



Workers install solar panels at a new 4 million kilowatt energy base in Ordos, Inner Mongolia, China.

AS A FAST-GROWING ECONOMY AND THE world's second-largest by GDP, China's energy transition was always viewed as a critical component of the global push away from coal and fossil fuels. Over the past decade, the country's efforts have yielded significant achievements. It now leads the world in solar panel production and wind energy and has made important strides in distributed energy implementation. In February, Chinese stock exchanges announced the government was instituting regulations requiring publicly traded companies to publish sustainability reports by 2026, in part to counter the emerging trends of greenwashing.

Brunswick recently spoke to two leading experts in China's energy transition, Huang Shaozhong and Feng Liwen, about the nation's progress and expectations for corporate leadership. Huang is a research fellow of China Energy Research Society (CERS) and

CHINA'S "Pragmatic" Energy Transition

Chair of Carbon Neutrality Industry Cooperation Division under CERS. Previously, he was a senior expert for World Bank programs, and was Director-General of the Northwest Regulatory Bureau of National Energy Administration in China. Feng is Vice Chair of the Carbon Neutrality Industry Cooperation Division of CERS. She is founder and chair of China Energy Net, China's most influential non-state think-tank for the energy industry.

The following is translated from an interview by Brunswick's QC Liang and June Deng.

Two experts on the country's Green energy program talk to Brunswick about the climate roadmap of the world's second-largest economy.

Congratulations on your fruitful experience at COP28. Xie Zhenhua, China's then-Special Envoy for Climate Change, stressed at that summit how important it is that each country explore its own optimal transition path and that China's path will be different from that of more developed countries. What does that path look like?

FENG LIWEN: Mr. Xie gained lots of respect internationally with his vision, and decade-long service as China's Special Envoy for Climate Change. While China has set a clear goal of achieving peak carbon before 2030 and carbon neutrality before 2060, we have to be pragmatic in defining our roadmap and the pace of our transition.

Every country is at a different stage of development. China operates with strong macro-policy planning cycles, and local governments and communities have mapped out their transition strategies to address their own challenges at the local level.

HUANG SHAOZHONG: Healthy policy incentives are essential in bringing down industry bottlenecks. The cost of solar energy has now come down to below the cost of coal-based power—that's a fundamental change. We have seen other very encouraging progress: China's installed capacity for wind and solar energy exceeded that of coal for the first time at the end of last year.

China's macro-policy regulator, the National Development and Reform Commission (NDRC), is rolling out new plans to promote solar energy from towns and cities to rural areas. We hope by 2030, solar panels will be installed on 50% of all household rooftops. By then, the way power is generated, transmitted and traded will be drastically different.

How can companies set their own goals and paths for energy transition to achieve the country's carbon reduction goal?

FL: This question should be approached from the standpoint of production. The evolution in production driven by new energy represents a fundamental transformation of the traditional dependence on energy sources.

High-efficiency solar cell production technology and the manufacturing of large-scale energy storage devices are two good examples. They have significantly reduced the production costs and increased the efficiency of new energy, thereby promoting its widespread application. Data, as an important new factor of production in the new energy field, enhances energy production and utilization efficiency through intelligent management



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and optimization operations. The development of smart grids exemplifies the integration of data technology with new energy production.

The focus provided by the transition has led to new products and application scenarios, such as the widespread adoption of electric vehicles. These new products are not only changing people's lifestyles, but also offer more choices and possibilities for energy consumption.

So that is the broad view: Energy transition should be driven by a combination of technological revolution and market transformation. It not only improves the efficiency and sustainability of energy production, but also promotes the transformation of social relations for production facilities, providing a powerful impetus for achieving green development goals.

Your organization has been aggressively engaged in promoting the best practices of carbon reduction. What examples do you have at the corporate level?

HS: Our work focuses on energy transition, and within this area, several examples stand out. Chinese energy companies have been making significant investments to boost the supply of renewable energy, vigorously reducing the percentage of coal-fired power, and the contributions of multinational companies are notably recognized.

The Chinese state-owned enterprises State Power Investment Corporation (SPIC), Huaneng Group and CHN Energy have dominated the top three positions on the global solar-asset ownership ranking. Also, SPIC recently announced a \$5.85 billion investment plan in northeast China to produce fuel from hydrogen that is generated from wind power.

FL: Among the multinationals, Budweiser APAC has emerged as an industry leader in its sustainability efforts to achieve RE100 (100% renewable electricity) across its operations in China. They have made impressive strides in reducing carbon emissions and transforming three of its local breweries to carbon neutral to date.

BASF is another noteworthy example. Its 25-year green energy purchase agreement, signed last year, marked a significant milestone in China's renewable energy landscape. Despite the higher costs associated with green energy, the decision to transition reflects a long-term dedication to making a positive impact on the country and the planet.

These companies' substantial efforts have positioned them as thought leaders in the energy

transition and they have been actively communicating their best practices in public forums.

What is China's vision for distributed energy, and what are the opportunities for companies?

HS: Distributed energy and a centralized power grid are both key pillars of China's energy strategy. Usage scenarios, and the tools and the relationships that exist between those two pillars, should determine the solutions and the opportunities for companies. In China, several localized carbon-neutrality zones are leveraging distributed energy.

The most advanced project now is the Ordos Net-Zero Industrial Park in Inner Mongolia. The park is combining large solar energy arrays with desert ecological protection. It's the largest such project in China and now hosts the largest battery factory in the region. It is also home to the largest green hydrogen production base in China.

In many of these projects, China is keen to learn from global best practices. For example, there has been strong interest in combining wind power and aquaculture, which is a strategy that is fairly common in Europe.

China reopened the trading market for voluntary greenhouse gas emission reduction. How do you view the significance of this initiative, and how



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can multinationals take advantage of this development and actively participate in carbon emission reduction trading?

HS: That's true. Recently the Chinese government published rules for certifying the first batch of greenhouse gas voluntary emission reduction projects, and also designated nine accreditation institutions covering the electric power and forestry sectors.

For the time being, China Certified Emission Reduction focuses on four types of projects: forest carbon sinks, grid-connected solar thermal power, grid-connected offshore wind power and mangrove revegetation. Project types will be expanded in the future by specifying project methodologies. In the future, as the carbon market matures, more sectors, and even individuals, will be able to participate.

FL: It's important to emphasize, though, that carbon credits are not commodities. But green power is readily tradeable. No matter where they operate, companies should focus on building green power to achieve their carbon neutrality goals more quickly. ♦

QC LIANG is a veteran communications specialist based in Brunswick's Beijing office. He was head of global branding for TCL and Secretary General of TCL Charity Foundation. **JUNE DENG** is an Associate in Beijing, advising clients on public and regulatory affairs. She was previously with the research arm of Caixin, a top-tier media outlet in China.

A farmer walks through a rural village in the shadow of a wind farm in this photo from 2009. China became the world's largest wind energy provider in 2010.



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