

Transport and Climate Profile

Thailand



Credits: unsplash

Developed by:



Developed with the support of:



Introduction to the profiles: These “Transport and Climate Profiles” are part of the research work entitled “Transport NDC Gap Analysis for Low- and Middle-Income Countries (LMICs) in Asia and the Pacific” which is being implemented and builds on the work of the Asian Transport Outlook (ATO), a project initiated and supported by the Asian Development Bank (ADB). ATO is also being supported by the Asian Infrastructure Investment Bank (AIIB). The research is being co-funded by UKAID through the UK Foreign, Commonwealth and Development Office (FCDO) under the High-Volume Transport (HVT) Applied Research Program managed by DT Global International Development UK LTD (DT Global). The research is being implemented under HVT057 (Transport Decarbonisation Index - <https://transport-links.com/funded-projects/transport-decarbonisation-index-tdi>) whose lead research supplier is the Partnership on Sustainable, Low Carbon Transport. These profiles are designed to complement the main report of the research entitled *Bridging the Gap: A Deep Dive into NDCs and Transport Policy Landscapes in Low- and Middle-Income Asian Economies*. While intended as supplementary materials, they also function as standalone knowledge products. All the related knowledge products will be made available through <https://asiantransportoutlook.com/analytical-outputs/ndc-analysis> and <https://asiantransportoutlook.com/analytical-outputs/transportclimateprofiles/>

The Asian Transport Outlook (ATO) is an initiative that aims at strengthening the knowledge base on transport in the Asia-Pacific region. It supports the planning and delivery of transport-related assistance in Asia, supports wider transport policy making, and helps track global and regional processes related to sustainable development. For example, ATO is the monitoring mechanism for the Aichi 2030 Declaration on Environmentally Sustainable Transport – Making Transport in Asia Sustainable (2021-2030) which was adopted by more than 20 countries in Asia-Pacific through the High Level Environmentally Sustainable Transport Forum (EST) that is organized by the United Nations Centre for Regional Development (UNCRD)-DSDG/UN DESA, along with its partners. For more information, visit asiantransportoutlook.com

This profile is structured into two main sections: Data Insights and Policy Insights. Under “Data Insights”, individual components at the intersection of transport and climate change are detailed. Similarly, the “Policy Insights” section outlines various policy documents, measures, and targets.

Disclaimer: The ATO project collects, collates, organizes, and presents transport-relevant data from publicly available official sources and reputable, peer-reviewed secondary sources. Users should be aware that: the ATO does not generate any primary data; the source data may contain inconsistencies or gaps; despite rigorous quality control measures, the ATO cannot guarantee the absolute accuracy, completeness, or suitability of the data for specific purposes.

Users of the data and derived knowledge products are strongly advised to: independently verify and validate all data before use; exercise professional judgment in data interpretation and application; and acknowledge that any reliance on ATO data is at the user’s own risk. Users should also note that data may be subject to updates or revisions. It is the user’s responsibility to ensure they are working with the most current version of the data available.

The ATO, and all affiliated organizations: make no representations or warranties, express or implied, regarding the data’s accuracy, completeness, or fitness for any particular purpose; and disclaim all liability for any direct, indirect, incidental, consequential, or special damages arising from the use of or reliance upon ATO data or derived products. The views expressed in this knowledge product do not necessarily reflect the official policies of any of the organisations mentioned above.

The designations, presentations, and materials in this publication, including citations, maps, and bibliography, do not express or imply any opinion on the part of the ATO or involved organizations regarding the legal status of any country, territory, city, area, or its authorities, or concerning the delimitation of frontiers or boundaries. By using the data or derived products, users agree to indemnify and hold harmless the ATO, its supporting organizations, and all affiliated organizations from any claims, losses, or damages resulting from such use.

Suggested Citation:

Asian Transport Outlook (ATO). (2024). Transport and Climate Profile: Thailand, <https://asiantransportoutlook.com/analytical-outputs/countryprofiles/>

For any questions or information related to this publication, please write to asiantransportoutlook@gmail.com.

Photographs used are copyright free.

Transport and Climate Profile: Thailand

2024

The publication is available at <https://asiantransportoutlook.com/analyticaloutputs/countryprofiles/>

Contents

Data Insights

- I Transport and Climate Change
- II Transport Energy Consumption
- III Adaptation and Resilience
- IV Other Externalities
- V Vehicle Fleet
- VI Urban Transport
- VII Transport Investments

Policy Insights

- VIII Transport and Climate Policy Documents
- IX Representation of Transport in Key Climate Policy Documents
- X Distribution of Transport and Climate Policy Measures in Policy Documents
- XI National Policy Priorities on Transport
- XII Direct GHG Targets
- XIII Indirect Transport Climate Change Targets
- XIV Transport and Climate Policy Measures

Executive Summary

Thailand, an upper-middle-income economy in Southeast Asia, is experiencing a critical juncture in its transportation sector concerning climate change. The sector's CO₂ emissions in 2022 reached about 81 million tonnes, constituting 29% of the nation's total fossil CO₂ emissions. Alarming, the growth rate of these emissions has accelerated since 2015, reaching 4% annually. This contrasts with the Asia-Pacific average growth of -1% during the same period, highlighting Thailand's unique challenge.

CO₂ Emissions:

- Thailand's transport sector significantly contributes to climate change, with CO₂ emissions reaching 79 million tonnes in 2023, representing 29% of the total economy-wide emissions. While emissions growth has slowed since the adoption of the Paris Agreement and SDGs, the annual increase of 3% since 2015 remains concerning, particularly compared to the Asia-Pacific average of 1% between 2019 and 2023. The road sector dominates emissions, contributing 96% of the transport sector's CO₂ output.

Energy Consumption:

- In 2021, Thailand's transport sector consumed 1,146,394 terajoules of energy, primarily driven by road transport (99%), with oil products accounting for 89% of road sector energy use. While biofuels and electricity accounted for only 8% by 2021, electricity's share in rail sector energy consumption increased to 21%. Between 2000 and 2010, transport sector energy consumption grew at an annual rate of 3%, slowing down to 2% annually since 2010. Thailand's energy intensity, measured as megajoules per USD of GDP, was 0.85 in 2021, showing an improvement compared to previous years. Thailand's grid emission factor was 561 gCO₂ per kWh in 2022, decreasing by about 6% from 2015. Between 2010-2022, Thailand's fossil fuel subsidies totaled 155 million USD.

Adaptation and Resilience:

- A Growing Concern Thailand faces an average annual loss of \$125.78 million (0.01% of GDP) due to hazards impacting its transport infrastructure, primarily roads (78%) and rail (21%). This is part of a more significant trend in Southeast Asia, with the subregion facing an estimated \$10.34 billion in annual losses (0.02% of GDP). While Thailand's road vulnerability ranks 66th globally, the fact that 10% of its population lives in low-lying coastal zones highlights its vulnerability to climate-related hazards.

Vehicle Fleet:

- Electrification Gains Momentum Thailand's vehicle fleet has grown significantly, reaching 42.76 million vehicles in 2023, or 596 vehicles per thousand people. This surpasses the 2022 average for Asia-Pacific (577 vehicles per thousand people) and Southeast Asia (505 vehicles per thousand people). The majority of Thailand's vehicle fleet consists of two-wheelers (52%) and light-duty vehicles (LDVs) (44%). While the country has a history of importing buses, with \$2.19 billion USD worth imported between 2015-2023, the focus has shifted towards electric vehicles (EVs). Between 2017-2023, Thailand imported \$4.66 billion USD worth of EVs, primarily electric LDVs (98%). This reflects a remarkable increase in EV adoption, as the share of electric vehicle imports grew from 0.9% in 2017 to 45.2% in 2023, outpacing the Southeast Asia subregion's 16.1% share. Thailand's commitment to e-mobility is further evidenced by its high E-mobility Readiness Index score of 82/100 in 2024, highlighting its progress in technology access, EV policy, clean energy, and financial instruments.

Urban Transport:

- Expanding Rapid Transit Thailand has made strides in expanding its urban rapid transit network, reaching 2.98 kilometers per million urban population in 2021. However, access to public transport remains uneven across cities, necessitating further investments in infrastructure and service provision.

Investments:

- Shifting Priorities Official development assistance and public-private partnerships have played pivotal roles in transport investments. A noticeable shift towards rail projects has occurred in recent years.

Policy Landscape:

- Thailand's transport sector presents a complex landscape of low-carbon policies, showcasing both alignment with national climate goals (NDCs) and notable gaps and opportunities. With 31 relevant transport documents, 7 specifically addressing climate, and 23 containing climate mitigation or adaptation components, the policy framework demonstrates a significant focus on decarbonization. Thailand's 2nd Updated NDC (2022) outlines economy-wide emissions reduction targets of 20-30% from the projected business-as-usual (BAU) level by 2030, alongside renewable energy targets. Notably, it lacks a transport-specific GHG emissions target and a net-zero or long-term emissions target found in the Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy (2021). This LTS envisions peaking emissions in 2030 and achieving net-zero emissions by the second half of this century, with a transport sector-specific mitigation target of 41.0 MtCO₂eq.
- The transport sector's policy landscape is characterized by diverse targets, spanning biofuels, e-mobility, renewable energy, and energy consumption, among others. These targets are outlined in various documents, including the Thailand Greenhouse Gas Reduction Action Plan for the Transport Sector, Thailand's Action Plan to Reduce Aviation Emission, and The Thirteenth National Economic and Social Development Plan (2023-2027). Despite the comprehensive policy framework, policy gaps exist. While e-mobility, rail infrastructure expansion, and aviation improvements are among the top climate change policy priorities, only 14% of the measures originate from the NDC or LTS, and only 11% address adaptation and resilience.
- The analysis reveals opportunities for more substantial policy alignment between national climate goals and sectoral actions, particularly in transport. There's potential to integrate adaptation and resilience considerations more comprehensively into policy measures. Further, the focus on e-mobility, rail infrastructure, and aviation improvements could be leveraged to accelerate emissions reductions in the transport sector.
- Thailand's transport sector policy framework showcases a commitment to low-carbon development. However, addressing policy gaps and harnessing identified opportunities can enhance the sector's contribution to national climate goals and ensure a more sustainable and resilient transport system. In conclusion, Thailand's transport sector faces a complex interplay of challenges and opportunities in its pursuit of a sustainable and climate-resilient future. Bridging policy gaps, accelerating the transition to low-carbon technologies, and enhancing adaptive capacity are crucial steps in mitigating emissions, improving energy efficiency, and ensuring the sector's resilience to climate change impacts.

Data Insights Thailand



Thailand

Transport and Climate Profile

Population (2024)
71.9 million

Urban population
54%

Below 18 y.o.
19%

Population density
141 persons per sqkm

Rural population
46%

Above 60 y.o.
24%

Subregion
(1) **South East Asia**

Gross domestic product
(1) (GDP PPP, 2023)
1.68 trillion USD

(1) Domestic consumption per capita, tonnes (2024)
11.4 tonnes

(1,2) *Domestic consumption is the total amount of materials directly used in the economy (used domestic extraction plus imports), minus the materials that are exported.*

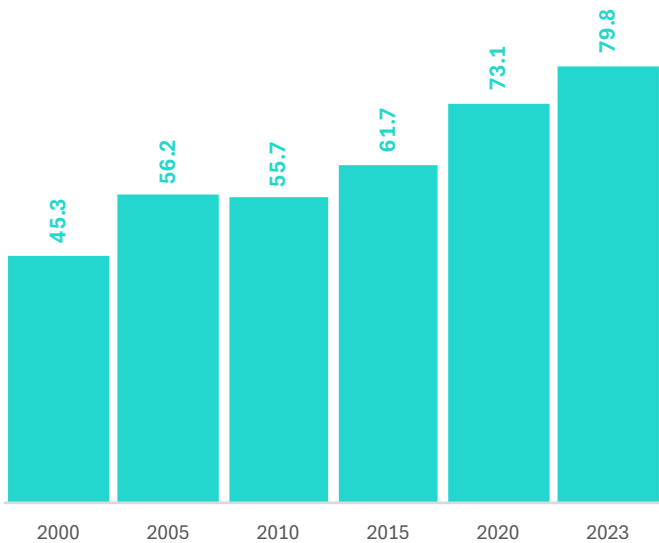
Income class
Upper middle income

GDP per capita (PPP, 2023)
23,423 USD (1,2)
(2)

(3)

I. Transport and Climate Change

Transport fossil CO2 emissions, million tonnes



In 2010, transport contributed 23% of total fossil CO2 emissions. By 2023, transport contributed 29%.

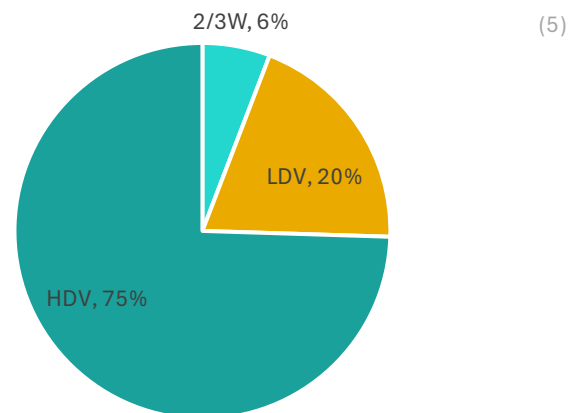
Share of transport CO2 emissions by mode (2022)

(4) | Road **95.8%** (4)
| Rail **0.3%**
| Navigation **0.7%** (4)
| Aviation **3.1%** (4)

Navigation and aviation only includes domestic transportation

Between 2000-2015, road transport contributed 96% in transport fossil CO2 emissions. Between 2016-2022, road transport contributed 96%.

Road transport CO2 emissions (well-to-wheel), share by mode (2022)



Transport CO2 emissions intensity (2023)

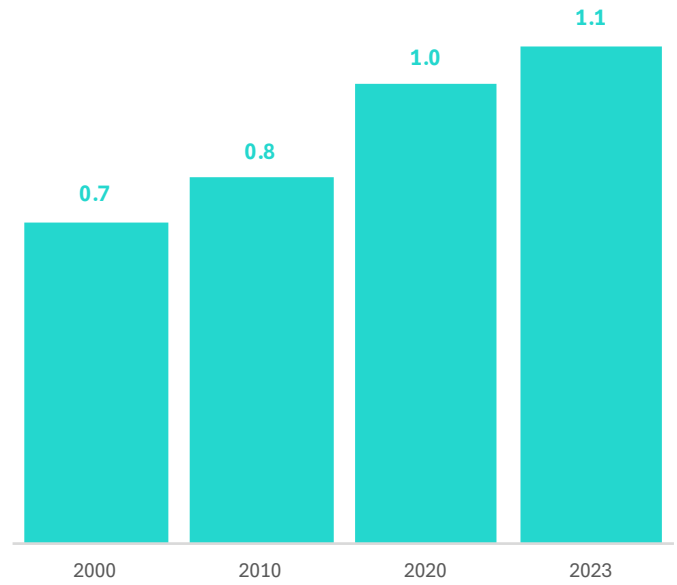
47 gCO2 per USD

(2,4)

Asia-Pacific average is 32 gCO2 per USD

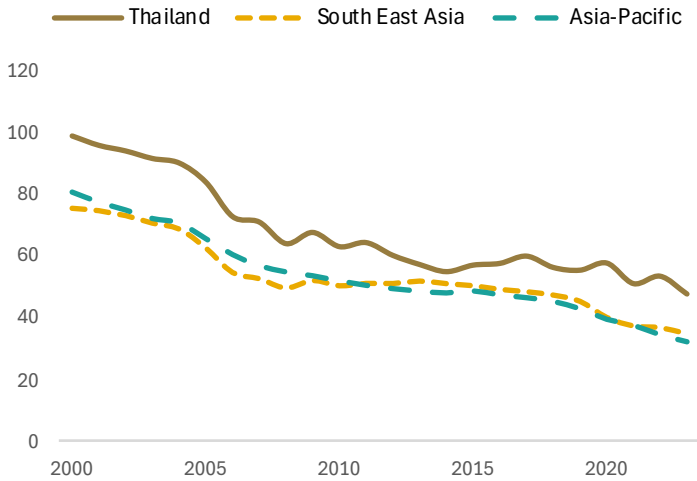
Transport fossil CO2 emissions per capita, tonnes

(1,4)



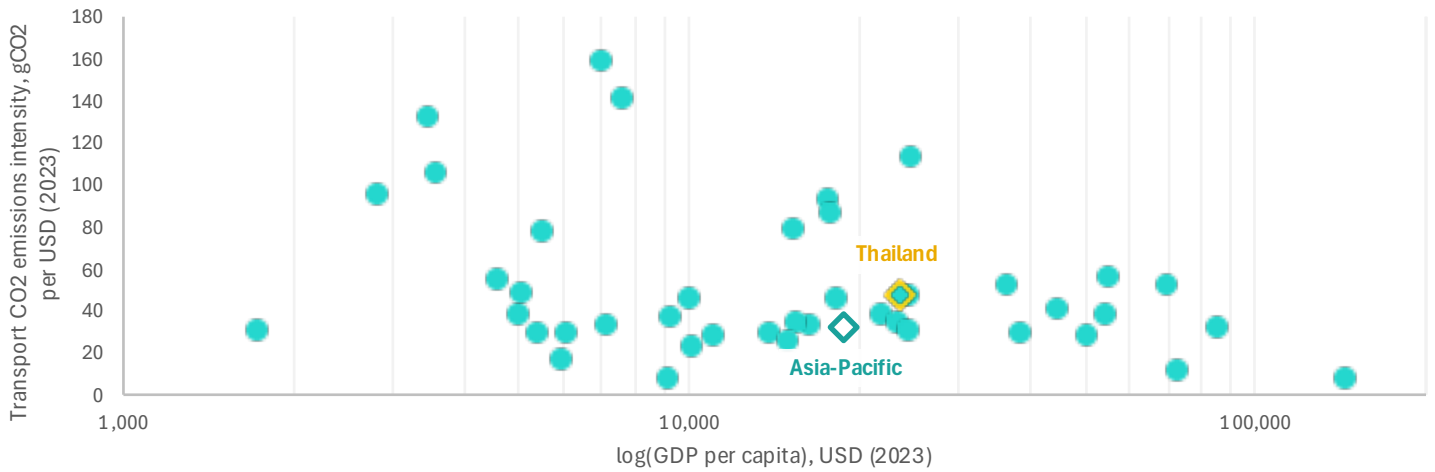
Transport CO2 emissions intensity trend, gCO2 per USD

(2,4)



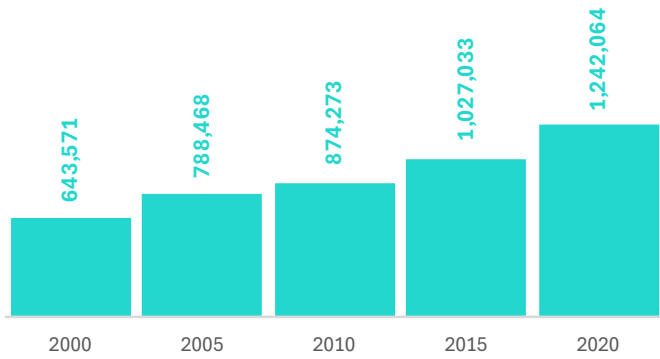
Transport CO2 emissions intensity in Asia-Pacific, gCO2 per USD

(2,4)



II. Transport Energy Consumption

Transport energy consumption, TJ

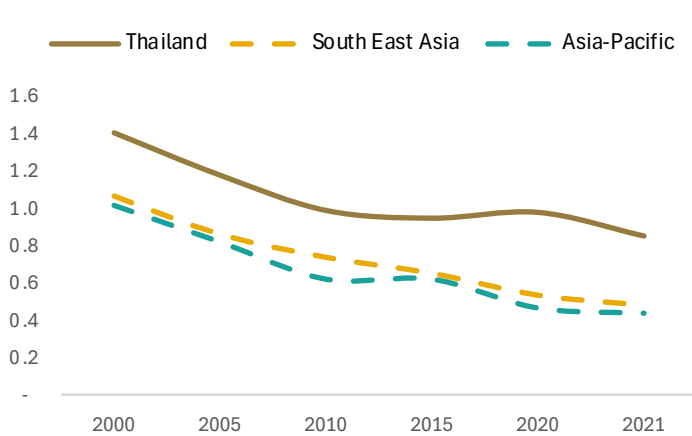


Transport energy intensity (2021)

