

ベトナム駐在の経験から―

- **▼ ASEAN主要国でも着実に脱炭素に関する**政策枠組の整備が進む。排出権取引制度も
 その一つ。
- ✓ ASEAN諸国は気候変動影響に脆弱。緩和・適応両面での対策は急務。
- ▼ 様々な政治的な思惑がありながらも、真剣に脱炭素に取組んでいる。



民間セクターの脱炭素も少しずつ進みつつある。

SBT認定取得・コミットはこれから。テクスタイルセクターが牽引。

ASEAN国別SBT認定コミット企業数

	企業数	企業数	
国名	(2024年1月時	(2025年3月時	増減
	点)	点)	
Singapore	45	57	12
Indonesia	33	36	3
Thailand	33	35	2
Malaysia	22	29	7
Vietnam	18	25	7
Cambodia	5	5	0
Philippines	4	7	3
Myanmar (Burma)	3	3	0
合計	163	197	34



ベトナムのEV路線バス

出典: VINBUS ウェブサイトより https://vinbus.vn/en/gioi-thieu/ebus

ASEAN各国におけるカーボンプライス制度の概観

ETSはインドネシアがリード。ベトナムが近く試験事業開始、マレーシア、タイ、フィリピンが検討中。シンガポールは炭素税。

国名	ネットゼロ目標	ETS	炭素税	VCM	国名	ネットゼロ目標	ETS	炭素税	VCM
ブルネイ	ネットゼロ 2050				ミャンマー	ネットゼロ 2040 (森林その他土地利用セッター)			0
カンボジア	カーボン ニュートラル 2050			0	フィリピン	目標なし	検討中 低炭素経済投資法	検討中 低炭素経済投資法	0
インドネシア	ネットゼロ 2060 以前	2023年~開始	準備中	0	シンガポール	ネットゼロ 2050		2019年開始	0
ラオス	ネットゼロ 2050			0	タイ	カーボ ンニュートラル 2050 ネットセ・ロ 2065	検討中 気候変動法	検討中 気候変動法	0
マレーシア	ネットゼロ 2050	実現可能性調査 実施中(-2025)	準備中 2026年~?	0	ベトナム	ネットゼロ 2050	パイロット 2025年スタート予定		0

出典:ASEAN Center for Energy Progress of Carbon Pricing in ASEAN to Support the Shift Towards a Low Carbon Economy (2024)をベースに一部、WWFジャパンにて修正・アップデート。

ASEAN各国はなぜカーボンプライス政策を急ぐのか

EU炭素国境調整を強く意識。またNDC達成のための政策手段としてもCPを活用。

ASEAN加盟国はCBAMへの準備ができていると思うか?



- ★ ASEAN Centre for Energy (ACE) が実施した専門家へのアンケート 調査では、多くの専門家がCBAMはASEAN各国の脱炭素の推進力と なると感じている一方で、対応準備に課題を感じており、政府による 早急な制度整備を期待が伺える。

出典:Carbon Border Adjustment Mechanism (CBAM) Implementation on Reducing Emission in the ASEAN Energy Sector (ASEAN Centre for Energy, 2024) よりWWFジャパン和訳

https://iopscience.iop.org/article/10.1088/1755-1315/1395/1/012035/meta

インドネシアETS

2023年9月から、石炭火力発電所を対象にスタート。対象は徐々に拡大予定。

インドネシア気候変動対策・ETS概要

- **2** 2060年ネットゼロ目標、NDC 2030年は31.9~43.2% (BAU比)
- ✓ 2023年9月~排出量取引市場がスタート。最初は石炭火力発電所が対象。
- 超過排出分は他事業者の排出枠もしくは特定の緩和活動からのクレジットを購入。
- ≪ 将来的にはETSと炭素税を統合してシステムにすることを目指す。

フェーズ1 (2023年~2024年)

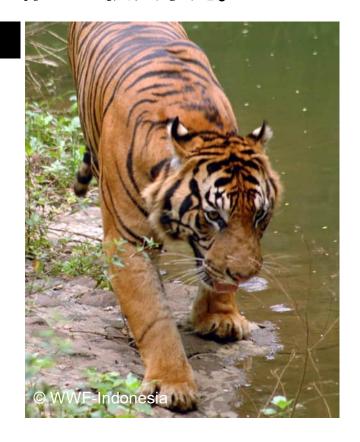
- ・一定規模以上の石炭火力発電所 (2024年時点で63法人、146事業所)
- ・前年の実績をもとに事業所ごとの排出強度目標を設定。これに応じて、排出割当が決められる。2024年は75~85%が無償

<u>フェーズ 2</u> (2025年~2027年)

- ·石炭火力規模拡大
- ・ガス火力も含む
- ・セメントやテクス タイルなどその他の セクターも順次追加

<u>フェーズ3</u> (2028年~2030年)

