

Shanghai striving to develop cruise cluster

By SHI JING in Shanghai
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A detailed development plan and a set of 20 supportive policies were released on Wednesday to facilitate the expansion of the sea cruise industry in Shanghai's Waigaoqiao area amid the city's efforts to advance high-quality development of the manufacturing sector.

By 2025, a world-class comprehensive cruise production and assembly base should be initially shaped in Waigaoqiao in Shanghai's Pudong New Area, said the industry development plan. The base should be able to explore the cruise market all over China and even across the Asia-Pacific region so it can forge a globally influential cruise industry cluster, the plan stated.

Waigaoqiao should feature a globally significant cruise industry cluster with an accompanying complete supportive system, high-end manufacturing and various consumption resources by 2035, it said.

A total of 20 policies were released on Wednesday to achieve the above goals. Qualified high-tech cruise companies or research institutions will be granted between 250,000 yuan (\$36,520) and 5 million yuan in one-time subsidies by the local government. A maximum 20 million yuan in bonuses will be provided to qualified cruise technology renovation projects upon completion. Equipment subsidies and tax exemptions from technology transfers are included in the newly released policies.

Li Hui, head of the Pudong Technology and Economic Committee, said that the plan and supportive policies are aimed at building an advanced cruise manufacturing industry in Waigaoqiao, which combines production, assembly, maintenance, design and research.

A total of 20 cruise projects were launched in Waigaoqiao via a signing ceremony on Wednesday, covering manufacturing, interior design, production and other segments throughout the cruise

industry chain. Shanghai-based marine service provider RMS Group, Changzhou-based manufacturing conglomerate KTK Holding and Japan's Endo Lighting Corp signed cooperation agreements on Wednesday.

Huang Fuyu, CEO of RMS Group, said updating existing marine service standards by referring to internationally accepted ones is one way to facilitate high-quality development of the cruise industry — not only in Shanghai but nationwide.

Wang Yanguo, vice-general manager of CSSC Cruise Technology Development Co Ltd, explained that about 80 percent of the cruise production sector in Europe has been localized. The complete cruise supply chain in Europe, which integrates talent training, technology innovation and production, has helped to realize the high rate of localization. This can be an important example for Waigaoqiao to emulate, Wang said.

The first China-made large cruise ship, which is designed and manufactured by China State Shipbuilding Corp Ltd, is scheduled to begin trial sailings from Pudong in July.

While high-end manufacturing has been an important driver of high-quality economic growth in Pudong, the cruise industry should become a key growth engine for the overall manufacturing industry in Pudong by creating a complete industrial chain featuring technological breakthroughs and state-of-the-art management systems, said Hang Yingwei, government head of Pudong New Area. In this way, traditional industries can also be upgraded and complete their restructuring, he said.

According to the Ministry of Transport, about 14 million Chinese vacationers will take cruise trips annually by 2035. This will drive more than 1 trillion yuan in investment, including the construction of at least 100 cruise ships. The annual cruise industry value will exceed 400 billion yuan by that time, creating more than 1.5 million jobs.



A cruise ship is under construction in Shanghai's Waigaoqiao area. XINHUA

Briefly

Hydrogen production station begins ops

China's first integrated methanol hydrogen production and refueling station was put into operation on Wednesday in Dalian, Liaoning province, said its operator China Petrochemical Corp. The station, capable of producing 1,000 kilograms of high-purity hydrogen daily, uses a methanol-to-hydrogen process to produce the hydrogen, said the company, also known as Sinopec, the world's largest refiner by volume. Compared with current hydrogen production models, the integrated hydrogen production and refueling station will reduce costs by 20 percent by cutting costs associated with hydrogen storage and transportation, it said.

PBOC to issue 25b yuan of bills in HK

China's central bank plans to issue 25 billion yuan (\$3.67 billion) worth of bills in Hong Kong on Tuesday. The central bank bills will be issued in two batches. One is worth 10 billion yuan with a maturity of 91 days. The other is worth 15 billion yuan with a maturity of one year, the People's

Bank of China said in a statement. The move aims to enrich yuan-denominated investment products with high credit ratings in Hong Kong and improve the yield curve of the yuan in the region, the central bank said.

