai broke world efficient and commercially attractive means to address growing energy demand. Regional leaders such as Masdar, and platforms such as the World Future Energy Summit, which is held during Abu Dhabi Sustainability Week, the largest sustainability gathering in the region, have been helping to drive the industry forward and reinforce the business case behind diversifying our regional energy-mix."

> WFES was created to drive the business of clean energy, offering



THE WORLD Future Energy Summit (WFES) is the world's most influential energy, energy efficiency, and clean technology.

a marketplace where suppliers of new technology can connect with buyers.

Since 2008, the economics of that marketplace have changed dramatically, and WFES 2017 brings together solutions that are not only sustainable, but are increasingly the more cost-effective option. That's especially true when the long-term returns required for new-build infrastructure are factored in.

Part of Abu Dhabi Sustainability Week (ADSW) from 16 to 19 January and hosted by Masdar,

WFES 2017 will bring together ADSW's theme of 'Practical Steps Towards a Sustainable Future, with the WFES goal, 'Sustaining the Clean Energy Consensus, Empowering New Players'.

Deals made at WFES have been at the center of a surge in renewables across the MENA region, particularly solar power. Some of the key projects in the GCC include a 100 MW utility-scale plant due to open in Mecca in 2018; Kuwait has signed a contract for a USD 385 million, 50 MW plant; in Abu Dhabi the Shams concentrated solar power (CSP) project went

online in 2013. Further afield. the World Bank is supporting CSP developments in Egypt and Morocco, with renewables in North Africa seen as a path to reducing dependence on fossil fuel imports, and possibly as an opportunity to export power to Europe.

For desert regions, the impact of low-cost solar energy extends far beyond the power grid. Abu Dhabi's Masdar is running pilot programs to use solar power for desalination - one of the GCC's most significant consumers of electricity.

While governments in the region are

# Propriety &



setting ambitious targets, IRENA notes the faster-than-expected fall in costs means renewables are now seen as a financially sound investment. Within the GCC, shifting to renewables also frees up more of the region's hydrocarbon reserves for export.

While renewables have previously been more expensive than conventional sources of energy, and so required subsidies, now the technology has dropped in price to the point where they can compete on their own terms. Particularly in countries where there is ample sunlight and undeveloped land for locating solar arrays, there is an enormous market opportunity for suppliers and investors.

Scheduled to follow the 2016

COP 22 meeting in Morocco and annual sessions of the United Nations General Assembly, WFES 2017 will bring together the world's leading renewable energy professionals, policy makers, innovators and investors.

The 2016 edition hosted 30,000 attendees from 150 countries, and 600 exhibiting companies. Previous editions have hosted respected international figures, including United Nations Secretary-General Ban Ki-moon, Nobel laureate and former Vice President of the USA, Al Gore, and Wen Jiabao, Prime Minister of China.

Along with WFES itself, the fourday exhibition and conference program now features five co-located events highlighting targeted aspects of sustainability. Each event makes a strong business case for innovation within its field.

Among these, International Water Summit (IWS) in partnership with ADWEA emphasizes water security issues, while EcoWaste, in partnership with Tadweer, offers solutions that turn environmental waste into a valued resource.

For 2017, WFES Solar Expo and WFES Energy Efficiency Expo are being expanded as co-located events, showcasing the latest in solar technology and smart building solutions. The WFES Sustainable Transport Zone will also return, offering the latest solutions in energy-efficient vehicles.

### WFES drives the business of clean energy across the Middle East, South Asia and Africa.



WFES, the centerpiece exhibition, will be the largest-ever gathering of renewable energy and sustainability experts in the Middle East and North Africa, hosting prominent global thought leaders from the public, private, and academic sectors.

Alongside the exhibitions, the WFES and IWS Conference Programs will offer highlevel, practical discussion of sustainability trends and innovations across energy, water, and waste, hosting thousands of the world's leading experts.

Attendees will also gain hands-on waste management experience at the EcoWaste Workshops and Seminars, and share solutions and build partnerships at the

Middle East and North Africa Municipalities Roundtable.

Supporting home-grown entrepreneurs, the live competition Innovate@IWS will return with a panel of distinguished judges awarding development funding for the region's most promising water

technologies. Driving networking and the region's sustainability market, Sustainability Business Connect will return to pre-arrange thousands of meetings between buyers and sellers. WFES 2016 hosted a record 1,735 executive buyers from 1,322 companies and 75 countries.



### **Enviro Day**

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Clean air takes centre stage at Sarajevo Film Festival



Sarajevo Film Festival's Enviro Day showcases UN Environment initiatives boosting air quality and protecting human health.

he second annual Enviro Day saw the UN Environment Programme and Sarajevo Film Festival join forces to raise awareness of the importance of clean air in Bosnia and Herzegovina - home to some of Europe's most polluted cities.

Poor air quality is responsible for 44,000 years of life being lost in Bosnia and Herzegovina every year, according to the European Environment Agency. It costs the country \$7.23 billion, or 21.5 per cent of national GDP annually, says the World Health Organization (WHO).

