

EU CBAM Disrupts Global Trade Order



By LIANG Yilian & ZHANG Jiaxin

On January 1, the European Union (EU) began formally levying substantive charges under its Carbon Border Adjustment Mechanism (CBAM). According to China's Ministry of Commerce, the EU's move constitutes unfair and discriminatory treatment against China, is suspected of violating World Trade Organization regulations and the spirit of international climate agreements, and has also triggered China's serious concern and firm opposition.

In essence, CBAM functions as a "green tariff." Its rationale is that EU companies bear higher costs due to emissions-reduction requirements and should therefore impose a "carbon price differential" on imports. To fully understand it, however, it is necessary to revisit the EU's climate policy trajectory over the past two decades. Since 2005, the EU has relied on its Emissions Trading System (ETS) as the cornerstone of its climate strategy and a key market-based tool for cutting greenhouse gas emissions. However, as carbon prices soared to 70-100 EUR per tonne, the competitiveness of Europe's manufacturing sector gradually declined. CBAM consequently emerged as a remedial measure to address the unintended consequences of the EU's own policy design. Under this mechanism, exporters unable to provide EU-recognized "actual carbon emissions" are taxed based on EU-set default values for carbon intensity.

Evidence increasingly indicates that these default values are being deliberately inflated, amounting to potential covert trade discrimination. According to industry portal Eurometal, just before CBAM enters its charging phase in 2026,



Workers from the State Grid Cangzhou Power Supply Company conduct drone inspections at a "fish-solar hybrid" photovoltaic power plant in Huanghua city, Hebei province. (PHOTO: XINHUA)

the European Commission abruptly revised emissions benchmarks for several products. Take steel billets — a major Chinese export — as an example. Earlier draft regulations set the default value at 1.75 tonnes of carbon dioxide per tonne of steel, in line with China's industry average of about 1.8 tonnes in 2024. At that stage, the methodology remained grounded in actual industrial values.

Yet in the final regulations issued in December 2025, the default value for Chinese steel billets surged to an astonishing 3.167 tonnes — an increase of 81 percent. Under this revised benchmark, Chinese exporters would be compelled to absorb an additional carbon cost of approximately 144 EUR (around 168 USD) per tonne. This figure is nearly double China's industry average and even exceeds the emissions levels of Europe's own aging blast furnaces, generally estimated at 1.8 to two tonnes. Market analysts warn that such a sudden and drastic cost hike poses considerable challenges in international trade.

Of even greater concern, the regula-

tion has already come into effect, and charges have commenced. However, detailed operational guidelines and reporting regulations will not be released until sometime in 2026. As a result, many companies who are unable to complete complex certification processes within the short timeframe, are effectively forced to accept EU-mandated default values.

A leaked internal document revealed by U.S. media outlet *Politico*, sheds light on the reason behind this abrupt escalation. According to the document, EU technical teams carrying out on-site measurements, found that emissions from China's advanced production lines were in some cases even lower than those of European facilities. Confronted with this scientific reality, the European Commission, under pressure from vested interests, opted not to reflect on its own lagging industrial upgrades.

Instead, to erect barriers before CBAM regulations took effect on January 1, it inflated emissions values for Chinese products by altering calculation

methodologies.

This kind of "black-box accounting" is now drawing scrutiny worldwide. The Bipartisan Policy Center, a U.S.-based think tank, has questioned the artificially inflated results presented by the EU's Joint Research Centre, including default emissions values applied to U.S. steel.

Last month, Abhyuday Jindal, managing director of Jindal Stainless, also publicly criticized the lack of clarity in the regulations. This opacity grants the EU excessive discretionary power.

At its core, the EU's decision to erect high barriers serves to shield its own members that underperform in emissions reduction. According to *European Steel in Figures 2025*, published by the European Steel Association, around 60 percent of Europe's steel output still relies on traditional blast-furnace processes. On a genuinely transparent and level playing field, Europe's outdated, high-emission production lines would lose competitiveness. Instead, the EU exploits the technical hurdles faced by developing countries in building sophisticated carbon-tracking systems, inflating external default values to artificially prolong the life of inefficient domestic capacity. This practice — lenient toward itself, harsh toward others, reveals the EU's ambition to dominate the standard-setting process.

Cumbersome reporting requirements and opaque calculations are now distorting global trade. In response, China is accelerating efforts to establish its own carbon-footprint framework to safeguard "data sovereignty." Climate policy should not be weaponized to preserve industrial hegemony. If the EU persists in transforming CBAM into a global "cash machine," it will ultimately encounter collective resistance from its trading partners. What the world needs is fair, fact-based cooperation, not a biased and credibility-deficient technical barrier.