・全ての化石燃料火力



出曲

 $\label{lem:https://icapcarbonaction.com/en/ets/indonesian-economic-value-carbon-nilai-ekonomi-karbon-trading-scheme $$ $$ https://www.jetro.go.jp/biz/areareports/special/2024/0502/f71405a8c66f75e9.html $$ $$ https://www.enerdata.net/publications/daily-energy-news/indonesia-carbon-trading-sectors.html$

https://icapcarbonaction.com/en/ets/indonesian-economic-value-carbon-nilai-ekonomi-karbon-trading-scheme

ベトナムETS

2025年6月からパイロット開始、本格運用は2029年から。

ベトナム気候変動対策・ETS概要

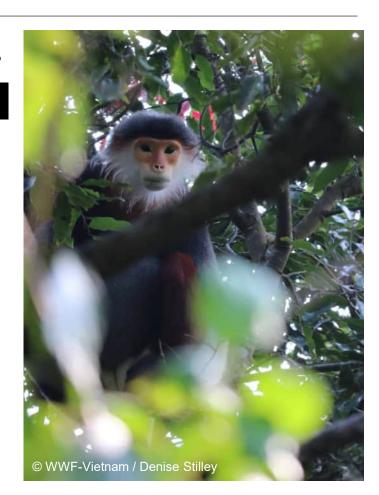
- **2050年ネットゼロ目標、NDC 2030年は9~27%減(BAU比)**
- ▼ セクターごとの脱炭素計画を策定し、さらに事業所ごとの割当を決定
- **✓** クレジットは国内・国際(CDM、JCM、6条4項クレジット)から調達可能。ハノイ証券取引場で売買。

<u>パイロット期間</u> (2025年6月~2028年12月)

- ・Allowanceは多排出セクターに無償で割当
- ・パイロット期間中に必要な追加的政策枠組を並行して整備

<u>本格運用</u> (2029年~)

- ・セクター・対象事業所拡大
- ・無償割当に加えオークション制も導入



出曲:

マレーシア・タイ・フィリピン

フィリピンは法案審議中。タイも法案が既にドラフト、マレーシアも検討が進む。

マレ<u>ーシア</u>

- **▼** 2021年にETSを含むCP政策を整備 していくことを表明。
- び 世銀と協力し、CPメカニズムの実現 可能性調査を実施中。
- **▼** 2026年までに鉄鋼・エネルギーセクターの炭素税導入を検討を表明。



出曲:

https://www.nies.go.jp/gio/wgia/pi5dm300001g1ubp-att/0-1 wgia21 NRES.pdf https://www.spglobal.com/commodity-insights/en/news-research/latest-news/energy-transition/102124-malaysia-sets-2026-carbon-tax-reaffirms-decarbonization-goals-in-budget-2025

タイ

- **▼ 2013年以降、MRVやボランタリー**市場で実証を重ねてきた。



出典

https://icapcarbonaction.com/en/ets/thailand https://insightplus.bakermckenzie.com/bm/tax/thailand-climate-change-bill-aligning-with-international

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- **び** 2025年2月に低炭素経済投資法案が 下院を通過。



出典:

https://carbon-pulse.com/365259/ https://docs.congress.hrep.online/legisdocs/first_19/CR01383.pdf

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新たな法律が下院を通過(2025年2月)

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ASEAN ETS/CP

予。壮大な計画?実現するのかな?

At the regional level, ASEAN has set an ambitious course with its <u>ASEAN Strategy for Carbon Neutrality</u>, which outlines eight key strategies aimed at accelerating ASEAN's transition toward a low-carbon economy. Among these strategies, establishing an *interoperable carbon market* stands out as a transformative approach to unifying regional carbon reduction efforts.

The interoperability of carbon market highlights the compliance between national, regional, and global market standards. In response to achieve a qualified carbon market, several aspects should be considered including setting eligible credit standard, sharing compliance market practices and adopting best practices of carbon credit accounting standards.

フィリピン参考

Philippines lawmakers approve carbon trading bill

Published 02:56 on February 5, 2025 / Last updated at 02:56 on February 5, 2025 / Stian Rekley / Asia Pacific, International. Nature-based, Other APAC, Paris Article 6, Voluntary

The Philippines House of Representatives on Tuesday approved a bill that would set up a domestic emissions trading scheme with offset provisions as well as task the government with establishing a framework for trading carbon credits under the Paris Agreement.

The Low Carbon Economy Investment Act, HB11375, went through its second reading in the House on Tuesday, and was approved through a voice vote.

While yet to be put to the Senate, the bill - a combination of two similar bills that made their way through the House committee system last year - would pave the way for creating a multi-sector ETS and a range of institutional arrangements to help the Southeast Asian country meets its commitments under the Paris Agreement.

