

ELECTRIC

SHANGHAI

上海电气



SHANGHAI ELECTRIC:
JOINTLY PROMOTE GREEN
BELT AND ROAD

CHINA



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Editor's words

THE MOST VIVID "FOOTNOTE" TO GREEN DEVELOPMENT

This year marks the 10th anniversary of the Belt and Road initiative. If the Belt and Road has a color, what it would be? The answer must be "green".

All humanities share one planet and live in the same world. The international community is now interested in the "voice of China", and green Belt and Road is echoing global green development.

After ten years, the Belt and Road initiative has proved that it is a path to economic prosperity and green development. Green infrastructure construction, green energy, green finance and other joint projects have been solidly advanced, international cooperation in environment and climate governance has been strengthened, and the level of information sharing and capacity building for green and low-carbon development of the Belt and Road countries has been continuously upgraded.

As a leader in the national equipment manufacturing industry, Shanghai Electric practices green development, promotes green Belt and Road, expands cooperation in key areas such as green infrastructure construction, green energy and green transportation, promotes high-quality development of the Belt and Road, and contributes to the building of a shared community for human beings and nature.

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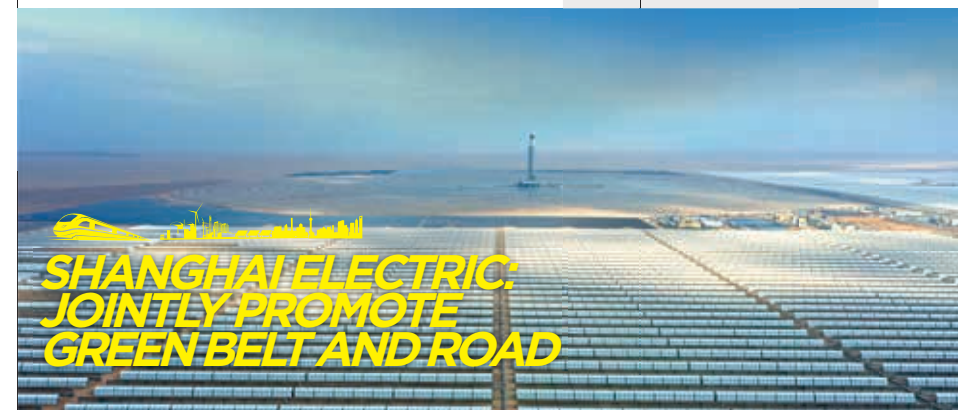
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NEWS OVERVIEW

Shanghai Electric Successfully Exports Its First Synchronous Condenser to Mexico

Generator Plant, a subsidiary of Shanghai Electric Power Generation Equipment, has recently been awarded the bid for China Energy International Group's synchronous condenser project in Mexico. The project involves providing a 25 Mvar (60Hz) synchronous condenser and its supporting equipment for the second phase of the Puerto Penasco 1 Solar PV Park in Mexico. This collaboration marks the export of Shanghai Electric's first distributed synchronous condenser, showcasing the strength and influence of Chinese companies in the global energy sector. The project is of significant importance to Mexico as it is classified as one of the country's national strategic projects, with a focus on enhancing energy security. Once completed, the Puerto Penasco 1 Solar PV Park will become the largest single-site PV project in Mexico, effectively addressing the power shortage in the northern region of Baja California and its surrounding areas. Shanghai Electric will provide high-performance synchronous condenser to maximize the transmission capacity of the PV plant, ensuring stable operation and efficient power generation.



Shanghai Electric Wind Power Group's Zhangye Base Successfully Produces the First S82 Wind Turbine Blade

The Zhangye Blade Production Base of Shanghai Electric Wind Power Group Co., Ltd. (hereinafter referred to as "Shanghai Electric Wind Power") has recently successfully produced their first S82 wind turbine blade. This accomplishment follows the previous production of the first S98 blade at the Taonan Wind Power Industrial Park in June. It signifies another important step towards Shanghai Electric Wind Power's commitment to domestically manufacture blades. The Zhangye Blade Production Base is the second facility of its kind commissioned by Shanghai Electric Wind Power. Located in Nanhua Industrial Park, Gaotai County, Zhangye City, Gansu Province, the base covers an area of 366 mu (approximately 24 hectares). It plays a vital role in enhancing the company's core component technology capabilities and optimizing the supply chain in the northwest region of China. The base is strategically positioned to cater to the blade requirements of provinces including Gansu, Xinjiang, Qinghai, Shaanxi, Shanxi, and Inner Mongolia.

Shanghai Electric Included in Hang Seng Corporate Sustainability Index Series

Recently, Shanghai Electric has been included in the Hang Seng Corporate Sustainability Index Series, i.e. the Hang Seng (China A) Corporate Sustainability Index ("HSCASUS"), the Hang Seng (Mainland and HK) Corporate Sustainability Index ("HSMHSUS"), and the Hang Seng (China A) Corporate Sustainability Benchmark Index ("HSCASUSB"). The adjustment took effect on September 4. The inclusion of Shanghai Electric as a constituent of Hang Seng Index signifies critical recognition of the company's exceptional performance in ESG as evaluated by authoritative agencies. Shanghai Electric has published ESG reports for seven consecutive years, and its MSCI ESG rating has been elevated to an "A" grade. In recent years, the company has remained committed to supporting China's national strategies. With a strong emphasis on low-carbon operations and digital transformation, Shanghai Electric continuously enhances its internal management system, optimizes corporate governance structure, and strengthens its ESG management mechanism. The company actively embraces ESG transformation by making dedicated efforts to promote ESG concept and high-quality corporate development.

Shanghai Electric Wind Power's Products Included in 2023 Advanced Clean Energy Equipment Catalogue

Recently, the 2023 World Conference on Clean Energy Equipment was held in Deyang, jointly organized by the Sichuan Provincial People's Government and the Ministry of Industry and Information Technology. At the conference, the 2023 Advanced Clean Energy Equipment Catalogue was released, and Shanghai Electric's EW8.5-230 offshore wind turbine, built on the Poseidon platform, and EW6.25N-202 wind turbine, built on the Xcaliber platform, were included into the catalogue. Shanghai Electric is committed to developing advanced clean energy equipment and will continue to innovate in technology and products with a focus on turbine upgrades.

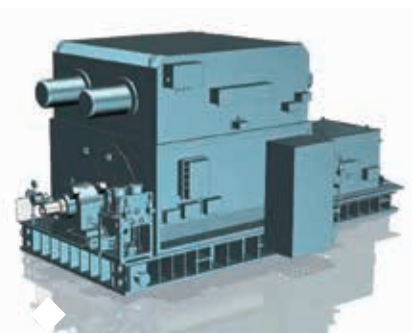


Final Handover and Provisional Handover Certificates Issued for Two Blocks in Phase V of Mohammed bin Rashid Al Maktoum Solar Park in Dubai

On August 26, SHUAA Energy 3, the owner of the 900MW PV Phase V of Mohammed bin Rashid Al Maktoum Solar Park, issued the final handover certificate for Block A (300MW) and the provisional handover certificate for Block C (300MW). This marks the end of the warranty period for Block A and the official start of the warranty period for Block C. The Phase V PV project consists of three blocks, namely A, B, and C, each with a capacity of 300 MW and a warranty period of 24 months. Block A completed its temporary handover in July 2021 and its final handover in July 2023. Block B completed its temporary handover in October 2022. Block C completed its temporary handover in August 2023. Currently, all three blocks are in commercial operation, and their unit performance has exceeded the contract standards, as confirmed by annual testing. The project has received high praise from ACWA Power, the Dubai Electricity and Water Authority (DEWA), and other relevant departments.

Shanghai Electric Machinery Secures a Major Order for Natural Gas Pipeline Compressor Motors

Shanghai Electric Group Shanghai Electric Machinery Co., Ltd. (hereinafter referred to as "Shanghai Electric Machinery"), has recently secured an order from Pipe China for the supply of 11 units of 20MW ultra-high-speed pressurized enclosure type excitation brushless synchronous motors. These motors will be deployed in four compressor stations located in the middle section of the Third West-to-East Gas Pipeline. This order further solidifies Shanghai Electric Machinery's leading position in the field of natural gas pipeline projects. The completion of this project will connect the already finished western and eastern sections of the Third West-to-East Gas Pipeline, effectively bridging Western resources with the Eastern natural gas market, mitigating gas shortage in central and eastern China. It will contribute to national energy security and enhance the natural gas supply capacity of Hubei and Henan provinces. Furthermore, this project will facilitate the circulation of domestic and foreign resource supplies, thereby improving the natural gas pipeline system in central and eastern China. It is also of great significance to the construction of a "five vertical and five horizontal" trunk gas pipeline, which aims to accelerate the development of a unified national gas network.



