

# Indonesia

## Transport Climate Profile

Population (2024)  
**279.8 million**

Urban population  
**59%**

Below 18 y.o.  
**31%**

Population density  
**147 persons per sqkm**

Rural population  
**41%**

Above 60 y.o.  
**12%**

Subregion  
**(1) South East Asia**

Gross domestic product  
(GDP PPP, 2022)  
**(1) 4.04 trillion USD**

Domestic consumption per capita, tonnes (2024)  
**(1) 8.2 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.*

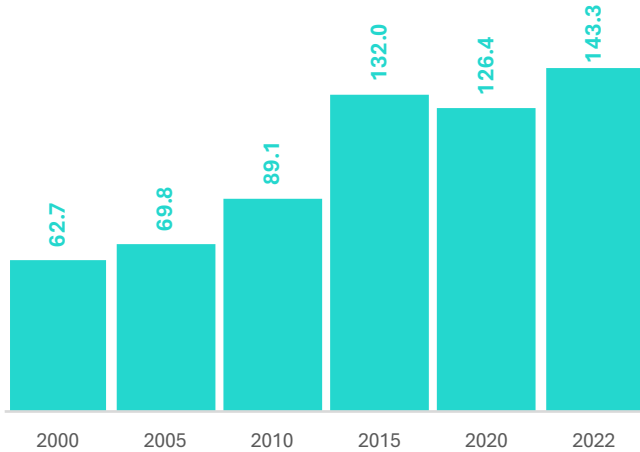
Income class  
**Low and lower middle income**

GDP per capita (PPP, 2022)  
**14,658 USD** (1,2)  
(2)

(3)

## Transport and Climate Change

Transport fossil CO2 emissions, million tonnes



(4)

*In 2010, transport contributed 20.5% of total fossil CO2 emissions. By 2022, transport contributed 20.7%.*

Share of transport CO2 emissions by mode (2022)

| Road **89.7%** (4)  
| Rail **0.0%**

| Navigation **5.5%** (4)  
| Aviation **4.8%**

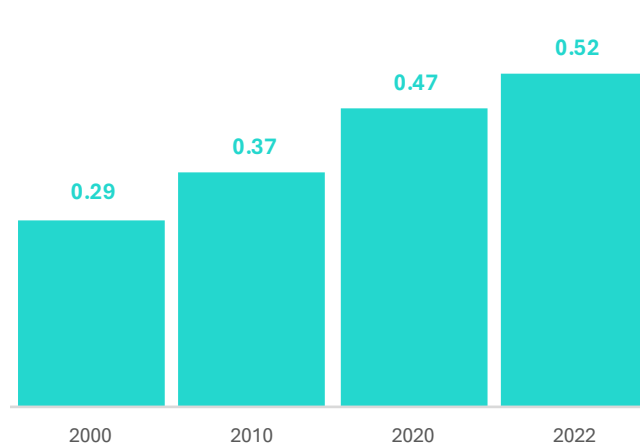
*Navigation and aviation only includes domestic transportation*

*Between 2000-2015, road transport contributed 88.6% in transport fossil CO2 emissions. Between 2016-2022, road transport contributed 88.8%.*

Transport CO2 emissions intensity with GDP, 2022  
**35.5 gCO2 per USD**

*Asia-Pacific average is 33.2 gCO2 per USD*

Transport fossil CO2 emissions per capita, tonnes

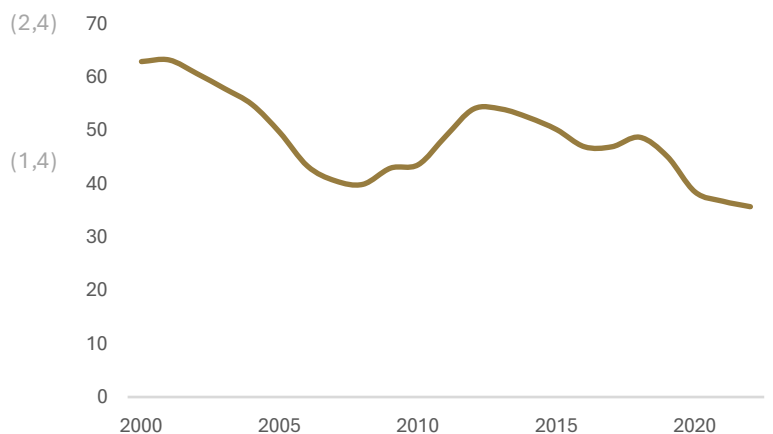


(2,4)

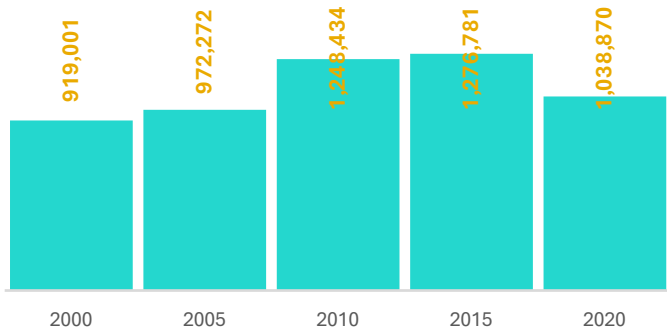
(1,4)

Transport CO2 emissions intensity with GDP trend, gCO2 per USD

(2,4)



