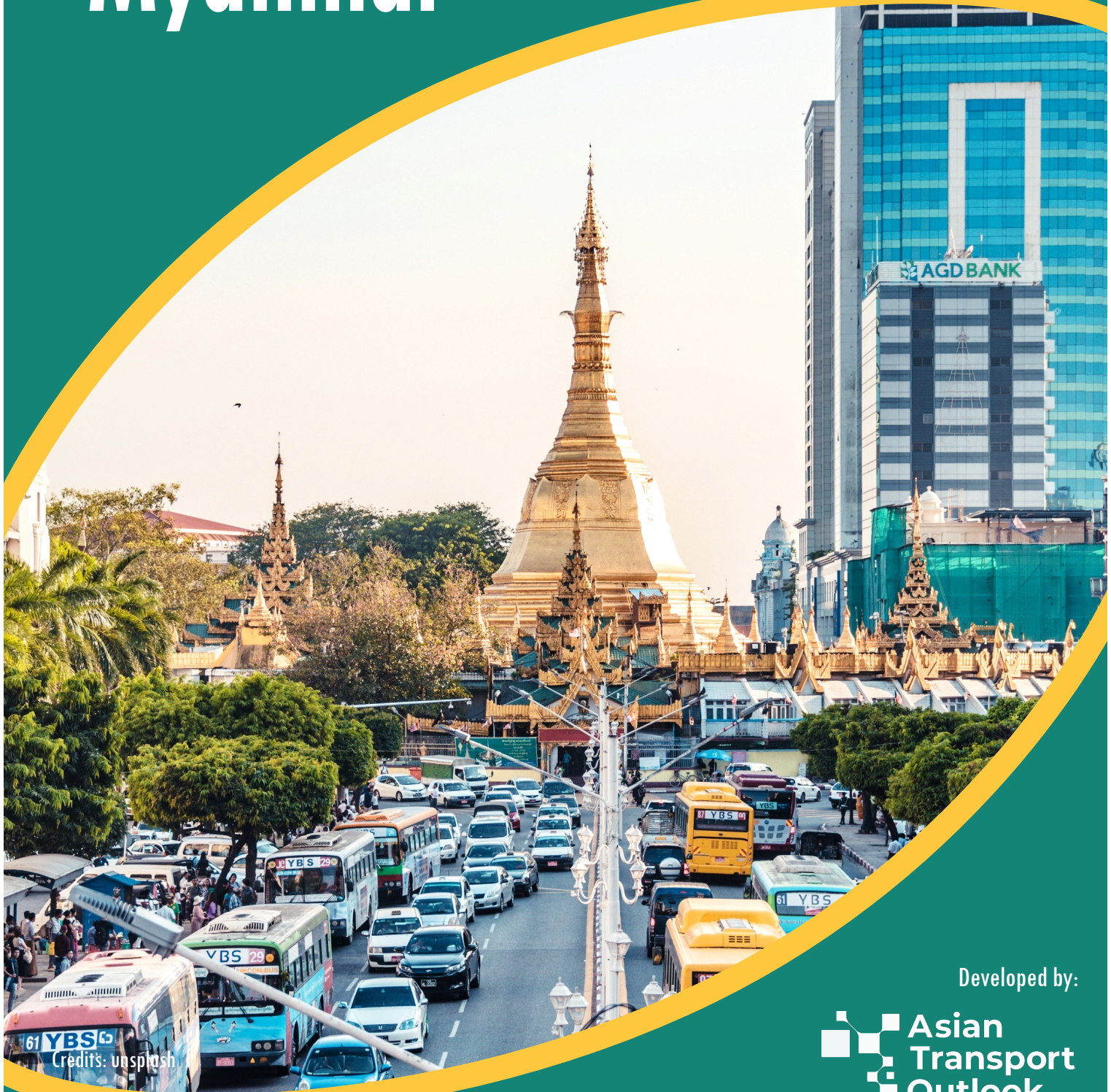


Transport and Climate Profile

Myanmar



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: Myanmar, <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: Myanmar

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

Myanmar, a lower-middle-income Southeast Asian country, is experiencing a growing transport sector that significantly contributes to climate change.

CO2 Emissions:

- Myanmar's transport sector CO2 emissions in 2023 were 5.3 million tonnes, accounting for 16% of the total economy-wide emissions. Since 2010, emissions have grown by 7% annually, with a notable exception during the COVID-19 pandemic, when they decreased by 4% annually between 2019-2023. In 2022, the road sector dominated transport emissions, contributing 73%, and accounting for approximately 10% of total economy-wide emissions. Myanmar's transport sector CO2 emissions intensity with GDP in 2023 was 16.6 gCO2 per USD, significantly lower than the Asia-Pacific average of 32.0 gCO2 per USD.

Energy Consumption:

- The transport sector's energy consumption in Myanmar has also increased, driven primarily by the road sector's reliance on oil products. The share of biofuels and electricity in road sector energy consumption remains negligible, indicating a missed opportunity for cleaner alternatives. While Myanmar's grid emission factor has decreased, it still contributes to emissions from electricity consumption. The country's fossil fuel subsidies further complicate the transition to a low-carbon transport system.

Adaptation and Resilience:

- Myanmar faces significant risks from climate change impacts on its transport infrastructure. Potential annual losses to transport infrastructure are estimated to be substantial, with roads being the most vulnerable. The country's road network vulnerability ranking underscores the need for enhanced resilience measures.

Vehicle Fleet:

- Myanmar's vehicle fleet has grown rapidly, with a significant increase in the number of vehicles per thousand population. While the import of electric vehicles has seen some progress, the overall share remains relatively low compared to the Southeast Asia region. Myanmar's E-mobility Readiness Index score indicates potential for improvement in access to technology, policy support, clean energy, and financial instruments.

Urban Transport:

- Myanmar's urban transport system faces challenges in providing convenient access to public transport for a significant portion of the urban population. The limited availability of BRT, LRT, and other transit options hinders sustainable urban mobility. However, investment opportunities exist to expand public transport networks and promote low-carbon transport modes.

Investments:

- Myanmar has received substantial official development assistance for the transport sector, focusing on roads and rail. Public-private partnership investments have also played a role, particularly in waterborne transport. However, there is a need for increased investment in sustainable transport solutions, such as electric mobility and public transport infrastructure.

Policy Landscape:

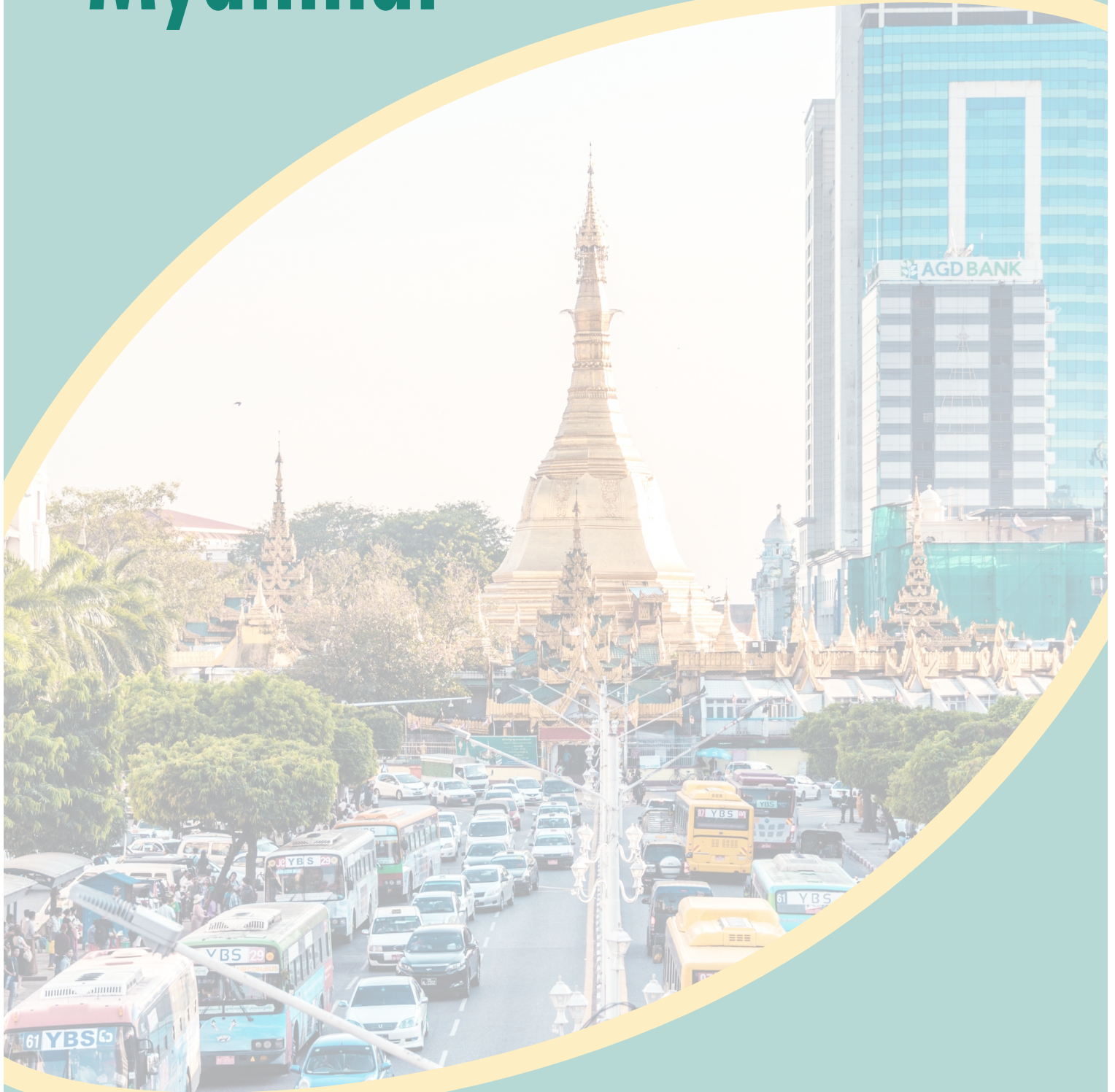
- Myanmar's NDC, updated in 2021, aims to unconditionally reduce emissions by 244.52 million tCO₂e, with a conditional target of 414.75 million tCO₂e by 2030, dependent on international support. The plan focuses on economy-wide emissions reduction but does not include specific targets for the transport sector or establish long-term goals like net zero or carbon neutrality.
- Myanmar's transport policy landscape reveals a complex picture with potential gaps and opportunities for alignment with climate goals. The country has 21 transport-related documents, including six specifically on climate and 15 non-climate documents with mitigation or adaptation measures. Myanmar has several policy documents relevant to transport, with some addressing climate change mitigation and adaptation. However, there are gaps in aligning these policies with the country's Nationally Determined Contributions (NDCs) and the absence of a long-term emissions strategy (LTS) for the transport sector. This misalignment is evident because only 10% of the top policy priorities align with the NDC. Additionally, there's an imbalance between mitigation and adaptation efforts, with the former overshadowing the latter.
- Policy priorities in areas like public transport, infrastructure resilience, and fiscal incentives for electric vehicles demonstrate a commitment to sustainable transport, but implementation and coordination remain crucial. Policy priorities, however, lean towards public transport, infrastructure resilience, and asset management, with some focus on e-mobility and alternative fuels. Notably, only 10% of these priorities align with the NDC, highlighting a gap in policy integration. Moreover, mitigation measures (72%) significantly outweigh adaptation and resilience efforts (31%), leaving the transport sector vulnerable to climate change impacts.

Opportunities

- Key documents like "The Survey Program for the National Transport Development Plan" and the NDC offer starting points, but Myanmar needs a more holistic approach. This involves integrating climate considerations into all transport policies, setting specific transport-related emissions targets in the NDC, and developing a long-term strategy that balances mitigation and adaptation. This could involve promoting e-mobility, investing in resilient infrastructure, and implementing land-use policies that support sustainable transport. By addressing these gaps, Myanmar can create a more climate-resilient, low-carbon transport sector.

In conclusion, Myanmar's transport sector faces significant challenges in mitigating and adapting to climate change. However, by leveraging data-driven insights, implementing comprehensive policies, and embracing sustainable solutions, the country can pave the way for a greener and more resilient transport future.

Data Insights Myanmar



Myanmar

Transport and Climate Profile

Population (2024)
55 million

Urban population
32%

Below 18 y.o.
31%

Population density
84 persons per sqkm

Rural population
68%

Above 60 y.o.
11%

Subregion
(1) **South East Asia**

Gross domestic product
(1) (GDP PPP, 2023)
322.3 billion USD

(1) Domestic consumption per capita, tonnes (2024)
3.5 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.*

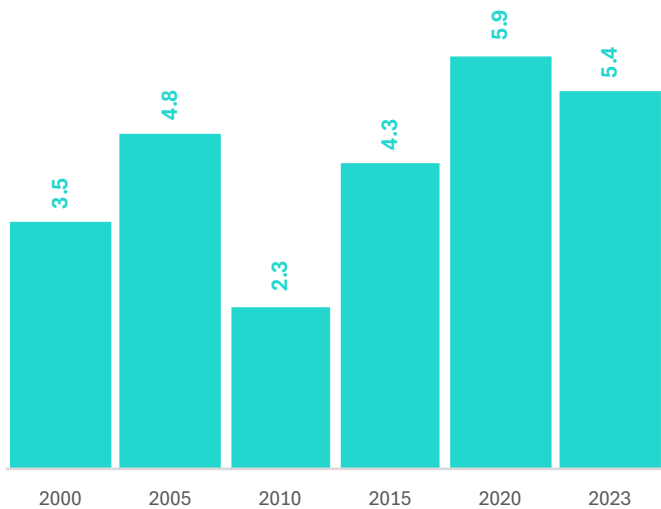
Income class
Low and lower middle income

GDP per capita (PPP, 2023)
5,905 USD (1,2)

(3)

I. Transport and Climate Change

Transport fossil CO2 emissions, million tonnes



In 2010, transport contributed 27% of total fossil CO2 emissions. By 2023, transport contributed 16%.

Share of transport CO2 emissions by mode (2022)

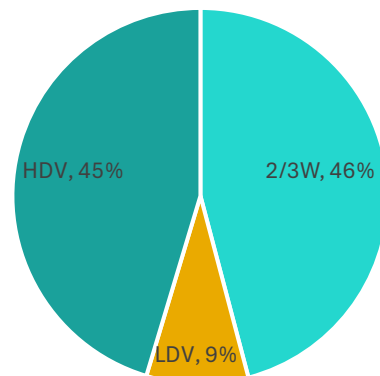
(4) Road	71.8%	(4)
Rail	17.4%	(4)
Navigation	4.1%	(4)
Aviation	6.6%	(4)

Navigation and aviation only includes domestic transportation

Between 2000-2015, road transport contributed 85% in transport fossil CO2 emissions. Between 2016-2022, road transport contributed 72%.