Shanghai Electric Participates in Press Conference Commemorating the 65th Anniversary of China-Iraq Diplomatic Relations

Recently, the Chinese Embassy in Iraq held a press conference at the East Baghdad Oilfield to commemorate the 65th anniversary of diplomatic relations between China and Iraq. Shanghai Electric, ZhenHua Oil, and PowerChina attended the conference as representatives of Chinese companies in the power, oil, and infrastructure sectors. At the conference, Shanghai Electric's representatives presented the company's contributions and social responsibilities fulfilled in Iraq's power sector over the past 15 years. They shared information about the positive impact of the Wassit Thermal Power Plant and generator maintenance services on the local power grid, and showcased achievements in community development, local talent cultivation, and community engagement in the surrounding areas. Chinese enterprises have played a crucial role in Iraq's power construction by building power plants with a total installed capacity of over 6,000 MW. Notably, the Wassit Thermal Power Plant, for which Shanghai Electric was involved in construction and operation, supplies nearly 30% of Iraq's power and almost 70% of Baghdad's power during peak periods. To date, the project has generated 140 billion kWh of electricity, effectively alleviating local power shortage.



Shanghai Electric Power Generation Group Showcases Low-Carbon Solutions at China International Energy Storage Exhibition

The 2nd EESA China International Energy Storage Exhibition was held in Suzhou recently, where Shanghai Electric Power Generation Group made a notable presence. The group showcased its low-carbon solutions, including intelligent energy storage systems, industrial and commercial energy storage systems, residential battery energy storage systems, 5G base station backup power, and UPS solutions. As a recognition of its achievements, the group was honored with the "Best System Integrator" award.

Shanghai Electric Power Generation Group Secures Two Major Orders for Compressed Air Energy Storage Equipment

Shanghai Electric Power Generation Group has recently announced the successful acquisition of two orders for compressed air energy storage (CAES) equipment. These orders entail the supply of turbines and generators for two CAES projects by China Energy Engineering Corporation, marking a significant breakthrough for the Power Generation Group in the CAES sector. The first project, located in Jiuquan, Gansu, is a 300MW CAES project equipped with the world's first artificial chambers for gas storage. The project employs innovative high-temperature adiabatic CAES technology enabled by low-melting-point molten salt, which paves the way for large-capacity, environmental-friendly, zero-carbon, efficient, cost-effective, and flexible CAES applications. The second project, situated in Tai'an, Shandong, is the world's largest 350MW salt cavern CAES project. Once completed, it will set multiple world records in terms of single-unit power, conversion efficiency, and energy storage capacity. The comprehensive conversion efficiency of its system is expected to exceed 70%, representing a remarkable milestone in the compressed air energy storage technology.

Shanghai Electric's Thar Block-1 Project Receives Three Consecutive National Environment Excellence Awards in Pakistan

Recently, the National Forum for Environment and Health (NFEH) in Pakistan held its 20th Annual Environment Excellence Awards Ceremony. Shanghai Electric's Thar Block-1 Integrated Project won the Environment Excellence Awards for three consecutive years. The project has implemented various measures to conserve fresh water resources and enhance their utilization through the use of water storage tanks and drip irrigation systems. These initiatives have effectively contributed to the improvement of local ecological vegetation diversity and brought tangible benefits to local residents. The project also conducts regular monitoring of water, air, noise, and waste to promptly address any environmental issues. By incorporating advanced technology, the project has enhanced resource utilization efficiency, reduced waste, and minimized environmental impact. Continuous optimization of environmental protection measures is pursued, aiming to meet the highest standards of environmental protection. As of June this year, the project has achieved an impressive greening coverage rate of 75%, transforming the Thar region from a desert zone into an oasis, and significantly improving the local ecology and the quality of life for residents.





Shanghai Electric Illuminates the “Zero-carbon Methanol” Torch of the Asian Games

On September 23, the 19th Asian Games torch was lit at the Hangzhou Olympic Sports Center Stadium, known as the “Big Lotus”. A remarkable highlight of the opening ceremony was the use of zero-carbon methanol in lighting the main torch, making it the first-ever zero-carbon opening ceremony of a major global sports event. The zero-carbon methanol used to fuel the main torch was provided by the Anyang Green Methanol Plant in Henan province. The CO₂ used in methanol production was produced by the carbon capture device provided by Shanghai Electric. The device features high absorption efficiency and low energy consumption, reducing CO₂ emissions by 160,000 tons per year to achieve efficient CO₂ utilization. Zero-carbon methanol is a clean and renewable energy source that enables carbon neutrality. It is produced from hydrogen gas in coke oven gas and captured carbon dioxide from industrial air emissions through a special process. The

carbon dioxide generated and consumed during methanol production and combustion is completely neutralized. Green methanol, as the main torch fuel, showcases its environmentally friendly, safe, reliable, visible, and economical advantages, embodying the spirit of a “green, smart, economical, and ethical” Hangzhou Asian Games. Shanghai Electric, as a leading energy equipment manufacturer in China, has been embracing a green, low-carbon, and environmentally friendly development approach. It has combined wind power, solar energy, green hydrogen, carbon capture, and advanced methanol synthesis technologies to create its own green methanol technology solutions. This transformation from an “Energy Expert” to a “Management System of Carbon Emission” contributes to China’s high-quality development and supports the goals of carbon peaking and carbon neutrality. **D**

SHANGHAI ELECTRIC

Shanghai Electric Maintains Position of Asia’s Top 100 Brand

On September 20th, the Asia Brand Summit organized by the World Brand Lab was held in Hong Kong and released the “Asia’s 500 Most Influential Brands of 2023”. Shanghai Electric secured the 92nd position on the list, marking a one-place improvement compared to the previous year’s ranking.

It is worth noting that Shanghai Electric has been on the list of Asia’s 500 Most Influential Brands for eight consecutive years, thanks to its highly resilient industrial foundation and innovative brand paradigm. In recent years, around comprehensive low-carbon transformation and its industrial planning, Shanghai Electric is actively expanding the “wind, solar, storage and hydrogen” multi-energy complementation projects and “generation, grid, load, and storage” integrated business, to drive revenue growth. Driven by scientific and technological innovation and supported by its comprehensive strength, Shanghai Electric continues to deepen the three core advantages of “extreme manufacturing power, integration services, scientific and technological competitiveness”, driving accelerated growth in its main business. With a focus on the national strategy of low-carbon development and digital transformation, the Group continued to deepen internal reform of the management system to optimize the corporate governance structure and improve the ESG management system and ESG governance. Shanghai Electric joins hands with its global partners to continuously create and improve customer experience based on the concepts of openness, coordination and win-win cooperation, so as to promote sustainable and high-quality development.

It is reported that companies from 20 countries and regions were selected for the Asia’s 500 Most Influential Brands, and a total of 215 brands from China (including Hong Kong, Macao and Taiwan) made to the list, accounting for 43.00% of the top 500 Asian brands, ranking first. Experts analyzed that after the pandemic, the global consumption trend and industry development pattern have seen



great changes. Compared with last year, brands of certain industries such as finance, diversification, communication services, and retail have increased, while for industries such as information technology, media, food and beverage, electronics and electrical appliances, and petrochemicals, the number of brands has declined. Asia remains the world’s most promising economy, with China, Japan and South Korea having the highest number of brands selected.

The Asia’s 500 Most Influential Brands has been published annually since 2006, and this year marks the 18th evaluation conducted by the World Brand Lab to assess the influence of Asian brands. It measures market share, brand loyalty, and Asian leadership among other metrics, and its findings have become an important basis for intangible asset assessment in the M&A process for many companies. **D**



For a Zero-Carbon Future

Shanghai Electric Presents Innovations at CIIF 2023

On September 19th, the 23rd China International Industry Fair (hereinafter referred to as "CIIF") kicked off at the National Exhibition and Convention Center (NECC) Shanghai. Chen Jining, Secretary of the Shanghai Municipal Party Committee, visited the exhibition area of SHANGHAI-FANUC Robotics Co., Ltd.* (hereinafter referred to as "SHANGHAI-FANUC**"), an enterprise in which Shanghai Electric is a shareholder, to learn about the achievements made by the enterprise in the field of intelligent manufacturing, and exchanged views with on-site staff on the topics of intelligent manufacturing, artificial intelligence, and IoT research and development.

As a longstanding participant in CIIF, Shanghai Electric proposed the "Zero-Carbon and Intelligent Future" with a focus on "Smart Energy", "Intelligent Manufacturing" and "Digital Integration". It creates five new themed exhibition areas and two immersive viewing areas, to showcase a full range of Shanghai Electric's achievements in equipment manufacturing digitization and the integrated solution of "wind, solar, storage and regulation". It presented the innovative products of "specialized and sophisticated" enterprises and other cutting-edge technologies in various business fields, leading the audience to explore the "Zero Carbon" world from a new perspective

and experience the beauty of industrialization.

In the morning, with the witness of Liu Ping, Deputy Secretary of the Party Committee and President of Shanghai Electric Group, and Gu Zhiqiang, Vice President of Shanghai Electric Group, Shanghai Electric signed strategic cooperation agreements with AECC CAE and National Innovation Center par Excellence, opening a new chapter of comprehensive cooperation.

Shanghai Electric also launched impressive products. It successively released three major industrial intelligent solutions, namely "Intelligent Management System of Carbon Emission", "SEunicloud" industrial Internet platform 4.0 and "Zero-Carbon Industrial Park", and released the "Zero Carbon Industrial Park Planning and Assessment". In addition, on the occasion of the 10th anniversary of the "Belt and Road" initiative, Shanghai Electric released two promotional videos about overseas projects, "Beyond the Mountains and Seas" and "Ten Years on the Road" at CIIF. **D**

Five Shanghai Electric Products Included in Shanghai's First Catalog of Recommended Innovative Products for 2023

The Shanghai Municipal Commission of Economy and Informatization has recently unveiled the First Catalog of Recommended Innovative Products for 2023. Among the included products, five were manufactured by three companies under Shanghai Electric, highlighting the recognition given by authorities to the innovative capabilities and product performance of these companies.

