

# Indonesia



While **Indonesia** was recording a strong growth of transport CO<sub>2</sub> emissions until 2019, the COVID-19 pandemic in 2020 and 2021 resulted in an emission decline of more than 10% in these two years. The per capita transport emissions in 2021 are close to the income and regional average.

Biofuels represent 12% of Indonesia's transport energy consumption due to high biofuel blending mandates. Indonesia's intention is to increase the biofuel mandates further by 2025. Urban transport will be improved through more metro lines and cycling infrastructure is being expanded in Jakarta. A national railway network will be established by 2030.

Income group	Middle-income
Human Development Index (2021)	0.705
Population size (2022)	274 616 289 +x6.6% (2015 - 2022)
Urban population share (2022)	58.5% +16.8% (2015 - 2022)
GDP per capita (2021)	3 904.85 +16.9% (2015 - 2021)

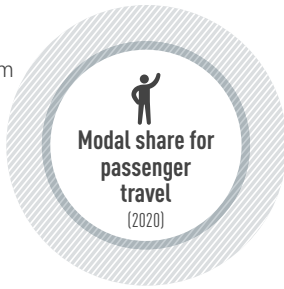
## Transport Demand Trends

### Passenger travel activity

**29 068**

million passenger-km for rail and aviation in 2020

**+30.4%**  
(2015 to 2020)

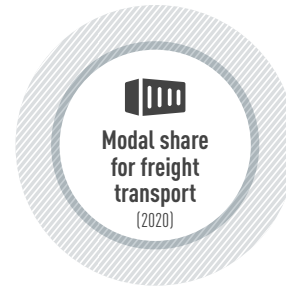


### Freight transport activity

**16 754**

million ton-km for rail and aviation in 2020

**+4.7%**  
(2015 to 2020)



### Energy consumption (2020)

**48.1**

million tonnes of oil equivalent

**+7.6%**  
(2015 to 2020)

Average light duty fuel economy consumption Lge/100 km (WLTP) **8.1** (2019)

**88.2%**

Oil Products

**11.8%**

Biofuels

## Transport Emission Trends

### Transport CO<sub>2</sub> emissions (2021)

**135** million tonnes

**+2.3%**  
(2015 to 2020)

### Per capita transport CO<sub>2</sub> emissions (2021)

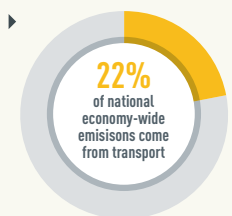
**0.49** tonnes

### Per capita transport CO<sub>2</sub> emissions

Global average Income group average Regional average Indonesia average



Transport is the **third-largest** CO<sub>2</sub> producing sector in the country



## Transport Decarbonisation Pathways

Transport strategy identifies climate change	Not available
Long-term strategy submitted to UNFCCC	✓
NDC submitted:	1st and Updated NDC
NDC highlights transport for GHG mitigation	✓
Transport mitigation targets in NDC	✗
Other non-emission related transport targets in NDC	✗
VNR highlights transport	✓ 2021 VNR with transport linkages to SDG 2, SDG 3, SDG 5, SDG 8, SDG 9, SDG 11 and SDG 13

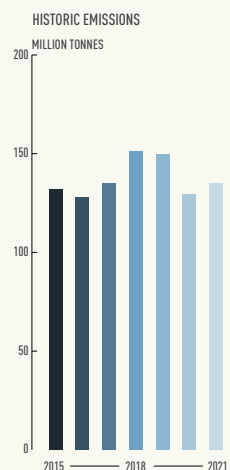
### Transport actions in VNRs

- Improving transport links
- Enhancing the maritime sector's infrastructure
- Expanding access to remote areas
- Providing alternative multi-modal transport options
- Developing urban mobility and access to public transport

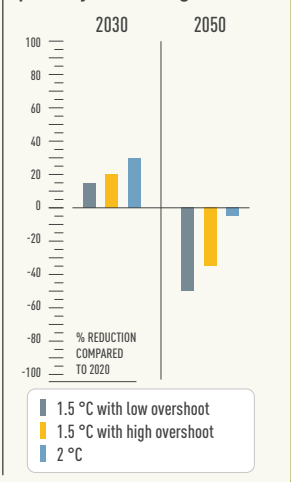
### Transport actions in NDC

- Mitigation**
  - Biofuels
  - Fuel quality improvements
  - LPG/CNG/LNG
- Adaptation**
  - Adaptation and resilience of transport systems
  - Education and Training
  - Transport Planning