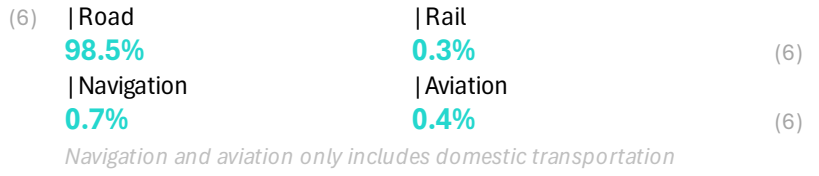
0.8 MJ per USD

Asia-Pacific average is 0.4 MJ per USD

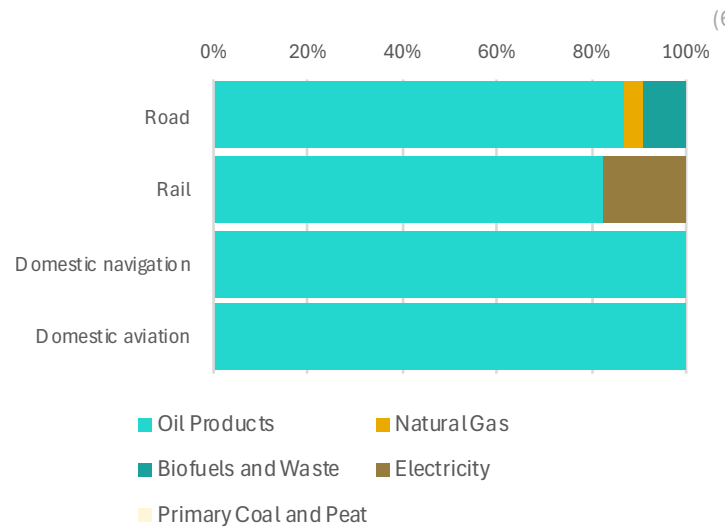
Transport energy intensity trend, MJ per USD



Share of transport energy consumption by mode (2021)



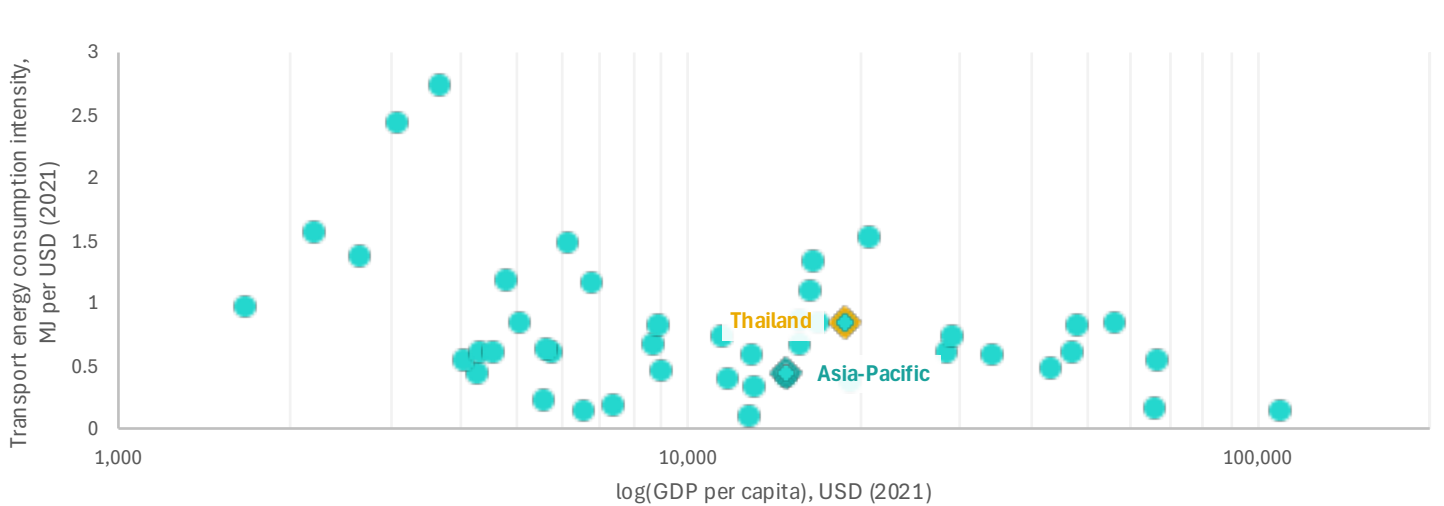
Share of transport energy consumption by source (2021)



Share of transport in renewable energy consumption



Transport energy intensity in Asia-Pacific, MJ per USD

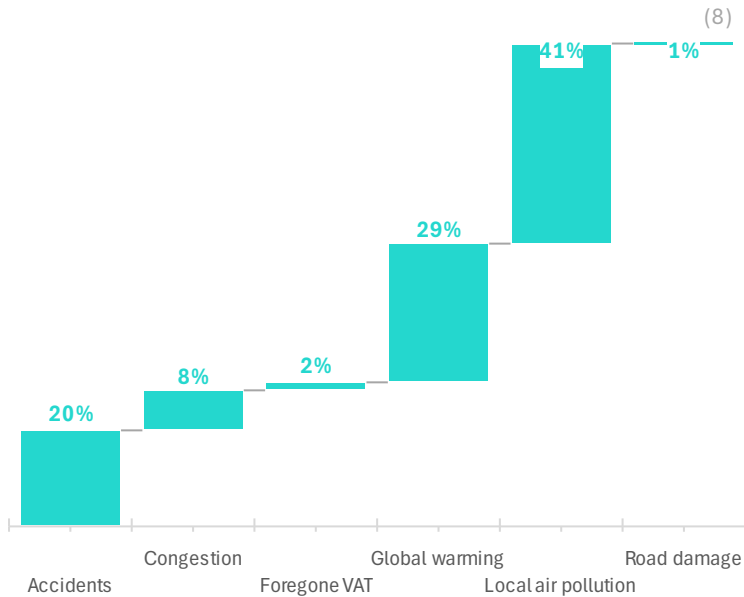


Transport fossil fuel subsidies, cumulative (2010-2022)

155 million USD

0.0% of Asia-Pacific total

Estimated externalities due to fossil fuel subsidies



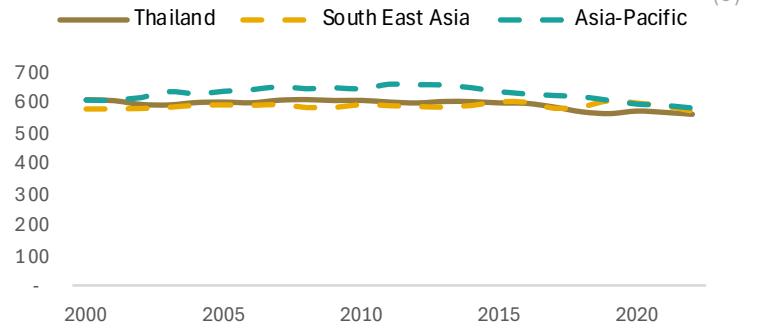
Data includes all sectors and all fuel types

Grid emission factor (2022)

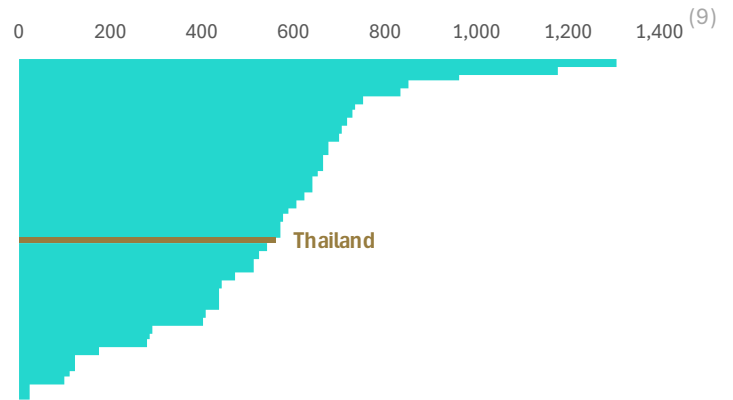
(7) **561 gCO₂ per kWh**

(9)

Grid emission factor trend, gCO₂ per kWh



Grid emission factors in Asia-Pacific, gCO₂ per kWh



III. Adaptation and Resilience

Average annual losses to transport infrastructure due to hazards (2023)

126 million USD

Road	Rail
78%	21%
Ports	Airports
0%	1%

National road vulnerability index ranking (2023)

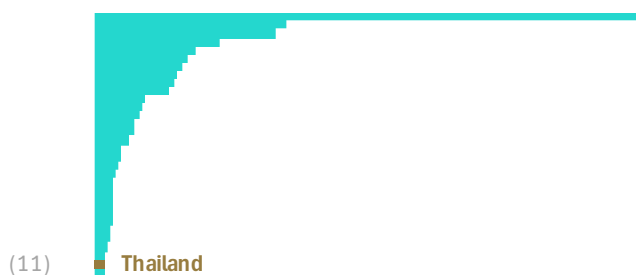
66th out of 208 countries

Share of population in low elevated coastal zones (2018)

10%

Average annual losses to transport infrastructure due to hazards, as a share of GDP, in Asia-Pacific (2023)

(10) 0.0% 0.1% 0.2% 0.3% 0.4% 0.5% (10)



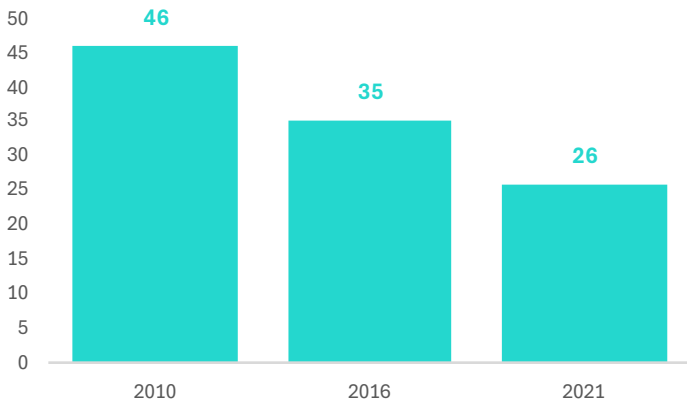
(11) Thailand

(12)

IV. Other Externalities

Road crash fatalities (2021)
18.2 thousand deaths

Road crash fatality rate per 100 thousand population

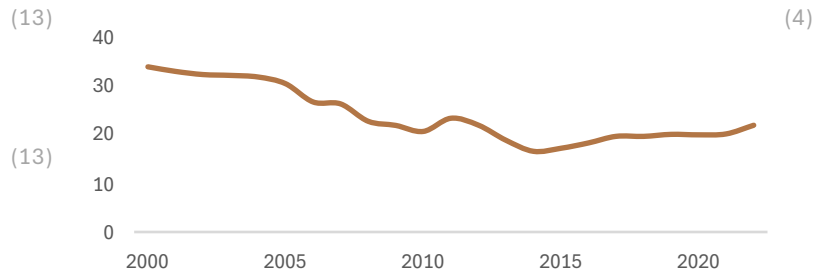


Asia-Pacific average is 16 fatalities per 100 thousand population

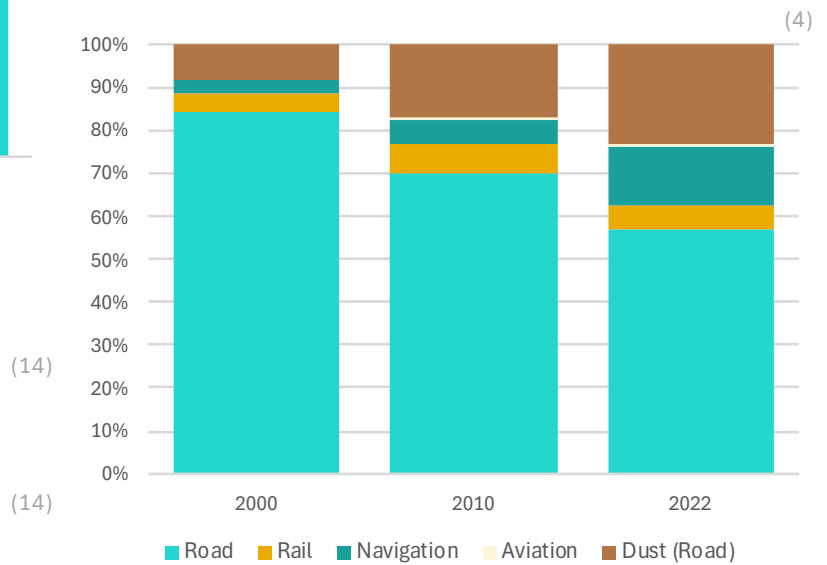
Rural access index (2023)
93%

Rural population without access to all-season roads (2023)
2.2 million

Transport PM 2.5 emissions trend, thousand tonnes



Transport PM 2.5 emissions share by source



V. Vehicle Fleet

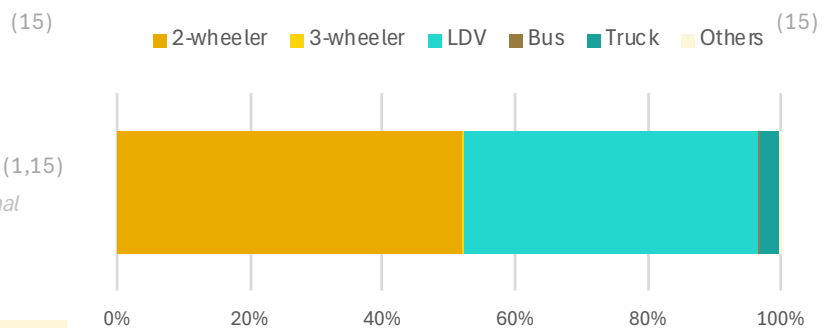
Road vehicles (2022)
42.8 million vehicles

Road vehicle motorization rate (2022)
596 vehicles per thousand population

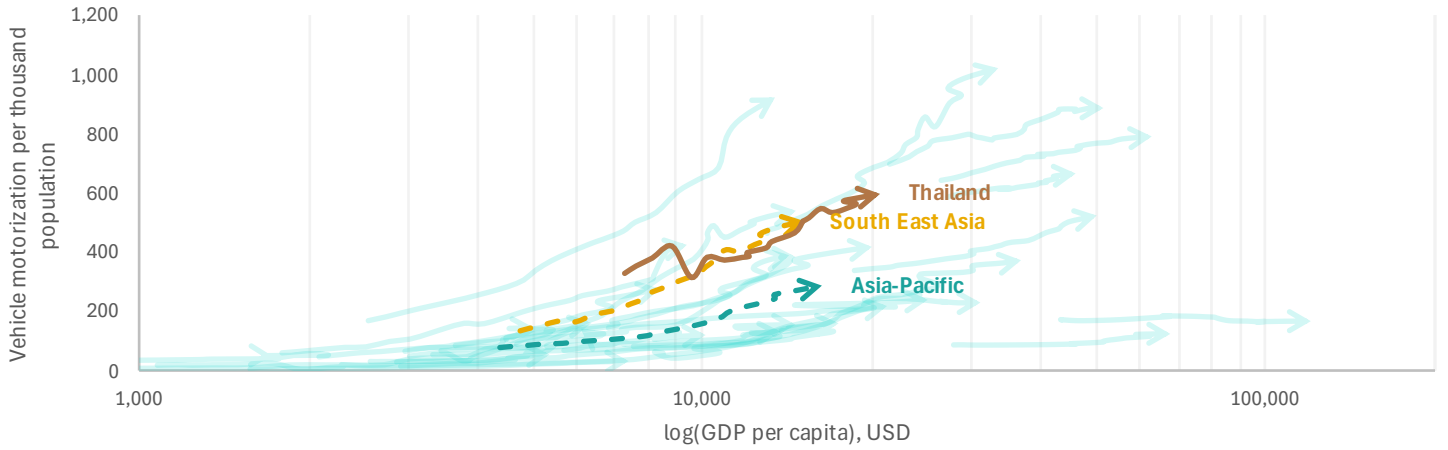
Road vehicles include 2- and 3-wheelers, LDVs, buses and other informal public transport, trucks, and other unclassified types

In 2000, Thailand had 328 vehicles per thousand population. By 2022, this has increased to 596 compared with Asia-Pacific average of 577 in 2022.

Share of vehicles by type



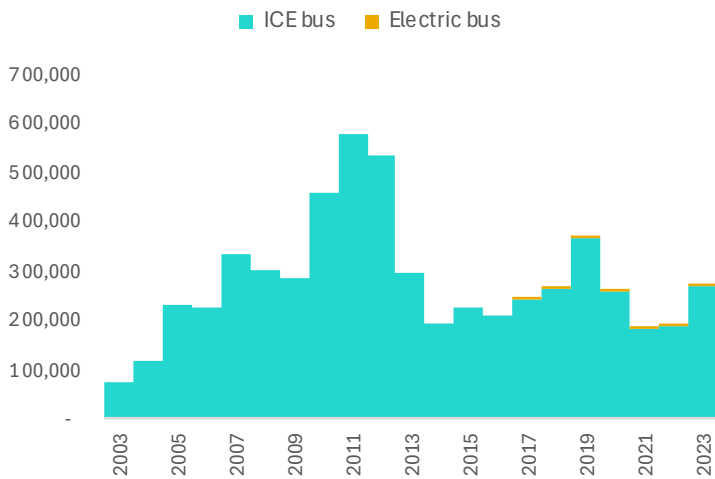
Vehicle motorization per thousand population in Asia-Pacific (2000-2022)



Bus import value (2015-2023)

2.19 billion USD

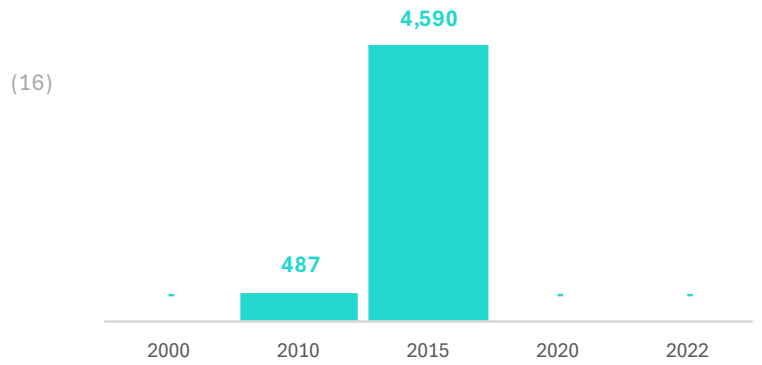
Bus import value, thousand USD



Bus vehicle production, units

(16)

(17)



E-mobility Readiness Index (2024)

| Technology & Market

20/25

| Policy

20/25

(18)

| Energy

20/25

| Financial

22/25

| Overall

82/100

Electric road vehicle import value (2017-2023)

4.66 billion USD

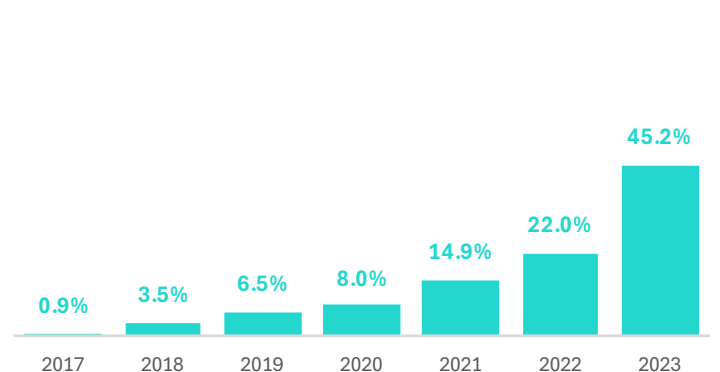
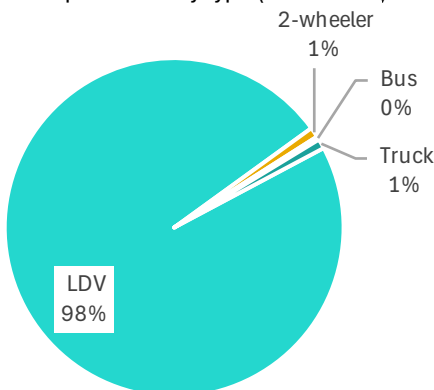
(16)

Electric road vehicle share in total road vehicle import value trend

(16)

Electric road vehicle import share by type (2017-2023)

(16)