"Air pollution is an invisible killer and a hidden limiting factor to the GDP growth of Bosnia and Herzegovina," said UN Environment Regional Director for Europe Jan Dusik. "Yet solutions stemming from district heating, public transport systems and energy efficiency in general are easily available and can boost the local economy while improving the quality of life of Bosnians. This partnership with the Sarajevo Film Festival is vital in spreading this message among the general public and local population," he said.

The Enviro Day held at the Sarajevo Film Festival saw experts from UN

Environment, WHO and the Federal Hydrometeorological Institute present the latest scientific knowledge on Sarajevo's air quality and on ways to improve it.

Earlier in 2016, UN Environment opened two new air quality monitoring stations in Bosnia and renovated two others. The two new facilities are located in the cities of Gorazde - where the safe threshold for solid particles has been exceeded 19 times since 8 December 2015 - and Prijedor.

As a result, accurate data is available in real-time to monitor climate



44.000 YEARS of life, one-fifth of GDP are lost in Bosnia and Herzegovina annually due to poor air quality.

change and announce pollution alerts to the general public, as well as to measure the impact of policy measures to improve air quality.

The latest data from the stations shows that air quality is currently at safe overall levels, yet last winter - when pollution levels are seasonally higher - WHO pointed to the Bosnian cities of Zenica, Banja Luka, Sarajevo and Tuzla as one of the most polluted in Europe.

Two cities in Bosnia and Herzegovina have meanwhile joined the UN Environment-led Global District Energy in Cities Initiative. Banja

Luka and Sarajevo form part of the programme, which supports national and municipal governments in their efforts to develop, retrofit or scale up district energy systems - one of the biggest sources of greenhouse gas emissions in Bosnia and Herzegovina. A project launched by Banja Luka with UN Environment in January will modernize the city's heating network and could reduce fuel consumption by 27 per cent, leading to a reduction of 20,000 tonnes of carbon dioxide each year and 4.5 million euro in fuel cost savings.

The installation of 'smart' solar

benches in Sarajevo by UNEP and the United Nations Development Programme at last year's edition of the film festival is meanwhile already bearing fruits.

The six benches sponsored by the Swedish Embassy - have since used solar energy to charge mobile phones 17,520 times, equivalent to saving 44kg of carbon dioxide emissions.

The main culprits behind Bosnia's air pollution are emissions from traffic, household stoves and local heating using heavy fuel oil, and high-intensity energy used to power industry.





### **Paris Agreement Tracker**

The World Resources Institute has published a summary updating the follow-up of the Paris Agreement on climate change adopted in 2015 which marks a critical turning point in the transition to a zero-carbon and resilient world. More countries are taking steps to formally join the Agreement - so far it has been signed by 180 Parties and ratified/joined by only 27 Parties representing 39% of global emissions. We need 55 Parties representing at least 55% of global emissions to join for the Paris Agreement to enter into force.

That is why climate scientists were excited and thrilled when the two largest greenhouse gas emitters, the US and China, formally joined the Paris Agreement on September 03, 2016, bringing it much closer to reality. President Obama and President Xi deposited their country's official instruments with the UN Secretary General, Ban-Ki Moon, ahead of the G20 Summit.

This brings the world firmly within range of hitting the 55-55 threshold this year. Other countries are urged to submit their "instrument of ratification, acceptance or approval" to the UN as soon as possible. By joining the Paris Agreement, countries have to turn the page from making commitments to delivering action.

The United States and China together account for almost 38 percent of the world's total greenhouse gas emissions. Their joint statement also deepens the relationship between the two countries on climate change and their cooperation should encourage others as they helped pave the way for success at COP21 last year. They actually reconfirmed their responsibility to lead by example.

Brazil, Argentina, Australia, Canada and Mexico have all committed to join the Agreement this year during their participation at the G20 summit being held for the first time in China. The UN Secretary General has scheduled a special event on September 21 during the UN General Assembly for countries to join the Agreement by submitting their formal instruments of ratification, acceptance or approval.

27 countries representing 39.06 percent of total greenhouse gas emissions have now joined the Paris Agreement. A further 31 have either committed to join this year or are extremely likely to, based on national statements and completion of domestic ratification processes. This should bring it to 57 countries representing 58.40 percent of emissions – well over the 55:55 threshold. This will allow the Conference of Parties to the Paris Agreement (CMA1) to take place in conjunction with COP22 in Morocco this November.

Parties would then need to determine a process for adopting the key procedures and guidelines to implement the Paris Agreement. Hence, we are optimistic that the rapid entry into force would continue the momentum started at Paris last year and help reinforce the global commitment to building a zero-carbon, climate-resilient future.

You can monitor progress on ratification of the Paris Agreement by following the progress on the Paris Agreement Tracker, which will be updated in real time as new countries join the agreement. The Paris Agreement Tracker is provided by the World Resources Institute in six languages: English, Spanish, French, Portuguese, Chinese and Japanese. Here is the link: http://cait.wri.org/source/ratification/#?lang=en

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



Zayed International Prize for the Environment



Together for a green century