### Required regional transport decarbonisation pathways



### IPCC transport decarbonisation pathways for this region



## Policy Areas: Indicators and Targets

### Integrated Transport Planning

National urban mobility framework (2022)	✓
Sustainable urban mobility plans (2022)	✓
Number of sustainable urban mobility plans (2022)	1 city
Low emission zones (2022)	Not available

### Walking

National walking strategies (2022)	Walking combined with cycling in active mobility planning
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#### Targets

- ▶ Targets to be defined on local level

### Cycling

National walking strategies (2022)	Cycling combined with walking in active mobility planning
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#### Targets

- ▶ Targets to be defined on local level

Cycling infrastructure in capital (2022)	193.6 km of bicycle lanes
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### Shared Mobility, Public Transport and Informal Transport

Bus rapid transit (2022)	251 km in 1 city
Bus rapid transit daily passenger volume (2022)	46 467
Urban rail (LRT, metro, tram) (2022)	45 km in 2 cities
Rapid Transit to Resident Ratio (2021)	61

### Intercity Rail

Rail network (2019)	5 483 km
Rail travel activity (2019)	29 066 million-passenger-km
Rail freight activity (2019)	15 573 million ton-km
High-speed rail (2021)	Not available
High-speed rail travel activity (2021)	Not available
National plans for passenger and freight rail expansion (2021)	✓

#### Target

- ▶ 10,524 km national railways in 2030 including 3,755 km urban railways
- ▶ Railway share to increase to 7-9% for passenger and 11-13% for freight transport

### Road Transport

Total road vehicles in use per 1,000 people (2020)	777
Average annual growth rate (from 2015 to 2020)	4.90%

### Aviation

Air passengers carried (2020)	38 million people
Air freight activity (2020):	674.8 million ton-km
Carbon-accredited airports (2022)	1 airports
of which carbon neutral:	✗

### Shipping

Liner shipping connectivity index (2021):	32.7
Container port traffic (2020):	14 025 449 TEU

### Transport Energy Sources

Biofuel blend mandate (2022)	35% Biodiesel, 5% Ethanol
Renewable energy (biofuels and electricity) share in transport (2020)	11.85%
Targeted % of renewable energy	40% biodiesel and 20% ethanol by 2025

### Vehicle Technologies

Emission standards for LDVs (2020)	Euro 4
CO <sub>2</sub> emissions performance for passenger cars (2017)	140 gCO <sub>2</sub> /km
Targeted CO <sub>2</sub> emissions performance	Not available
Regulatory environment ranking on used vehicles by UNEP (2021)	Banned
Electric vehicles (2022)	Not available
Share of electric vehicles in car sales (2022)	Not available
ICE phase-out targets:	✗

### COVID-19

Strongest impact of COVID-19 on...	(compared to pre-COVID-19 baseline)
... trips to public transport	-62.1% Week of 3 May 2020
... navigation request for walking	-68.9% Week of 26 April 2020
... navigation request for driving	-59.7% Week of 26 April 2020
... driven kilometres	-74.4% Week of 3 May 2020
Traditional transport infrastructure investment:	Not available
Clean transport infrastructure investment:	Not available

This fact sheet is part of the SLOCAT Transport, Climate and Sustainability Global Status Report 3<sup>rd</sup> Edition. Information shown in this country fact sheet is based on desk research and might not be complete or not show the most recent status. The data has been collected to the best knowledge and availability. If no information was able to be retrieved, then 'Not available' is being indicated. The content does not represent the opinion of the SLOCAT Partnership on Sustainable, Low Carbon Transport. For more information, please visit [tcc-gsr.com](http://tcc-gsr.com)

#### List of acronyms

GDP	Gross-domestic product
HDV	Heavy-duty vehicle
ICE	Internal combustion engine
LDV	Light-duty vehicle
LRT	Light-rail transit
NDC	Nationally determined contribution
TEU	Twenty-foot Equivalent Unit
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
VNR	Voluntary national review of the Sustainable Development Goals
WLTP	Worldwide harmonised light vehicles test procedure