



A wind farm operated by Jinneng Holding Electricity in the county of Youyu  
TIAN ZHONG / FOR CHINA DAILY

# New energy revolution blows through Shanxi

Once famous for its coal, province has embraced green technology



By YUAN SHENGGAO

Blue Ridge Mountain in the United States, which was featured by John Denver in his famous song *Take Me Home, Country Roads*, is an anthem for self-driving and mountain-climbing tourists not only in the US, but throughout the world.

But the “Blue Ridge Mountain” in Datong, China’s Shanxi province, which is called Lanling in Chinese, has another charm to offer.

For travelers who love to tour technical sites, the charm of Lanling lies in its huge solar farms on the hilltops. The site gets its name from the photovoltaic panels, which have turned the area into a glittering, blue world.

A location that technology enthusiasts cannot afford to miss in Lanling is a solar farm operated by Shanxi-based Jinneng Holding Electricity Group. It features rotating photovoltaic panels that can adjust their surfaces to point toward to the sun and get more light. The rotating panels can generate 20 percent more electricity than fixed panels.

The farm marks Jinneng Holding’s recent effort to shift its focus from coal-fired power plants to energy developments with lower carbon-dioxide emissions.

In 2020, the company launched one gas-fired, seven wind-power



Lu’an Solar Power, a subsidiary of Jinneng Holding Group, is the fourth-largest photovoltaic battery supplier in the world.  
LI WEI / FOR CHINA DAILY

and four solar-power plants in Shanxi. The total generation capacity reaches 546,000 kilowatts, according to company executives.

Jinneng’s increasing number of new-energy power stations is a reflection of the energy revolution campaign in Shanxi. As one of the major coal-producing provinces in China, Shanxi is applying an industrial transformation plan to reduce its reliance on coal and increase the ratio of clean resources.

By 2020, the generation capacity of power plants using new and clean energy resources reached 35.7 million kW, growing 2.36 times from five years ago. This also accounted for 34.38 percent of the entire power generation capacity in Shanxi.

After decades of mining, Shanxi now only ranks third in China in its reserves of coal. However, its reserves of coalbed methane ranks first nationally, which promises new

development potential for coal mines with depleted resources.

Coalbed methane is a form of natural gas found in coal mines. Its thermal value is one to four times higher than coal of the same weight. Almost no exhaust gases are produced after coalbed methane is burned, according to industry insiders.

However, coalbed methane is dangerous inside coal mines. It can explode if the concentration of the gas reaches 5-16 percent.

Safe extraction of the gas can help avoid coal mine accidents by reducing its concentration. The extracted coalbed methane can then be used as a clean fuel for power plants, heating plants and residents’ kitchens, according to industry insiders.

Huajin Coking Coal, based in the city of Lyuliang, is a subsidiary of Shanxi Coking Coal Group, a major coal mining, coking and power-gen-

eration enterprise in the province.

The company has installed 34 power-generation sets using coalbed methane extracted from its mines as fuel, according to Ma Zhiguo, an executive of Huajin.

“The utilization efficiency of coalbed methane is further improved as the residual heat from power plants is used for heat supply,” Ma added.

In 2020, Shanxi Coking Coal Group used a total of 212.62 million cubic meters of coalbed methane for power generation, which was a sharp contrast to the volume of 41.26 million cu m in 2017.

To assist the sharing of experiences and best practices in harnessing and using coalbed methane, the United Nations launched its international center for coal mine methane utilization research in Shanxi Coking Coal Group in 2017.

Apart from the supply side, consumer demand is also witnessing a transformation in the consumption of energy resources. One example is the use of clean, alternative energy resources taking the place of coal as a household fuel for cooking and heating.

Zhang Baozhen, a resident in a village in Taiyuan’s Yingze district, said she will no longer be worried about heating her home this winter.

“We used to use coal for heating in winters. It took a lot of effort to buy coal and transport it home.

“In winter, we have to fire up the stove every day, which gave the room a foul atmosphere. And monoxide poisoning was a serious concern every night,” Zhang said.

She noted that her family now uses electricity to heat rooms. “A technician at the heat supply company told us the system we use is called a heat-storage heating system,” Zhang said. “We only need to turn it on at night and it will keep warm when it’s off in the daytime.”

She said the government offered her family about 2,400 yuan (\$375) as an annual heating subsidy, which almost covers the cost of the entire heating season.

Guo Yanjie contributed to this story

## Apple farming earns city wide recognition

By YUAN SHENGGAO

Yuncheng, a city known as the granary of Shanxi province, kicked off an agriculture show on Oct 15. But this time, the highlight was not on its grains, but on a renowned fruit grown in the city.

Catching the most attention of the Yuncheng International Fruits Fair was the apple of Yuncheng.

According to Ding Xiaoqiang, Party secretary of Yuncheng, apple farming has developed into a pillar industry and a new source of revenue for farmers in recent years.

“The planting area of fruits, with apples as the staple produce, reached 166,000 hectares in recent years, with an average annual output of about 6 million metric tons,” Ding said.

However, what makes the official and his colleagues proud is not the output but the quality of the produce.

The city is known for selenium-rich apples. Selenium is a trace element that’s beneficial to human health. The cultivation of this special breed of apple is made possible by the use of organic fertilizers containing selenium. Selenium-rich apples can sell at prices about 15 percent higher than ordinary varieties, local farmers said.