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

(5)



Transport CO2 emissions intensity (2023)

17 gCO2 per USD

(2,4)

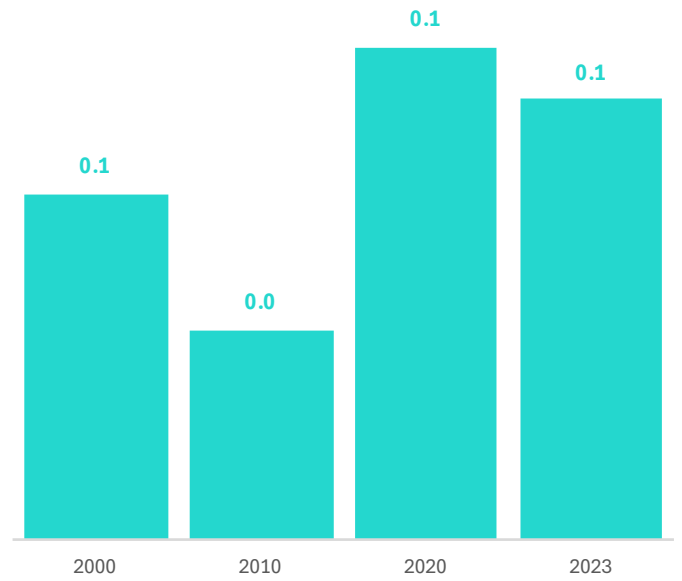
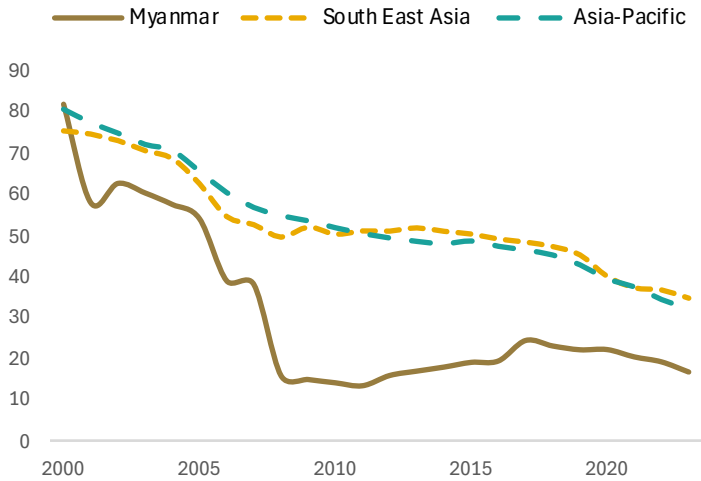
Asia-Pacific average is 32 gCO2 per USD

Transport fossil CO2 emissions per capita, tonnes

(1,4)

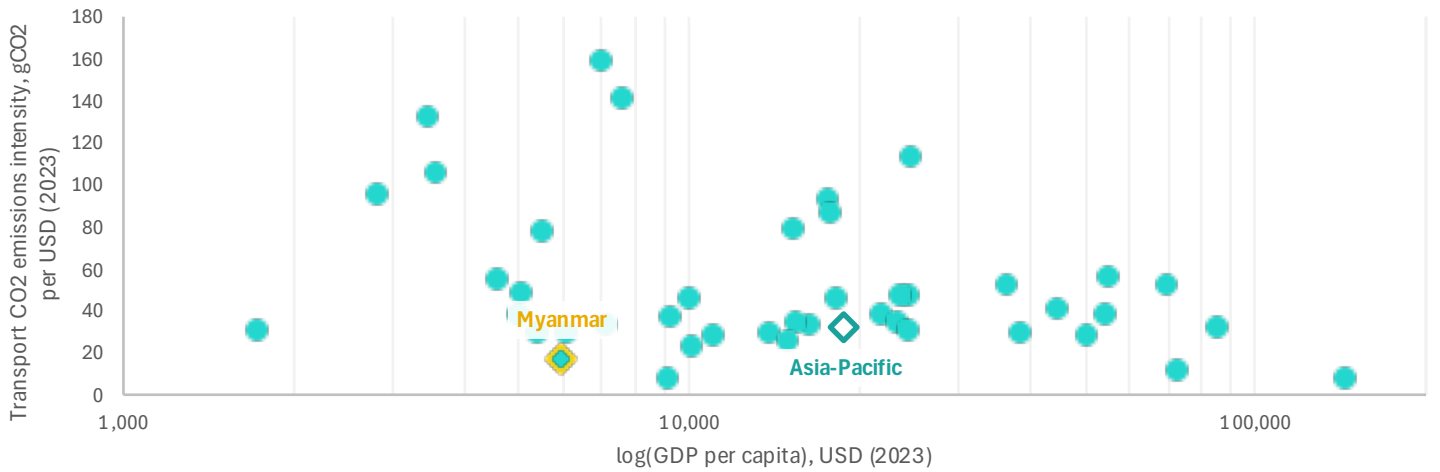
Transport CO2 emissions intensity trend, gCO2 per USD

(2,4)



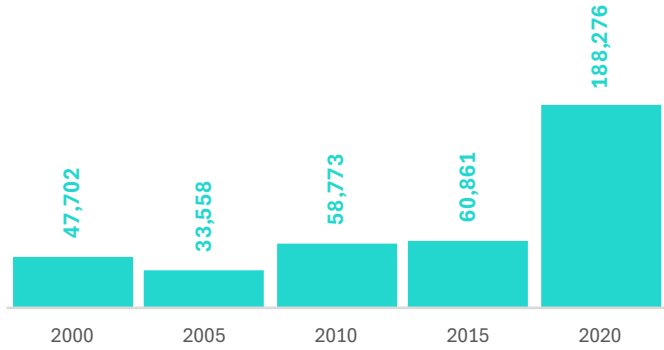
Transport CO2 emissions intensity in Asia-Pacific, gCO2 per USD

(2,4)



II. Transport Energy Consumption

Transport energy consumption, TJ

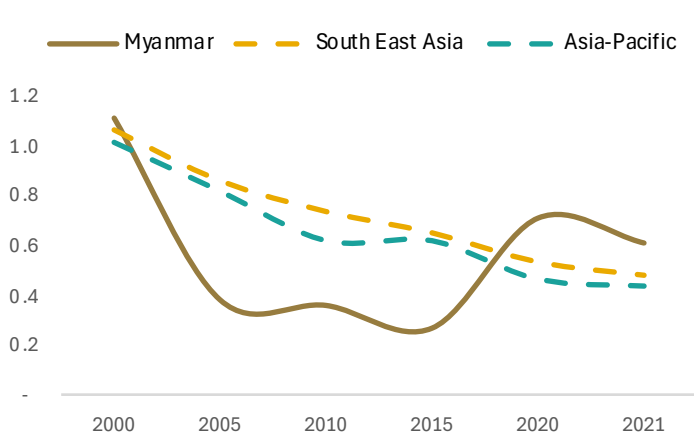


Transport energy intensity (2021)

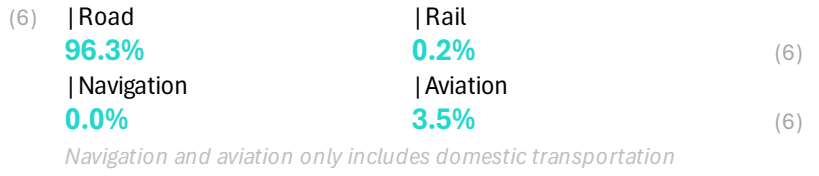
0.6 MJ per USD

Asia-Pacific average is 0.4 MJ per USD

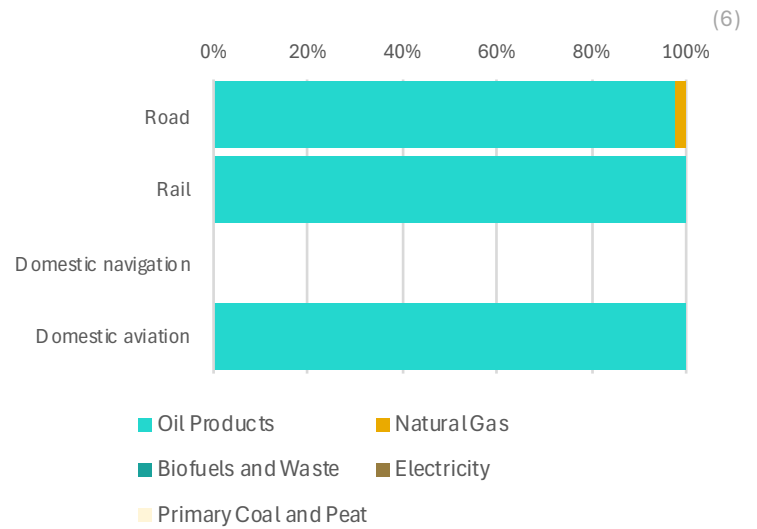
Transport energy intensity trend, MJ per USD



Share of transport energy consumption by mode (2021)



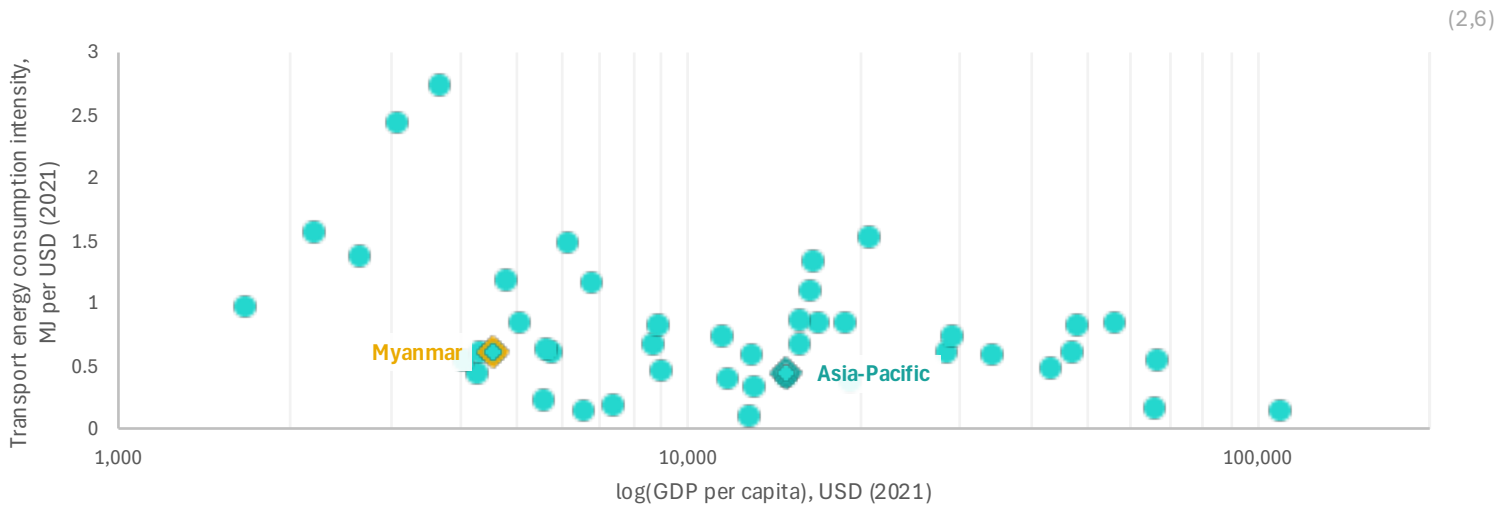
Share of transport energy consumption by source (2021)



Share of transport in renewable energy consumption



Transport energy intensity in Asia-Pacific, MJ per USD

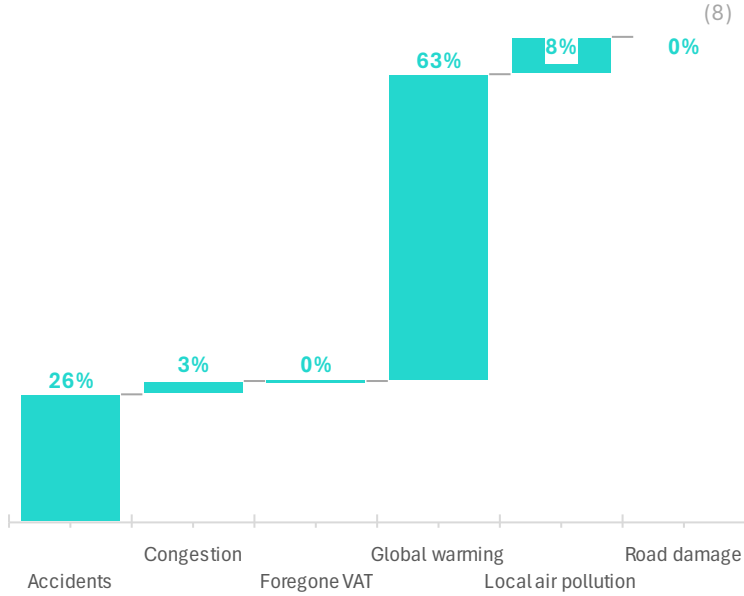


Transport fossil fuel subsidies, cumulative (2010-2022)

None

0.0% of Asia-Pacific total

Estimated externalities due to fossil fuel subsidies



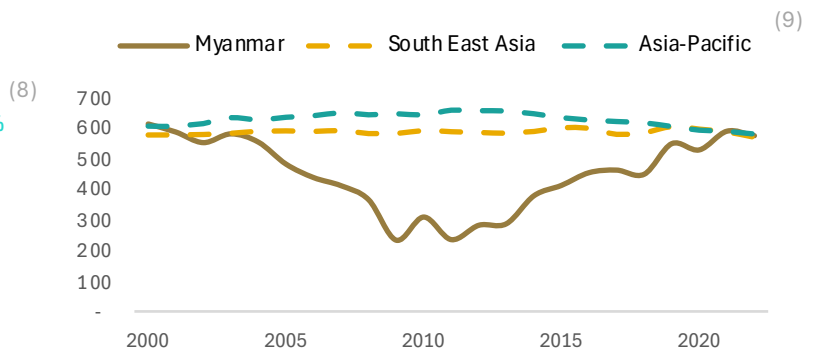
Data includes all sectors and all fuel types

Grid emission factor (2022)