VI. Urban Transport

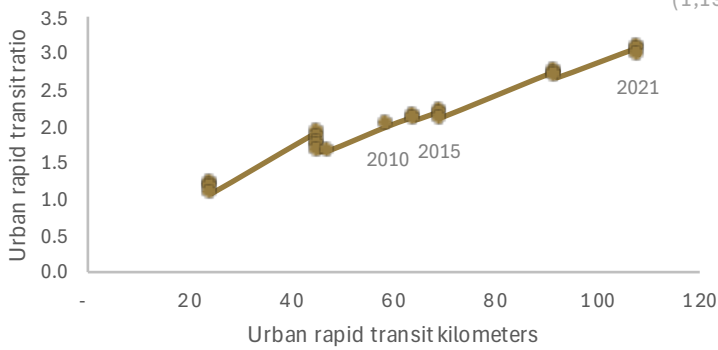
Urban rapid transit length (2021)

| BRT **12 kilometers** | LRT **None**
 | Metro **97 kilometers**

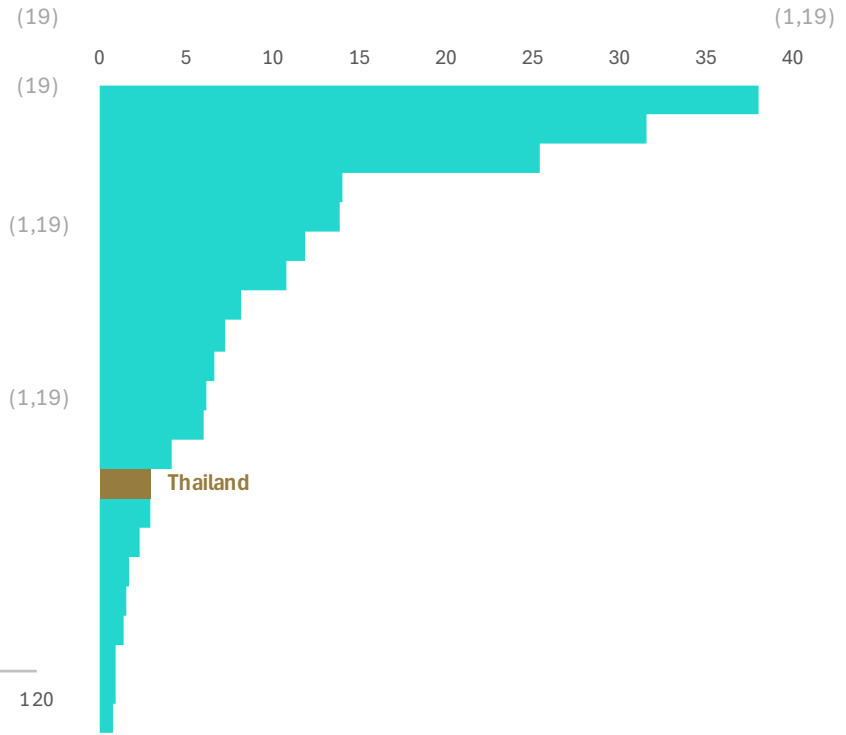
Urban rapid transit ratio (2021)

3 kilometers per million urban population

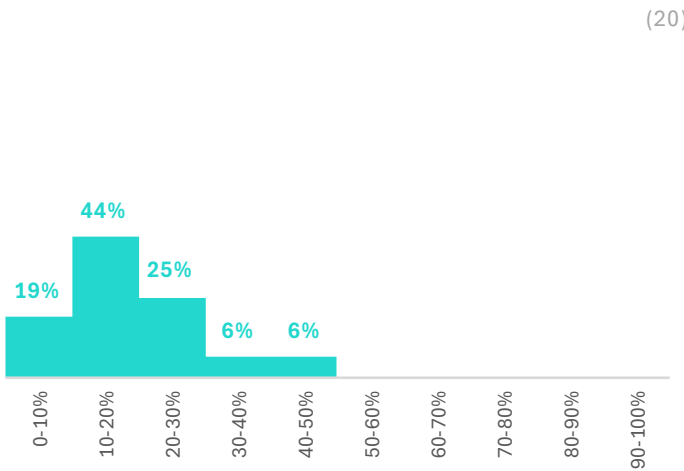
Urban rapid transit ratio, kilometers per million urban population (2000-2021)



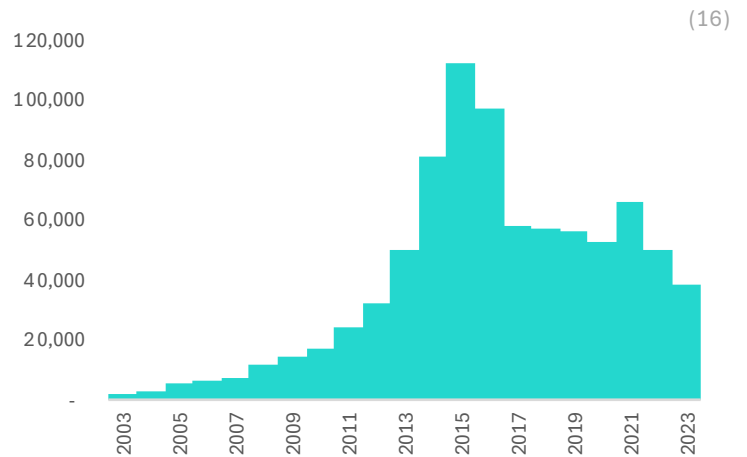
Urban rapid transit ratio in Asia- Pacific, kilometers per million urban population (2021)



Share of cities by level of access to public transport (out of 32 cities)



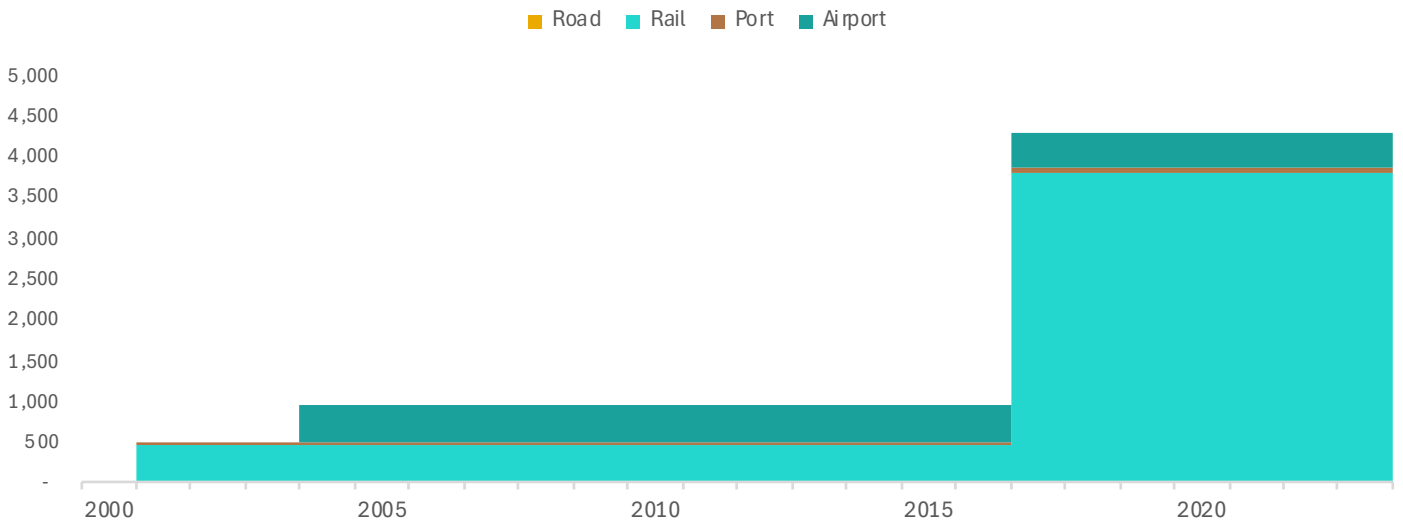
Bicycle import value, thousand USD



VII. Transport Investments

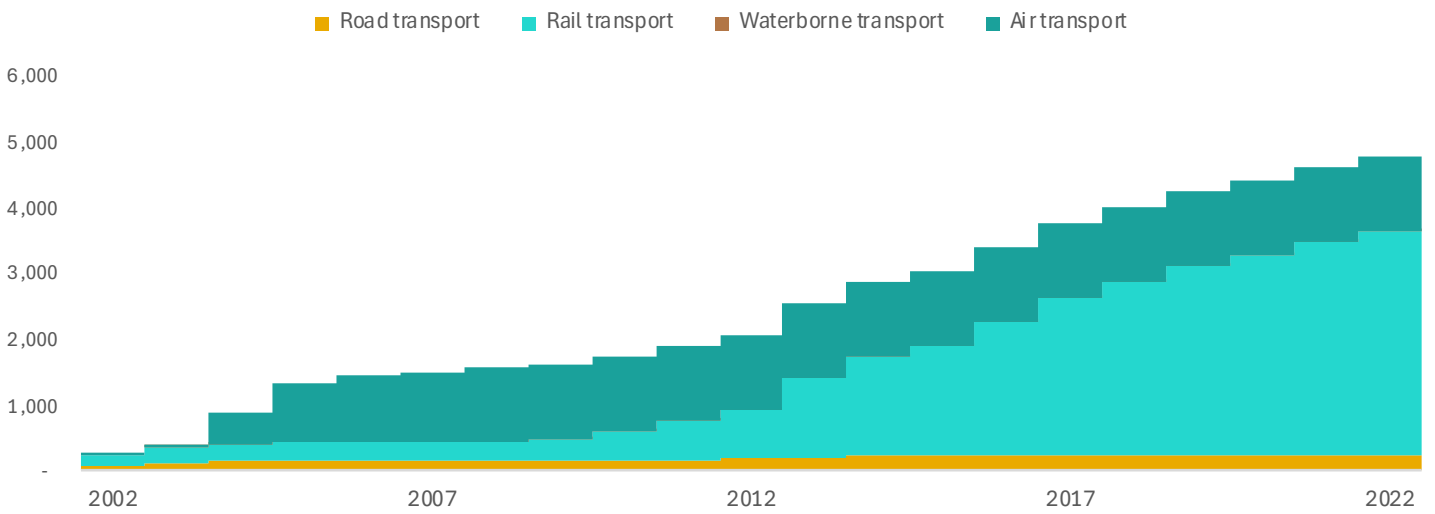
Public-private partnership investments in the transport sector, million USD

(21)



Official development assistance in the transport sector, million USD

(22)



Policy Insights Thailand



VIII. Transport and Climate Policy Documents

Transport-related policy documents in Thailand

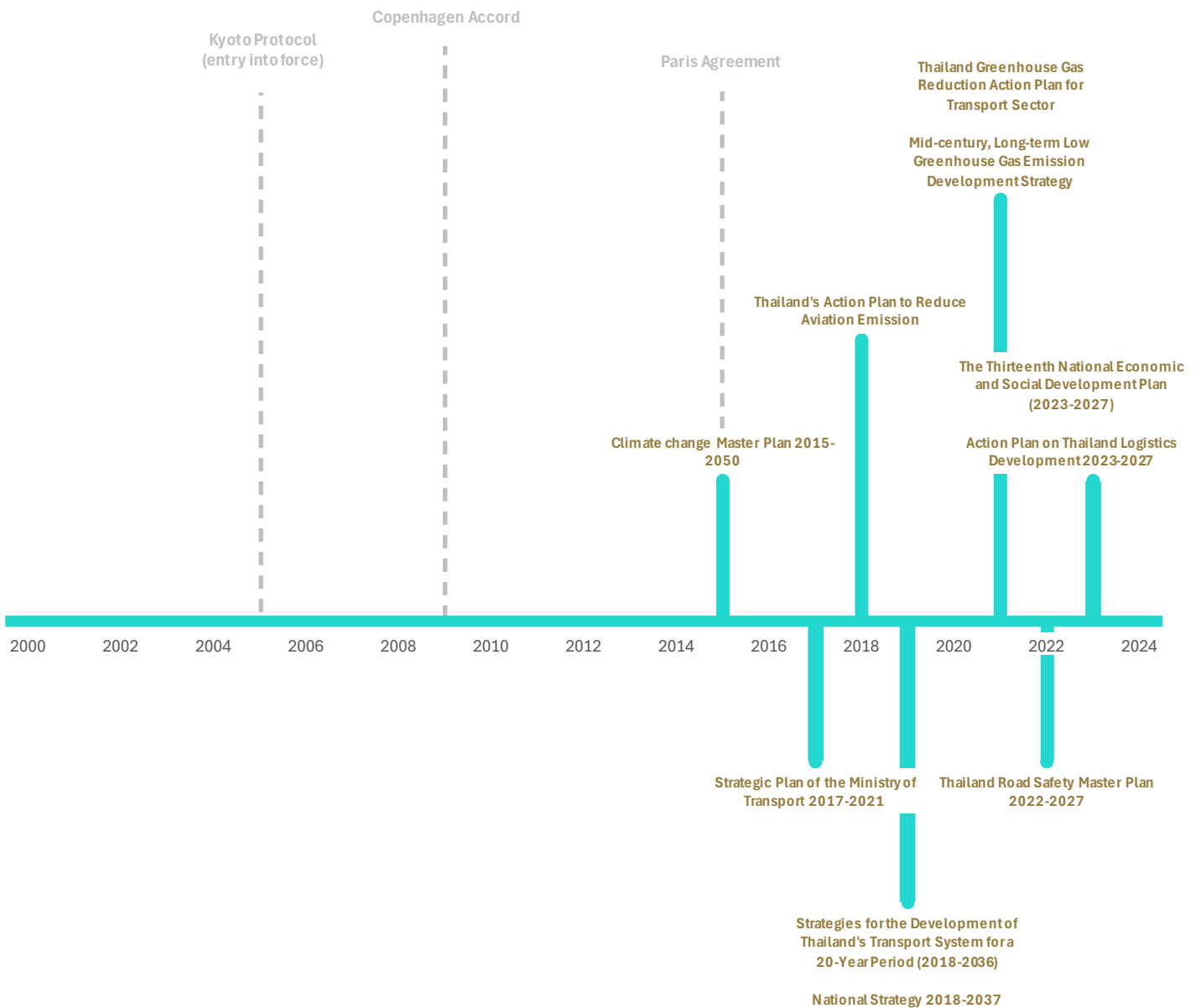
Selection made based on the number of climate change mitigation and adaptation policy measures

Nationally Determined Contributions of Thailand

2015: Intended Nationally Determined Contribution (INDC)

2020: Updated Nationally Determined Contribution - THA

2022: Thailand's 2nd Updated Nationally Determined Contribution



IX. Representation of Transport in Key Climate Policy Documents

Nationally Determined Contributions

Thailand's 2nd Updated Nationally Determined Contribution (adopted in 2022)

Mitigation measures
Mitigation targets
Adaptation measures
Adaptation targets

Road transport
Yes

Rail transport
Yes

Domestic navigation

Domestic aviation

Urban transport

Long-term Strategies

Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy (adopted in 2021)

Mitigation measures
Mitigation targets
Adaptation measures
Adaptation targets

Road transport
Yes

Rail transport
Yes

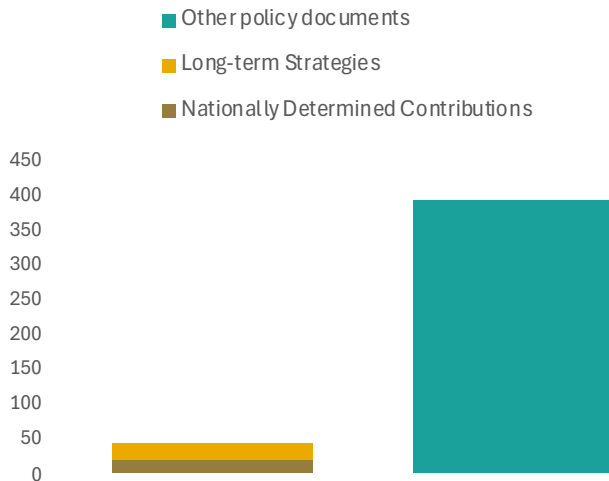
Domestic navigation

Domestic aviation

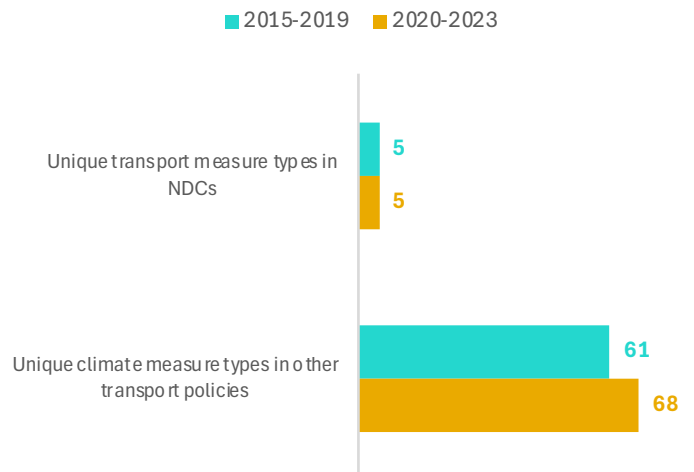
Urban transport

X. Distribution of Transport and Climate Policy Measures in Policy Documents

Number of policy measures by source



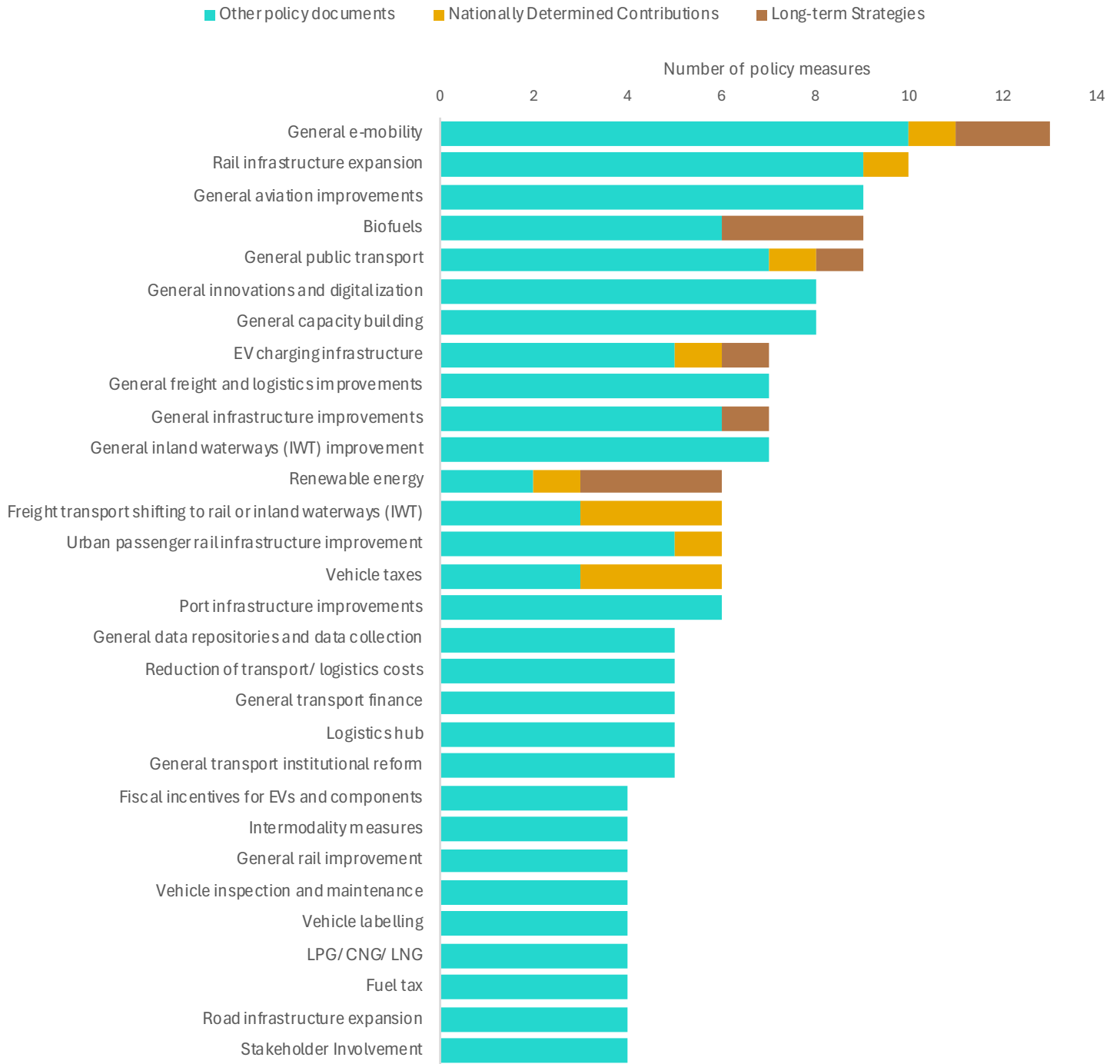
Integration of climate ambition, unique number of policy measures in (*) NDCs and other transport policies



