

# Viet Nam

**Viet Nam's** transport sector is dominated by road travel, accounting for nearly 98% of passenger mobility and over 71% of freight movement. Despite economic growth, data indicates that passenger travel activity declined by 29% from 2015 to 2021, while freight transport increased. Transport emissions rose by 18.4% since 2015, contributing 7.6% of national GHG emissions in 2023. Renewable energy, including biofuels and electricity, accounted for a mere 0.4% of the country's transport energy consumption, whereas the carbon intensity of its electricity remained high, at 472.5 gCO<sub>2</sub>/kWh in 2023. Concerning sustainability aspects, transport accounted for 6.2% of national air pollution in 2019. Transport-induced caused 2.42 premature deaths per

100,000 people in Viet Nam in the same year. Road traffic injuries are significant contributor to overall deaths, claiming 17.7 lives per 100,000 people and accounted for 5.10% of Viet Nam's GDP in 2021. In 2020, 52.51% of Viet Nam's population had convenient access to public transport, whereas an impressive 88.5% of the rural population had access to all-weather roads. Viet Nam's policies support public transport expansion, vehicle efficiency improvements and alternative fuels. Planned investments in rail and low-emission zones signal steps towards sustainability. However, high reliance on oil (99.5%), dominance of road transport and above-average road traffic fatalities pose ongoing challenges for sustainable, low-carbon transport.

Income group: Middle-income

Human Development Index (2023): 0.77

Population size (2023): 93.39 million **+8.43%** (2015 - 2023)

Urban population share (2023): 39.90% **+26.15%** (2015 - 2023)

GDP per capita (2023): 3772.54 USD **+45.46%** (2015 - 2023)

Share of transport and storage jobs in workforce (2023) **4.1%**

Share of women employed in transport and storage (2023) **13.7%**

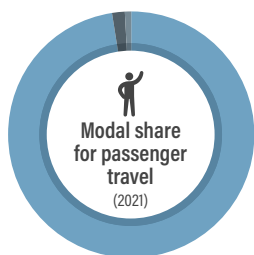
## Transport Demand Trends

### Passenger transport activity

**79 873**

million passenger-km in 2021

**-29.1%**  
(2015 to 2021)



0.8% Railways  
1.5% Waterways  
97.7% Roads

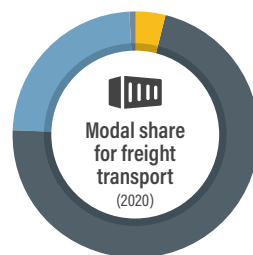
SDG 91

### Freight transport activity

**104 819**

million ton-km in 2021

**+7%**  
(2015 to 2021)



3.9% Railways  
71.8% Roads  
23.6% Waterways  
0.6% Aviation

SDG 91

### Transport energy consumption (2022)

**615 060** TJ

**+32.8%**  
(2015 to 2023)

#### Oil products

**99.5%** of total transport energy consumption

### Per capita fossil fuel subsidies (2022)

**293.3** USD per capita

SDG 12

### Fuel quality standards (2022)

**15-50** ppm

### Average light duty vehicle fuel consumption (2022)



### Road traffic fatalities (2021), WHO estimates

SDG 3.6

**17.7** deaths per 100,000 people

**15.6** Regional  
**15.0** Global

### Road traffic fatality cost as percentage of GDP (2021)

**5.1%**

### Premature deaths linked to transport air pollution (2019)

SDG 11.6

**2.4** deaths per 100,000 people

**3.2** Regional  
**2.3** Global

### Contribution of transport to air pollution (2019)

**6.2%**

## Transport Emission Trends

### Transport GHG emissions (2023)

**39.9**

million tonnes of CO<sub>2</sub> equivalent

**+18.4%**  
(2015 to 2023)

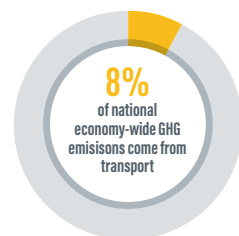
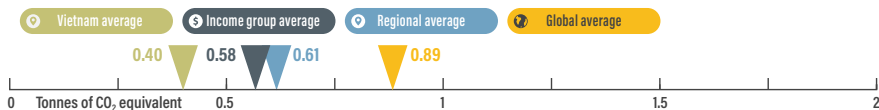
**+12.2%**  
(2022 to 2023)

### Per capita transport GHG emissions (2023)

**0.4**

tonnes of CO<sub>2</sub> equivalent per capita

#### PER CAPITA EMISSION COMPARISON



Transport is the **fifth-largest** GHG-emitting sector in the country in 2023.