List of Included Products:

Shanghai Renmin Electrical Apparatus Works Co., Ltd.

High-voltage Intelligent Universal Circuit Breaker
RMW3-6300T

Indoor High-voltage Vacuum Circuit Breaker
RMV1-12/1250-31.5M

Shanghai Kezhi Electric Automation Co., Ltd.

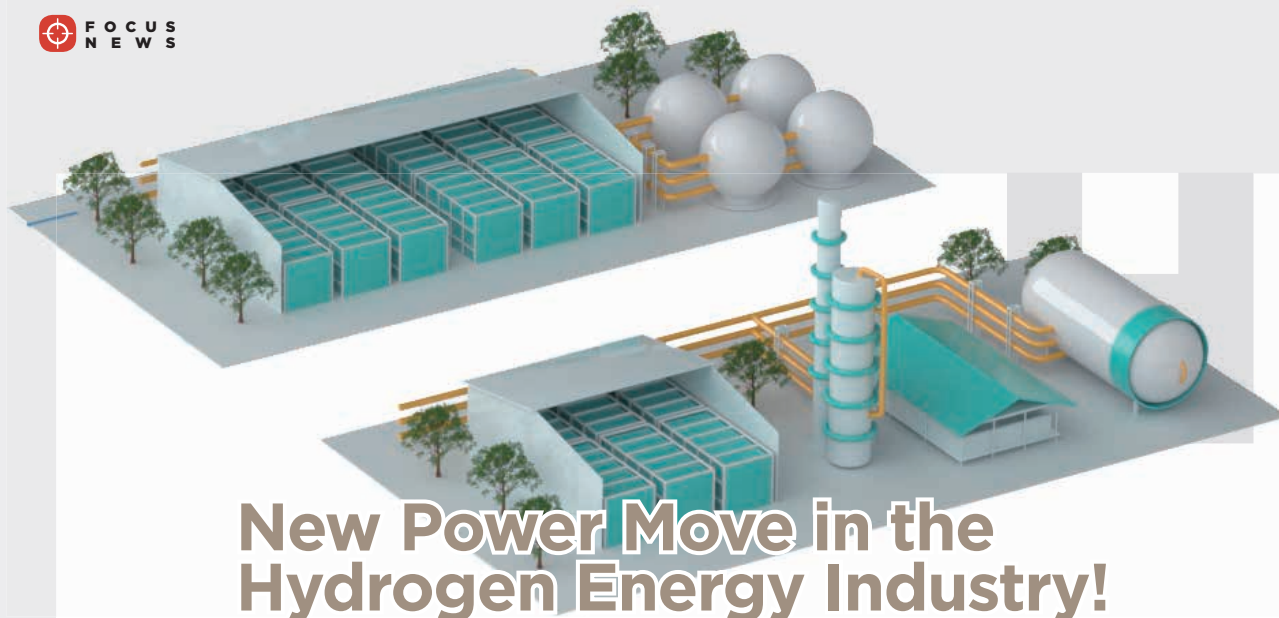
Production, operation, and quality management platform for digital factories for automotive powertrain and motor component industries

Shanghai No.1 Machine Tool Works Co., Ltd.

Reactor vessel internal and control rod drive mechanism for "Hualong One" Reactor

Reactor vessel internal and control rod drive mechanism for "Guohe One" Reactor

The First Catalog of Recommended Innovative Products for 2023 went through a rigorous evaluation process, including expert scoring and online public announcement, before its official release. The products in the catalog represent advanced technology trends and have significant market potential. The main objective of the catalog is to stimulate the commercialization and industrialization of innovative products, enhance the leading role of high-end industries, promote the industrialization of research and development efforts, establish the brand of "Made in Shanghai", and support the high-quality development of industries in Shanghai. **D**



2

New Power Move in the Hydrogen Energy Industry! Hydrogen Energy R&D Center and Automated Hydrogen Energy Production Line Unveiled

On September 1st, the inauguration ceremony of the Hydrogen Energy R&D Center and the Automated Hydrogen Energy Production Line of Shanghai Electric Hydrogen Equipment Era Technology Co., Ltd. was held. Leng Weiqing, Secretary of the Party Committee and Chairman of the Board of Directors of Shanghai Electric Group, and Liu Ping, Deputy Secretary of the Party Committee and President of the Group, attended the ceremony and inaugurated the two facilities.

During the ceremony, Leng Weiqing attentively received a project briefing. She learned about the scientific research and manufacturing capabilities of Shanghai Electric Hydrogen Equipment Era Technology Co., Ltd., inquired the R&D and manufacturing plan for the core components of the electrolyzer, and exchanged ideas with scientists and engineers. As talents are the foundation of Shanghai Electric's hydrogen energy industry, she noted that it's urgent to introduce more talents, strengthen talent training, attract and cultivate a large team of outstanding talents, and create favorable conditions for the sustained development of Shanghai Electric's hydrogen energy strategy.

In recent years, with the growing global demand for clean energy, hydrogen energy as an efficient clean energy has come to the spotlight. The development of the hydrogen

energy industry is a crucial strategic choice in coping with climate change and realizing green and sustainable development. It can promote China's transformation to green and low-carbon energy and the realization of the "dual carbon" goal. Shanghai Electric Hydrogen Equipment Era Technology Co., Ltd. was established in 2022, as one of the important initiatives in the realization of Shanghai Electric's "4+2+X" strategy.

The Hydrogen Energy R&D Center aims to meet the R&D needs of new electrolyzers and their core components. It can test and verify the key components and products for hydrogen production from electrolytic water, providing robust support for the R&D of key electrolyzer components and the creation of new products. The unveiled automated hydrogen energy production line is the first of its kind dedicated to the automated manufacturing of core components of high-power alkaline electrolyzers in China. It will significantly improve production efficiency and reduce manufacturing costs, while providing more stable and reliable quality. The R&D center and the automated production line will equip Shanghai Electric with the capabilities of systematic verification, production and testing of materials, machines and services related to electrolyzed water-based hydrogen production equipment. **D**

Shanghai Electric's Large-capacity Motor for 300MW Compressed Air Energy Storage (CAES) System Successfully Rolled Off the Line

On August 23, Shanghai Electric Group Shanghai Electric Machinery Co., Ltd. (hereinafter referred to as "Shanghai Electric Machinery") held a roll-off ceremony for the world's first large-capacity motor designed for a 300MW Compressed Air Energy Storage (CAES) system. The motor has met international advanced technical standards, making significant contributions to China's CAES industry.

It will be used in the world's first 300MW CAES project under construction in Yingcheng, Hubei. The motor has a power range of 20MW to 150MW, with a voltage range of 10 to 15.75kV, covering a wide range of electric drive power for energy storage of various capacities. Customized services are available based on different units and technology routes. The successful production of the motor demonstrates Shanghai Electric's capability to provide solutions for advanced large-scale CAES compressor motors with ultra-large capacity, high efficiency, and high speed.

To meet the unique requirements of CAES applications, the technical team has developed a dedicated insulation system for the motor. Through digital simulation, they

have optimized the electromagnetic and structural aspects of the motor, ensuring stability during frequent start/stop cycles, high efficiency, easy installation, high reliability, and maintenance-free operation.

The motor has versatile applications in various energy storage scenarios such as CAES, liquid air energy storage (LAES), distributed energy storage, and integrated energy storage. It is also suitable for industries like metallurgy, petrochemicals, oil and gas, and new energy, covering specific applications such as large-scale air separation, blast furnace blowers, cracked gas compressors, propylene compressors, ethylene compressors, propane dehydrogenation, liquefied natural gas, carbon capture, and other important fields.

At the roll-off ceremony, more than 30 guests from the project owner, design institute, main equipment manufacturer, collaborative organizations, and sister organizations learned about Shanghai Electric's strategy and product development in energy storage. They also visited the Shanghai Electric Machinery's exhibition center and manufacturing facility. **D**



Shanghai Electric Achieves Two Major Milestones on the Eve of National Day

Shanghai Electric Power's Minhang Power Plant achieved a major milestone on September 28. The first H-class combined-cycle gas turbine by Shanghai Electric successfully completed a 168-hour full-load test run, demonstrating excellent environmental, economic, and technical performance. This achievement marks the official commercial operation of the model, coinciding with the celebration of the 74th Chinese National Day.

The H-class gas turbine is the result of a fruitful collaboration between Shanghai Electric and Shanghai Electric Power. It is the first H-class one-driving-one separate-axis combined-cycle gas turbine manufactured by Shanghai Electric, with all main equipment including turbine island and boiler island supplied by the company. The successful operation of this turbine fully demonstrates Shanghai Electric's capabilities in independent equipment design, technology, and supply.

The GT36 H-class gas turbine used in this project offers numerous advantages, including high performance, low emissions, operational flexibility, extended maintenance cycles, and the ability to adapt to different fuels. It incorporates advanced combustion turbine technologies, such as four-stage variable stator vanes, two-stage sequential combustion, and compressor intercooling. These features ensure exceptional stability and flexibility. The two-stage sequential combustion allows for stable combustion and achieve ultra-low NOx emissions even at a load level as low as 20%.