Transport energy consumption, terajoules

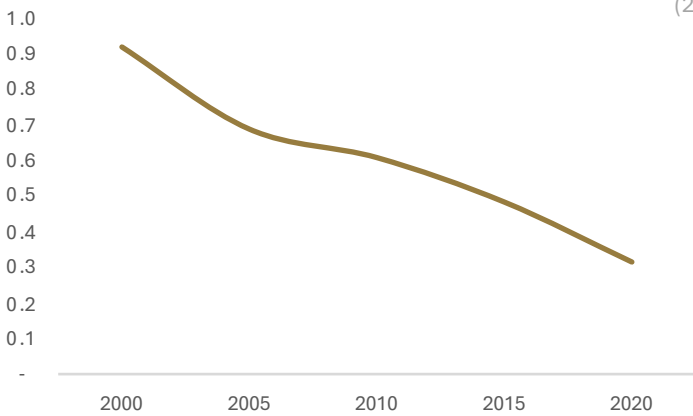


Transport energy intensity with GDP, 2020

**0.3 MJ per USD**

Asia-Pacific average is 0.5 MJ per USD

Transport energy intensity with GDP trend, MJ per USD

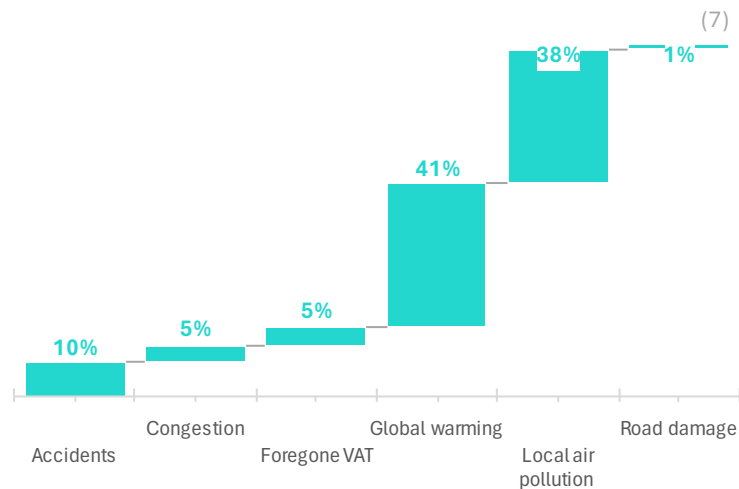


Transport fossil fuel subsidies, cumulative from 2010 to 2022

**201.13 billion USD**

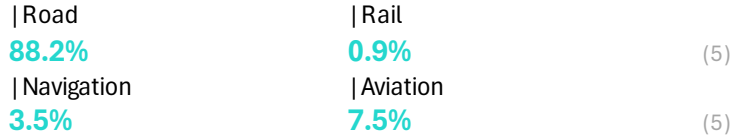
32.3% of Asia-Pacific total

Implicit fossil fuel subsidies due to externalities



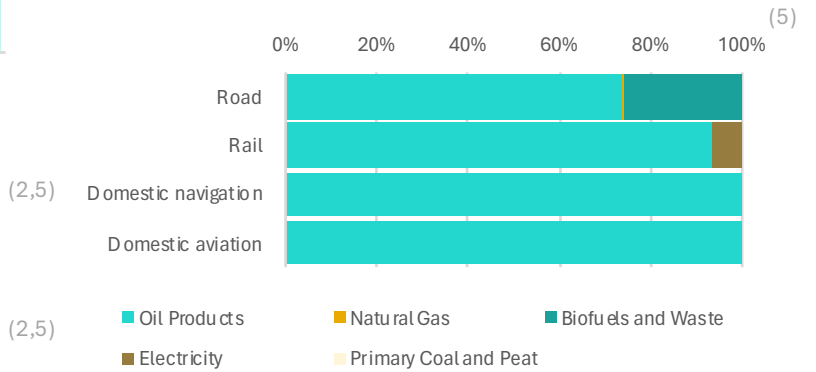
Data includes all sectors and all fuel types

Share of transport energy consumption by mode (2020)



Navigation and aviation only includes domestic transportation

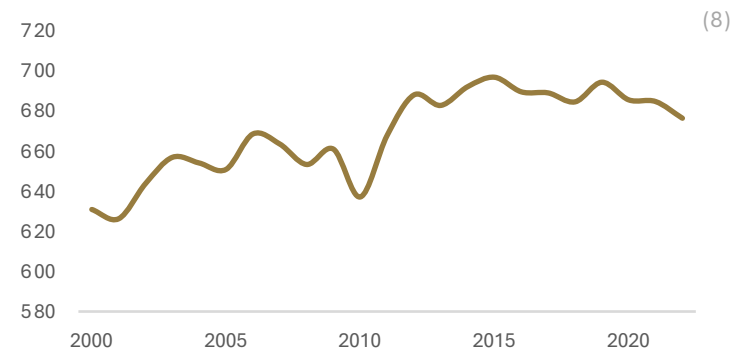
Share of transport energy consumption by source (2020)



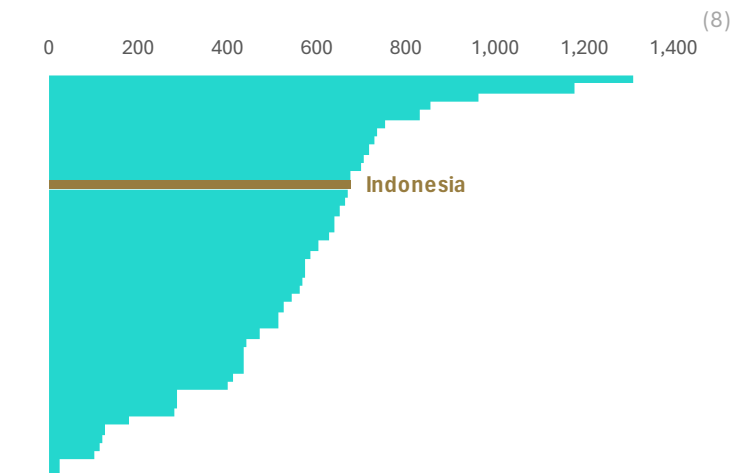
Grid emission factor (2022)

**675.9 gCO<sub>2</sub> per kWh**

Grid emission factor trend, gCO<sub>2</sub> per kWh



Grid emission factors in Asia-Pacific, gCO<sub>2</sub> per kWh



## Vehicle Fleet

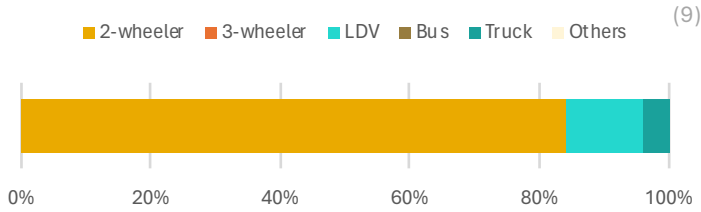
Road vehicles (2023)  
**157.08 million vehicles**

Road vehicle motorization rate (2023)  
**566 vehicles per thousand population**

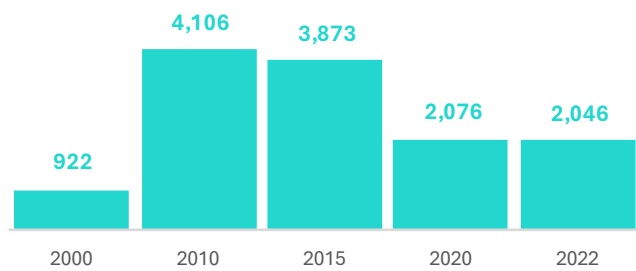
*Road vehicles include 2- and 3-wheelers, LDVs, buses and other informal public transport, trucks, and other unclassified types*

*In 2000, Indonesia had 89 vehicles per thousand population. By 2023, this has increased to 566 compared with Asia-Pacific average of 577 in 2022.*

Share of vehicles by type



Bus vehicle production, units

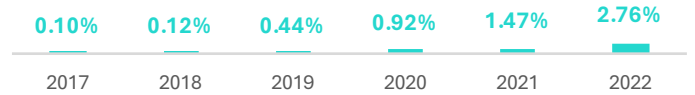


Electric road vehicle import value (2017-2022)

(9) | Total **449.8 million USD** | Hybrid-electric **186.5 million USD** (11)

(1,9) Electric road vehicle share in total road vehicle import value trend

(11)

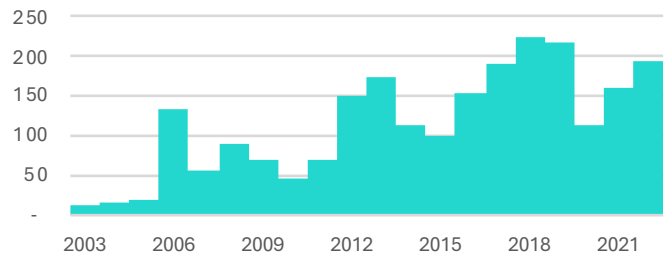


Bus import value (2017-2022)

**430.8 million USD** (11)

(10) Bus import value trend, assuming 2015=100

(11)



## Adaptation

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

**761.28 million USD**

Share of average annual losses due to hazards, by mode (2022)

|       |            |          |           |
|-------|------------|----------|-----------|
| Road  | <b>95%</b> | Rail     | <b>2%</b> |
| Ports | <b>1%</b>  | Airports | <b>2%</b> |

National road vulnerability index ranking (2023)

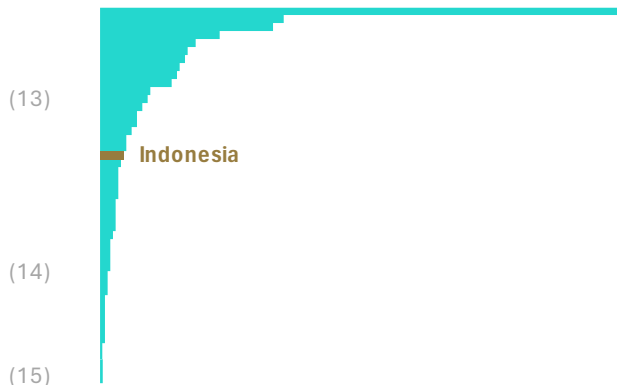
**102nd out of 208 countries**

Share of population in low elevated coastal zones (2018)

