KINGDOM OF THAILAND'S SUSTAINABILITY-LINKED BOND PROGRESS REPORT

JUNE 2026

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Kingdom of Thailand (KOT) SLB Issuance and Framework

In recent years, the Kingdom of Thailand (KOT) has strengthened its commitment to sustainable finance and climate action by integrating environmental considerations into its public debt management strategy, in line with the country's broader climate and sustainable development agenda. As part of this ongoing transition, the Public Debt Management Office (PDMO) issued its inaugural Sustainability-Linked Bond (SLB) (SLB406A) in November 2024, following Thailand's earlier thematic bond issuances in the sustainable finance space. The bond was issued as a 15-year benchmark bond in the domestic market, marking Thailand's first sovereign sustainability-linked bond and reflecting the increasing integration of sustainability considerations into sovereign debt strategy.

This issuance positioned Thailand as the third sovereign issuer of a SLB globally and the first in Asia, reinforcing the country's leadership role in sustainable sovereign financing in the region. It also demonstrates how public debt management can serve as a policy instrument to support environmental goals, while attracting growing interest from investors in environmental, social, and governance (ESG) instruments and setting an important precedent for the development of Thailand's sustainable finance ecosystem.

As of the reporting date, the outstanding amount of the bond stands at THB 230,139 million (approximately USD 6,974 million, based on an exchange rate of THB 33 per USD)

Context

Thailand's Sustainability-Linked Financing Framework was advanced by PDMO in October 2024 as a strategic step to integrate climate policy commitments into the country's sovereign financing approach. Rather than functioning solely as a reference document, the Framework serves as a practical mechanism for linking national environmental targets with public debt instruments, thereby reinforcing the role of debt management in supporting Thailand's transition toward a low-carbon economy. It is anchored in the Long-Term Low Greenhouse Gas Emission Development Strategy and the 2nd Updated Nationally Determined Contribution (NDC 2.0), which outline Thailand's pathways to achieve carbon neutrality by 2050 and net zero greenhouse gas emissions by 2065.

While the achievement of the Key Performance Indicators (KPIs) and Sustainability Performance Targets (SPTs) depend on the implementation of climate policies and data across multiple government agencies, the SLB serves as a mechanism to strengthen transparency, accountability, and market discipline by connecting sovereign finding to measurable sustainability outcomes. The framework, therefore, supports greater alignment between Thailand's climate commitments and the sovereign financing strategy while providing investors with a clear and transparent basis for monitoring progress toward national sustainability objectives.

In its design, the Framework draws upon globally recognized principles and regional standards to ensure consistency with market expectations. These include:

- The International Capital Market Association (ICMA) Sustainability-Linked Bond Principles (SLBP) 2024;
- The Loan Market Association (LMA), Loan Syndications and Trading Association (LSTA), and Asia-Pacific Loan Market Association (APLMA) Sustainability-Linked Loan Principles (SLLP) 2023; and
- The ASEAN Capital Markets Forum (ACMF) ASEAN Sustainability-Linked Bond Standards (ASEAN SLBS) 2022.

The credibility of the Framework is further supported by an independent Second Party Opinion provided by DNV (Thailand). This external review affirmed that the Framework is aligned with the relevant international standards and that the selected KPIs and SPTs appropriately reflect the ambition and direction of Thailand's national climate policy, as presented below. These KPIs were selected because they are material to Thailand's national decarbonization pathway, measurable through established government reporting systems, and aligned with key sectors responsible for the majority of natural GHG emissions.

Table 1: SPT for each KPI as stated in the SLB Framework

KPIs	KPI1: Total Greenhouse Gas (GHG) Emissions (excluding removals from Land Use, Land Use Change and Forestry: LULUCF) ($ktCO_2e$)	KPI2: Annual registrations of Zero Emission Vehicle (ZEV) passenger cars and pick-up trucks
SPTs	SPT1: Achieve Total GHG Emissions (excluding removals from LULUCF) of 388,500 $ktCO_2e$ by 2030, which would represent a 30% reduction on from the Business-as-usual (BAU) scenario	SPT2: Increase annual registrations of ZEV passenger cars and pick-up trucks by 476% by 2030, equivalent to 440,000 passenger cars and pickup trucks
Rationale	GHG Emissions represents Thailand's commitment to addressing the impacts of climate change. SPT1 is aligned with the NDC target of 30% reduction from the BAU scenario by 2030.	The transport sector contributed 21% of Thailand's overall GHG emissions in 2019. EVs also play a crucial role in reducing pollution, particularly the particulate matter (PM2.5).

Key Characteristics of KOT's SLB

The financial characteristics of the KOT's SLB are specifically designed to embed the sustainability commitments into the sovereign debt structure, ensuring that progress toward predefined targets is financially incentivized. Accordingly, in the event that KOT fails to achieve the committed SPTs, a financial adjustment (i.e., increase in coupon payment, or a step-up) may be imposed.

For KOT's SLB launched in November 2024 ("SLB406A"), each SPT is subject to an adjustment of 2.5 basis points (bps). The key financial characteristics of SLB406A are provided in **Table 2**.

