

China, CELAC Jointly Embrace High Tech

Voice of the World

Edited by TANG Zhexiao

Ten years ago, China proposed "building a community of shared destiny for common progress" during the China-Latin American and Caribbean (LAC) Countries Leaders' Meeting in Brazil's capital Brasilia.

Over the decade, the world has been experiencing a new wave of technological and industrial revolution. Thanks to their joint efforts, the China-LAC relationship has ushered in a new era characterized by equality, mutual benefit, innovation, openness and more benefits for the people.

New models such as the "Digital Silk Road" and the "Green Silk Road" have propelled China-Latin America cooperation on an innovative and intelligent track.

Developing high-tech together
High-tech fields such as AI, new energy, aerospace, and cross-border e-commerce have gradually become the new highlights of China-Latin America cooperation, with new infrastructure investment such as in 5G and cloud technology.

Aerospace cooperation is a key cooperation area in the 21st century. To implement the *China- CELAC (Community of Latin American and Caribbean States) Joint Action Plan for Cooperation in Key Areas (2022- 2024)*, China has assisted Venezuela, Bolivia, Brazil and other countries from the region to send communication satellites, remote sensing satellites, and resource satellites into the space.

At the first China- Latin American and Caribbean States Space Cooperation Forum in Wuhan, central China's Hubei province, in April, a declaration was made to enhance their already existing long-term, comprehensive and pragmatic space cooperation.

In cooperation with China, Chile



The Marangatu Photovoltaic Power Plant in Brazil, invested in and led by China's State Power Investment Corporation, was put into operation on June 7. This solar power project has an installed capacity of 446 kW and can supply electricity to nearly 550,000 households annually. (PHOTO: XINHUA)

has set up its first high-voltage direct current transmission line. Uruguay's 500 kV power transmission and transformation ring network closure project is under construction. Brazil's Marangatu Photovoltaic Power Station has gone live. Cuba's 12 MW solar photovoltaic power station equipment project is nearing completion.

Building green together
According to the *Foreign Policy* magazine, Benjamin Gedan, director of the Wilson Center's Latin American Program, said China is "the principal player in this region in this very dynamic green energy sector."

Latin America is rich in green resources and has great potential and strong motivation to develop green energy. Zhou Mi, deputy director of the Institute of American and Oceania Studies of the Chinese Academy of International Trade and Economic Cooperation under the Ministry of Commerce, said there is broad space for the development of China-Latin America green energy cooperation.

In cooperation with Chinese companies, Latin America can improve its capacity to process resources and energy as well as the value added of products and gain stronger export competitiveness, which will help its economic development, Zhou said, adding that the investment and infrastructure cooperation carried out by Chinese companies in Latin America can help local green transformation.

Benefiting together
In its cooperation with Latin American countries, China considers their self-development needs instead of simply trade and investment or mere one-off sales of resources and energy.

Hector Villagran Cepeda, former minister of transport and public works of Ecuador, spoke highly of China's new energy vehicle sector for its cost-effectiveness, industrial transformation and contribution to carbon reduction in the region.

Latin America adopted Chinese methods of low-energy consumption many years ago, and that transformation

has benefited transportation of passengers and cargo with low unit costs and low pollution, Cepeda said.

In Cuba, power generation is currently heavily reliant on fossil fuels. In 2022, fossil fuels accounted for about 95 percent of electricity generation, and about half of the fossil fuel used was imported, putting the country at high risk of price shocks and supply shortages.

On July 16, Cuban newspaper *Granma* reported that three photovoltaic parks donated by China had been inaugurated and connected to the National Electric System, providing 12 MW.

"With China's collaboration, the installation of photovoltaic parks in several provinces contributes to the government program to change the energy matrix in Cuba," Cuba's state news agency Prensa Latina reported.

Rosel Guerra, director of renewable energy at Cuba's Ministry of Energy and Mines, said the country currently has 75 solar parks that provide 254 megawatts and save 110,000 tons of fuel a year.

Comment

'Blue Screen' Raises Alarm About IT Loophole

By HU Dingkun & LIN Yuchen

On July 19, Microsoft's Windows operating system experienced a global outage that left millions of users facing the infamous "blue screen of death" — a systems crash. This caused widespread disruption, including in aviation, railways, healthcare, and finance. The cause of this debacle was an error in a software update by CrowdStrike, a renowned American cybersecurity company.

Technically, this was an entirely preventable incident. CrowdStrike failed to conduct thorough internal testing before releasing the update that was intended to enhance cybersecurity for its customers. Ironically, the outcome was akin to a large-scale cyberattack on those very customers.

British cybersecurity expert Junaid Ali said the fallout of this failure exceeded that of the 2017 WannaCry ransomware attack, which was previously the most severe incident of its kind. SpaceX and Tesla founder Elon Musk labeled it the largest IT failure in history.

This event underscores the fragility of the global IT infrastructure, which is overly reliant on leading tech giants like Microsoft and CrowdStrike. Microsoft's Windows commands approximately 72 percent of the global operating system market, while CrowdStrike holds nearly 24 percent of the endpoint security market.

This heavy dependence on a few dominant companies is a fundamental reason why a minor flaw in CrowdStrike's software could trigger a worldwide system crash. If these leading companies ever fall prey to forces

seeking to disrupt global or national IT systems, the consequences could be catastrophic.

There should be a more effective and transparent mechanism of sharing information between major IT service providers. The actions the blue screen incident triggered, including lawsuits, would not have happened had all IT service providers chosen to work closely.

In the light of this case, companies like Microsoft should take more responsibility for ensuring reliability of their services. More attention should be given to daily scrutiny to avert possible errors in their services as well as setting up preventive measures for technical incidents in collaboration with their business partners.