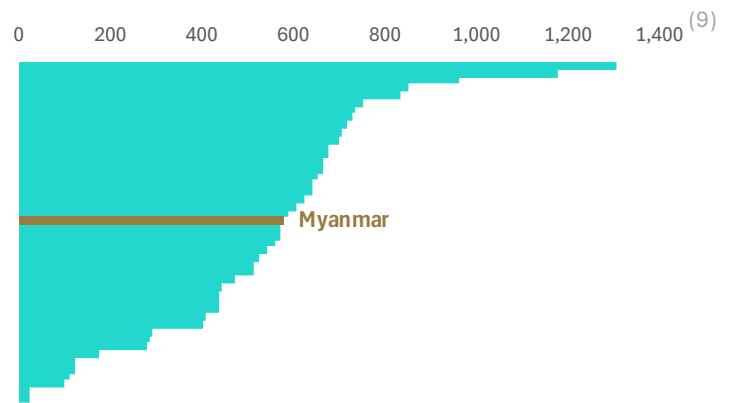
(7) **576 gCO₂ per kWh**

(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)

56 million USD

Road	Rail
72%	21%
Ports	Airports
2%	5%

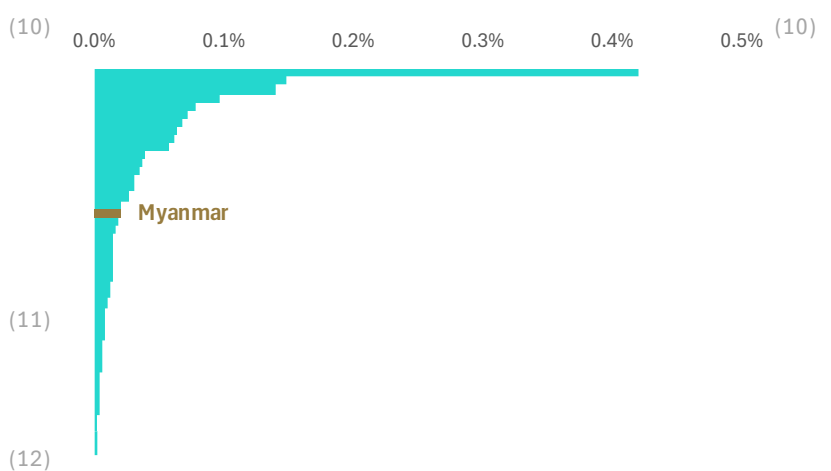
National road vulnerability index ranking (2023)

77th out of 208 countries

Share of population in low elevated coastal zones (2018)

11%

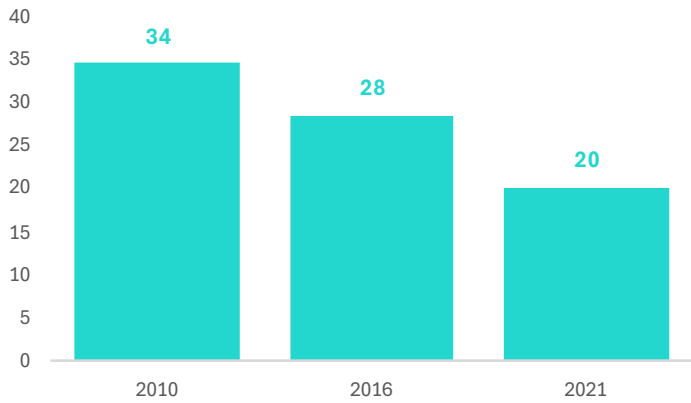
Average annual losses to transport infrastructure due to hazards, as a share of GDP, in Asia-Pacific (2023)



IV. Other Externalities

Road crash fatalities (2021)
10.4 thousand deaths

Road crash fatality rate per 100 thousand population

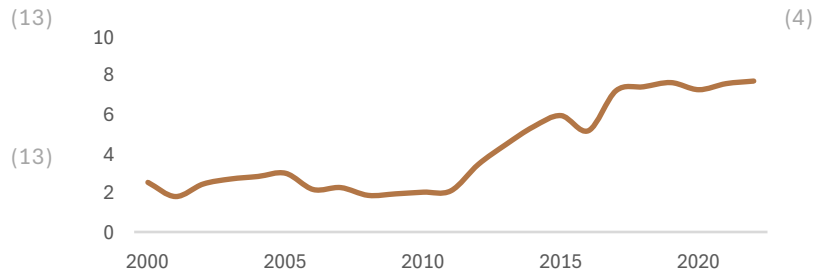


Asia-Pacific average is 16 fatalities per 100 thousand population

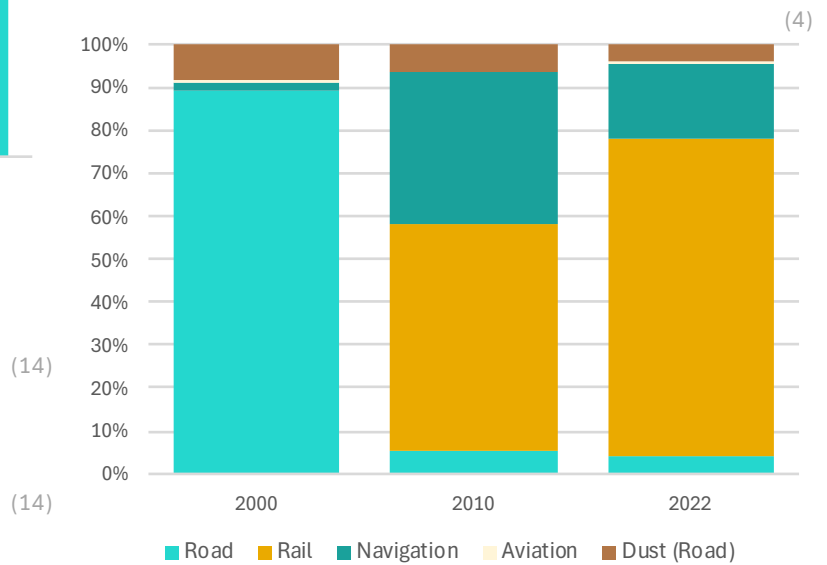
Rural access index (2023)
64%

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

Transport PM 2.5 emissions trend, thousand tonnes



Transport PM 2.5 emissions share by source



V. Vehicle Fleet

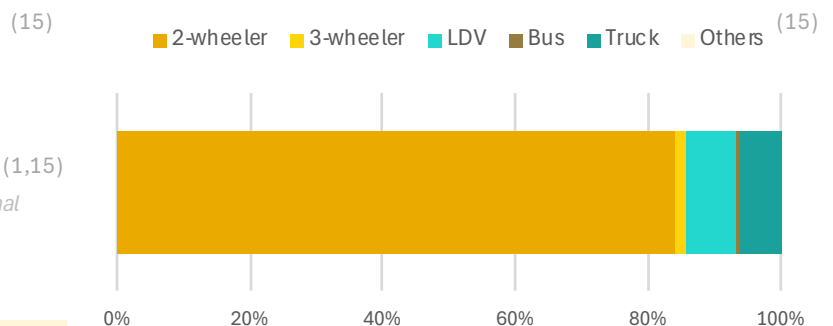
Road vehicles (2022)
7.8 million vehicles

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

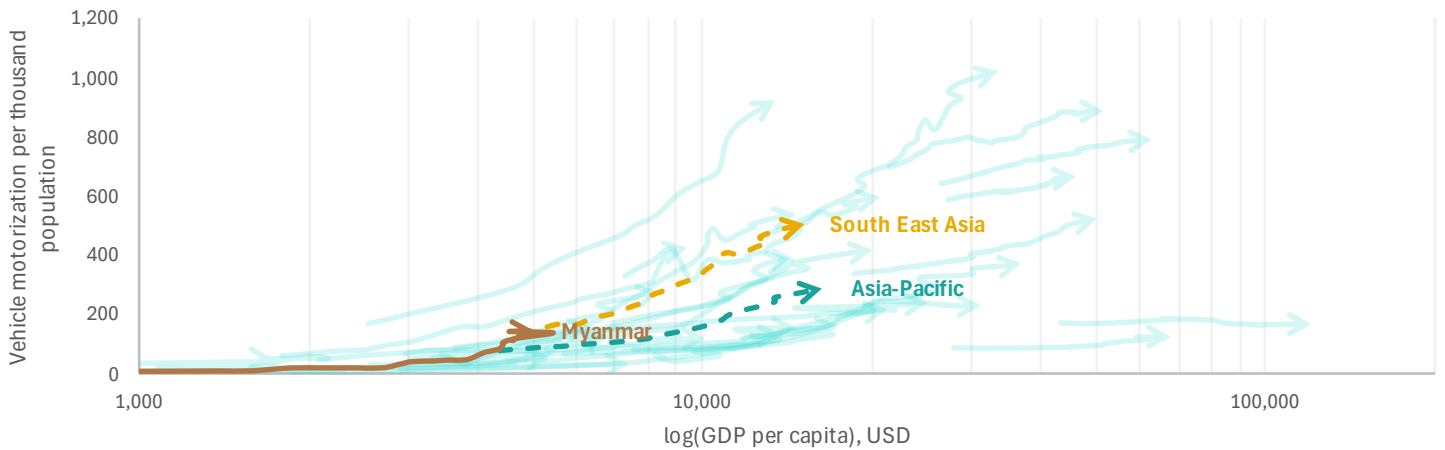
Road vehicles include 2- and 3-wheelers, LDVs, buses and other informal public transport, trucks, and other unclassified types

In 2000, Myanmar had 7 vehicles per thousand population. By 2022, this has increased to 145 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)

1.04 billion USD

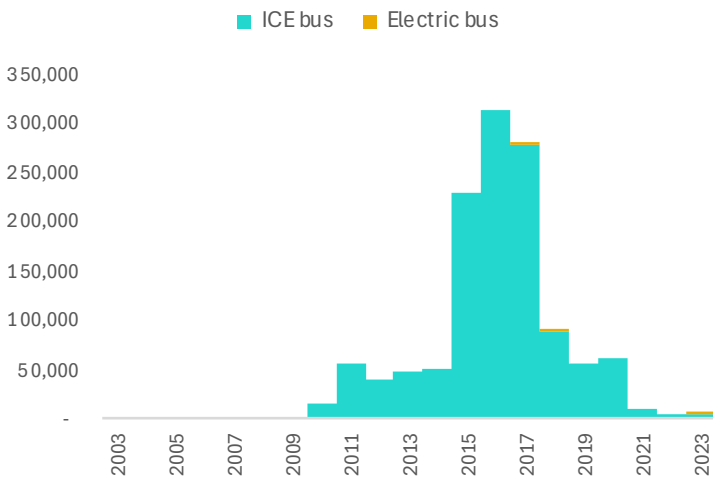
Bus vehicle production, units

(16)

(17)

Bus import value, thousand USD

(16)



E-mobility Readiness Index (2024)

| Technology & Market

14/25

| Policy

10/25

| Energy

18/25

| Financial

12/25

| Overall

54/100

(18)

Electric road vehicle import value (2017-2023)

179.7 million USD

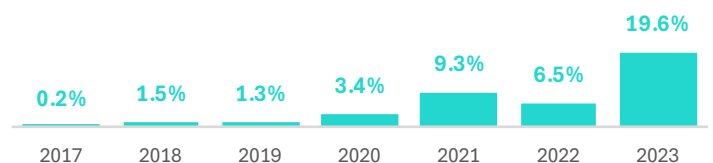
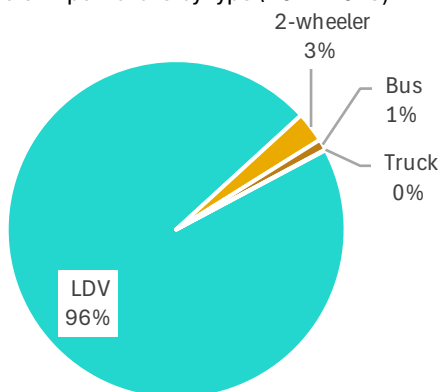
(16)

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	LRT
None	None
Metro	
None	

(19)

(19)

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

(1,19)

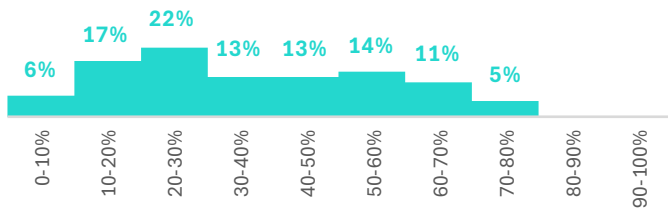
Urban rapid transit ratio (2021)

NA (1,19)

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

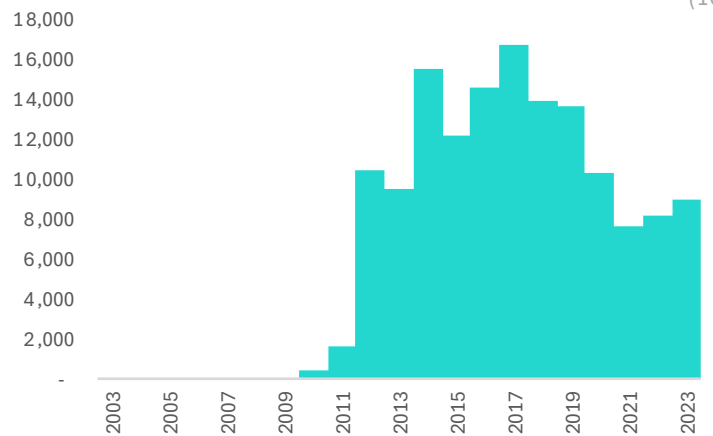
Share of cities by level of access to public transport (out of 64 cities)

(20)



Bicycle import value, thousand USD

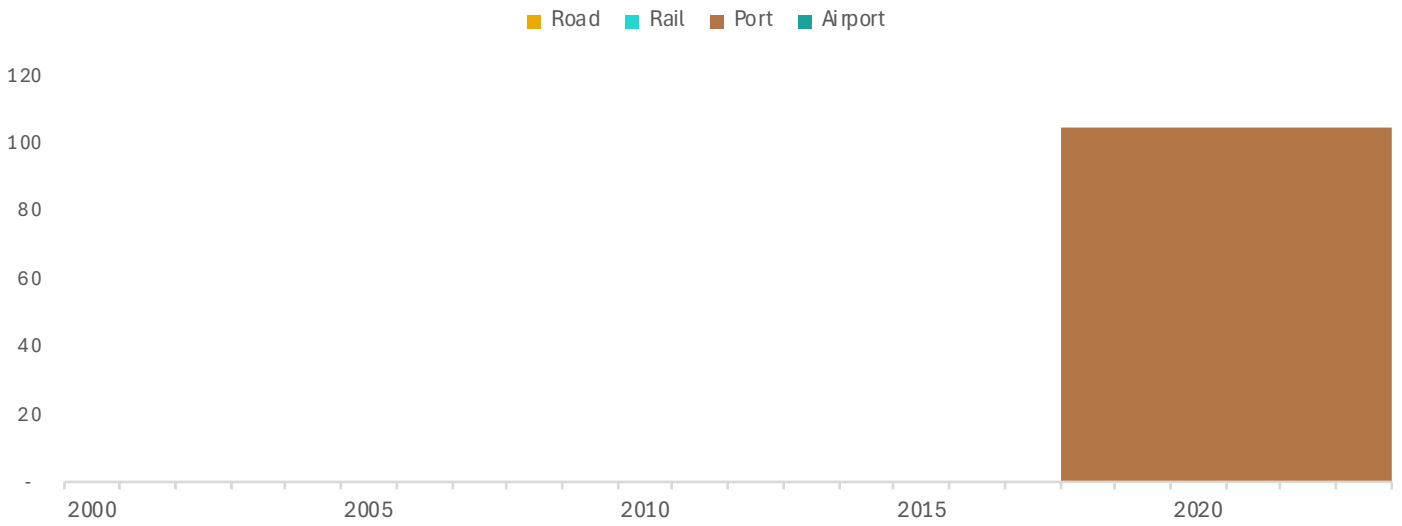
(16)



