

Wer plant of Shanxi International Energy Group in Yuxian county reduces its emissions by using the latest low-nitrogen-oxide burning equipment and denitration technology. DU AIQING / FOR CHINA DAIL Right: A drone flies over a village in Zuoquan county. Drone making is an emerging industry in Shanxi. WEI BO / FOR CHINA DAILY



Cyclists enjoy the waterscape of the Fenhe River. The river is an epitome of Shanxi's better environment. WANG RUIRUI / FOR CHINA DAILY



The water-drop-shaped devices are the latest wind turbine developed by Taiyuan University of Technology, which feature effective resistance to low temperatures and strong winds. PROVIDED BY TAIYUAN UNIVERSITY OF TECHNOLOGY

### By YUAN SHENGGAO

ince the beginning of this year, the North China province of Shanxi has demonstrated strong development momentum, in terms of advancements in economic transformation and industrial upgrades; infrastructure construction; market resilience and opening-up to the outside world.

In recent years, Shanxi has implemented an overall economic transformation initiative that features upgrading traditional industries and fostering emerging sectors as new growth drivers.

The coal mining industry, the traditional pillar sector of Shanxi's economy, is the major target of the province's industrial upgrading.

One example is Huo'erxinhe Coal Industry based in the city of Changzhi. The company has been using the latest digital technologies to upgrade its operations for increasing efficiency and improving safety.

Jin Zaixin is a safety monitoring worker at the company's coal mines. During a recent interview with the local media, Jin said the use of digital technologies has led to "an efficiency

beyond his imagination". Before the interview, he detected a

Province leveraging its unique industry, culture to boost widespread growth and opening-up across all sectors

While Shanxi is devoting much energy to the intelligent upgrades of traditional coal-mining operations, it is also encouraging the development of emerging industries as a crucial part of its economic diversification.

### Cutting-edge tech

The strategic emerging industries in the province now include such tech-intensive sectors as semiconductors, digital technologies, life sciences and high-speed trains.

During the 15th International Invention Fair in the Middle East held from Feb 16-19 in Kuwait, the ultra-high-speed low-vacuum tube magnetic levitation transportation system from Shanxi won the highest prize after the assessment by a panel of experts, showing a worldwide endorsement of cutting-edge technologies from the province.

The system, also known as maglev train or "high-speed flying train", was developed by a Datongbased laboratory jointly founded by Shanxi and China Aerospace Science and Industry Corp.

The lab features the development of the high-speed flying train and a full-size test line as the crucial infrastructure for the train's operations.

The inauguration of the lab and groundbreaking of the test line took place in May 2021. The purpose of the lab is to provide a key test platform for maglev technology. The maglev train, which develop-

ers said can have a travel speed of 1,000 kilometers per hour, is designed to run inside a virtually airfree tube to reduce resistance.

In August, a successful test on the test line was completed in Datong's Yanggao county, marking the project entering the midterm test phase.

In the years to follow, Shanxi's scitech authorities said that the province will continue to strengthen fundamental research in sciences and technologies, aiming to improve its overall innovation capacity.

# High-level opening-up

Through expanding the channels for international trade, such as international cargo flight services and the freight train services destined for Europe, Central Asia and Southeast Asia, Shanxi is pushing its openingup initiative to a higher level.

On Dec 21, a China-Europe train loaded with domestic cars arrived at the Belv Rast Station in Moscow.

"This train, departing from Changzhi city, marked the beginning of the operations of China-Europe freight trains in the southeast of Shanxi,' said an executive of Huayuan Land Port International Intermodal Transport (Shanxi) Co, an operator of the freight train service.

The freight train service allows Shanxi-made products to expand globally at a lower cost directly from their doorstep, significantly enhancing local companies' confidence in pursuing overseas opportunities.

In Shanxi, there are 15 routes dedicated to China-Europe freight train services, reaching 48 major cities in 16 countries.