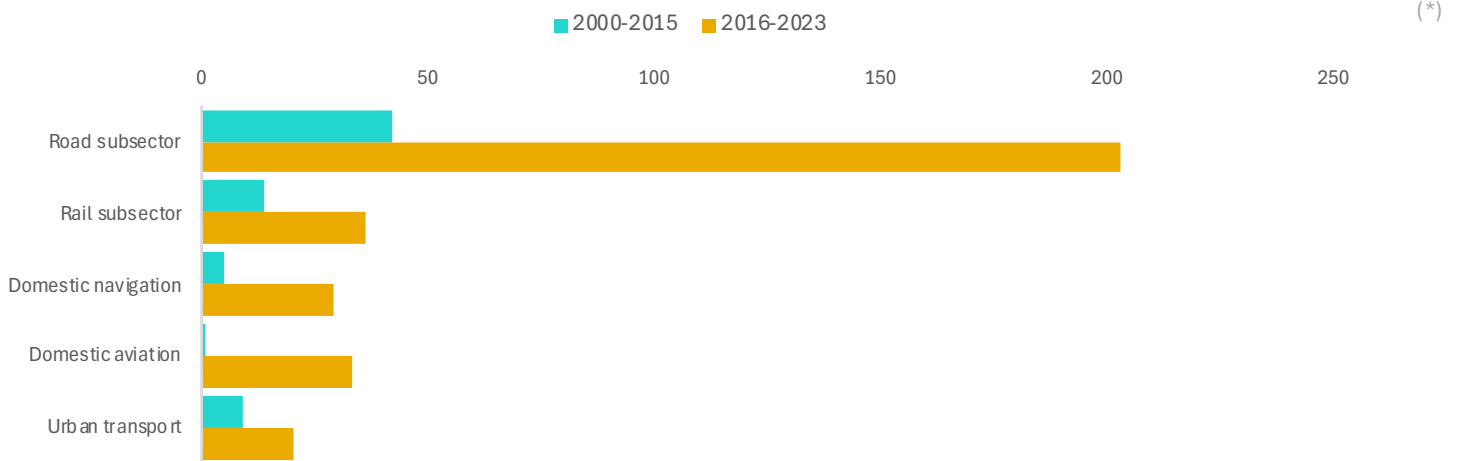
XI. National Policy Priorities on Transport

Priority policy measures on climate change mitigation and adaptation in transport (top 30)

(*)



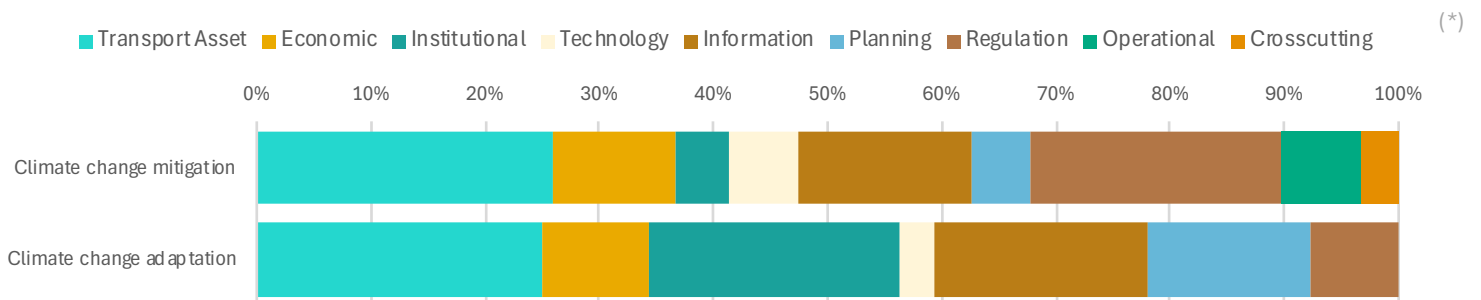
Number of climate change policy measures by subsectors



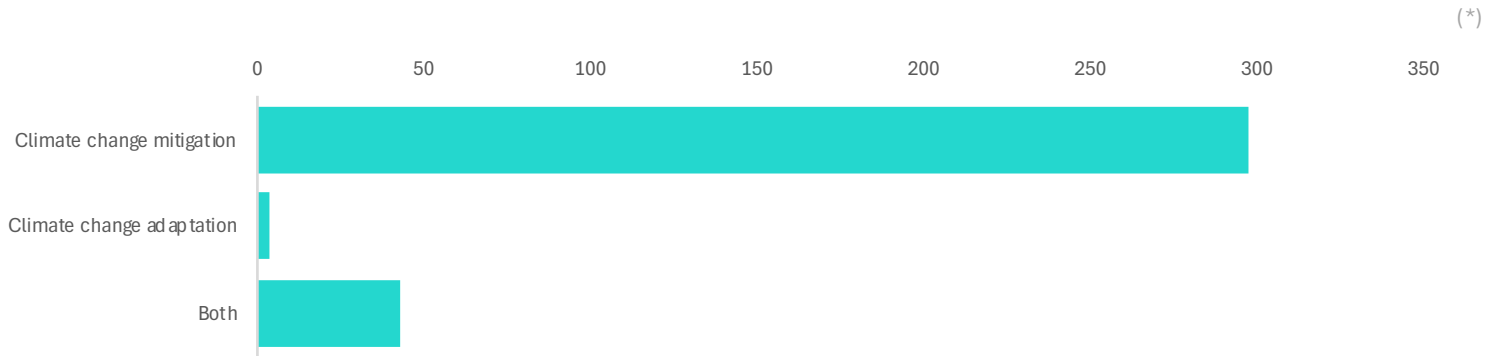
Number of climate change policy measures by passenger vs. freight



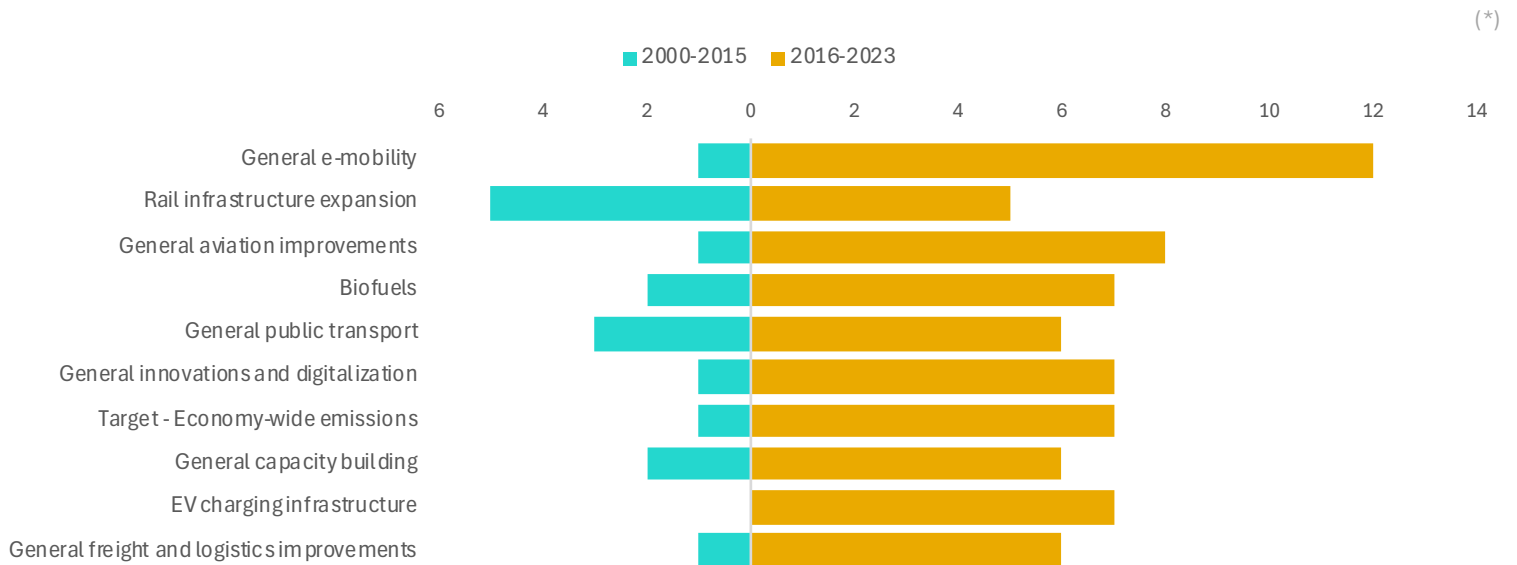
Transport-related climate change policy measures by framework



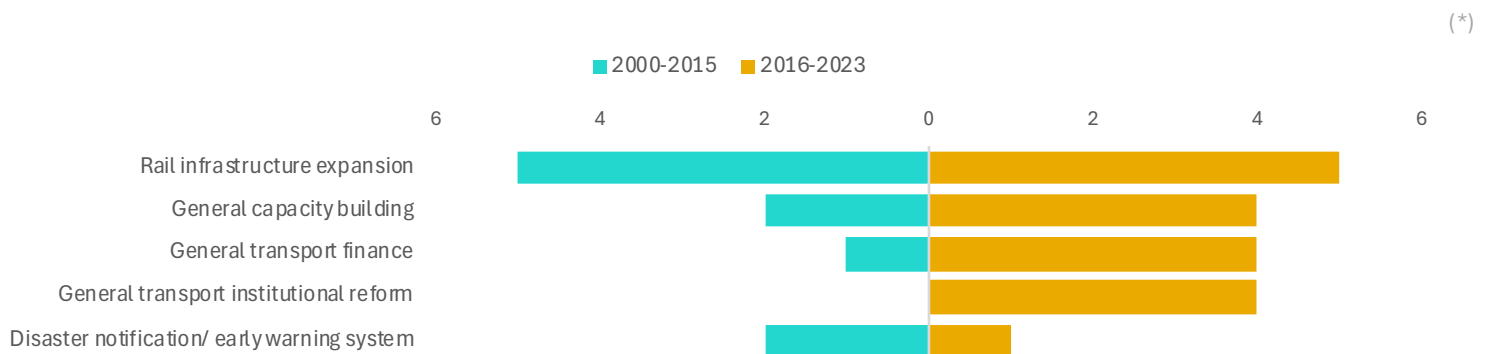
Number of climate change mitigation vs. climate change adaptation policy measures



Climate change mitigation top 10 typology, number of policy measures



Climate change adaptation top 5 typology, number of policy measures



XII. Direct GHG Targets

This table contains transport-relevant (e.g. economy-wide; sector-specific) GHG emissions targets as explicitly mentioned in the policy documents of Thailand

Document	Year published	Target	Target year
Economy-wide emissions			
Intended Nationally Determined Contribution (INDC)	2015	Thailand intends to reduce its greenhouse gas emissions by 20 percent from the projected business-as-usual (BAU) level by 2030.	2030
Updated Nationally Determined Contribution - THA	2020	Thailand intends to reduce its greenhouse gas emissions by 20 percent from the projected business-as-usual (BAU) level by 2030.	2030
Thailand's 2nd Updated Nationally Determined Contribution	2022	Thailand intends to reduce its greenhouse gas emissions by 30 percent from the projected business-as-usual (BAU) level by 2030.	2030
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand's first NDC indicates an emission reduction of 20% from the projected business-as-usual (BAU) level by 2030.	2030
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Thailand intends to reduce greenhouse gas emissions by 20% to 25% above emission levels. Greenhouse gas emissions in normal cases within the year 2030	2030
Thailand. Biennial update report (BUR). BUR 3.	2020	reduce GHG emissions by 20% from the projected BAU level by 2030	2030
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Reduction of overall GHG emissions (energy and transport/ industry/waste management) by no less than 20% from business-as-usual (BAU) level	2027
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Thailand has announced its goal to reduce its greenhouse gas (GHG) emissions and implement measures regarding climate change after 2020 when the GHG emissions were set to be reduced by 20 to 25 per cent in comparison with a business-as-usual level of GHG emissions in 2030, meaning that total GHG emissions are to be no more than 444 million tons of carbon dioxide equivalent	2030
Net zero, carbon neutrality, and other long-term climate action			
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand aims to peak its greenhouse gas emissions in 2030, with the ambition to move towards net-zero greenhouse gas emissions as early as possible within the second half of this century, and towards carbon neutrality by 2065	2030
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand aims to peak its greenhouse gas emissions in 2030, with the ambition to move towards net-zero greenhouse gas emissions as early as possible within the second half of this century, and towards carbon neutrality by 2065	2065
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Thailand's carbon neutrality target by 2050 and realize Thailand's intention to reach net zero GHG emission by 2065 — according to a statement by the Thai Prime Minister to the 26th Conference of the Parties (COP 26) of the United Nations Framework Convention on Climate Change (UNFCCC)	2050
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Thailand's carbon neutrality target by 2050 and realize Thailand's intention to reach net zero GHG emission by 2065 — according to a statement by the Thai Prime Minister to the 26th Conference of the Parties (COP 26) of the United Nations Framework Convention on Climate Change (UNFCCC)	2065

XII. Direct GHG Targets

This table contains transport-relevant (e.g. economy-wide; sector-specific) GHG emissions targets as explicitly mentioned in the policy documents of Thailand

Document	Year published	Target	Target year
Transport GHG emission			
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	41.0 MtCO ₂ eq mitigation	2030
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	In this regard, transportation from the energy and transport sectors has the combined potential as of 2030 (2030) to reduce greenhouse gas emissions by 41 MtCO ₂ e as additional measures .	2030
Thailand's Action Plan to Reduce Aviation Emission	2018	Aviation CO ₂ emission reduction = 0.2% Percentage of GHG reduction in the aviation sector = 1.5%	2030
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Air pollution (PM _{2.5}) and GHG emissions from the transport industry decreases by 4 per cent per year.	2027

XIII. Indirect Transport Climate Change Targets

This table shows non-GHG targets as specified in the policy documents in Thailand which indirectly benefit climate change mitigation and adaptation in the transport sector

Document	Year published	Target	Target year
Biofuels			
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	To achieve the targets under Thailand's LEDS, the share of liquid biofuel use will have to increase from 8% in 2030 to 34% of total final energy consumption in 2050.	2030
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	To achieve the targets under Thailand's LEDS, the share of liquid biofuel use will have to increase from 8% in 2030 to 34% of total final energy consumption in 2050.	2050
Alternative Energy Development Plan 2018-2037	2018	Increase the oil percentage in 2020 to 19 percent and continue to increase towards the end of the plan year. 2037 to 23 percent	2037
General e-mobility			
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	increase the share of electric vehicles to be at least 30% by 2030	2030
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	There are 282,240 EVs (zero-emission vehicles (ZEVs) with new registrations, which include battery-powered electric vehicles [BEVs] and fuel-cell electric vehicles [FCEVs]), accounting for 26 per cent of all vehicles, in use in Thailand by 2027. The combined value of investment promotion for the EV and parts industry is no less than 130 billion baht by 2027. The number of businesses in the EV supply chain increases by no less than 14, and there are investments in key EV technology in Thailand by 2027. The proportion of entrepreneurs who can transform their businesses increases by 10 per cent by 2027.	2027
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	As a result, the Thai government has expedited the development of a comprehensive EV system and set a vision for Thailand to become one of the world's important production bases of EVs and their parts with an emphasis on the development of zero emission vehicles (ZEV), which include battery-powered electric vehicles (BEV) and fuel-cell electric vehicles (FCEV), setting targets by 2030 at 440,000 units in domestic use (50 per cent of all vehicles) and 725,000 units in production (30 per cent of all vehicles).	2030
Renewable energy			
Intended Nationally Determined Contribution (INDC)	2015	the PDP sets a target to achieve a 20% share of power generation from renewable sources in 2036 AEDP aims to achieve a 30% share of renewable energy in the total final energy consumption in 2036	2036
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	It aims to increase the portion of renewable power generation from 17.29% in 2019 to 30% of total power requirement in 2037 which accounts for 29,358 MW.	2037
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Policy direction to increase the share of new renewable electricity generation to be at least 50%	2050
Thailand. Biennial update report (BUR). BUR 3.	2020	Thailand aims to increase the percentage of renewable energy in gross final consumption to 24.08 % by 2030.	2030
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	The proportion of renewable energy in the final energy consumption increases by no less than 24 per cent by 2027.	2027
Target - Transport energy consumption			

XIII. Indirect Transport Climate Change Targets

This table shows non-GHG targets as specified in the policy documents in Thailand which indirectly benefit climate change mitigation and adaptation in the transport sector

Document	Year published	Target	Target year
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	increase energy efficiency by reduce energy intensity at least 30% by 2037	2037
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Under Thailand's LEDS, the transport sector needs to increase the energy efficiency to 68% of total final energy consumption in 2050.	2050
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	energy consumption in the transportation sector to the energy consumption of the whole country = Present (2015) 36.6% Target (2036) to reduce energy use from normal case by 15%	2036
Thailand's Action Plan to Reduce Aviation Emission	2018	Aviation Fuel saved = 1% Increased efficiency = 0.5% less (0.363 by 2010)	2030
Employment in transport, communication, and storage			
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	The number of automotive workers upskilled to EVs and employed in the new industry increases by 5,000 by 2027.	2027
EV charging infrastructure			
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	The number of public charging stations/fast chargers increases by 5,000 by 2027 Supporting the reinforcement of electrical grids to sufficiently meet the constant charging demand of increasing EV use, together with separating electricity bills for EV charging from other electricity usage.	2027
EV manufacturing			
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Thailand manufactures 380,250 ZEVs, accounting for 17 per cent of all vehicles, by 2027. No fewer than 40,000 vehicles are converted into modified EVs by 2027. The export value of EVs or parts increases by 5 per cent per year, or Thailand's export value of EV parts increases by 5 per cent per year.	2027
Freight transport shifting to rail or inland waterways (IWT)			
Action Plan on Thailand Logistics Development 2023-2027	2023	The proportion of freight moved by rail to total freight volumes = An average of 7 percent (2023-2027)	2027
General capacity building			
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	The value of investment in automotive-related science, technology, research and innovation increases by 20 per cent per year. The number of workers undertaken EVs training development is not less than 30,000 by 2027.	2027
General freight and logistics improvements			

XIII. Indirect Transport Climate Change Targets

This table shows non-GHG targets as specified in the policy documents in Thailand which indirectly benefit climate change mitigation and adaptation in the transport sector

Document	Year published	Target	Target year
Action Plan on Thailand Logistics Development 2023-2027	2023	Customs (LPI) = Rank 25th or a score of not less than 3.20 Logistics Quality and Competence = Rank 25th or a score of not less than 3.60 E-commerce value of transport and logistics sectors = An average growth rate of 10 percent (2023-2027)	2027
Reduction of transport/ logistics costs			
Action Plan on Thailand Logistics Development 2023-2027	2023	Transport cost to GDP reduces to 5 percent	2027
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Logistics costs per gross domestic product (GDP) = Present (2016) 13.9% Target (2036) 11.9 percent Transportation costs per gross domestic product = Present (2016) 7.5% Target (2036) 6.7 percent	2036
Target - Modal shift			
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Proportion of public transport users traveling in Bangkok and its vicinity = Present (2015) 31.28% Target (2036) 50.38% Proportion of public transport users in intercity travel = Present (2015) 50.28% Target (2036) 61.12%	2036
Target - Road crash fatalities			
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Proportion of fatalities from public transport accidents to passenger traffic traveling on all public transport = Present (2015) 8.48% Target (2036) 2.77 percent	2036

XIII. Indirect Transport Climate Change Targets

This table shows non-GHG targets as specified in the policy documents in Thailand which indirectly benefit climate change mitigation and adaptation in the transport sector