VII. Transport Investments

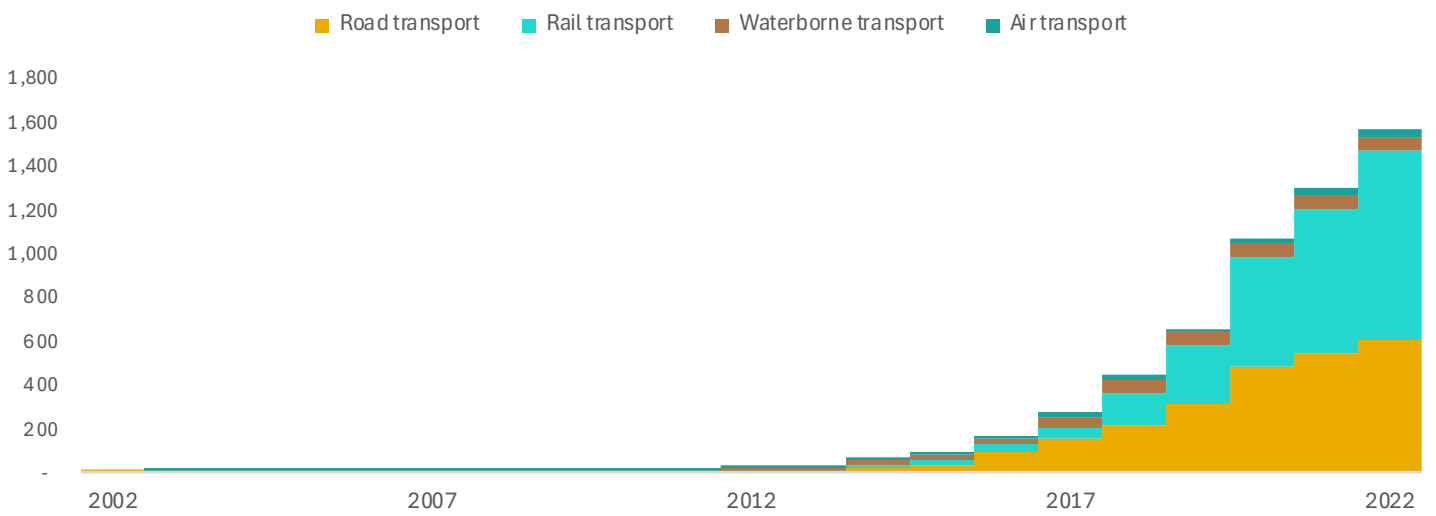
Public-private partnership investments in the transport sector, million USD

(21)

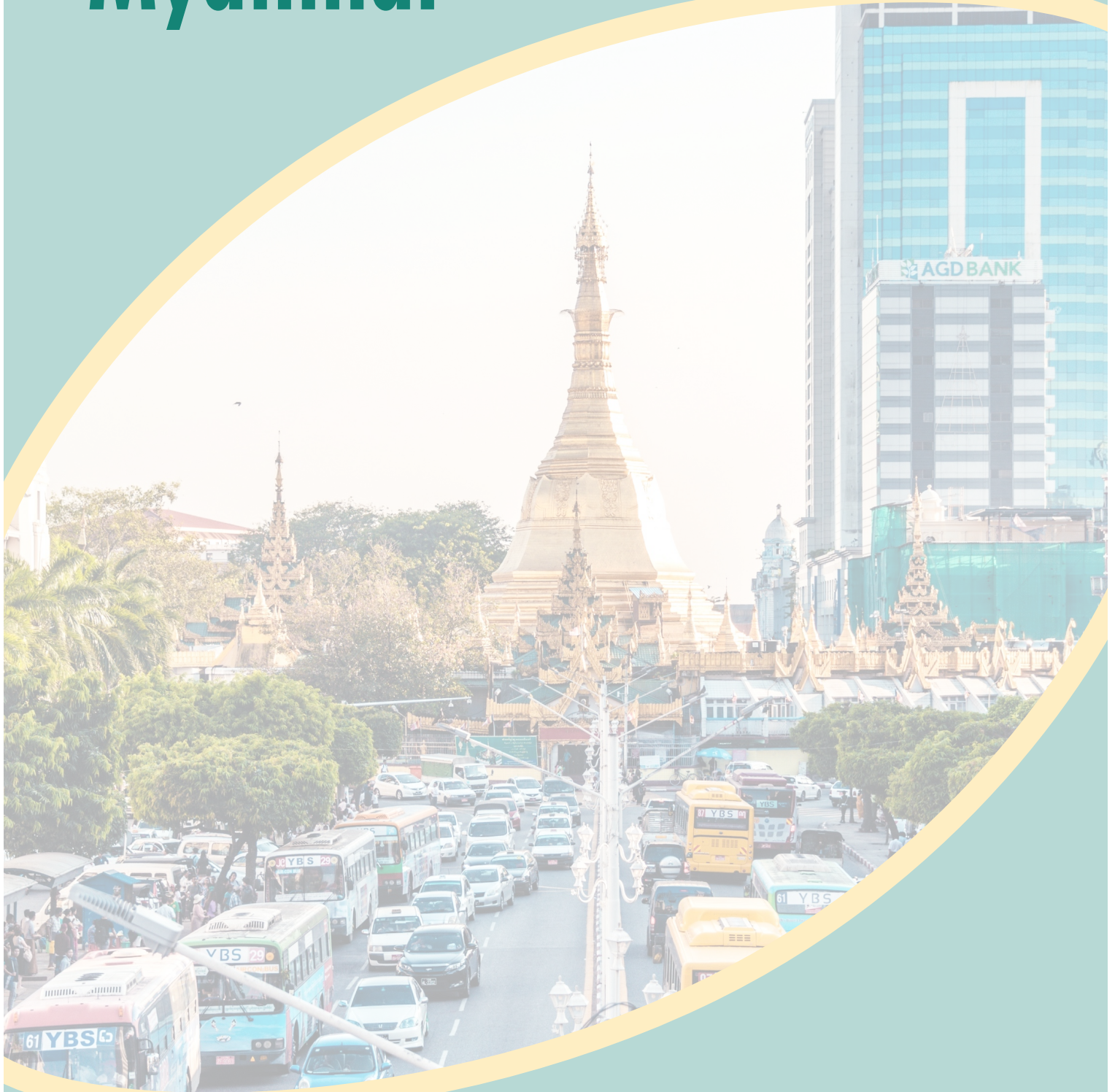


Official development assistance in the transport sector, million USD

(22)



Policy Insights Myanmar



VIII. Transport and Climate Policy Documents

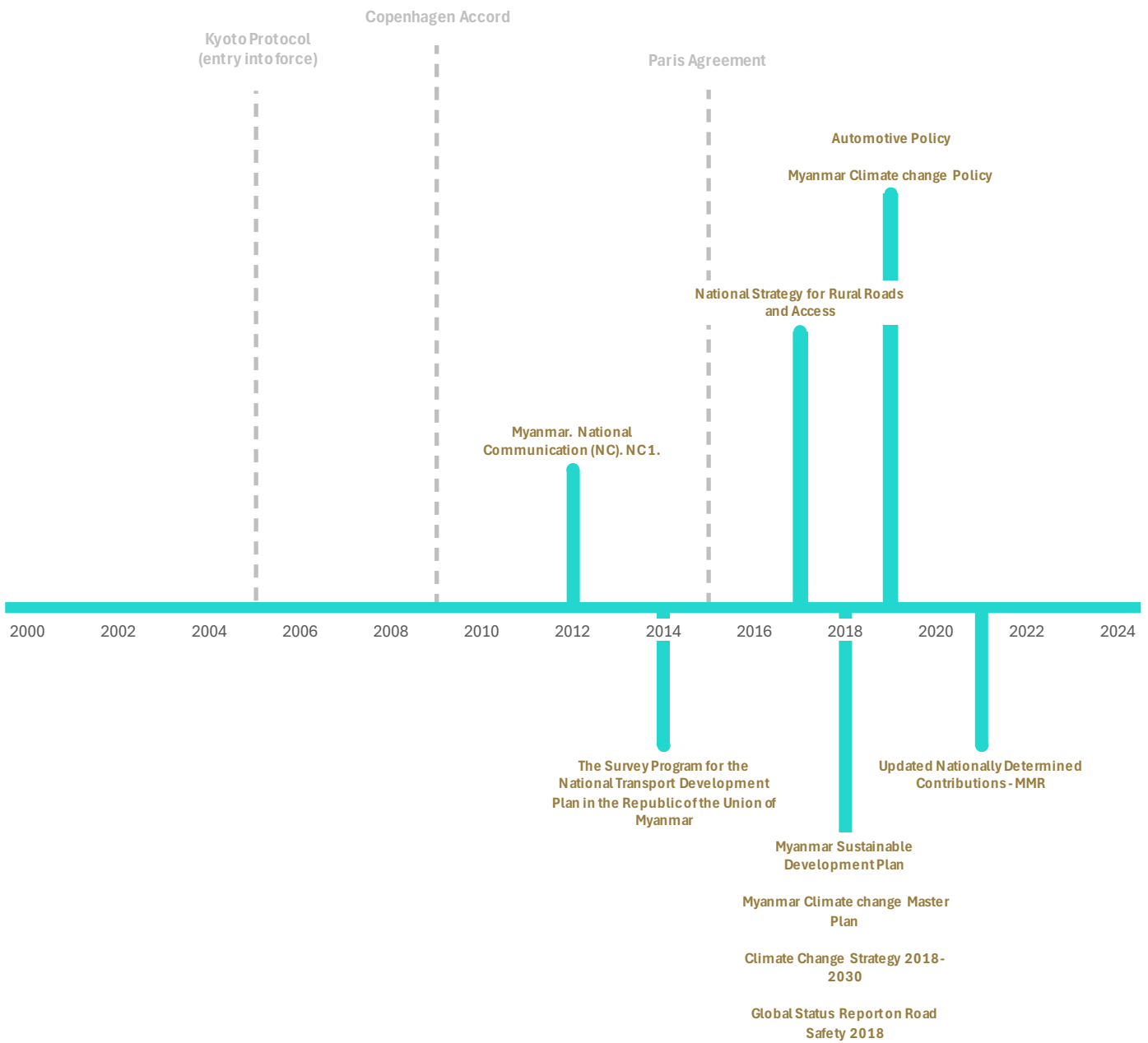
Transport-related policy documents in Myanmar

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

Nationally Determined Contributions of Myanmar

2015: Intended Nationally Determined Contribution - MMR

2021: Updated Nationally Determined Contributions - MMR



IX. Representation of Transport in Key Climate Policy Documents

Nationally Determined Contributions

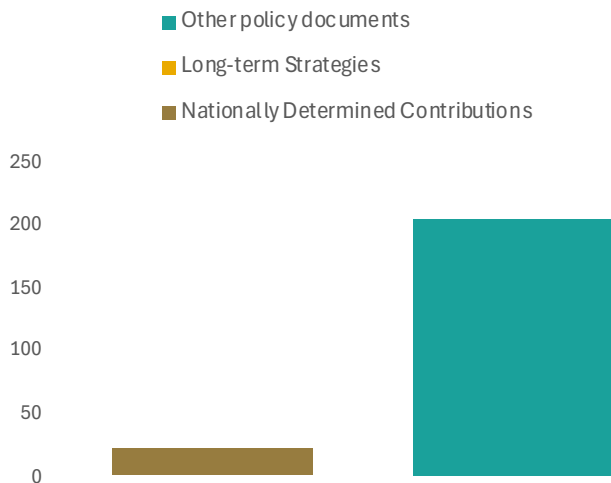
		Road transport	Rail transport	Domestic navigation	Domestic aviation	Urban transport
<i>Updated Nationally Determined Contributions - MMR (adopted in 2021)</i>	Mitigation measures	Yes	Yes	Yes	Yes	Yes
	Mitigation targets					
	Adaptation measures	Yes		Yes	Yes	Yes
	Adaptation targets					

Long-term Strategies

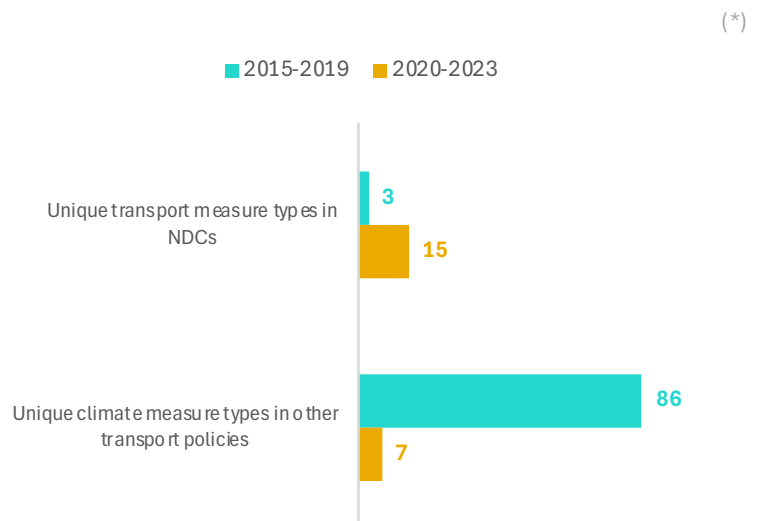
		Road transport	Rail transport	Domestic navigation	Domestic aviation	Urban transport
None	Mitigation measures					
	Mitigation targets					
	Adaptation measures					
	Adaptation targets					