**7%**

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

(12) 0.00% 0.10% 0.20% 0.30% 0.40% 0.50% (12)



Urban Transport

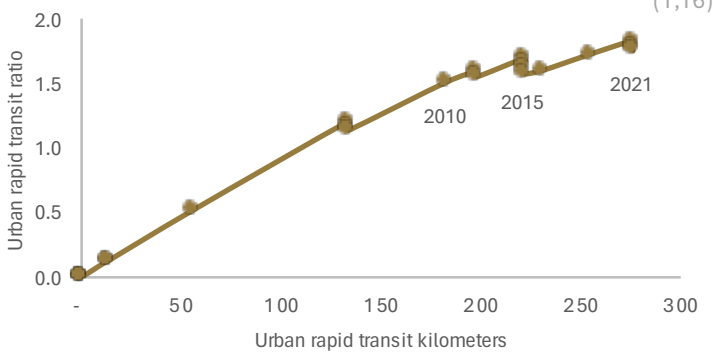
Urban rapid transit length (2021)

| BRT **231 kilometers**  
 | LRT **6 kilometers**  
 | Metro **39 kilometers**

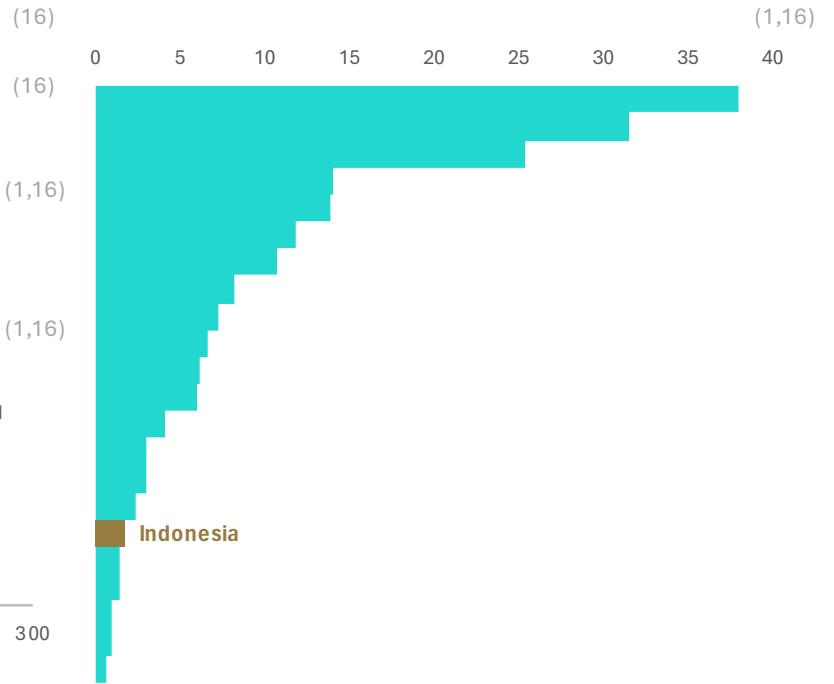
Urban rapid transit ratio (2021)

**1.75 kilometers per million urban population**

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



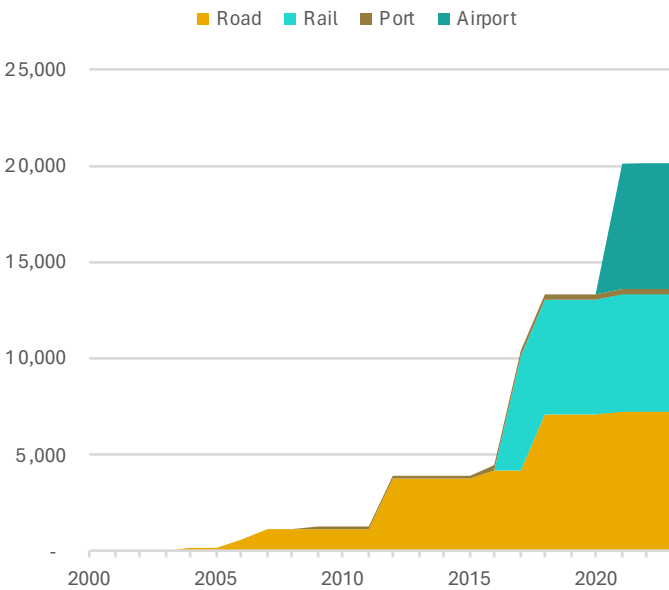
Urban rapid transit ratio in Asia-Pacific, kilometers per million urban population (2021)



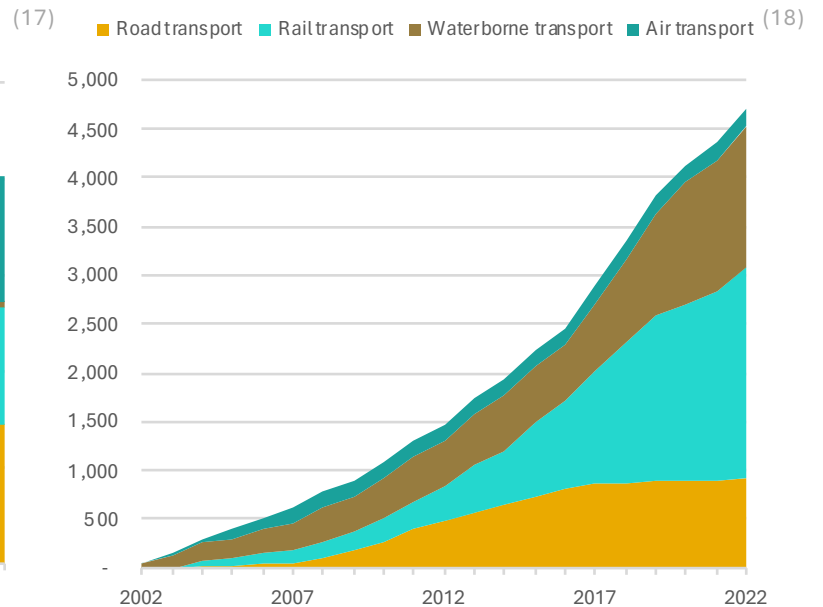
Based on 2015 estimates, only 75% of the population could reach the nearest city in 30 minutes, another 8% could reach in 1 hour, and another 9% could reach only after 3 hours.

