

# Aichi 2030 Declaration on Environmentally Sustainable Transport (EST): Country Profile

# Myanmar



Developed by:



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Aichi 2030 Declaration on Environmentally Sustainable Transport (EST): Country Profile (Myanmar)

2024

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Myanmar, a country in the South East Asia region, having Low and lower middle income status, was recorded to have a national population of about 55 million in the year 2024.

The urban population share in total is about 32%. The age wise distribution of the national population accounts for 31% and 11% of <18 years old (minors) and >60 years old (seniors) population, respectively. The GDP per capita (PPP) for the year 2022 was 5,020 USD.

The motorisation rate of the road transport vehicles for the year 2022, for all vehicles combined, stood at 145 vehicles per thousand population. Similarly, the rate for 2&3 wheelers, LDV, freight vehicles and buses were 122, 11, 9, and 1 respectively.

**Introduction to the profiles:** The Asian Transport Outlook (ATO) project serves as a comprehensive data repository that organizes transport-relevant data and information from various official and secondary sources. These profiles are meticulously crafted using data from this extensive collection and draw upon a carefully curated selection of key indicators from a pool of over 500 transport-related metrics (visit <https://asiantransportoutlook.com/snd> for more information).

These profiles also provide comprehensive summaries of national targets that are relevant to the Aichi 2030 Declaration goals as contained in ATO's national policy trackers. The profile is structured by goals, followed by policy insights and enumeration of sample projects by the MDBs corresponding to the 6 Goals.

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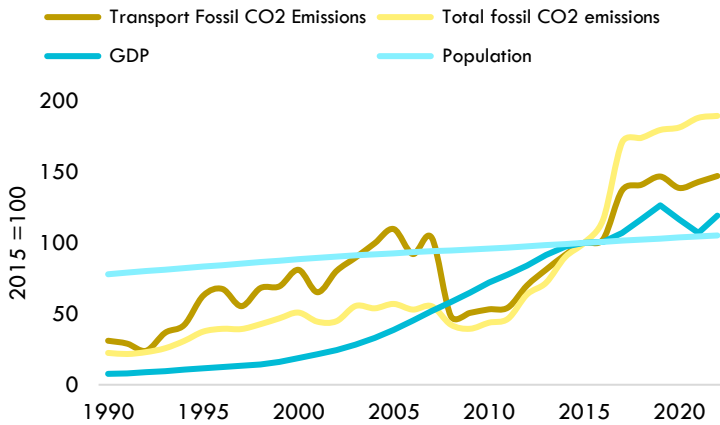


**Goal 1a – Low-Carbon (climate change mitigation):**

By 2030, aim to peak transport CO2 emissions and initiate reductions in transport related CO2 emissions with the intention to move towards decarbonization of the transport sector by 2050, or shortly thereafter (Based on SDG 7.2, 9.1, 13.2, Paris Agreement)

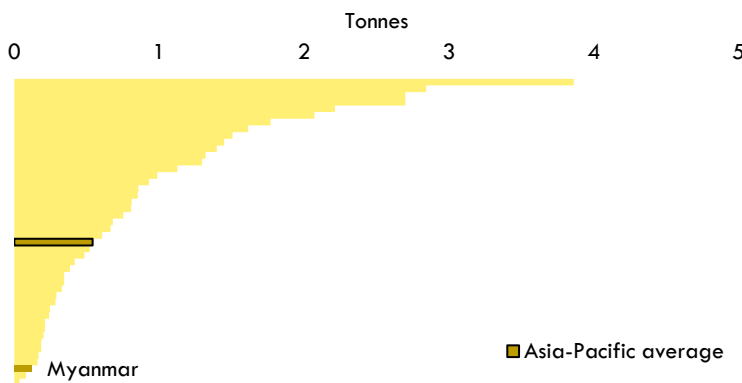
**Transport CO2 emissions (fossil)**

**Growth of transport fossil CO2 emissions, total fossil CO2 emissions, population and GDP (PPP) (1990 - 2022)**



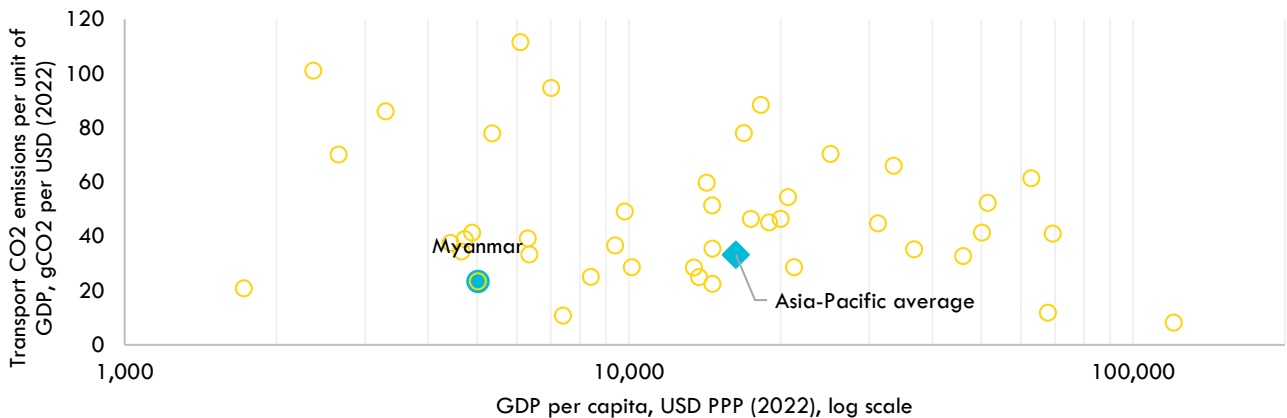
(EDGAR, 2023)

**Transport fossil CO2 emissions per capita (2022)**



(EDGAR, 2023)