## Transport Decarbonisation Pathways

Transport strategy identifies climate change



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

List of targets

VNR highlights transport



2023 VNR with transport linkages to SDG 9, SDG 11 and SDG 17

### Transport actions in VNRs

- ▶ Passenger and freight infrastructure investments
- ▶ Railway modernisation
- ▶ Urban railway expansion
- ▶ Public transport improvements
- ▶ Public-private partnerships

### Transport actions in NDC

#### Mitigation

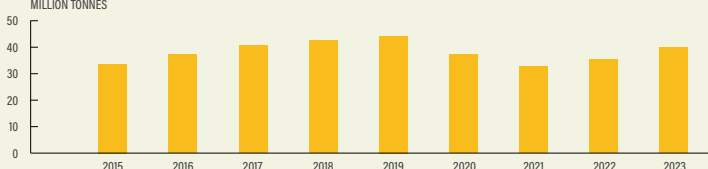
- ▶ General vehicle improvement measures
- ▶ Vehicle efficiency standards
- ▶ Transport demand management measures
- ▶ Improving load
- ▶ LPG/CNG/LNG support measures
- ▶ Biofuels support measures
- ▶ General e-mobility measures

#### Adaptation

- ▶ Transport System Adaptation

### Transport GHG emissions from 2015 to 2023

HISTORIC EMISSIONS  
MILLION TONNES



## Policy Areas: Indicators and Targets

### Integrated Transport Planning

National urban mobility framework (2024)	—
Sustainable urban mobility plans (2024)	—
Number of sustainable urban mobility plans (2022)	—
Low emission zones (2022)	2 planned LEZs

### Adaptation and Resilience

ND-GAIN Index (2022)	48.70
Vulnerability score for infrastructure (2022)	0.54

### Walking

Walkability Score (2024)	—
National walking strategies (2024)	✕

### Cycling

Cycling infrastructure in capital (2022)	2.3 km
Percent near protected bikeways (2024)	—
Bike sharing systems (2024)	8
National cycling strategies (2024)	✕

### Public Transport

Bus rapid transit (2024)	15 km of total length in 1 city
Bus rapid transit daily passenger volume (2024)	8 000 passengers per day
Urban rail (LRT, metro, tram) (2024)	41.3 km in 2 cities
Proportion of population that has convenient access to public transport (2020)	52.51% <span>SDG 11.2</span>

### Intercity Rail

Rail network (2021)	3 159 km
Rail travel activity (2020)	1 516 million passenger-km
Rail freight activity (2020)	3 759 million ton-km
High-speed rail	—
High-speed rail travel activity	—
National plans for passenger and freight rail expansion (2024)	✓

#### Target

- Add nine new rail lines with 2,362 km by 2030
- To have a network of 25 lines with a length of 6,354 km by 2050

### Road Transport

Total road vehicles in use per 1,000 people (2020)	49.0
Road vehicle fleet growth (from 2015 to 2020)	120.53%
Rural Access Index (2019)	88.5 RAI PST <span>SDG 9.1</span>
Diesel prices (2022)	0.87 USD per litre
Gasoline prices (2022)	1.05 USD per litre

### Aviation

Air passengers carried (2021)	14.8 million people
Air freight activity (2021)	676.5 million ton-km
Carbon-accredited airports (2023)	—
of which carbon neutral:	—

### Shipping

Logistics Performance Index (2023)	—
Liner shipping connectivity index (Q4 2024)	775
Container port traffic (2020)	12 422 588.0 TEU

### Transport Energy Sources

Biofuel blend overall mandate (2023)	—
Biofuel blend biodiesel mandate (2023)	5.0%
Biofuel blend ethanol mandate (2023)	5.0%
Carbon intensity of electricity (2023)	472.47 gCO <sub>2</sub> /kWh
Renewable energy (biofuels and electricity) share in transport (2022)	0.4% of total transport energy consumption <span>SDG 7.2.1</span>
Biofuels (2022)	0.1% of total transport energy consumption
Electricity (2022)	0.3% of total transport energy consumption
Targeted renewable power share	39%

### Vehicle Technologies

Emission standards for LDVs (2024)	Euro 4 and above
CO <sub>2</sub> emissions performance for passenger cars (2024)	—
Targeted CO <sub>2</sub> emissions performance (2024)	No target set
Regulatory environment ranking on used vehicles (2024)	Good
Electric vehicles stock for passenger cars (2024)	110 000 vehicles
Share of electric vehicles in car sales (2024)	17%
ICE phase-out targets	✕
Electric vehicles stock for vans (2024)	—
Electric vehicles stock for trucks (2024)	—

This fact sheet is part of the SLOCAT Transport, Climate and Sustainability Global Status Report – 4<sup>th</sup> Edition. The country fact sheets have been made possible thanks to financial support from the ClimateWorks Foundation. Information presented in this fact sheet is based on desk research and may not be complete or reflect the most recent status. Data has been collected to the best of our knowledge and availability. Where no information could be retrieved, the indicators are shown in grey. The content does not represent the views of the SLOCAT Partnership on Sustainable, Low Carbon Transport or the ClimateWorks Foundation. For more information, please visit [gsr4.slocat.net](https://gsr4.slocat.net).

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#### List of acronyms

GDP	Gross-domestic product
HDV	Heavy-duty vehicle
ICE	Internal combustion engine
kWh	Kilowatt-hour
LDV	Light-duty vehicle
LRT	Light-rail transit
NDC	Nationally determined contribution
PST	Primary, secondary or tertiary roads

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

