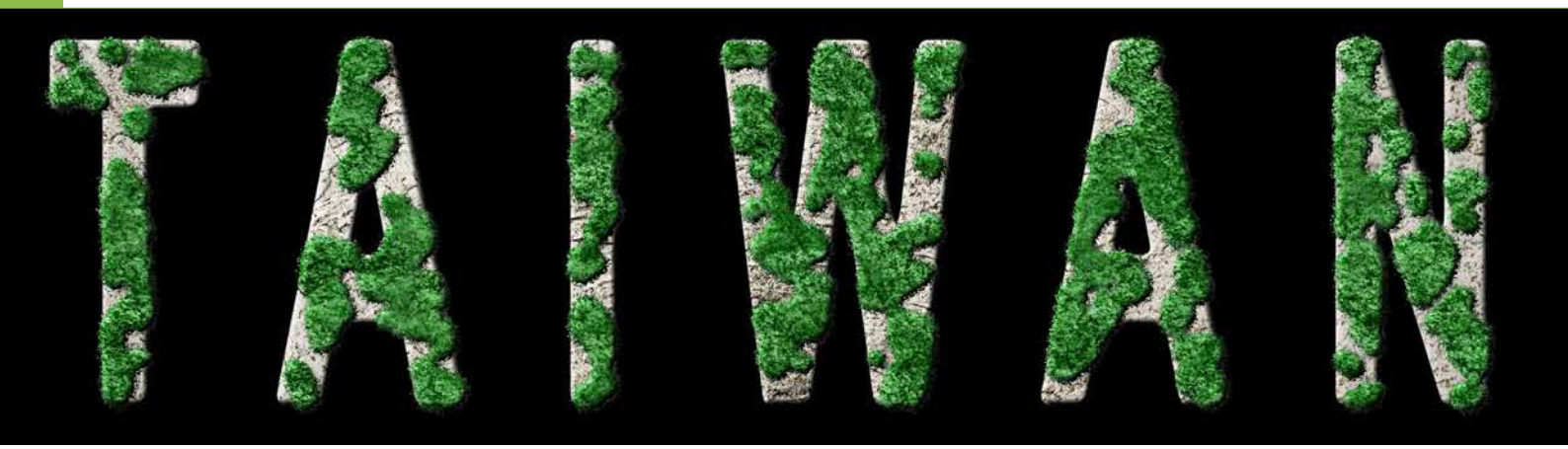
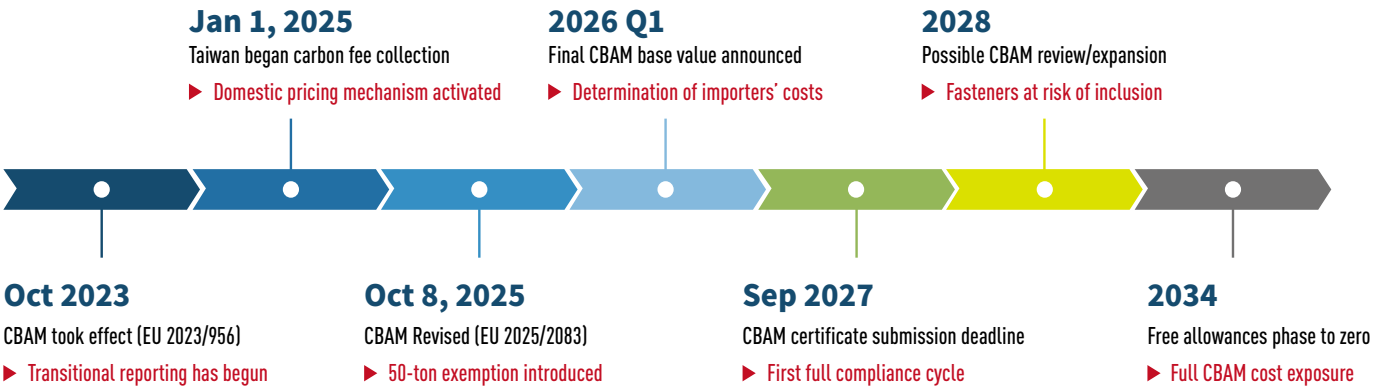


Analysis of CBAM Transitional Period:

Key Responses and Strategies for Taiwan's Fastener Industry



Why CBAM Enters the Transitional Period: Administrative Efficiency and SMEs' Tolerability as Core Revision Focuses

On October 8, 2025, the European Parliament and Council revised the EU 2023/956 Regulation, which took effect on October 1, 2023, to simplify and strengthen the Carbon Border Adjustment Mechanism (CBAM). The revised EU 2025/2083 Regulation by the European Commission confirms the completion of system simplification and enhancement before the end of the 2026 transitional period through quarterly reporting data and stakeholder exchanges, ensuring smooth subsequent implementation.