**Transport CO2 emissions per unit of GDP (2022)**

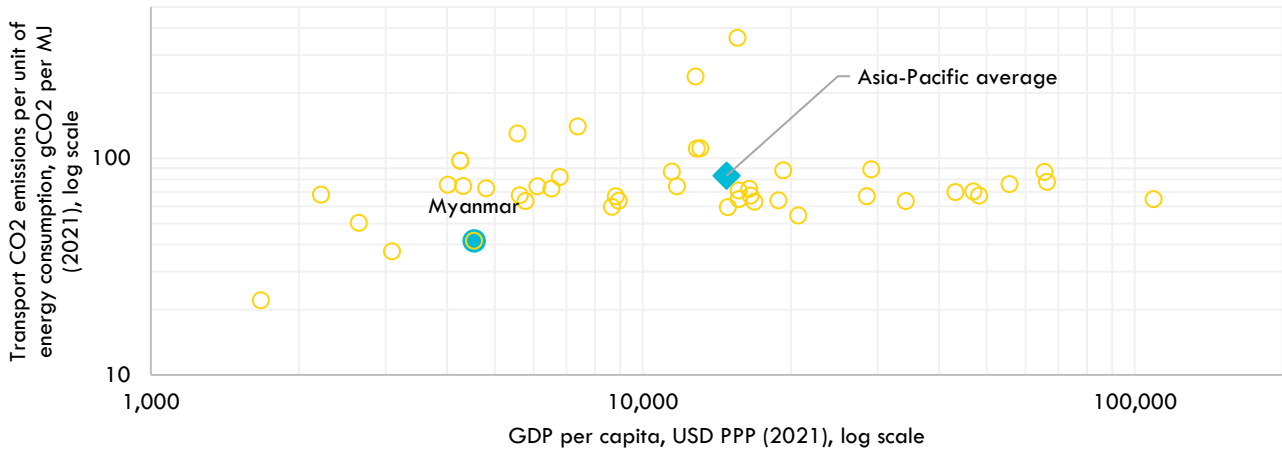


(EDGAR, 2023)

- **Population and economy:** Myanmar, with a population of 55 million and an upper-middle-income status, is experiencing rapid urbanization (32% urban population) and economic growth (3% annual GDP growth).
- **Motorization:** The motorization rate is 145 vehicles per 1000 people, with a dominance of two and three-wheelers.
- **Emissions:** Transport CO2 emissions are growing at 6% annually, exceeding the Asia-Pacific average. Per capita emissions are lower than the regional average, but the intensity of emissions relative to GDP is higher.
- **Energy:** Transport energy consumption is low compared to the region. Road transport dominates emissions, followed by railways.

Transport energy consumption

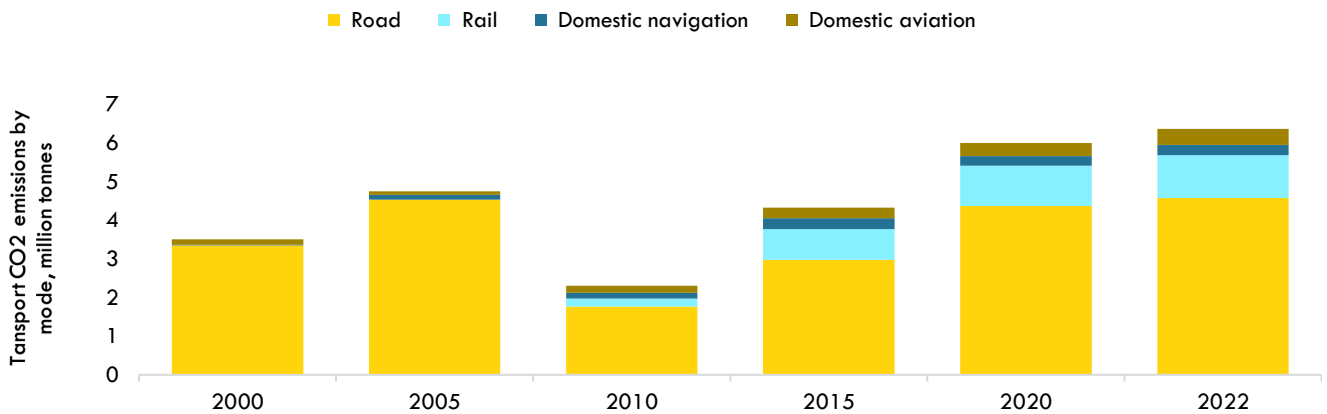
Transport CO<sub>2</sub> emissions per unit of energy consumption and GDP per capita (2021)



(EDGAR, 2023)

Transport CO<sub>2</sub> emissions (fossil) and energy consumption modeshare

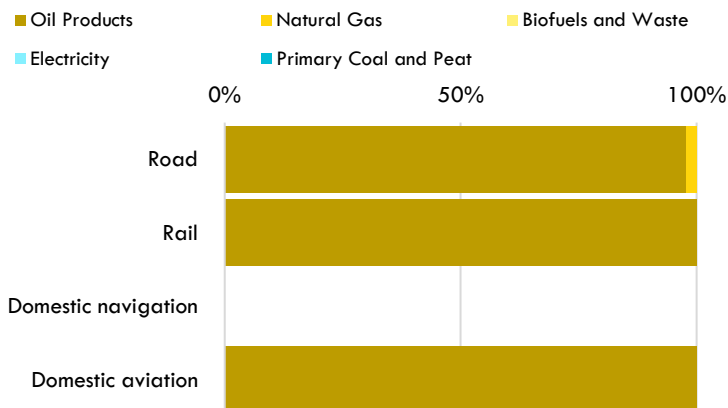
Growth of transport CO<sub>2</sub> emissions by mode



(EDGAR, 2023)

Share of transport energy consumption by mode and by source (2021)

Share of transport in renewable energy consumption:



(Data not available)

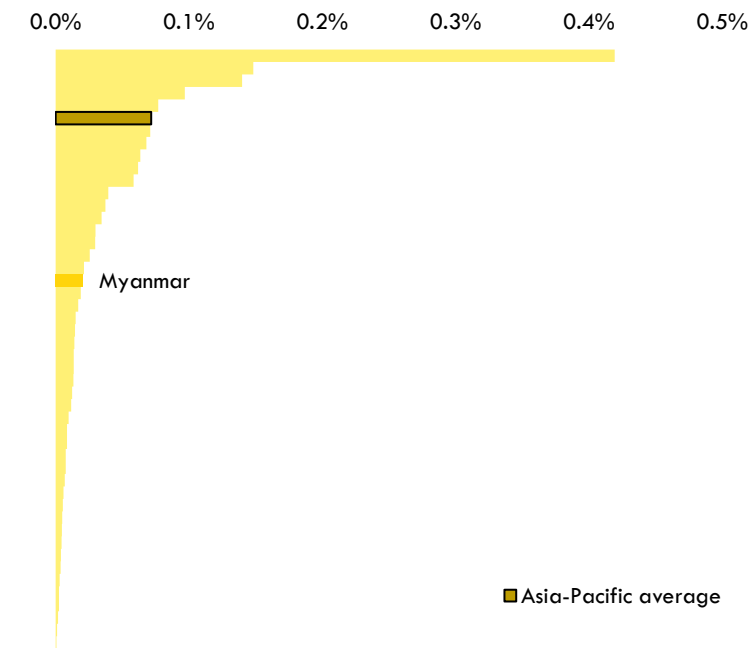
(EDGAR, 2023)