Table 2: Key financial characteristics of SLB406A

Amount Outstanding	**THB 230,139 million**	
Tenor at Initial Issuance	15 years 6 Months 23 Days	
Initial Issue Date	25 November 2024	
Maturity Date	17 June 2040	
Coupon Rate	2.70%	
	KPI 1	**KPI 2**
Target Observation Date	31 December 2030	31 December 2030
SPTs Adjusted Rate Effective Date	17 December 2035	17 December 2031
Possible Interest Rate Adjustment (in case of failure or meet SPT)	Coupon Step-Up: If SPT 1 is not met: 2.5 bps Step-Up, If SPT 2 is not met: 2.5 bps Step-Up	Coupon Step-Down: if SPT 1 is met: 2.5 bps Step-Down, if SPT 2 is met: 2.5 bps Step-Down
Interest Payment Date	Fixed rate, semi-annually (payable on 17 June and 17 December of every year throughout the terms of the Bond)	

Summary of KOT's SLB Issuance

Following the inaugural issuance, SLB406A has served as Thailand's benchmark government bond for the 15-year tenor, supporting market liquidity, price discovery, and the development of the domestic sustainability market. PDMO has conducted a series of bond re-openings to increase the outstanding amount of this bond series. These re-openings have helped to establish a sufficiently large issuance size enhancing liquidity in the domestic debt market. Collectively, these efforts contribute to the country's transition toward sustainable and resilient economic growth.

In addition, SLB406A has been designated as a destination bond for bond-switching transactions, serving as an important tool for public debt management and improving the efficiency of the government's debt portfolio. A summary of the bond issuances is provided in **Table 3**.

Table 3: Summary of KOT's SLB Issuance

Summary of Bond Series (ThaiBMA Symbol)	Transaction Date	Average Accepted Yield (%)	Account Issued/ Outstanding (THB Million)
SLB406A (Syndication)	19 Nov 2024	2.70%	30,000
SLB406A (Syndication)	14 Feb 2025	2.52 %	29,000
SLB406A (Auction)	9 Apr 2025	2.10%	15,000
SLB406A (Bond Switching)	19 May 2025	2.12%	9,000
SLB406A (Auction)	4 Jun 2025	2.03%	15,000
SLB406A (Auction)	16 Jul 2025	1.78%	15,000
SLB406A (Auction)	3 Sep 2025	1.44%	15,000
SLB406A (Auction)	15 Oct 2025	1.76%	13,434
SLB406A (Auction)	24 Dec 2025	2.01%	18,000
SLB406A (Auction)	28 Jan 2026	2.32%	15,000
SLB406A (Bond Switching)	16 Mar 2026	2.64%	10,705
SLB406A (Auction)	25 Mar 2026	2.82%	15,000
SLB406A (Auction)	22 Apr 2026	2.57%	15,000
SLB406A (Auction)	27 May 2026	2.79%	15,000
Total Amount Outstanding			**230,139**

Reporting Requirements

To ensure the transparency and credibility of data, KOT is required to disclose progress on an annual basis. Progress data are required to be readily and easily accessible on the PDMO's website at least until after the last SPT trigger event. As outlined in the framework, an SLB Progress Report will be published no later than June 30 of each year for data as of December 31 of the preceding year.

By publishing this report, KOT complies with the reporting commitments for disclosing:

- Information regarding KPI 1 (i.e., KOT's GHG inventory), in accordance with the current Nationally Determined Contribution (NDC) protocol. Data verification will be conducted as part of the NDC process and disclosed on the United Nations Framework Convention on Climate Change (UNFCCC) website.
- Information regarding KPI 2, reflecting the progress of ZEV passenger cars and pick-up trucks under the Motor Vehicle Act, in accordance with the registered data disclosed by the Department of Land Transport (DLT). Verification shall be completed by an independent external reviewer.

This report has been prepared in line with the reporting requirements under ICMA SLBP and ASEAN SLBS.

Progress of KPIs

KPI 1: Total Greenhouse Gas Emissions (excluding removals from LULUCF)

KPI 1 and SPT 1 require Thailand to limit the total GHG emissions, excluding removals from LULUCF, to 388,500 ktCO_2e by 2030. This target represents a 30% reduction from the BAU scenario of 555,000 ktCO_2e and is aligned with NDC 2.0.

The emissions data for 2023 are currently under preparation, as Thailand's GHG inventory follows the biennial reporting cycle under the UNFCCC Enhanced Transparency Framework. Therefore, the latest available verified data correspond to 2022, which were also reported in the previous report.

In 2022, Thailand's total GHG emissions (excluding LULUCF) amounted to 385,941.14 ktCO_2e, with the energy sector accounting for the largest share at 254,307.21 ktCO_2e. Total GHG emissions increased by approximately 5% compared with 2021, reflecting the rebound in economic activity following the COVID-19 pandemic. While Thailand's 2022 emissions level remained below SPT threshold of 388,500 ktCO_2e, approximately 2,559 ktCO_2e below the target threshold, continued implementation of mitigation measures across all the key sectors will be regulated to maintain emissions within the target pathway through 2030.