Taiyuan Wusu International Airport, the leading international airport in Shanxi, is also vigorously

expanding its overseas business. On Oct 21, a cargo plane carrying 11.2 metric tons of locally made products departed from Taiyuan and arrived in Almaty in Kazakhstan. This marked the inauguration of airborne cargo transportation between Shanxi and Central Asian countries.



The products produced at Shanxi High-Tech Huaye Electronic Group are destined for overseas markets. LIANG DONG / FOR CHINA DAI



Auto parts are produced at a company in Yuncheng city YAN XIN / FOR CHINA DAIL)

In 2024, Shanxi's airborne cargo tons.

The comprehensive, multimodal transportation system of Shanxi is effectively helping local enterprises go global

Shanxi is offering a beneficial enviin the areas of trade and investment.

governor Jin Xiangjun required further efforts in deepening opening-up and stabilizing foreign trade and investment.

## Market resilience

Shanxi saw a steady recovery of market demand in 2024. Statistics show that the total retail value of consumer goods reached 818.05 billion yuan (\$112.89 billion) last year, growing 2.5 percent year-on-year.

The growth momentum is expected to be sustained or to accelerate this year thanks to stimulating incentives offered by the government.

One such move is the trade-in subsidy policy announced by the Shanxi Provincial Department of Commerce in early January.

According to the policy, consumers buying certain new products through the trade-in practice can enjoy government subsidies of up to 20 percent of the retail prices.

The practice covers a range of products including mobile phones. laptops, automobiles, electric bikes and household appliances.

Shanxi reported retail sales of 878 million yuan worth of automobiles, 413 million yuan worth of household appliances and 871 million vuan worth of digital products through the



Clockwise from top left: A station of the Taiyuan Subway Line l features a modern design style. LI ZHAOMIN / FOR CHINA DAILY Wind turbines stand by crop farms in the county of Pinglu. HAO JIAN / FOR CHINA DAILY A train transports Shanxi-produced coal to the rest of the country PROVIDED TO CHINA DAILY

When attending the third session of the 14th NPC which concluded on Tuesday in Beijing, Zhang spoke highly of the current coal mining industry transformation featuring intelligent upgrades. "Intelligent coal mining is a revolu-tionary transformation of the indus-

he said. "The fundamental try," changes, especially in safety, efficiency and environmental benefits, can be clearly sensed by our workers and the management as well."

the 14th National People's Congress

and mail throughput reached 2,581

ronment for opening-up, especially During the third session of the 14th Shanxi Provincial People's Congress held in January, the government work report delivered by

problem with a feeder switch

"It took three minutes to identify and solve it," Jin said. He explained that this was because of the use of a wearable augmented reality device.

## Smart coal mines

Over the past two years, driven by innovative technologies and cuttingedge products, Shanxi has seen the emergence of a great number of intelligent coal mines, laying a solid foundation for its move toward energy revolution.

To date, it has 244 intelligent coal mines and 1,594 mining shafts with smart operations.

Statistics show that intelligent coal mines now produce 60.48 percent of Shanxi's total coal output. In a broader sense, coal mines with advanced operations, which include digitalization and automation, contribute to more than 83 percent of the province's coal output.

Zhang Shili, an executive of the Changcun Coal Mine affiliated to Lu'an Chemical Group based in the city of Changzhi, is also a deputy to



trade-in practice by Feb 11

Tourism is another sector featuring strong market demand. Statistics show that the number of tourist visits in Shanxi during the Spring Festival holiday period increased 22.2 percent from the same period last year. And the total revenue generated from the visits grew 30.03 percent year-on-year

Combining tourism with culture proved to be a big draw to tourists.

The city of Xinzhou, for instance, attracted a great number of tourists during the period because of a range of traditional cultural activities that vere held.

Shanxi is also promoting its rural tours. Last year, it promoted 19 rural tour routes, which cover 90 sites, among tourists throughout the country and from the rest of the world.

Local statistics show that the rural tourism sector garnered a total reve-nue of 11.29 billion yuan in 2024, increasing 4.1 percent year-on-year.

Zhang Qi and Li Yao contributed to this story