**Goal 1b – Resilience:**

By 2030, increase resilience and adaptive capacity of transport system to climate-related hazards and pandemics such as COVID-19. (Based on SDG 13, Paris Agreement and the Sendai Framework for Disaster Risk Reduction 2015-2030)

**Estimated average annual losses to transport infrastructure due to hazards**

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



(CDRI, 2023)

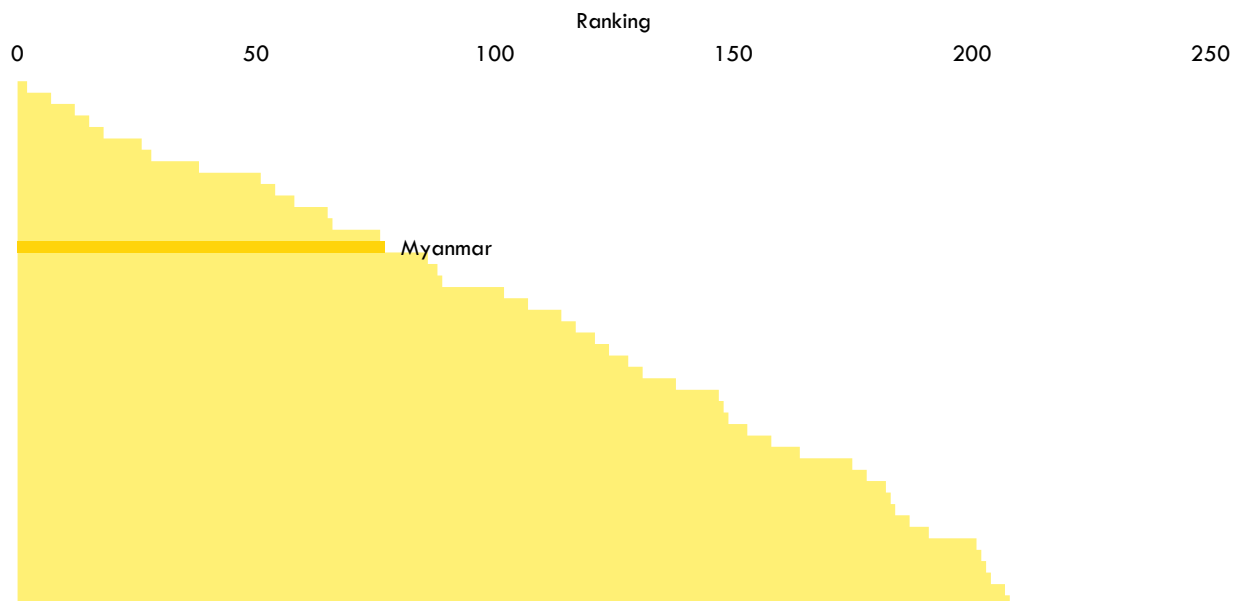
- **Vulnerability:** 11% of the population lives in low-elevated coastal zones, making them vulnerable to climate change impacts. The national road network is relatively resilient to disruptions.

- **Losses:** Road infrastructure suffers the most from hazards (72% of losses), followed by railways.

Note: National road vulnerability index ranking (NRVI), highest rank = 1 means fewer disruptions to trips after climate hazards due to sufficient network redundancy.

**Climate change vulnerability**

**National road vulnerability index (NRVI) ranking (2023)**



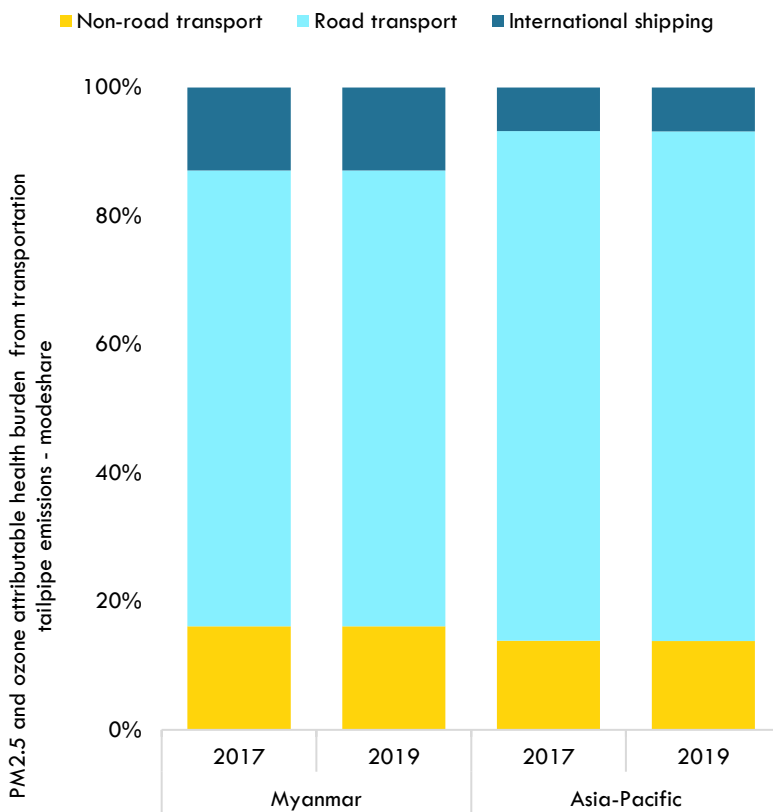
(Koks, et al., 2023)

**Goal 1c – Air pollution:**

By 2030, reduce air pollution and contamination caused by traffic, including PM2.5, other air pollutants and noise. (Based on SDG 3.9, 11.6).