The bill, which would be the by far most far-reaching climate legislation in the Philippines, includes several key provisions, such as for establishing:

- A greenhouse gas inventory
- A process for developing its next Nationally Determined Contribution (NDC) under the Paris Agreement
- A decarbonisation plan and investment roadmap for emitters
- · A carbon pricing mechanism and decarbonisation fund
- · A compliance mechanism
- · Penalties for non-compliance
- · An enabling mechanism for access to carbon markets

The Climate Change Commission (CCC) would be the main government body coordinating the work, though a number of ministries and other agencies would also be involved.

EMISSIONS TRADING

The scheme, if implemented, would obligate companies in the energy, transport, industry, agriculture/forestry, and waste sectors to develop climate action and emissions plans and strategies required to be in line with restricting global warming to 2C and reaching net zero by 2050.

Based on those, the CCC would develop allocation plans to distribute emissions allowances to each individual company covered.

Those failing to meet their targets would be able to buy allowances from other participants in order to be in compliance, or buy carbon credits from internationally recognised offset projects, the bill said, naming forestry, renewable energy, carbon capture and storage, and methane reduction as potentially eligible project types.

It did not specify whether the projects would have to be based in the Philippines.

In order to be in compliance, emitters could also choose PARIS AGREEMENT government-run decarbonisation fund, with the CCC se reviewing it every three years.

The system would roughly align the Philippines with AS Outcomes under the Paris treaty, Indonesia, Singapore, Thailand, and Vietnam, which are developing domestic carbon pricing frameworks.

As well, the bill would mandate the CCC to "establish the necessary protocols, The decarbonisation fund would exclusively fund emissi procedures, and systems to effectively implement the mechanisms for ITMOs and other Article 6 transactions", it said, referring to International Transferred Mitigation

> That would include setting out procedures for issuing letters of authorisation (LoAs) and corresponding adjustments, with REDD projects specifically mentioned as a project type the Philippines would be looking to host.

While still lacking domestic procedures for participating in the Article 6 market, the Philippines has signed an Article 6.2 MoU with Singapore and is also cooperating with Japan under the Joint crediting Mechanism (JCM).

It signed up to the JCM in 2017, but so far only four projects have been registered and no credits issued. A hydro power plant project in Mindanao that could generate around 40,000 credits a year was put out for public consultation on Tuesday.

The bill also mandates the CCC, the Department of Environment and Natural Resources, and others to develop the Philippines' second NDC under Paris.

For the 2020-30 period, the country has committed to keep GHG emissions 75% below BAU levels, though only 2.71% of the pledge is unconditional while the rest depends on international assistance.

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Under the approved roadmap, the government is responsible for establishing the framework for a domestic carbon market, incorporating both an ETS and a market for carbon credits. For the ETS, the government will develop a decarbonization plan for covered sectors and allocation plans for covered entities. Certified Carbon Credits (CCCs) will be eligible for ETS compliance and can be sourced from both domestic and international mechanisms, including the Clean Development Mechanism (CDM), the Joint Crediting Mechanism (JCM), and the Article 6.4 mechanism of the Paris Agreement. MONRE will issue enabling regulations, oversee governance, and manage the

national registry and MRV systems, while the Hanoi Stock

Exchange (HNX) will operate the carbon exchange...

Source: IPBES (2024)

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Ahead of the June 2025 pilot launch, MONRE is developing the necessary regulatory framework, including defining GHG emission limits and allocation plans for the period until 2030, regulation for the recognition and management of carbon credits, and auctioning and trading rules. During this phase, the government is also prioritizing infrastructure development and capacity-building activities to prepare government agencies and covered entities...

Source: IPBES (2024)

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- During the pilot phase, running from June 2025 to December 2028, the government will allocate emissions allowances for free to facilities in high-emitting sectors. CCCs will be allowed to offset emissions within the limits set by the government. The government is expected to issue additional regulation specifying the sectors and emission thresholds covered during the Pilot Phase, with a focus on finalizing regulations and enhancing
- infrastructure to ensure a smooth transition to a fully functional market.

Source: IPBES (2024)

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- From 2029, the carbon market will become fully operational, expanding sectoral coverage and introducing auctioning mechanisms alongside the free allocation of allowances. The government will continue refining regulations, infrastructure, and oversight to enhance market efficiency and long-term effectiveness.
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- Decree 06/2022/ND-CP specifies some details of the planned ETS including the requirement for Vietnam's most emitting enterprises (as per this decision and list) to provide an account of their Greenhouse Gas emissions. Initially, the ETS will cover the same enterprises, which will receive an emission quota. If a facility exceeds their cap, it purchases additional allowances or offsets up to 10% by purchasing using carbon credits generated
- outside the compliance market, i.e. by projects of the so-called national crediting programme.

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