

INSIGHTS

China's Space Program Thriving

Voice of the World

Edited by GONG Qian

China launched the Shenzhou-16 mission to its Tiangong space station on May 30, marking "another step forward" for the country's space program, said CNN. The day before this launch, it revealed that China will send astronauts to the moon before 2030 and carry out lunar scientific exploration and related technological experiments. The country's latest efforts to explore space have garnered much global attention.

The Shenzhou-16 launch is a tribute to China's surging space prowess, said Quentin Parker, an astrophysicist based at the University of Hong Kong and director of its Laboratory for Space Research, in a letter to *South China Morning Post*. Notably, the Shenzhou-16 crew includes China's first non-professional astronaut, Gui Haichao, professor at China's prestigious aeronautics institution Beihang University. "This is a clear signal from China to the rest of the world about its plans for peaceful and civilian exploration, and scientific and in-



The Long March-7 Y6 rocket, carrying Tianzhou-5, blasted off from the Wenchang Spacecraft Launch Site in Hainan province, November 12, 2022. (PHOTO: VCG)

dustrial exploitation, of space," said Parker.

Missions like this one will become more commonplace in the future. The reason is that China's space station is a huge laboratory for undertaking scientific research. It is capable of hosting a wide array of scientific and technological experiments from around the world, using sophisticated equipment that is often complex and delicate,

Parker added.

The Shenzhou-16 crew met three colleagues from the previous manned Shenzhou-15 flight, who had been at the space station for six months and returned to Earth on June 4. One expert told AFP that Shenzhou-16's flight represented "a regular crew rotation flight as one crew hands over to another," but even that was significant. "Accumulating depth of experience in human space-

flight operations is important," Jonathan McDowell, an astronomer and astrophysicist at the Harvard-Smithsonian Center for Astrophysics, told AFP.

China has a thriving space sector that includes human flights to its new space station, planetary, lunar and deep-space exploration, a satellite navigation system and the continued development of its space transport system, according to the *National*, a publication serving the United Arab Emirates community.

Bloomberg also reported that China has notched up an impressive series of achievements in recent years, becoming the first nation to land a craft on the far side of the moon in 2019 and landing a rover on Mars in 2021. It's also the only country operating its own space station.

When Canadian astronaut Chris Hadfield tweeted a story on China's plans to land astronauts on the moon before 2030, Tesla CEO and Twitter owner Elon Musk replied, "The China space programme is far more advanced than most people realize."

"The Chinese program has proceeded in a steady and cautious manner, reflecting the country's vast increase in economic power and global influence since the 1980s," said AP.

A Bangladeshi Girl Named After 'China'

Edited by Staff Reporters

On the eve of International Children's Day, a 12-year-old Bangladeshi girl received a reply letter from Chinese President Xi Jinping who encouraged her to study hard, pursue her dream and carry forward the traditional friendship between China and Bangladesh.

When the girl was born in 2010, her mother suffered a difficult delivery due to a severe heart problem.

The Chinese naval hospital ship Peace Ark, which had just sailed to Bangladesh to provide free medical services to locals at that time, immediately sent doctors to the local hospital to perform a cesarean section on her mother after learning of the emergency.

With the timely help from the military doctors, the mother and daughter were safe. To show his gratitude, Hossein, the father named his baby Chin, which means China in Bengali.

It is a very touching story of friendship between China and Bangladesh. The two countries have been close neighbors and good friends, whose friendly exchanges date back over a thousand years.

More than 600 years ago, Zheng He, a Chinese navigator of the Ming Dynasty, sailed twice to Bangladesh, sowing the seeds of friendship between the two peoples.

Over 600 years later, China's navy hospital ship continued writing a new chapter of the story between China and Bangladesh.

The Peace Ark hospital ship, which aims to provide free much-needed medical care to the people from around the world, is China's first standard ocean-going hospital ship and the world's first 10,000-ton-level professional hospital ship.