**Transport air pollution health impact**

**Transport air pollution health impact (PM 2.5)**

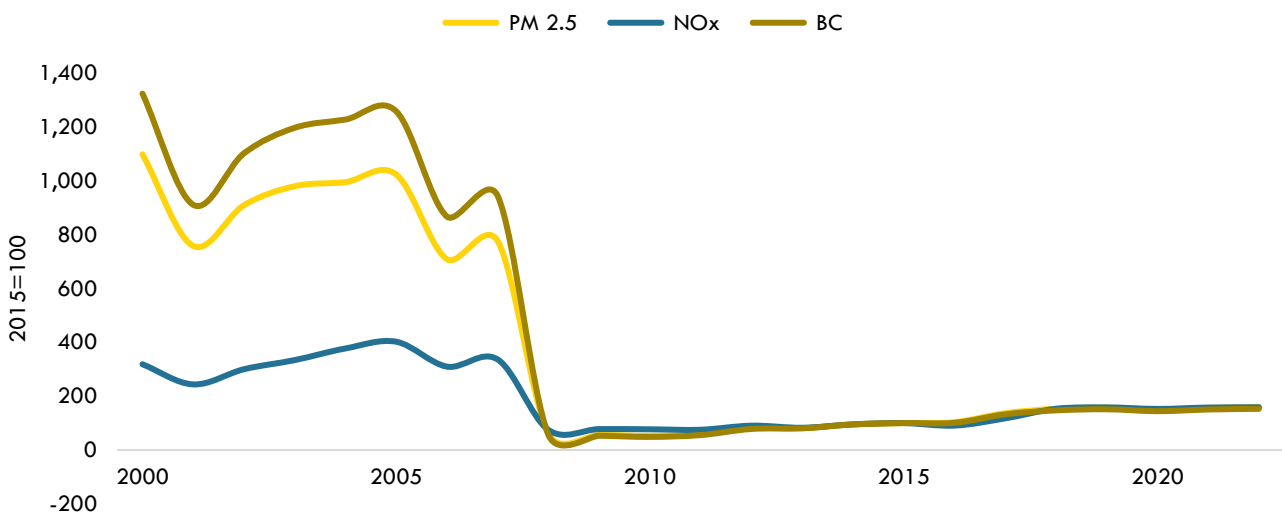


- Emissions: Air pollutant emissions from transport are increasing, particularly NOx and BC. The road transport sector contributes significantly to NOx and BC emissions.
- Health impacts: Deaths due to PM2.5 and ozone pollution from transport are rising, with non-road transport being the major contributor.
- In Myanmar, the total attributable deaths due to the PM2.5 and ozone air pollution from the transport sector changed from 1,345 to 1,471 between 2017 to 2019.
- The numbers for Asia-Pacific were about 236 thousand and 253 thousand, respectively, for the same time period.

(McDuffie et al., 2021)

**Transport air pollutant emissions**

**Growth of road transport air pollutant emissions**



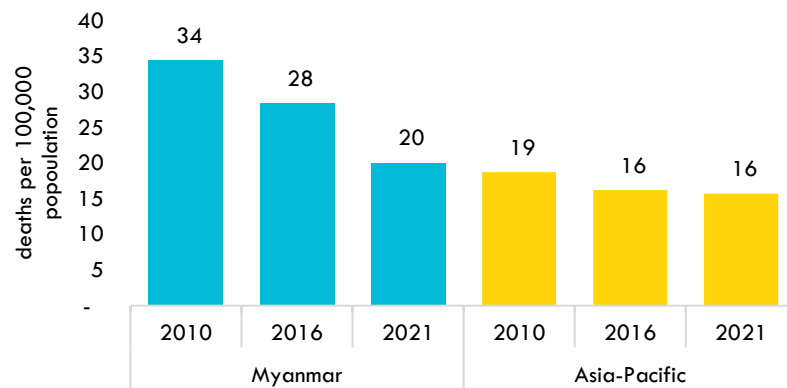
(EDGAR, 2023)

**Goal 2 – Road safety:**

By 2030, halve the number of deaths and injuries from road traffic accidents in Asia compared to 2020, with specific attention to vulnerable road users. (Based on SDG 3.6 and second UN Decade of Action on Road Safety 2021 – 2030, Stockholm Declaration on Road Safety)

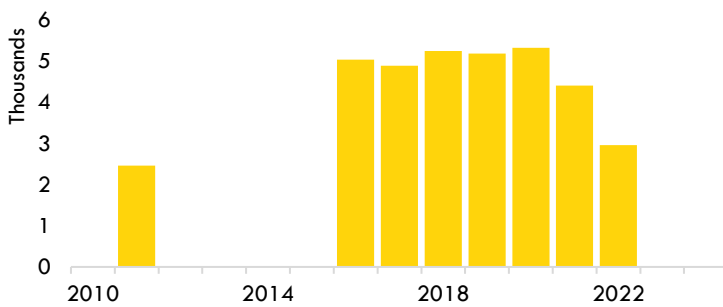
**Road traffic crash fatalities**

**Road traffic crash fatality rate**



(WHO, 2023)

**Road traffic crash fatalities (absolute values)**

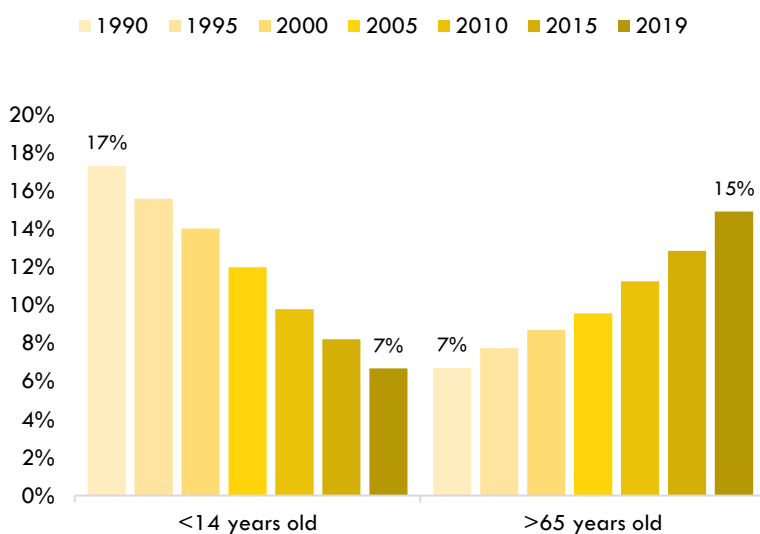


(Country official statistics)

- **Fatalities:** Road traffic fatalities are high, with an estimated 10,000 deaths in 2021. The fatality rate exceeds the Asia-Pacific average.
- **Vulnerable groups:** The share of fatalities among minors and seniors is increasing.
- **Economic cost:** Road crashes cost about 5% of Myanmar's GDP.