Document	Year published	Target	Target year
Thailand Road Safety Master Plan 2022-2027	2022	In 2027, the number of people killed in traffic accidents must be less than 8,474, or 12 per 100,000 people. The number of serious injuries from road accidents in 2027 must be less than 106,376. 1. Number of deaths and serious injuries among motorcycle users at 6,463 and 89,121 persons. respectively in 2027 2. The number of deaths and serious injuries that are private car users are 1,516 and 4,865 people. in 2027 3. The number of dead and seriously injured pedestrians at 210 and 3,035 people, respectively. in 2027 4. The number of deaths and serious injuries among cyclists at 20 and 3,889 people, respectively. in 2027 5. The number of fatalities and serious injuries among the elderly (aged 60 years and over) at 1,680 and 16,434 people. respectively in 2027 6. The number of fatalities and serious injuries related to professional drivers (driver and passenger) at 54 and 205 people respectively in 2027 1) Proportion of fatalities and serious injuries who are motorcycle riders (only the driver), which has a Blood alcohol consumption is reduced by an average of 10% per year through 2027. 2) Proportion of fatalities and serious injuries who is a motorcycle user who do not wear helmets decrease On average 10% per year until 2027 3) Proportion of fatalities and serious injuries that are children and youth (only the driver), which has the amount Blood alcohol consumption is reduced by an average of 10% per year through 2027. 4) Proportion of fatalities and serious injuries that is juvenile who do not wear helmets decrease On average 10% per year until 2027 1. Proportion of fatalities and serious injuries from motorcycles that do not meet safety standards decreased by percentage respectively in 2027 2. Proportion of fatalities and serious injuries from cars that do not meet the safety standards decrease as a percentage respectively in 2027 Number of deaths Happened on the roads of the Department of Highways ³ at 1,250 people in 2027 2. Number of deaths Happened on the roads of the Department of Rural Roads ³ at 190 people in 2027 3. Number of deaths Happened on the streets of local governments ³ at 1,132 people in 2027 1) Proportion of fatalities and severely injured A motorcyclist (driver only) who drives more than the speed limit of % respectively in 2027 2) Proportion of fatalities and serious injuries which are children and youth (only drivers) who drive more than the speed limit at the percentage of respectively in the year 2027	2027
Target - Transport activity			
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Proportion of the volume of freight by rail = Present (2015) 1.4% Target (2036) Percent 10% Proportion of volume of water transport = Present (2015) 11.44% Target (2036) 19 percent	2036
Target - Transport air pollution			
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Air pollution (PM2.5) and GHG emissions from the transport industry decreases by 4 per cent per year.	2027
Urban passenger rail infrastructure improvement			
Voluntary National Review 2021	2021	According to the Mass Rapid Transit Master Plan in the Bangkok Metropolitan Region (M-MAP), the Government aims to finish 103 metro stations by 2029.	2029

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Ban of ICE sales							
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand carbon neutrality by 2070 scenario: new vehicles in the market will be electric vehicle (Battery Electric Vehicle (BEV) and Plug-in Hybrid Electric Vehicle (PHEV)) with the share of 69% by 2035	x				
Biofuels							
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	promoting low carbon fuels such as biofuels used in transportation including removing petroleum subsidy	x				
Action Plan on Thailand Logistics Development 2023-2027	2023	Pushing forward the implementation of policy measures, namely, the utilization of biofuel and natural gas in supply chains, and the provision of financial or tax incentives to encourage energy users to adopt alternative energy in order to promote energy efficiency and reduce greenhouse gas emissions in line with the goals and guidelines of the Bio-Circular-Green Economy (BCG)					
Alternative Energy Development Plan 2018-2037	2018	Tax benefits for motor vehicles and mixed fuel					
Oil Plan 2015-2036	2015	Encourage the use of ethanol as the potential of the car. Adjust the type of fuel in gasoline - gasohol in accordance with the technology of the automobile on the balance of the refinery basis. Encourage the use of oil-based fuel potential of the car by promoting to make more confidence and understanding of the Gasohol, Gasohol E20 and E85. Promoting the E85 consumption in cars and motorcycles of government agencies and enterprises. Promote utilization of B20 in Heavy Duty Truck	x				
Technology Needs Assessment for Climate Change Mitigation - THA	2012	Promoting the production and utilization of biofuels, such as ethanol and biodiesel, for the substitution of conventional oil consumption.					
Thailand's Action Plan to Reduce Aviation Emission	2018	Development of biofuels				x	
Development of climate change/ low carbon plan/ policy							
Updated Nationally Determined Contribution - THA	2020	Thailand is formulating its Long-term Low Greenhouse Gas Emission Development Strategy (LT-LEDS) which will guide Thailand towards a climate-resilient and low greenhouse gas emissions development and serve as a basis for enhancing its subsequent NDCs.					
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	develop medium- and long-term GHG emission reduction targets and prepare roadmaps for the implementation by sector, including the GHG emission reduction target on a voluntary basis (pre-2020 target), Nationally Appropriate Mitigation Actions (NAMAs) roadmaps, and measurement, reporting, and verification mechanisms					
Climate change Master Plan 2015-2050	2015	Thailand first formulated the National Strategic Plan on Climate Change 2551-2555 B.E. (2008-2013)					

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand. Biennial update report (BUR). BUR 3.	2020	Thailand is formulating its Long-term Low Greenhouse Gas Emission Development Strategy (LT-LEDS) which will guide Thailand towards a climate-resilient and low greenhouse gas emissions development and serve as a basis for enhancing its subsequent NDC					
Development of national energy plan/ policy							
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand has formulated the Energy Efficiency Plan (EEP) 2018 and an EE action plan aiming to promote its energy efficiency.					
Climate change Master Plan 2015-2050	2015	the Ministry of Energy has devised the 20-Year Energy Efficiency Development Plan (2011-2030)					
Thailand. Biennial update report (BUR). BUR 3.	2020	Thailand has formulated The Alternative Energy Development Plan (AEDP) 2015 and an AEDP action plan aiming to promote alternative energy and reduce dependency on energy imports such as oil and natural gas.					
Disaster notification/ early warning system							
Intended Nationally Determined Contribution (INDC)	2015	Establish effective early warning system and enhance the adaptive capacity of national agencies through multi-hazard risk assessment, systematic observations, integrative research and development of database, model, and technology					
Climate change Master Plan 2015-2050	2015	Develop an early warning system that offers accurate and long-range predictions (including meteorological forecasts) along with standard operation procedures and practical guidelines for the public according to the magnitude and severity of the incident					
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	There is an effective early warning system (i.e., having comprehensive coverage of key disasters, the linkage between local, national and international level, precision, timeliness, and effective access to vulnerable groups).					
EV charging infrastructure							
Thailand's 2nd Updated Nationally Determined Contribution	2022	Support needed: Enhancement of electrification of transport, and technical support for battery charging technologies.	x				
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand carbon neutrality by 2065 scenario: A complete transformation of the vehicle fleet, the development of public EV fast charging networks, and hydrogen fueling stations are required as early as possible.	x				
Strategic Plan of the Ministry of Transport 2017-2021	2017	Project for the purchase of 200 electric buses ready for construction charging station	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Procurement of 35 electric buses along with the construction of an electric charging station	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	In addition, the government has also supported the development of nationwide infrastructure, particularly charging stations. According to the Electric Vehicle Association of Thailand (EVAT), Thailand has 664 charging stations with 1,450 ordinary chargers and 774 fast chargers (2,224 in total) as of 11 June 2021.	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Supporting the investment and development of EV charging stations or chargers to fit consumer behaviors and daily routines at home, office, places of accommodation and public spaces.	x				
Fossil fuel subsidy elimination							
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	promoting low carbon fuels such as biofuels used in transportation including removing petroleum subsidy	x				
Climate change Master Plan 2015-2050	2015	Set fuel prices which reflect the true cost and use tax mechanisms to promote energy conservation and renewable energy consumption in the shift towards high efficiency transportation;					
Thailand Energy Efficiency Development Plan 2015-2036	2015	Repeal/review energy price subsidies (diesel)					
Freight transport shifting to rail or inland waterways (IWT)							
Intended Nationally Determined Contribution (INDC)	2015	promote road-to-rail modal shift for both freight and passenger transport	x	x			
Updated Nationally Determined Contribution - THA	2020	Environmentally Sustainable Transport System Plan promotes road-to-rail modal shift for both freight and passenger transport.	x	x			
Thailand's 2nd Updated Nationally Determined Contribution	2022	The Environmentally Sustainable Transport System Plan promotes a road-to-rail modal shift for both freight and passenger transport.	x	x			
Climate change Master Plan 2015-2050	2015	Adopt intelligent logistics management systems which will increase efficiency by increasing the use of freight distribution networks, reducing the number of empty truck journeys while simultaneously shifting to more efficient and low-emission transport modalities (e.g. rail freight and water navigation) and;				x	
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Promote the transportation of both domestic and international goods to use rail and water transportation.				x	
General e-mobility							
Thailand's 2nd Updated Nationally Determined Contribution	2022	Support needed: Enhancement of electrification of transport, and technical support for battery charging technologies.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand carbon neutrality by 2070 scenario: new vehicles in the market will be electric vehicle (Battery Electric Vehicle (BEV) and Plug-in Hybrid Electric Vehicle (PHEV)) with the share of 69% by 2035 Thailand carbon neutrality by 2065 scenario: A complete transformation of the vehicle fleet, the development of public EV fast charging networks, and hydrogen fueling stations are required as early as possible. promoting battery electric vehicles Research development and deployment (RD &D): Electric Vehicle (xEV), battery and Infrastructures	x				
Action Plan on Thailand Logistics Development 2023-2027	2023	Promoting green businesses, efficient energy utilization, and greenhouse gas reduction, such as the use of electric vehicles.	x				
National Strategy 2018-2037	2019	promotion the shift from conventional automotive industry to electric vehicle industry	x				
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	It also encourages the conversion to use clean energy or energy. alternative work and transportation technology environmentally friendly vehicles such as electric vehicles, vehicle inspections and strict motorcycles o promote the use of electric cars	x				
Thailand Energy Efficiency Development Plan 2015-2036	2015	Study, plan and operate to support the use of electric vehicles	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Expansion of electric vehicles Procurement of 35 electric buses along with the construction of an electric charging station Procurement of 1,453 hybrid buses Lease of 400 hybrid buses (7 years) Replacing 4,626 air-conditioned passenger vans with electric minibuses (shared buses) Promotion of public buses, taxis and minibuses to use the system hybrid in Bangkok and its vicinity and 6 regional cities including Chiang Mai Khon Kaen, Phitsanulok, Phuket, Nakhon Ratchasima and Songkhla Change delivery motorcycles) to Electric motorcycles in Bangkok and its vicinity and 6 regional cities namely Chiang Mai, Khon Kaen, Phitsanulok, Phuket, Nakhon Ratchasima and Songkhla.	x				x
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	The Thai government has promoted the next-generation automotive industry by emphasizing an expansion of the current industry onto more advanced technology and innovation together with determining key supportive measures for EVs, such as foreign and domestic market stimulation measures, supportive measures for demand stimulation and transition towards EV manufacturing, and systematic infrastructure preparedness measures.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Promoting the use of all types of EVs in public transport systems, government agencies, state enterprises and public organizations through a conditional procurement mechanism to promote domestic production and human resources development in the EV industry. Encouraging people to convert existing internal combustion vehicles into modified EVs with safety standards certification and registration. Formulating a public relations plan on ZEVs as well as supporting the development of a relevant piloted program to raise public awareness and understanding. Expediting a shift towards electrification of national product champions such as pickup trucks, eco-cars and motorcycles. Promoting researches and formulating regulations to support research and development in ZEVs and autonomous vehicles as well as electrical connectors, electrification and shared use in order to extend results in the domestic industrial sector afterward. Promoting progressive development to facilitate businesses' transition and minimize economic impacts during the transitional period by supporting automotive technologies with potentials such as hybrids, plug-in hybrids, etc. in order to build momentum to become manufacturers in the BEV supply chain. Encouraging domestic manufacturers to use ICT to increase production management efficiency. Promoting collaboration between businesses and educational institutions to boost knowledge transfer of the EV technology, particularly in relation to battery technology, sensor system and EV electronics system. Developing human resources to support the EV industry and providing remedies during transition, as well as promoting lifelong learning. Encouraging manufacturers of EVs and parts to use the government-built intellectual infrastructure for research and development, such as the National Automatic and Tire Testing, the Research and Innovation Center, and a battery-testing laboratory in Sanam Chai Khet District, Chachoengsao Province. Encouraging the establishment of a fund for investment in EV infrastructure and management related to the green and circular economies. Encouraging investment in domestic test centers to achieve industrial standards and standards for EV manufacturers, product liabilities, and quality management through collaboration with international accreditation organizations. Providing benefits to boost investment by means of financial and tax measures. Forging partnerships with leading EV countries to seek appropriate measures to assist in the transition of Thai enterprises and boost competitiveness of Thai start-ups on the international market. Establishing research and innovation joint ventures. Accelerating the research and development of batteries, sensor system, electronic system and communication system for EVs. Developing CO2 capture technology, taking into consideration a product's entire lifecycle, and promoting technologies related to EV conversion as well as knowledge and technology transfer to local EV businesses.	x				
Voluntary National Review 2021	2021	This also includes plans to begin services on electric ferries in the Padungkrungkasem canal in Bangkok.					x

General infrastructure improvements

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	improving the infrastructure and modern management system					
Action Plan on Thailand Logistics Development 2023-2027	2023	Build comprehensive water, rail, road and air transport and logistics network to connect with economic zones, industrial parks and potential border crossing points	x	x	x	x	
National Strategy 2018-2037	2019	developing new transportation routes connecting with new tourist attractions development of related infrastructures and logistics system connecting primary and secondary cities to prepare for tourist pathways between ASEAN nations and the Mekong sub-region on land, water, and air developing land, water, and transport and infrastructure networks to accommodate transportation and logistics along the regional supply chain, with more importance being placed on water and rail modes of transport	x	x	x	x	
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Increase transport and logistics efficiency by developing transport infrastructure. to link production bases Agricultural and industrial resources Gates of commerce and important tourist attractions, connections between various modes of transport. and connects between major cities in the region					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Change to LED energy-saving light bulbs in all types of ports/airports/highways	x		x	x	
Thailand Road Safety Master Plan 2022-2027	2022	Add rest stops for public vehicles and trucks Warning signs and speed limit requirements are installed in accordance with the law. in different areas thoroughly	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Investing in infrastructure and developing supporting factors to promote special development zones and areas with current and future potentials, including transport infrastructure, logistics services and networks along key routes and links with neighboring countries, cross-border investment and trade facilities, ports and land bridges in the Southern Economic Corridor to turn Thailand into a strategic gateway. Investing in, and developing, infrastructure to enhance and accommodate tourism and services in provinces with potentials, such as connecting tourism in the Andaman Sea, which include Phuket, Krabi, Phangnga, Trang and Satun provinces, so as to become one of the world's top five cruise destinations. Continuously and adequately developing infrastructure, logistics and digital systems with high standards and full coverage of the area/city to facilitate the expansion of economic activities and public needs. Developing transport and logistics infrastructure to ensure safe, convenient and effective transportation and transports of goods and raw materials.	x		x		
General public transport							
Intended Nationally Determined Contribution (INDC)	2015	improvement of bus transit in the Bangkok Metro areas	x				x

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	increase use of public transportation services Thailand carbon neutrality by 2065 scenario: Public transport infrastructure and networks will be priorities to decarbonize the transport sector.					
Climate change Master Plan 2015-2050	2015	Increase coverage and connectivity of urban rail, bus and short-distance public transit networks.	x	x			x
Strategic Plan of the Ministry of Transport 2017-2021	2017	Land procurement and passenger station construction project Improving the service standards and quality of public buses within Bangkok and its vicinity	x				
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Development of public or mass transit systems in major cities in the region as an alternative for for the public to travel especially water and rail transport, which are Environmentally friendly transportation provision of transport services to facilitate in public travel both in quantity and in quality meet international standards and can provide services to the public all groups thoroughly, adequately, with reasonable fares that users can afford and with quality Accelerate the development of public transportation systems in Bangkok and its vicinity. Including in the main city in the region, 6 locations consisting of Chiang Mai, Phitsanulok, Khon Kaen, Nakhon Ratchasima, Phuket and Songkhla	x	x	x		
Thailand Energy Efficiency Development Plan 2015-2036	2015	. Development of transport infrastructure Mass Rapid Transit and connection system					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Development of areas surrounding mass transit stations Improving urban and non-urban public hybrid bus services Improvement of concession conditions for bus operation procurement of intercity buses	x				x
Thailand Road Safety Master Plan 2022-2027	2022	Supervise public transport drivers to have physical readiness before and during driving. Promote the change of travel patterns from using personal vehicles to other forms of travel. Especially public transport and walking - bicycles.	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Promoting eco-friendly transportation. Promoting the use of mass transit systems. Developing an eco-friendly public transport networks with low carbon emissions and countrywide coverage. Supporting the manufacturing and use of efficient clean-energy vehicles.	x				
General vehicle improvements							
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	engine performance improvement	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Improving the efficiency of air conditioning systems in cars	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Road Safety Master Plan 2022-2027	2022	Raise the safety standards of motorcycles and their accessories. along with knowledge motorcycle standards and safe use mproving automotive standards to increase safety for all types of road users. There are technical requirements in terms of engineering according to international safety standards. for the same vehicle group that is used both domestically There are technical requirements in terms of engineering according to accident data in order to prevent bodily injury. In the group of vehicles that are used only within Thailand, such as modified motorcycles with sidecars, school buses, ambulances, etc. Improving the formulation and supervision of standards for motor vehicles and equipment of public vehicles. school bus Including staff transportation To promote safe use of public transport	x				
Rail infrastructure expansion							
Intended Nationally Determined Contribution (INDC)	2015	construction of double-track railways		x			
Action Plan on Thailand Logistics Development 2023-2027	2023	Expediting the current phase 1 and 2 (and future) construction on double-track railways to be national transport backbones by prioritizing the project investment for regional connectivity, as well as supplying sufficient locomotives, carriages and lifting equipment in accordance with the rail projects, and developing railway connectivity within neighboring countries and regions.		x			
Climate change Master Plan 2015-2050	2015	Improve the quality and coverage of rail networks to provide a feasible alternative to the currently preferred modalities for inter-provincial travel.		x			
Oil Plan 2015-2036	2015	Development of infrastructure, transportation, electric doubletrack		x			