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

Number of policy measures by source



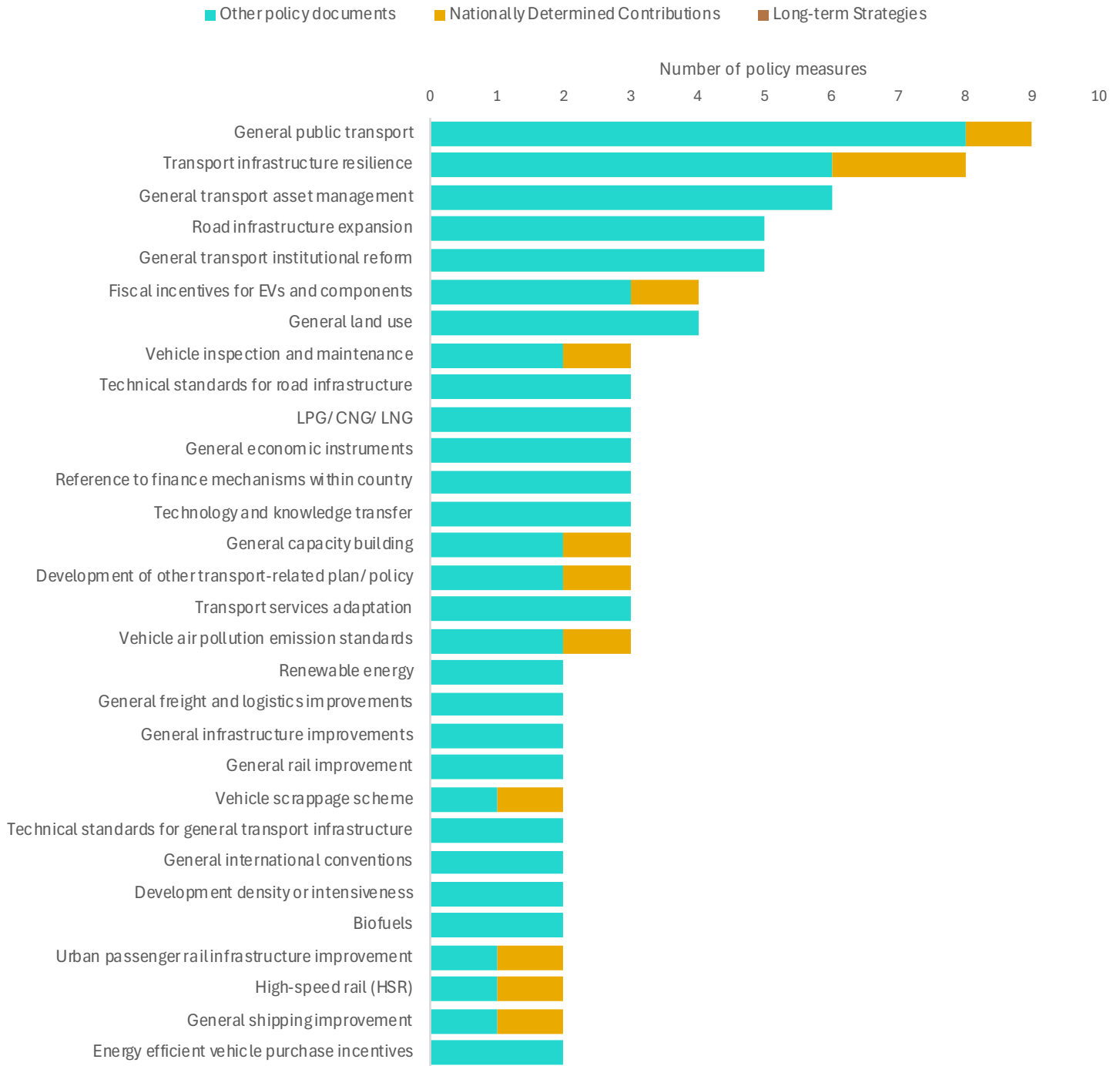
Integration of climate ambition, unique number of policy measures in (*) NDCs and other transport policies



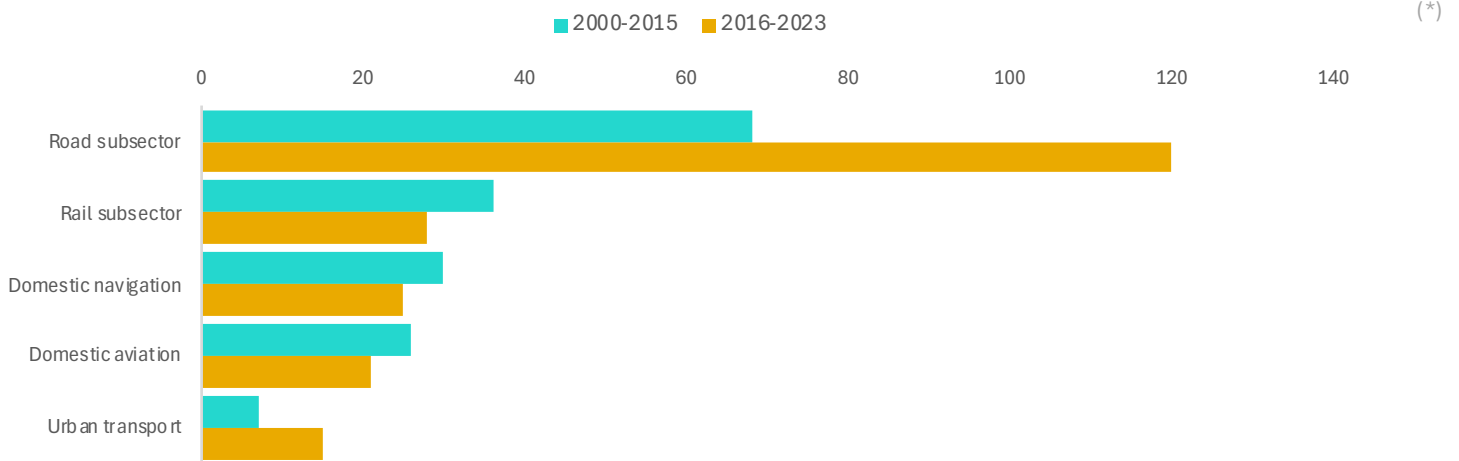
XI. National Policy Priorities on Transport

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

(*)



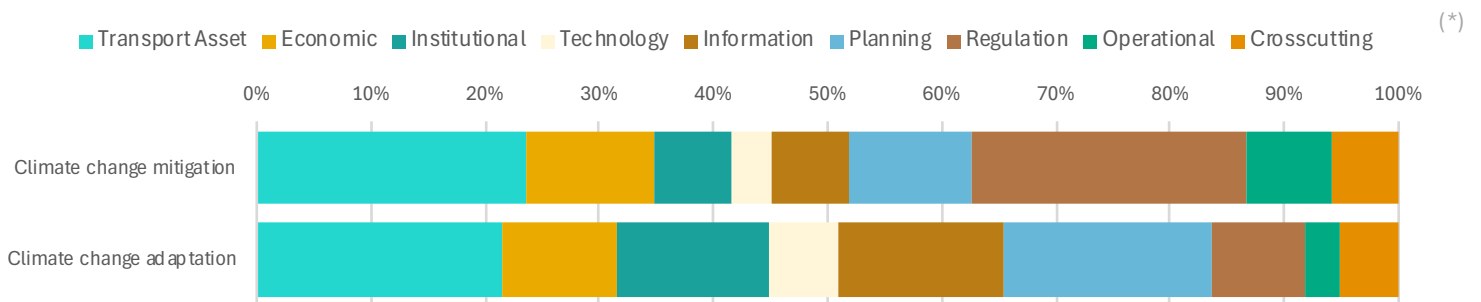
Number of climate change policy measures by subsectors



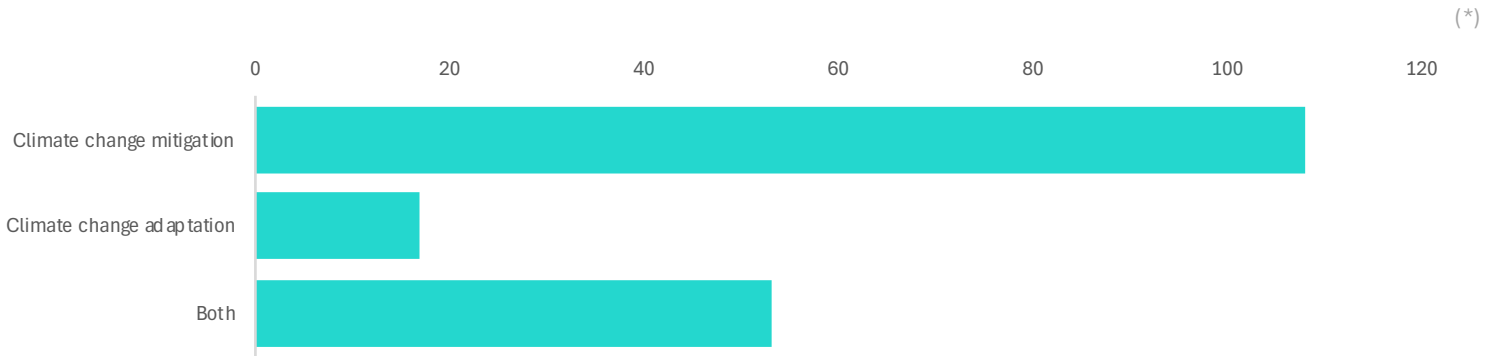
Number of climate change policy measures by passenger vs. freight



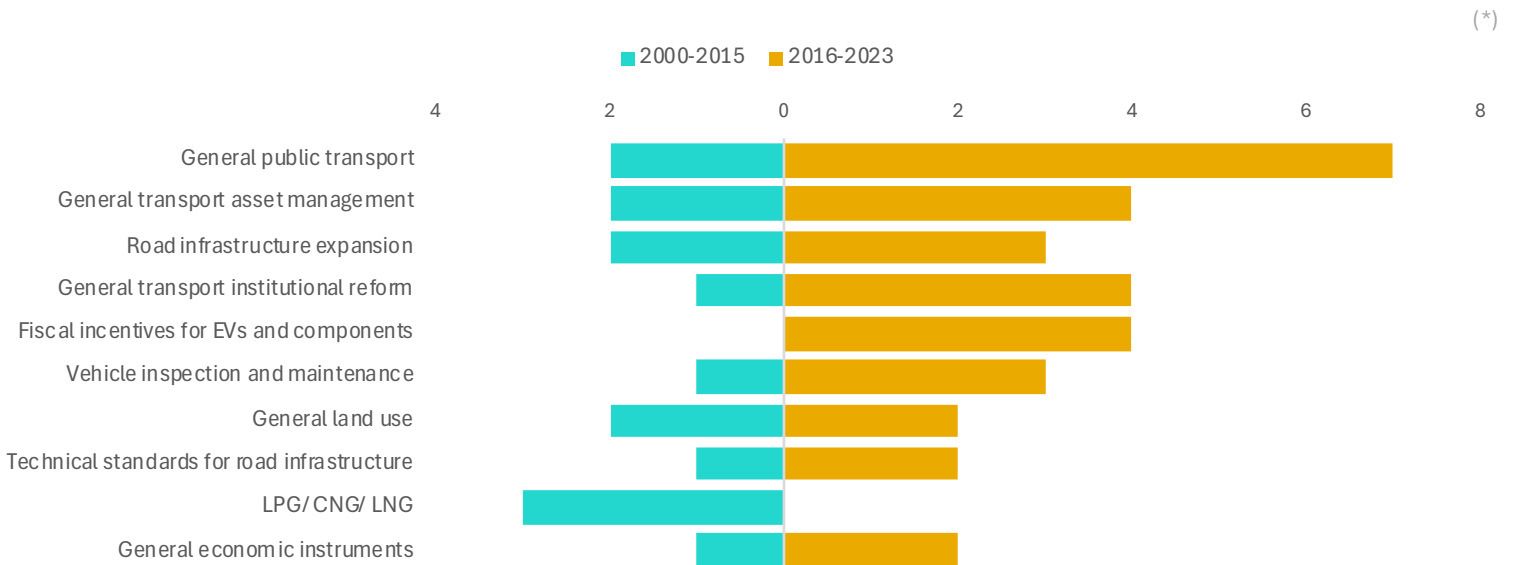
Transport-related climate change policy measures by framework



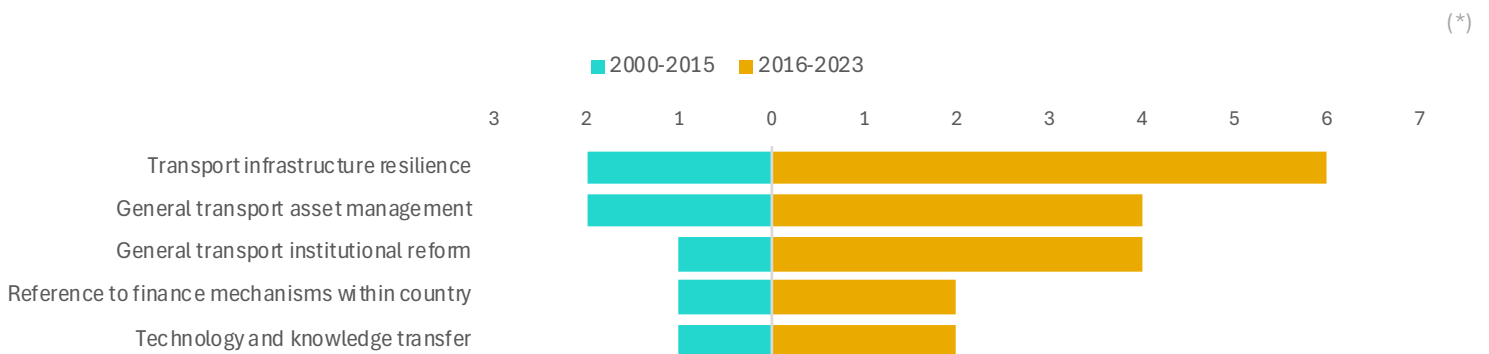
Number of climate change mitigation vs. climate change adaptation policy measures



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 Myanmar

Document	Year published	Target	Target year
Economy-wide emissions			
Updated Nationally Determined Contributions - MMR	2021	Myanmar's total emissions reductions contributions as a part of its NDC are 244.52 million tCO₂e unconditionally, and a total of 414.75 million tCO₂e, subject to conditions of international finance and technical support by 2030	2030
Net zero, carbon neutrality, and other long-term climate action			
Transport GHG emission			