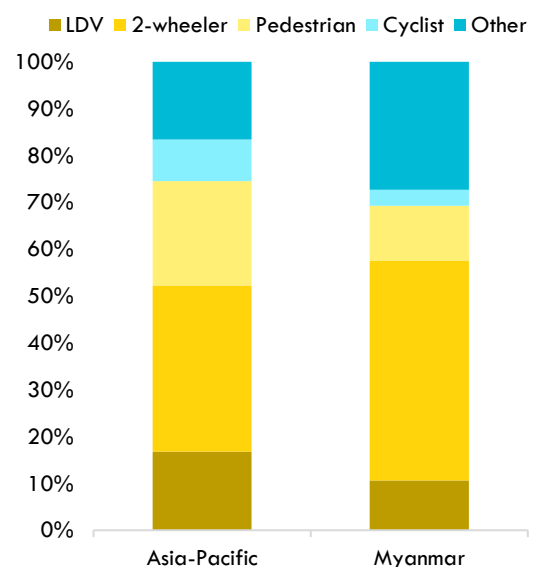
**Share of vulnerable groups**

**Share of road crash fatalities by age**



(GBD, 2021)

**Share of road crash fatalities by mode**



(WHO, 2023)

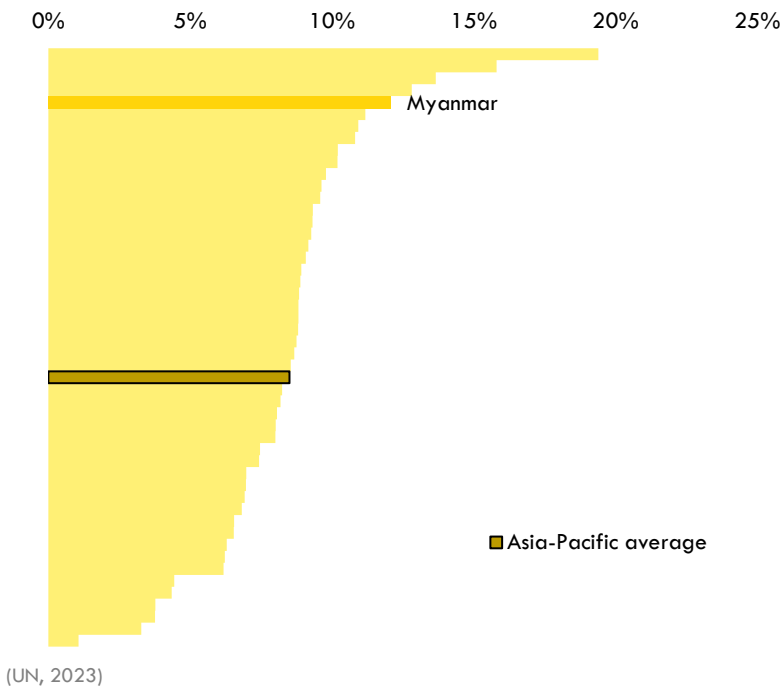


**Goal 3 - Economic sustainability:**

By 2030, realize sustainable economic and employment growth by leveraging science, technology and innovation and green investments in quality passenger and freight transport infrastructure and services in a manner that fully incorporates environmental and social impacts throughout the lifecycle of the transport infrastructure and services, (Based on SDG 8.4, SDG 9.1, 12.1 and 12.c)

**Transport sector and GDP**

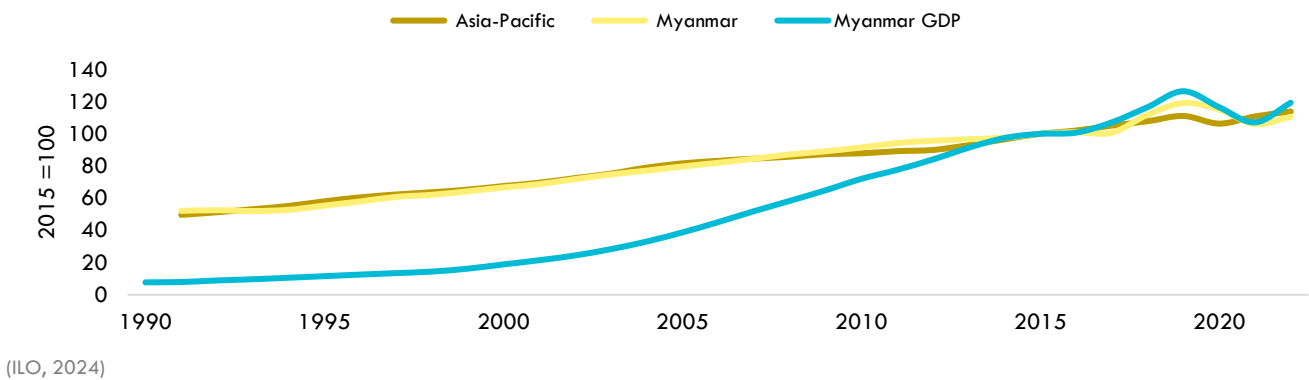
**Transport as a share of GDP**



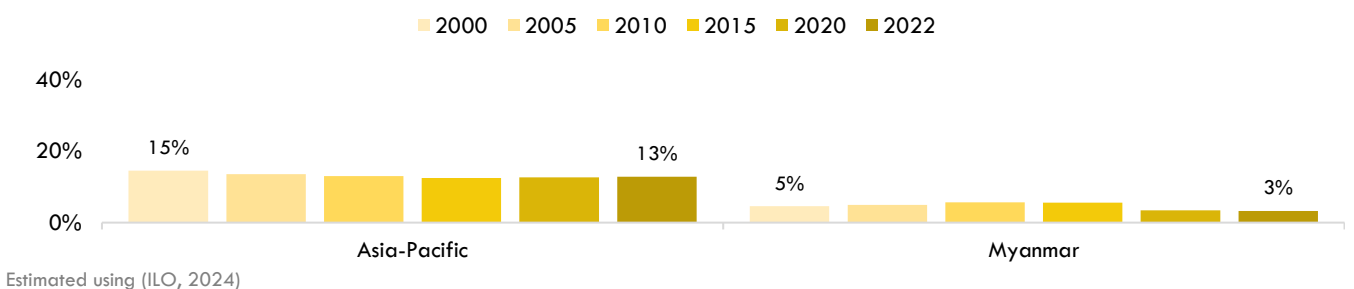
- **Contribution:** The transport sector's contribution to GDP is decreasing. Transport employment growth is moderate.
- **Gender:** Female employment in the sector is declining.
- **ODA and PPP:** The sector receives significant Official Development Assistance, mainly for roads. PPP investments are relatively low.
- **Logistics:** Myanmar's logistics performance ranking has dropped significantly.