Transport Investment

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

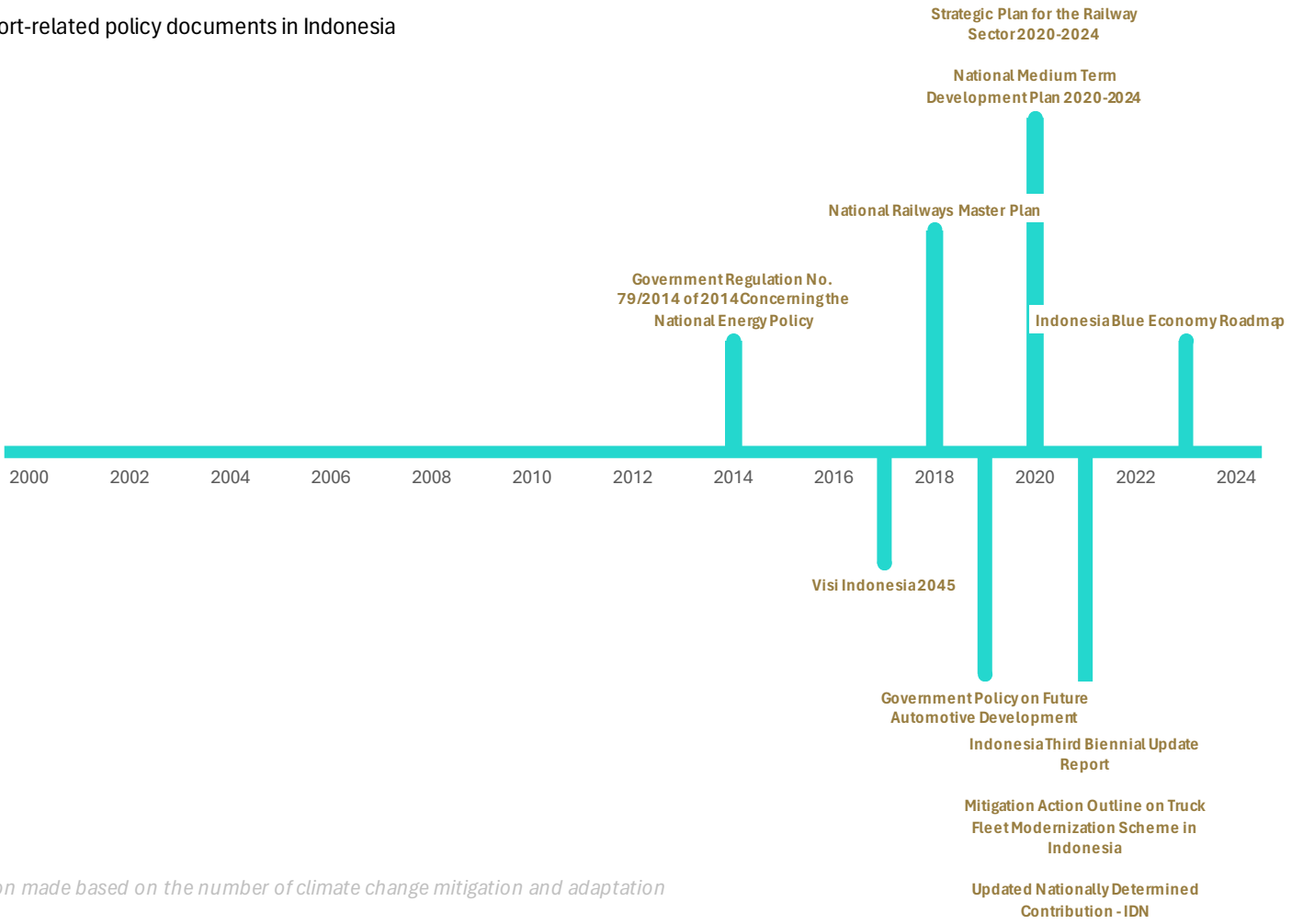


Official development assistance in the transport sector, million USD



Transport Climate Policy Documents

Transport-related policy documents in Indonesia



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

Nationally Determined Contributions

|   | Road transport | Rail transport | Domestic navigation | Domestic aviation | Urban transport |
|---|----------------|----------------|---------------------|-------------------|-----------------|
| <b>Updated Nationally Determined Contribution - IDN (adopted in 2021)</b> | <b>Yes</b>     | <b>Yes</b>     | <b>Yes</b>          | <b>Yes</b>        |                 |
| Mitigation measures   |                |                |                     |                   |                 |
| Mitigation targets  |                |                |                     |                   |                 |
| Adaptation measures   |                |                |                     |                   |                 |
| Adaptation targets  |                |                |                     |                   |                 |

Long-term Strategies

|  | Road transport | Rail transport | Domestic navigation | Domestic aviation | Urban transport |
|--|----------------|----------------|---------------------|-------------------|-----------------|
| <b>Indonesia Long-Term Strategy for Low Carbon and Climate Resilience 2050 (adopted in 2021)</b> | <b>Yes</b>     |                |                     |                   |                 |
| Mitigation measures  |                |                |                     |                   |                 |
| Mitigation targets   |                |                |                     |                   |                 |
| Adaptation measures  |                |                |                     |                   |                 |
| Adaptation targets   |                |                |                     |                   |                 |

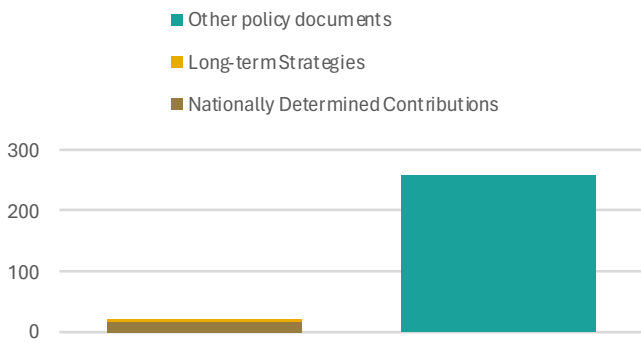


Developed with the support of:

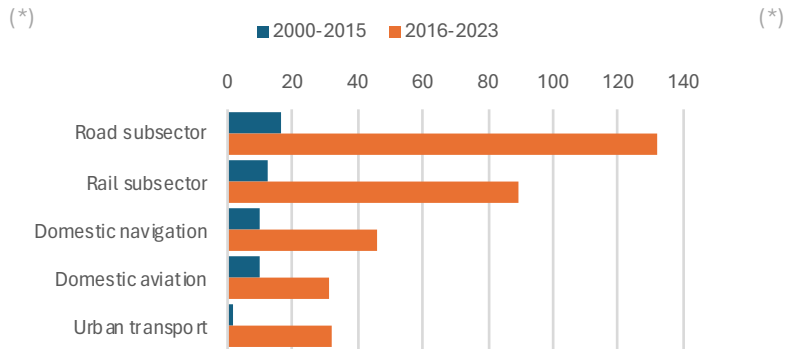


Transport Climate Policy Overview

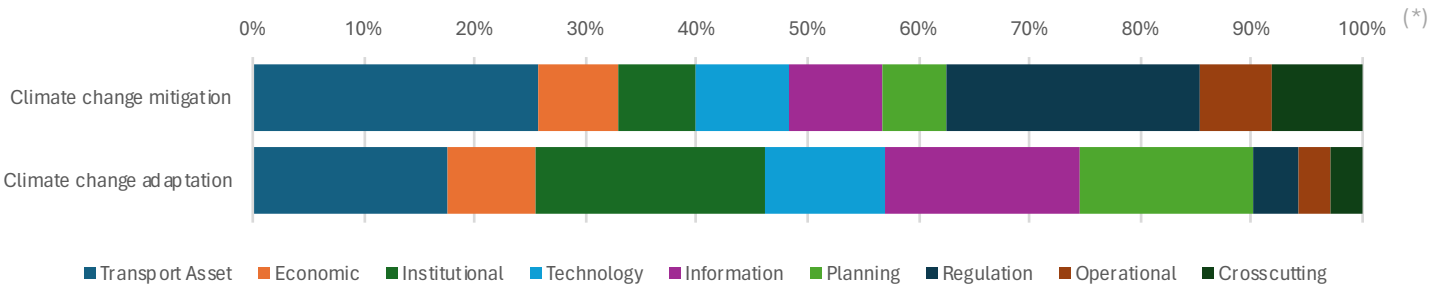
Number of measures by source



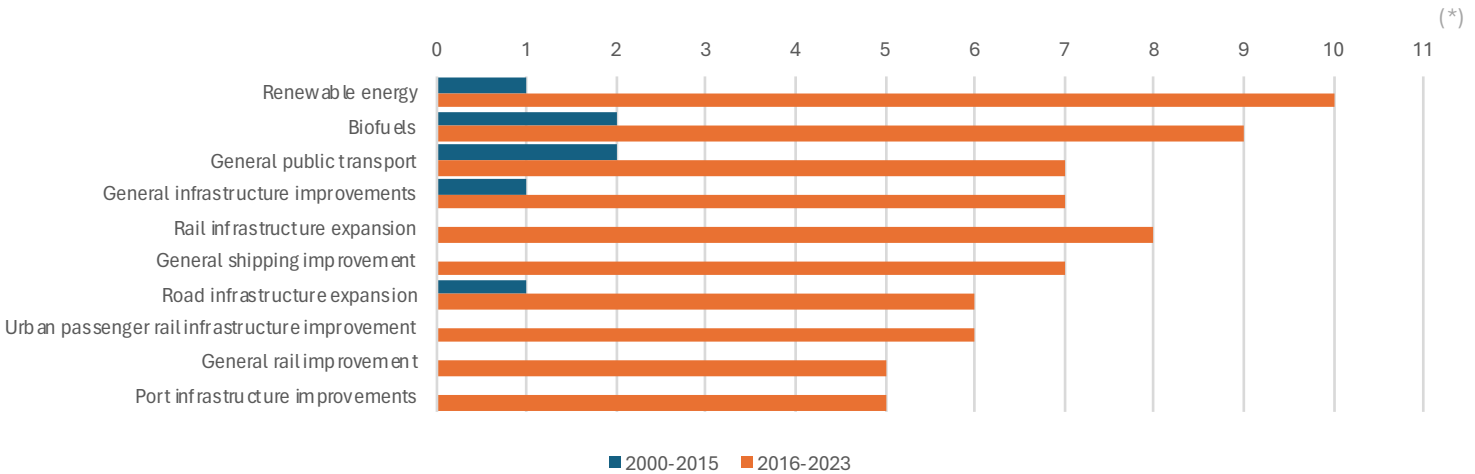
Number of climate change measures by subsectors



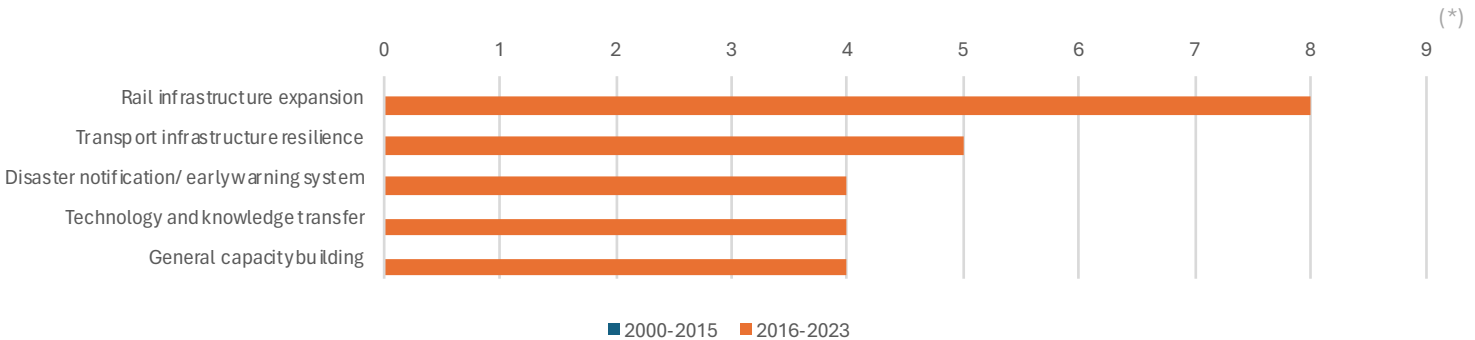
Transport-related climate change by framework



Climate change mitigation top 10 typology, number of measures



Climate change adaptation top 5 typology, number of measures



## Climate Change Mitigation Policy Measures - Road Transport

| Policy document   | Year | Measures  |
|---|------|---|
| Mitigation Action Outline on Truck Fleet Modernization Scheme in Indonesia  | 2021 | General freight and logistics improvements, Travel time improvement, Fuel quality, Road-side vehicle technical checks, Vehicle inspection and maintenance, Vehicle scrappage scheme, Vehicle labelling, Energy efficient vehicle purchase incentives, Fuel tax, Low-emission vehicle zones, Road charging and tolls, Reference to finance mechanisms within country, Accreditation of driver training agencies, Technology and knowledge transfer, General capacity building, Port infrastructure improvements, Road infrastructure expansion, General transport institutional reform, Involvement of subnational government for transport activities, Development of other transport-related plan/ policy, Transport law, Road safety training for professional drivers, General education and behavior change, Vehicle air pollution emission standards, Vehicle restrictions (import, age, access, sale, taxation) |
| Government Policy on Future Automotive Development  | 2019 | Ban of ICE sales, Fiscal incentives for EVs and components, General e-mobility, Technical standards for general transport infrastructure, Biofuels, Vehicle taxes, Vehicle manufacturing  |
| Presidential Regulation No. 55 of 2019 on Acceleration of Battery Electric Vehicles Program for Road Transportation   | 2019 | Ban of ICE sales, EV charging infrastructure, EV manufacturing, Fiscal incentives for EVs and components  |
| Government Regulation No. 79/2014 of 2014 Concerning the National Energy Policy   | 2014 | Hydrogen, Renewable energy, General e-mobility, Biofuels, LPG/ CNG/ LNG, General alternative fuels, General public transport, Road charging and tolls, Vehicle efficiency standards   |
| Intended Nationally Determined Contribution - IDN   | 2016 | Biofuels  |
| Roadmap of SDGs Indonesia: A Highlight  | 2019 | General e-mobility, Intelligent transport systems (ITS), General land use, Biofuels, General public transport   |
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008)  | 2008 | Biofuels  |
| Updated Nationally Determined Contribution - IDN  | 2021 | Biofuels, LPG/ CNG/ LNG, Fossil fuel subsidy elimination, Vehicle efficiency standards  |
| Indonesia Third Biennial Update Report  | 2021 | Data modelling improvements, Fuel quality, Intelligent transport systems (ITS), LPG/ CNG/ LNG, BRT, General public transport, Traffic management, Development of other transport-related plan/ policy, Ecodriving   |
| 59 UN Transport Agreements/ and Conventions Serviced by ECE   | 2021 | Convention on Road Traffic 1968   |
| Presidential Regulation No. 98 of 2021 on the Implementation of Carbon Pricing to Achieve the Nationally Determined Contribution Target and Control over Greenhouse Gas Emissions in the National Development | 2021 | Define roles and accountabilities across agencies   |
| Global Status Report on Road Safety 2018  | 2018 | Design standards for sidewalks and bicycle paths, National speed law, Local authorities have the power to modify national speed limits, Speed limits on urban roads <= 30 kph, Speed limit on rural roads <= 70 kph, Speed limit on motorways <= 90 kph   |
| National Vision of Non-Motorized Transport Infrastructure   | 2020 | Design standards for sidewalks and bicycle paths, Technical standards for general transport infrastructure  |
| International Energy Charter  | 2015 | Fuel quality  |
| National Medium Term Development Plan 2020-2024   | 2020 | Intermodality measures, General infrastructure improvements, General public transport, Transport asset condition assessment, General transport asset management, Reference to finance mechanisms within country, Logistics hub, Road infrastructure expansion, General education and behavior change  |
| Indonesia Blue Economy Roadmap  | 2023 | Programs to reduce emissions in logistics, General freight and logistics improvements   |
| Indonesia's Adaptation Communication  | 2022 | Renewable energy, General infrastructure improvements   |

## Climate Change Mitigation Policy Measures - Road Transport

| Policy document   | Year | Measures  |
|---|------|---|
| Voluntary National Review 2021 - IDN  | 2021 | General infrastructure improvements, Public transit integration, General public transport, Investment required for specific projects, Road infrastructure expansion |
| Long-Term National Development Plan of 2005-2025                                  | 2007 | Intermodality measures, General public transport, Road infrastructure expansion, Stakeholder Involvement, Transport law   |
| Indonesia Long-Term Strategy for Low Carbon and Climate Resilience 2050           | 2021 | Renewable energy  |
| Ministry of National Development Planning Strategic Plan                          | 2020 | Reporting, transparency, feedback mechanism   |
| Visi Indonesia 2045   | 2017 | Road infrastructure expansion   |
| Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles | 2020 | Vehicle inspection and maintenance, Vehicle import inspections, Vehicle restrictions (import, age, access, sale, taxation)  |