Figure 1: Composition of national GHG emissions by sector for 2000 - 2022

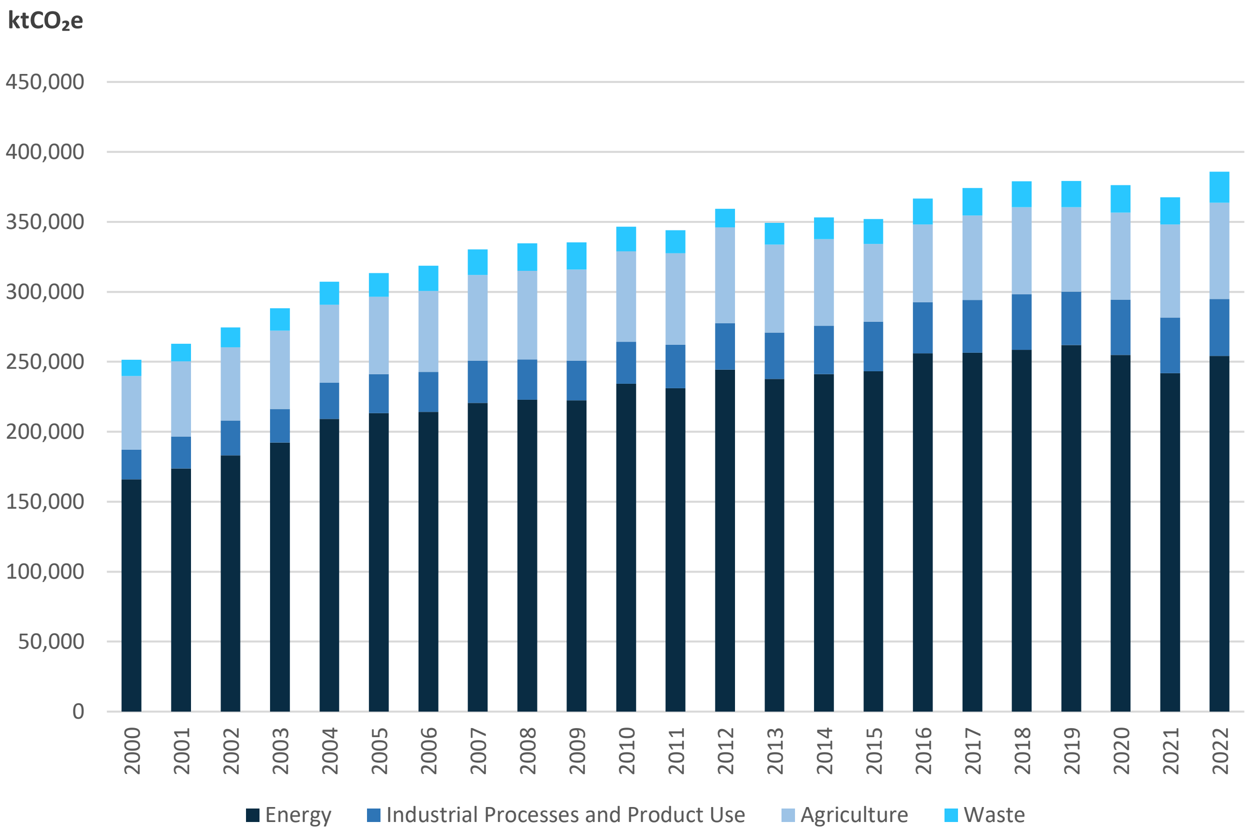


Table 4: Trend of national GHG inventory by sector for 2000-2022 (ktCO_2e)

Year	Source Category within Scope of KPI				Total GHG Emissions (excluding LULUCF)	Excluded from Scope of KPI	Net Emissions (including LULUCF)
	Energy	Industrial Processes and Product Use	Agriculture	Waste		LULUCF	
2000	165,993.49	21,270.17	52,572.93	11,584.23	251,420.82	-45,321.86	206,098.96
2001	173,786.87	22,851.86	53,757.54	12,495.26	262,891.53	-54,351.30	208,540.23
2002	183,231.35	24,914.92	52,186.51	14,210.25	274,543.02	-44,027.61	230,515.41
2003	192,201.46	24,139.99	55,978.17	15,853.86	288,173.48	-45,802.95	242,370.53
2004	209,166.96	25,882.04	55,725.52	16,486.35	307,260.86	-54,094.53	253,166.33
2005	213,347.12	27,753.14	55,412.52	16,847.51	313,360.29	-58,311.85	255,048.43
2006	214,099.94	28,638.69	57,874.22	17,981.81	318,594.66	-61,329.22	257,265.44
2007	220,511.18	30,280.50	61,155.73	18,404.05	330,351.45	-68,334.05	262,017.40
2008	222,914.54	28,741.86	63,403.46	19,614.30	334,674.15	-69,123.15	265,551.01
2009	222,506.38	28,161.54	65,243.35	19,393.56	335,304.82	-71,135.31	264,169.51
2010	234,426.01	29,785.43	64,836.71	17,516.55	346,564.69	-65,765.77	280,798.92
2011	231,177.29	31,084.66	65,291.30	16,521.13	344,074.38	-74,574.83	269,499.55
2012	244,331.59	33,222.21	68,562.67	13,117.17	359,233.63	-80,634.49	278,599.14
2013	237,795.61	33,025.81	62,898.82	15,473.29	349,193.53	-83,060.24	266,133.29
2014	241,257.40	34,537.47	61,731.03	15,754.73	353,280.63	-100,507.61	252,773.02
2015	243,336.90	35,332.02	55,637.00	17,719.75	352,025.67	-87,328.01	264,697.66
2016	255,922.33	36,772.29	55,414.17	18,580.41	366,689.20	-87,040.09	279,649.11
2017	256,586.42	37,628.02	60,345.03	19,582.99	374,142.46	-85,379.74	288,762.72
2018	258,643.32	39,623.31	62,186.58	18,507.80	378,961.00	-85,967.13	292,993.88
2019	262,082.80	37,961.73	60,486.17	18,696.48	379,227.18	-91,986.27	287,240.91
2020	254,827.70	39,609.01	62,065.69	19,799.28	376,301.68	-95,590.26	280,711.42
2021	241,921.78	39,772.72	66,503.31	19,470.95	367,668.76	-98,028.87	269,639.89
2022	254,307.21	40,527.22	68,933.74	22,172.97	385,941.14	-107,901.43	278,039.71