**Transport employment**

**Growth of transport sector employment**

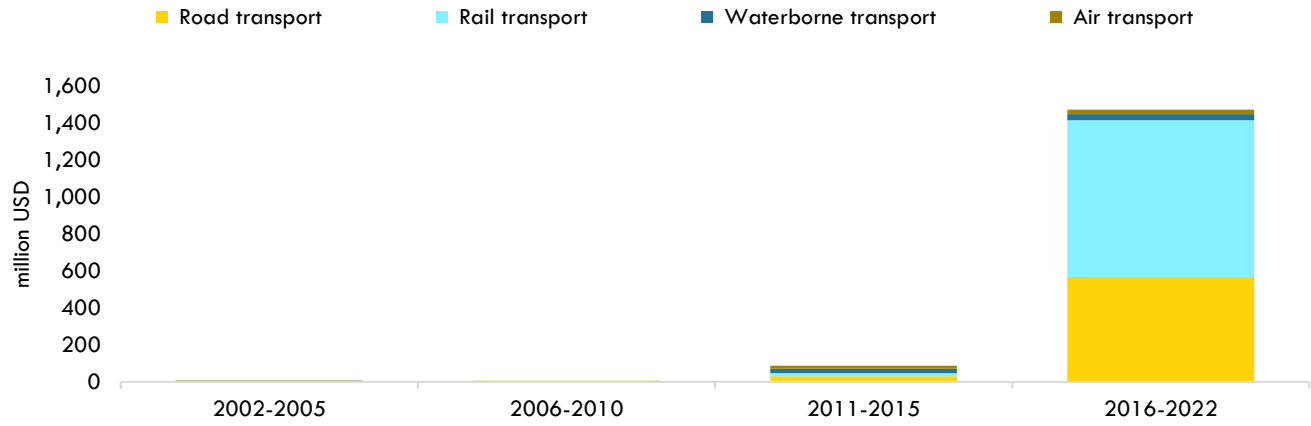


**Female share in the transport employment**



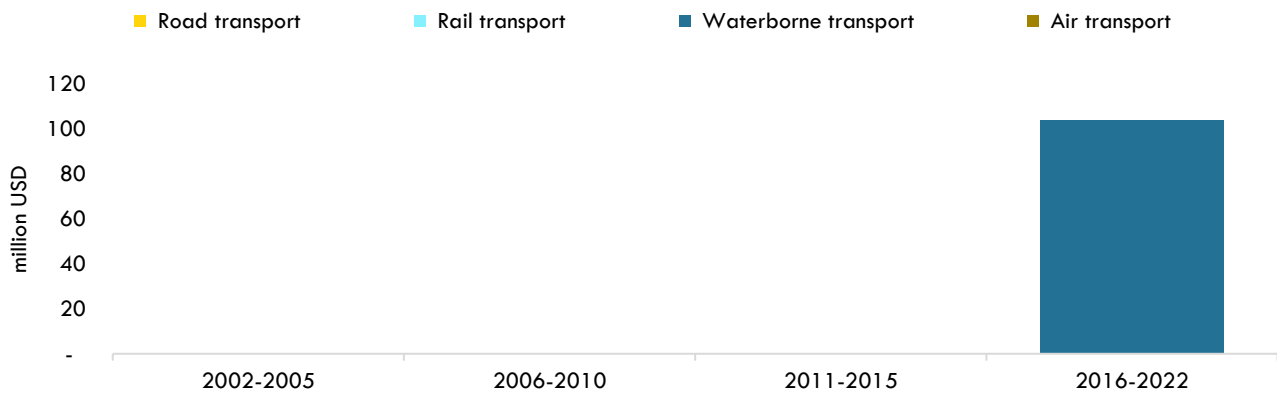
**Transport investments**

**Official development assistance for Transport**



(OECD, 2022)

**Public Private Partnership in Transport**



(WB, 2023)

**Freight sector**

**Domestic Logistics Performance Index, Rank change (2016 - 2023)**

(Data not available)

**Goal 4 - Rural access:**

By 2030, realize accessible, inclusive, safe, affordable, and resilient rural transport infrastructure and services, thus facilitating improved access to markets, basic utilities and services including health and education by the farming community, and other rural population including physically disabled and vulnerable groups (Based on SDG 2 and SDG 9.1)

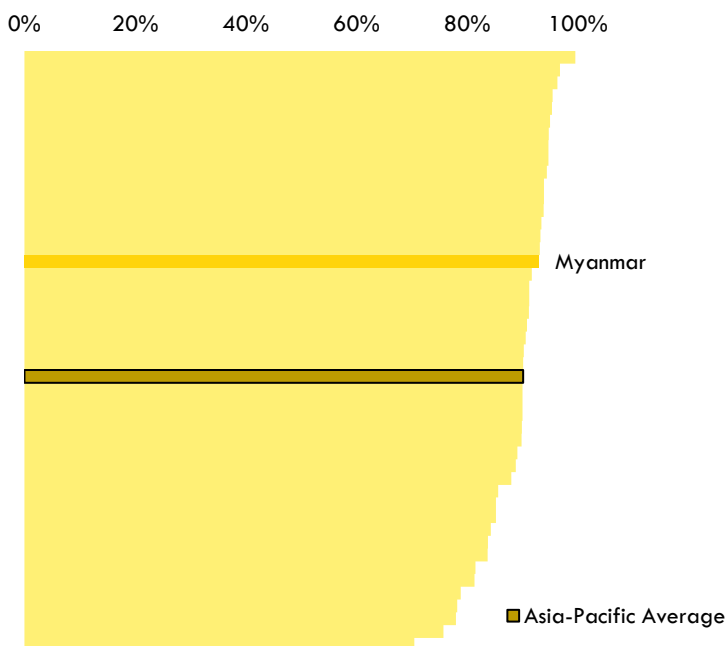
**Rural access**

**Rural access index**



(CIESIN-rural, 2023)

**Share of Secondary and Tertiary roads in Total road network**



(ATO and Country estimates)

- Accessibility: 64% of the rural population lives within 2km of an all-weather road, lower than regional and global averages.
- Gap: An estimated 14 million people in Myanmar lack decent rural access.