The steam turbine used in the project is the first domestically-made steam turbine designed for combined cycle with an H-class gas turbine. It is developed by Shanghai Electric and features advanced specifications, including a three-cylinder two-exhaust modular design and efficient AIBT flow-through technology. The turbine also incorporates advanced technologies such as start/stop system, high operational efficiency, and intelligent programs. Additionally, it is equipped with a water-hydrogen-cooled generator, ensuring high efficiency and reliability. The waste heat boiler, with a DC high-pressure system, enables rapid start/stop and efficient load response.

The Minhang Gas Turbine Demonstration Project, located in the Minhang Industrial Zone in the southwest suburb of the city, is a key project of the city. Once put into operation, it will contribute to Minhang's role as an important power supply hub, ensuring safe, reliable, economical, and environmentally friendly operation of Shanghai's power grid. As the first demonstration project



equipped with Shanghai Electric's H-class heavy-duty gas turbine, it will drive innovation in the gas turbine manufacturing industry. It will also play a crucial role in import substitution for heavy-duty gas turbines and establish the "Made in Shanghai" brand. This achievement is a landmark in cultivating domestic enterprises into global leaders in gas turbine manufacturing.

On September 25, Shanghai Electric and the Shanghai Advanced Research Institute, Chinese Academy of Sciences, held a completion and delivery ceremony for the first set of "horizontal 10MWt helium gas turbine", jointly developed for Generation IV nuclear energy. The ceremony took place at the gas turbine final assembly workshop of Shanghai Electric's Turbine Plant.

In May 2014, Shanghai Electric and the Shanghai Advanced Research Institute established the "Joint Research Center for Key Technologies of Generation IV Nuclear Reactor Energy Conversion System" to contribute to China's nuclear energy development. The helium gas turbine technology, a significant research task of the Shanghai Advanced Research Institute in the "12th, 13th and 14th Five-Year Plans" for scientific and technological innovation, has received support from the Chinese Academy of Sciences' Class A pilot projects, namely the "Thorium-based Molten Salt Nuclear Reactor" and "Clean Energy" projects. The Shanghai Advanced Research Institute has been actively involved in fundamental research related to this technology, while Shanghai Electric possesses comprehensive design and manufacturing capabilities for various types of power equipment. Together, they are conducting joint technical research and development to industrialize China's Generation IV nuclear technology. **D**

Asia's First Offshore Wind Power SOV Successfully Launched

On the morning of September 16th, the grand launching ceremony of Asia's first offshore wind power SOV (Service Operation Vessel) was held in Qidong. Shanghai Electric Wind Power Group Co., Ltd. (hereinafter referred to as "Shanghai Electric Wind Power") commissioned ZPMC to build the two SOVs. This is the first time that a wind turbine manufacturer in the field of offshore wind power operation and maintenance introduced specialized SOV in Asia. After the launching of the new ships, a number of mooring and navigation tests will be conducted.

During the "14th Five-Year Plan" period, China has planned five ten-million-kilowatt-class offshore wind power bases and introduced various measures to promote offshore large-scale development and deep and distant sea demonstration development. Following this national strategy, while drawing on its extensive experience in offshore wind power operation and maintenance, Shanghai Electric Wind Power became the first in the industry to launch a specialized SOV traffic program.

Initially designed by the Norwegian company Ulstein, these two offshore wind power SOVs were crafted by Shanghai Zhenhua Offshore Design and Research Institute and officially put into production in September 2022. Integrated with high efficiency, green, and intelligent O&M,

and equipped with DP2 power positioning system, active wave compensation trestle and DC integrated electric propulsion system and lithium battery hybrid power scheme, the two vessels have a large cargo space, a spacious loading capacity, and an advanced intelligent O&M system.

The offshore wind power SOV is currently one of the best solutions for deep and distant sea operation and maintenance in the world, and it is also the forward-looking step taken by Shanghai Electric Wind Power to exploit the deep and distant sea. After being put into use, it will greatly alleviate the pain points of the current Chinese mainstream offshore transportation vessels, such as short window period, operation interruption, frequent trips, low efficiency, poor applicability to harsh sea conditions, etc., and provide strong support for the operation and maintenance of deep and distant sea projects.

Leaders of Qidong municipal party committee, municipal government, Nantong MSA and other relevant governments, guests from Shanghai Electric Wind Power, ZPMC, China Classification Society (CCS), No.704 Research Institute of China State Shipbuilding Corporation and other enterprises and institutions, and important partners of Shanghai Electric Wind Power witnessed this historic moment. **D**





SHANGHAI ELECTRIC'S "GREEN AND LOW- CARBON" DEVELOPMENT BENEFITS PEOPLE ALONG THE BELT AND ROAD



SHANGHAI ELECTRIC: JOINTLY PROMOTE GREEN BELT AND ROAD

On September 7, at the 2023 Asia Green and Low-Carbon Development Roundtable, Long Yongtu, former Vice Minister of Foreign Trade and Economic Cooperation and China's Chief Negotiator for WTO accession, said that over the past ten years since the launch of the Belt and Road Initiative, China has adhered to the principle of co-deliberation, co-building and sharing, and has developed mutually beneficial cooperation with countries including Kazakhstan, Myanmar, Bangladesh, Türkiye, Mongolia, Laos, Thailand, and Saudi Arabia, providing a large number of good practices for the benefit of the people.

In the past ten years, Shanghai Electric has been working on various projects in countries along the Belt and Road, such as Pakistan, Kenya, Kazakhstan, Bangladesh, Türkiye, Saudi Arabia, etc. With a large number of completed or ongoing green low-carbon projects, it has become a pearl on the Belt and Road.

PRACTICING THE CONCEPT OF ENVIRONMENTAL PROTECTION

Going green is important to the high-quality development of the Belt and Road initiative. Standing on the strategic height of the development of human civilization, Shanghai Electric follows the consensus of all stakeholders. In foreign investment and cooperation, Shanghai Electric has enhanced the concept of green development, strengthened the capacity to operate in accordance with the law, and required its entities to release environmental reports on a regular basis. It has increased the construction of green infrastructure, promoted green technological innovation, and strengthened green supervision.

In July 2017, Mombasa-Nairobi Railway was officially opened. A standard-gauge railway connecting the two cities of the Republic of Kenya, it was built with the aid of China in accordance with National Railway Class I standards. The Railway is an integral part of the East African railway network, the largest infrastructure construction project since Kenya's independence, and the "flagship project" for Kenya to realize Vision 2030.

As a bridgehead enterprise of the Belt and Road initiative, Shanghai Mitsubishi Elevator, a subsidiary of Shanghai Electric, fully participated in the construction of Mombasa-Nairobi Railway, and practiced green development, allowing all the Kenyan people to enjoy Chinese quality. Shanghai Mitsubishi elevator has built the highest escalator in Africa. In the Mombasa West

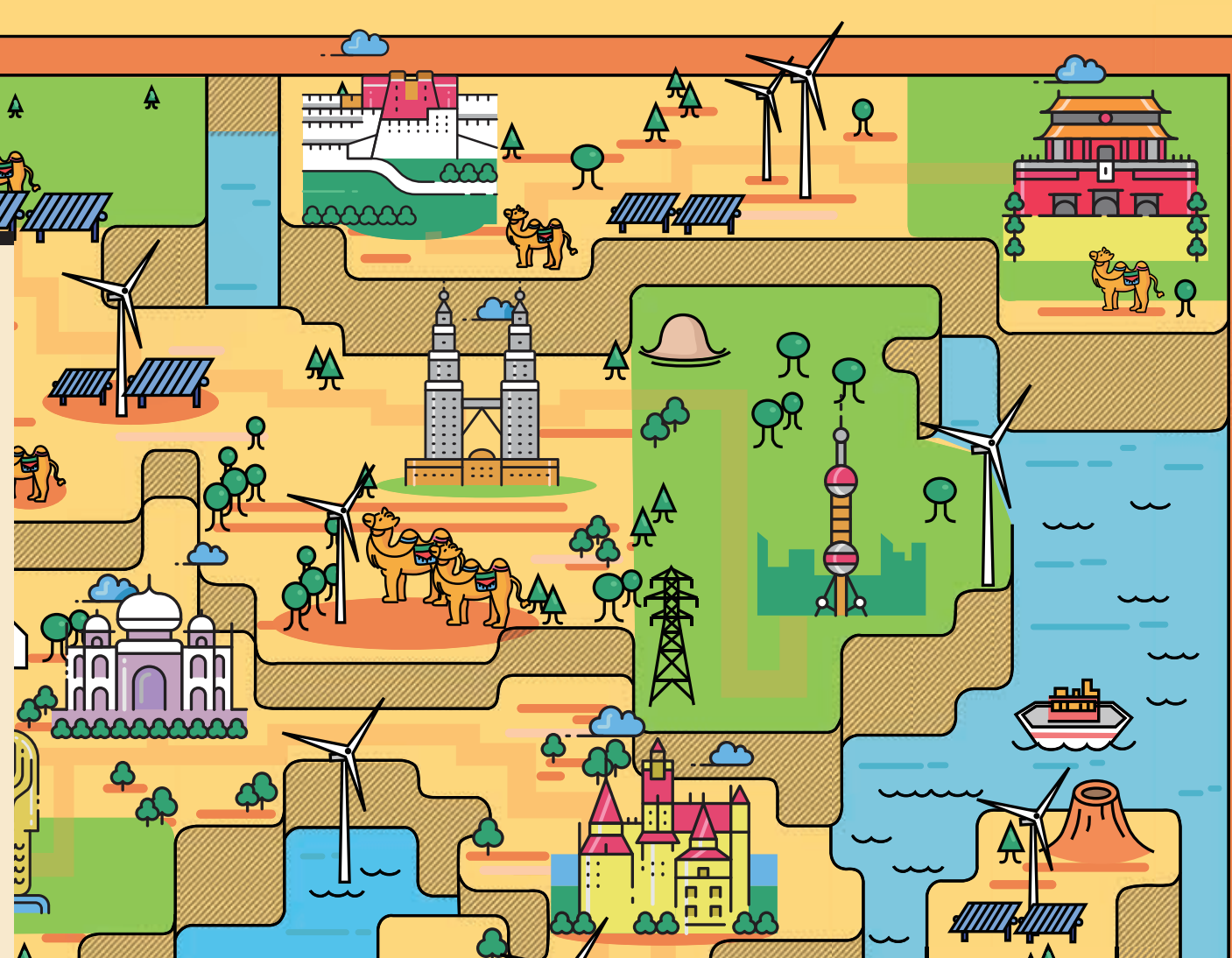
Station, the lifting height of the Shanghai Mitsubishi HE type public transportation escalator reaches 11 meters, breaking the record in Africa.