Given the long-term return of the target and the continued evolution of economic activity, energy demand, and sectoral emissions, the annual emissions may fluctuate over the implementation period. Therefore, progress toward SPT 1 should not be assessed solely on the basis of a single year's emission level.

Key Policy Development during the reporting period:

Thailand continued to strengthen the climate policy framework during the reporting period through a number of significant developments aimed to support long-term GHG mitigation.

In January 2025, the cabinet approved the implementation of a carbon tax at a rate of THB 200 per tCO_2e, representing an important step toward the incorporation of carbon pricing mechanisms into Thailand's climate policy framework. Furthermore, in December 2025, the cabinet approved in principle the draft climate change Act, Thailand's first comprehensive climate legislation.

These policy developments complement existing measures under Thailand's National energy plan, renewable energy expansion initiatives, electric vehicle promotion schemes, and broader commitments under the NDC, collectively supporting progress toward SPT 1.

Transparency and External Review:

A significant development during this reporting period was the successful completion of the UNFCCC Technical Expert Review (TER) process for Thailand's First Biennial Transparency Report (BTR1), with the review report officially published on 23 February 2026. The completion of the TER enhances the transparency, accuracy, and credibility of Thailand's national GHG inventory, reinforcing confidence in the reported emissions data and the country's progress toward its climate commitments.

The TER acknowledged Thailand's comprehensive GHG reporting framework, including the application of the 2006 IPCC Guidelines and the reporting of emissions across all major sectors. It also recognized progress in implementing policies and measures in areas such as renewable energy, energy efficiency, sustainable transport, agriculture, and waste management. At the same time, the review identified opportunities for further improvement, particularly in strengthening data completeness, Quality Assurance/Quality Control (QA/QC) systems, and methodological transparency. Thailand continues to strengthen institutional arrangements data systems, and technical capacity in response to these recommendations.

In summary, the best available emissions data, together with on going policy developments and the successful completion of the UNFCCC TER process, provide evidence of the continued progress toward Thailand's long-term climate objectives, including achievement of the NDC target, carbon neutrality and net zero GHG emission within the specified time frame.

KPI 2: Annual registrations of Zero Emission Vehicle (ZEV) passenger cars and pick-up trucks

KPI 2 and SPT 2 require Thailand to increase annual registrations of ZEV passenger cars and pick-up trucks to 440,000 vehicles by 2030, representing an increase of 476% from the baseline year and supporting Thailand's broader objective under the 30@30 policy. The transport sector accounted for approximately 21% of Thailand's total greenhouse gas emissions in 2019, making vehicle electrification an important component of the country's decarbonization strategy.

As shown in **Table 5** and **Figure 2**, the registrations of ZEV passenger cars and pick-up trucks increased significantly from 70,582 vehicles in 2024 to 122,796 vehicles in 2025, representing year-on-year growth of approximately 74.0%. During the same period, total registrations of passenger cars and pick-up trucks increased modestly from 649,280 vehicles to 656,274 vehicles, equivalent to growth of approximately 1.08%.