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategic Plan of the Ministry of Transport 2017-2021	2017	Chachoengsao-Khlong Lib Kao-Kaeng Khoi double-track railway construction project The construction of a double track railway at the junction of Chira - Khon Kaen Road Lop Buri - Pak Nam Pho double track railway construction project Mab Kabao double-track railway construction project – Thanon Chira Junction Nakhon Pathom-In double-track railway construction project The project of construction of a double track railway between Praprap Khiri Khan - Chumphon Chang-Praap Khiri Khan railway construction project Construction of a double track railway project, Pak Nam Pho - Den Chai The construction of a double track railway at the junction of Thanon Jira - Ubon Ratchathani Khon Kaen - Nong Khai double track construction project Chumphon - Surat Thani double track construction project Churat Thani - Khongkhla double track railway construction project Cha Ngad Yai - Padang Besar double-track railway construction project Den Chai - Chiang Mai double track railway construction project Mai Mai Den Chai - Chiang Rai - Chiang Khong Railway Construction Project Mai Mai Ban Phai - Nakhon Phanom Railway Construction Project railway construction project Lam Chabang Port - Tha Thae Pier		x			
Thailand Energy Efficiency Development Plan 2015-2036	2015	Development of transportation infrastructure system, double-track railway		x			
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Construction of 32 double-track railways Construction of 14 new railway lines Development of railway container transportation center at Laem Chabang Port Phase 1 and Phase 2		x			
Transport Infrastructure Development Strategy 2015-2022	2015	Medium-term: Khon Kean - Nong Kai (2024), 174 km Chumphon - Surat Thani (2024), 167 km Pak Nam Pho - Den Chai (2025), 285 km Jira Junction - Ubonratchathani (2025), 309 km Hat Yai - Padang Besar (2025), 48 km Sriracha - Map Ta Phut (2025), 70 km Surat Thani - Hat Yai-Song Kha (2026), 339 km Den Chai - Chiang Mai (2029), 217 km Long-term: Klong19 - Aranyaprathet (2030), 174 km Hat Yai - Junction-Sungai Kolok, 216 km		x			
Voluntary National Review 2021	2021	Key programmes include the construction of the R3 railway linking Chiang Rai to Kunming through the Lao PDR		x			
Voluntary National Review 2021	2021	construction of a dual-track railway on 7 routes covering 993 kilometres two projects to construct a new railway covering 4773 kilometres		x			
Renewable energy							
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	Thailand carbon neutrality by 2070 scenario: share of renewable electricity generation will be at least 50% of new power generation capacity by 2050					
Surface treatment resurfacing							
Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy	2021	road surface improvement	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Target - Modal shift							
Thailand's 2nd Updated Nationally Determined Contribution	2022	The Environmentally Sustainable Transport System Plan promotes a road-to-rail modal shift for both freight and passenger transport.	x	x			
Urban passenger rail infrastructure improvement							
Intended Nationally Determined Contribution (INDC)	2015	extensions of mass rapid transit lines		x			x
Climate change Master Plan 2015-2050	2015	Increase coverage and connectivity of urban rail, bus and short-distance public transit networks.		x			x
Strategic Plan of the Ministry of Transport 2017-2021	2017	The construction of the MRT Blue Line at Chang Lamphong - Bang Khae and Bang Sue - Tha Phra (Total construction cost = 84,303.3 million baht) Yay Khie Chong Electric Railway Project - Mo Chit - Bridge Mai - Khu Khot (Total construction cost = 37,728.0 million baht) Yam BTS Project Chagun Yattatham - Min Buri (Total construction cost = 113,999.3 million baht, year 2011 = 38,531.7 million baht) Yee Chompoo BTS Project Chong Khae Rai - Min Buri (Total construction cost = 53,519.5 million baht.) Yee Lueang MRT Project, Ladpra-Namrong Station (Total construction cost = 51,931.2 million baht) Yee Mong electric train project Chong Tao Poon - Rat Burana (Total construction cost = 128,420.6 million baht, 2011 year = 51,409.9 million baht) Yee Khia Electric Railway Project Bearing-Mutprakarn section (Total construction cost = 18,287.2 million baht) BTS SkyTrain Project Bang Khae - Phutthamonthon Yai 4 (Total construction cost = 21,197.0 million baht, 2011 year = 1,421.0 million baht) Yam BTS Project Chong Taling Chan - Cultural Center (Total construction cost = 123,354.0 million baht, year 2011 = 60,282.4 million baht) Yee Khia Electric Railway Project Muttaraprakan-Bangpoo (Total construction cost = 12,146.0 million baht, year 2011 = 2,329.4 million baht) Yee Khia Electric Railway Project, Chong Khu Khot - Lam Luk Ka (Total construction cost = 9,803.0 million baht, 2011 year = 1,889.3 million baht) Kakham Mooma Project, the Brown Line Project		x			x
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Construction of mass transit electric trains and suburban trains 20 lines (including extension)		x			x
Voluntary National Review 2021	2021	Four rail transportation lines with a total of 153.8 kilometers have been opened in Bangkok: (1) Green line (2) Blue line (3) Airport rail link (Phayathai-Suvarnabhumi) and (4) Purple line (Bang Yai-Tao Poon).		x			x
Vehicle taxes							
Intended Nationally Determined Contribution (INDC)	2015	vehicle tax scheme based on CO2 emission was also approved and will become effective beginning 2016	x				
Updated Nationally Determined Contribution - THA	2020	A vehicle tax scheme based on CO ₂ emission was introduced in 2016 to promote low carbon vehicles.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand's 2nd Updated Nationally Determined Contribution	2022	A vehicle tax scheme based on CO2 emission was introduced in 2016 to promote low carbon vehicles.	x				
Climate change Master Plan 2015-2050	2015	Decrease the demand for travel by introducing distance-based insurance premiums and service fees, encouraging staggered working hours, and encourage more effective use of the ICT tools available (e.g. teleworking, remote study, e-commerce).	x				
Thailand Energy Efficiency Development Plan 2015-2036	2015	Support the policy of the Ministry of Finance in restructuring the excise tax on cars.	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Improving excise tax rates Based on CO2 emissions (reflecting direct fuel consumption) for a car Improving excise tax rates Based on CO2 emissions (reflecting direct fuel consumption) for motorcycles Annual car tax rate improvement according to the amount of CO2 emissions (which directly reflects the fuel consumption rate) Improving excise tax rates according to the amount of CO2 emissions (which reflect direct fuel consumption) for the vehicle as well Intensified tax measures	x				
Accreditation of vehicle inspection centers							
Land Transport Act	1979	Any person wishing to establish a vehicle condition examination center for providing vehicle condition examination under this Act shall be licensed by the Central Registrar.	x				
Active transport infrastructure expansion							
Climate change Master Plan 2015-2050	2015	Improvethethecoverage and safetyof bicyclelanes and public walkways and encourage non-motorised transport (NMT) for short distance journeys by building convenient bicycle parking facilities in community areas;	x				
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	development of facilities road transport facilitation to promote the reduction of use personal cars such as bicycle parking spots, Park and Ride, convenient and safe pedestrian walkways, etc.	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Promoting walking and bicycles to connect with transportation systems Public (Non-Motorized Transport, NMT) by improving sidewalks, footpaths and bike paths in Bangkok and its vicinity in 140 routes Promoting walking and bicycles to connect with transportation systems Public (Non-Motorized Transport, NMT) by improving sidewalks, sidewalks and bike lanes in 6 regional cities. with public transportation systems, namely Chiang Mai, Khon Kaen, Phitsanulok, Phuket Nakhon Ratchasima and Songkhla	x				x

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts United Nations Regulations 1958							
59 UN Transport Agreements/ and Conventions Serviced by ECE	2021	Ratification, accession, or definite signature by country	x				
Thailand Road Safety Master Plan 2022-2027	2022	There is an announcement by the Department of Land Transport to approve the automotive technical requirements of the Agreement 1958 related to safety, not less than 20 requirements within 5 years. Establish product standards of automotive parts or equipment in accordance with automotive technical requirements. of the 1958 Agreement in accordance with the announcement of the Department of Land Transport within 5 years	x				
Air traffic management							
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Flight Operations Efficiency Optimization using the airport and air traffic management, etc.				x	
Thailand's Action Plan to Reduce Aviation Emission	2018	More efficient ATM planning, ground operations, terminal operations (departure, approach and arrivals), en-route operations, airspace design and usage, aircraft capabilities More efficient use and planning of airport capacities				x	
Thailand's Action Plan to Reduce Aviation Emission	2018	Single engine taxi-in Weight reduction optimization - Aircraft wash/engine wash - reduced flap landing - RNAV&RNP - Continuous descent operation (CDO) - Improved flexible use of civil-military airspace, conditional route (CDR) - Improved the use of optimum routings (parallel route)				x	
Aircraft fleet renovation							
Thailand's Action Plan to Reduce Aviation Emission	2018	Purchase of new aircraft Retrofitting and upgrade improvements on existing aircraft Adoption of revolutionary new designs in aircraft/engines				x	
Thailand's Action Plan to Reduce Aviation Emission	2018	Purchase of new aircrafts				x	
Alternative trip schedules							
Climate change Master Plan 2015-2050	2015	Decrease the demand for travel by introducing distance-based insurance premiums and service fees, encouraging staggered working hours, and encourage more effective use of the ICT tools available (e.g. teleworking, remote study, e-commerce).	x				
Automated enforcement of speed limits							

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Road Safety Master Plan 2022-2027	2022	Install a speed detection camera that detects motorcycle license plates. in traffic areas dense and prone to road accidents There should be an empirical study. To know the number of speed cameras installed in different areas.	x				
Budget/ identification of active mobility projects							
Thailand Road Safety Master Plan 2022-2027	2022	At least 20 percent of the transportation infrastructure construction budget must be allocated. to the infrastructure for non-motorized travel. (Non-motorized transport), such as bicycle path, footpath, crosswalk, underpass	x				
Convention on Road Traffic 1949							
59 UN Transport Agreements/ and Conventions Serviced by ECE	2021	Ratification, accession, or definite signature by country	x				
Convention on Road Traffic 1968							
59 UN Transport Agreements/ and Conventions Serviced by ECE	2021	Ratification, accession, or definite signature by country	x				
Voluntary National Review 2021	2021	At the international level, Thailand became a party to the Vienna Convention on Road Traffic (1968) in 2020, which has been key in elevating road safety standards in the country and ensuring that driving licence standards conform to international standards.	x				
Coordinate planning across government agencies							
Action Plan on Thailand Logistics Development 2023-2027	2023	Promoting collaboration between agencies involved in import-export procedures to facilitate border crossing formalities through Single-Stop Inspection (SSI) at key trade gateways.					
Thailand's Action Plan to Reduce Aviation Emission	2018	Draft MoUs and cooperation agreement with other Authorities of the region focusing on increasing their efforts and know-how in terms of GHG and emissions reduction solutions through a coordinated approach. Cooperate with other authorities in the region to advance research and testing on alternative fuels in the aviation sector.				x	
Data modelling improvements							
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Use of information systems or modern technology to systematically collect data and can be a tool for planning and setting policies for reducing profits Chaz greenhouse					
Thailand Road Safety Master Plan 2022-2027	2022	Conduct research studies to obtain empirical data that supports changing travel patterns from using motorcycles towards more use of public transport and non-motorized travel. Conduct research studies to obtain empirical data that support the change of travel patterns from using cars. to increase the use of public transport and non-motorized travel.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Design standards for sidewalks and bicycle paths							
Global Status Report on Road Safety 2018	2018	Partial	x				
Development of air pollution plan/ policy							
Thailand. Biennial update report (BUR). BUR 3.	2020	Thailand has furthermore developed similar strategies to address other aspects of the environment, including the 20-Year Master Plan on Air Quality Management (2018-2037)					
Development of automotive plan/ policy							
Thailand Road Safety Master Plan 2022-2027	2022	10) There is an integrated plan for standardizing automotive parts or equipment that is applicable within the country. that goes in the same direction by joint determination between related agencies, namely Department of Land Transport And the Thai Industrial Standards Institute (TISI) within 3 years	x				
Development of aviation plan/policy							
Thailand's Action Plan to Reduce Aviation Emission	2018	Work on implementation policy, and regulatory measures to set CAAT's priorities towards ICAO aspirational targets.				x	
Development of e-mobility transport plan/policy							
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	The number of quality and safety standards for main EV parts increases by no less than 15 per year. Promoting researches and formulating regulations to support research and development in ZEVs and autonomous vehicles as well as electrical connectors, electrification and shared use in order to extend results in the domestic industrial sector afterward. Drafting and amending laws and regulations to facilitate the growth of the EV industry and charging stations together with regulations on communications and safety, installation and area development, and used batteries. Developing key standards — namely, installation standards and battery standards for converted vehicles — to build confidence in the safety of converted vehicles. Reviewing and revising relevant regulations, particularly in relation to vehicle registration to facilitate conversion into EVs. Relaxing regulations related to investment in supply chains of EVs parts that will be vital at the initial stage to boost foreign direct investments. Reviewing and revising relevant regulations (particularly in relation to vehicle registration) to encourage and facilitate conversion to EVs. Establishing and developing standards for EVs, parts and accessories in line with export markets' standards and requirements. Enhancing laboratory testing and accreditation standards in compliance with international standards. Identifying key standards to promote conversion to EVs and the manufacturing of battery, charging stations and other EV accessories. Formulating standard development plans for EV businesses. Identifying standards and designated agency responsible for certifying converted vehicles	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Development of logistics plan/policy							
Action Plan on Thailand Logistics Development 2023-2027	2023	Amend laws and regulations regarding international transport and logistics transshipment laws, namely Customs Acts and Declarations regarding timing and document requirements for cross-border transport and transshipment.					
Development of public transport plan/ policy							
Strategic Plan of the Ministry of Transport 2017-2021	2017	Project and preparation Prepare a master plan for the development of passenger terminals					
Development of transport adaptation/ emergency/ disaster plan/ policy							
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	There are area-based risk prevention plans for natural disasters and climate change, especially for key areas.					
Development of transport plan/ policy							
Climate change Master Plan 2015-2050	2015	the Ministry of Transport has prepared NationalTransport Infrastructure Development Strategy 2015-2022tosupport future demands in transportation					
Ecodriving							
Climate change Master Plan 2015-2050	2015	Educate the general publicon fuel-efficient driving behaviour and vehicle maintenance by including them as compulsory elements in driving licence test;	x				
Oil Plan 2015-2036	2015	Driving for energy savings	x				
Thailand Energy Efficiency Development Plan 2015-2036	2015	Personnel development in driving for energy saving (ECO Driving)	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Establishing energy-saving driving training centers in 5 regions across the country. Establishment of a training center for truck drivers (Training of Trainer) according to Energy-saving driving course (Eco-driving) in all regions across the country.	x				
Employment in transport, communication, and storage							
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Establishing remedy measures for those affected by the shift to an EV industry such as operators and workers in the petrochemical businesses and farmers of biofuel crops. Setting measures to attract highly skilled Thai and foreign experts with benefits offered at the preliminary periods, such as tax benefits for high-skilled workforce in fields related to EV production, privileges in visa, residency and migration for foreign experts.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
EV manufacturing							
Thailand Industrial Development 4.0 Strategy for 20 years (2017-2036)	2016	Manufacture of equipment for Hybrid vehicles, Electric Vehicles (EV) and Plug in Hybrid Electric Vehicles (PHEV)	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Fostering EV export market expansion while retaining existing export bases in Thailand's main trade partners for competitive products, particularly pickup trucks. Promoting BEV exports, especially to countries with carbonneutral policies to encourage the use of such vehicles. Promoting Thailand as a key EV production base to attract foreign investment in ZEV manufacturing, as well as supporting businesses within the supply chain to become capable of manufacturing key parts in EV technology, including connected and autonomous vehicles. Encouraging the production of "clean, economical and safe" vehicles according to international standards (UN regulations) to improve the quality of vehicles for domestic use and meet the diverse needs of current and new export markets. Enabling the establishment of a domestic production base for batteries and key parts such as motors, battery management systems and navigation systems. Fostering supply chain connections with countries with important raw materials for ZEV production, including rare earth minerals and semiconductors. Encouraging existing operators with potentials to shift to EV production lines such as production with new materials of auto bodies and suspension systems, the production of power transmission systems, etc. Providing benefits to boost investment by means of financial and tax measures. Forging partnerships with leading EV countries to seek appropriate measures to assist in the transition of Thai enterprises and boost competitiveness of Thai start-ups on the international market. Promoting the conversion of existing internal combustions cars into EVs to stimulate investment in the automotive industry's ecosystem and the transfer of EV technology.	x				
Express lanes/ public transport priority							
Climate change Master Plan 2015-2050	2015	Improve the quality and safety of public buses by mandate an effective and interconnected network of bus lanes and rigorously enforcing them;	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Increasing the proportion of bus lanes and granting special privileges for Public buses in the city	x				x
Financial instruments to support decarbonisation							

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Action Plan on Thailand Logistics Development 2023-2027	2023	Pushing forward the implementation of policy measures, namely, the utilization of biofuel and natural gas in supply chains, and the provision of financial or tax incentives to encourage energy users to adopt alternative energy in order to promote energy efficiency and reduce greenhouse gas emissions in line with the goals and guidelines of the Bio-Circular-Green Economy (BCG)					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Supporting market mechanisms and tax mechanisms to promote participation in reducing greenhouse gas emissions, such as offering benefits to people or stakeholders Entrepreneurs participating in the project Organize campaigns that are modern and regular for the public or entrepreneurs. who participated in the project					
Fiscal incentives for EVs and components							
Climate change Master Plan 2015-2050	2015	Encourage the shift to energy efficient vehicles (e.g. electric vehicles, hybrid vehicles, eco-cars, vehicles with high-efficiency diesel engines) for personal and commercial uses by offering incentives (e.g. lower tax rates or tax rebates);	x				
Thailand's Electric Vehicle policies	2022	Reduction of annual vehicle tax for EV sedan to 1,000 Baht Reduction of annual vehicle tax for EV bus and truck to 1,450 Baht	x				
Thailand's Electric Vehicle policies	2022	Reduction of annual vehicle tax for EV sedan to 200 Baht	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Promoting incentives to encourage a shift to EVs, including 1) tax incentives such as an excise tax, waiver or reduction of annual vehicle registration fees, etc., 2) non-tax incentives such as discounts on household and condominium electricity bills, free parking, and hire-purchase loans for EV users, and 3) subsidies for EV purchases to lower operational costs to similar level as those of internal combustion vehicles. Providing low-interest rate loans to EV-and-parts businesses.	x				
Fuel tax							
Climate change Master Plan 2015-2050	2015	Set fuel prices which reflect the true cost and use tax mechanisms to promote energy conservation and renewable energy consumption in the shift towards high efficiency transportation;					
Oil Plan 2015-2036	2015	Consider to charge the excise tax by heating value compared with gasoline - ethanol fuel to minimize market distortions LPG prices to reflect the true cost of each source of supply.					
Thailand Energy Efficiency Development Plan 2015-2036	2015	Regulating fuel prices in the transportation sector to reflect the real costs.					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Use of fuel price mechanism To push for the use of vehicles with higher efficiency Development of fuel tax exemption law according to service quality of service providers. fixed-route bus	x				
General active mobility							

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Support non-motorized transportation such as bicycles, walking, etc.	x				
Thailand Road Safety Master Plan 2022-2027	2022	Promote the change of travel patterns from using personal vehicles to other forms of travel. Especially public transport and walking - bicycles.	x				
General alternative fuels							
Thailand's Action Plan to Reduce Aviation Emission	2018	Development of other fuels with lower life cycle CO2 emissions Standard/requirements for alternative fuel use				x	
General aviation improvements							
Action Plan on Thailand Logistics Development 2023-2027	2023	Improving potential regional airports to serve as air cargo hubs, such as Chiang Mai International Airport, Mae Sot International Airport, Udon Thani International Airport, Ubon Ratchathani International Airport, Hat Yai International Airport, and Ranong Airport.				x	
Climate change Master Plan 2015-2050	2015	Promote the use of energy efficient technology in the aviation industry.				x	
National Strategy 2018-2037	2019	development of related infrastructures and logistics system connecting primary and secondary cities to prepare for tourist pathways between ASEAN nations and the Mekong sub-region on land, water, and air developing land, water, and transport and infrastructure networks to accommodate transportation and logistics along the regional supply chain, with more importance being placed on water and rail modes of transport				x	
Strategic Plan of the Ministry of Transport 2017-2021	2017	Project to improve/develop air service system infrastructure Phuket Airport Port Construction Project				x	
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Construction of runways, routes 3 and 4 of Suvarnabhumi Airport				x	
Thailand Industrial Development 4.0 Strategy for 20 years (2017-2036)	2016	Aircraft service and maintenance (Maintenance, Repair and Overhaul: MRO) Aircraft parts manufacturing industry unmanned aerial vehicle (Drone)Manufacturing of aircraft parts, navigation systems and various software and educational institutions and training in aviation, etc.				x	
Thailand's Action Plan to Reduce Aviation Emission	2018	Aircraft minimum fuel efficiency standards Aggressive aircraft fuel efficiency standards, setting standards for the future Installation of airport infrastructure such as Fixed Electrical Ground Power and Pre-Conditioned Air to allow aircraft APU (Auxiliary Power Unit) switch-off Construction of additional runways and taxiways if used solely to relieve traffic congestion Optimized aircraft maintenance (including jet engine cleaning/washing)				x	

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand's Action Plan to Reduce Aviation Emission	2018	Construction of new runways at Suvarnabhumi airport (n. 3) Upgrade of certification standards in the majority of airports of the country: from level 2 to level 3 in order to precisely quantify CO2 reduction. (from mapping-carbon footprint- level 1 to carbon neutrality level 3+ as per ACI-Airport Carbon Accreditation) Develop and update of CO2 standards				x	
Voluntary National Review 2021	2021	In terms of air transport, projects include the construction of the Betong International Airport, which will be completed within 2021, and the development of the U-Tapao airport as the country's third commercial international airport.				x	
General capacity building							
Action Plan on Thailand Logistics Development 2023-2027	2023	Build capacities of logistics personnel Engaging logistics personnel in reskilling, upskilling and new skilling efforts to meet national skill standards and acquire essential skills for international labour markets consistent with business needs and technological advancement. Promoting cooperation between public and private sectors to develop or improve curriculums or training courses that emphasize the use of technology for logistics industries, for example, by encouraging logistics experts or entrepreneurs to be involved in improving the curriculums or courses, and building cooperation between academic institutions and logistics operators to offer internship opportunities to students.					
Climate change Master Plan 2015-2050	2015	Develop skills of the workforce and other supporting structure to attract foreign investment into energy efficient automotive industry and develop mechanics with according maintenance skills;					
National Strategy 2018-2037	2019	developing manpower to have skills required by the automotive, aviation and space, and logistics industries encouraging automotive, aviation and space, and logistics industries including regulatory bodies to operate with international standards	x			x	
Thailand Automotive Industry Situation and Master Plan	2015	High skill enhancement Knowledge Creation and Diffusion Society R&D, Innovation Capability Education for new and advance technology Education for new management system for Industry 4.0 Academic Alliance					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Developing the potential of personnel of agencies involved in reducing greenhouse gas emissions in Collect activity data and calculate greenhouse gas reduction.					
Thailand Road Safety Master Plan 2022-2027	2022	Consumer representatives or private organizations or government agencies with vehicles as the main means of operation In every province know and use the vehicle inspection system and safety standards. of new cars Educate local administrative organizations about road construction guidelines with high safety. for all groups of users (cars, motorcycles cyclist and pedestrians) according to iRAP criteria, operating for new roads planned to be constructed.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand's Action Plan to Reduce Aviation Emission	2018	Train and urge capacity building activities with all involved sector stakeholders, governmental agencies and ministries Sensitize operators into adopting green procurement solutions and carbon footprint in management structure, operations and equipment to be addressed well beyond the obvious measures.				x	
General data repositories and data collection							
National Strategy 2018-2037	2019	developing a maritime tourism database			x		
Strategic Plan of the Ministry of Transport 2017-2021	2017	Project to develop a public transport system database Project to develop a database connection system for traffic offenders					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	development of a database system and tracking cargo information On-board Diagnostic (OBD) equipment and technology development and systems A database to evaluate the results of energy-saving driving measurements in trucks.	x				
Thailand Road Safety Master Plan 2022-2027	2022	5) Provide an efficient data linkage system between the Department of Land Transport and private vehicle inspection stations. within 2 years	x				
Thailand's Action Plan to Reduce Aviation Emission	2018	An aviation emissions database has been established to demonstrate: - Accuracy of data and trends in the sector: exhibiting CAAT's role and powers as the new Regulator of the aviation sector - The environmental effectiveness of the instrument: its demonstrated effect on emissions reductions and the benefits that stem from a continuous and systematic update of the system - The economic benefits: the cost-effectiveness of the instrument, its effect on economic growth, and the potential for demonstrating the need, the uptake and development of low-carbon technology				x	
General education and behavior change							
Action Plan on Thailand Logistics Development 2023-2027	2023	Creating awareness or promote information about improving or adding laws and regulations for businesses.					
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Transport must also manage personnel to ensure proper working hours without causing fatigue to the operators involved (e.g. pilots, operators). air traffic control Employees driving or public buses, etc.), which may lead to safety impacts	x			x	
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	public relations to inform the public to create motivation to use serve Demonstrating the importance of GHG reduction actions using the benefits For example, using a vehicle with good performance and reducing emissions will save energy and costs. expenses Public relations and dissemination of information on GHG reduction progress in order to raise awareness and disseminate knowledge on GHG reduction. Implementation of measures to reduce greenhouse gases Action					