Voice of the World

Chinese Innovation Shines at CES 2026

By LI Linxu

At the recently wrapped-up Consumer Electronics Show (CES) 2026 in Las Vegas, the U.S., Chinese companies once again emerged as some of the most visible and influential innovators on the global stage.

"China's presence at CES 2026 was widely noted across press coverage," observed *Forbes*, characterizing it as the first show where China, not Japan or South Korea, dominated the show.

According to industry sources, Chinese companies accounted for about a quarter of all exhibitors at CES 2026, making them the second largest group after the U.S.

The annual tech showcase — regarded as a barometer of global technology trends — featured an unprecedented presence of Chinese firms spanning robotics, AI hardware, intelligent vehicles, wearable tech and smart home solutions.

One of the most striking narratives at CES this year was the dominance of Chinese robotics companies, particularly in the humanoid sector.

Official CES figures show that Chinese companies made up the majority of exhibitors in the humanoid robotics category this year. Of the 38 companies participating, 21 were from China, including Fourier, Unitree and AgiBot, giving the country more than half of the total presence.

Shanghai-based company Fourier made its debut at this year's CES with its humanoid robot GR-3. GR-3, the company's first full-size "care-bot," is designed to open new possibilities in human-robot interaction through

thoughtful design, advanced perception, and approachable intelligence. People can engage in natural conversation with the robot, touch-based interactions, or light, playful activities that demonstrate its ability to sense, understand, and respond.

From robots dealing blackjack to boxing opponents and running marathons, CES 2026 was a robotics spectacular, with nearly all of the standout innovations coming from Chinese companies, South Korea's *Korea JoongAng Daily* reported.

China filed 7,705 humanoid patents over the past five years, compared with 1,561 by the U.S., according to a report by Morgan Stanley in December.

"China is both the world's largest producer and consumer of robots, strategically deploying them to automate key manufacturing sectors, including electronics, automobiles and industrial machinery," a recent report by the Korea Institute for Industrial Economics & Trade said.

In addition to robotics, Chinese consumer electronics and AI hardware also drew considerable attention. Companies showcased augmented reality glasses, AI-enabled smart home devices, smart earbuds, wearable tech and more.

This reflects a broader shift: Chinese firms are increasingly emphasizing scenario-driven innovation, where technology is tightly integrated with user experiences across home, work and mobility.

International tech outlets reported that this year's show underscored China's growing role not just as a participant in global tech, but as a driver of innovation trends that resonate far beyond its home market.

Japan's Right Wing Challenges Non-nuclear Principles

Opinion

By QI Liming

The year 2025 marked the 80th anniversary of the victory of the Chinese People's War of Resistance Against Japanese Aggression and the World Anti-Fascist War. As a state defeated in World War II and a non-nuclear-weapon state party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), Japan is prohibited from developing nuclear weapons.

However, in recent years, Japan's right-wing forces have repeatedly sought to break the three non-nuclear principles long upheld by successive Japanese governments, namely, not possessing, not producing, and not permitting the introduction of nuclear weapons.

Present Japanese Prime Minister Sanae Takaichi has been making ambiguous statements about these principles, even hinting at the possibility of abandoning them. She has also stated that the option of introducing nuclear-powered submarines should not be ruled out.

**Japan is capable of producing weapon-grade nuclear materials**

According to the report *Nuclear*

*Ambitions of Japan's Right-Wing Forces: A Serious Threat to World Peace* jointly released by China Arms Control and Disarmament Association (CACDA) and China Institute of Nuclear Industry Strategy (CINIS) on January 8, Japan has plutonium stockpiles that far exceed civilian nuclear needs.

Japan's nuclear industry began to develop in the 1950s. In the field of nuclear power generation, Japan's first imported commercial nuclear power unit began operation in 1966. Thereafter, through technology introduction, assimilation and innovation, Japan independently designed and constructed multiple types of reactors.

Prior to the Fukushima Daiichi nuclear accident in 2011, Japan operated at most 54 nuclear power reactors at the same time, with a combined installed capacity of approximately 47.5 gigawatts. This accounted for around 30 percent of the country's total electricity generation.

According to the *Status Report of Plutonium Management in Japan* for year 2024, released by Japan's Cabinet Secretariat Office for Atomic Energy Policy in August 2025, as of the end of 2024, Japan managed a total of approximately 44.4 tons of separated plutonium both domestically and overseas.