Mombasa-Nairobi Railway Project also set up an "animal passage". With 120 kilometers extending through Tsavo National Park, the Railway managed to minimize the damage to the environment. Along the railway, 14 animal passages have been set up, including bridge-type passages with a clear height of more than 6.5 meters, which basically ensures the free migration of wild animals.

Wind power generation saves energy and protects the environment. In Kazakhstan, as of August 2023, 13 wind turbines have been lifted for the Zhanatas 100MW wind power project, the largest wind power project in Central Asia under Sino-Kazakh

cooperation, and the remaining 9 will be completed by early November. The wind turbines were supplied by Shanghai Electric Wind Power Group. The project can generate about 350 million kWh of electricity per year, saving about 110,000 tons of standard coal per year compared to thermal power projects of the same capacity. The commissioning of the wind farm is of strategic significance to improve the unbalanced supply and demand of electricity between the north and south of Kazakhstan.

In this Belt and Road project, Shanghai Electric has always practiced green development, increased its efforts in environmental protection, and worked with all parties to build a "Green Silk Road".



SETTING GREEN STANDARDS FOR BELT AND ROAD COUNTRIES

Shanghai Electric has aligned with the green standards for countries along the Belt and Road to improve the level of green development. It actively participates in the formulation of international green standards, guides enterprises to strictly comply with the ecological and environmental protection laws, regulations and standards of the host country, encourages enterprises to carry out environmental protection work with reference to the international standards or higher standards, and improves the level of green and low-carbon construction and operation.

The Zafarabad 220kV substation project is the first digitized substation in Uzbekistan. As of August 2023, the project site has taken shape. As one of the key projects in Uzbekistan's investment program 2020-2023, it is also a major achievement of China-Uzbekistan Belt and Road cooperation. The substation will play an important role in improving power supply in East Uzbekistan by realizing the digitalization of station-wide information, the networking of communication platform and the standardization of information sharing.

As the EPC contractor, Chinese constructors from Shanghai Electric arrived at Zafarabad since the end of 2021, collaborating with the local power design institute to provide technical solutions based on the IEC61850 digital substation standard. With Chinese technology and equipment, the first three-tier, two-networked, intelligent substation was set up for the double landlocked country.

The intelligent elements designed and manufactured by China made the whole system solution of the substation more

efficient, while bringing safe and stable protection configurations to ensure the stable operation of the substation. More importantly, the substation, which covers an area of about 10 hectares, will provide sufficient power supply for the local area, solving power shortage of the residents.

In Iraq, Shanghai Electric, as the EPC contractor of the Wassit Power Station Project, built a modern and high-level power station project in accordance with the green standards and norms of the industry that are in line with international standards. The Wassit Power Station consists of four 330MW units and two 610MW units, with a total installed capacity of 2,540MW. The project started in 2010. In June 2015, it was put into full operation and the temporary handover was 12 months ahead of schedule. The final handover of the project was completed in October 2018, which is the largest thermal power station in Iraq so far.

Since its commissioning, Wassit Power Station has generated more than 125 billion kWh of electricity to Iraq, accounting for 20% of the national total. It is the largest power point in the Iraqi power grid and the main power station for the capital city of Baghdad.

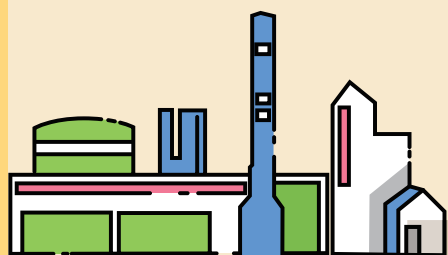
BUILDING MAJOR PILOT PROJECTS IN THE BELT AND ROAD INITIATIVE

Energy is the cornerstone of modern social development and a core element in promoting economic growth and improving people's quality of life. Green development of the energy along the Belt and Road is of great significance to overall green development, ecological civilization, climate change control, and global ecological security. Over the past ten years, Shanghai Electric has achieved fruitful results in a number of major projects.

On July 31, 2023, the Pakistani government held a grand ceremony in the capital city of Islamabad to celebrate the tenth anniversary of the launch of the China-Pakistan Economic Corridor. Over the past ten years, the China-Pakistan Economic Corridor has achieved fruitful results and become a "new landmark" for China-Pakistan friendship. Pakistan believes that the Corridor has created multiple development opportunities, and exemplified global governance of joint building and sharing. At the celebration, 29 Chinese enterprises and organizations, including Shanghai Electric, won the "Outstanding Contribution Award" medals issued by the Pakistani government.

Over the past ten years, Shanghai Electric has been actively promoting low-carbon, efficient and clean energy technology, piloting them in countries along the Belt and Road, and building many power plant projects with international influence. In October 2016, the Pelabuhan Ratu 3x350MW project in Indonesia was handed over. In April 2018, the final handover of Vinh Tan 2x622MW project in Vietnam was completed, which is the first thermal power project of this class completed in Vietnam's energy market. It is also Shanghai Electric's first overseas 600,000-kW class thermal power unit EPC project. In September 2020, the final handover of Khulna 150MW to 225MW combined cycle expansion project in Bangladesh was completed, which is the first combined cycle expansion project of Shanghai Electric in the Bangladesh market, making a number of "firsts" in technological breakthrough.

In Pakistan, the Thar Coal-electricity Integration Project, which is now under construction and witnessed by the leaders of the two countries, is a key project of the China-Pakistan Economic Corridor and has become the first overseas power plant investment project of Shanghai Electric. This project serves as an advertisement of Shanghai Electric's equipment and its



global influence. With the performance of overseas EPC projects, Shanghai Electric was listed in Grade A Enterprises Contracting Foreign Projects of 2020 and ENR Top 250 International Contractors.

Over the past ten years, Shanghai Electric has been actively promoting energy cooperation among the Belt and Road countries. It has injected new impetus for the world's economic prosperity and social development, provided new solutions for the transformation of the global energy governance system, and made new contributions to the well-being of the people.



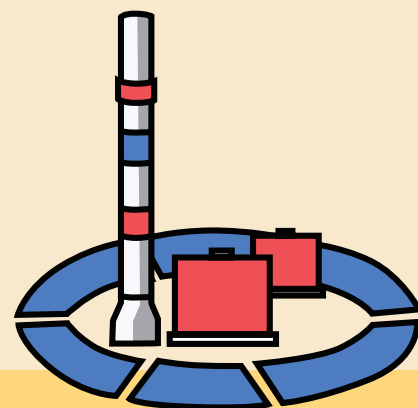
MAKING GREEN ENERGY LIGHT UP THE GOBI DESERT

With the development of the global new energy industry, solar energy has become an important choice for mankind to address the energy crisis, and concentrated solar power as a global new energy frontier technology has received widespread attention. Shanghai Electric teams up with industry chain upstream and downstream partners to bring advanced photo-thermal and photovoltaic equipment to the international market, which has achieved remarkable results.

In the desert hinterland of Dubai in the Middle East, a benchmark new energy super project received global attention. The Mohammed bin Rashid Al Maktoum Solar Park Phase IV Solar Power Plant Project is now standing. Under the focus of more than 70,000 heliostats, the collector at the top of the 262-meter-high CT unit is shining brightly, indicating that the unit is

ready to be connected to the grid. After the project is put into operation, it will effectively promote the optimization and upgrading of Dubai's energy structure, and become a demonstrative project in the Middle East that uses advanced photo-thermal and photovoltaic power generation technology.