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Road Safety Master Plan 2022-2027	2022	Develop a road safety core curriculum for children and youth of different ages; and Develop appropriate guidelines for curriculum implementation (Guidelines) by setting up a working group to design curriculum and curriculum implementation guidelines And start operating in the education innovation area as a pilot (Education sandbox) according to the Educational Innovation Area Act B.E. 2562 Encourage youth networks to be an important mechanism for surveillance. reflect the risk and driven Work on road safety issues at the local level Reduce the risk of accidents from improper driving behavior and use of safety equipment. There is public relations and awareness raising on the issue of drinking and driving. wearing a seat belt Using a mobile phone while driving and continued use of child safety seats At least once a quarter Regular public awareness activities about using speed at least per quarter Conduct a study on the control of advertising media for road safety among agencies. related within 2 years Support the establishment of community checkpoints and road accident surveillance at the family level. and communities in areas that have not yet been implemented and increase the frequency and execution time of community checkpoin in areas that have already been operated	x				
General freight and logistics improvements							
Action Plan on Thailand Logistics Development 2023-2027	2023	Build comprehensive water, rail, road and air transport and logistics network to connect with economic zones, industrial parks and potential border crossing points Promote utilization of digital technology advancement Develop data linkages and accelerate the full usage of the National Single Window (NSW) system Promote paperless custom clearance processes Improve cross-border freight transport facilitation at major trade gateways Accelerate cooperation and remove barriers to international transport Increase Thai LSP's capability Elevate Thai LSPs to international markets Improving customs houses or developing potential border crossing points, such as Chiangkhong Customs House, Maesot Customs House, Nongkhai Customs Office, Nakhonphanom Customs House, Mukdahan Customs House, Sadao Customs House, and Padangbesar Customs House, to support cross-border transport facilitation for all modes of transport covering all activities of release and clearance of goods, namely customs clearance, plant and animal inspections, immigration, disease controls, and truck weighing. Promoting the improvement of logistics services for special goods, such as pharmaceuticals, and dangerous goods. Promote paperless custom clearance processes Formulating consistent management guidelines for existing infrastructure and logistics centres to support national freight transport. Supporting the development of new marketing channels, especially e-Commerce.	x	x	x	x	

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Climate change Master Plan 2015-2050	2015	Adopt intelligent logistics management systems which will increase efficiency by increasing the use of freight distribution networks, reducing the number of empty truck journeys while simultaneously shifting to more efficient and low-emission transport modalities (e.g. rail freight and water navigation) and;	x	x	x		
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Upgrading of service and management in waiting Facilitate Trade and supply chain management (Supply Chain Management) by increasing the efficiency of the system.					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Backhaul Management development of a database system and tracking cargo information Introducing and encouraging truck transport operators to develop quality Truck Transport Standard Implementation	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Boosting the efficiency of logistics management to facilitate and mitigate obstacles in trade and investment as well as correspond to future trade patterns. Improving basic infrastructure management systems by, for example, adopting modern technologies, enhancing service systems, developing software, and relaxing relevant rules and regulations.					
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Thailand's ranking in the logistics performance index is no lower than 25th or 3.60 in terms of scores.	x	x	x	x	
General inland waterways (IWT) improvement							
Climate change Master Plan 2015-2050	2015	Improvethetheefficiencyof water and rail logisticsnetworks (e.g.establishnew networks and hubs, restore, develop and maintainexistingones, develop ICTinfrastructure and safeguard system, expand coverage area) while minimising the negative environmental and social impacts;			x		
National Strategy 2018-2037	2019	development of related infrastructures and logistics system connecting primary and secondary cities to prepare for tourist pathways between ASEAN nations and the Mekong sub-region on land, water, and air developing land, water, and transport and infrastructure networks to accommodate transportation and logistics along the regional supply chain, with more importance being placed on water and rail modes of transport			x		
Strategic Plan of the Ministry of Transport 2017-2021	2017	Ferry development project linking the upper Gulf of Thailand, the eastern coast and Western			x		
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Development of public or mass transit systems in major cities in the region as an alternative for for the public to travel especially water and rail transport, which are Environmentally friendly transportation			x		
Thailand Energy Efficiency Development Plan 2015-2036	2015	Increase the efficiency of water transportation of the country			x		

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Construction of elevated dams on the Chao Phraya and Nan rivers for navigation purposes. Efficiency improvement of goods transportation system in Pa Sak River			x		
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Building and enhancing the capacity of river and coastal transport, focusing on convenient, modern and safe transport along key rivers, including the Chao Phraya, Nan and Pasak rivers, and particularly along the Chao Phraya to Laem Chabang Port. Developing waterways for economic purposes to boost the effectiveness of domestic and international transport.			x		
General innovations and digitalization							
Action Plan on Thailand Logistics Development 2023-2027	2023	Promote technological and innovative R&D projects in logistics for domestic use Encouraging infrastructure service providers and government agencies to utilize digital technology to develop and improve logistics-related services to reduce logistics cost and upgrade logistics system efficiency, for example, the utilization of driverless vehicles and development of the digital platform as backbone system for transport management and tracking for SMEs. Encouraging use of technology, innovation and digital platform in transport and logistics services such as one-stop service platforms, Smart GPS and QR Code technologies for end-to-end tracking and tracing systems, and digital sensors for temperature, humidity, and vibration monitoring systems.	x				
National Strategy 2018-2037	2019	promoting the use of information technology to connect transport networks and logistics system, ensuring the same operation standard					
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Promote research and development to bring technology, innovation and systems various intelligent technologies that has progressed rapidly to be adapted for infrastructure development and management					
Thailand Automotive Industry Situation and Master Plan	2015	Technology Transformation R&D, Design Capability Automation					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	On-board Diagnostic (OBD) equipment and technology development and systems A database to evaluate the results of energy-saving driving measurements in trucks. Development and improvement of information systems, technologies and innovations to support Actions to reduce greenhouse gas emissions for data management (data management) and extending the data for planning and setting policies for reducing greenhouse gas emissions	x				
Thailand's Electric Vehicle policies	2022	GPS Installation on all Public Buses					

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Advocating for the adoption of technologies such as autonomous systems, artificial intelligence, other 4.0 industries, as well as 5G wireless mobile technology in production management to cut costs and raise competitiveness. Establishing research and innovation joint ventures. Accelerating the research and development of batteries, sensor system, electronic system and communication system for EVs. Developing CO2 capture technology, taking into consideration a product's entire lifecycle, and promoting technologies related to EV conversion as well as knowledge and technology transfer to local EV businesses.	x				
Voluntary National Review 2021	2021	Measures have been implemented to reduce roadside injuries, closedcircuit television (CCTV) has been introduced to enforce road traffic regulations, and Traffic Safety Zones which control vehicle speed have been created.	x				
General land use							
Climate change Master Plan 2015-2050	2015	Apply and strictly enforce urban planning measures such as land-use zoning to encourage urban development that is conducive to the adoption of public transportation;					x
National Strategy 2018-2037	2019	improving national and local planning and zoning systems developing effective urban planning and management guidelines to create low-carbon cities and green areas					x
General rail improvement							
Climate change Master Plan 2015-2050	2015	Improvethetheefficiencyof water and rail logisticsnetworks (e.g.establishnew networks and hubs, restore, develop and maintainexistingones, develop ICTinfrastructure and safeguard system, expand coverage area) while minimising the negative environmental and social impacts;		x			
National Strategy 2018-2037	2019	development of related infrastructures and logistics system connecting primary and secondary cities to prepare for tourist pathways between ASEAN nations and the Mekong sub-region on land, water, and air developing land, water, and transport and infrastructure networks to accommodate transportation and logistics along the regional supply chain, with more importance being placed on water and rail modes of transport		x			x
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Development of public or mass transit systems in major cities in the region as an alternative for for the public to travel especially water and rail transport, which are Environmentally friendly transportation		x			

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Continuously giving importance to the rail system and turning it into Thailand's main transport network with linkages to regional and sub-regional logistics networks in order to minimize logistics costs. Supporting rail connections between Thailand, Laos and China at Nongkhai and Chiangrai provinces as well as facilitating rail connections between local economic zones in the Northern, Northeastern, Central and Eastern regions and China and GMS countries.		x			
General regulations for app-based mobility							
Ride-Hailing Vehicles Via Electronic System B.E. 2564	2021	Based on the MR on Ride-Hailing, the electronic systems are required to be approved and verified by the DLT. Cars registered with the DLT must meet the required specifications. Vehicles are divided into the following categories: small vehicles – engine power from 50-90 kilowatts; mid-sized vehicles – engine power from 91-120 kilowatts; full-sized vehicles – engine power over 120 kilowatts; and electric vehicles – maximum speed of no less than 90 km per hour.	x				
General shipping improvement							
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Study and management of queuing of cargo ships Establishment of One Stop Service Center of Bangkok Port			x		
General transport asset management							
Action Plan on Thailand Logistics Development 2023-2027	2023	Manage existing infrastructure and logistics centres					
Strategic Plan of the Ministry of Transport 2017-2021	2017	Road and bridge maintenance project on the land network Road and bridge maintenance project on rural road network	x				
General transport finance							
Action Plan on Thailand Logistics Development 2023-2027	2023	Provide investment incentives for the industries using technology and innovation in logistics activities Promoting rail and inland waterway transport, such as providing tax incentives for freight operators to use rail or inland waterway transport and setting port tariff/port charges of each port based on product types and ship types or sizes. Continuously supporting access to sources of funding, and the use of financial innovations, such as encouraging entrepreneurs to use alternative financial evidence, such as purchase order confirmations, to enable potential entrepreneurs to gain access to credit.		x	x		
Oil Plan 2015-2036	2015	Revolving fund to energy conservation by energy services company The subsidies for energy efficiency for the transport sector (SOP + DSM)					

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Sources of investment in investment in transport infrastructure development consist of budget, annual expenditures, income from state enterprises. Loans (domestic or foreign sources of funds), funds, fees through and private investment in state enterprises (PPP). The new model is Thailand Future Fund (TFF)					
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Establishment of a fund to support traveling by public transport system					
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Encouraging more private sector investment in infrastructure with transparency, accountability and clear evaluation of efficiency and success. Allowing operators in the trade, investment and service sectors to have more roles in service provision.					
General transport institutional reform							
Oil Plan 2015-2036	2015	Establish Task Force on the Harmonization of Quality Standards for Transportation Fuel in ASEAN					
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Organizational restructuring and transport related agencies to play a role between agencies in policy, supervision, and transport operators, so that the operations in each area are clear. efficient and meet international standards including the restructuring of departments. Transportation, including road, rail, water and air (such as Bangkok Mass Transit Authority, State Railway of Thailand, Thai Airways International Public Company Limited) by separating the departments related to birds Regulatory bodies and operating units Water transportation and establishment of the Department of Rail Transport, etc.	x	x	x	x	x
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Development of a central agency responsible for collecting, analyzing, linking and evaluating the amount of GHG emission reduction. By surveying, monitoring and accounting (Inventory), actions or goals, reduction (Mitigation) and life cycle. (Life Cycle Analysis) to analyze the reduction of greenhouse gas emissions from the source to the destination. which requires the integration of multi-sectoral cooperation Whether it is an agency of land, rail, water and air.					
Thailand. Biennial update report (BUR). BUR 3.	2020	Thailand established the National Committee on Climate Change Policy (NCCC) in 2007 in order to fulfill Thailand's commitments under the UNFCCC and to define national climate policies.					
Thailand's Action Plan to Reduce Aviation Emission	2018	The Civil Aviation of Thailand Emergency Decree, B.E. 2558, established the Civil Aviation Authority of Thailand (hereinafter CAAT, The Authority, the Regulator) and transferred to this entity all the competence previously belonging to the Department of Civil Aviation. CAAT also adds the economic aspect of the operators within in its role. Under the Aerodrome Standards Department (AGA), the Aviation Environment Division (EV) was created. The dedicated environmental and climate change experts have been employed.				x	

High-speed rail (HSR)

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Construction of high-speed trains + EEC, totaling 4 lines		x			
Transport Infrastructure Development Strategy 2015-2022	2015	Medium-term (2022-2026): Bangkok-Hua Hin (211 km) Phitsanulok-Chiang Mai (288 km) Long-term (2026-2027): Hua Hin-Surat Thani (424 km) Surat Thani-Padang Besar (335 km)		x			
Implementation of horizontal deflections on roads							
Thailand Road Safety Master Plan 2022-2027	2022	Use appropriate traffic calming and road diet tools. with motorcycle users and the context of the road according to the Context Sensitive Design principle.	x				
Intelligent transport systems (ITS)							
Climate change Master Plan 2015-2050	2015	Use Intelligent Transportation Systems (ITS) to improve traffic management efficiency;	x				
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Use of Intelligent Transport Systems (ITS) and technology to enhance transportation services and manage transportation systems for maximum efficiency, such as Real-time traffic condition reporting, traffic light control, driving speed control, service charge system electronics intelligent highway system, etc., and the exchange of traffic information without going through Other traffic information centers Including the use of GPS to control the driving of public buses and freight vehicles.	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Real-time public transport network information service using mobile application and improvement of bus operation information via signboards. intelligent bus	x				
Intermodality measures							
Action Plan on Thailand Logistics Development 2023-2027	2023	Developing logistics centers to be regional and intermodal facilitation centres in potential areas having capability to be strategic locations for both national and regional connectivity, namely fulfillment and distribution centres, intermodal facilities, free zone warehouses, truck terminals or container yards, along with truck rest areas for transport safety.	x				
National Strategy 2018-2037	2019	developing domestic transportation networks that can effectively link all modes of transport					

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	There is management that Efficiency to reduce logistics costs, reduce bottlenecks and promoting multimodal transport by providing transportation Rail and water as the main form of transport and road transport as a support system (Feeder Systems) and develop the capacity to support (Capacity) and efficiency (Efficiency) of the infrastructure. Develop a freight forwarding center such as Inland. Container Depot (ICD) or Container Yard (CY), etc., including the development of connection points between transportation modes (such as Sathorn Pier, which is a connection point for the Chao Phraya Express Boat, the BTS SkyTrain and public transport system) and the development of passenger terminals. for the convenience of traveling		X	X		
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Developing a seamless multimodal transportation and logistics system at the regional, sub-regional and cross-border levels. Integrating infrastructure development plans for land, water and air transport to exploit the geographical and infrastructural linkages from regional, sub-regional and cross-border links, especially links with GMS countries and southern China. Including the Eastern Economic Corridor and other Special Economic Zones in the regional infrastructure linkages to globalize Thailand's manufacturing and service sectors.	X		X	X	
Investment required for specific projects							
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Table 1 onwards					
Involvement of subnational government for transport activities							
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Infrastructure development for all forms of transport and services by integrating plans in/project with all relevant agencies from the planning stage to the construction stage to be consistent with the development of the entire transportation network and facilities other facilitators to have a complete transport network and efficiency. Important goals include network connection.					
Thailand Road Safety Master Plan 2022-2027	2022	There is a central and local management mechanism. by integrating the work between Provincial Road Safety Administrative Center District Road Safety Operation Center and Local Administrative Organization Safety Operation Center in every province within 3 years	X				
Logistics hub							
Action Plan on Thailand Logistics Development 2023-2027	2023	Develop logistics centres and improve potential border crossing points Developing logistics centers to be regional and intermodal facilitation centres in potential areas having capability to be strategic locations for both national and regional connectivity, namely fulfillment and distribution centres, intermodal facilities, free zone warehouses, truck terminals or container yards, along with truck rest areas for transport safety.	X				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Develop a freight forwarding center such as Inland Container Depot (ICD) or Container Yard (CY), etc., including the development of connection points between transportation modes (such as Sathorn Pier, which is a connection point for the Chao Phraya Express Boat, the BTS SkyTrain and public transport system) and the development of passenger terminals. for the convenience of traveling		x	x		
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Establishment of a distribution center (Distribution Center, DC)					
Thailand Industrial Development 4.0 Strategy for 20 years (2017-2036)	2016	Modern logistics center					
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Encouraging investment in building logistics service centers, which includes container yards or inland container depots, dry ports, and loading-unloading docks, with an emphasis on integrating investment plans into key strategic transport routes to enable connections with GMS countries, China and ASEAN. Setting compelling service rates to motivate a shift in transport modes to rail system.			x		
LPG/ CNG/ LNG							
Action Plan on Thailand Logistics Development 2023-2027	2023	Pushing forward the implementation of policy measures, namely, the utilization of biofuel and natural gas in supply chains, and the provision of financial or tax incentives to encourage energy users to adopt alternative energy in order to promote energy efficiency and reduce greenhouse gas emissions in line with the goals and guidelines of the Bio-Circular-Green Economy (BCG)					
Oil Plan 2015-2036	2015	Subsidizing the retail price of NGV for buses and trucks Adjudge NGV retail prices to reflect the true cost The establishment of a freight car with natural gas service stations (NGV Terminal Hub). Encourage the use of NGV in the bus and truck.	x				
Technology Needs Assessment for Climate Change Mitigation - THA	2012	Promoting the use of natural gas in the transportation (NGV), industrial, commercial and household sectors.					
Voluntary National Review 2021	2021	Furthermore, the Government deployed a budget of 3.5 billion Thai Baht to freeze the price of gas, and a further 801 million Thai Baht to support the costs of natural gas for public transport vehicles.					
Market entry regulations for app-based mobility							
Ride-Hailing Vehicles Via Electronic System B.E. 2564	2021	Following the enforcement of the MR on Ride-Hailing, drivers are required to register their cars that will be used for ride-hailing service with the Department of Land Transport	x				
Mixed use							

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Climate change Master Plan 2015-2050	2015	Apply mixed use planning approaches to reduce the need for transit and regulate area density to facilitated transit-oriented developments.					x
National speed law							
Global Status Report on Road Safety 2018	2018	Yes	x				
Road Traffic Act - THA	1979	A driver must drive a conveyance at the speed prescribed in the Ministerial Regulation or the traffic sign installed on the road.	x				
Thailand Road Safety Master Plan 2022-2027	2022	Reduce the speed of traveling on the roads of motorcyclists and young people. Study and determine the function and hierarchy (functional of road hierarchy) of roads in Thailand. and determine the appropriate speed according to the function of the road Conduct a study and review of laws and regulations related to speed limit Including methods for joint enforcement among relevant agencies within 2 years. Amendment of fines for driving beyond the legal speed limit To increase in the form of a ladder within 5 years. Main responsible person There is a law prescribing speed rates that are consistent with the context of town planning, hierarchy and characteristics. Road usage within 5 years There is a national road speed management plan within 3 years.	x				
Non-urban passenger rail infrastructure improvement							
Strategic Plan of the Ministry of Transport 2017-2021	2017	Suburban Railway System Project (Yee Daeng) Bang Sue - Makkakan - Makka and Chong Bang Sue - Lamphong Suburban railway system project (Yee Daeng) Bang Sue - Rangit (Contract 3) (JICA loan value 82,281.5 million baht/money value of the State Administrative Court 5,721.9 million baht) Suburban Railway System Project (Yee Daeng) Chong Rangit - Thammasat University Rangit Center Suburban Railway System Project (Yee Daeng Light) Taling Chan - Siriraj Section Suburban electric train system project (Yee Daeng Light), Taling Chan - Alaya section (Additional Bang Kray Station - EGAT and Rama 6 Bridge) Airport Rail Link (Airport Rail Link) Extension Project (Phase 1) Chong Phaya Thai - Bang Sue (worth 17,245.6 million baht) Airport Rail Link Extension Project (Phase 2) Bang Sue - Don Mueang (worth 13,903.7 million baht)		x			
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Develop intercity rail systems for transporting goods and passengers. to be completed according to the master plan Rail transport system in Bangkok and its vicinity with the goal of increasing the proportion of travel mass transit system		x			x
Parking pricing							