The latest information technology is also used for improving the

yield and quality of apples.

Wang Shemin, a farmer in Xili village in the county of Linyi, operates a smart apple farm of about 7 hectares.

“With an intelligent operational system, the farm is managed by myself, and doesn’t require me to hire other workers,” Wang said.

The system is linked with various sensors at the farm to monitor the conditions of soil and air. “An analysis of such conditions can guide operations like automatic irrigation and fertilizer spray at the right time,” Wang said.

To help farmers expand their sales, the city began implementing a collective branding campaign for its apples in 2017.

The city has registered the “Yuncheng Apple” brand name for apples produced in Yuncheng.

The collective marketing strategy, involving the use of a unified brand logo and packaging, has improved the recognition of the produce among consumers both nationwide and across the world.

According to Ding, Yuncheng’s apples have been sold to 75 countries and regions. The total export volume is about 300,000 tons a year, accounting for about 80 percent of Shanxi’s total exports of apples.

Li Ningbo contributed to this story.



Overseas buyers give their thumbs-up to Yuncheng’s apples at the international fruits fair. WANG LIPING / FOR CHINA DAILY

## Family leaves spiritual legacy and landmark

By YUAN SHENGGAO

For thousands of years, culture has been used in China to gauge whether a place is suitable for people to live in, especially when they are trying gain prosperity and fortune for their families.

This is especially true in Shanxi province, which is believed by many to be one of the cradles of Chinese culture. Its prosperous culture has been embodied in its great number of ancient structures, monuments and historical remains as well as rich folk arts, traditions and customs, not only in big cities but remote villages too.

One such village is Wenxing in the county of Qinshui in the southeast of Shanxi. Located at the heart of the Taihang Mountains, Wenxing is home to a large residential complex that was built during the Ming (1368-1644) and Qing (1644-1911) dynasties.

The complex is called Liu’s Residence. More than 90 percent of the population in Wenxing belong to the Liu family.

According to the Liu family’s history book, their ancestor was Liu Zongyuan. He was a renowned writer, poet and statesman in the Tang Dynasty (618-907).

The book said he was a political activist during the middle period of Tang, who implemented sweeping reforms of Chinese bureaucracy. But a taxation system reform brought him into conflict with the aristocracy. As a result, Liu Zongyuan was demoted to some remote regions in China. His family members had to move to Wenxing village to escape persecution.



The Liu’s Residence is surrounded by a wall resembling that of the Forbidden City. WANG PEI / FOR CHINA DAILY

## Journalists treated to tour of *baijiu* brand’s farms

By YUAN SHENGGAO

For many old brands in China, their association with traditional cultures and values has helped them shine to this date.

This is also the case with Xinghuaacun Fenjiu Group, a time-honored distillery company based in the city of Fenyang in Shanxi province.

During their tour of the company on Oct 10-11, a group of journalists from the country’s major media outlets found that emphasizing quality in every link of operations is the core value that this renowned *baijiu*, or white liquor, producer has insisted on from the very beginning. It’s the secret behind the company’s long-term prosperity.

Many people believe Xinghuaacun became a household name mainly because of a poem called *Qingming*, written by Tang Dynasty (618-907) poet Du Mu. In the poem, Du described his mood during his trip on Qingming, or Tomb Sweeping Day, in April. In Chinese, Xinghuaacun literally means apricot flower village.

It is unknown whether the Xinghuaacun brand had any realistic connection with the poem, as the company was established in 1949 after the merger of several local old distillery brands.

However, the journalists learned



Journalists visit a Xinghuaacun Fenjiu grain farm in Qinxian county, Shanxi province. LIU TONG / FOR CHINA DAILY

much about the company from their tour, which they said was a trip to help them understand how traditional values are still upheld by the group and to make them believe Xinghuaacun Fenjiu is a “living fossil witnessing the development of China’s *baijiu* industry”.

The moment they arrived at the company, the journalists were told their schedule began by visiting “the first link of its production and quality chain”.

When they were guessing what that “first link” was, the journalists

were led to an expansive sorghum farm.

Li Qiuxi, board chairman of the group, said: “Unlike many producers who view buying raw materials as the first link of production, our operations begin from sorghum farming.”

He explained operating farms was a common practice among many prestigious *baijiu* producers in the old times, which allowed them to control product quality from the very beginning.

Aiming for a revival of the old *baijiu* brand, Xinghuaacun Fenjiu began

including its grain farming base development in its strategic growth plan in 2009, according to Li.

The board chairman added that the company currently operates more than 70,000 hectares of grain farms in Shanxi and the Inner Mongolia autonomous region, as well as in Jilin and Hebei provinces.

Operating its own farms can also help the company cultivate and grow the best breeds suitable for making *baijiu*, according to Chang Jianwei, deputy general manager of Xinghuaacun Fenjiu.

Li said the company has a very complicated procedure for quality control, from grain planting to distilling.

“From growing grain, our production has to go through 36 monitoring points and 183 checks. It also has to meet 2,182 standards,” Li said.

When talking about the origin of Xinghuaacun Fenjiu and its local predecessors, the board chairman showed journalists the Fenjiu Museum, where items of archaeological discoveries were on display.

Archaeologists found an ancient alcoholic beverage production site in the location of the company. Unearthed production utensils revealed that the site has a history of about 6,000 years of production.

Wang Pei contributed to this story.