Since 2018, Shanghai Electric has been involved in the construction of the phase IV of the Dubai Mohammed bin



Rashid Al Maktoum Solar Park 700MW CSP + 250MW PV hybrid project as an EPC contractor. Joining hands with more than 40 international energy companies around the world, it will build a photo-thermal project with a total area of about 44 square kilometers, equivalent to 6,162 soccer fields, which currently has the world's largest investment, largest installed capacity, and largest thermal storage of fused salt reactors. After the completion of the project, it will reduce carbon emissions by 1.6 million tons per year, provide clean electricity for more than 320,000 households in Dubai, and realize technological empowerment.

In addition, Shanghai Electric has secured the contract of the 900MW Phase V PV Project in Dubai. The project is divided into three blocks, A, B and C, and the construction scale of each block is 300 MW. At present, the three blocks of A, B and C have entered the commercial

operation stage, and the annual performance test parameters of the units are superior to those set out in the contract, which is highly recognized by the owner, Dubai Electricity & Water Authority and other relevant departments. After the project is put into operation, it can provide 2.268 billion kWh of power per year to meet the needs of 270,000 households in Dubai, and reduce carbon emissions by 1.1 million tons per year.

At present, China and Arab states are jointly building the high-quality Belt and Road, and carefully creating an all-round cooperation pattern. Cooperation in energy infrastructure, production capacity, project contracting, finance and monetary, scientific and technological innovation, aerospace and biomedical field is booming. In the future, Shanghai Electric will grasp the opportunities to become an important supplier of international new energy equipment with its good performance in the market.

STRENGTHENING GREEN FINANCE COOPERATION ALONG THE BELT AND ROAD

Green finance promotes industrial innovation. Shanghai Electric Finance Group actively provides financial assistance for green development, and investment and financing support for green investment projects along the Belt and Road. By building a green Belt and Road financial service platform, it provides professional services for related investment cooperation.

At the national level, it orderly promotes the two-way opening-up of the green financial market, encourages financial institutions and relevant enterprises to carry out green financing in the international market, strengthens cooperation with international financial institutions such as the Asian Infrastructure Investment Bank and the BRICS New Development Bank, and provides services for key investment projects along the Belt and Road through the provision of green loans, the issuance of green bonds, the establishment of green funds, and the innovation in green financial products.



Since 2014, Shanghai Electric has successfully promoted the Thal Coalfield Block I Energy Integration Project. After the completion of the project, it is expected to provide 4 million households in Pakistan with clean, affordable and sustainable electricity in the next 30 years of operation, helping Pakistan to further develop native resources, reduce energy import, improve the energy structure and enhance national energy security. The project was completed and put into operation in February 2023. In the process of the construction, Shanghai Electric was widely praised for fully fulfilling corporate social responsibility and actively cultivating local talents.

The loan agreement of the project was signed at the end of 2019, and the formal closure of the financing is of great significance for the 7.8 million t/a open pit coal mine project of the Thar Coalfield Block I in Pakistan. It ensures the project's 20% return on equity for 30 years and meets the project's construction funding needs. With the Pakistani government reducing or waiving the project's infrastructure tax and sales tax, it accelerates the project's construction and help reach target output earlier.

The Hunutlu Thermal Power Plant is the largest project in terms of direct investment by Chinese enterprises in Türkiye since the establishment of diplomatic relations between China and Türkiye. It is also a key project representing the collaboration of China's Belt and Road Initiative with Türkiye's Middle Corridor Initiative. With a total investment of about 1.7 billion dollars, the project is jointly developed and constructed by Shanghai Electric Power, a subsidiary of SPIC, AVIC INTL Project Engineering Company and local shareholders in Türkiye, with Shanghai Electric providing the main equipment for power generation.

After the project is put into operation, it can supply 9 billion kWh of electricity to Türkiye annually, accounting for about 3% of Türkiye's annual power generation. Thanks to

the advanced power generation technology, it is also the first chimney-less power plant in Türkiye, effectively promoting energy saving and environmental protection.

On February 6, 2023, local time, Türkiye was hit by two earthquakes of magnitude 7.8 and several earthquakes of magnitude 6 or higher in a single day, which caused major casualties and property losses. Thankfully, the Hunutlu Thermal Power Plant operated stably during the strong earthquakes, providing safe and stable power supply for relief efforts in the quake-affected zone.

Epilogue

From the Hunutlu Power Plant in Türkiye to the Zafarabad Project in Uzbekistan, from the Wassit Project in Iraq to the Thal Coalfield Block I Energy Integration Project in Pakistan, they have not only relieved power shortage in the region and satisfied the demand of the residents for electricity, but also created job opportunities, and protected the natural environment. As an important driving force for clean energy technology innovation and application, Chinese energy enterprises have contributed "Chinese wisdom" in promoting Asia's energy transformation and maintaining global energy security.

However, we should also see that there are risks and challenges facing the green development of the Belt and Road, where the levels of green technology development vary, and international cooperation in eco-environmental protection has yet to be improved. There is an urgent need to improve the top-level design and standardization system, to improve the support system for green development, to strengthen the cooperation in green finance, and to strengthen the responsibility of the enterprises for eco-environmental protection. We should adhere to the principle of mutual benefit and win-win development, mutual learning, so as to better promote the green development of the Belt and Road. **D**



CAO GUANG QI

THE ARCHITECT OF WIND TURBINE STANDARDS

Shanghai Municipal May 1st Labor Medalist from the Engineering and Technology Institute of Shanghai Electric Wind Power

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ince he joined Shanghai Electric Wind Power Group Co., Ltd. (hereinafter as “Shanghai Electric Wind Power”)

13 years ago, Cao Guangqi and his team have always taken the lead in wind turbine development with a string of achievements made, including 7 academic papers, 6 patents for invention and 8 for utility models, drafting of 3 national standards for the wind power industry (as a major formulator) and reviewing 2 national industrial standards. In April, 2023, Cao Guangqi was awarded the Shanghai May 1st Labor Medal, a new milestone in his glorious career.

These impressive patents and academic results pinpoint crucial moments in his own and the company’s development, and together, they form a promising blueprint where personal and collective value align. Boosted by his keen aspirations, Cao Guangqi has practiced the company’s core value and development philosophy of “being a professional in wind power and go beyond” in a dynamic, diligent and pragmatic manner, and made inventions while identifying valuable know-how.



INNOVATION CAPABILITY IS THE SOURCE

“Technological innovation is essential to win the competition in the new energy industry.” For more than a decade, Cao Guangqi needs to make groundbreaking technological advancements as a key researcher, and at the same time, to stand up to challenges caused by changing markets as a manager in numerous major projects, such as improving digitalization in tower design, reducing costs of mechanical materials, building knowledge-based organizations for technological business lines, and handling major product quality problems.

Due to the wind power industry’s rapid development and unpredictable changes, players in the arena have to invest tremendous capital on R&D to tackle difficulties that never seem to end, and purchase equipment and tools that are required by state-of-the-art technologies. Scientifically optimized tools can make tasks easier. However, the optimization itself poses a rigorous test to one’s creativity.

A large number of tower designs tailored to different wind turbines have to be prepared on ground that different types vary a lot fundamentally. What’s more, they need to be delivered in a short period of time. However, the lack of consistent 3D design standards resulted in persistent problems like low design efficiency of engineers, sometimes badly-made models and drawings, and late discovery of design defects, making the production process more difficult. With the root cause found, Cao Guangqi made up his mind to develop a digitalized tool platform to remove bottlenecks created by design.

He led the tower team to fulfill both the NX-based analysis of documents on tower’s parametric design requirements, and the development of the tool platform. While improving tools, the team further formulated the NX design standards for enterprises, and specific guidelines for complex parts. “All the efforts are worth it.” Thanks to these tools of parametric design, Cao Guangqi and his team can automatically update towers’ 3D models and 2D drawings by inputting key parameters like the diameter and height, increasing design quality and efficiency tremendously.

By reducing design time and errors, this platform makes the overall procedure more efficient. Just like what Cao Guangqi has said, “technological tools are not ‘secrets’, but can truly help to solve practical problems. Innovation capability is not only my source power, but also the engine for our company’s growth.”

For those who meet him for the first time, Cao Guangqi impresses them with his humbleness and good manners. As a manager, nevertheless, he is the man who calls the shots in making design and R&D decisions, and implements tasks on the front line. While serving as a leader in many teams, he is always ready to fight with colleagues side by side against problems.



UNLEASH THE POWER OF KNOWLEDGE

The wind power industry is a pool of well-educated talents, seeing rapid product iteration and technological development. While an outsider can easily gain an idea of its knowledge intensity from the fact that the wind turbine's unit capacity doubles within two or three years, an insider considers it more important the more effective organizational structure and talent retention coupled with expertise accumulation. According to Cao Guangqi, "the future of a wind power company can be fully told from its training programs for engineers."

Fast roll-out of new products means a high employee turnover rate, which is common in the industry. How knowledge and technologies are accumulated and applied in a company is involved with the training of engineers, and more importantly, the competitiveness of its technological R&D and the product development efficiency. Driven by his deep understanding of the significance of knowledge, Cao Guangqi volunteered to be the director of building a knowledge-based organization project under Shanghai Electric Wind Power's technological line, who was responsible for categorizing and analyzing R&D expertise accumulated in decades.