Based on import distribution and embedded emissions data collected during the transitional period, the European Commission determined that emissions at the import end are highly concentrated among a few importers. Its analysis found that 97% of CBAM-covered carbon emissions came from just 20% of the companies. From the perspective of administrative burden, exempting the remaining 80% of the companies from tax obligations is the prudent approach. Therefore, the revision introduces a minimum threshold exemption based on annual cumulative net weight, initially set at 50 tons, applicable cumulatively to goods in industries such as steel, aluminum, fertilizers, and cement. Electricity and hydrogen energy are excluded from this minimum threshold exemption due to their different trade patterns and emissions characteristics.

As long as an importer's cumulative net weight of the aforementioned goods imported within the same calendar year does not exceed 50 tons, they are exempt from CBAM obligations for that year. Once the threshold is exceeded, the importer must bear full obligations for all relevant goods imported in that year, with no evasion allowed through split shipments. The EU also

clearly states that the threshold is designed to ensure at least 99% of embedded emissions remain within CBAM's scope, limiting exemptions to no more than 1% of emissions, while significantly reducing the administrative burden on the majority of importers (approximately 182,000 importers, mostly SMEs).

For the fastener industry, which uses steel as its core material, this adjustment means future emissions calculations and compliance communications will focus more on embedded emissions at the raw material end and their traceability, rather than allocating substantial CBAM costs to the low-proportion downstream processing; However, as the EU's methodology discussion paper released in mid-December 2025 further emphasizes disclosure requirements for energy use in product manufacturing processes, emissions generated from post-production processes involving fuels such as liquefied petroleum gas (LPG) or liquefied natural gas (LNG) must still be included in the overall calculation of embedded emissions. Relevant details remain pending the formal announcement of subsequent official templates and reporting procedures.

Complementarily, the EU also strengthens default values and verification arrangements: reported embedded emissions using default values require no verification, and only actual values must be verified by accredited verifiers. It also adjusts timelines for annual reporting and certificate submission, giving authorized declarants more time to collect data, complete verification, and allocate certificates.

The EU 2023/956 Regulation also states that importers can use CBAM certificates to offset embedded emissions exceeding the base value (adjusted by CBAM coefficients, at 97.5% in 2026). Certificate pricing will align with the average auction price of the EU ETS, which stood at approximately €73 per ton of CO_2 in 2025. Companies can purchase CBAM certificates and submit them to the EU for compliance by September 2027.

Overall, these **simplification measures reduce administrative hurdles for small-volume imports and downstream processing on one hand, while directing compliance pressure more clearly toward emissions data from steel raw materials and supply chain consistency on the other hand. For Taiwan's metal fastener industry, building data structures for raw material traceability and embedded emissions calculations offers higher priority and cost-effectiveness than chasing fragmented process data.**

🎯 Implication of CBAM Revisions:
Simplification Does Not Mean Leniency and Fair CBAM Base Value is the Point

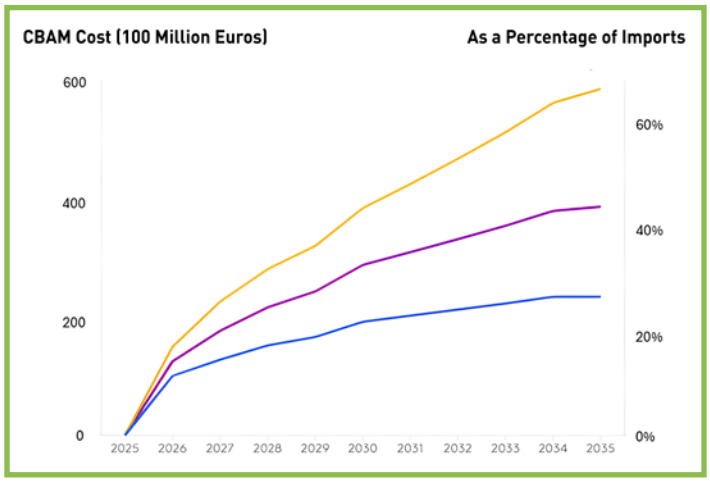
The European Commission has released provisional CBAM base value, allowing EU importers and manufacturers to begin quantifying CBAM costs. However, the final base value won't be published until Q1 2026, and both provisional base value and country-specific default values remain complex, leaving companies facing significant challenges and risks in the coming months. In an interview, President of the EIFI noted that while CBAM revisions trend toward simplifying reporting, the association believes raw material carbon emissions – despite seemingly negligible process emissions – are the core of future transparency demands from clients and supply chains. **Simplified reporting does not equate to relaxed carbon management and could introduce risks of inconsistent standards. For instance, while CBAM eases administrative requirements in practice, it does not improve carbon pricing or emissions determination consistency, potentially distorting competition by allowing imports with incomplete carbon data disclosure to enter the market, pressuring established suppliers.**