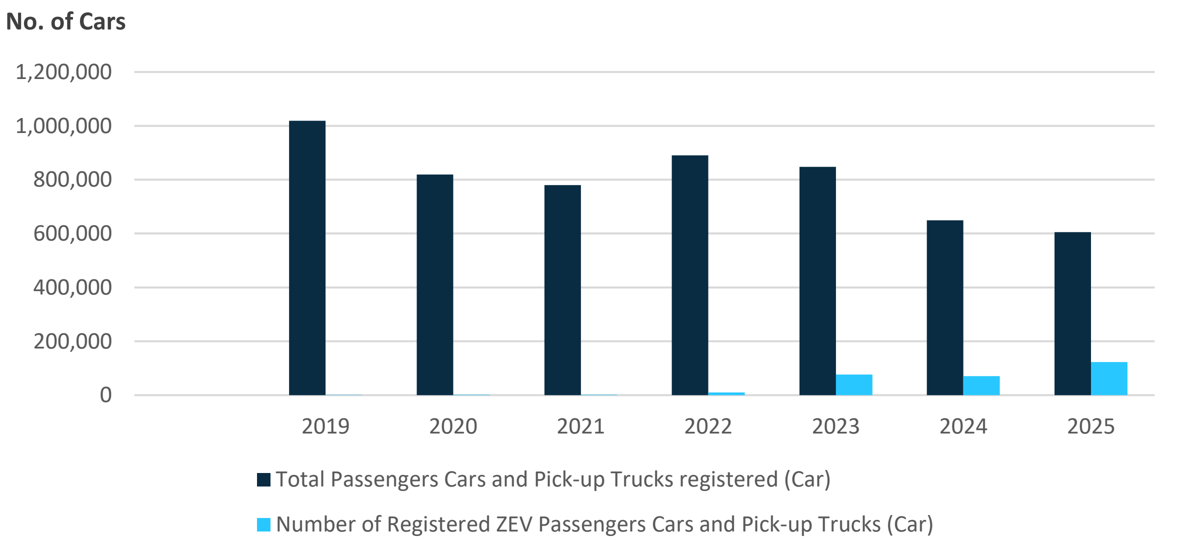
As a result, the share of ZEV registrations in total passenger car and pick-up truck registrations increased from 10.87% in 2024 to 18.71% in 2025. This reflects continued growth in consumer adoption of zero-emission vehicles despite relatively subdued conditions in the overall automotive market.

Table 5: Number of Registered ZEV Passenger Car and Pick-up Trucks

	Unit	2019	2020	2021	2022	2023	2024	2025
Total Passengers Cars and Pick-up Trucks registered	Car	1,018,722	818,810	779,924	890,615	847,385	649,280	656,274
Number of Registered ZEV Passengers Cars and Pick-up Trucks	Car	691	1,288	1,958	9,674	76,361	70,582	122,796
% ZEV market share	%	0.07	0.16	0.25	1.09	9.01	10.87	18.71
% Achievement Against Target	%	0.16	0.29	0.45	2.20	17.35	16.04	27.91
30@30 Policy Target: 440,000 vehicles in 2030								

Source: Department of Land Transport

Figure 2: Numbers of Registered ZEV Passenger Car and Pick-up Trucks



Trajectory Assessment Toward SPT 2:

Progress toward SPT 2 continued to improve during the reporting period. Based on 2025 registrations, Thailand has achieved approximately 27.91% of the 2030 target of 440,000 annual ZEV registrations. While substantial growth will still be required over the remainder of the implementation period, the pace of adoption observed in recent years demonstrates continued momentum in the transition toward electric mobility.

Achieving the 2030 target would require average annual growth of approximately 29% in annual ZEV registrations between 2026 and 2030. Although future market conditions, technological developments, and consumer demand remain uncertain, current adoption trends suggest that Thailand has established a strong foundation for further expansion of the ZEV market. Continued implementation of supportive policies and investments in charging infrastructure, manufacturing capacity, and supply chains will remain important factors in maintaining progress toward SPT 2.

Key Drivers of Performance:

The increase in ZEV registrations during 2025 reflected the following key factors:

- Policy support: Continued implementation of EV 3.0 and EV 3.5 provided purchase subsidies, tax incentives, and domestic production requirements, alongside targeted flexibility adjustments introduced by the National Electric Vehicle Policy Board.
- Ecosystem expansion: Cumulative Board of Investment (BOI) approved investment in the domestic (Electric Vehicle) EV supply chain reached approximately THB 137.7 billion, with charging infrastructure expanding to more than 3,700 stations and approximately 11,000 outlets nationwide.
- Market conditions: The number of registered Battery Electric Vehicle (BEV) passenger car brands increased to 58 brands, expanding consumer choice, while easing financing constraints contributed to a gradual recovery in vehicle demand.

This momentum is further reflected in Thailand's progress toward its 30@30 policy targets. The achievement rate against the ZEV registration target increased significantly from 16.04% in 2024 to 27.91% in 2025, indicating accelerated progress toward the country's long-term vehicle electrification objectives.

Thailand's Policies, Mitigation Measures and Actions

Overview of Policy Framework

Thailand continues to advance a comprehensive climate policy framework to support its transition toward a low-carbon and climate-resilient economy. The framework is underpinned by a combination of national development strategies, sectoral transition plans, and international climate commitments that collectively guide greenhouse gas mitigation efforts and sustainable economic development.

At the national level, climate change considerations have been integrated into the 20-Year National Strategy (2018–2037), the 13th National Economic and Social Development Plan (2023–2027), the Climate Change Master Plan (2015–2050), and Thailand's Long-Term Low Greenhouse Gas Emission Development Strategy (LT-LEDS). These frameworks provide strategic direction for reducing greenhouse gas emissions, strengthening climate resilience, and promoting sustainable resource management across all sectors of the economy.

Thailand's climate actions are further guided by its NDC under the Paris Agreement. During the reporting period, Thailand submitted its Second Nationally Determined Contribution (NDC 3.0) to the UNFCCC, marking a significant milestone in strengthening the country's climate ambition. Under NDC 3.0, Thailand has accelerated its net zero GHG emissions target from 2065 to 2050, bringing the target forward by 15 years to align with the 1.5°C pathway and reinforcing its commitment to reducing GHG emissions and advancing a low-carbon future.