New machine to help railway construction

State-owned builders are elevating cutting-edge technologies to help boost engineering construction. China Railway No 4 Engineering Group Co Ltd has created and mass-produced the country's first cantilever intelligent bridge building machine to help bolster railway construction. Experts from Wuhan Institute of Technology have approved the machine, which integrates hydraulic transmission, intelligent control, high-tech monitoring and other modalities, raising the work efficiency of cantilever cast-on-site beams by more than 20 percent. It is being used in building railway bridges on the Shanghai-Chongqing-Chengdu High-speed Railway, linking a number of city clusters along China's longest river.

XINHUA - CHINA DAILY



An employee works on a solar panel production line at a company in Hefei, Anhui province.

ZHAO MING / FOR CHINA DAILY

China's solar exports to accelerate this year

Green demand, Europe's heightened buying due to energy crisis big factors

By ZHENG XIN
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China's exports of solar modules are expected to gain further momentum this year, buoyed by increasing global demand amid green energy transition as well as Europe's plan to cut energy imports from Russia, said industry analysts.

The increasing demand for solar power worldwide will continuously provide opportunities for solar companies in China, leading to a robust rise in exports of Chinese solar components, said Luo Zuoxian, head of intelligence and research at the Sinopec Economics and Development Research Institute.

Compared with China, the world's top solar manufacturer, Europe's manufacturing capacity is smaller, and that market needs to rely on China in the short to medium term, he said.

Exports of solar products, together with lithium batteries, lead China's list of high-tech and high-value exports, according to the Ministry of Commerce. China's exports of solar cells rose by nearly 68 percent in 2022, as the country is continuing its rapid expansion into new energy markets globally, it said.

Germany, for example, relies heavily on solar cells sourced from Chinese manufacturers. Deutsche Bank data showed that more than one-third of Germany's small and medium-sized enterprises in the solar industry rely heavily on Chinese supplies.

Peter Walch, purchasing manager of German solar company Belectric, was quoted by www.tagesschau.de as

saying that the company might not be able to build and develop solar power plants without the core components provided by Chinese companies.

According to BloombergNEF, total exports of solar cells and modules from China rose sharply in 2022 to a record high of \$46.3 billion. This is 63 percent higher than the dollar sum in the previous year. While solar modules represented a capacity of 157 gigawatts, cells added up to 24 GW. Together, the two solar products' capacity was 181 GW, it said.

"China dominates the global solar supply chain, with at least an 80 percent share of the total manufacturing capacity for photovoltaic module production," said Tan You-ru, an analyst from BloombergNEF. The EU was the biggest destination region for the Chinese mainland's PV exports in 2022, buying nearly \$23 billion worth of products, up 113 percent year-on-year. This is equivalent to about 84 GW of modules, more than half of China's total module exports in 2022, he said.

BloombergNEF said it expects the market for newly built PV modules to grow by another 8 GW in 2023 in Europe to reach 49 GW. China will contribute significantly to it.

"The European Commission presented a Green Deal Industrial Plan to enhance the competitiveness of Europe's net-zero industry and support a rapid transition to climate neutrality in February 2023. While discussions on systematic incentive programs for solar manufacturing in competition with the US Inflation Reduction Act are heating up, Europe doesn't yet have a solid plan to

support its solar manufacturing industry," he said.

"Although many countries are hoping to establish solar manufacturing capacity so that they can depend less on China, the capital expenditure required to do that is still significant, especially in the US and Europe, despite the decreasing costs due to efficiency improvements and cheaper equipment over the last decade."

The EU's heightened buying activity was spurred by energy security concerns and the acceleration of solar projects, although the market is limited by labor shortages for rooftop installations, which are permitted, and grid bottlenecks for large projects, he said.

Estimates by Pingan Securities show that China will account for a large proportion of solar product exports during the 2022-26 period. It is expected to account for less than half of the major markets worldwide with Europe and South America being the major growth markets.

Overseas revenue has become critical for China's top PV module manufacturers, which are also the world's top six, including Jinko Solar, LONGi Green Energy Technology and Trina Solar.

Jinko Solar, which is based in Shanghai, saw its shipments of PV modules rise to 44 GW last year, ranking second worldwide. With 14 production bases worldwide, it is optimistic about the prospects for solar module shipments this year.

Strong demand from Europe, Australia, Latin America and the Middle East substantially contributed to the company's better-than-expected performance last year. Overseas revenue of the company accounted for a major part of its total revenue last year, it said.

Shandong nuclear heat pipe work begins

By ZHENG XIN

Construction of a nuclear heat transmission pipe network started on Wednesday to further facilitate expansion of nuclear power-based heating projects to more areas nationwide, said its operator State Power Investment Corp.