In recent years, China has achieved high-level technological self-reliance and self-improvement, making significant breakthroughs in critical IT fields. This can be seen as a response to the international community's persistent high reliance on a few monopolies like Microsoft.

The Microsoft blue screen incident also highlights the intertwined nature of global IT systems and the necessity for countries to achieve technological independence. While major tech companies must improve their operational standards and reliability, nations must also invest in developing and adopting their own technologies to safeguard against similar disruptions.

Collaborative efforts to enhance global cybersecurity governance are essential, but self-reliance in core technologies remains crucial for national security and stability.

Hi! Tech

Building a Floor in 5 Days

By Staff Reporters

A residential building in Qingdao, Shandong province in east China, presents an unusual sight. It is covered with a huge blue "box."

The box is the Tianchan system and the secret behind the building's rapid rise.

The Tianchan system is an advanced and integrated construction system that incorporates various automated robots.

The robots operate along tracks on top while human construction workers labor below. This collaboration in all construction processes has streamlined the work and made it safer and faster. It can also be used for maintenance once the construction is over.

For safety in high-altitude opera-

tions, the Tianchan system uses a suspension frame and enclosure system. In severe weather, the foldable canopy on the top of the system can be unfolded, covering the entire work area and sheltering workers.

Additionally, the system is modular and has a standardized component design, which makes it easy to install and disassemble for reuse, saving resources.

According to Huang Yunchang, technical director of the project contractor, the Tianchan system covers the entire construction area and has an automatic climbing formwork.

Compared with traditional construction methods, it can reduce labor by more than 50 percent, shorten the construction period by approximately 30 percent, and achieve a construction speed of up to one floor in five days.



The Tianchan system has been put into use in Qingdao, Shandong province, east China. (PHOTO: XINHUA)

Opinion

By LIN Yuchen

Rather than merely seeing China as a competitor, the U.S. could adopt some of China's effective strategies to enhance its own development. This was emphasized by columnists Azhar Azam and Stephen M. Walt in their articles published in *The Express Tribune* and *Foreign Policy* respectively. They discussed how the U.S. could benefit from learning from China's development strategies.

According to their views, one of the most glaring differences between the two nations is their approach to infrastructure. Former U.S. President Barack Obama once voiced out his disappointment that American infrastructure

was lagging behind with engineers evaluating it poorly, while China was building faster trains and newer airports.

According to *The Express Tribune*, China's investment in infrastructure, as a percentage of its GDP, is 10 times that of the U.S. This disparity is evident in the fact that China has constructed 45,000 km of high-speed rail, whereas the U.S. has only just over 600 km of track capable of supporting trains traveling over 160 kph.

China has also excelled in the fields of high-tech innovation and green energy, areas where the U.S. has been slower to invest. The *Industrial Development Report 2024* released by the United Nations Industrial Development Organization praises China's significant growth in clean energy investments and its leadership in green industrialization.

The *World Energy Investment Report*,

released by the International Energy Agency, also points out that China continues to be the world's largest clean energy investor. China's commitment to developing renewable energy technologies not only addresses climate change, but also positions the country as a leader in global energy transition.

The Express Tribune says that the U.S. could learn from China's strategic shift towards sustainable and innovative growth models. While Washington has imposed tariffs on Chinese electric vehicles, solar products, and semiconductors in an attempt to slow China's progress, these actions also hinder global advancements in green technology.

Both authors argue that to truly learn from China, the U.S. must shift its perspective from viewing China solely as a threat, to seeing it as a

source of valuable lessons. This involves moving beyond ideological biases and exaggerated threat perceptions, which have historically led the U.S. into costly blunders. Emphasizing trade and technological cooperation and prioritizing the well-being of its citizens over maintaining global dominance through military means could pave the way for a more sustainable and prosperous future.

In general, China's emphasis on high-quality growth, its capacity for mass production of green technologies, its strategy for lasting peace and shared prosperity, and its willingness to share development benefits with other countries are all examples the U.S. could follow.

By reassessing its priorities and adopting a more balanced approach, the U.S. can enhance its competitiveness and contribute to global stability.

'Financial Innovation' Where Technology, Finance Converge

From page 2

To support researchers from developing countries and support sustainable development goals, *Financial Innovation* covers all publication fees for all articles.

Secondly, combining academic traditions, theoretical depth, and policy responses with problem-oriented research to provide profound academic solutions to real concerns.

Over the past three years, the editorial office has invited editorial board members and authors based on academic

achievements to participate in writing policy proposals on various topics, such as financial risk prevention and control, credit system construction, and carbon finance. These proposals have been selectively adopted by governments at various levels in China. Papers published in *Financial Innovation* with topics such as online lending willingness, blockchain and online fraud detection, and the regulation of cryptocurrency markets have been cited in public policy documents abroad.

Thirdly, the journal aims to make

cutting-edge research on financial innovation more accessible to promote scientific popularization to disseminate scientific knowledge to young people.

For children aged 8 to 15, the journal developed a popular science education course on fintech covering the developmental history of big data and its application, AI, blockchain, cloud computing, the Internet of Things, and the metaverse. This initiative aims to promote scientific thinking and increase young people's interest in learning.

Financial Innovation hopes to serve as a platform for global wisdom, producing high-quality academic outcomes. With continuous achievement as its driving force rather than temporary recognition, *Financial Innovation* will strive to serve its original purpose, adapt to current issues, and advance toward a brighter future.

The author is managing editor of *Financial Innovation*, and dean of the Big Data Research Institute at Southwestern University of Finance and Economics.