## Climate Change Mitigation Targets - Road Transport

| Policy document  | Target year | Targets  |
|--|-------------|--|
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008) | 2025        | B20<br>E15   |
| National Medium Term Development Plan 2020-2024  | 2024        | Number of cities with multi-level transport systems = 6 (Baseline 2019 = 3)  |
| National Medium Term Development Plan 2020-2024  | 2024        | Number of metropolitan cities with built and developed urban mass transit systems = 6 (Baseline 2019 = 1)  |
| National Medium Term Development Plan 2020-2024  | 2024        | Length of newly built and/or operational toll roads (in km) = 2500 (Baseline 2019 = 1461)  |
| National Medium Term Development Plan 2020-2024  | 2024        | Length of newly built roads (in km) = 3000 (Baseline 2019 = 3387)  |
| National Medium Term Development Plan 2020-2024  | 2024        | Percentage of roads in good condition at the national/provincial/regency/city level (%) = 97/75/65 (Baseline 2019 = 92/68/57)  |
| National Medium Term Development Plan 2020-2024  | 2024        | Railroad conditions according to the Track Quality Index (TQI) categories 1 and 2 (%) = 94 (Baseline 2019 = 81.5)  |
| Government Policy on Future Automotive Development   | 2030        | Motor Vehicle:<br>Total (Unit) Production = 3.000.000<br>Percentage LCEV(%) = 25<br>Percentage LCGC(%) = 20<br>Total (Unit) Sales = 2.500.000<br>Total (Unit) Export = 1.500.000 |
| Government Policy on Future Automotive Development   | 2030        | Motor Cycle:<br>Total (Unit) Production = 12.500.000<br>Percentage Electric = 25<br>Total (Unit) Sales = 8.400.000<br>Total (Unit) Export = 1.400.000                            |
| Government Policy on Future Automotive Development   | 2035        | Motor Vehicle:<br>Total (Unit) Production = 4.000.000<br>Percentage LCEV(%) = 30<br>Percentage LCGC(%) = 20<br>Total (Unit) Sales = 2.100.000<br>Total (Unit) Export = 900.000   |
| Government Policy on Future Automotive Development   | 2035        | Motor Cycle:<br>Total (Unit) Production = 15.000.000<br>Percentage Electric = 30<br>Total (Unit) Sales = 9.000.000<br>Total (Unit) Export = 1.750.000                            |

## Climate Change Mitigation Policy Measures - Rail Transport

| Policy document   | Year | Measures  |
|---|------|---|
| National Railways Master Plan   | 2018 | General rail improvement, Technical standards for rail infrastructure, Transit-oriented development (TOD), Public transit integration, Urban passenger rail infrastructure improvement, General public transport, Technologies on transport asset management, General transport asset management, General parking measures, General transport finance, Investment required for specific projects, Reference to finance mechanisms within country, Accreditation of vehicle inspection centers, Technology and knowledge transfer, General capacity building, Rail infrastructure expansion, Define roles and accountabilities across agencies, General transport institutional reform, Involvement of subnational government for transport activities, Reporting, transparency, feedback mechanism, Stakeholder Involvement, Local production, services, contracting etc. |
| Government Regulation No. 79/2014 of 2014 Concerning the National Energy Policy   | 2014 | Hydrogen, Renewable energy, Biofuels, LPG/ CNG/ LNG, General alternative fuels, General public transport, Vehicle efficiency standards  |
| Roadmap of SDGs Indonesia: A Highlight  | 2019 | Intelligent transport systems (ITS), General land use, Biofuels, Urban passenger rail infrastructure improvement, General public transport  |
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008)  | 2008 | Biofuels  |
| Presidential Regulation No. 98 of 2021 on the Implementation of Carbon Pricing to Achieve the Nationally Determined Contribution Target and Control over Greenhouse Gas Emissions in the National Development | 2021 | Define roles and accountabilities across agencies   |
| Strategic Plan for the Railway Sector 2020-2024   | 2020 | Intermodality measures, General infrastructure improvements, General rail improvement, Transit-oriented development (TOD), General land use, Public transit integration, Urban passenger rail infrastructure improvement, General transport demand management, General transport finance, Technology and knowledge transfer, General capacity building, Freight rail infrastructure improvement, Rail infrastructure expansion, Define roles and accountabilities across agencies, General transport institutional reform, Stakeholder Involvement, Development of other transport-related plan/ policy, Transport law, General education and behavior change   |
| Indonesia Third Biennial Update Report  | 2021 | Fuel quality, Urban passenger rail infrastructure improvement, Rail infrastructure expansion, Development of other transport-related plan/ policy   |
| Updated Nationally Determined Contribution - IDN  | 2021 | Fossil fuel subsidy elimination, Vehicle efficiency standards   |
| National Medium Term Development Plan 2020-2024   | 2020 | Intermodality measures, General infrastructure improvements, High-speed rail (HSR), General public transport, General transport asset management, Reference to finance mechanisms within country, Logistics hub, Rail infrastructure expansion, General education and behavior change   |
| Indonesia Blue Economy Roadmap  | 2023 | Programs to reduce emissions in logistics, General freight and logistics improvements   |
| Indonesia's Adaptation Communication  | 2022 | Renewable energy, General infrastructure improvements   |
| Voluntary National Review 2021 - IDN  | 2021 | General infrastructure improvements, Public transit integration, High-speed rail (HSR), General public transport, Investment required for specific projects, Rail infrastructure expansion  |
| Long-Term National Development Plan of 2005-2025  | 2007 | Intermodality measures, General public transport, Stakeholder Involvement, Transport law  |
| Visi Indonesia 2045   | 2017 | Urban passenger rail infrastructure improvement, Rail infrastructure expansion  |
| Ministry of National Development Planning Strategic Plan  | 2020 | Reporting, transparency, feedback mechanism   |

## Climate Change Mitigation Targets - Rail Transport

| Policy document  | Target year | Targets   |
|--|-------------|---|
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008) | 2025        | B20<br>E15  |
| National Medium Term Development Plan 2020-2024  | 2024        | Number of cities with multi-level transport systems = 6 (Baseline 2019 = 3)<br><br>Increased public satisfaction index with public services in the transportation sector by 88.5  |
| Strategic Plan for the Railway Sector 2020-2024  | 2024        | On Time Performance (OTP) achievement for transportation services is 82.08%   |
| National Medium Term Development Plan 2020-2024  | 2024        | Number of metropolitan cities with built and developed urban mass transit systems = 6 (Baseline 2019 = 1)<br><br>Creating a railway transportation service that has a passenger market share of 7% - 9% and goods 11% - 13% of all national transportation services.  |
| National Railways Master Plan  | 2030        | "Increasing railway security and safety with indicators of decreasing the ratio of security and safety disturbances by at least 50% in the period 2010 - 2030"<br><br>Passenger transportation facilities with a total of 2,839 locomotives, 27,949 intercity trains and 6,229 urban trains<br><br>Goods transportation facilities with a total of 2,475 locomotives and 48,364 wagons. |
| Strategic Plan for the Railway Sector 2020-2024  | 2024        | Increased levels of safety and security as measured by a decrease in the fatality ratio of transportation accidents to 0.826  |
| Strategic Plan for the Railway Sector 2020-2024  | 2030        | Creating railway transportation services that have a passenger market share of 7% - 9% and goods of 11% - 13% of all national transportation services." (National Railways 2030)  |
| National Railways Master Plan  | 2030        | "fulfillment of strong railway funding supported by private investment with an investment target estimated to reach USD 65,063.00 million with funding contributions from the Government and investment from Business Entities  |
| National Railways Master Plan  | 2030        | "The realization of mastery of railway technology by reducing technological dependence on facilities and infrastructure by a maximum of 25%, local content of at least 85% and supplied by a minimum of 90% of domestic industry  |
| National Medium Term Development Plan 2020-2024  | 2024        | Length of newly built rail network (cumulative) (in km)<br>= 7451 (Baseline 2019 = 6164)  |
| National Railways Master Plan  | 2030        | 1. The national railway network reaches 10,524 km (spread across the islands of Java-Bali, Sumatra, Kalimantan, Sulawesi and Papua) including the city/urban railway network of 3,755 km.   |