As the support facility of the third phase of the 900-megawatt nuclear power-based district heating project in Shandong province, the pipeline will connect Shandong province's Yantai with Weihai with a 23-kilometer main transport pipe, it said.

Total investment in the project has reached up to 700 million yuan (\$102 million). The project also includes a heat source distribution center that will apply intelligent scheduling management and a control platform for parameter monitoring, the company added.

An analyst said the application of nuclear power-based district heating will help reduce heating costs for con-

sumers while improving the efficiency of the nuclear power plant.

Despite nuclear heating still being in the infancy stage of development, the project will provide valuable experience to further promote such heating modalities nationwide, said Lin Boqiang, head of the China Institute for Studies in Energy Policy at Xiamen University.

The efforts in nuclear heating illustrate China's ambitions at decarbonizing its energy-intensive heating sector, he said.

The Haiyang nuclear power plant in Shandong has a heating system connected to two traditional nuclear units, making it the first commercial attempt in China to supply heat from traditional nuclear power.

The system extracts nonradioactive steam from the secondary circuit of Haiyang unit 2, which is then fed through a multistage heat exchanger in an on-site heat exchange station.

State Power Investment Corp has been stepping up efforts to expand

its nuclear power-based heating projects to more areas across the country in recent years.

The company started its first-phase of nuclear heating in 2019 in Shandong, which has provided 700,000 square meters of carbon-free heating, followed by the second phase that covered 5 million sq m in 2021.

The third phase of nuclear heating, the country's largest single-unit steam extraction heating project, is currently under construction and is expected to start providing clean heating during this year's heating season. It will cover 30 million sq m and is expected to meet heating demand of 1 million residents and carbon reduction is expected to increase several times over, SPIC said.

The company plans to expand the heating area to the entire Jiaodong peninsula, as nuclear-based heating alternatives are likely to be more widely embraced, thanks to the steadily accelerating development of nuclear power plants.

Chip body assails disruption attempts

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The China Semiconductor Industry Association on Wednesday called on the global semiconductor industry and academia to unite and defend the industry's globalization, while opposing the reported US-Dutch-Japanese deal on imposing new export controls and restrictions on chip manufacturing in China.

"If the (reported) move becomes a reality, it will cause serious harm to the semiconductor industry in China, with detriment to the global economy, as well as long-term damage to the interests of consumers worldwide," the CSIA said in a statement.

The association protested what it described as an act of destroying the existing global semiconductor ecosystem, and opposed interference in the process of global trade liberalization. It also said such acts distort the supply-demand equation.

The association objected to the attempt to exclude China's semiconductor industry from the global innovation system and free competition market.

"Semiconductors are at the core of the global digital infrastructure, which sets the foundation for a lot of people's livelihoods in our modern society. The semiconductor industry is a global industry, and highly dependent on innovation and cooperation. Inappropriate intervention by governments and authorities can cause disruption to our industry," the CSIA said.

Highlighting that China's semiconductor market can create great economic value and promote global scientific and technological progress, the CSIA called on the global semiconductor industry and academia to unite and promote collaborative innovation, and continue to create benefits for industry and human society.

The CSIA also called on the Chinese government and the agencies concerned to establish rules for maintaining the healthy development of the global semiconductor industry. Foreign enterprises that defend the concept of globalization and the value of the global semiconductor industry can expect to receive the association's support for their business operations in the Chinese market, the CSIA said.

On Tuesday, Kevin (Jongwon) Noh, president of South Korean memory chip company SK Hynix, met Jin Zhuanglong, China's minister of industry and information technology who heads the country's top industry regulator, in Beijing to exchange views on deepening cooperation.

Zhong Xinlong, a senior consultant at the China Center for Information Industry Development Consultancy, said the chip industry's 60-year history indicates that the key factors contributing to success are the global market scale and collaborative innovation.

"The US government should stop using political power to disrupt the global chip industry," Zhong said.

According to the CSIA, it joined the World Semiconductor Council in 2006, which not only shows the determination of the semiconductor industry in China to align itself with the globalization process and market-oriented development, but also demonstrates China's resolve to develop the global semiconductor industry through international collaboration.

"Reviewing history and learning from past experience, the CSIA believes that China's economic growth will bring us development opportunities and the trend will not change," the association said.

"At this particular juncture, we need to gather our confidence, to respond positively, and create a better future together."