XIII. Indirect Transport Climate Change Targets

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

Document	Year published	Target	Target year
Biofuels			
Myanmar Energy Master Plan 2015	2015	A biofuel policy with set mixing targets for 2020 and 2030 is recommended. Assuming a 10 % target for both diesel and gasoline by 2020, and 20 % target by 2030, transport de-carbonisation case can be developed.	2030
General adaptation measures			
Climate Change Strategy 2018-2030	2018	by 2030, Myanmar has achieved climate-resilience and pursued a low-carbon growth pathway to support inclusive and sustainable development.	2030
General land use			
Climate Change Strategy 2018-2030	2018	by 2030, Myanmar must develop resilient and sustainable cities and towns for all to live and thrive, with emphasis on the most vulnerable people.	2030
Measures to improve rural-urban connectivity			
National Strategy for Rural Roads and Access	2017	The second priority for the Government of Myanmar will be villages with more than 500 people, with at least 95% of these villages to be connected by allseason road by 2025.	2025
National Strategy for Rural Roads and Access	2017	The third priority for the Government of Myanmar will be to target villages with more than 250 people, connecting at least 75% of these villages by all-season roads by 2030. Villages with less than 250 people will also be included, with at least 50% of these villages connected by all-season road by 2030.	2030
National Strategy for Rural Roads and Access	2017	The long-term development objective of the Government of Myanmar is to provide all-season access to all villages in Myanmar. In support of this long-term development objective, this National Strategy for Rural Roads and Access targets the next 15 years up to 2030, during which the Government of Myanmar aims to provide all-season road access to at least 80% of the villages in each state/region in Myanmar.	2030
National Strategy for Rural Roads and Access	2017	By prioritizing the villages with larger populations, the Government of Myanmar will connect an additional 10 million rural people by all-season road, providing year-round road access to approximately 90% of the rural population in the country by 2030.	2030
National Strategy for Rural Roads and Access	2017	The Government of Myanmar will furthermore provide dry-season road access to an additional 6,700 villages, ensuring that at least 90% of the villages in each state/region and up to 95% of the country's rural population have some form of road access by 2030.	2030
Road infrastructure expansion			
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Complete a total of 3,000 km of ASEAN Highway Network in Myanmar (e.g. AH-1: Yangon- Mandalay- Tamu, AH-2: Mandalay-Taunggyi-Tachileik) by the year 2030.	2030

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Development of e-mobility transport plan/policy							
Updated Nationally Determined Contributions - MMR	2021	Based on how markets for EVs progress, Myanmar will develop both infrastructure and policies to further support the sector under bilateral partnerships or public-private partnerships.	x				
Development of other transport-related plan/policy							
Updated Nationally Determined Contributions - MMR	2021	Department of Urban Housing and Development (DUHD) under the Ministry of Construction has been developing conceptual town development plans.					x
Climate Change Strategy 2018-2030	2018	The government of Myanmar is drafting: (a) National Urban and Regional Development Planning Law, which makes reference to environmental and social issues that need to be integrated into spatial planning (b) National Housing Framework, which should integrate climate change considerations in the delivery of affordable and inclusive housing, and (c) National Urban Policy, of which climate change will be an important component.					x
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop an ICT and ITS master plan and introduce advanced technology to achieve higher efficiency in use of road infrastructure.	x				
Development of transport plan/ policy							
Intended Nationally Determined Contribution - MMR	2015	Policies such as the National Transport Master Plan and National Implementation Plan on Environmental Improvement in the Transport Sector are being developed.	x	x	x	x	
Myanmar Climate change Master Plan	2018	Integrate climate change into energy, transport and industry policies, plans, research and development, and extension services at national, sectoral and local levels	x	x	x	x	
Fiscal incentives for EVs and components							
Updated Nationally Determined Contributions - MMR	2021	While no policies currently exist to phase out fossil fuel vehicles, incentives for EVs include tax exemptions on import registration fees. Electric motorcycles are also allowed on Myanmar roads	x				
Law Amending the 2022 Union Tax Law	2022	In the table of goods not subject to commercial tax in section 14, sub-section (a) of the 2022 Union Tax Law, item 46 shall be added after item 45 as follows: Sr. Name of the goods 46. Battery electric vehicle (BEV) and its battery	x				
Climate Change Strategy 2018-2030	2018	There is evidence of attempts to contain emissions through e.g. incentives for electric cars.	x				
Automotive Policy	2019	Special Offers and Privileges for manufacturing Electric Vehicles (EVs) shall be provided to international investors.	x				
General capacity building							

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Updated Nationally Determined Contributions - MMR	2021	Myanmar also seeks to enhance its capacities to engage in IMO discussions and the International Convention for the Prevention of Pollution from Ships Myanmar is interested in enhancing its capacities to engage with the aviation sector (the International Civil Aviation Organisation) regarding climate change, specifically the Carbon Offsetting and Reduction Scheme in International Aviation.			x	x	
Automotive Policy	2019	Trainings of skill labours and creation of more job opportunities shall be conducted. HRD Programs such as expansion of Autorelated Industrial Training Centers, trainings for getting Certifications on Maintenance and Maneuvering shall be performed.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Invite professional technical support to improve and increase staff capacity in the field of transport modeling and planning Provision of vocational training for designated sector professions Increase the capacity of the national universities and institutes in the transport infrastructure sector through international exchange programs, technical assistance (TA) from advanced countries, etc. Improve the existing research and development capacity in ministries Increase the number of road transport safety specialists.	x	x	x	x	
General e-mobility							
Updated Nationally Determined Contributions - MMR	2021	Priority will be given to electric vehicles, the development of a Shipping Energy Efficiency Management Plan (SEEMP) and a Green Shipping Strategy Myanmar is interested in introducing EVs for both personal use and (MRT)	x				
General public transport							
Updated Nationally Determined Contributions - MMR	2021	Myanmar is interested in introducing EVs for both personal use and (MRT) MRT projects, either private sector or public-private sector partnerships, and light commercial vehicles including vehicles for personal use, will be highly encouraged.	x	x			
Climate Change Strategy 2018-2030	2018	The regulatory framework for transport is also evolving, with a focus on improved and extended public transport systems and infrastructure, particularly for roads.	x				
Myanmar Climate change Policy	2019	Ensure that urban and inter-city transportation networks and infrastructure are sustainable, lowcarbon and climate-resilient for all modes of transport, in particular for mass transit;	x	x			x
Myanmar Climate change Master Plan	2018	Introduce alternative modes of service delivery to improve the energy efficiency system in transport, building and industry sectors Feasibility studies for urban public transport developed at city level within two years Public transport authorities established in urban areas to develop and implement mass transit systems within 15 years	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Myanmar. National Communication (NC). NC 1.	2012	make all public transports more attractive and affordable; Make public road, rail and water transports more comfortable and affordable	x	x	x		
Myanmar Sustainable Development Plan	2018	Develop sustainable public transport systems, including school transportation systems, that are safe, convenient and accessible to all	x	x	x	x	
National Strategy for Rural Roads and Access	2017	It is expected that the private sector will respond to improved road access by providing improved public transport services to respond to demand. However, this will need to be monitored to ensure that the objectives of improved access are indeed achieved and that public transport services are appropriate in the type and quality of service they provide and the cost of this service. Where necessary, additional effort may be needed to improve the quality and cost of the service.	x				
National Spatial Development Framework and Urban Planning System of Myanmar	2018	Improvement of Public Transport and Bus System	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Upgrade public transport.	x				
General shipping improvement							
Updated Nationally Determined Contributions - MMR	2021	Priority will be given to electric vehicles, the development of a Shipping Energy Efficiency Management Plan (SEEMP) and a Green Shipping Strategy Use of alternative energy/ fuels ● Use wind or solar energy ● Use of LNG Table 36 Additionally, within the transport sector, Myanmar is also interested in further regional engagement in the ASEAN Green Ship Strategy to reduce emission from non-convention ships (NCS) where International Maritime Organization (IMO) rules do not apply.			x		
Myanmar. National Communication (NC). NC 1.	2012	Improve railwayand waterway systems for increased containerized freight transport			x		
General transport finance							
Intended Nationally Determined Contribution - MMR	2015	Addressing financial needs of the other key sectors which are emerging such as sustainable transportation, urbanisation, waste management and agricultural practices	x	x	x	x	
High-speed rail (HSR)							
Updated Nationally Determined Contributions - MMR	2021	High speed trains and monorails are also planned to depend on feasibility studies and ensuring social and environmental standards are met, including designing wildlife friendly infrastructure.		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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Construct high speed train for the Ywa Thar Gyi-Nay Pyi TawMandalay section		x			x
Measures to improve rural-urban connectivity							
Updated Nationally Determined Contributions - MMR	2021	Rehabilitation of 130 km of farm roads and 300km of tertiary canals into climate resilience conditions in Mandalay, Magway, and Sagaing regions	x				
Myanmar Sustainable Development Plan	2018	Improve rural transport connectivity, including through a new National Rural Road Access Program	x				
National Strategy for Rural Roads and Access	2017	It is expected that the private sector will respond to improved road access by providing improved public transport services to respond to demand. However, this will need to be monitored to ensure that the objectives of improved access are indeed achieved and that public transport services are appropriate in the type and quality of service they provide and the cost of this service. Where necessary, additional effort may be needed to improve the quality and cost of the service.	x				
Request for financial support to develop transport							
Updated Nationally Determined Contributions - MMR	2021	Myanmar thus seeks international technical and financial assistance in combinations of grants and concessional loans to develop the railway sector. As a part of its NDC, Myanmar thus seeks international public and/or public-private sector engagement and grants for technical and financial assistance, estimated at US\$ 2.3 million; - in the Inland Marine sector for GHG Emission Reductions (US\$ 1.2million) and the Green Ship Strategy for coastal shipping (US\$ 1.1 million).			x		
National Strategy for Rural Roads and Access	2017	The Government of Myanmar will request the development partners to provide financial support to cover the remaining funding needs for the implementation of the strategy. Development partners are increasingly providing funding for rural roads and bridges, and currently include the Asian Development Bank (ADB), the Japanese International Cooperation Agency (JICA), the German development bank (KfW) 16, and the World Bank.	x				
Ship efficiency improvements							
Updated Nationally Determined Contributions - MMR	2021	Priority will be given to electric vehicles, the development of a Shipping Energy Efficiency Management Plan (SEEMP) and a Green Shipping Strategy Improvement in the main engine"s efficiency ● Change and convert the main engine ● Recover waste heat			x		
Transport infrastructure resilience							

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Intended Nationally Determined Contribution - MMR	2015	Adaptation activities are also being conducted in the water sector, with projects on water way improvement to reduce flooding, improving the control of the transportation of commodities and on river bank erosion.			x		
Updated Nationally Determined Contributions - MMR	2021	Rehabilitation of 130 km of farm roads and 300km of tertiary canals into climate resilience conditions in Mandalay, Magway, and Sagaing regions	x				
Climate Change Strategy 2018-2030	2018	The country will need to upgrade and retrofit existing infrastructure to reduce vulnerabilities and maximise efficiency and generate adaptation and mitigation co-benefits including greener and more progressive transport systems. Transport systems are adapted to heightened risks of disasters from new climatic conditions and sustainable through to efficiency and low-carbon technologies	x	x	x	x	
Myanmar Climate change Policy	2019	Ensure that urban and inter-city transportation networks and infrastructure are sustainable, lowcarbon and climate-resilient for all modes of transport, in particular for mass transit;	x	x	x	x	x
Myanmar Climate change Master Plan	2018	Transport systems are adapted to heightened risks of disasters from new climatic conditions and sustainable through efficiency and low-carbon technologies	x	x	x	x	
Myanmar Sustainable Development Plan	2018	Adapt infrastructure systems, including transport systems, to mitigate against heightened risks of natural disasters and new climatic conditions, while facilitating a transition to more efficient, low-carbon technologies Lessen rural communities' exposure to extreme climate-related events, especially in disaster prone areas including supporting the development of climate-resilient rural infrastructure	x	x	x	x	
National Strategy for Rural Roads and Access	2017	Class A and class B roads will include proper protection of cut and fill slopes and embankments to avoid extensive damage from occurring to the road. Depending on the circumstances, this may vary from vegetative protection (bio-engineering) to retaining walls (concrete, masonry or gabion).	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Implement slope protection measures in landslide prone road sections. Implement measures to avoid flooding along the designated coarse ways. Carry out a series of disaster-resistant (cyclone and earthquake-resistant) improvements of existing bridges.	x				
Urban passenger rail infrastructure improvement							
Updated Nationally Determined Contributions - MMR	2021	The railway network will play a key role in Urban MRT in Myanmar as more trains will be introduced. High speed trains and monorails are also planned to depend on feasibility studies and ensuring social and environmental standards are met, including designing wildlife friendly infrastructure.		x			x
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Construct new rail infrastructure (LRT, MRT, subway) at Yangon Circular Line and Mandalay Circular Line and an LRT line, linking Mandalay to Mandalay International Airport. Construct new circular line in Mandalay Construct subway systems in Yangon City Construct LRT system for Mandalay – Kyaukse		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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Vehicle air pollution emission standards							
Updated Nationally Determined Contributions - MMR	2021	Finally, only new vehicles that meet Euro 4 standards will be allowed in Myanmar. In coordination with the Vehicle Import Steering Committee and under the guidance of the MOI, vehicle standards will also be developed to ensure the country has a recycling system in place	x				
Automotive Policy	2019	Emission Standards and Fuel Quality shall be set up in accordance with the Region-wide Standards. Regarding to Emission Standard, notifications shall be declared by relevant Ministries as a minimum of Euro 4 for imported / manufactured Passenger Cars, and Commercial Vehicles, Euro 4 for Motorcycles and Euro 4 for the Fuel Properties of gasoline and diesel.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Review and revise the existing regulation on vehicle inspection from an aspect of environmental improvement (strict regulation on emission gases)	x				
Vehicle efficiency standards							
Updated Nationally Determined Contributions - MMR	2021	Similarly, Myanmar's Road Transport Administration Department would also like to develop projects with the private sector to improve and increase vehicle testing systems and work with CSOs on vehicle efficiency and standards to decrease fossil fuel consumption.	x				
Myanmar. National Communication (NC). NC 1.	2012	increase the use of fuel-efficient motor vehicles; Implement stringent standards for reducing CO2 emissions from vehicles	x				
Vehicle inspection and maintenance							
Updated Nationally Determined Contributions - MMR	2021	Emissions testing of new private vehicles take place three years after registration, whereas commercial vehicles have to be tested annually. Similarly, Myanmar's Road Transport Administration Department would also like to develop projects with the private sector to improve and increase vehicle testing systems and work with CSOs on vehicle efficiency and standards to decrease fossil fuel consumption.	x				
Road Transport Operations Law	2016	the transport motor vehicle shall be subject to the standards and norms of the safety of motor vehicles, the exhaust emission and air pollution, and payload of the motor vehicles stipulated by the State;	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Review and revise the existing laws/acts/regulations with regard to vehicle inspection/registration and introduce an advanced vehicle inspection system.	x				
Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles	2020	Periodic inspection is in effect	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Vehicle scrappage scheme							
Updated Nationally Determined Contributions - MMR	2021	Allied to this would be a slow phase-out of old, highly inefficient vehicles. Myanmar has already phased-out over 200,000 old, highly inefficient vehicles	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Regulate and limit the use of older vehicles for commercial purposes (old trucks) and public transport (old buses) and encourage replacement with new vehicles by providing preferential treatment	x				
Accreditation of road inspection and auditing agencies							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Provide trainings with regard to inspection, evaluation and implementation of the maintenance for transport infrastructures.	x				
Adaptation-related education and training							
Myanmar Climate change Policy	2019	Ensure that actions undertaken under Myanmar’s national policies on education, technology and training integrate climate change adaptation and mitigation considerations and are complementary to and/or support actions under this Policy;					
Myanmar Climate change Master Plan	2018	Carry out studies looking at climate change impact and implications in the energy, industry and transport sectors	x	x	x	x	
Air traffic management							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Improve CNS/ATM systems according to the master plan for modernization of Air Navigation Services.				x	
Automated enforcement of speed limits							
Global Status Report on Road Safety 2018	2018	Yes	x				
Biofuels							
Myanmar Energy Master Plan 2015	2015	The Government pursues to reduce the CO2 emission by increasing natural gas utilization in transport sector by converting gasoline, diesel and LPG vehicles to CNG vehicles and also using biofuels.	x				
Climate-resilient design standards							

