

Low carbon forum host to keynote speakers



China Shanxi

Diplomats, experts and officials among those delivering speeches in Taiyuan

By YUAN SHENGGAO

Taiyuan, the capital city of Shanxi province, has again attracted the attention of the global energy industry by hosting a high-profile forum.

The 2022 Taiyuan Energy Low Carbon Development Forum ran on Sept 1-3, with meetings and exhibitions featuring energy revolution, low-carbon development and environmental protection.

The forum was an important international event in China's energy industry. And China's goal for peak carbon by 2030 and carbon neutrality in 2060 again took center stage at this year's event.

Taiyuan has hosted six sessions of the forum, which has evolved into a high-profile and authoritative global platform for dialogue, communication and collaboration in the energy industry and other fields related to sustainable development, according to the event's organizers.

They said the host province of Shanxi has used the forum as a showcase to display the achievements in its energy revolution campaign. It focuses on upgrading its coal-mining industry for efficient and clean production and fostering clean-energy industries for a greener and low-carbon path of development.



The 2022 Taiyuan Energy Low Carbon Development Forum is held in Taiyuan from Sept 1-3. LIU TONG / FOR CHINA DAILY

A summit forum held on the opening day was the highlight of the event. It gathered 16 honored guests, including foreign diplomats, international experts and Chinese officials, to give keynote speeches.

At the summit forum, Israeli Ambassador to China Irit Ben-Abba introduced the contributions her home country has made to dealing with global climate change issues.

The ambassador said Israel is willing to cooperate further with China and Shanxi province in many areas relating to sustainable development and collaborate in related fields.

This year marks the 30th anniversary of the establishment of diplo-

matic ties between China and Israel. It is also the fifth year of a comprehensive partnership between the two countries.

Xie Zhenhua, China's special envoy for climate change, called on nations to maintain a strategic focus on promoting the green transition. He reiterated China's climate commitment and noted the significant progress in honoring it.

He said China is making great efforts to realize the carbon-neutrality goals in three fields.

"The first is promoting a low-carbon transformation through the use of green energy resource; the second is accelerating the application of low-

carbon technologies; and the third is fostering and strengthening low-carbon industries for high-quality development," Xie said.

Shanxi's entrepreneurs and officials used the event as a platform to showcase the latest achievements made in the province's industrial transformation, energy revolution and low-carbon development.

At the new energy technology sub-forum, Tao Jiajin, general manager of Taiyuan Heavy Machinery Group, said his company is devoting a great deal of effort to developing and producing equipment that meets the increasing demands for new energy production in Shanxi.

"As one of the leading producers of wind-power equipment in Shanxi, we hope to cooperate with partners from home and abroad," Tao said.

There was a special subforum dedicated to the emerging and promising coal bed methane industry.

Shanxi is one of the provinces in China with rich coal bed methane resources and is a pioneer for the safe use of the gas.

Coal bed methane is a form of natural gas. Its thermal value is one to four times higher than coal of the same weight. Almost no exhaust gases are produced after coal bed methane combustion, according to attendees to the subforum.

They said safe extraction of the gas can help to avoid coal-mine accidents by reducing its concentration. The extracted coal bed methane can then be used as a clean energy resource.

After successful trials in the exploration of coal bed methane, the Shanxi city of Jincheng plans to develop itself into a national demonstration base for the industry. Xue Mingyao, mayor of Jincheng, said at the forum.

"We are developing a coal bed methane industrial chain ranging from exploration, processing, storage, transportation and utilization to equipment production and technical services," Xue said. "The entire chain is expected to usher in an industrial cluster with annual output worth of 100 billion yuan (\$14.49 billion)."

As in previous sessions, an industrial show was a highlight of this year's event. More than 160 leading companies, including those listed among the Fortune Global 500 and China's top 500 businesses, displayed their products, technologies and services.

At the show, one of the most eye-catching exhibits was carbide, or artificial diamond, made from coal bed methane. The product was developed by Huayang Group based in the eastern Shanxi city of Yangquan.

"We are the first in Shanxi that synthesized carbide from coal bed methane," said Chen Yuanyuan, a sales manager of the company.