Tangible results were achieved in just one year. Cao Guangqi and his team successfully deliver the "wind power knowledge map" with which engineers can efficiently access design resources like industrial codes, design guidelines, checklists, and the archive of turbine failures. What's more, they also upgrade the knowledge management platform, approval procedures for knowledge imputing and file authorization management, which helps to highlight document quality, employee engagement and authorization to core resources amid knowledge accumulation.

CAO GUANG QI

So far, there have been more than 4,000 knowledge files recorded on the platform, over 50% of which are design guidelines, specifications and solution archives. New employees can use this platform to gain a comprehensive understanding of the company's rules and regulations, workflows and systems, design guidelines of his/her own department and training materials shared among departments, which allows them to quickly adapt to the company's working environment and acquire skills required by their positions.

With a forward-looking development mindset, Shanghai Electric Wind Power moves towards the goal of becoming a learning-oriented enterprise through establishing effective knowledge-based organizations and improving the engineer training system. "If you give a man a fish, you feed him for a day. If you teach a man to fish, you feed him for a lifetime". Likewise, the power of knowledge is explored during organizational change. It is Cao Guangqi's personal goal, and the ambition of Shanghai Electric Wind Power.

STANDARDS FORMULATED BY SHANGHAI ELECTRIC WIND POWER

As an old saying goes, "Nothing can be accomplished without norms or standards." The wind power industry is still considered an emerging one in China. Therefore, we, Chinese companies, have to catch up with our western counterparts who have started decades ago in only a dozen of years. The difficulties rising along the journey cannot be overstated. Compared with speed,


the industrial standard is more crucial in the competition because it plays a decisive role in the sustainable development of the whole industry.

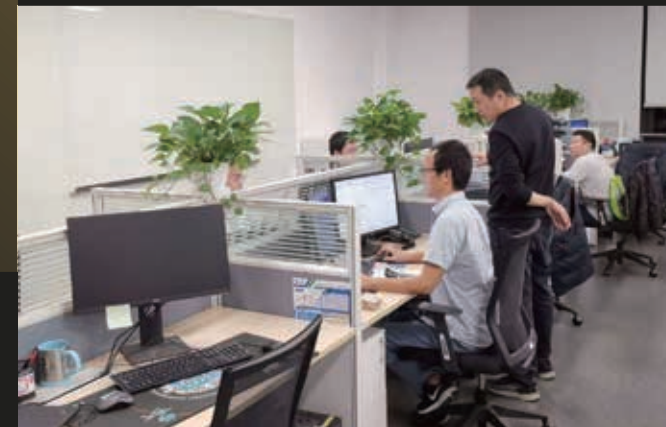
Although most wind power technologies and design standards applied in China originate in Europe, it is imperative to formulate codes that adapt to our own conditions because there are huge differences between China and Europe in terms of wind resources, requirements on production processes and costs. Shanghai Electric, a leader in China's off-shore wind power market, fulfils its responsibility in taking the lead in industrial standard formulation without any hesitation.

Cao Guangqi, the leader, and his team members deliberated the old standard "GB/T 19072-Tower of Wind Turbine Generator System" for two years while carrying out many tests for data comparison and verification. The revised version has been published. He participated in the review of two standards - "NB/T 10216-2019 Code for Design, Manufacture and Erection of Steel Tubular Tower of Wind Turbine" and "NB/T 10105-2018 Code for Design of Wind Turbine Foundations for Offshore Wind Power Projects" as a major reviewer. The two codes have been published, and will play an important role in directing engineers and technicians to carry out wind power projects.

What's more, Cao Guangqi has attended many technological and academic seminars and conferences to communicate with domestic and international peers, and to promote high-quality development of wind power in China with concerted efforts.

Cao Guangqi is the vice president of the Engineering and Technology Institute of Shanghai Electric Wind Power, and a member of the Mechanics of Vibration Committee of the 13th Shanghai Society of Theoretical and Applied Mechanics (SSTAM), a professional member of the Mechanical Technique Group, Wind Power Sub-committee, Technology Committee of China Quality Certification Centre, and a member of the committee of IEC61400-6 specification. What come along with titles are honor and mission, indicating that one is responsible for leading the development of the industry.

Neither market competition nor industrial development can sustain without innovation and invention. Cao Guangqi said: "Technological innovations are more and more craved for and demanded by the industry, and I hope that I can adapt to these changes and do a better job, making more contributions to Shanghai Electric Wind Power." 



CROSS-CULTURAL MANAGEMENT: MUTUAL RESPECT

By Wei Li

For Chinese companies going global, great cross-cultural management is one of the key factors in gaining a foothold in overseas markets.

Coffee is a symbol of Huawei's "cross-culturalism". Coming from a tea-loving country, the Chinese employees were often served with coffee overseas. At first they didn't realize that a cup of beverage reflects social etiquette, communication style, lifestyle, and even values and culture. Losing an order because of a cup of coffee is a classic case in Huawei's induction training.

In the 21st century, globalization is still deepening. In recent years, Chinese enterprises have enhanced cooperation with countries and regions along the Belt and Road Initiative, realizing high-quality and win-win development. As a national group of great strategic importance, Shanghai Electric has made new progress in international business development, with a focus on mutual benefit and win-win cooperation, joint construction and common development, driving Chinese technology and Chinese standards to "go global".

So far, Shanghai Electric has had 145 offices or branches in 35 countries, including Pakistan, Dubai, Serbia, etc., with more than 6,000 overseas employees and CNY 22.3 billion of overseas assets. The countries along the "Belt and Road" now also have more trust in the management technology, quality and other aspects of Chinese enterprises.

With the expansion of multinational enterprises, cultural differences are also being magnified. In this context, cross-cultural management has become a challenge that enterprises must tackle. To communicate with employees, customers and suppliers from different cultural backgrounds, it is necessary to ensure the efficiency and effectiveness.

In its many years of overseas management practice, Shanghai Electric has always fulfilled social responsibility, bringing Chinese solutions and injecting new momentum to enhance the well-being of the people in the host countries and promote sustainable development.

Specifically, Shanghai Electric promotes the comprehensive construction of internationalized community, jointly carries out CSR and public service activities with the local government and civil institutions in Pakistan, benefits the neighboring villagers through reforestation, road works and jobs, and promotes Chinese culture and the Sino-Pakistani friendship, thus building a good Chinese brand image of Shanghai Electric.

In practice, cross-cultural management is very important. Over the years, Shanghai Electric believes in: "Don't try to change a culture", "Communicate more and promote mutual understanding", and "Formulate appropriate regulation to achieve the goals on the basis of mutual respect". These are its important experience for cross-cultural management.

"Openness, inclusiveness, respect, understanding, trust and friendship" are the DNA of corporate culture at Shanghai Electric. Huawei gets closer to its foreign employees over a cup of coffee, while Shanghai Electric achieves efficient cross-cultural management by being friendly. As a "culture-friendly, people-friendly, environment-friendly, animal-

SHANGHAI ELECTRIC

friendly and industry chain-friendly" enterprise, Shanghai Electric shoulders its responsibility as a multinational enterprise.

Specifically, in Dubai, before the launch of Concentrated Solar Power and Photovoltaic Project, the project department of Shanghai Electric first relocated all the wild animals in the park, which was praised by the local wildlife protection organization. In India, the Highly plant was designed with a standard higher than the local environmental protection requirements, and the real-time monitoring of emission indexes after the completion of the project was highly recognized by the local government.

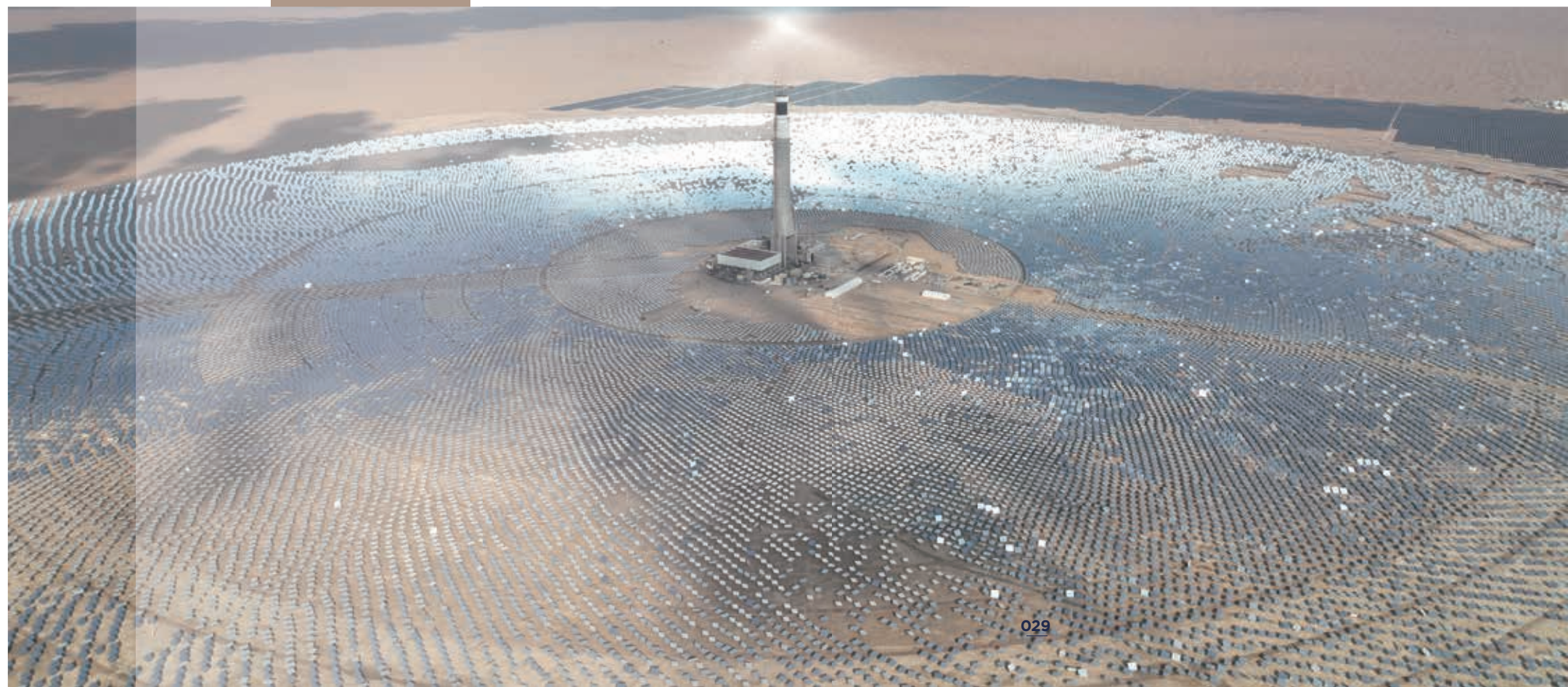
As the Chinese proverb goes, teach others to fish and they will fish for a lifetime. The coal mine and power station projects in Thar, Pakistan required highly qualified Pakistani technical and managerial staff. Shanghai Electric invested financial resources and material resources, with engineers and technicians providing guidance and on-site training for the Pakistani employees. They overcame language barriers and site constraints to thoroughly impart knowledge. Safety education and training, operation rules training, etc. were carried out based on local conditions and materials. The construction work of the project provided nearly 8,000 jobs for the