**Goal 5 - Urban access:**

By 2030, ensure access to accessible, inclusive, safe, efficient, affordable, and sustainable transport facilities, systems and services for urban dwellers, including physically disabled and vulnerable groups through the development of urban transport infrastructure and services (Based on SDG 11.2 and 11.7)

**Urban rapid transit infrastructure**

**Rapid transit infrastructure to resident ratio (RTR)**

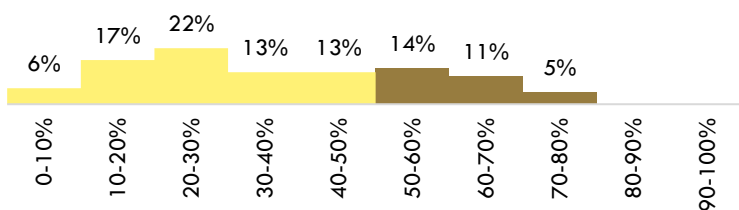
(Data not available)

**Urban rapid transit infrastructure length**

(Data not available)

**Urban access**

**Share of cities by level of urban access (out of 64 cities)**



(CIESIN-urban, 2023)

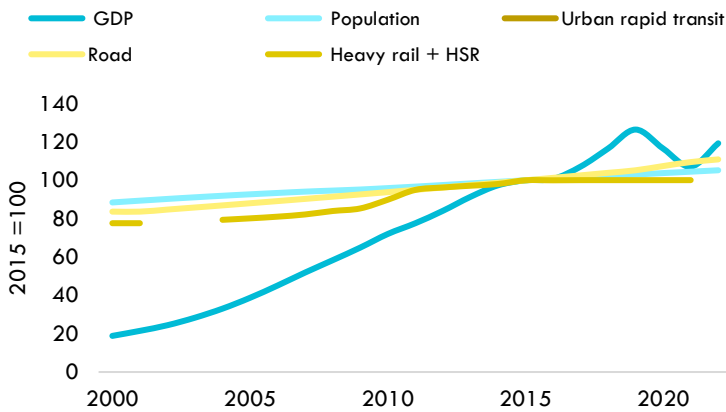
• Public transport: data is limited, but among a sample of global cities, 19 have urban access above 50%.

**Goal 6 - National access and connectivity:**

By 2030, facilitate inclusive multi-modal national (including rural-urban) and regional (cross-border) connectivity through the provision of sustainable multi-modal freight and passenger transport infrastructure and services (Based on SDG 9.1)

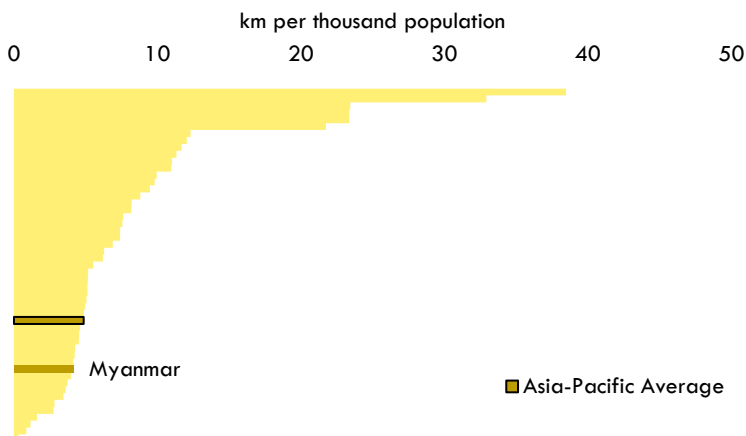
**Transport infrastructure**

**Growth of transport infrastructure**



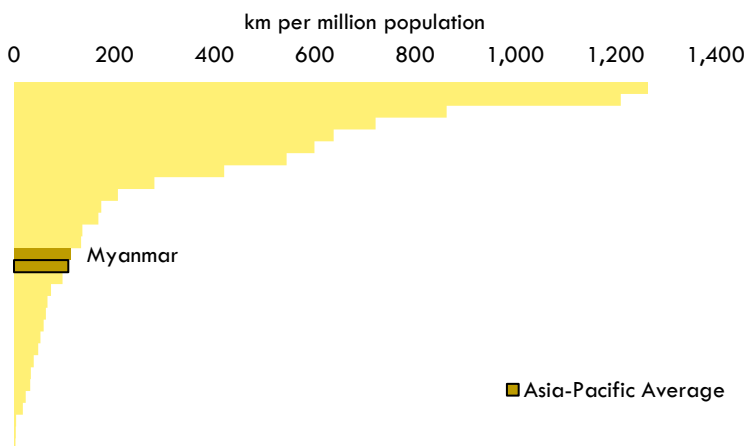
(IRF, 2024) (UIC, 2024) (ITDP, 2022) (ATO and Country estimates)

**Road transport infrastructure availability (2022)**



(IRF, 2024) (ATO and Country estimates)

**Rail transport infrastructure (including HSR) availability (2021)**

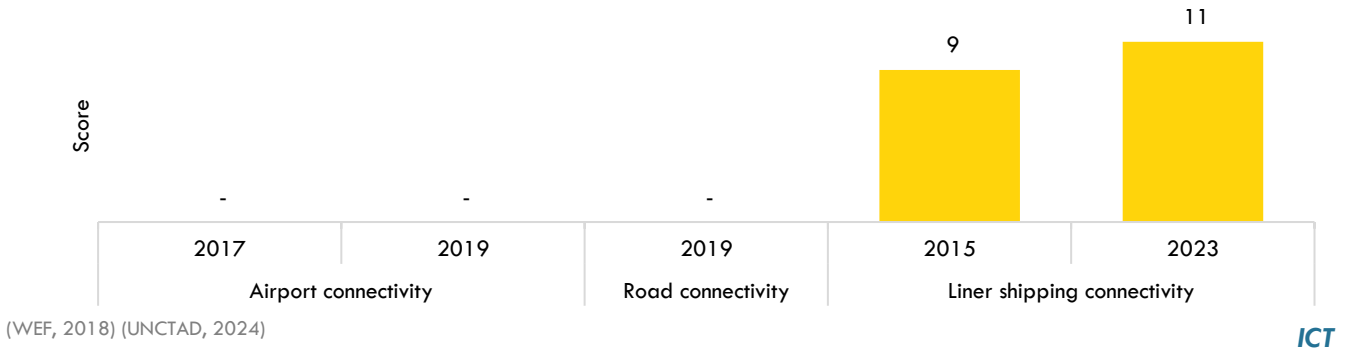


(UIC, 2024)

