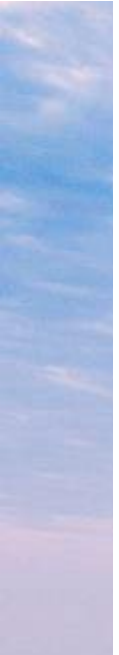


# China Economic Quarterly Q2 2023

China's industrial economy,  
the backbone of high-quality development





# China's industrial economy, the backbone of high-quality development

China's economy recovered at a slower pace than anticipated in the second quarter. The current challenge lies in the general lack of confidence among residents and businesses in the extent and scope of economic recovery, translating to insufficient demand, continued weak consumption, and slow investment recovery. Even more concerning is that some people have started to question China's future sustainable development and been worried about whether the country can

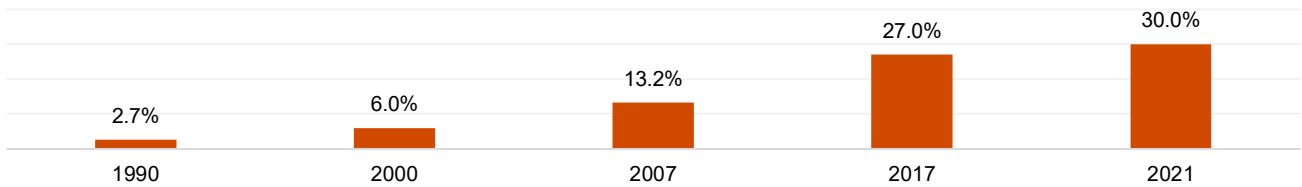
achieve its development goal for 2035, that is to reach the level of moderately developed countries in terms of per capita GDP.

It is a common phenomenon that when confronted with significant difficulties and setbacks, individuals as well as companies or countries tend to lose confidence in their future goals.

In this context, this article asserts that through the study and analysis of the development of China's industrial

economy, it can be reasonably concluded that China's economic development remains sustainable. For example, during the past three years, the stable operation of China's manufacturing industry has provided strong support to many countries in their fight against global challenges. During this period, the proportion of China's manufacturing industry in the world rose to 30%. Meanwhile, China's import and export of goods maintained steady growth.

## China's share of global manufacturing



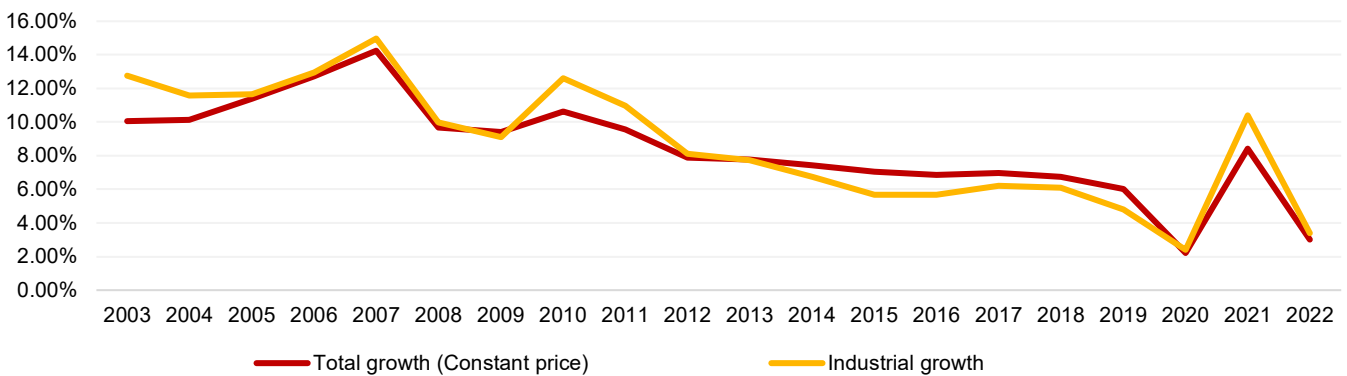
Source: World Bank, Ministry of Industry and Information Technology

Over the past decade, China's industrial economic growth has slowed down due to a deceleration in GDP growth. The share of industrial output in GDP has experienced a decline in recent years, attributable to the gradual improvement of the service sector. However, the

China's industrial sector has not reduced in size and not deviated from the overarching trend of transitioning and upgrading towards higher value-added industries and technology-driven innovation. Manufacturing, a huge part of the industrial economy, will continue

to be a key driving force for China's high-quality development for a considerable period of time. We will examine the development momentum of China's industrial economy through a case study on domestic offshore wind power.

## GDP and industrial growth in the past 20 years



Source: Wind (National Bureau of Statistics)



## ■ The development of new energy, including offshore wind power, has seen rapid growth

**The world's first 16-megawatt (MW) ultra-large capacity offshore wind turbine in Fujian offshore wind farm, China, has been successfully connected to the grid and started to generate power recently.** According to Chinese state media, this gigantic offshore wind turbine stands at a height equivalent to 150 floors of a building.

When all three blades are assembled together, each with length up to 123 metres, the entire rotor's diameter reaches 252 meters. The rotating sweep area is equivalent to the size of seven football fields. Under standard running conditions, this wind turbine can generate 34.2 kilowatt-hours of electricity with each rotation. It is

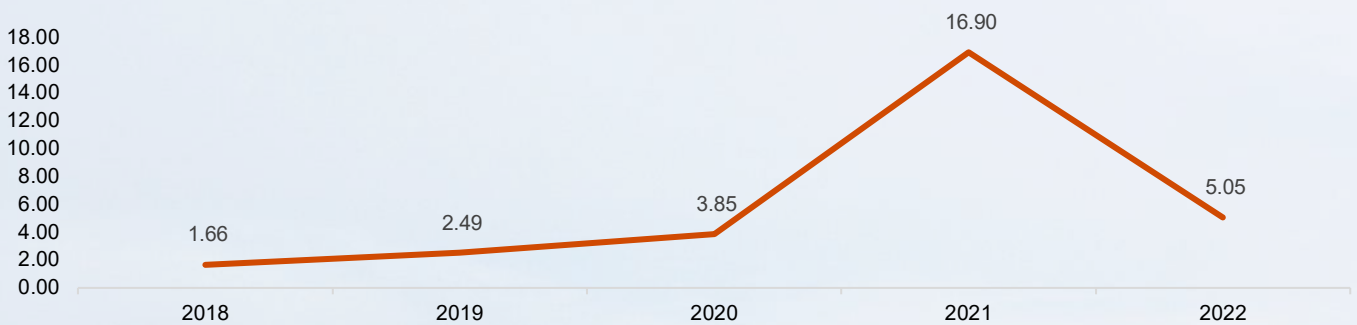
estimated to generate over 66 million kilowatt-hours of electricity annually, meeting the annual power needs of around 36,000 three-person households. Based on the current offer price of approximately 3,500 yuan per kilowatt for offshore wind, the estimated cost of this 16 MW wind turbine is between 50 and 60 million yuan.

The successful debut of the 16 MW ultra-large capacity offshore wind turbine signify that China is already at the forefront of global offshore wind power development. Meanwhile, as of 2022, the average individual unit power

capacity for offshore wind installations was 8.8 MW in Europe, 7.4 MW in China, and 7.6 MW globally. According to forecasts by the Global Wind Energy Council (GWEC), the average individual unit capacity for offshore wind power

will increase to 11.5 MW by 2025. As per the current trajectory of technology development, GWEC predicts that 2030 will see the introduction of offshore wind turbines with individual unit capacities of 20 MW.

**New installed capacity of offshore wind power in China (Unit: million kilowatts)**



Source: Wind (World Wind Energy Association)



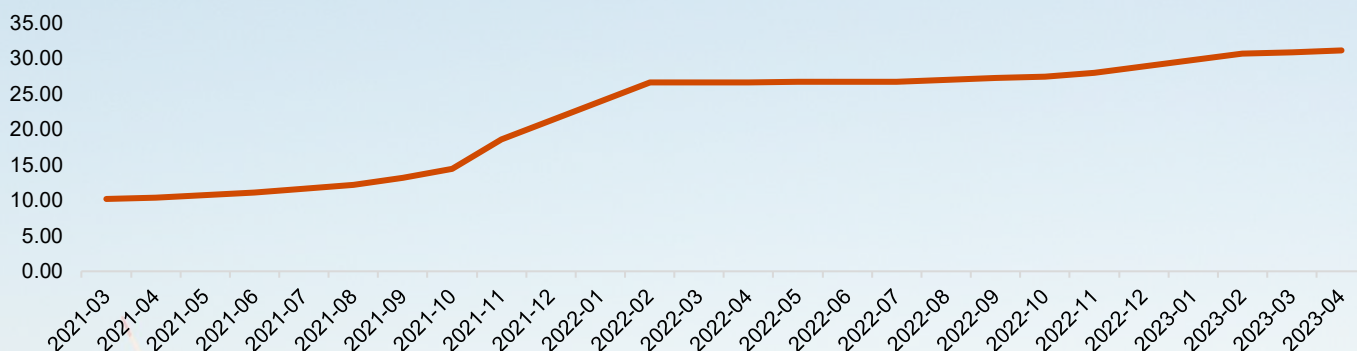
**In recent years, China's offshore wind power capacity has continued to grow, and the country has become the world's largest exporter of wind power equipment.** In 2022, China's offshore wind power added around 5 million kilowatts of installed capacity, accounting for approximately 54% of the global total. By the end of 2022, the cumulative installed capacity of offshore wind power worldwide reached 57.6 gigawatts (GW), with China's cumulative installed capacity reaching 30.51 GW, accounting for 53% share in the global market. The trend towards larger offshore wind turbines is apparent. From 2011 to 2021, the average individual unit capacity of newly added offshore wind installations in China increased from 2.7 MW to 5.6 MW, and the average individual unit capacity of new offshore wind turbines that came into operation in 2022 has

reached 11.5 MW. Additionally, nearly 60% of wind power equipment in the global market was produced in China, with its cumulative wind power exports reaching 11.93 million kilowatts, covering 49 countries and regions.