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Climate change Master Plan 2015-2050	2015	Encourage a modal shift through the introduction of congestion pricing, parking fees in inner-city areas with sky-train/subway infrastructure, carpool parking, school bus parking areas, and mandatory safety standards for school bus service, etc. and;	x				x
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Measures to collect parking fees in high-traffic areas	x				x
Thailand Road Safety Master Plan 2022-2027	2022	Study for ways to determine parking prices and management of parking spaces. through reduction of parking spaces in urban areas or determining the maximum parking space in urban areas to incentivize the use of cars reduced personal	x				x
Passenger and freight load limits							
Road Traffic Act - THA	1979	The traffic officer or competent official has the power to order a driver to stop the conveyance when: (1) such conveyance is not in the condition correctly complied with the provisions of section 6; (2) he or she finds that the driver or any person in such conveyance violates or fails to comply with the provisions of this Act or the law concerning such conveyance.	x				
Port infrastructure improvements							
Action Plan on Thailand Logistics Development 2023-2027	2023	Improving for maximizing port utilization, and managing hinterland congestion to facilitate operations of ports, such as Laem Chabang Port, and Bangkok Port as well as investing sufficient lifting equipment and facilities to increase the efficiency of ports, such as Ranong Multipurpose Port and Songkhla Port, and developing and dredging economic waterways to support inland coastal and international shipping.			x		
Strategic Plan of the Ministry of Transport 2017-2021	2017	Project to build a way to the countryside to support Klong Yai multipurpose pier Project to build a rural way to support Laem Chabang Port Project to build a way to the countryside to support Tha Akaya Anuraphoum Project to build a rural way to support Map Ta Phut Port Project to build a way to the countryside to support Chiang Nae Pier, Chiang Rai Province Project to build a way down to the countryside, Nunnapa, across the Mekong River No. 4, Chiang Rai Province Project to build a way to the countryside to support Pak Bara Pier Construction project for a large cruise terminal (Cruise) of 4 units At Krabi Province, Koh Mui District, Surat Thani Province, Phuket Province and the coast Bangkok to Chonburi			x		
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Development of Laem Chabang Port, Phase 3 Development of Map Ta Phut Industrial Port, Phase 3			x		

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Maritime tourism including pleasure cruises, yachts and river cruises: by formulating a clear development plan in collaboration with the private sector to identify locations for marinas both as home ports and transit ports, for cruises in areas with potentials along the Gulf of Thailand and the Andaman Sea such as Pattaya and Phuket, together with creating tourist spots in connection with the marinas to substantially stimulate private investment and revenue distribution Investing in infrastructure and developing supporting factors to promote special development zones and areas with current and future potentials, including transport infrastructure, logistics services and networks along key routes and links with neighboring countries, cross-border investment and trade facilities, ports and land bridges in the Southern Economic Corridor to turn Thailand into a strategic gateway. Investing in, and developing, infrastructure to enhance and accommodate tourism and services in provinces with potentials, such as connecting tourism in the Andaman Sea, which include Phuket, Krabi, Phangnga, Trang and Satun provinces, so as to become one of the world's top five cruise destinations.			x		
Transport Infrastructure Development Strategy 2015-2022	2015	Chiang Saen Port Chiang Khong Port			x		
Voluntary National Review 2021	2021	the Government has accelerated the third phase of the Laem Chabang port project, opened the Pattaya-Kao Thakiab route, and plans to open the Sattahip-Bangsaphan route.			x		
Pricing control for app-based mobility							
Ride-Hailing Vehicles Via Electronic System B.E. 2564	2021	Under the MR on Ride-Hailing, ride-hailing service fare rates are now regulated. The MR on Ride-Hailing empowers the minister of the Ministry of Transport to prescribe service fares. Fees must be shown to the passenger before the service can be provided. Further, electronic system operators are not allowed to do any marketing promotion where the collection of service fares is lower than the fare rates prescribed above.	x				
Programs to reduce emissions in logistics							
Action Plan on Thailand Logistics Development 2023-2027	2023	Promoting green businesses, efficient energy utilization, and greenhouse gas reduction, such as the use of electric vehicles.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Upgrading standards of transportation management by trucks to support Enhancing energy efficiency and reducing greenhouse gas emissions Study on ways to increase energy efficiency and reduce gas Cold Chain Logistics Greenhouse Changing substances in the cooling system in Cold Chain Logistics trucks to increase energy efficiency and reduce CO2. A pilot project to change refrigerant in trucks in Cold Chain Logistics to increase energy efficiency and reduce CO2. Promotion of transportation management system for energy saving (LTM) Research and development of transportation management program for energy saving (LTMA) Implementation of a sustainable logistics system (Green Logistics) by the private sector					
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Restructuring the industrial, service and logistics sectors to adopt BCG (Bio-Circular-GreenEconomy Model) framework, as well as supporting clean energy usage, reusing and recycling of factors of production, and CO2 emission reductions.					
Public transit integration							
Climate change Master Plan 2015-2050	2015	Common ticketing systems and complimentary infrastructure (e.g. park-and-ride, connecting bridges and escalators, etc.) must also be expanded to facilitate even greater adoption of multi-modal transit;	x				
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	development of facilities road transport facilitation to promote the reduction of use personal cars such as bicycle parking spots, Park and Ride, convenient and safe pedestrian walkways, etc.	x				
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Adjustment of the number of bus trips in conjunction with road routing adjustments to be a system connecting travel (Feeder) with the rail system Park and Ride Development for users of the rail mass transit system (Phase 2) to support the travel demand management system Study on the development of a common ticketing system that integrates travel across the country	x	x			
Railway electrification							
Oil Plan 2015-2036	2015	Development of infrastructure electric trail transit		x			
Strategic Plan of the Ministry of Transport 2017-2021	2017	Project to supply diesel-electric locomotives with spare parts to replace 50 GE locomotives		x			
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Modification of 8 electric bogey trains Modification of 12 electric bogey trains procurement of diesel-electric locomotives Replace 50 GE diesel-electric locomotives		x			
Reduction of transport/ logistics costs							
National Strategy 2018-2037	2019	to help reduce logistics costs and increase added values					

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	There is management that Efficiency to reduce logistics costs, reduce bottlenecks and promoting multimodal transport by providing transportation Rail and water as the main form of transport and road transport as a support system (Feeder Systems) and develop the capacity to support (Capacity) and efficiency (Efficiency) of the infrastructure.					
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	The proportion of Thailand' logistics costs to GDP is less than 11 per cent.					
Reporting, transparency, feedback mechanism							
Action Plan on Thailand Logistics Development 2023-2027	2023	Monitor and evaluate logistics performance					
Thailand Road Safety Master Plan 2022-2027	2022	This road safety development plan emphasizes the mechanism of the monitoring and evaluation process as follows. 1. The monitoring and evaluation process must be conducted quarterly, by the midterm (in 2024), and at the end of the implementation of the new plan. 2. The revisit and revision of targets, indicators, and measures in the plan need to be conducted by the mid-term implementation of the new plan (2024) to reflect new trends and situations in road safety. 3. The performance reporting of the road safety status to the cabinet and the public is mandatory. Conduct a study and review of vehicle inspection systems to improve and develop inspection standards. and overseeing the inspection system to be more efficient within 3 years There is at least an increase in the capacity of personnel responsible for monitoring and evaluation (Capacity building). Once per quarter There is a monitoring and evaluation of the use of budget for road safety operations. of responsible agencies including funding agencies	x				
Road charging and tolls							
Climate change Master Plan 2015-2050	2015	Encourage a modal shift through the introduction of congestion pricing, parking fees in inner-city areas with sky-train/subway infrastructure, carpool parking, school bus parking areas, and mandatory safety standards for school bus service, etc. and;	x				x
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Road usage fee collection measures in dense traffic areas	x				x
Road infrastructure expansion							
Action Plan on Thailand Logistics Development 2023-2027	2023	Developing intercity transport routes and bypasses, such as intercity route between Ranong and Chumphon, improving motorways to transport goods to various regions, and building bridges across borders.	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategic Plan of the Ministry of Transport 2017-2021	2017	Project to develop a network of entrances to the Nai Lak and Lak Sien main roads for Accepting travel within the country and in the region in the future Road construction project to support production and industrial base areas	x				
Transport Infrastructure Development Strategy 2015-2022	2015	3 Motorway routes: • Pattaya- Mab Taphut, • Bang Pa-in-Nakhon Ratchasima • Bang Yai-Kanchanaburi 4 lanes highway development connecting major cities supporting agricultural, tourist areas, and Special Economic Zones (SEZ)	x				
Voluntary National Review 2021	2021	Particular progress has been made in expanding road coverage throughout the country and connecting travel in the ASEAN sub-region, with Thai roads expanding to 0.89km per square kilometre, which ranks 28th out of 63 countries across the world and third overall in ASEAN. development of Route 67 linking Anlong Veng and Siamreap and development of the ThaiMyanmar connectivity from Myawaddy-Tanaosri mountain pass.	x				
Road-side checks on overspeeding							
Road Traffic Act - THA	1979	The traffic officer or competent official has the power to order a driver to stop the conveyance when: (1) such conveyance is not in the condition correctly complied with the provisions of section 6; (2) he or she finds that the driver or any person in such conveyance violates or fails to comply with the provisions of this Act or the law concerning such conveyance.	x				
Smart charging							
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Promoting the smart grid technology to fully integrate the connections and management of EV charging, including the development of smart meters as well as an integrated platform to link data from charging stations and EVs for the purpose of grid management.	x				
Speed limit on motorways <= 90 kph							
Global Status Report on Road Safety 2018	2018	120 km/h	x				
Speed limit on rural roads <= 70 kph							
Global Status Report on Road Safety 2018	2018	90 km/h	x				
Speed limits on urban roads <= 30 kph							
Global Status Report on Road Safety 2018	2018	80 km/h	x				x
Stakeholder Involvement							

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Action Plan on Thailand Logistics Development 2023-2027	2023	Promoting private sector participation, with transparent performance evaluations, in government's supported infrastructure as transport service providers, namely providing private sectors opportunities to provide rail transport services given that route and time allocations, freight charges and other infrastructure fees, and other related standards are determined by concerning authorities.		x	x		
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Building awareness of climate change cooperation from all sectors By allowing them to be involved from the planning stage. and study measures or projects supporting the implementation of greenhouse gas reduction					
Thailand Road Safety Master Plan 2022-2027	2022	Create participation from the public and private sectors. in preventing and reducing road accidents By imposing the prohibition on traffic offenses as an organizational measure	x				
Thailand's Action Plan to Reduce Aviation Emission	2018	Work with TGO, ONEP, research centers, universities, institutes to develop R&D solutions capable of greening the aviation sector reducing GHG emissions. Sign cooperation agreements with operators to encourage green solutions and behaviours in their day-to-day business operation.				x	
Technical standards for general transport infrastructure							
National Strategy 2018-2037	2019	developing related infrastructures and facilities to have standards and safety adequate with that of international					
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Promote safe transport in all modes of transport. by focusing on providing Standardized and secure infrastructure					
Technical standards for road infrastructure							
Thailand Road Safety Master Plan 2022-2027	2022	Complete road standards are established and applied in various areas. - There are standards for designing motorcycle lanes and designing roads in urban areas and on highways that are safe for motorcycles. Especially the point that is an area, a crossing, an intersection, a U-turn within 2 years.	x				
Technology and knowledge transfer							
Thailand Road Safety Master Plan 2022-2027	2022	Organize a meeting for the local administrative organization safety operation center in the manner Work experience exchange once a quarter	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Promoting joint ventures/business partnerships between Thai businesses in the existing supply chain and foreign manufacturers of EVs or parts to promote technology and resource transfer as well as to enhance Thai enterprises' development opportunities to become product and technology owners. Establishing research and innovation joint ventures. Accelerating the research and development of batteries, sensor system, electronic system and communication system for EVs. Developing CO2 capture technology, taking into consideration a product's entire lifecycle, and promoting technologies related to EV conversion as well as knowledge and technology transfer to local EV businesses. Promoting collaboration between businesses and educational institutions to boost knowledge transfer of the EV technology, particularly in relation to battery technology, sensor system and EV electronics system.	x				
Teleworking							
Climate change Master Plan 2015-2050	2015	Decrease the demand for travel by introducing distance-based insurance premiums and service fees, encouraging staggered working hours, and encourage more effective use of the ICT tools available (e.g. teleworking, remote study, e-commerce).					
Traffic management							
Oil Plan 2015-2036	2015	Transport Management for energy saving	x				
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Management by bringing using modern technology in the development of infrastructure and efficient transportation management.	x				
Training of enforcement authorities							
Road Traffic Act - THA	1979	The Commissioner-General shall have power to appoint a person with prescribed qualifications and has passed a training course for traffic volunteer to perform the duties in assisting the performance of duties of the competent official. The qualification of the applicant for training, details concerning training course for traffic volunteer, and duties of traffic volunteer as well as uniform and sign shall be prescribed by the Commissioner-General.	x				
Thailand Road Safety Master Plan 2022-2027	2022	Set up a law enforcement academic center to study the potential and readiness of the office national police traffic law enforcement When the behavior point deduction system is introduced	x				
Transit-oriented development (TOD)							
Climate change Master Plan 2015-2050	2015	Develop sustainableurbantransportationsystems that are built and runonsustainable foundations, increase efficiency, reduce GHG emissions, and promote transit oriented development;					x

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Develop areas along railway and electric train routes (TOD)		x			x
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Increasing efficiency of urban land use, taking into account urban planning that encompasses all aspects. Encouraging land readjustment process together with the development plan of the adjusted lands with public participation following the livable and sustainable city framework. Improving the landscape in line with urban culture and environment. Supporting a feasibility study on land and structural use to accommodate the Transit Oriented Development. Increasing green and public areas in the city as well as diminishing urban sprawls to improve residents' quality of life.					x
Transport law							
Action Plan on Thailand Logistics Development 2023-2027	2023	Amending Thai laws and regulations to be in accordance with international obligations and agreements of freight transport. Revising and enacting relevant laws and regulations to support modern transport and logistics activities, such as laws and regulations on multimodal international transport, e-Commerce, and cross-border e-Commerce.					
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	Enforcement of traffic and transport laws, such as supervising transport operators in all forms to comply with the rules and regulations set forth specific traffic disciplines. Revision of relevant laws, rules and regulations is necessary. very necessary so that the laws are up-to-date in accordance with the changing economic and social situations, trade and investment contexts and related agencies can					
Vehicle efficiency standards							
Oil Plan 2015-2036	2015	Promoting high energy-efficient vehicles.	x				
Vehicle import inspections							
Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles	2020	Yes	x				
Vehicle inspection and maintenance							
Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles	2020	Periodic inspection is in effect	x				
Strategies for the Development of Thailand's Transport System for a 20-Year Period (2018-2036)	2019	It also encourages the conversion to use clean energy or energy. alternative work and transportation technology environmentally friendly vehicles such as electric vehicles, vehicle inspections and strict motorcycles	x				

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Road Safety Master Plan 2022-2027	2022	Amend the conditions for annual tax payment according to the Motor Vehicle Act B.E. 2522 and the amendments. Require cars and motorcycles to undergo the first inspection after registration within 4 years and 2 years, respectively, with such amendments to be completed within 5 years.	x				
Thailand's Electric Vehicle policies	2022	Check and Maintenance of Vehicle	x				
Vehicles Act, B.E. 2522	1979	A vehicle applied for registration must: (1) be a vehicle containing full components and accessories prescribed in the Ministerial Regulation, and (2) have been examined the vehicle condition by the Registrar or the vehicle condition examination centre licensed under the law on land transport at the time of registration application.	x				
Vehicle labelling							
Climate change Master Plan 2015-2050	2015	Improve emissions and fuel economy standards for all types of vehicles and facilitate consumer decision-making by mandating energy efficiency/GHG emissions labelling on vehicles;	x				
National Strategy 2018-2037	2019	displaying green labels on energy-saving vehicles and equipment	x				
Oil Plan 2015-2036	2015	Car labeling pro	x				
Thailand Energy Efficiency Development Plan 2015-2036	2015	Energy Efficiency Labeling in Tires	x				
Vehicle manufacturing							
Thailand Industrial Development 4.0 Strategy for 20 years (2017-2036)	2016	Modern automotive industry, including the production of engines and engine parts high-tech vehicle parts Manufacture of safety and energy-saving parts Manufacture of tires Manufacture fuel system parts Manufacture of parts for powertrain systems Manufacture of motorcycles (except those with cylindrical capacity less than 248 cc) electric vehicles	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Thailand's automotive industry ranks as ASEAN's number one production base and is among the world's top 10. Maintaining the competitiveness of market-capable products that are still unable to transition within a short period (five years), such as pick-up trucks, taking into consideration consumer preparedness and product readiness. Supporting enterprises in internal combustion engines and power transmission systems in their transition to other industries such as industrial robotics, rail or other industries with potentials.	x				
Vehicle restrictions (import, age, access, sale, taxation)							
Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles	2020	Import is regulated with vehicle age restriction	x				
Vehicle scrappage scheme							

XIV. Transport and Climate Policy Measures

This table lists the policy measures that relate to climate change mitigation and adaptation in the transport sector that had been identified in the transport policy documents of Thailand

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Thailand Greenhouse Gas Reduction Action Plan for Transport Sector	2021	Encouraging the sale of deteriorated cars (old cars) from system (more than 15 years or more than 200,000 km?)	x				
The Thirteenth National Economic and Social Development Plan (2023-2027)	2023	Exploring and determining directions for domestic disposal of used vehicles and parts in line with the global automobile trends, as well as promoting reuse in accordance with circular economy principles.	x				

References:

- 1) UN Population Database (2022), <https://population.un.org/wpp/>
- 2) World Bank (2022), <https://data.worldbank.org/>
- 3) Global Materials Flow Database (UNEP, 2023), <https://www.resourcepanel.org/global-material-flows-database>
- 4) Emissions Database for Global Atmospheric Research (EC, 2023), <https://edgar.jrc.ec.europa.eu/>
- 5) International Council on Clean Transportation (2023)
- 6) UN Energy Statistics (2021)
- 7) Fossil Fuels Consumption Subsidies 2022 (IEA, 2022), <https://www.iea.org/reports/fossil-fuels-consumption-subsidies-2022>
- 8) Climate Change Dashboard (IMF, 2024), <https://climatedata.imf.org/pages/access-data>
- 9) Ember (2023), <https://ember-climate.org/data-catalogue/yearly-electricity-data/>
- 10) Coalition for Disaster Resilient Infrastructure (CDRI, 2023), <https://giri.unepgrid.ch/facts-figures/building-infrastructures>
- 11) Koks, et al. (2023), <https://iopscience.iop.org/article/10.1088/2634-4505/acd1aa>
- 12) Environmental Vulnerability Indicators (UN, 2018), <https://www.un.org/development/desa/dpad/least-developed-country-category/evi-indicators-ldc.html>
- 13)) Global Status Report on Road Safety 2023 (WHO, 2023), <https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/globalstatus-report-on-road-safety-2023>
- 14) Socioeconomic Data and Applications Center (CIESIN, 2023), <https://sedac.ciesin.columbia.edu/data/set/sdgi-9-1-1-rai-2023>
- 15) Country Official Statistics
- 16) Trademap (ITC, 2024), <https://www.trademap.org/>
- 17) International Organization of Motor Vehicle Manufacturers (OICA, 2023), <https://www.oica.net/production-statistics/>
- 18) ATO analysis of UNEP Index using latest data
- 19) Rapid Transit Database (ITDP, 2022), <https://www.itdp.org/rapid-transit-database/>
- 20) Socioeconomic Data and Applications Center (CIESIN, 2023), <https://sedac.ciesin.columbia.edu/data/set/sdgi-11-2-1-urban-access-publictransport-2023>
- 21) PPI Database (World Bank, 2023), <https://ppi.worldbank.org/en/ppi>
- 22) Organisation for Economic Co-operation and Development (OECD) (2022), <https://stats.oecd.org/Index.aspx?DataSetCode=CRS1#>
- (*) National transport policies



<https://asiantransportoutlook.com/>