The policies and measures described in this section support the achievement of the SPTs established under Thailand's SLB Framework. In particular, they contribute to the reduction of national GHG emissions under KPI 1 and the acceleration of ZEVs adoption under KPI 2.

Mitigation Measures and Actions

Measures Supporting KPI 1: Total GHG Emissions:

1) Thailand's Second Nationally Determined Contribution (NDC 3.0)

In November 2025, Thailand submitted its NDC 3.0 to the UNFCCC. The updated NDC represents a significant evolution of Thailand's climate ambition, transitioning from a business-as-usual reduction approach toward an economy-wide absolute GHG emissions reduction target based on a 2019 baseline year. Under NDC 3.0, Thailand targets a reduction in net greenhouse gas emissions to 152 $MtCO_2eq$ by 2035, a 47% reduction from the 2019 baseline, and accelerates its net-zero target from 2065 to 2050.

The updated NDC covers all major greenhouse gas emitting sectors, including energy, transport, industry, agriculture, and waste. Implementation is supported through the Nationally Determined Contribution Action Plan (2021–2030), which coordinates sector-specific mitigation measures and investment priorities across government agencies.

The GHG emissions target embedded within Thailand's SLB Framework is directly derived from Thailand's NDC commitment. Consequently, progress toward SPT 1 is closely linked to the successful implementation of policies and measures supporting NDC 3.0.

2) Climate Change Act

A major policy milestone during the reporting period was the Cabinet's approval in principle of the draft Climate Change Act in December 2025. The proposed legislation represents Thailand's first comprehensive climate law and aims to establish a unified legal framework for climate governance, greenhouse gas mitigation, climate adaptation, and sustainable finance. It also marks a shift from largely voluntary and sector-specific climate measures toward a more coordinated national approach, as achieving Thailand's emissions reduction targets requires structured participation from both the public and private sectors under a single enforceable framework.

The draft legislation includes provisions relating to:

- Legal and Institutional Framework: Establishment of a national-level committee to oversee climate policy, set GHG reduction targets, and coordinate implementation across government agencies.
- Climate Finance and Investment: Establishment of a Climate Fund and promotion of sustainable finance instruments, including green bonds, SLBs, and carbon credit markets.
- Monitoring, Reporting, and Verification (MRV): Introduction of a mandatory GHG reporting system to enhance transparency, accountability, and data integrity across key emitting sectors.
- Sectoral Actions: Application of mitigation measures across key sectors, including energy, transport, industry, waste, and agriculture, with consideration of international alignment mechanisms including Thailand's engagement with Article 6 of the Paris Agreement.

The draft legislation is currently undergoing legal review by the Council of State and will subsequently be submitted to Parliament for consideration. Preparatory work is also underway to support future implementation, including the development of subordinate regulations and institutional arrangements. Once enacted, the Act is expected to strengthen policy coordination across government agencies and the regulatory foundations supporting the sustainability commitments outlined in Thailand's SLB framework.

3) Carbon Pricing Initiatives

Thailand continued to advance market-based climate policy instruments during the reporting period. In January 2025, the Cabinet approved the implementation of a carbon tax at a rate of THB 200 per metric ton of carbon dioxide equivalent (tCO_2e), integrated within the existing excise tax framework.

The introduction of carbon pricing represents an important step in strengthening economic incentives for GHG mitigation. By incorporating carbon costs into economic decision-making, the measure is expected to encourage improvements in energy efficiency, support investment in low-carbon technologies, and facilitate emissions reductions across key sectors of the economy.

4) National Energy Plan

The energy sector remains the largest contributor to Thailand’s GHG emissions, accounting for approximately 66% of total national emissions in 2022. As a result, transformation of the energy sector is expected to play a central role in achieving Thailand's climate objectives and supporting progress toward SPT 1.

To facilitate this transition, Thailand is advancing the National Energy Plan (NEP), which integrates five major energy policy frameworks: the Power Development Plan (PDP), Alternative Energy Development Plan (AEDP), Energy Efficiency Plan (EEP), Oil Plan, and Gas Plan.

The NEP aims to enhance energy security, improve energy efficiency, and accelerate the deployment of low-carbon technologies. Current plans target renewable energy accounting for more than 50% of electricity generation by 2037, while supporting investment in emerging technologies including battery energy storage systems (BESS), carbon capture, utilization and storage (CCUS), and hydrogen applications.

In the transport sector, the NEP supports the expansion of EVs with a target of at least 30% ZEV share in new registrations by 2030, alongside investment in charging infrastructure, public transport electrification, and rail network expansion. These measures directly support progress toward SPT 2 under Thailand's SLB framework.

Implementation of the NEP is expected to require approximately THB 2.9 trillion in investment between 2024 and 2037 across renewable energy generation, transmission systems, energy storage infrastructure, EV ecosystems, and related low-carbon technologies. These investments are expected to contribute significantly to reducing emissions from Thailand's largest emitting sector and support achievement of both SPT 1 and SPT 2.