**Despite a relatively late entrance into the offshore wind power industry, China has rapidly grown into the world's largest offshore wind power market, thanks to robust policy support, technological innovation, and a well-established industrial chain.** Offshore wind power has become a crucial support for China's energy transformation in the new era and a significant driving force for the development of the marine economy in coastal provinces. China's exploration of offshore wind power began in 2007, with the first offshore wind power project featuring a 1.5 MW wind turbine

completed on November 8 of that year. However, during the "Twelfth Five-Year Plan" period (2011-2015), the progress of offshore wind power in China was relatively sluggish. Installed capacity remained below one million kilowatts, falling short of the target of five million kilowatts set forth in the "Twelfth Five-Year Wind Power Development Plan". High cost was one of the major obstacles hindering the pace of offshore wind power development during this period. In the "Thirteenth Five-Year Plan" period (2016-2020), benefiting from previous technological reserves, improved industrial chains, and better investment and financing environments, China's offshore wind power entered a stage of rapid development, with nearshore offshore wind power embarking on a phase of large-scale development.

Installed capacity of offshore wind power generation of China (Unit: million kilowatts)



Source: Wind (World Wind Energy Association)



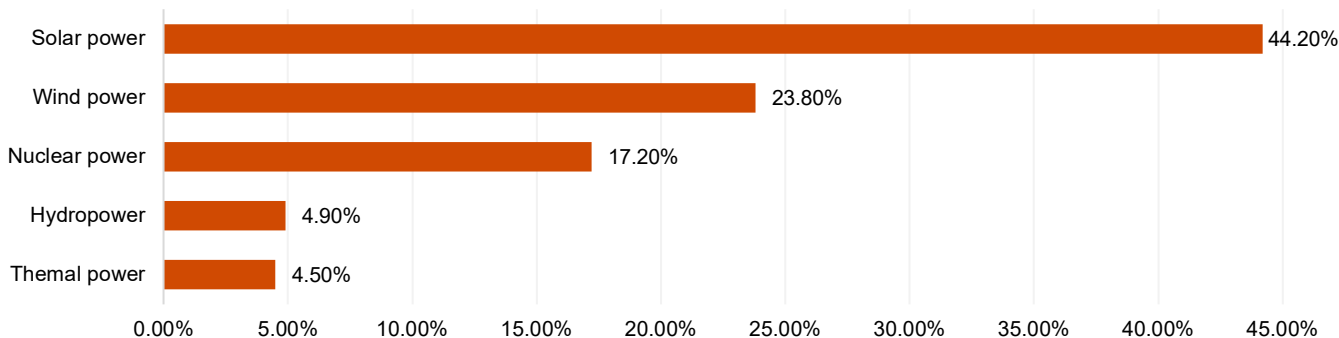
**In recent years, China has experienced rapid advancement in the field of new energy, particularly in wind power. Electricity generation from renewable sources has significantly outpaced that from traditional sources.** As of the end of 2021, electricity generation from renewable sources (wind power, solar power, nuclear, and others) had increased by 6.8 times compared to 2012, with an average annual growth rate of 25.7%. It accounted for 11.5% of

the total electricity generation, a 9 percentage point increase from 2012.

Specifically, nuclear power increased by 3.2 times with an average annual growth of 17.2%; wind power increased by 5.8 times with an average annual growth of 23.8%; and solar power increased from 251 billion kilowatt-hours in 2014 to 3,258 billion kilowatt-hours in 2021, 12 times increase with an average annual growth of 44.2%. Overall, by the end of 2021, the total

installed power capacity in China stood at 2.38 billion kilowatts, 1.1 times over the level in 2012, with an average annual growth of 8.4%. Electricity generation in 2021 reached 85 trillion kilowatt-hours, a 71.1% increase from 2012, with an average annual growth rate of 6.1%. During the same period, thermal power generation increased by 49.1% with an average annual growth of 4.5%, while hydropower generation also expanded by 53.5% with an average annual growth of 4.9%.

### China's annual growth rate of energy by type (2012 - 2021)



Source: Wind (World Wind Energy Association)

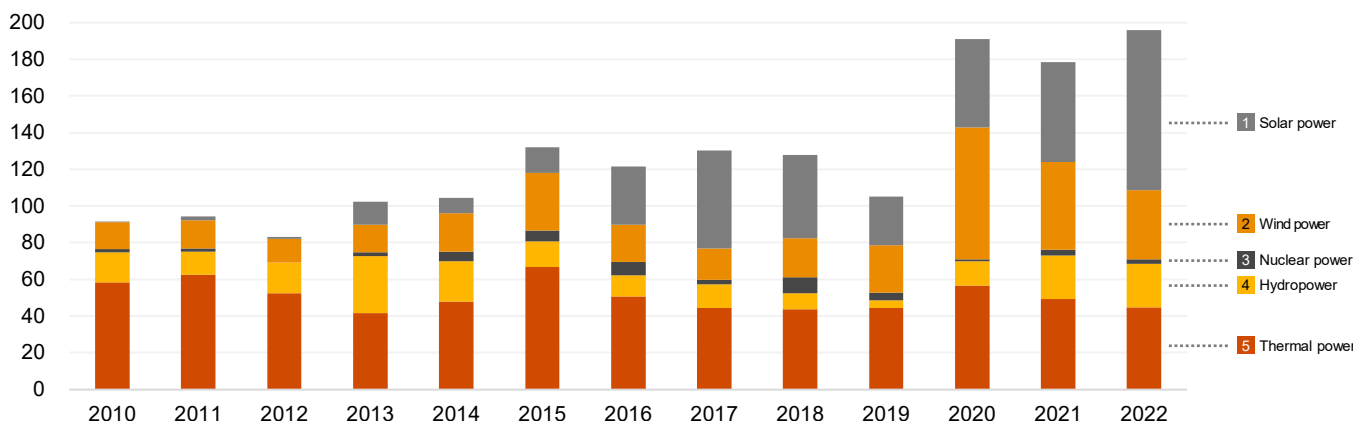
**In 2021, China maintained its global leadership in hydropower, wind power, and solar power installations, with each category surpassing 300 million kilowatts for consecutive years.** In pursuit of its “30·60” carbon goals, China’s energy production structure is undergoing a rapid transformation, with steady increase in its share of clean energy in the global market. The “30·60” goals encompass China’s efforts to combat climate change by primarily reducing greenhouse gas emissions, particularly

carbon dioxide. China aims to reach the peak of carbon dioxide emissions before 2030 and achieve carbon neutrality before 2060.

In 2021, China’s installed capacity of non-fossil energy-based power generation, including hydropower, wind power, and solar power, exceeded 1.12 billion kilowatts, accounting for 47% of the total installed capacity for power generation during the year. This marked the first time that non-fossil energy surpassed coal-based power generation

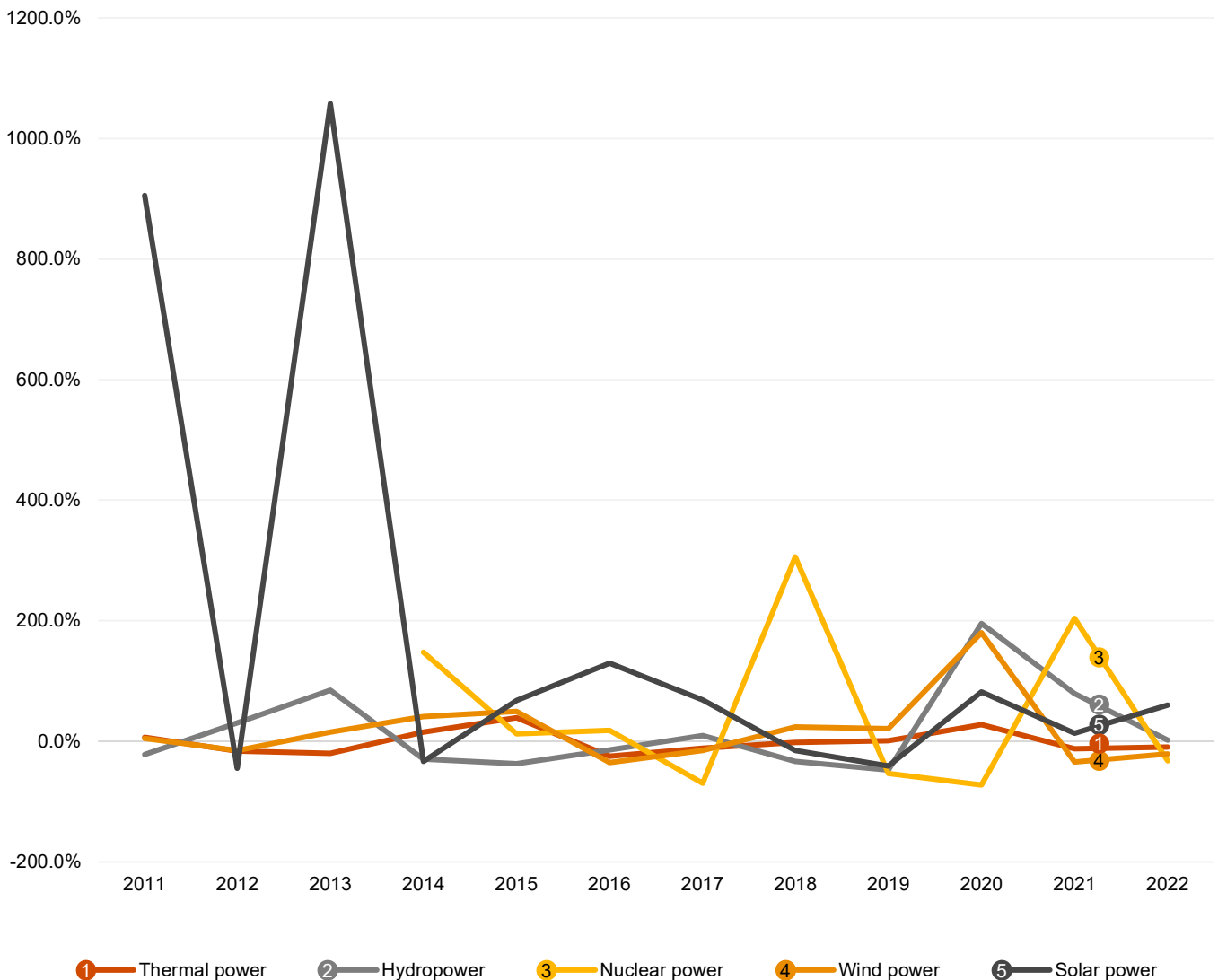
in terms of installed capacity in a year. The proportions of clean energy sources, such as natural gas, hydropower, nuclear power, within the country’s energy production structure have been steadily increasing. On the other hand, the share of coal-based power in the energy mix has decreased to 67%, equivalent to a decline of 9.2 percentage points from 2012. Additionally, the proportion of crude oil has also decreased to 6.6%, down by 1.9 percentage points.