Huayang's exhibits also included a sodium-ion battery, high-performance carbon fiber and other new materials and new technologies.

The exhibition was accessible online with livestreaming platforms, allowing more audiences to view the products and identify partners.

Zhang Yi contributed to this story.



Experts share their insights into the future of the hydrogen industry at the forum. RUAN YANG / FOR CHINA DAILY

Delegates discuss opportunities of Shanxi's fledgling hydrogen industry

By YUAN SHENGGAO

Shanxi's tentative but successful development in the hydrogen industry offers a new option for energy industry transformation, participants said at a forum earlier this month in Taiyuan.

As part of the 2022 Taiyuan Energy Low Carbon Development Forum, experts from home and abroad, industry insiders and local officials discussed the future of hydrogen as a new energy resource at a hydrogen economy development sub-forum on Sept 3.

Lin Zhongqin, president of

Shanghai Jiaotong University and an academican of the Chinese Academy of Engineering, said hydrogen can play an important role in helping China achieve peak carbon and carbon neutrality.

He noted that some automakers in China have rolled out hydrogen-fueled vehicles after technological breakthroughs were made in hydrogen fuel cells and cheaper methods found to produce hydrogen.

"This new automotive sector will drive demand for hydrogen and foster a new industrial chain," Lin said.

Shanxi is one of the nation's pioneers in fostering a hydrogen indus-

trial chain, said Wu Hongwen, head of the Shanxi Department of Industry and Information Technologies.

He noted that Shanxi now sees the hydrogen industry as a strategic sector for its energy revolution move. An industrial chain, with dozens of enterprises upstream and downstream, has taken shape as a result.

Wu said Shanxi has its unique advantages in developing the hydrogen industry. Hydrogen can be made through water electrolysis or extracting from coking gas. The latter is popular in Shanxi because of its rich resources and viable technologies.

Shanxi is now the largest coke

producer in China and the world, with an annual production of 100 million metric tons. Coking gas, with a hydrogen content of more than 60 percent, can be used to develop the largest hydrogen production industry in the world, according to Wu.

He estimated that Shanxi's coking plants can produce 14 billion cubic meters of hydrogen a year. If other coke-consuming enterprises are included, the volume could reach 24 billion cu m.

Pengfei Group, based in the city of Lyuliang, is one of the leading hydrogen, hydrogen vehicle and component producers in Shanxi.

Its chairman and president Zheng Peng told the forum that the company had released its 250-kilowatt hydrogen fuel cell system for heavy trucks on Sept 2 — just one day before he spoke.

"This is a world-first in its specification," Zheng said. "This power output can effectively extend the truck's travel distance."

Pengfei broke ground for a plant to produce hydrogen vehicles and components in Lyuliang on July 21. This is regarded by industry insiders as a milestone event in Shanxi. It is the first purely hydrogen-fueled vehicle production facility to be funded by an indigenous automaker.

Pengfei has established Pengwan Hydrogen Port, a development zone for the hydrogen industry, in Lyuliang. One of the zone's major projects, a hydrogen production facility with an annual output of 20,000 tons, opened in July.

Jin Shuaini contributed to this story.

Projects boost province's sustainable development

By YUAN SHENGGAO

Shanxi secured 71 projects, with combined investment totaling 88.53 billion yuan (\$12.83 billion), at the 2022 Taiyuan Energy Low Carbon Development Forum held from Sept 1-3 in the provincial capital of Taiyuan.

The deals were inked at an agreement-signing ceremony on Sept 2. Of these projects, the event's organizers said, there are 14 large ones each with funding between 1 billion yuan and 5 billion yuan and five super-sized ones each with investment of more than 5 billion yuan.

The projects are centered around the energy industry, ranging from smart energy exploration, new energy resources, energy equipment and environmental protection to the efficient utilization of resources.

Local officials said these projects will inject new vigor into Shanxi's low-carbon development.

Gao Ruyun, chairman of Luneng Hequ Power Generation based in the Shanxi county of Hequ, was present at the ceremony for a project which is to be launched in Wuzhai, another county in Shanxi province.

Luneng Hequ's offering will be a pumped storage hydropower station in Wuzhai.

A pumped storage hydropower station is a special type of energy storage facility. It is a system functioning like a giant battery as it can store power and then release it when needed.