5) Transparency and Reporting Enhancements

During the reporting period, Thailand successfully completed the UNFCCC TER process for its BTR1. The review report was officially published on 23 February 2026.

The completion of the TER strengthens confidence in Thailand's GHG inventory system and demonstrates continued progress in transparency and data quality. Reporting is consistent with international standards under the UNFCCC Enhanced Transparency Framework. The review acknowledged Thailand's comprehensive reporting framework while also identifying opportunities for further improvement in data completeness, quality assurance and quality control systems, and methodological transparency. The successful completion of the TER reinforces confidence in the emissions data underlying KPI 1 and Thailand's progress toward SPT 1.

Measures Supporting KPI 2: Annual Registrations of ZEV Passenger Cars and Pick-up Trucks:

1) EV Transition

The transport sector accounted for approximately 21% of Thailand's GHG emissions in 2019, making it a priority area for the country's decarbonization efforts. The electrification of road transport is a key component of Thailand's decarbonization strategy and directly supports KPI 2 under the SLB Framework.

Thailand's 30@30 policy aims to accelerate the transition toward zero-emission mobility by increasing the share of ZEV production and adoption within the domestic automotive sector.

2) EV 3.0 and EV 3.5 Schemes

The EV 3.0 and EV 3.5 schemes serve as Thailand's principal policy instruments for promoting EV adoption and developing domestic manufacturing capabilities.

The schemes combine demand-side measures, including purchase subsidies, excise tax reductions, and temporary import duty relief, with supply-side measures requiring participating manufacturers to establish domestic production capacity. This dual approach aims to stimulate vehicle adoption while strengthening Thailand's position as a regional electric vehicle manufacturing hub.

Financial Incentives

- Subsidies for EV Purchases:
  - Under the EV 3.0 scheme (2022–2025), the government provided direct purchase subsidies of up to THB 150,000 per vehicle for BEVs priced not exceeding THB 2 million. Vehicles not meeting the full eligibility criteria received a lower subsidy of THB 70,000 per unit.
  - Under the EV 3.5 scheme (2024–2027), subsidy levels have been adjusted to more closely reflect vehicle performance specifications. For eligible vehicles priced not exceeding THB 2 million, subsidies of THB 100,000 and THB 75,000 are available in 2024 and 2025 respectively. Vehicles with lower performance specifications receive reduced subsidies in the range of THB 20,000–50,000 per unit.

These adjustments reflect a gradual transition away from broad demand-side subsidies as the market matures, with greater focus on higher-performance EV technologies.

- Tax Reductions:

Both EV 3.0 and EV 3.5 provide fiscal incentives through a reduction in excise tax for BEVs to approximately 2%, subject to compliance with scheme conditions. Import duties on completely built-up (CBU) EVs were also reduced or exempted during the initial phase of market development to improve vehicle affordability and support market entry.

Under EV 3.5, import duty incentives are primarily limited to the early phase of the scheme (2024–2025), reflecting a policy shift toward encouraging domestic manufacturing over imports. This is consistent with Thailand's broader objective of developing a domestic EV production base.

Production Obligations

Both schemes impose local production requirements on participating manufacturers to ensure that import privileges are matched by domestic investment. Under EV 3.0, manufacturers are required to offset imported vehicles with domestic production at a ratio of 1:1, rising to 1:1.5 by 2025. Under EV 3.5, these requirements are further strengthened, with required domestic production ratios increasing to 1:2 in 2026 and 1:3 in 2027 relative to imported volumes.

Any outstanding production obligations under EV 3.0 are carried forward into the EV 3.5 scheme, with manufacturers required to fulfill existing commitments before qualifying for additional incentives under the new scheme.

Policy Adjustments During the Reporting Period

In July 2025, the National Electric Vehicle Policy Board approved targeted adjustments to the implementation of the EV 3.0 and EV 3.5 schemes, including extensions to registration timelines, modifications to production compensation requirements, and enhanced flexibility in subsidy disbursement arrangements. These adjustments are intended to support orderly market development, maintain investor confidence, and ensure continuity of policy support during a period of rapid expansion in Thailand’s EV industry.

3) Expansion of Thailand's EV Ecosystem

Thailand's EV ecosystem continued to expand during the reporting period through sustained public and private sector investment.

According to the BOI, cumulative approved investment in the domestic EV supply chain reached approximately THB 137.7 billion. Investment activities span vehicle assembly, battery manufacturing, charging infrastructure, battery-swapping systems, and supporting industries.

At the same time, charging infrastructure continued to expand nationwide. By 2025, Thailand had more than 3,700 charging stations and approximately 11,000 charging outlets in operation. Consumer choice also continued to improve, with the number of registered BEV passenger car brands increasing to 58 brands during the year.

The continued development of manufacturing capacity, charging infrastructure, and supporting supply chains, combined with the financial incentives, domestic production requirements, and policy flexibility introduced during the reporting period, is expected to strengthen the long-term growth potential of Thailand's EV market and support sustained growth in ZEV adoption toward the SPT 2 target of 440,000 annual registrations by 2030.