Moreover, the EU's "target big players and give small fry a pass" approach refines CBAM, substantially easing reporting and compliance burdens for exempt entities in the short term. This gives SMEs and supply chains from developing countries more time to build emissions data and carbon reduction capabilities, preventing from being kicked out of the market due to excessive carbon and compliance costs. However, this narrowed scope could spill over to influence other countries developing carbon border policies.

Since the UK's CBAM closely mirrors EU principles and the US CCA Act is often seen as a response to EU CBAM, tracking whether nations maintain stringent border carbon policies is essential. For emerging economies like China, India, and Brazil – which question the legitimacy of CBAM – the EU's scope contraction could bolster arguments framing it as trade protectionism, reducing cooperation willingness. This dilemma is reflected in corporate implementation: companies have previously admitted struggles meeting CBAM data demands, with **surveys showing most German firms unable to fully provide emissions data. No matter the design, implementation hinges on data availability and calculation capabilities. This underscores for Taiwan's fastener industry that building credible, coherent product carbon footprint databases and raw material emissions mechanisms is key to EU market access.**

EU's Potential Crisis: Anxiety Over Economic Imbalance Amid Accumulating Costs

▼ Figure 1: EU CBAM Cost Impact Scenario Analysis on Imported Goods



Data Source: Fast Markets Carbon / Compiled by the author (Dec., 18, 2025)

Note for **Fig. 1**: Purple line represents baseline scenario with expected future carbon prices; blue line represents low carbon price scenario; yellow line assumes sharply rising carbon prices.

Figure 1 illustrates CBAM's cost impact on EU imported goods under different carbon price scenarios. The left axis shows CBAM costs, while the right axis shows CBAM costs as a percentage of imported goods' value. Despite only a 2.5% free allowance reduction in 2026, CBAM costs see their largest annual growth in the first year, as all embedded emissions exceeding the base value must incur fees from the start. With free allowances phasing to zero by 2034 and EU ETS prices climbing steadily, costs will rise year after year. Research institutions' final projections indicate that by 2035, over 90% of imports from CBAM-covered industries will face taxes exceeding 10% of the product value.

In the low carbon price scenario, prices remain moderate, so CBAM costs as a share of import value rise gradually but stay manageable overall. This allows supply chains more room for progressive adjustments by corporates via efficiency gains and cost-sharing. However, in the high carbon price scenario, surging EU ETS prices rapidly amplify CBAM costs, potentially making them a non-negligible portion of import values in the medium to long term. This creates structural disadvantages for high-carbon raw materials and products, forcing markets to reassess supply sources and trade feasibility.

Across all scenarios, the cost pressure from CBAM clearly escalates annually. While not immediately reshaping trade structures, it steadily erodes product margins and import competitiveness. If EU domestic supply chains can't achieve self-sufficiency, supply-demand imbalances could drive inflation. These three scenarios converge on one key message: CBAM's real impact lies not in its launch but in carbon price trends and cumulative time effects. Once on a high carbon price trajectory, carbon costs shift from a compliance issue to a core driver of import competitiveness and supply chain choices.

Constellium, the Paris-based aluminum giant supplying global aviation, automotive, and packaging industries, had its CEO Jean-Marc Germain bluntly state in late 2025 that CBAM should be scrapped entirely, or it will inflict death by a thousand cuts on European industry, risking capacity offshoring and structural decline.

The weight of these words comes from a speaker of a firm that is not of high-carbon emission or exporting to the EU, but of a highly localized European manufacturer theoretically protected by CBAM. Constellium primarily uses European aluminum raw materials and local processing, so it shouldn't directly bear CBAM carbon taxes. Yet market anticipation of CBAM's full 2026 rollout pushed European aluminum prices to a near-year high by late 2025. All aluminum prices will rise in sync going forward—no exceptions—and this isn't a one-off hit but a chronic drain on client profits.