### Newly installed capacity for power generation from 2010 to 2022 (Unit: million kilowatts)



Source: China Electricity Council

## YoY growth of newly installed capacity for power generation from 2011 to 2022



Source: China Electricity Council  
\*Calculated by PwC

These developments indicate a significant shift towards cleaner and more sustainable energy sources in China's energy mix. The country's commitments to increasing its share of the global clean energy market and reducing its dependence on fossil fuels are both crucial to achieving its ambitious climate goals as part of the global efforts in combating climate change.

Research conducted by the Global Energy Monitor (GEM) showed that China's installed solar power capacity has already surpassed the combined total of other regions worldwide. If China successfully constructs and operates all the planned power plants as scheduled, it is estimated that by 2025, China's installed solar and wind power capacities will reach 1,200 GW, allowing it to potentially achieve its 2030 clean energy targets five years ahead of schedule.

**The significant increase in the proportion of clean energy in China has driven the rapid development of the entire clean energy industry. Wind power, solar power, nuclear power, and other related industries have subsequently attained global leadership as industry progress continues.** As China progresses towards achieving its 2030 carbon peak target, there is still immense potential for further development in this area. This continuous progress will help the world transition faster towards carbon neutrality, while presenting abundant opportunities for China's clean energy industry.



The following sections will focus on the changes in China's industrial economy in recent years, with analyses from three dimensions: industrial value-added, showcasing the immense scale of China's industrial economy as the world's largest industrial powerhouse; goods import and export, underscoring China's importance as the world's largest trading economy; and the significant role of private enterprises, demonstrating great progress in bolstering private economy.

## ■ For 13 consecutive years, China has maintained its position as the world's largest industrial powerhouse

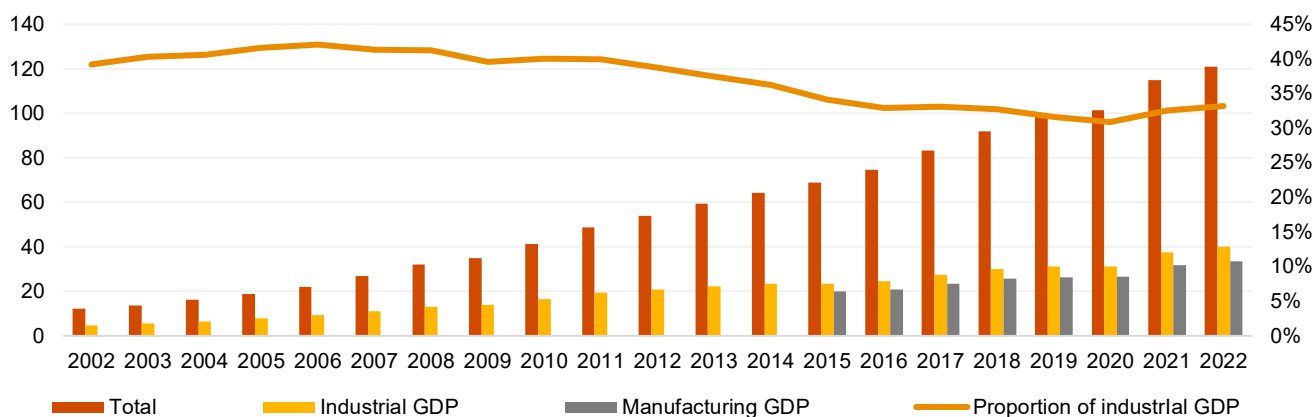
According to data from the National Bureau of Statistics, China's GDP reached 59.3 trillion yuan in the first half of the year, while the industrial value-added accounted for over 30% of the economy. By sectors, the value-added of the primary, secondary and tertiary industries were 3.04, 23.07, and 33.19 trillion yuan respectively. More specifically, the industrial value-added in the secondary industry was 19.46

trillion yuan, including 16.46 trillion yuan from the manufacturing industry, which accounts for a significant 32.8% of national GDP.

These figures demonstrate the vast scale of China's industrial sector and its vital role in the economy. The industrial sector serves as a foundation for the Chinese economy, contributing significantly to its economic growth and

employment. Manufacturing, as an integral part of the secondary industry, plays a crucial role in China's economic transformation and upgrading, driving innovation and sustainable development. China's consistent global leadership in industrial scale not only showcases the country's economic dynamism and competitiveness, but also has a degree of significance on the global economy.

Composition of GDP by industry in the past 20 years (Unit: RMB trillion)



Source: Wind (National Bureau of Statistics)

\* Annual data of Industrial GDP and Manufacturing GDP refer to the cumulative figure for the December of each year.

In 2022, the scale of China's industrial value-added increased by 3.6% YoY, with the industrial sector contributing 36% to economic growth. The industrial sector contributed 1.1 percentage points to the overall economic growth, of which the manufacturing industry accounted for 0.8 percentage points. The value-added of the manufacturing industry accounted for 27.7% of GDP. China's total industrial value-added in 2022 reached 40.16 trillion yuan, representing

a 3.4% increase compared to the previous year. When adjusted for constant prices, this is equivalent to 1,171 times the value in 1952 (343 billion yuan).

**Over the past decade, China's industrial economy has sustained rapid growth, providing robust support for the steady expansion of the national economy.** From 2013 to 2021, the average annual growth rate of

industrial value-added was 6.1%. In 2021, the industrial value-added increased by 9.6% compared to the previous year, reaching 37.3 trillion yuan, accounting for 32.6% of the gross domestic product (GDP). It contributed 3.1 percentage points to economic growth, and its share of contribution to GDP growth reached 38.1%, making the industrial sector a vital supporting force for economic stability.

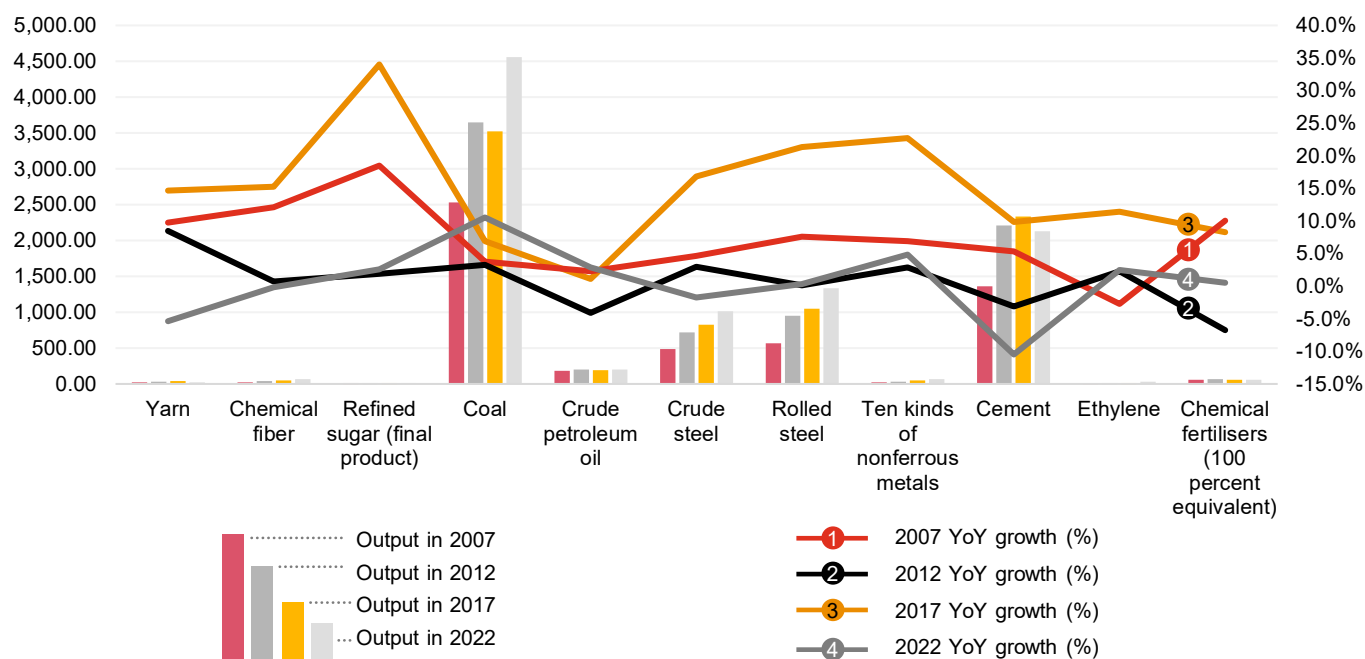
**According to data from the World Bank, China's manufacturing value-added surpassed the United States for the first time in 2010 and has since then remained the world's largest for consecutive years.**

