

Institutional Reform and Trade Implementation Under Thailand's Draft Climate Change Act

Pabhawan Suttiprasit, Ph.D.

- Thailand's Draft Climate Change Act, approved by Cabinet on December 2, 2025, establishes a multi-layered carbon pricing framework comprising an Emissions Trading System (ETS) projected for 2029, carbon taxation at 200 THB/tCO₂e, and Thai Carbon Border Adjustment Mechanism (CBAM) targeting 2031 implementation. The legislation restructures the National Climate Change Policy Committee (NCCPC) with Permanent Secretaries from nineteen ministries to address cross-ministerial coordination challenges. However, the Measurement, Reporting, and Verification (MRV) system faces significant capacity constraints with only 17 registered verification organizations, necessitating accelerated training programs and inter-ministerial coordination mechanisms.
- Thailand has established Article 6.2 bilateral agreements with Switzerland, Japan, and Singapore, with international credit utilization limited to 3% of Nationally Determined Contribution (NDC) targets. Implementation success requires: (1) expanding verification capacity through existing energy auditor networks; (2) formalizing inter-ministerial coordination through binding memoranda; (3) pursuing EU CBAM equivalence negotiations; and (4) establishing SME support mechanisms for simplified reporting and subsidized verification costs.

Legislative Background

Thailand's Climate Change Act development spans seven years, originating from the 2017 Constitution's national reform mandate. The Climate Change Coordination Division initiated drafting in 2019, subsequently transferred to the newly established Department of Climate Change and Environment (DCCE) in 2023. The development process incorporated extensive stakeholder consultations with government agencies and comparative legal research examining climate frameworks from the United Kingdom, European Union, United States, and Singapore, with reporting thresholds and ETS design parameters aligned with EU and Korean benchmarks at 25,000 tCO₂e.

Institutional Reform Architecture

The draft legislation establishes a reconfigured National Climate Change Policy Committee (NCCPC) as the apex climate governance body, incorporating Permanent Secretaries from nineteen ministries including Finance, Energy, Commerce, Industry, Agriculture, and Transport. This expansive composition

addresses the DCCE's historical lack of comprehensive authority over climate change management across governmental portfolios.

The Measurement, Reporting, and Verification (MRV) system requires substantial capacity development. The pilot phase is projected for 2029-2030, initially focusing on Scope 1 and Scope 2 emissions from stationary combustion sources. Current verification capacity presents a significant constraint: only 17 organizations maintain Thailand Greenhouse Gas Management Organization (TGO) registration for Carbon Footprint verification. The DCCE is coordinating with the Department of Alternative Energy Development and Efficiency to facilitate cross-registration of approximately 2,040 existing energy auditors.

Carbon Pricing Mechanisms

1) Emissions Trading System (ETS)

Thailand's ETS framework adopts a hybrid cap-and-trade and baseline-and-credit approach. The system allocates emission allowances through five-year allocation plans, with entities

Institutional Reform and Trade Implementation Under Thailand's Draft Climate Change Act

permitted to offset up to 15% of surrender obligations through certified voluntary market carbon credits. This ceiling exceeds the 10% threshold proposed in alternative parliamentary drafts. ETS implementation anticipates commencement in 2029, with allocation plans published at least one year prior to each period.

2) Carbon Tax Integration

The Excise Department established an initial carbon price of 200 THB per tonne CO₂e through Ministerial Regulation No. 41, integrated within excise tax structures for petroleum products. Article 95 establishes a rebate mechanism permitting controlled entities to present carbon tax payment evidence to reduce ETS auction prices, preventing double taxation. The DCCE confirmed active collaboration with the Excise Department to develop detailed calculation methodologies for this offset mechanism.

Trade Implementation

Thailand's export exposure to EU CBAM remains limited in initial product categories. However, anticipated CBAM expansion to refined petroleum products, organic chemicals, and polymers necessitates proactive preparation. The National Metal and Materials Technology Center (MTEC) has initiated preparatory measures by developing emissions intensity databases for the aluminum industry.

Chapter 9 establishes Thailand's domestic CBAM, projected for 2031 implementation. Thai CBAM addresses carbon leakage risks from imports produced in jurisdictions with less stringent regulations, with exemptions for small-volume imports to minimize SME burden.

Thailand has established bilateral frameworks under Article 6.2 of the Paris Agreement with Switzerland, Japan, and Singapore. Cabinet-approved guidelines limit international credit utilization to 3% of Thailand's NDC target (approximately 16.7 million tCO₂e). Thailand's Premium T-VER standard achieved ICAO CORSIA Phase 1 recognition (2024-2026).

Article 6 Implementation

Thailand has established bilateral frameworks under Article 6.2 of the Paris Agreement with Switzerland, Japan, and Singapore. These arrangements demonstrate differentiated approaches: Switzerland excludes forestry credits, Singapore permits credits for domestic carbon tax compliance, and Japan implements cost-sharing based on investment proportions. Cabinet-approved guidelines limit international credit utilization to 3% of Thailand's NDC target (approximately 16.7 million tCO₂e), requiring project additionality and operation beyond 2030. Thailand's Premium T-VER standard achieved ICAO CORSIA Phase 1 recognition (2024-2026), validating international acceptance of Thai carbon credit standards.

Climate Fund Governance

The Climate Fund constitutes a juristic entity exempt from Treasury remittance requirements. Revenue sources encompass ETS auction proceeds, Thai CBAM certificates, and international credit authorization fees. Fund governance operates through a Board comprising an expert chairperson, representatives from nine ministries, and external experts from business associations. Following ETS operationalization, auction revenues project substantial cumulative returns.

Policy Recommendations

1. Accelerate verification capacity through training programs leveraging existing energy auditor networks and university-level certification curricula.
2. Formalize inter-ministerial coordination through binding memoranda between DCCE, Excise Department, Customs Department, and sectoral ministries.
3. Pursue EU CBAM equivalence negotiations to secure recognition of Thai carbon pricing payments as deductible from CBAM certificate obligations.
4. Strengthen Climate Fund governance with independent audit requirements and transparent public disclosure of funding allocations.
5. Establish SME support mechanisms with earmarked Fund resources for simplified reporting and subsidized verification costs.
6. Integrate just transition findings into Fund allocation criteria, addressing workforce implications in carbon-intensive sectors.

Conclusion

Thailand's Draft Climate Change Act represents comprehensive institutional reform positioning the nation to meet NDC commitments while establishing competitive advantages in carbon-constrained trade environments. The multi-instrument approach combining mandatory reporting, emissions trading, carbon taxation, and border adjustment demonstrates sophisticated policy design aligned with international best practices. Implementation success hinges upon resolving verification infrastructure constraints and securing international recognition of Thai carbon pricing systems.

References

Interview data on the Draft Climate Change Act from the Department of Climate Change and Environment (January 13, 2026).

(Pabhawan Suttiprasit / Sukhothai Thammathirat Open University (STOU), Thailand)