

Hanwha Newsletter

01 Hanwha Makes Headway

- Hanwha Steps Up for the Environment
- 2019 Hanwha Corporate Film

02 Press Release

- Copenhagen ZOO protects its species with the power of the sun – powered by Hanwha Q CELLS

03 Hanwha Worldwide News

Explore this month's news of Hanwha and its affiliates, taking the initiative in all corners of the world.



Hanwha Steps Up for the Environment

Helping people making the world a better place

From delivering clean energy to remote communities and social projects to combatting desertification and air pollution by planting new forests with trees grown in solar-powered nurseries, there are few lengths that Hanwha isn't willing to go, especially if it means helping improve our environment.



Combating pollution with solar power

To commemorate World Environment Day on June 5, Hanwha is launching the "Clean Up Mekong" campaign in Vinh Long Province in collaboration with the Vietnam Environment Administration and Global Green Growth Institute. This campaign is the latest in Hanwha's ongoing efforts to combat climate change and energy poverty, and to encourage responsible consumption in accordance to the United Nations' Sustainable Development Goals (UN SDGs).

The Mekong is a trans-boundary river that runs through China, Myanmar, Laos, Thailand, Cambodia, and finally Vietnam before discharging into the Pacific Ocean. It moves 475 km³ of water annually and supports over 70 million people who rely on it as their main source of water. However, indiscriminately disposed waste and sewage discharge along the river's length has turned the Mekong into one of the world's ten most polluted rivers.

The key to the campaign's clean-up efforts will be solar-powered boats donated by Hanwha. Powered and propelled by Hanwha Q CELLS' Q.PEAK solar modules, the boats scoop up waste off the Mekong River's surface using electric conveyors without emitting any greenhouse gases or other pollutants.

Spreading awareness on environmental issues and encouraging public engagement

Hanwha implemented a social media campaign to raise public awareness on the environmental issues caused by water pollution. The campaign also speaks to the importance of environmentally friendly energy sources and its benefits. The campaign was aimed at supporting the UN SDGs Target 12.5 and 12.8 to substantially reduce waste generation and to ensure that people everywhere had the information necessary for sustainable development and lifestyle that is in harmony with nature. Vietnamese citizens were encouraged to spread the news of the campaign by uploading messages of encouragement and support on Facebook. ■



To watch the video, please go to : https://www.hanwha.com/en/news_and_media/newsletter/list/aug2019.html ■

Press Release

Copenhagen ZOO protects its species with the power of the sun – powered by Hanwha Q CELLS

· In cooperation with PKA's energy fund, SustainSolutions, Copenhagen ZOO has installed high-performance solar systems using Q.PEAK DUO solar modules from Hanwha Q CELLS atop the zoo's farm buildings. The arrays help to avoid around 170 tons of CO2 emissions annually and thus achieve the zoo's ambitious climate goals



[August 22, 2019] Copenhagen ZOO is turning green and is fully committed to solar energy – powered by Hanwha Q CELLS – for the implementation of its energy-saving and climate protection measures.

Copenhagen ZOO has entered into a cooperation agreement with Pensionskassernes Administration A/S (PKA)'s energy fund, SustainSolutions, and Solcellekonsulent A/S (wholesaler) in order to enable an annual energy saving

of 20%, as well as 6 million liters of water and 170 tons of CO2 emissions for the operation of the zoo. Solar energy plays a key role in this, as the biggest effect for Copenhagen ZOO is the installation of photovoltaic systems on the roofs of 12 buildings located in the zoo's gardens.

The solar systems have a capacity of 273 kWp, and Hanwha Q CELLS' Q.PEAK DUO BLK-G5 with an output of 300 Wp and Q.PEAK DUO-G5 with that of 325 Wp are delivering clean energy from the sun, starting from the completion of the project on July 1st. The Copenhagen ZOO exclusively consumes the solar power itself. In this way, the zoo not only reduces its energy costs, but also effectively and sustainably improves its environmental balance.

Jørgen Nielsen, CEO of Copenhagen ZOO, has spent the past 18 months working on a comprehensive renovation and redesign of the ZOO to offer visitors an entirely new world of experiences. "The entrance area, the restaurants and cafés, the playground and many other areas of the ZOO have been extensively renovated, redesigned and upgraded. This makes the visit even more pleasant and exciting for our guests. For Copenhagen ZOO, species, environmental and

climate protection go hand in hand. Therefore we are very pleased that together with our partners PKA's energy fund, SustainSolutions, and Solcellekonsulenten A/S, we can now make the protection of nature and species at Copenhagen ZOO even more sustainable with the power and endurance of Hanwha Q CELLS' solar energy solutions," said the ZOO Director.

Jan Peters, Regional Sales Manager North (Europe) at Hanwha Q CELLS, added: "With the help of Hanwha Q CELLS' powerful solar solutions, Copenhagen ZOO will significantly reduce its electricity costs and thus effectively increase its competitiveness and sustainability. More and more companies across Europe are recognising the enormous potential of Hanwha Q CELLS' C&I solutions and are focusing on solar power for their own consumption".