According to data from the National Bureau of Statistics, in 2018, China's industrial value-added exceeded 30 trillion yuan for the first time. In 2020, China's manufacturing value-added

accounted for 28.5% of the global share, a 6.2 percentage point increase from 2012, further strengthening its importance as the fuel for global industrial economic growth. Among more than 500 major industrial products globally, China ranks first in output for over 220 of them. For example, the production of colour televisions and air conditioners exceeded 200 million units, refrigerators reached 78.76 million

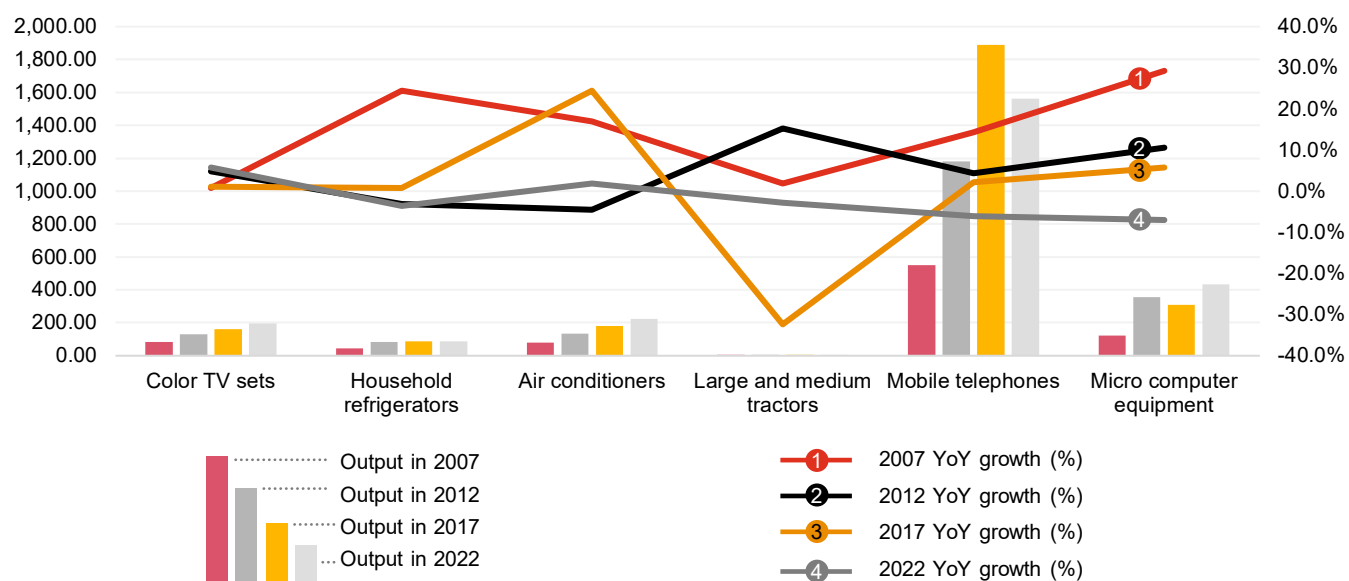
units, and washing machines reached 71.5 million units, accounting for over 50% of the global output. China's automobile production exceeded 27.8 million units, representing 30% of the global output. The production of new energy vehicles reached 1.27 million units, accounting for over 50% of the global output.

**Output of major industrial products and growth rates (Unit: million tons)**



Source: National Bureau of Statistics

**Output of major industrial products and growth rates (Unit: million units)**



Source: National Bureau of Statistics



**In addition to maintaining its position as the world's largest industrial powerhouse, China has seen rapid growth in high-tech manufacturing industries with high value-added.**

From 2013 to 2021, the value-added of equipment manufacturing and high-tech manufacturing industries expanded at an average annual rate of 9.2% and 11.6% respectively, surpassing the growth of the overall industrial sector by 2.4 and 4.8 percentage points. For example, the proportion of mechanical and electrical products and high-tech products in China's imports and exports points to a generally increasing trend year by year (more detail will be discussed in the next section).

Specifically, the aerospace equipment manufacturing industry grew at an average annual rate of 13.7%, the electronic and communication equipment manufacturing industry at 13.6%, the pharmaceutical manufacturing industry at 11.7%, and the medical instruments and apparatus manufacturing industry at 10.9%. In 2021, the value-added of equipment manufacturing and high-tech manufacturing industries accounted for 32.4% and 15.1% of the value-added of the overall industrial sector respectively, an increase of 4.2 and 5.7 percentage points compared to 2012.

In 2022, the value-added of the high-tech manufacturing industry increased by 7.4% YoY, outpacing the growth of the overall manufacturing industry by 4.4 percentage points. The production of new products maintained high-speed growth, with new energy vehicles leading the global market for eight consecutive years, with a YoY increase of 96.9% and 93.4% in production and sales, respectively. Significant breakthroughs in industrial technological innovation have been achieved, including the delivery of China's first indigenously developed C919 large passenger aircraft and the successful development and certification of domestically produced extracorporeal membrane oxygenation (ECMO) machines, which have been put into use.

**China has established 45 national-level advanced manufacturing clusters and 100 SME (small medium enterprise) industry clusters.**

The Industrial Internet has been fully integrated into 45 major categories of the national economy, with over 240 influential Industrial Internet platforms, injecting new momentum into industrial upgrading. These 45 national-level advanced manufacturing clusters have a combined output value of 19 trillion yuan. They encompass manufacturing strengths in key areas, including 13 clusters related to the next-generation information technology, 13 related to high-end equipment, 7 related to new materials, 5 related to biopharmaceuticals and high-end medical equipment, 4 related to consumer goods, as well as 3 related to new energy and intelligent connected vehicles. These clusters have emerged as essential drivers for innovation and development in key industries and fields, embodying China's aspiration to strengthen its manufacturing capabilities.

These 45 national-level advanced manufacturing clusters are distributed across 19 provinces, autonomous regions, and municipalities across China. Among them, there are 30 clusters in the eastern region, 8 in the central region, 5 in the western region, and 2 in the northeastern region. Four key regional clusters, namely the Beijing-Tianjin-Hebei region, the Yangtze River Delta, the Pearl River Delta, and the Chengdu-Chongqing region, account for 30 national-level clusters, representing two-thirds of the total. These national-level clusters have become significant engines in driving regional economic development, while playing a crucial role in shaping and leading the growth of their respective regions.





## ■ China has maintained its position as the world's largest country in terms of merchandise trade for six consecutive years

