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economy, breathtaking coastal landscapes, a lively urban culture and a high quality of life for its residents. Photos by Zhang Jianhua / For China Dali.

## Qingdao: a model of high-quality innovation

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During the 14th Five-Year Plan (2021-25), Qingdao in Shandong province has embraced a comprehensive strategy to stabilize growth, enhance quality and efficiency, and drive reform.

The city has consistently prioritized high-quality development, leading to a leap in its overall strength. The total retail sales of consumer goods have grown at an average annual rate of 6.4 percent, surpassing 650 billion yuan (\$91.86 billion), ranking second only to Beijing among northern Chinese cities.

In terms of industrial development, Qingdao has established four clusters in smart home appliances, rail transit equipment, marine engineering equipment and instrumentation, which have been recognized as national advanced manufacturing clusters.

The city's ranking among China's top 100 advanced manufacturing cities improved from 11th in 2020 to sixth in 2024. The added value of its service sector has exceeded 1 trillion yuan, contributing an average of 65 percent to annual economic growth and becoming the primary driver of

As a major marine city, Qingdao's marine economy reached 550 billion yuan in 2024, ranking third among coastal cities nationwide and accounting for 33 percent of its

Iconic national marine projects have been commissioned, and Qingdao Port's cargo and container throughput ranked fourth and fifth globally in 2024, respectively.

Qingdao has promoted the development of a science and technology powerhouse.

Over the first four years of the 14th Five-Year Plan, research investment grew at an average annual rate of 11.6 percent, and the city's ranking in the global top 100 innovation clusters surged from 69th in 2020 to 34th this year.

Technological breakthroughs include the development of China's first 6,000-meter deep-sea observation buoy and a high-speed train



From July 5 to 9, the "SCO Youth, Encounter Oingdao" study tour brings 100 international students from more than 20 SCO-related countries to Qingdao, a city with notable and substantial growth in internationalization in recent years. PROVIDED TO CHINA DAILY

prototype capable of reaching 400 kilometers per hour. The number of high-tech companies and techbased small and medium-sized enterprises has grown substantially compared to the 13th Five-Year Plan (2016-20), with accelerated commercialization of cutting-edge technologies such as sulfide solid-state

batteries and synthetic biology.

Talent attraction has also flourished. Of the eight new academicians in Shandong this year, six are based in Qingdao. The city's total talent pool now exceeds 3 million, an increase of 700,000 since the end

Qingdao's capacity for opening-

up has also been enhanced. Benefiting from national policies and trade zones, the "Invest in Qingdao" brand continues to gain promi-

Urban-rural development has been a key focus. Qingdao has promoted rural vitalization and new urbanization in a coordinated manner, becoming the first city in Shandong to provide high-speed rail access to all counties. Meanwhile, its expressway mileage leads the province and the subway operation length has extended to 352 km, an increase of 106 km from the end of the 13th Five-Year Plan.

Urban renewal efforts have transformed 1,584 old residential communities and 260 urban villages. Additionally, 687 km of urban greenways, 378 pocket parks and 24 fitness facilities have been constructed or renovated.

Furthermore, Qingdao ranks among China's major cities in ensuring stable grain and agricultural product supply, with annual grain output exceeding 3.1 million

The city has made tangible progress in environmental protection, with clearer skies, cleaner waters and a more beautiful landscape. It has been selected as China's first pilot city for green urban development and is among the first batch of national carbon peaking

Upholding a people-centered development philosophy, Qingdao has allocated over 70 percent of its fiscal expenditure to people's livelihoods. The per capita disposable income of urban and rural residents has kept pace with economic

Moreover, the city's public services have become more high-quality and balanced, with 277 new, renovated or expanded primary and secondary schools and kindergar-

The average life expectancy has increased to 82 years, and the historic urban area and Laoshan Scenic Spot have been included in China's preliminary list for UNES-CO World Cultural Heritage Site applications

## Construction projects boost resources

By FAN ZITONG fanzitong@chinadailu.com.cn

During the 14th Five-Year Plan (2021-25), the Qingdao development and reform commission led the advancement of major engineering projects and achieved remarkable

In the field of high-quality economic development, a series of major projects in scientific and technological innovation and industrial development are boosting the growth of new quality productive forces. Construction projects such as the new campus of the Ocean University of China, located in the Qingdao West Coast New Area, and the Laoshan Laboratory have provided support for the city's technology

Projects involving SiEn Integrated Circuits and BOE mobile display put into operation. These projects have accelerated the rise of emerging cuits, new display technologies, arti-

In the field of modern urban development, major projects in transportation, energy, water conservancy, and other sectors have helped Qingdao enhance its infrastructure. For example, the Laixi-Rongcheng high-speed railway and Liaoyang Expressway have commenced operation.

International Airport has opened for business, and the metro network now spans 352 kilometers,

modules have been completed and industries such as integrated cir ficial intelligence and green energy.

Meanwhile, Qingdao Jiaodong ty People's Hospital. making travel more convenient and

The first phase of PowerChina's large-scale offshore photovoltaic project in Qingdao's Jimo district begins supplying renewable energy to the grid in late May. PROVIDED TO CHINA DAILY

efficient for the public.