local community, effectively promoting local socio-economic development, improving the quality of the local labor force, and upgrading the livelihood of the local people.

In addition, Shanghai Electric's overseas branches also regularly organize Chinese and local employees for sports competitions, movies, and food sharing. Local historical and cultural site tours are organized, and Chinese employees are required to strengthen their knowledge of and respect for local religions, to learn more about Islamic culture, etc., and to understand the local living and working habits. Local employees also come to Shanghai for training and learning, and two-way exchanges have brought the two sides closer.

Shanghai Electric has won a good reputation and established a good image with respect and friendliness. The trust of Shanghai Electric's overseas employees, customers and suppliers help maximize the comprehensive benefits of the enterprise.

Great oaks from little acorns grow. In the future, Shanghai Electric will carry out more international energy projects and bring advanced Chinese equipment and management concepts to the countries along the Belt and Road and the whole world. **D**



SEIZE THE MOMENT

By Xia Song

Two months ago, a colleague in her 30s in our department suffered from serious neck pain. Optimistic as she is, she cured the pain herself and promoted simple neck exercises in the office. Getting used to the "clicking" sounds made by the cervical vertebrae during the exercises, we now habitually stretch our cervical vertebrae after meals every day.

This reminds me of ten years ago when I was tortured by the dizziness, nausea and insomnia caused by cervical spine pain and strain. It was so serious that I need one or two massages a week. The doctor ruled that my cervical spine is a mess: "It is as old as that of a sixty-year-old!" I asked the doctor for treatment. He told me that cervical spondylosis is basically an occupational disease and can only be relieved through the adjustment of daily posture and lifestyle habits.

It was 2020 when the pandemic first broke out that I set my mind to make a trip to the community garden every day. I went on a diet and began to jog and swim.

After a colleague reminded me, I realized that I had not felt the pain for a long time. I went to the hospital for a test, and the result showed that my back bones, especially the cervical spine, were in the shades of blue or yellow (blue means there is a health risk and yellow means that there's an existing problem). My cervical spine was healed! The result was a pleasant surprise. Once again, I believed that the universe is fair, and all your efforts will be rewarded sooner or later.

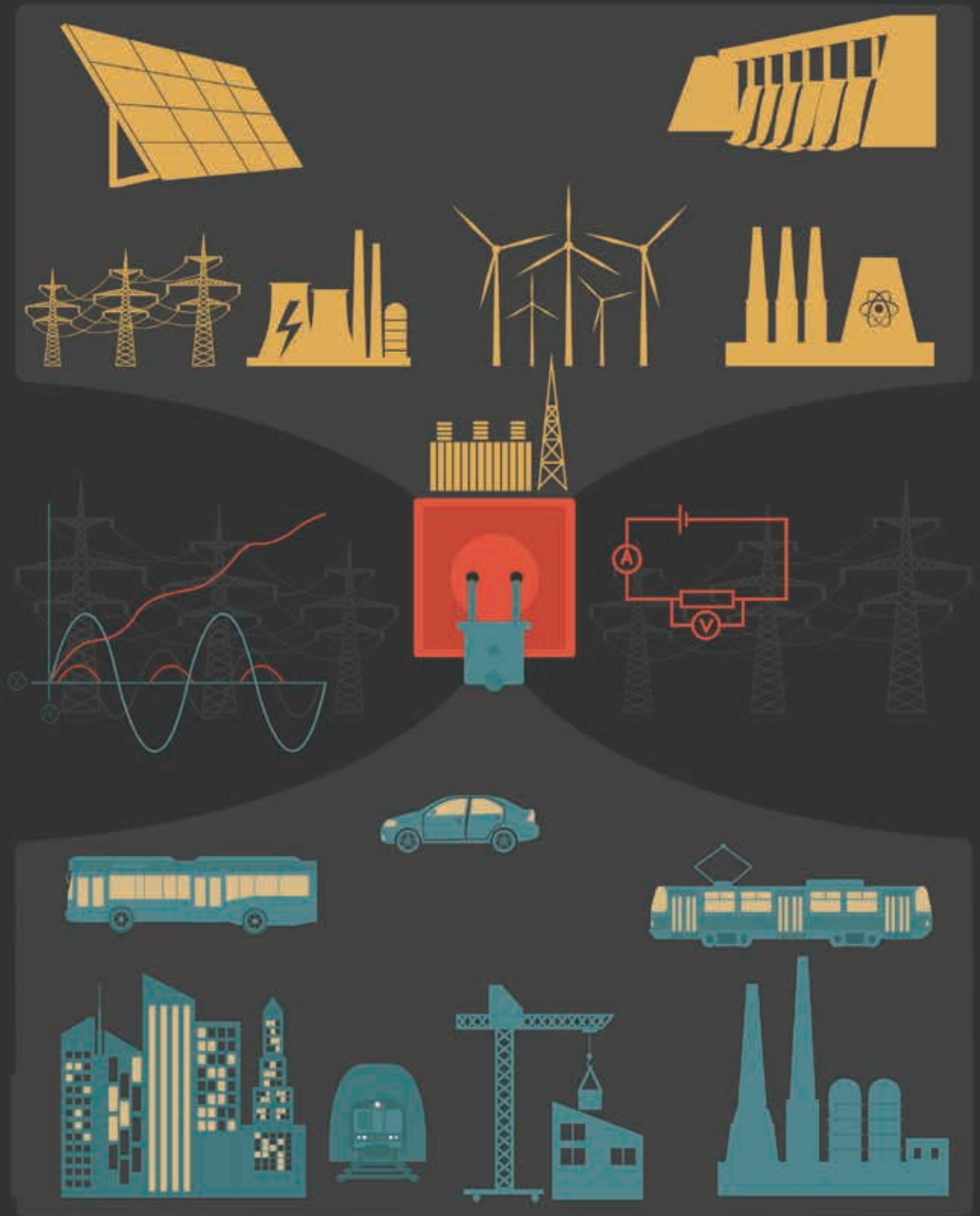
In the TV series *Twenty Your Life On*, the character played by Guan Xiaotong asked, "Have you ever heard of the 10,000-hour rule? When you are staying up all night, I am in bed getting my beauty sleep. When you idle away your time, I go running and exercise. You eat whatever you want, while I have a strict diet rule to follow. Can you do that? I am doing my best to stay beautiful!"

There is no shortcut in life, and it's never too late to start living a good life, as long as one is determined to persist.

Mr. Li, a retired employee of a power station, started to study photography, picture composition and computer photo editing upon retirement. Originally a novice in photography, but now, with multiple entries in photography competitions, he has become a member of the China Photographers Association. In order to sell the goods to foreigners, a granny in Yunnan Province learned English every day independently. Now she can communicate with tourists not only in English, but also in simple French and Korean. My friend A studied painting in her middle age. From pencil sketch, gouache to oil painting, she practiced every day, eventually getting a general idea of all the Renaissance and Impressionist paintings. She also paints a rosy picture for herself — hoping that when she turns seventy, she can become a volunteer docent in an art museum.

It seems that only a few things in our life are within our control. Malcolm Gladwell described the "10,000-hour rule" in *Outliers*. He asserted that "What makes a genius exceptional is not unequalled talent, but sustained effort. 10,000 hours of hard work is all that is necessary for anyone to go from mediocrity to world-class mastery."

Now is the best time to take actions. As a firm believer in this rule after middle age, it has prolonged my youth. **D**



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