### The rapid development of China's industrial economy is evident in its share of global merchandise trade.

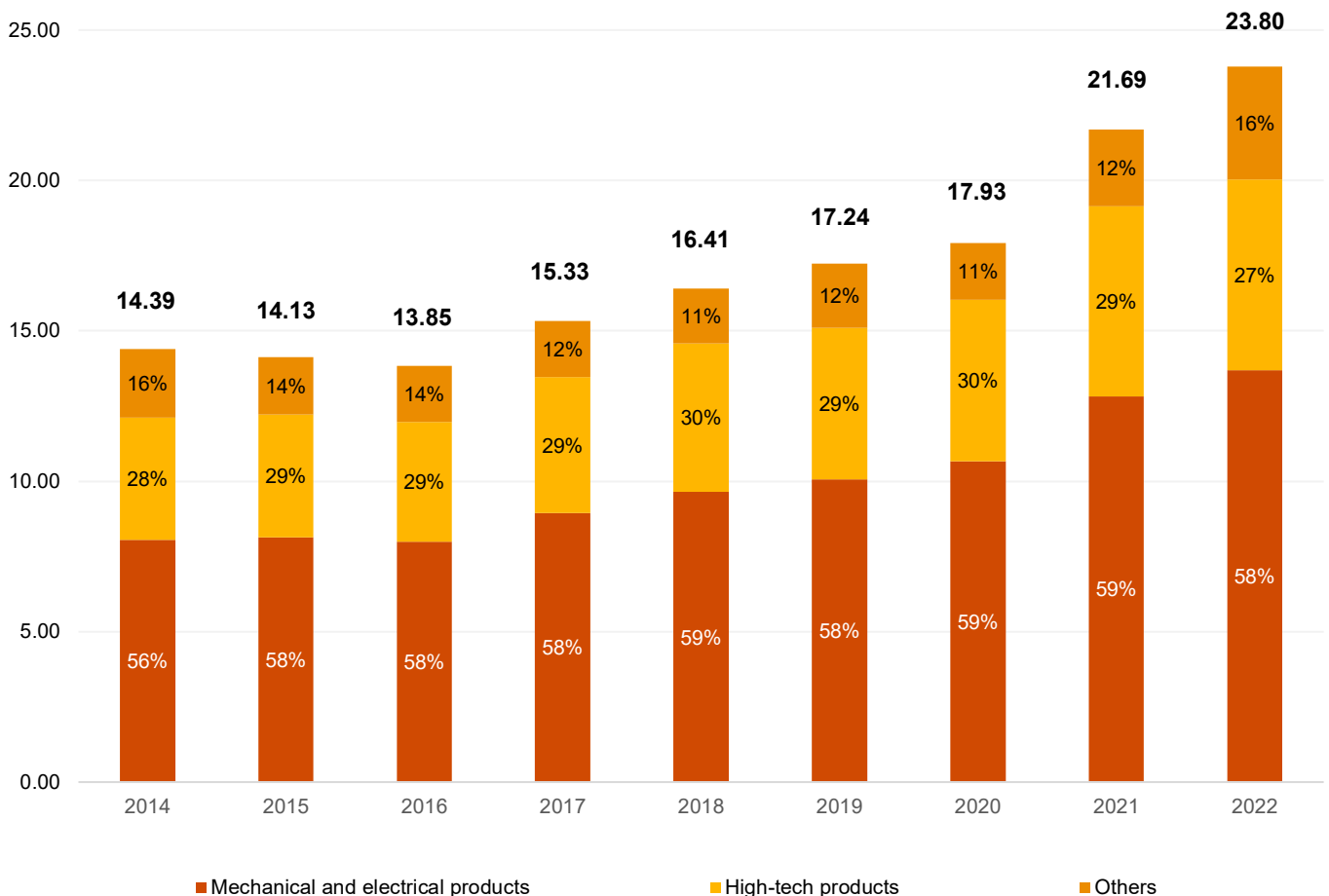
According to data provided by China Customs, in 2022, China's total foreign trade value exceeded 42 trillion yuan, solidifying its position as the world's largest country in merchandise trade for six consecutive years. The total import and export cargo volume reached 4.8 billion tons in 2022, involving 13 million units (ships, planes, trains, etc.) of transportation vehicles and 320 million cross-border postal and express items. A customs spokesperson illustrated that

if all the import and export goods of China in 2022 were loaded onto trains, they could encircle the Earth's equator 30 times. Furthermore, the containers from last year, if lined up, could stretch between the Earth and the Moon in two rows.

**The scale of China's industry sector has experienced significant growth over the years, accompanied by a continuous increase in value-added of industrial products.** For example, in 2002, China's total exports amounted to 2.70 trillion yuan (US\$ 325.6 billion),

with mechanical and electronic products accounting for 1.3 trillion yuan and high-tech products accounting for 562 billion yuan. By 2022, China's exports have surged to 23.97 trillion yuan (US\$3.6 trillion), an increase of over 10 times compared to 2002. Among them, mechanical and electronic products accounted for 13.7 trillion yuan, while high-tech products accounted for 6.34 trillion yuan, witnessing a tenfold increase within the span of 20 years.

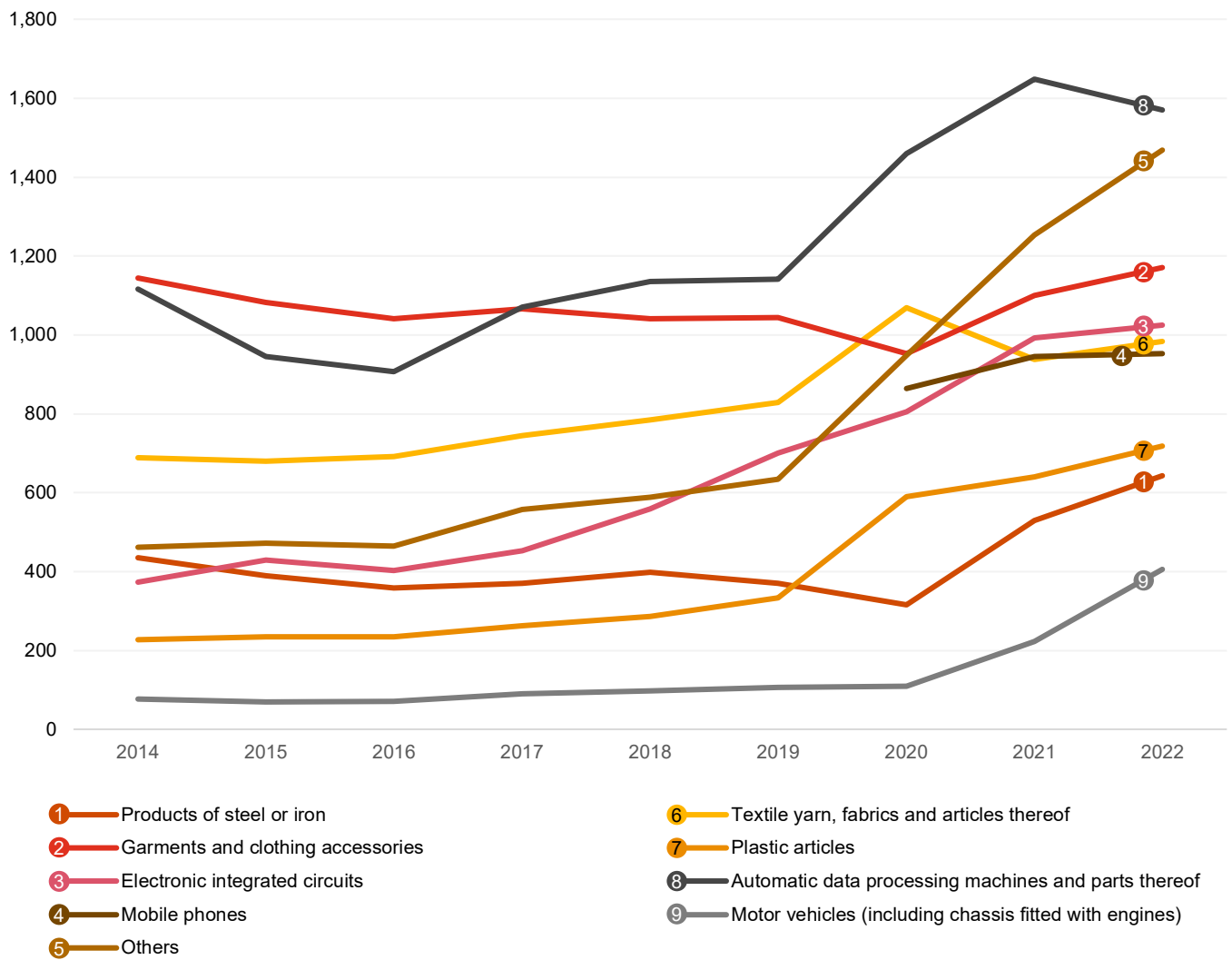
China's export, 2014 to 2022 (Unit: RMB trillion)



Source: Wind (General Administration of Customs of China)

\* Annual data refers to the cumulative figure for the December of each year.

## Main export commodities, 2014 to 2022 (Unit: RMB billion)



Source: Wind (General Administration of Customs of China)

\* Others include footwear, furniture and parts thereof, leather suit-cases and similar containers, toys, containers, and LCD flat panel display modules.














\*\* Annual data refers to the cumulative figure for the December of each year.



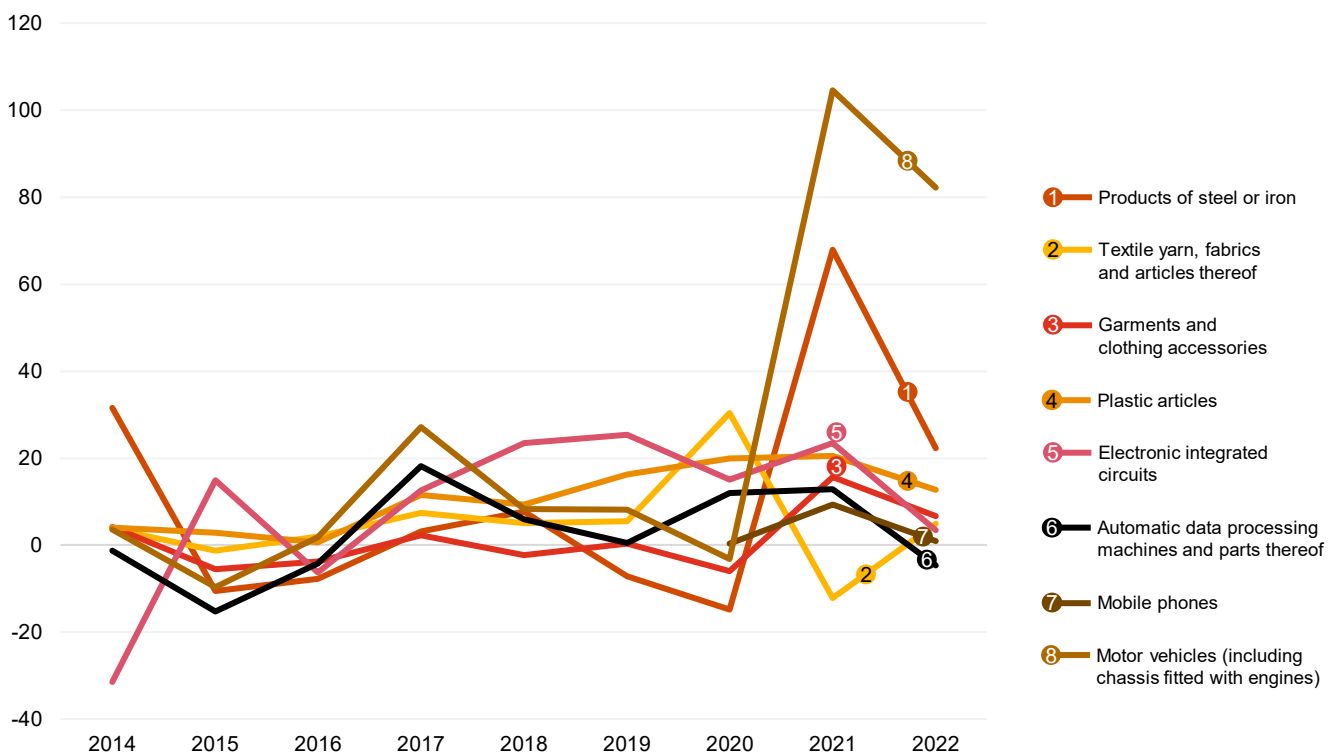
**In terms of product categories, China's industrial goods exports grew by 9.9% in 2022, contributing 9.4 percentage points to the overall export growth.** Exports of labour-intensive products continued to grow at a fast pace, with green and low-carbon