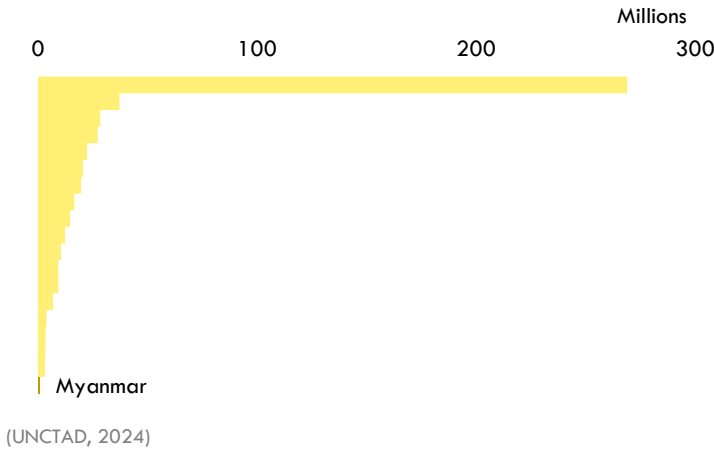
- Infrastructure: Road and rail infrastructure has seen moderate expansion. Bus motorization remains low.
- Connectivity: Liner shipping connectivity has improved. Container port traffic is substantial.
- Telecommunication: Mobile network coverage is extensive, but internet usage has declined.

Transport connectivity

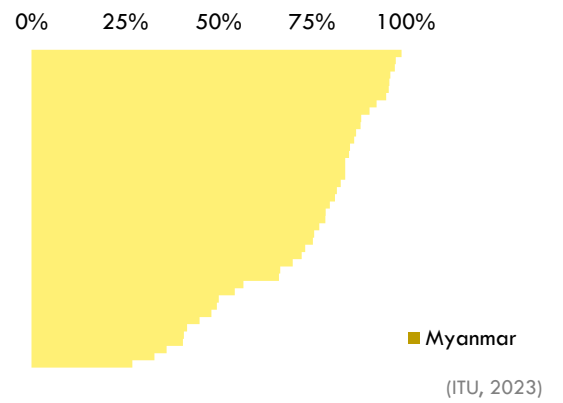
Transport connectivity



Container port traffic (TEU)



Percentage of individuals using the internet (2022)



Transport Policy insights:

The insights are based on the transport policy trackers developed by the ATO. Trackers include analysis of policy measures and targets from all the transport relevant policy documents for a country published after the adoption of the Aichi 2030 Declaration, i.e. 2021.

- Policy activity: 15 policy documents have been adopted since 2015, with a focus on low-carbon transport, air pollution, and road safety.
- Aichi alignment: 2 documents have been published since the Aichi 2030 Declaration, indicating some policy response.

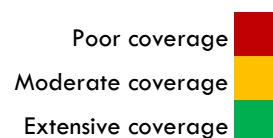


**Transport relevant policy documents**

Red - Poor coverage; Orange - Moderate coverage; Green - Extensive coverage

Doc. No.	Document Name	Year	Goal 1a	Goal 1b	Goal 1c	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
1	Myanmar Energy Master Plan 2015	2015	Green	Red	Green	Red	Red	Red	Red	Red
2	Intended Nationally Determined Contribution - MMR	2015	Yellow	Green	Yellow	Yellow	Yellow	Red	Red	Green
3	Road Transport Operations Law	2016	Green	Red	Green	Green	Red	Red	Red	Red
4	National Strategy for Rural Roads and Access	2017	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Red	Red
5	Myanmar Climate change Master Plan	2018	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Yellow
6	Climate Change Strategy 2018-2030	2018	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Yellow
7	Myanmar Sustainable Development Plan	2018	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow
8	Policies, Planning and Challenges related to Port Development and Integrated Intermodal Transport	2018	Green	Yellow	Green	Yellow	Red	Red	Yellow	Green
9	National Spatial Development Framework and Urban Planning System of Myanmar	2018	Green	Red	Green	Green	Red	Red	Yellow	Yellow
10	Myanmar Climate change Policy	2019	Yellow	Green	Yellow	Yellow	Red	Yellow	Yellow	Green
11	Automotive Policy	2019	Green	Yellow	Green	Yellow	Yellow	Red	Red	Yellow
12	Traffic Safety and Motor Vehicle Classification	2020	Yellow	Red	Yellow	Green	Red	Red	Red	Yellow
13	Rail Sector Development Activities in Myanmar	2020	Green	Green	Green	Green	Red	Red	Green	Green
14	Updated Nationally Determined Contributions - MMR	2021	Green	Yellow	Green	Yellow	Red	Red	Red	Yellow
15	Law Amending the 2022 Union Tax Law	2022	Green	Red	Green	Yellow	Green	Red	Red	Yellow

(ATO National policy tracker)



Transport relevant national targets

Doc. No.	Target	Year	Goal 1a	Goal 1b	Goal 1c	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
1	<b>Myanmar Energy Master Plan 2015</b>									
	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	x		x					
4	<b>National Strategy for Rural Roads and Access</b>									
	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						x		
	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						x		
	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						x		
	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						x		
	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						x		
6	<b>Climate Change Strategy 2018-2030</b>									
	by 2030, Myanmar has achieved climate-resilience and pursued a low-carbon growth pathway to support inclusive and sustainable development.	2030		x						x
	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	x		x	x			x	
14	<b>Updated Nationally Determined Contributions - MMR</b>									
	Myanmar's total emissions reductions contributions as a part of its NDC are 244.52 million tCO <sub>2</sub> e unconditionally, and a total of 414.75 million tCO <sub>2</sub> e, subject to conditions of international finance and technical support by 2030	2030	x		x					

(ATO National policy tracker)

**Transport relevant sample projects:**

A sample list of projects by the MDB highlights their focus with respect to the Aichi 2030 Declaration Goals.

**Transport relevant projects**

Year	Project name	Amount (million USD)	Goal 1a	Goal 1b	Goal 1c	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
2023	Myanmar Peaceful and Prosperous Communities Project	200								

(MDB Projects database)

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