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
National Strategy for Rural Roads and Access	2017	Under this National Strategy for Rural Roads and Access, use will be made of climate resilient designs that take account of the differences in climate vulnerability (flood risk, erosion risk, rainfall, drought, etc.) in the various parts of the country. Appropriate designs will be applied that find a balance between the risks of climate impacts and related repair and maintenance costs on the one hand, and the construction costs on the other hand.	x				
Convention on Road Traffic 1968							
59 UN Transport Agreements/ and Conventions Serviced by ECE	2021	Ratification, accession, or definite signature by country	x				
Coordinate planning across government agencies							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Establish coordination / information exchange mechanisms (e.g. via optical cable, etc.) between the Ministries Formulate a planning coordination body for corridor development by inviting representatives from each Ministry and local government involved in the corridor development	x	x	x	x	
Data modelling improvements							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop and utilize computer models in the national transport model (strategic model)	x	x	x	x	
Define roles and accountabilities across agencies							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Conduct a comprehensive study on possible decentralization of road planning, administration, and management roles.	x	x	x	x	
Design standards for sidewalks and bicycle paths							
Global Status Report on Road Safety 2018	2018	Yes	x				
Development density or intensiveness							
Climate Change Strategy 2018-2030	2018	it can engage in reducing and preventing new emissions through compact urban development and low-carbon construction technologies.					x
National Spatial Development Framework and Urban Planning System of Myanmar	2018	PLANEDCITY EXTENSION,/ PLANNED CITY INFILL					x
Development of aviation plan/policy							

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Prepare a master development plan and conduct a feasibility study for each of the strategic airports for international services. MOT to develop the strategic airports according to the master plans.				x	
Development of rail plan/ policy							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop a Rail Transport Safety Improvement Master Plan.		x			
Development of road plan/ policy							
Myanmar Sustainable Development Plan	2018	Improve rural transport connectivity, including through a new National Rural Road Access Program	x				
Development of transport adaptation/ emergency/ disaster plan/ policy							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop an emergency transport plan, to be implemented during emergencies, such as a large-scale earthquake.	x	x	x	x	
Development of transport asset management plan/policy							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop an asset management system, such as HDM, and a maintenance program. Conduct Research and Development (R&D) on cost-effective maintenance technologies.	x	x	x	x	
Disaster monitoring and risk assessment for transport infrastructure							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Prepare a hazard map and identify road networks and other transport facilities that are likely to be damaged by natural disasters.	x	x	x	x	
Energy efficient vehicle purchase incentives							
Automotive Policy	2019	To provide special incentives and encouragements in advancement of Eco-friendly or Environmentally friendly and Alternative Fuel Vehicles. Significant Tax Relaxations and Reliefs shall be allowed for productions and imports of Fuel-efficient, Eco-friendly or Environmentally friendly Vehicles. The followings shall be done to reduce the Environmental Impacts	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Introduce preferential treatment for use of environmentally friendly vehicles (e.g. favored import tax)	x				
EV charging infrastructure							
Automotive Policy	2019	Necessary infrastructures and supports shall be fulfilled for widely use of Electric Vehicles (EVs).	x				
Freight rail infrastructure improvement							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Increase the capacity of the Thilawa rail line to the Thilawa port and SEZ in accordance with the increasing demand of international container cargo		x			
Freight transport shifting to rail or inland waterways (IWT)							
Myanmar. National Communication (NC). NC 1.	2012	Improve railwayand waterway systems for increased containerized freight transport		x	x		
Fuel quality							
Automotive Policy	2019	Emission Standards and Fuel Quality shall be set up in accordance with the Region-wide Standards.	x				
Fuel tax							
Myanmar Sustainable Development Plan	2018	Implement measures to improve road user fees framework, including heavy vehicle license fees, fuel levies, and road tolls	x				
General active mobility							
Myanmar. National Communication (NC). NC 1.	2012	Improve all transport modes and traffic demand management, including cycling and containerized freight transport; Undertake land use, urban and transport planning to improve traffic management, transport systems, includingnon-motorizedtransport (cycling, walking)	x				x
General aviation improvements							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Monitor traffic growth and review airport development plans, based on the actual trend of air transport periodically, e.g. at 5-year intervals.				x	
General data repositories and data collection							

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Collect and update the transport infrastructure inventory, traffic data, etc., and build an initial database system and update it periodically	x	x	x	x	
General economic instruments							
Law Amending the 2022 Union Tax Law	2022	Notwithstanding anything contained in section 23, sub-section (a), if an association of persons is engaged in the oil and natural gas exploration and production sector of Myanmar, income tax shall be imposed at the rate of 25% on the total net income without deducting the allowances under section 6 of the Income Tax Law.	x				
Automotive Policy	2019	A allocation of Auto-related incomes/revenues shall be exercised as a priority the area of Road Infrastructure development and Public Transportation improvement. Revenues from Auto-related sectors shall also be used in the areas on analyzing to the source of Traffic Accident and Traffic Congestion and fulfillments to road infrastructures such as Pedestrian Lanes, Traffic Lights, Overpasses (Flyovers) and Bus Lanes. Appropriate Taxation Scheme shall be set up as Protection Measures for the development of domestic manufacturing. Tax and registration fees difference between Locally Assembled or Manufactured by SKD, CKD system and imported CBU shall be significantly large enough in terms of higher rate to imports.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop and enact special a purpose taxation scheme (e.g. fuel levy law, development levy law) if applicable. Collect fees from transport users, according to the services they use.	x				
General education and behavior change							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Increase public awareness	x	x	x	x	
General freight and logistics improvements							
Myanmar Sustainable Development Plan	2018	Implement the GMS Cross Border Transport Facilitation Agreement (CBTA)	x	x	x	x	
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Examine current tariffs, taking into account competitiveness with other ports in neighboring countries.	x	x	x	x	
General infrastructure improvements							
Myanmar. National Communication (NC). NC 1.	2012	Install more lightemittingdiodesfor trafficlighting.	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop cross border transport facilities and improve access to these facilities. Install road signs and a route numbering system that are compatible with the ASEAN highway network. Urgently implement safety measures (e.g. installation of guardrails, lighting, road signs, weight bridges, segregated pedestrian crossings, traffic signal installation at major intersections, etc.) at critical road sections.	x				
General inland waterways (IWT) improvement							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Improve inland waterway networks along the priority development corridors, namely the Northern Corridor, the Western North-South Corridor / the Main River Corridor and the Delta Area Network. Improve connectivity with other modes such as international shipping, truck and railway operators together with proper handling and storage facilities like warehouses in order to facilitate multi-modal transport. Develop a new business plan for IWT, in which the basic direction of IWT function will be focused into ship management in order to collaborate with the private sector. Replace IWT aged vessels and build new vessels with new technology (such as shallow draft vessel, environmentally-friendly vessel, etc.) jointly with private sector. Ensure that IWT continues to provide passenger and cargo transport services in remote areas, where transport services are difficult to install and on routes that have no private sector provider. IWT to build new vessels, and provide in the market with reasonable prices for the private sector. Increase capacity of existing shipyards and modernize associated facilities in order to provide better quality services.			x		
General innovations and digitalization							
Automotive Policy	2019	Upgrading of Information Technology (IT) System shall be executed in order to perform the tasks of Auto-related Documentation and Registration.	x				
General international conventions							
Automotive Policy	2019	Supervision Committee shall perform providing guidance in setting up of Safety Standards, Type Approval System and Homologation System for each vehicle type and its Component Parts and Systems based on the UNECE regulations as well as the rules in the international agreements.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Fully implement ASEAN Framework Agreements on Transport Facilitation.	x	x	x	x	
General land use							
Myanmar Climate change Master Plan	2018	Strengthen urban institutional processes that promote sustainable transport	x	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Myanmar. National Communication (NC). NC 1.	2012	Undertake land use, urban and transport planning to improve traffic management, transport systems, including non-motorized transport (cycling, walking)	x				x
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Plan urban re-generation projects at or near major rail stations such as Yangon, Insein, Kyee Myint Daing, New Ma Hlwa Gone and Mandalay stations.	x	x	x	x	x
General rail improvement							
Myanmar. National Communication (NC). NC 1.	2012	Improve railway and waterway systems for increased containerized freight transport		x			
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Improve railway infrastructure and enhance railway transport services along the priority corridors (e.g. Yangon – Mandalay Section, Yangon - Hanthawaddy / Bago Section, Bago-Mawlamyine Section, Yangon-Pyay Section). Replacement of rolling stock, rehabilitation of the existing rolling stock and identification of the critical problems. Import environmentally-friendly and energy-saving locomotives, DEMU and other low-carbon technologies.		x			
General transport asset management							
Myanmar. National Communication (NC). NC 1.	2012	To reduce GHG emission from the transport sector, maintenance of good road networks and fuel switching from petroleum to CNG should be expedited and CNG pipelines and stations expanded. Improve roads and road networks, and construct road detours	x				
Myanmar Sustainable Development Plan	2018	Upgrade international transport corridors, such as expanding access to expressways for heavy commercial vehicles, rehabilitating and modernizing the pavement for high traffic highways, and improving road safety. Expand, modernize and maintain domestic rail lines	x				
National Strategy for Rural Roads and Access	2017	In total, it is estimated that just under 26,000 miles of existing dry-season CRRN roads will need to be upgraded to an all-season standard, that some 2,400 miles of new CRRN roads will need to be constructed and upgraded to an all-season standard to complete the all-season connection of 80% of villages in each state/region, and that a further 4,300 miles of new construction to a dry-season standard will be required to ensure that a further 10% of villages in each state/region have at least dry-season access.	x				
Policies, Planning and Challenges related to Port Development and Integrated Intermodal Transport	2018	Current Infrastructure development Projects by External Assistance Yangon-Mandalay Railway Improvement Project Mandalay -Myitkyina Railway Line Rehabilitation Project Yangon-Pyay Railway Improvement Project Yangon-Mawlamyine Railway Improvement Project Yangon Circular Railway Line Upgrading Project		x			x
Rail Sector Development Activities in Myanmar	2020	Yangon-Mandalay Railway Line Improvement Project Yangon Circular Railway Line Upgrading Project Mandalay - Myitkyina Railway Line Rehabilitation Project Yangon-Pyay Railway Improvement Project		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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Improve trunk road networks along the designated priority development corridors: the Central North-South Corridor (Yangon – Nay Pyi Taw – Mandalay), the East-West Corridor (Yangon – Hpa-An- Myawaddy), the Northern Corridor (Mandalay – Muse) and the Western North-South Corridor (Yangon – Pyay – Magway). Improve infrastructure (e.g. surface condition improvement, widening, etc.) on the union highway(s) along the priority corridors (e.g. Thaton – Eindu – Kawkareik – Myawaddy Road, etc.). Implement preventive (proactive) measures before undertaking full-scale replacement or rehabilitation works. Improve railway infrastructure and enhance railway transport services along the priority corridors (e.g. Yangon – Mandalay Section, Yangon - Hanthawaddy / Bago Section, Bago-Mawlamyine Section, Yangon-Pyay Section).	x	x			x
General transport demand management							
Myanmar. National Communication (NC). NC 1.	2012	Improve all transport modes and traffic demand management, including cycling and containerized freight transport;	x				
General transport institutional reform							
Myanmar Sustainable Development Plan	2018	Further administrative decentralization of the transport sector	x	x	x	x	
National Strategy for Rural Roads and Access	2017	By 2020, an autonomous National Rural Road Agency (NRRA) will be created that will become responsible for managing the rural road sector and for preparing and implementing the rural road investment plans. The NRRA will prepare investment plans and maintenance plans based on this strategy and other government policies.	x				
National Strategy for Rural Roads and Access	2017	To improve the coordination between these different ministries and their departments, the following three committees were created in 2016: a national level Regional Road & Bridge Steering Committee, a national level Regional Road & Bridge Implementation Committee, and state/regional level Regional Road & Bridge Supervision Committees. These committees are together responsible for implementing this National Strategy for Rural Roads and Access.	x				
Automotive Policy	2019	To establish a Supervision Committee for evaluation, reviewing and refinements on relevant tasks of Automotive Policy. Automotive Institutes and Development Centers shall be established as of necessity.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Formulate a fully equipped special task force (unit) for data collection, data entry and analysis in each Ministry (MOT, MRT, MOC) Establish a special safety improvement task force team for union highways Establish a special project unit for HSR development. Modernize or reorganize the existing institute of Myanma Railways. Strengthen regulatory functions of the Department of Civil Aviation, so as to monitor and regulate the increasingly influential roles and activities of other organizations.	x	x		x	
General vehicle 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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Automotive Policy	2019) The system of Homologation by which a certain type of vehicle (both for locally manufactured or imported) is scrutinized that it is compatible with Road Safety and Traffic-lane System in Myanmar. Policy and arrangement shall be developed for production and safety of Motorcycles and related Vehicles.	x				
Intelligent transport systems (ITS)							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Introduce Intelligent Transport System (ITS).	x	x	x	x	
Intermodality measures							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Improve inter-modality with truck, inland water and railway operators with the development of warehouses and ICDs, and enable bounded transportation to/from the port.	x	x	x		
Investment required for specific projects							
National Strategy for Rural Roads and Access	2017	The total costs of construction and upgrading of the core rural road network to connect at least 90% of all existing registered villages by road, including connecting at least 80% of all registered villages by all-season rural road or higher-level road, is estimated to be approximately US\$ 2.5 billion (MMK 3,400 billion). This includes US\$ 2.0 billion for upgrading the existing dry-season CRRN roads to all-season standard, US\$ 131 million for the construction of new CRRN roads to earthen standard (excluding costs of land acquisition), US\$ 199 million for upgrading approximately a third of these new CRRN roads to an all-season standard, and US\$ 226 million for upgrading existing timber bridges in the CRRN (note that this does not include the costs of new bridges that may be required in existing or new CRRN roads ¹³). Total maintenance costs over the 15-year strategy period are estimated to be in the order of US\$ 1.4 billion, growing from just over US\$ 60 million per year currently to US\$ 120 million per year in 2030. The total funding needs for the 15-year strategy period come to US\$ 3.9 billion, including US\$ 2.5 billion for upgrading and new construction of roads and bridges, and US\$ 1.4 billion for maintenance.	x				
Involvement of subnational government for transport activities							
Myanmar Climate change Policy	2019	Ensure the active involvement of city, township and village stakeholders in identifying climate change challenges at local level, and devise plans, strategies and practical actions to adapt to climate change, mitigate its effects, and develop in a sustainable lowcarbon manner;					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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Local production, services, contracting etc.							
Automotive Policy	2019	The purpose of the Automotive Policy is to increase the usage of vehicles with affordable prices in each and every sector and to be higher UIO. In this policy, Vehicle Penetration Ratio in the designated period of time and the expected UIO are as follows: 2029 = 4,000,000 units 2034 = 10,000,000 units To support and supervise domestic assembling and production to be in line with the promulgated definition in this policy, as well as to undertake systematic inspection to the processes.	x				
Logistics hub							
Policies, Planning and Challenges related to Port Development and Integrated Intermodal Transport	2018	Future Dry Ports Development Plan Proposed eight potential locations in Myanmar Two locations in Yangon and Mandalay are under construction. Planning to conduct Pre-Feasibilities on other potential Dry ports under Korea Knowledge Sharing Program by the support of Korea EXIM Bank. Selection of Target Sites with high priority	x	x	x	x	
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop logistics centres at major railway stations (e.g. Yangon and Mandalay ICD/Dry Ports) in conjunction with the Thilawa port development. Develop dry ports/ICDs in Yangon (Ywa Thar Gyi) and Mandalay (Myinge) area in conjunction with Thilawa port and SEZs development along the corridor.	x	x	x	x	
LPG/ CNG/ LNG							
Myanmar. National Communication (NC). NC 1.	2012	600 CNG buses had been imported for publictransport so far, and morethan 25,000 motor vehicles have been changed from petrol/diesel to CNG up to September, 200	x				
Myanmar. National Communication (NC). NC 1.	2012	Further promote and expand CNG-used vehicles and CNG pipelines and stations; To reduce GHG emission from the transport sector, maintenance of good road networks and fuel switching from petroleum to CNG should be expedited and CNG pipelines and stations expanded.	x				
Myanmar Energy Master Plan 2015	2015	The Government pursues to reduce the CO2 emission by increasing natural gas utilization in transport sector by converting gasoline, diesel and LPG vehicles to CNG vehicles and also using biofuels.	x				
National speed law							
Myanmar Motor Vehicle Act	1989	A motor-vehicle shall not be driven in a street or public place recklessly or negligently, or at a speed or in a manner which is likely to endanger human life, or to cause hurt or injury to any person or animal, or to damage any goods carried in any vehicle or by any person, or which would be otherwise than reasonable and proper, having regard to all the circumstances of the case including the nature, condition and use of the street or public place and to the amount of traffic which is actually on it at the time, or which may reasonably be expected to be on it:	x				
Traffic Safety and Motor Vehicle Classification	2020	Driving a motor vehicle more than the prescribed speed limit or driving below the prescribed speed limit.	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Global Status Report on Road Safety 2018	2018	Yes	x				
Passenger and freight load limits							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Enforce regulations against overloading trucks.	x				
Performance-based transport maintenance contracts							
National Strategy for Rural Roads and Access	2017	A three-tier system of supervision and quality control will be introduced. The township staff of DRD and MOBA will carry out regular inspection visits to check the quality and overall performance of the works before approving payments. This will be complemented by independent third-party quality control consultants that will visit at least 50% of all rural road projects during implementation.	x				
Port infrastructure improvements							
Automotive Policy	2019	Build industrial road and port infrastructure	x		x		
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Enhance port capacity of Yangon port (including Thilawa area) to meet sharply increasing cargo demands and to reduce dwelling time of cargoes and ships in the port.			x		
Rail infrastructure expansion							
Myanmar Sustainable Development Plan	2018	Expand, modernize and maintain domestic rail lines		x			
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Construct an extension from Thanbyuzayat to Three Pagoda Pass where the State Railway of Thailand (SRT) confirms the connection and through-operation with Myanmar. Develop an airport rail access to the newly developed Hanthawaddy International Airport, as part of the future high speed rail (HSR: Yangon – NPT - Mandalay). Construct new double line for Yangon- Ywa Thar Gyi Upgrade the Thazi-Shwenyaung section Construct double line for Yangon-Mogyobyt Extend rail network of the Yangon and Mandalay Circular Rail Line		x			
Railway electrification							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Introduce electrification of the rail system or a hybrid system at circular line and other trunk lines by 2035.		x			
Reference to finance mechanisms within country							