products such as solar cells, lithium batteries, and electric passenger vehicles experiencing export growth of over 60%. This trend highlights the rapid development of new export drivers. According to the latest data, China maintained its position as the

world's largest exporter for 14 consecutive years, with its share in world exports reaching 14.7% in 2022. Specifically, some of the major products exported by China in 2022 included:

 Integrated circuits (2,734 billion pieces) valued at <b>1,025.4 billion yuan.</b>	 Textile yarn, fabrics and related products valued at <b>983.6 billion yuan.</b>
 Automatic data processing equipment and components valued at <b>1,570.1 billion yuan.</b>	 Clothing and clothing accessories valued at <b>1,171.3 billion yuan.</b>
 Mobile phones (822.24 million units) valued at <b>952.7 billion yuan.</b>	 Footwear valued at <b>384.4 billion yuan.</b>
 LCD flat panel display modules valued at <b>180.7 billion yuan.</b>	 Furniture and its components valued at <b>463.9 billion yuan.</b>
 Automobiles (including chassis) (3.32 million units) valued at <b>405.4 billion yuan.</b>	 Boxes, bags, and similar containers valued at <b>237.8 billion yuan.</b>
 Steel (67.32 million tons) valued at <b>642.7 billion yuan.</b>	 Toys valued at <b>322.9 billion yuan.</b>
 Containers (3.21 million units) valued at <b>96.7 billion yuan.</b>	 Plastic products valued at <b>718.8 billion yuan.</b>

**YoY growth for the main export commodities from 2014 to 2022 (Unit: %)**



Source: Wind (General Administration of Customs of China)

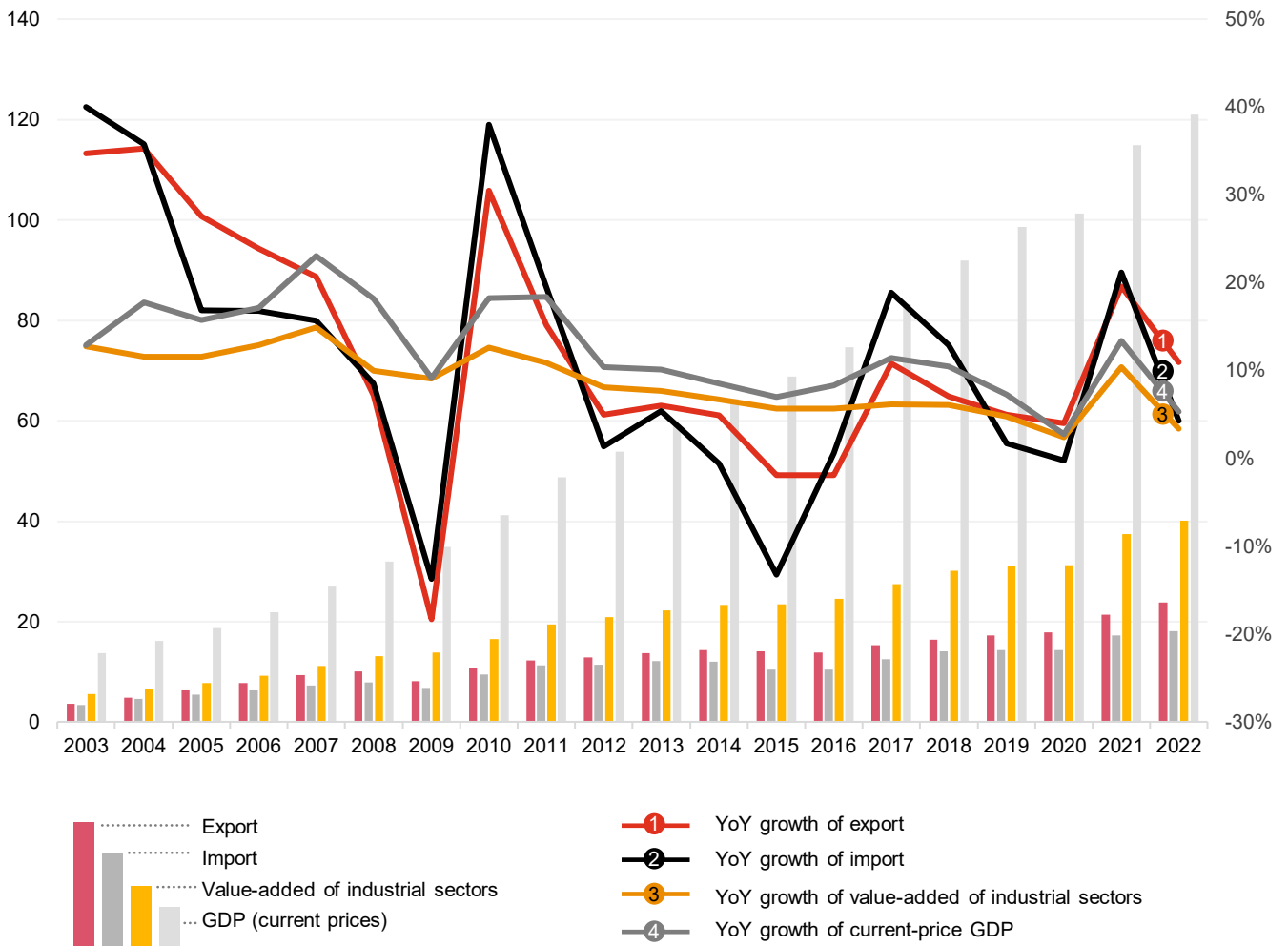
\* Annual data refers to the cumulative figure for the December of each year.

Taking high value-added products such as automatic data processing equipment and components, mobile phones, automobiles, and LCD flat panel displays as examples, their export values have seen significant growth over the past decade. In 2012, the

export values of these four product categories were 185.3 billion US dollars, 81 billion US dollars, 21 billion US dollars, and 36.3 billion US dollars, respectively. In the past ten years, these products experienced substantial growth in their export values, with

mobile phones and automobiles showing the largest increase. As for integrated circuits, their export value exceeded 1 trillion yuan in 2022, despite the absence of export data in 2012 and 2017 possibly due to insignificant value.

### Imports and exports in the past 20 years (Unit: RMB trillion)



Source: Wind (National Bureau of Statistics, Wind)  
 \* YoY growth of current-price GDP is calculated by PwC.