Conclusion

Thailand continues to strengthen the policy, regulatory, and investment frameworks necessary to support achievement of the SPTs established under its SLB Framework. The implementation of NDC 3.0, advancement of the Climate Change Act, introduction of carbon pricing mechanisms, execution of the NEP, and expansion of EV support measures collectively demonstrate continued progress toward Thailand's climate objectives.

These measures provide an integrated policy foundation supporting reductions in GHG emissions, acceleration of transport electrification, achievement of Thailand's NDC commitments, and contributes to the country's pathway toward net zero GHG emissions by 2050.

Calculation Methodology

GHG Emissions

Thailand's GHG inventory was developed and submitted in accordance with Article 4 and 12 of the UNFCCC and Article 13 of the Paris Agreement. Thailand's GHG inventory encompasses emissions and removals from various sectors, including Energy, IPPU, Agriculture, LULUCF, and Waste. Estimated emissions were prepared based on the 2006 IPCC Guidelines, and any subsequent versions or refinement of the IPCC Guidelines and recorded on the TGEIS platform. TGEIS is a robust architecture enabling standardized data collection, effective compilation, reporting and verifying emission data whilst ensuring alignment with international standards. Both direct and indirect emissions are recorded as details in **Table 6**.

Table 6: List of recorded direct and indirect emissions in TGEIS

Direct Emissions	Indirect Emissions
Carbon Dioxide (CO_2)	Nitrogen Oxides (NOx)
Methane (CH_4)	Carbon Monoxide (CO)
Nitrous Oxide (N_2O)	Non-Methane Volatile Organic Compounds (NMVOCs)
Hydrofluorocarbons (HFCs)	Sulphur Dioxide (SO_2)
Perfluorocarbons (PFCs)	
Sulphur Hexafluoride (SF_6)	
Nitrogen Trifluoride (NF_3)	

For each sector, Thailand adopted a combination of Tier 1 and Tier 2 methodologies depending on the availability of data (e.g., direct and indirect GHGs) and country-specific emission factors, details as follows:

- Energy Sector: Emissions from fuel combustion and fugitive emission were estimated using activity data from national energy statistics. Tier 1 approach was primarily used.
- Industrial Processes and Product Use: Emissions were calculated based on production data from industries. Tier 1 methodology was applied.
- Agriculture: A combination of Tier 1 and Tier 2 is used, for example categories like Enteric Fermentation and Manure Management, Tier 2 approach was adopted, using country-specific emission factors derived from local studies. Whilst other categories, such as rice cultivation and agricultural soils, adopted the tier 1 methodology with default emission factors.
- LULUCF: Tier 2 methodology was applied across all subcategories, utilizing national forest inventory data and remote sensing.
- Waste: Emission from solid waste disposal, wastewater treatment and waste incineration were estimated using Tier 1 approach.

To calculate GHG emissions using the TGEIS, following the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, the focus is on direct GHG emissions, including Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulphur Hexafluoride (SF_6) from the Energy, IPPU, Waste, and Agriculture sectors. This calculation is linked to Thailand's SLB through the use of Total GHG Emissions (excluding removals from LULUCF) as a KPI, with data reported annually in the SLB Progress Report and biennially in the BTR.

Electrical Vehicle Registration

Under the SLB Framework, KPI 2 is defined as the annual registration of ZEV passenger cars and pick-up trucks as defined in the Motor Vehicle Act. Thailand has seventeen classification of vehicle types defined in the Motor Vehicle Act, covering sedans, vans, taxis, motorcycles and tractors etc. However, according to the discussion with the Excise Department and the BOI, the following types of vehicles shall be included as "passenger cars and pick-up trucks" under the 30@30 policy.

- Sedan, not more than 7 passengers (Code: Ror.Yor 1)
- Microbus and Passenger Van (Code: Ror.Yor 2)
- Van and Pick-up (Code: Ror.Yor 3)
- Interprovincial Taxi (Code: Ror.Yor 5)
- Urban Taxi (Code: Ror.Yor 6)
- Hotel Taxi (Code: Ror.Yor 9)
- Tour Taxi (Code: Ror.Yor 10)
- Car for Hire (Code: Ror.Yor 11)

The active advancement of adopting EVs is a key strategy to meet the NDCs and facilitate green transition. According to the discussions with the BOI and Excise Department, the baseline year was agreed to be 2023 as it is the most recent and presented as most reliable. Registration data have been derived and consolidated from the raw data disclosed on the DLT website and cross-checked against information disclosed by the Thailand Automotive Institute (TAI) website. No deviations between the two sources were identified.

External Verification

Reports from both independent verifiers conclude that the 2022- 2025 data is accurate.

KPI 1

KPI 1 data (report date 28 December 2022) has been externally verified.
Performance of KPI 1 for the year 2022 has been reviewed and verified by technical experts under the UNFCCC through the International Consultation and Analysis (ICA) process as part of Thailand's NDC reporting, and subsequently through the TER of Thailand's BTR1 under the Paris Agreement. Both reports are available on the UNFCCC website.

KPI 2

KPI 2 data for 2025 has been externally verified.
Performance of KPI 2 for the year 2025, was reviewed and verified by United Nations Development Programme (UNDP). A limited assurance verification report is available on the PDMO website.

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