“Constellium further highlights CBAM's key flaws, with lessons valuable for global manufacturing firms. Overseas suppliers can dodge carbon taxes by exporting aluminum scrap (low-carbon product) to Europe while producing high-carbon goods elsewhere—a move with no real global emissions benefit but one that inflates EU aluminum costs. This is why the CEO calls CBAM a climate policy in name that undermines Europe's own competitiveness.”

The fastener industry's challenges mirror aluminum's: heavy reliance on steel, wire rod, heat treatment, and surface finishing, with clients in European automotive, machinery, and construction supply chains. According to Constellium, costs incurred by CBAM don't stop at imports—they amplified and passed through each supply chain layer. Even if fasteners aren't in the list to be influenced first, they will be in the future. Taiwanese business owners should stay vigilant.

How Should Taiwan Fastener Industry Respond: Prove Your Decarbonization Ability Amid Global and Domestic Trends

The EU CBAM does not entirely disregard exporting countries' existing carbon pricing mechanisms. It allows importers to claim credits under specific conditions for carbon prices already paid on product emissions in the country of origin. According to CBAM rules, if the exporting country has imposed carbon fees or taxes on the product's embedded emissions – and this can be proven as actually paid with a clear calculation basis – importers can reduce the number of CBAM certificates they must submit during declaration. In other words, CBAM's core is not "double taxation" but bridging the carbon price gap with the EU ETS.

Taiwan's current carbon fee system, while not yet directly linked to EU ETS, qualifies as a clear carbon pricing mechanism with potential for CBAM credit eligibility. Though not labeled a "carbon tax," Taiwan has planned implementation under the Climate Change Response Act, with carbon fee supporting regulations finalized since 2024 – including the Carbon Fee Collection Regulations, Greenhouse Gas Reduction Targets and Voluntary Reduction Plan Management Regulations, and others – marking Taiwan's official entry into the carbon pricing era.

The carbon fee collecting system was started on January 1, 2025, targeting companies exceeding annual emission thresholds. Payments, based on the prior year's emissions, will be due by May 2026. Rates are set by the central authority: an initial standard rate of NTD 300 per metric ton of greenhouse gases, with preferential rates tied to voluntary reduction plans. Coverage includes direct emissions (Scope 1) and indirect emissions like electricity use (Scope 2), mainly hitting high-emission sectors such as manufacturing and energy.

The inclusion to be subject to Taiwan's carbon fee is not determined by industry or company but by whether a single site or firm's annual greenhouse gas emissions hit the legal threshold. For the fastener industry, large-scale producers with concentrated heat treatment or high-energy processes are likeliest to face it first; smaller fastener plants mostly remain in indirect impact or preparation phases.

Taiwan's Carbon Fee System Overview	
Date of Collection	Jan 1, 2025
Payment Due	May 2026 (based on 2025 emissions)
Standard Rate	NTD 300/Metric Ton GHG
Coverage	Scope 1 (direct) + Scope 2 (eletricity)
Target	Sites/Companies Above Emission Threshold
Impact on Fastener Industry	Large Plants With Heat Treatment/High Energy

Actual CBAM credit eligibility hinges not on the regulations' titles, but on three practical requirements:

(1) Whether the carbon fee explicitly targets product-embedded emissions;

(2) Whether it clearly maps to specific products or processes

(3) Whether supporting data meets EU-recognized verification standards.

Thus, even if Taiwan's fastener firms can avoid direct CBAM duties in the short term, they must urgently build emissions data and product carbon footprints, compatible with the carbon fee system. These will manage domestic burdens and form the foundation for CBAM credit discussions and carbon cost-sharing with European clients.

CBAM in the Long Term: From Compliance Concerns to Reshaping Competitive Conditions

From a long-term perspective, CBAM is not a one-off mechanism but a tool evolving with EU industry and energy policies. Current discussions point to another review and revision in 2028, assessing expansion to more downstream products like automotive components and appliances – key end-markets for Taiwan's fastener industry. Notably, while discussing broader carbon tariff scopes, the EU is easing fuel vehicle policies under industry pressure. On December 16, 2025, the European Commission proposed that new cars in 2035 need only to reach the emissions 90% below 2021 levels, with sales still dominated by EVs, but allowing limited hybrids, hydrogen vehicles, or even gas cars. This signals pragmatic rebalancing between energy transition and industrial competitiveness.

Such policy tensions mean CBAM's evolution may not follow a single path of relentless tightening. Instead, it could oscillate between decarbonization goals, industry tolerability, and geopolitical competition. As policies iterate and boundaries expand, resilient firms won't just chase regulatory changes – they'll manage carbon risks amid uncertainty and reposition their competitive edge. ■