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Climate Change Strategy 2018-2030	2018	The sector may have considerable need for financial support and technology transfer, to ensure the country benefits from efficient transport and more rational, efficient spatial development.	x	x	x	x	
National Strategy for Rural Roads and Access	2017	To increase the amount of funding available to the road sector, the Government of Myanmar will create a Road Fund. This Road Fund will provide financing for the rural road network managed by DRD and MOBA as well as for the higher-level trunk road network managed by MOC and the urban road networks managed by City Development Councils and Township Development Councils. The Road Fund will obtain its main revenue from road user charges, including existing tolls and vehicle fees, as well as new road user charges that will be introduced with the creation of the Road Fund, specifically a fuel tax or levy.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Carry out a comprehensive study to identify possible sources of financing for the transport sector including the establishment of a new taxation scheme targeted to transport infrastructure development. Build a typical business model for a toll road construction project, using a PPP scheme. Establish a JV or a similar partnership with the private sector (local and foreign) for both freight and passenger transportation at an initial stage, which can be transformed to a company (corporatization) and a Government Linked Company (GLC), with a phased approach. Build a typical business model for a PPP project (e.g. Yangon station building and surrounding area development, ICD facilities building and operation project under PPP scheme).	x	x	x	x	x
Renewable energy							
Myanmar Climate change Master Plan	2018	Introduce and promote innovative technology for renewable energy - for example, solar, wind, tidal and wave in the energy, transport and industry sector	x	x	x	x	
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Introduce renewable energy, where applicable (e.g. lighting at stations). Introduce early renewable energy where applicable (e.g. at ports, navigation system, etc.).		x	x		
Reporting, transparency, feedback mechanism							
National Strategy for Rural Roads and Access	2017	To monitor the progress in achieving the strategy objective of connecting at least 80% of all registered villages by all-season road and at least 90% of villages by any kind of road, use will be made of the following key performance indicators and targets.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Publish transport statistics report regularly (e.g. monthly reports) Monitor the progress of the Myanmar National Transport Master Plan's (MYT-Plan) implementation	x	x	x	x	
Road charging and tolls							

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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Myanmar Sustainable Development Plan	2018	Implement measures to improve road user fees framework, including heavy vehicle license fees, fuel levies, and road tolls	x				
Road infrastructure expansion							
Myanmar Sustainable Development Plan	2018	Upgrade international transport corridors, such as expanding access to expressways for heavy commercial vehicles, rehabilitating and modernizing the pavement for high traffic highways, and improving road safety	x				
National Strategy for Rural Roads and Access	2017	In total, it is estimated that just under 26,000 miles of existing dry-season CRRN roads will need to be upgraded to an all-season standard, that some 2,400 miles of new CRRN roads will need to be constructed and upgraded to an all-season standard to complete the all-season connection of 80% of villages in each state/region, and that a further 4,300 miles of new construction to a dry-season standard will be required to ensure that a further 10% of villages in each state/region have at least dry-season access.	x				
Automotive Policy	2019	Build industrial road and port infrastructure	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Provide a high-speed and high-capacity road network and services to/from major dry ports, sea and river ports, and airports.	x				
Road-side checks on overloading							
Myanmar Motor Vehicle Act	1989	(1) The driver shall cause the motor-vehicle to stop and to remain stationary so long as may reasonably be necessary. (a) when requested to do so by any police-officer for the purpose of regulating traffic or of ascertaining his name and address or for any other reasonable purpose; or (b) when an accident occurs to any person, or to any animal or vehicle in charge of any person, owing to the presence of the motor-vehicle on the road.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Urgently implement safety measures (e.g. installation of guardrails, lighting, road signs, weight bridges, segregated pedestrian crossings, traffic signal installation at major intersections, etc.) at critical road sections.	x				
Road-side checks on overspeeding							
Myanmar Motor Vehicle Act	1989	(1) The driver shall cause the motor-vehicle to stop and to remain stationary so long as may reasonably be necessary. (a) when requested to do so by any police-officer for the purpose of regulating traffic or of ascertaining his name and address or for any other reasonable purpose; or (b) when an accident occurs to any person, or to any animal or vehicle in charge of any person, owing to the presence of the motor-vehicle on the road.	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Routine transport asset maintenance							
National Strategy for Rural Roads and Access	2017	After construction and upgrading works have been completed, maintenance will be carried out in all CRRN roads with the aim of further increasing the sustainability and lifespan of the roads. This will include annual routine maintenance aimed at avoiding damage, complemented by periodic maintenance every few years to renew the road surface and carry out spot repairs.	x				
Speed limit on rural roads <= 70 kph							
Global Status Report on Road Safety 2018	2018	80 km/h	x				
Speed limits on urban roads <= 30 kph							
Global Status Report on Road Safety 2018	2018	48 km/h	x				x
Stakeholder Involvement							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Provide opportunities for the public to join the planning process through SEA. Maintain and further encourage participation of the private sector in developing and maintaining road transport infrastructure and providing transport services.	x	x	x	x	
Technical standards for general transport infrastructure							
Myanmar Climate change Master Plan	2018	Integrate climate change into transport sector policies and plans by developing guidelines and regulations for climate proofing transport infrastructure, port facilities, roads, railways and bridges	x	x	x	x	
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Set a Unified technical standard and regulation for port structure to secure the safety of port facilities	x	x	x	x	
Technical standards for rail infrastructure							
Myanmar Climate change Master Plan	2018	Integrate climate change into transport sector policies and plans by developing guidelines and regulations for climate proofing transport infrastructure, port facilities, roads, railways and bridges		x			
Technical standards for road infrastructure							
Myanmar Climate change Master Plan	2018	Integrate climate change into transport sector policies and plans by developing guidelines and regulations for climate proofing transport infrastructure, port facilities, roads, railways and bridges	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
National Strategy for Rural Roads and Access	2017	The minimum specifications of the all-season standard will be defined in detail in the National Rural Road Standards and Specifications (NRRSS) that are currently under preparation with support from development partners.	x				
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Finalize a series of road designs, construction, and maintenance manuals. Establish a new road classification system urgently, including a new numbering system proposed by MYT-Plan, and corresponding geometric standards. Rehabilitate/replace expressway facilities to meet international motorway standards. Develop highway design standards and a design manual.	x				
Technology and knowledge transfer							
Climate Change Strategy 2018-2030	2018	The sector may have considerable need for financial support and technology transfer, to ensure the country benefits from efficient transport and more rational, efficient spatial development.	x	x	x	x	
Myanmar Climate change Master Plan	2018	Increase access to climate-resilient and low-carbon technologies and practices in the energy, transport and industry sectors.	x	x	x	x	
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Establish coordination / information exchange mechanism between the coordination body and private investors Dispatch select staff to those supportive countries to study advanced technologies, techniques, etc. Conduct joint research and development (R&D)	x	x	x	x	
Transport asset condition assessment							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Carry out technical inspection of the existing road and bridge infrastructure and develop a database / inventory. Carry out technical inspections of the existing rail infrastructure and develop a database/inventory of these by the end of 2015.	x				
Transport asset management funding strategy							
National Strategy for Rural Roads and Access	2017	To ensure that available funding for rural roads and access is used efficiently and effectively in achieving the objective of this strategy, the concept of a Core Rural Road Network (CRRN) will be applied. The CRRN refers to the minimum rural road network in a township required to connect all villages to each other and to the higher-level road network. Once the budget allocations have reached the township level, allocation of the budgets will follow investment plans that have been prepared based on specific selection and prioritization criteria.	x				
Transport asset management information system							
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop an asset management system, such as HDM, and a maintenance program.	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 Myanmar

Document	Year published	Measure	Road	Rail	Domestic Navigation	Domestic Aviation	Urban Transport
Transport law							
Myanmar Sustainable Development Plan	2018	Revise and enhance key transport related laws, polices programmes and strategies	X	X	X	X	
The Survey Program for the National Transport Development Plan in the Republic of the Union of Myanmar	2014	Develop EIA guideline in the transport sector	X	X	X	X	
Transport services adaptation							
Climate Change Strategy 2018-2030	2018	Transport systems are adapted to heightened risks of disasters from new climatic conditions and sustainable through to efficiency and low-carbon technologies	X	X	X	X	
Myanmar Climate change Policy	2019	Ensure that urban and inter-city transportation networks and infrastructure are sustainable, lowcarbon and climate-resilient for all modes of transport, in particular for mass transit;	X	X	X	X	X
Myanmar Climate change Master Plan	2018	Transport systems are adapted to heightened risks of disasters from new climatic conditions and sustainable through efficiency and low-carbon technologies	X	X	X	X	
Vehicle import inspections							
Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles	2020	Yes	X				
Vehicle restrictions (import, age, access, sale, taxation)							
Myanmar. National Communication (NC). NC 1.	2012	regulation of imports of second-hand motor vehicles Discouragetheimportandtheuseofoutdatedandfuel-inefficientmotorvehicles	X				
Automotive Policy	2019	Step-by-step reduction and eradication of Used-car imports with designated time interval. Only left hand drive vehicles conforming to the Myanmar’s Trafficlane System shall be imported and manufactured for the domestic use.	X				
Vehicle taxes							
Myanmar. National Communication (NC). NC 1.	2012	Impose heavy taxes on the imported luxury cars and encourage car pools	X				
Myanmar Sustainable Development Plan	2018	Implement measures to improve road user fees framework, including heavy vehicle license fees, fuel levies, and road tolls	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/>