## Climate Change Mitigation Targets - Rail Transport

| Policy document                                 | Target year | Targets   |
|---|-------------|---|
| Strategic Plan for the Railway Sector 2020-2024 | 2024        | Increased national connectivity ratio to 0.69   |
|   |             | Interregional Connectivity Ratio 0.36   |
| Strategic Plan for the Railway Sector 2020-2024 | 2024        | Length of the built railway network (cumulative) (Km's) = 7451  |
|   |             | Construction of access roads and railway lines to port nodes, airports and terminals as well as logistics activity centers; |
|   |             | Number of metropolitan cities with urban mass public transport systems built and developed (cities) = 6                     |
|   |             | Number of cities where non-level crossings (cities) were built = 6  |

## Climate Change Mitigation Policy Measures - Domestic Navigation

| Policy document   | Year | Measures   |
|---|------|--|
| Government Regulation No. 79/2014 of 2014 Concerning the National Energy Policy   | 2014 | Hydrogen, Renewable energy, Biofuels, LPG/ CNG/ LNG, General alternative fuels, General public transport, Vehicle efficiency standards   |
| Roadmap of SDGs Indonesia: A Highlight  | 2019 | Intelligent transport systems (ITS), General land use, Biofuels, General public transport  |
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008)  | 2008 | Biofuels   |
| Presidential Regulation No. 98 of 2021 on the Implementation of Carbon Pricing to Achieve the Nationally Determined Contribution Target and Control over Greenhouse Gas Emissions in the National Development | 2021 | Define roles and accountabilities across agencies  |
| Indonesia Third Biennial Update Report  | 2021 | Fuel quality, Port electrification, Ship efficiency improvements, General shipping improvement, Development of other transport-related plan/ policy  |
| Indonesia Blue Economy Roadmap  | 2023 | Renewable energy, Programs to reduce emissions in logistics, General freight and logistics improvements, General innovations and digitalization, Ship efficiency improvements, General shipping improvement, Emissions trading and carbon pricing, General economic instruments, General capacity building, Port infrastructure improvements |
| Updated Nationally Determined Contribution - IDN  | 2021 | Fossil fuel subsidy elimination, Vehicle efficiency standards  |
| National Medium Term Development Plan 2020-2024   | 2020 | General shipping improvement, Reference to finance mechanisms within country, Logistics hub, Port infrastructure improvements, General education and behavior change   |
| Indonesia's Adaptation Communication  | 2022 | Renewable energy, General infrastructure improvements, General innovations and digitalization  |
| Voluntary National Review 2021 - IDN  | 2021 | General infrastructure improvements, Public transit integration, General public transport, Investment required for specific projects   |
| Visi Indonesia 2045   | 2017 | General shipping improvement, Port infrastructure improvements   |
| Mitigation Action Outline on Truck Fleet Modernization Scheme in Indonesia  | 2021 | Port infrastructure improvements   |
| Ministry of National Development Planning Strategic Plan  | 2020 | Reporting, transparency, feedback mechanism  |
| Long-Term National Development Plan of 2005-2025  | 2007 | Stakeholder Involvement, Transport law   |

## Climate Change Mitigation Targets - Domestic Navigation

| Policy document  | Target year | Targets  |
|--|-------------|--|
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008) | 2025        | B20<br>E15   |
| National Medium Term Development Plan 2020-2024  | 2024        | Connected shipping routes/loops (%) = 27 (Baseline = 2019 = 23)<br>h. Number of main ports that meet standards = 7 (Baseline = 1)<br>Number of subsidized sea toll routes= 25 (Baseline =14) |
| Visi Indonesia 2045  | 2045        | Maritime<br>economic contribution to GDP will increase from 6.4 percent in 2015 to 12.5 percent in 2045.   |
| National Medium Term Development Plan 2020-2024  | 2024        | Number of newly built ports for water transport = 36 (Baseline 2019 = 24)  |

## Climate Change Mitigation Policy Measures - Domestic Aviation

| Policy document   | Year | Measures   |
|---|------|--|
| Indonesia Third Biennial Update Report  | 2021 | Air traffic management, Aircraft fleet renovation, Jet fuel policies, General aviation improvements, Fuel quality, Development of other transport-related plan/ policy |
| Government Regulation No. 79/2014 of 2014 Concerning the National Energy Policy   | 2014 | Hydrogen, Renewable energy, Biofuels, LPG/ CNG/ LNG, General alternative fuels, General public transport, Vehicle efficiency standards                                 |
| Roadmap of SDGs Indonesia: A Highlight  | 2019 | Intelligent transport systems (ITS), General land use, Biofuels, General public transport  |
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008)  | 2008 | Biofuels   |
| Presidential Regulation No. 98 of 2021 on the Implementation of Carbon Pricing to Achieve the Nationally Determined Contribution Target and Control over Greenhouse Gas Emissions in the National Development | 2021 | Define roles and accountabilities across agencies  |
| Updated Nationally Determined Contribution - IDN  | 2021 | Fossil fuel subsidy elimination, Vehicle efficiency standards  |
| National Medium Term Development Plan 2020-2024   | 2020 | Logistics hub, General education and behavior change   |
| Indonesia Blue Economy Roadmap  | 2023 | Programs to reduce emissions in logistics, General freight and logistics improvements  |
| Indonesia's Adaptation Communication  | 2022 | Renewable energy, General infrastructure improvements  |
| Voluntary National Review 2021 - IDN  | 2021 | General infrastructure improvements, Public transit integration, General public transport, Investment required for specific projects                                   |
| Ministry of National Development Planning Strategic Plan  | 2020 | Reporting, transparency, feedback mechanism  |
| Long-Term National Development Plan of 2005-2025  | 2007 | Stakeholder Involvement, Transport law   |

## Climate Change Mitigation Targets - Domestic Aviation

| Policy document  | Target year | Targets    |
|--|-------------|------------|
| Supply Utilization and Trading Procedure of Biofuel as Alternate Fuel (Regulation of the Minister of Energy and Mineral Resources No. 32/2008 of 2008) | 2025        | B20<br>E15 |



## Climate Change Mitigation Policy Measures - Urban Transport

| Policy document   | Year | Measures   |
|---|------|--|
| Indonesia Third Biennial Update Report  | 2021 | LPG/ CNG/ LNG, BRT, Urban passenger rail infrastructure improvement, Development of other transport-related plan/ policy   |
| Strategic Plan for the Railway Sector 2020-2024                                 | 2020 | Urban passenger rail infrastructure improvement, General transport finance, General transport institutional reform, Stakeholder Involvement, Development of other transport-related plan/ policy |
| Indonesia's Adaptation Communication  | 2022 | General infrastructure improvements  |
| National Medium Term Development Plan 2020-2024                                 | 2020 | General infrastructure improvements, General public transport, Reference to finance mechanisms within country, Road infrastructure expansion   |
| Voluntary National Review 2021 - IDN  | 2021 | General infrastructure improvements, General land use, General public transport, Investment required for specific projects, Road infrastructure expansion  |
| National Railways Master Plan   | 2018 | General rail improvement, Urban passenger rail infrastructure improvement, General public transport, General parking measures, Rail infrastructure expansion                                     |
| Government Regulation No. 79/2014 of 2014 Concerning the National Energy Policy | 2014 | General public transport   |
| Long-Term National Development Plan of 2005-2025                                | 2007 | General public transport   |
| Visi Indonesia 2045   | 2017 | Urban passenger rail infrastructure improvement, Port infrastructure improvements  |
| Global Status Report on Road Safety 2018  | 2018 | Speed limits on urban roads $\leq 30$ kph  |
| Roadmap of SDGs Indonesia: A Highlight  | 2019 | Urban passenger rail infrastructure improvement  |