The ship has multiple operating rooms, nursing stations and exam rooms, and more than 100 medical staff working in dozens of clinical and auxiliary departments, bringing medical support to those in dire need. In addition, it undertakes the task of dispatching anti-pandemic materials and vaccines to people in need, and aiding countries battered by natural disasters.

When the Peace Ark arrived in Bangladesh for the second time in 2013, China's military doctors conducted a comprehensive check-up on Chin.

In 2017, Sheng Ruifang, the anesthesiologist who participated in the surgery for Chin's mother, met Chin during a visit to Bangladesh with a Chinese naval mission. Since then Chin has called Sheng her "Chinese mother".

"It was the Chinese mother who helped me come into this world back then. Today, uncles and aunts from China are still showing long-term concern for my growth," said Chin. "Many thanks to all of them."

Chin has expressed her aspirations of studying in China in the future. She wants to be a China-Bangladesh friendship messenger when she grows up, and wishes to study at a medical school in China in the future so that she can save lives just like her "Chinese mother."



Bangladeshi girl Alifa Chin. (PHOTO: XINHUA)

IPEF: Unclear Intention, Shallow Outcomes

Opinion

Edited by QI Liming

On 27 May, trade ministers of 14 countries in the U.S.-led Indo-Pacific Economic Framework (IPEF) talks "substantially completed" a deal to make supply chains more resilient and secure, especially semiconductor supply chains.

CSIS, an American think tank, then analyzed on May 30 that a seismic shift in trade, economic, and technology competition policy is underway, particularly in the U.S.

Matters traditionally relegated to the national security realm increasingly flow over into economic policy. Parallel to this shift, is a U.S. movement away from traditional free trade agreements centered on market access and tariff liberalization in favor of arrangements focused on sustainability and worker-centric goals, without offering additional market access.

These moves have become part of a new industrial policy that aims to strengthen U.S. high-tech competitiveness, while preventing foreign adversaries from acquiring advanced technologies.

On the one hand, it is not hard to find that under the Biden administration, the shift toward a more expansive definition of the so-called "national security" in trade policy is becoming more and more evident.

The U.S. government's political intervention in economic development itself will trap the U.S. economy into a great insecurity environment. Any political intervention that goes against the laws of economic development will ultimately be futile.

The U.S. Chamber signed a multi-association industry letter recently to the Secretary of Commerce Gina Raimondo and Trade Representative Katherine Tai, outlining concerns over the administration's proposed direction in the IPEF.

In the letter, the U.S. business and agriculture community wrote that they welcomed the administration's launch of the IPEF talks to advance U.S. commercial interests in a critical region. However, they are getting increasingly concerned that the content and direction of the administration's proposals for the talks risk not only failing to deliver meaningful strategic and commercial outcomes, but also endangering U.S. trade and economic interests in the Indo-Pacific region and beyond.

"A 'worker-centric' trade agenda

must reflect how American companies, and the workers they employ, suffer together when we are barred from selling the goods and services we produce in foreign markets. In light of the concerns cited above, we strongly urge the administration to change course and use the IPEF to deliver outcomes that advance the interests of American workers, farmers, and companies," said the letter.

On the other hand, as the global economy is struggling to recover from the COVID-19 pandemic, the U.S.-led gang-like suppression has delayed the pace of global economic recovery, and is awfully shortsighted.

A healthy competitive environment is not to take every extreme means to suppress competitors blindly, but to learn from each other and make improvements together. Actions that go against national conditions and the wishes of the contracting countries are ultimately difficult to carry out, especially when the original intention is unclear and has ulterior motives.

Executive director of the Asian Trade Centre, Deborah Elms, analyzed that the U.S. had not been clear with what it wanted when it had framed IPEF as a framework, and on other occasions it represented the pact as something far more substantial.

The U.S. decision to kick off IPEF discussions with a topic of labor laws that were sensitive to Asia also proved problematic, said Elms, adding that, "A big problem is the U.S. insistence on starting with discussions on labor, [by] which they mean workers' rights. For a lot of the other governments, that's a difficult one."