## ■ Private enterprises account for over 50% of China's total merchandise trade volume

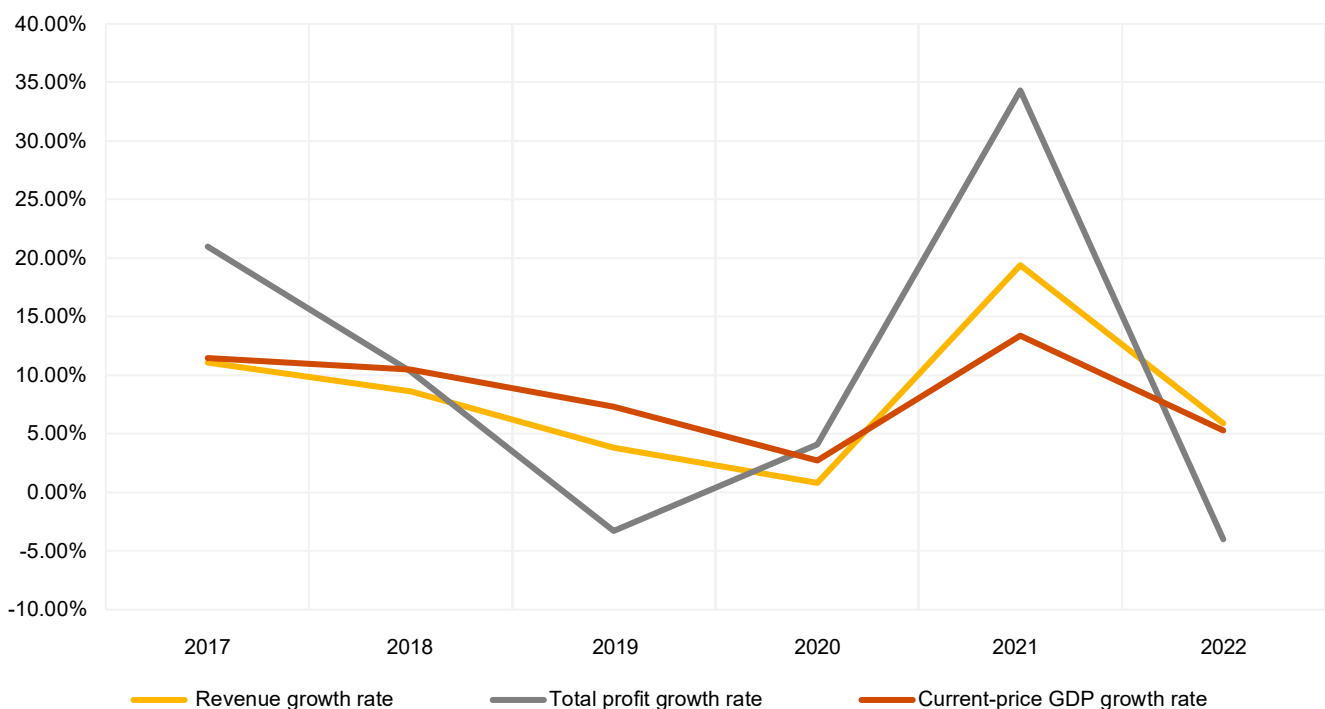
**In recent years, the foreign trade volume of private enterprises has experienced rapid growth, making significant contribution to China's foreign trade.** In 2022, there were 598,000 foreign trade enterprises in China that engaged in actual import and export activities, marking a 5.6% increase. Among these enterprises, 510,000 were private enterprises, showing a 7% increase. Their combined import and export value reached 21.4 trillion yuan, indicating a 12.9% growth. Private enterprises' import and export value accounted for 50.9% of the total,

an increase of 2.3 percentage points. During the same period, foreign-invested enterprises accounted for 13.82 trillion yuan in import and export value, while state-owned enterprises accounted for 6.77 trillion yuan, representing 32.9% and 16.1% of the total, respectively.

In 2022, private enterprises' import and export contributed 80.8% of China's foreign trade growth. During the same period, private enterprises witnessed double-digit growth in imports and exports with their three largest trading

partners: ASEAN (27.6% growth), the European Union (12.6% growth), and the United States (10.6% growth). The combined value of these three trading partners accounted for 43.9% of private enterprises' total import and export value. Additionally, private enterprises also experienced growth in imports and exports with other BRICS countries (22.1%), Latin America (14.5%), and the five Central Asian countries (55.1%).

**YoY growth of the operation revenue and the total profit of industrial enterprises from 2017 to 2022**



Source: Wind (National Bureau of Statistics, Wind)  
\* Current-price GDP growth rate is calculated by PwC.

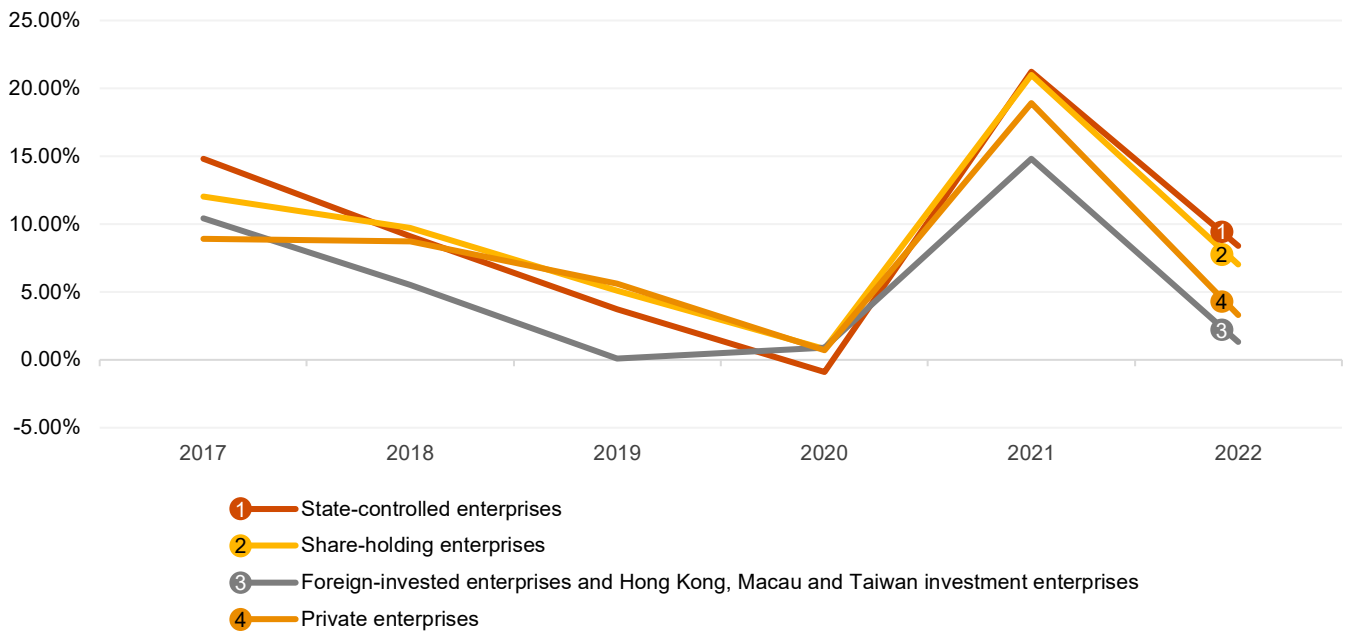
In addition to merchandise trade, changes in China's industrial economy can also be observed through the production scale of industrial enterprises. In 2022, large-scale

industrial enterprises posted a total revenue of 137.91 trillion yuan, a 5.9% increase compared to the previous year. Their total assets amounted to 156.12 trillion yuan, representing an 8.2%

increase year-on-year. However, owing to changes in the producer price index (PPI) and other factors, total profit declined to 8.4 trillion yuan, a decrease of 4% compared to the previous year.



### Revenue growth of industrial enterprises with different ownerships from 2017 to 2022



Source: Wind (National Bureau of Statistics)

\* Annual data refers to the cumulative figure for the December of each year.

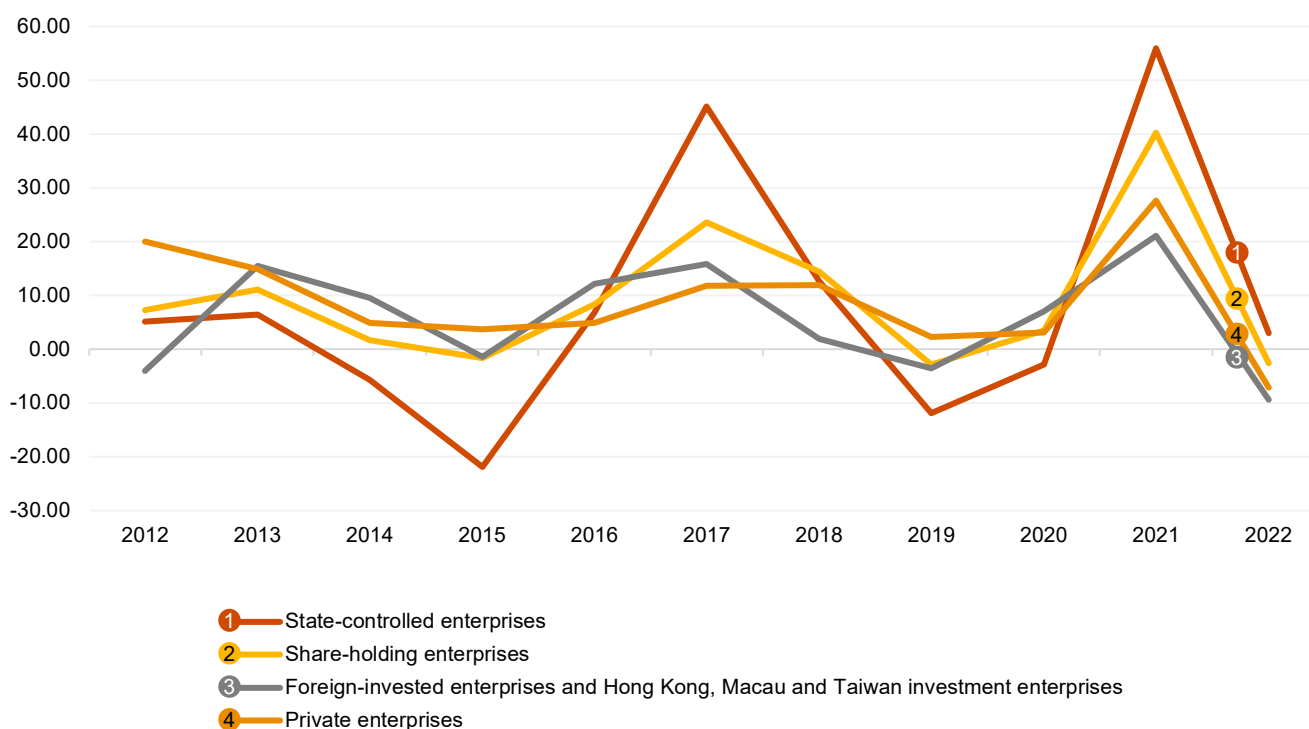
In terms of total profit, state-owned enterprises earned a total of 2.38 trillion yuan, an increase of 3% compared to the previous year. Limited companies (joint stock or sharing holding enterprise) made a total profit of 6.16 trillion yuan, a decrease of 2.7%. Total profit of foreign-invested enterprises and enterprises from Hong Kong SAR, Macau SAR, and Taiwan region saw a decrease of 9.5% to 2 trillion yuan.