In the energy sector, some key projects have been completed and put into operation. Major new energy projects such as the PowerChina offshore photovoltaic initiative are on the way, making the city's power supply more reliable, green and smart. In the water sector, the main con-

struction of Guanlu Reservoir is scheduled for completion by the end of this year, enhancing the city's water supply capacity.

In the field of people's livelihoods, the implementation of major projects in education, healthcare, culture and sports has improved the life quality of residents.

Since the start of the 14th Five-Year Plan, the city has constructed, renovated or expanded 277 primary and secondary schools and kindergartens, while developing a number of healthcare projects such as the Qingdao Branch of Peking Universi-

Cultural and sports facilities including the new People's Liberation Army Naval Museum and the new Qingdao Science and Technology Museum, have been completed and put into use.

Additionally, a series of urban renewal projects have been implemented, including the renovation of Taiping Mountain Park and Zhongshan Road.

Investment in social welfare and people's livelihoods has maintained rapid growth, while project develop ment has become more people-oriented and effective.

Qingdao said it will continue to plan and advance a series of major and high-quality projects, providing support for the development of a modern international metropolis.

## New quality productive forces developed to lead manufacturing

By WANG YUCHEN anguuchen@chinadailu.com.cn

Qingdao has helped implement the national strategy of building China into a manufacturing powerhouse during the 14th Five-Year Plan (2021-25) by focusing on advanced new-type industrialization and the development of new quality productive forces through citywide initiatives.

From 2021 to 2023, Qingdao ranked seventh among the top 100 advanced manufacturing cities in China, rising to sixth in 2024. By prioritizing the industrial economy, Qingdao has maintained stable growth while enhancing both quality and efficiency

Innovation has strengthened the competitiveness of Qingdao's indus-

The city has implemented a program to enhance manufacturing innovation capacity, establishing cen ters for smart home appliances and virtual reality innovation, and achieving more than 50 breakthroughs in key technologies.

In addition, the city's industrial upgrading has accelerated. Four clus ters involving smart home applianrail transit equipment, instruments and meters, and ships and marine engineering have been included in national advanced manufacturing clusters, among 80 nationwide and six in Shandong province. Eight emerging industrial parks, including those focused on artificial



Spectators are captivated as a robot showcases its skills at the 2025 Robot World Cup (RoboCup) Asia-Pacific Oingdao Invitational Tournament held in Qingdao West Coast New Area in September.

intelligence, have been established. Qingdao has also intensified efforts

to cultivate high-quality enterprises. Focusing on an innovation-driven industrial system, the city now has 5,028 industrial enterprises above designated size. Eight companies, including Haier and Hisense, have been listed among the 2025 China's

top 500 manufacturing enterprises. The integration of the digital and real economies has been deepened, with enterprises making significant strides in their digital and intelligent transformation. The city has established six global lighthouse factories, 14 industrial internet platforms, and 26 service-oriented manufacturing demonstration enterprises. Further more, 95.9 percent of industrial enterprises above designated size have completed their digital transforma-

Additionally, Qingdao has made significant progress in green transfor mation. The city has implemented a peak carbon action plan, developing 67 national-level green factories. It has been named a national leader

in energy and water efficiency, with 14 energy-saving technologies included in the Ministry of Industry and Information Technology's official recommendation list.

## Region accelerates its drive to become a global consumption hub

Since the commencement of the 14th Five-Year Plan (2021-25), Qingdao has accelerated efforts to establish itself as an international consumption center.

It has been designated as a national pilot for developing an international consumption environment and fostering new formats, models and scenarios.

The city has promoted the first-

store economy, attracting over 500 flagship stores of various brands.

Additionally, it has introduced 82 tax-free stores, with tax-refundable sales for foreign visitors increasing by more than 40 percent year-on-year in the first three quarters of 2025.

Qingdao has also advanced online consumption. Meanwhile, the city has intensified the national trade-in program for consumer goods, with cumulative subsidies

reaching 6.64 billion yuan (\$940 million).

In response to a challenging and complex international economic environment, Qingdao has implemented a series of policies to stabilize foreign trade, resulting in a substantial expansion of import and export volumes.

Currently, nearly 27,000 foreign trade enterprises in the city have actual import and export activities, an increase of more than 6,000

compared with the end of the 13th Five-Year Plan (2016-20).

More than 8,000 local enterprises have been supported in exploring overseas markets, with trade partners spanning over 230 countries and regions.

Innovative strides have been made in digital, offshore and bar-

Over the past five years, Qingdao has attracted 120 projects invested in by Fortune Global 500 companies, continuously optimizing the business environment for foreign investment.

The city has established a roundtable meeting system for foreignfunded enterprises and hosted multiple thematic conferences for companies from countries such as South Korea and Germany.

Moreover, the comprehensive service system of "Overseas Qingdao" has been enhanced, with 10 overseas centers set up in locations including the United Arab Emir ates, Cambodia and Egypt.

This year, Qingdao's trade with Shanghai Cooperation Organization member states is projected to exceed 130 billion yuan.

Over the past five years, the China (Shandong) Pilot Free Trade Zone Qingdao Area has achieved institutional innovation milestones, with some being pro-moted both provincially and