Jayant Menon, a senior fellow at IS-EAS-Yusuf Ishak Institute who closely monitors IPEF, said developing countries were always "suspicious" when a developed country proposed labor standards in trade talks.

Moreover, without market access, for example in reduction of tariffs, the U.S. has little leverage in getting different countries to quickly come to the table on issues like labor or digital trade.

If an outcome is forced by the end of the year, the group of 14 countries could end up with a, "Fairly shallow, low-ambition agreement consisting primarily of aspirational non-commitments," said Stephen Olson, a senior research fellow at Hinrich Foundation.

There are other pressures that may also work against the IPEF, for example, the U.S. may lose traction in negotiations with a change in government next year when it goes to the polls, said Elms.

Research Box

Renewables, Nuclear Becomes China's Main Source of Power

While China's carbon emissions increased again in the first quarter of 2023, the country also passed a symbolic milestone for the capacity of electricity generation from non-fossil sources.

These sources, including renewables and nuclear, passed 50% of China's installed power capacity for the first time, overtaking coal and other fossil fuel-based capacity.

Solar installations increased to a

record 34 gigawatts (GW) in the first three months of the year, nearly tripling the previous high of 13GW in the same period of 2022. (For comparison, total UK solar capacity has been stuck at around 13GW for the past five years.)

New wind power installations also reached a record for the first quarter. The 10.4GW added in the three months to March 2023 was an increase of 32%

over the period in 2022.

Research on Energy and Clean Air (CREA)'s earlier analysis for Carbon Brief found that such bases were going to enable China to meet its 2030 wind and solar capacity target years earlier than planned.

If installations [of new wind and solar capacity] in 2023 reach the 160GW target, then 385GW will have been added in the first three years of

the five-year period, leaving up to 240GW per year to be added in the next two years.

Beyond 2023, a continued rapid expansion of low-carbon energy could enable emissions to peak and enter into a structural decline, once the post-COVID recovery has played out.

—Analysis: China's CO₂ emissions hit Q1 record high after 4% rise in early 2023, CREA, 12-05-2023

China's Green Revolution Is Quietly Succeeding

China added 62 gigawatts of solar and wind power capacity in the first four months of this year. In comparison, the country added only around 26 gigawatts during the same period in 2022. That will bring non-fossil fuel generating capacity above half of the nation's total power mix for the first time by the end of the first quarter, accord-

ing to Fitch Ratings: around 80% of the new power capacity added this year so far came from renewable sources.

Capacity addition in solar has been particularly rapid, as the government pushes for installations of rooftop solar panels. Solar capacity has risen by 44% since the end of 2021.

While actual renewable power gen-

eration still lags behind that from fossil fuels, there are encouraging signs there too. Fitch expects more than 17 percent of China's power consumption in 2023 will be met by renewable sources, excluding hydropower. China has set a target for 18 percent of 2025 power consumption to come from non-hydro renewable power. China is already a mas-

sive hydropower power generator, so the total renewable percentage will likely be much higher.

China's immense renewable build-out is good news for the planet—and for maintaining the country's dominance of the industry.

—Jacky Wong, *The Wall Street Journal*, 02-06-2023

Portable Thermal Printers Meet Multiple Needs

Hi! Tech

By QI Liming

When it comes to printers, many people think of bulky home machines. Now, there is an option of a mini portable thermal printer that has many advantages over its antiquated traditional ancestor.

The size of the portable thermal printer is as small as a mini can of Coke, and it looks more like a larger spectacle case than a printer in a bag. With a built-in battery, you don't need to plug it in anywhere, and the bare weight is only

755g. It can therefore literally go wherever you go.

Without connecting to a computer, you can print using a smartphone. Press one button, and the printing process is done. Since it's a thermal printer that uses thermal paper, there's no need for accessories like ink cartridges, which means the printer is dust and odor free, and produces little noise. With fewer parts in the printer, the failure rate is also much lower compared to conventional models.

For students, it is perfectly able to meet a large number of printing needs, while businessmen will find it to be a convenient and quick printing tool.



The portable thermal printer. (PHOTO: SCREENSHOT)