Private enterprises made a total profit of 2.66 trillion yuan, a decrease of 7.2%.

In 2022, total revenue reached 137.91 trillion yuan. Among this, private and foreign-invested enterprises, as well as enterprises from Hong Kong SAR, Macau SAR, and Taiwan region accounted for 38.63% and 20.73% of large-scale industrial enterprises, with revenues reaching 53.27 trillion yuan

and 28.59 trillion yuan, respectively. State-owned enterprises accounted for 26.46%, of total revenue of 36.48 trillion yuan. Limited companies, which typically refer to both state-owned and private enterprises that have publicly issued stocks, achieved an operating revenue of 104.67 trillion yuan, representing 75.89% of the total.

## Total profit growth of industrial enterprises with different ownerships from 2017 to 2022 (Unit: %)



Source: Wind (National Bureau of Statistics)

\* Annual data refers to the cumulative figure for the December of each year.

**In recent years, the private industrial economy has continued to grow rapidly, demonstrating significant improvements in profitability and job creation capacity.** (Please note that the earliest available data is in 2021).

Between 2013 and 2021, the average annual growth rate of value-added in large-scale private industrial enterprises stood at 8%, which was 1.2 percentage points higher than the overall level of all large-scale industrial enterprises. In 2021, the total profit of large-scale private industrial enterprises grew 44.4% to 2.9 trillion yuan compared to 2012, with an average annual growth rate of 4.2%, which was 0.3 percentage points higher than the overall level of all large-scale industrial enterprises.

Additionally, in 2021, large-scale private industrial enterprises provided employment opportunities for 35.82 million people, representing a growth of 14.7% since 2012. The number of people employed by private industrial enterprises accounted for 48.1% of total employment in large-scale industrial enterprises, far exceeding enterprise of other ownership types.

**The industrial economy, including the manufacturing industry, is of paramount importance as it serves as the cornerstone for China's sustained and high-quality economic development.** Similarly, the increasing importance of the private economy to China's overall development cannot be overstated. The private economy contributes over 50% of the country's tax revenue, 60% of GDP and exports, 70% of technological innovation, 80% of urban employment, and 90% of total number of enterprises. Therefore, it can be affirmed that the trajectory of the private economy directly affect the strength of the industrial economy and its sustainable high-quality development in the future.

**Multiple indicators suggest that China will place even greater emphasis on the development of the private economy in the future.** The recent release of the "Opinions of the Central Committee of the Communist Party of China and the State Council on Promoting the Development and Growth of the Private Economy" has

conveyed important messages. For instance, it shed lights on a significant measure in China's deepening of reform and expanding high-standard opening-up, signalling unprecedented opportunities for the development of the private economy and a major step towards establishing a market-oriented economic system. It also signifies that the central government will strictly require local authorities to fully implement these policies. As stated in the report of the 18th National Congress of the Communist Party of China in 2012, "we will unswervingly encourage, support, and guide the development of the non-public sector of the economy, ensure that all types of ownership can equally use production factors in accordance with the law, fairly participate in market competition, and enjoy equal legal protection".



**It is evident that the industrial economy possesses a relatively high degree of marketisation, but some irrational phenomena still persist.** For example, in 2022, state-owned enterprises achieved a total profit of 238 billion yuan, marking a 3% increase compared to the previous year, meanwhile, other ownership enterprises experienced a varying degree of profit decline. The main reason behind that is state-owned enterprises dominate numerous upstream resources such as mining, energy (including petroleum, coal, electricity), communications, transportation, finance, etc. These sectors are less likely to be affected by economic fluctuations, and the monopoly over resources ensures higher profit margins.

It has been 30 years since Deng Xiaoping first proposed the establishment of a socialist market economy during his southern tour in 1992, and the 14th National Congress of the Communist Party of China officially put forward the goal of establishing a socialist market economy. During this time, the private economy has grown rapidly in China, but it still hasn't received completely

equal treatment in development. At the end of 2013, the Third Plenary Session of the 18th Central Committee of the Communist Party of China put forward the goal of "giving the market a decisive role in resource allocation", which significantly improved the business environment for private enterprises and opened up more opportunities for them. However, in this year, due to multiple domestic and international factors, many private enterprises lack confidence in the future sustainable development of China's economy.

The release of this document may indicate that the 20th Third Plenary Session to be held in 2024 will place a higher emphasis on accelerating the improvement of the socialist market economic system. China may also make institutional adjustments to promote the development of the private economy and create a favourable domestic environment for China's sustainable and stable development, helping it to achieve the goal of becoming a moderately developed country in terms of per capita GDP by 2035.





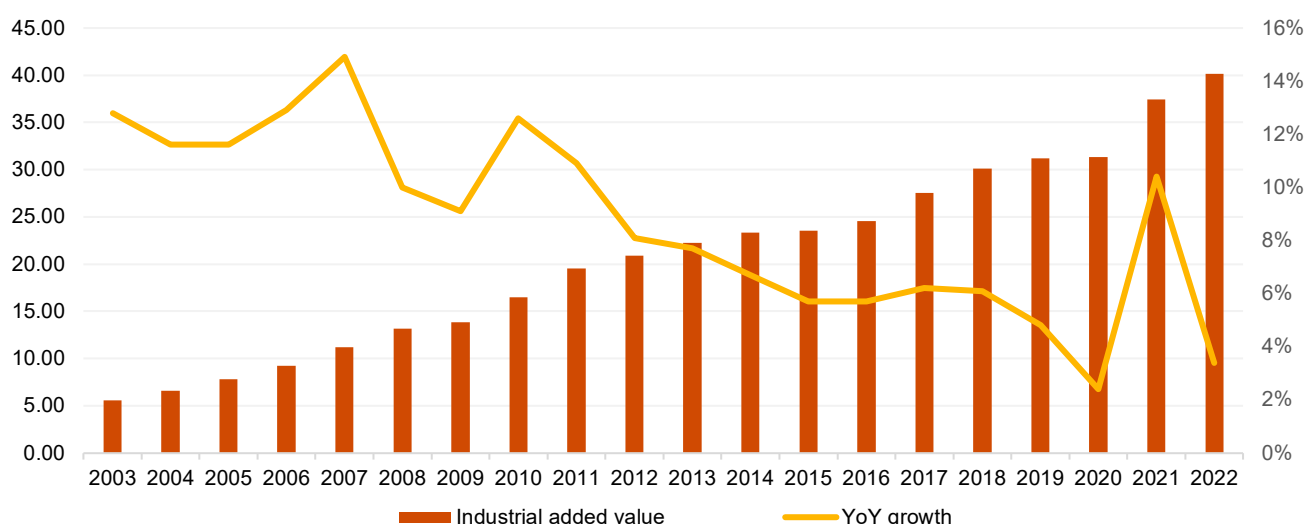
## ■ Conclusion: Technological innovation will drive China's industrial economy towards high-end, intelligent, and green development

After 45 years of reform and opening-up, especially since China's official entry into the WTO on December 11, 2001, the country's economic development has experienced rapid integration with the global economy. China has maintained the top position in industrial scale globally for 13 consecutive years, and it has been the world's largest

trading nation for goods for six consecutive years, earning recognition as the global manufacturing centre. China's industrial value-added has grown significantly, from just over 4 trillion yuan in 2002 to over 40 trillion yuan in 2022. During the early stages of the reform in 1978, China's industrial value-added was only a little over 160

billion yuan, and back in 1952, it was less than 12 billion yuan. Building upon a solid industrial foundation, China has established the world's largest high-speed rail network, highway network, and achieved significant advancement in infrastructure development, including airports, ports, water resources, energy, and information technology.

**Total value-added of industry and its growth in the past 20 years (Unit: RMB trillion)**



Source: Wind (National Bureau of Statistics)

In the years of continuously holding the world's top position in industrial scale, China's manufacturing has undergone a remarkable transformation from quantitative growth to qualitative improvement. Currently, China produces over 40% of the world's top 500 industrial products.

The country has shifted its focus from producing and exporting low value-added primary products to gradually producing and exporting higher value-added medium and high-end products.

Today, China is making strides towards world-leading levels in various industrial sectors, including manned spaceflight, lunar and planetary exploration, deep-sea and deep-earth exploration, supercomputers, satellite navigation,

quantum information, large aircraft manufacturing, and biopharmaceuticals, among others.

According to the national development plan, China's industrial economy is poised to advance towards high-end, intelligent, and green development in the future. The transition from "Made in China" to "Created in China" will accelerate, with technological innovation acting as the core driving force for high-quality development of China's industrial economy. This is the outcome of continuous investment in research and development (R&D) by enterprises.

The intensity of R&D expenditure in China's manufacturing industry, measured by the proportion of R&D expenditure to sales revenue, has

increased from 0.85% in 2012 to 1.54% in 2021. The specialised and innovative "Little Giant Enterprises" have achieved an average R&D intensity of 10.3%. In 2022, 762 Chinese industrial enterprises secured their positions in the list of the top 2500 global R&D spenders, based on the EU Industrial Research and Development Scoreboard 2022.

The development of strategic emerging industry clusters will be a key focus going forward. These industry clusters, including new generation information technology, artificial intelligence, biotechnology, new energy, new materials, high-end equipment, and green environmental protection, will act as new growth engines.



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