## Climate Change Mitigation Targets - Urban Transport

| Policy document                                 | Target year | Targets   |
|---|-------------|---|
| National Medium Term Development Plan 2020-2024 | 2024        | Number of cities with multi-level transport systems = 6 (Baseline 2019 = 3)   |
| National Medium Term Development Plan 2020-2024 | 2024        | Number of metropolitan cities with built and developed urban mass transit systems = 6 (Baseline 2019 = 1)<br><br>Creating a railway transportation service that has a passenger market share of 7% - 9% and goods 11% - 13% of all national transportation services.  |
| National Railways Master Plan                   | 2030        | "Increasing railway security and safety with indicators of decreasing the ratio of security and safety disturbances by at least 50% in the period 2010 - 2030"<br><br>Passenger transportation facilities with a total of 2,839 locomotives, 27,949 intercity trains and 6,229 urban trains<br><br>Goods transportation facilities with a total of 2,475 locomotives and 48,364 wagons. |
| National Railways Master Plan                   | 2030        | 1. The national railway network reaches 10,524 km (spread across the islands of Java-Bali, Sumatra, Kalimantan, Sulawesi and Papua) including the city/ urban railway network of 3,755 km.  |
| Strategic Plan for the Railway Sector 2020-2024 | 2024        | Number of metropolitan cities with urban mass public transport systems built and developed (cities) = 6<br><br>Number of cities where non-level crossings (cities) were built = 6   |

## Climate Change Adaptation Policy Measures

| Policy document   | Year | Measures   |
|---|------|--|
| National Railways Master Plan   | 2018 | Technologies on transport asset management, General transport asset management, General transport finance, Investment required for specific projects, Reference to finance mechanisms within country, Technology and knowledge transfer, General capacity building, Rail infrastructure expansion, Define roles and accountabilities across agencies, General transport institutional reform, Involvement of subnational government for transport activities, Reporting, transparency, feedback mechanism, Stakeholder Involvement<br>(Sub-sectors: Rail transport, Urban transport) |
| Presidential Regulation No. 98 of 2021 on the Implementation of Carbon Pricing to Achieve the Nationally Determined Contribution Target and Control over Greenhouse Gas Emissions in the National Development | 2021 | Define roles and accountabilities across agencies<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation)   |
| Strategic Plan for the Railway Sector 2020-2024   | 2020 | Transport infrastructure resilience, General transport finance, Technology and knowledge transfer, General capacity building, Rail infrastructure expansion, Define roles and accountabilities across agencies, General transport institutional reform, Stakeholder Involvement, Development of other transport-related plan/ policy, Transport law<br>(Sub-sectors: Rail transport, Urban transport)  |
| Indonesia's Adaptation Communication  | 2022 | Disaster notification/ early warning system, Reporting, transparency, feedback mechanism, Development of national development plan/ policy, Development of transport adaptation/ emergency/ disaster plan/ policy<br>(Sub-sectors: NA)   |
| Technology Needs Assessment for Climate Change Mitigations 2012   | 2012 | Development of national development plan/ policy<br>(Sub-sectors: NA)  |
| Indonesia Third Biennial Update Report  | 2021 | Rail infrastructure expansion, Development of other transport-related plan/ policy<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation, Urban transport)   |
| Mitigation Action Outline on Truck Fleet Modernization Scheme in Indonesia  | 2021 | Investment volume for transport, Reference to finance mechanisms within country, Technology and knowledge transfer, General capacity building, General transport institutional reform, Involvement of subnational government for transport activities, Development of other transport-related plan/ policy, Transport law<br>(Sub-sectors: Road transport)   |
| Intended Nationally Determined Contribution - IDN   | 2016 | Disaster notification/ early warning system, Transport infrastructure resilience, Development of transport adaptation/ emergency/ disaster plan/ policy, General adaptation measures<br>(Sub-sectors: NA)  |
| National Medium Term Development Plan 2020-2024   | 2020 | Disaster notification/ early warning system, Transport asset condition assessment, Transport infrastructure resilience, General transport asset management, Reference to finance mechanisms within country, Rail infrastructure expansion, Development of transport adaptation/ emergency/ disaster plan/ policy<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation, Urban transport)   |
| Updated Nationally Determined Contribution - IDN  | 2021 | Disaster notification/ early warning system, Transport infrastructure resilience, Development of transport adaptation/ emergency/ disaster plan/ policy<br>(Sub-sectors: NA)   |
| Indonesia Blue Economy Roadmap  | 2023 | Transport infrastructure resilience, General capacity building, Disaster monitoring and risk assessment for transport infrastructure<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation)  |
| Roadmap of SDGs Indonesia: A Highlight  | 2019 | Intelligent transport systems (ITS)<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation)   |

## Climate Change Adaptation Policy Measures

| Policy document  | Year | Measures   |
|--|------|--|
| Voluntary National Review 2021 - IDN                     | 2021 | Investment required for specific projects, Rail infrastructure expansion<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation, Urban transport) |
| Visi Indonesia 2045                                      | 2017 | Rail infrastructure expansion<br>(Sub-sectors: Rail transport)   |
| Ministry of National Development Planning Strategic Plan | 2020 | Reporting, transparency, feedback mechanism<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation)   |
| Long-Term National Development Plan of 2005-2025         | 2007 | Stakeholder Involvement, Transport law<br>(Sub-sectors: Road transport, Rail transport, Domestic Navigation, Domestic Aviation)  |

## Climate Change Adaptation Targets

| Policy document                                 | Target year | Targets   |
|---|-------------|---|
| National Railways Master Plan                   | 2030        | "fulfillment of strong railway funding supported by private investment with an investment target estimated to reach USD 65,063.00 million with funding contributions from the Government and investment from Business Entities  |
| National Medium Term Development Plan 2020-2024 | 2024        | Length of newly built rail network (cumulative) (in km)<br>= 7451 (Baseline 2019 = 6164)  |
| National Railways Master Plan                   | 2030        | 1. The national railway network reaches 10,524 km (spread across the islands of Java-Bali, Sumatra, Kalimantan, Sulawesi and Papua) including the city/urban railway network of 3,755 km.<br><br>Increased national connectivity ratio to 0.69<br><br>Interregional Connectivity Ratio 0.36 |
| Strategic Plan for the Railway Sector 2020-2024 | 2024        | Length of the built railway network (cumulative) (Km's) = 7451<br><br>Construction of access roads and railway lines to port nodes, airports and terminals as well as logistics activity centers;   |
| National Railways Master Plan                   | 2030        | "The realization of mastery of railway technology by reducing technological dependence on facilities and infrastructure by a maximum of 25%, local content of at least 85% and supplied by a minimum of 90% of domestic industry  |
| National Medium Term Development Plan 2020-2024 | 2024        | Percentage of roads in good condition at the national/provincial/regency/city level (%) = 97/75/65 (Baseline 2019 = 92/68/57)<br><br>Railroad conditions according to the Track Quality Index (TQI) categories 1 and 2 (%) = 94 (Baseline 2019 = 81.5)                                      |

## Notes



(\*) Policy measures and targets were extracted from policy documents as listed in the ATO National Transport Policies Database

<https://bit.ly/ATOpolicyrepository>

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