The expanding nuclear ambitions

of Japan's right-wing forces send a dangerous signal of the revival of Japanese militarism, posing a serious threat to global peace.

**The international community should be on high alert against Japan's expanding nuclear ambitions**

Dai Huaicheng, secretary-general of CACDA, said Japan must fully abide by the provisions not to manufacture or acquire nuclear weapons, and not to receive whatsoever transfer of nuclear weapons or control over such weapons. However, the recent months have seen a number of dangerous attempts, including Takaichi implying the possibility of quitting the three non-nuclear principles.

These dangerous attempts, closely aligned with the inflated ambition to break free from international order, revive militarism and speed up re-militarization, are by no means isolated incidents or personal views. Rather, they are the result of long-standing, carefully orchestrated efforts by Japan's right-wing forces.

Luo Qingping, chairman of CINIS, emphasized that the international nuclear non-proliferation regime is an important part of the post-war international order. Japan's right-wing forces' attempt to revise the three non-nuclear principles and even advocate possessing nucle-

ar weapons gravely challenges the authority and effectiveness of the NPT, undermining the international nuclear non-proliferation regime. These dangerous developments warrant high vigilance by the international community.

The report *Nuclear Ambitions of Japan's Right-Wing Forces* puts forward 10 recommendations. They include urging the Japanese prime minister to clarify her erroneous remarks and Japan to strictly fulfill its non-proliferation obligations and address its plutonium stockpile imbalance. It calls on the 2026 NPT Review Conference, to take place in the United Nations headquarters in New York from April, to carefully consider this matter.

Also, the International Atomic Energy Agency must strengthen the safeguard on Japan's nuclear material and activities.

Besides, relevant countries should ensure their civil nuclear cooperation remains exclusively for peaceful purposes.

The UN chief and heads of other international organizations must express a clear stance defending the post-war international order.

The international academic community should be encouraged to strengthen research on this, providing intellectual support to maintain an international non-proliferation regime.

Under-road Heating for Safer Winter Driving

Hi-Tech

By QI Liming

With the onset of winter, high-altitude mountain roads in China are often covered with snow and concealed ice, posing a significant danger while driving. In the section of the newly opened Leshan-Xichang Expressway in Leibo county, Sichuan province, southwestern China, an innovative intelligent loop heat pipe snow-melting system has been implemented. This technology is like laying "floor heating" on the road surface, automatically eliminating snow and concealed ice, thereby reducing driving risks.

To make this possible, eight-millimeter diameter heat pipes are embedded 15 centimeters below the wheel track area of the main road's surface. A total of 27 sections, comprising 92 groups of heat pipes are laid out, covering a length of 2,374 meters. This includes the exit area of the upward tunnel, the entrance area of the downward tunnel, and the long and steep slope bridge section.

This technology has established a closed-loop system of "perception -

decision-making - execution." The laser snow depth meters, temperature and humidity sensors are fully covered. Based on the predicted kilometer-level ice and snow, together with data from AI models, satellites, the meteorological station and road surfaces, the power of the heat pipe can be automatically adjusted in accordance with the expected risk level.

The automatic start-up air source heat pump can preheat the heat medium to temperatures of 50 to 60 degrees Celsius. Through the efficient heat conduction of the heat pipe, the temperature of the wheel track is stably maintained and can automatically melt the ice within a range of one to two degrees Celsius.

Compared with traditional snow removal methods such as plowing, salting and the use of snow-melting agents, this new technology enables the transformation from passive ice clearance to proactive prevention and intelligent regulation.

This system has established a sophisticated meteorological monitoring network covering a five-kilometer area. It uses AI algorithms to achieve precise and dynamic temperature control, causing light snow to melt as it falls and heavy snow to melt quickly after being cleared by vehicles.



A staff member uses a thermal imager to test the effectiveness of the loop heat pipe snow melting system. (PHOTO: XINHUA)

AI Explores More Possibilities in Space

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As a cutting-edge field in global technological competition, an important development direction of commercial aerospace, and an important example of new quality productive forces, the appli-

cation prospects of space computing are extremely broad.

With advantages such as global coverage, high timeliness, and green and low-carbon features, it can effectively serve multiple fields including the digi-

tal economy, low-altitude economy and emergency relief.

At present, China has incorporated the development of the aerospace information industry, the promotion of satellite Internet and the construction of an

integrated space-ground information network into multiple national strategies, such as Digital China, which has a long-term goal of establishing a comprehensive digital development system by 2035.