"The aim of the project is the efficient use of energy in Wuzhai, and it has won strong support from the local government," Gao said.

Beijing-based Zhongjin Meicheng Ecological Science forged

a partnership with Huoer Xinxhe Coal Industry based in the Shanxi city of Changzhi. The former agreed to develop a project for Huoer Xinxhe into researching refilling depleted mining shafts and enhancing shafts at work.

One of Zhongjin Meicheng's solutions is to use coal refuse to refill shafts.

Jiang He, chairman of Zhongjin Meicheng, said the solution has multiple benefits in both economic and environmental terms.

He said it can effectively solve the problem of solid waste discharge and avoid the risks of geological disasters, while cutting related costs for waste disposal and shaft refilling.

In addition to those who signed agreements on the site, an even greater number of business representatives attending the summit had shown their intention to cooperate in the future.

Li Shufu, chairman of renowned domestic automaker Geely, is one of them.

Geely now operates a new energy vehicle production facility in the city of Jinzhong.

The facility just announced the market launch of its first methanol-fueled heavy truck and fourth-generation methanol fuel-cell hybrid car on June 22.

"Geely is one of the world's automakers owning mature technologies for methanol vehicles and Shanxi is one of the leading methanol-production provinces in China," Li said at the event. "I'm optimistic about the future of the industry in Shanxi and I'm sure we will take our collaborations to new heights and more extensive fields."

Meng Ting contributed to this story.

Foreign observers praise renewable energy work

By YUAN SHENGGAO

China has taken great efforts and made remarkable achievements in promoting low-carbon development and addressing climate change issues, foreign diplomats and experts said at the 2022 Taiyuan Energy Low Carbon Development Forum held from Sept 1-3.

Francois Lemal, a counselor at the French embassy in China, said this is the first time that France attended the forum, and he realized that this is a globally influential platform for dialogue, international collaboration and a showcase of the latest technologies and products.

"France and China have been engaged in collaboration in the fields of environmental protection and global climate change for a long peri-

od of time," Lemal said. "We have recognized that a transformation in the energy industry, including changes in production and consumption, is crucial to addressing the current challenges."

The diplomat said he noticed that Shanxi is one of the Chinese pioneers in the industrial transformation. "We are willing to cooperate with China and Shanxi in fields relating to the transformation," Lemal said.

Israel was the guest country of honor at this year's forum.

Mor Riklin Thein, a counselor at the Israeli embassy in China, said the forum has become an important platform for Israel's cooperation with China and Shanxi.

During the forum, a matchmaking event was held to facilitate coopera-

tion between Israel and China. They said the two sides will further their cooperation in the energy and environmental fields in the future and her embassy will arrange more industrialists and specialists to attend the forum in the years to come.

Francesco La Camera, director-general of the International Renewable Energy Agency, said there is a pressing need to transform the current energy industry considering this year's volatile fossil energy market caused by international crises like the Russia-Ukraine conflict.

Compared with the rising prices of fossil fuels, Camera said "renewables are by far the cheapest form of power today."

He noted that China has made great achievements in developing clean, renewable energy resources.

Camera said the country has made technological breakthroughs in the new energy industry and has a predictable policy environment for the industry's sustained development.

Many participants praised Shanxi's remarkable role in promot-

ing the energy industry transformation and sustainable development.

Wang Jiazhong is the chairman of Shanxi Association of Entrepreneurs Returning from Overseas. A partner of a German-funded architecture company in Shanxi, Wang has been living in Shanxi for 10 years.

"Over the past decade, I have stood witness to Shanxi's transformation of the energy industry," Wang said. "We have seen the rapid growth of many renewable sectors, including wind power, solar power and hydrogen."

Over recent years, Shanxi has implemented a transformation campaign that features upgrading the coal industry toward the directions of high efficiency and clean production and stepping up the development of clean energy resources.

Local statistics show that the capacity of power generation plants based on clean and renewable energy resources now accounts for 34.3 percent of Shanxi's total.

Chen Junqi contributed to this story.



Business representatives attend an agreement-signing ceremony for investment projects on Sept 2. RUAN YANG / FOR CHINA DAILY