Copenhagen ZOO in Frederiksberg looks back on 160 years of history and is home to more than 3,500 animals and 240 species. Founded in 1859, it is Denmark's oldest zoo and one of the oldest zoos in Europe. It is a magnet for visitors to Copenhagen, attracting over a million visitors from home and abroad every year. ■

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Korea

Hanwha Techwin

Hanwha Wisenet Completes Megaproject for CJ Logistics' Megahub

Monitoring the movement of packages going in and out at CJ Logistics' Megahub in Gyeonggi-do, South Korea may seem like a challenge for most, but it's not a problem for Hanwha Techwin's Wisenet cameras.

More than 1,600 Wisenet X series bullet cameras and Wisenet X series IR PTZ cameras are installed throughout CJ Logistics' Megahub, which occupies two buildings the size of 40 football pitches. 43km of conveyor belts, equivalent to a full marathon, snake around the facility, handling 1.72 million parcels every day. The cameras feature an industry-leading 12x optical zoom and 150dB Wide Dynamic Range, allowing for images to be captured clearly in bright or dim conditions.

The Wisenet cameras located inside and outside of the Megahub track packages as they arrive and get processed before being sent out to their destinations. The cameras can detect any problems that may occur along the Megahub's automated processing equipment so that they may be quickly addressed, keeping delays to a bare minimum. They also track the movement of over 1,500 vehicles coming in and



out of the facility to help create a safer working environment.

"Thanks to Hanwha Techwin's Wisenet security solutions, we were able to build a smart video surveillance system that can match the size and the cutting-edge facilities of Asia's largest logistics terminal," said a CJ Logistics official. "Now we can safeguard every corner of our terminal including vehicles, parcels, and personnel, not to mention indoor and outdoor spaces."



Germany



Hanwha Q CELLS GmbH

Hanwha Q CELLS GmbH to Build 20 Solar Farms in Poland

Hanwha Q CELLS GmbH's Engineering, Procurement, and Construction (EPC) division has been awarded the right to build 20 new solar farms in Poland. These plants will add an extra 16.8 MW of capacity to the Polish electricity grid, helping the country to deliver more green energy to its people.

Planning for the 20 new solar farms is expected to be finalized by the end of 2019. Hanwha Q CELLS GmbH is now putting together all the necessary paperwork to obtain electricity licenses with distribution network operators in order to be eligible for monthly feed in tariffs.

Hanwha Q CELLS GmbH is a leader in the Polish solar energy market. It already has a cumulative capacity of 56 MW of solar farms in the country and delivered more than 55 MW of solar modules as well. The company is hard at work strengthening



its position in this fast-growing market.

"Deals like these 20 solar farms demonstrate how well our product range is being received in the Polish market and how competitive we are as an EPC player," said Mauro Di Fiore, Vice President of EPC/Utility at Hanwha Q CELLS GmbH. "We've gained a great deal of key insights from the projects we've already implemented in Poland, and these insights will help us greatly as we develop our latest projects."



Vietnam



Hanwha Life Insurance Vietnam Ltd.

Hanwha Life Insurance Vietnam Ltd. Spreads Its Wings and Embarks on a Musical Journey

Conveying something as intangible as a company's spirit and culture can seem like a daunting task. However, Hanwha Life Insurance Vietnam struck upon a creative solution ten years ago when it commissioned "Wings of a Dream", an inspirational song illustrating the company's goal of helping people's dreams come true by giving them hope and guiding them to a brighter future through insurance.

This July, Hanwha Life Insurance Vietnam re-released Wings of a Dream through a YouTube music video to share the song to a wider audience. This new version of the song features a refreshed melody to better convey the company's positive spirit. The music video showcases employees dancing to choreography that is both fun and simple enough for viewers to follow along.

The music video also features stylized backgrounds inspired by special landmarks throughout Vietnam, symbolizing how Hanwha Life Insurance Vietnam products are for everyone, including the Ben Thanh market in Ho Chi Minh City, Dragon Bridge in Da Nang, and Hoan Kiem Lake in Hanoi.



The re-released song became an immediate success, racking up thousands of views on YouTube in just a few days due to how the company's youthful energy, proactivity, dynamism, and positivity comes through in the music video.

Wings of a Dream is currently being used throughout Hanwha Life Insurance Vietnam to boost employee enthusiasm at sales kick-offs, during training courses, and on 'I love Hanwha Day'. It is also used to inspire current and potential customers to take a closer look at Hanwha Life Insurance Vietnam and the company's extensive range of products.



Saipan World Resort

Hanwha Saipan World Resort Reopens “Wave Jungle” Waterpark

Hanwha Saipan World Resort is proud to announce that Wave Jungle, Saipan’s largest waterpark, is once again open and ready for business. The waterpark was closed for repairs after the devastating Super Typhoon Yutu swept through Saipan late last year.

Visitors can now once again enjoy the park’s various aquatic attractions, including the lazy river, black hole slide, and beach area. One attraction that is creating a lot of “waves” is the revamped wave pool, as it can now produce much larger waves than previously – much to the delight of visitors.

At the same time, Hanwha Saipan World Resort also had a soft opening for brand



new rooms that were constructed in a separate renovation project. Preparations are now underway to welcome the expected surge of new guests once the resort has a grand reopening in October this year. ■