

Germany



Except for the impacts of the COVID-19 pandemic in 2020 and 2021 on passenger travel activity and transport CO₂ emissions, there are very few changes in Germany's ambition on sustainable transport. Transport is still the second largest CO₂-emitting sector in Germany.

Germany records a variety of well-established policy areas, such as sustainable urban mobility plans, walking and cycling strategies, public transport and rail investments. However, since the previous edition in 2021, there were no major updates in the ambition. As an high-income country, Germany has to reduce transport CO₂ emissions from now and achieve a decarbonised transport system by 2050.

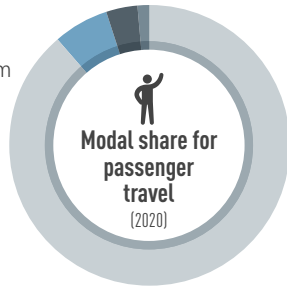
Income group: high-income	
Human Development Index (2021): 0.942	
Population size (2022): 83 426 789	+1.8% (2015 - 2022)
Urban population share (2022): 76.9%	+1.7% (2015 - 2022)
GDP per capita (2021): 42 393.43	+3.49% (2015 - 2021)

Transport Demand Trends

Passenger travel activity

912.70 billion passenger-km in 2020

↑ 17.2% (2015 to 2020)

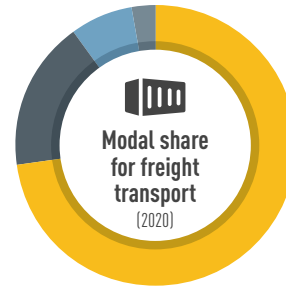


2020	88.7%	Passenger cars
	3.7%	Buses and coaches
	6.3%	Railways
	1.3%	Tram and metro

Freight transport activity

638.70 billion ton-km in 2020

↑ 2.7% (2015 to 2020)



2020	73%	Road
	17.1%	Rail
	7.3%	Inland Waterways
	2.6%	Pipelines

Energy consumption (2020)

51.4 million tonnes of oil equivalent

↓ 7.7% (2015 to 2020)

Average light duty fuel economy consumption Lge/100 km (WLTP) 6.2 (2019)

90.7% Oil Products

1% Natural Gas

6.4% Biofuels

2% Electricity

Transport Emission Trends

Transport CO₂ emissions (2021)

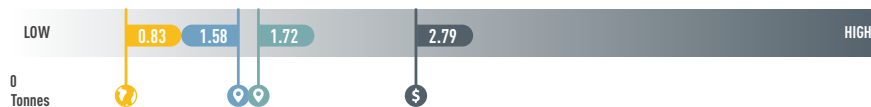
143.5 million tonnes

↓ 9% (2015 to 2021)

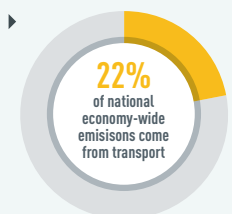
Per capita transport CO₂ emissions (2021)

1.72 tonnes

Per capita transport CO₂ emissions



Transport is the **second-largest** CO₂ producing sector in the country



Transport Decarbonisation Pathways

Transport strategy identifies climate change	✓
Long-term strategy submitted to UNFCCC	✓
NDC submitted:	1st and Updated NDC as European Union
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 4, SDG 7, SDG 8, SDG 9, SDG 11, SDG 12 and SDG 13

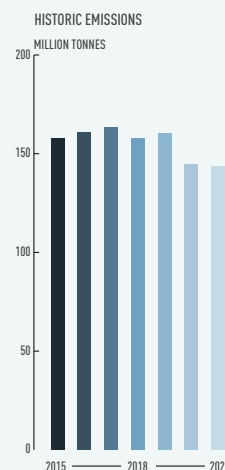
Transport actions in VNRs

- ▶ Emission trading scheme
- ▶ Sustainable investments in infrastructure and public transport
- ▶ Transport infrastructure plan for all modes
- ▶ Future of mobility platform

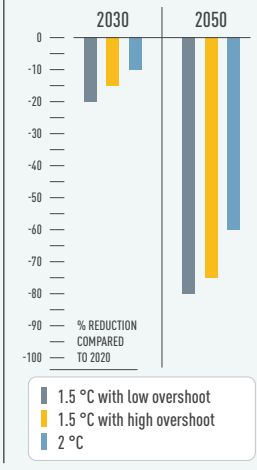
Transport actions in NDC

- ▶ Emissions trading and carbon pricing
- ▶ Vehicle efficiency standards
- ▶ Not available

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)	107 cities
Low emission zones (2022)	77 cities

Walking	
National walking strategies (2022)	✓
Targets	
▶ Increase foot traffic and implement shorter distances	

Cycling	
National walking strategies (2022)	✓
Targets	
▶ 60% of citizens to cycle more in future	
▶ Decrease the number of cyclists killed in traffic by 40% (compared to 2019 levels)	
Cycling infrastructure in capital (2022)	620 km of separated bikelanes

Shared Mobility, Public Transport and Informal Transport	
Bus rapid transit (2022)	31 km in 2 cities
Bus rapid transit daily passenger volume (2022)	42 000
Urban rail (LRT, metro, tram) (2022)	Over 2 200 km in 62 cities
Rapid Transit to Resident Ratio (2021)	879

Intercity Rail	
Rail network (2021)	33401.0 km
Rail travel activity (2020)	58822 million-passenger-km
Rail freight activity (2021)	1230670 million ton-km
High-speed rail (2021)	1104 km
High-speed rail travel activity (2021)	19572 million passenger-km
National plans for passenger and freight rail expansion (2022)	✓
Target	
▶ modernising and maintaining as well as building and expanding the rail network	

Road Transport	
Total road vehicles in use per 1,000 people (2020)	627.3
Average annual growth rate (from 2015 to 2020)	1.50%

Aviation	
Air passengers carried (2020)	26.0 million people
Air freight activity (2020):	5454.6 million ton-km
Carbon-accredited airports (2022)	5 airports
of which carbon neutral:	1 airport

Shipping	
Liner shipping connectivity index (2021):	85.1
Container port traffic (2020):	18 028 702 TEU

Transport Energy Sources	
Biofuel blend mandate (2022)	4.4% Biodiesel, 2.8% Ethanol
Renewable energy (biofuels and electricity) share in transport (2020)	8.40%
Targeted % of renewable energy	at least 2.6% is should be advanced biofuels by 2030; 2% e-kerosene in aviation by 2030

Vehicle Technologies	
Emission standards for LDVs (2020)	Euro 6
CO ₂ emissions performance for passenger cars (2020)	109 gCO ₂ /km
Targeted CO ₂ emissions performance	0 gCO ₂ /km by 2035
Regulatory environment ranking on used vehicles by UNEP (2021)	Not available
Electric vehicles (2022)	1000000
Share of electric vehicles in car sales (2022)	31%
ICE phase-out targets:	No (but EU by 2035)

COVID-19	
Strongest impact of COVID-19 on...	(compared to pre-COVID-19 baseline)
... trips to public transport	-58.0% Week of 3 January 2021
... navigation request for walking	-54.2% Week of 29 March 2020
... navigation request for driving	-53.9% Week of 29 March 2020
... driven kilometres	-71.1% Week of 29 March 2020
Traditional transport infrastructure investment:	Not available
Clean transport infrastructure investment:	USD 2.79 billion

- Examples**
- ▶ Public transport infrastructure and service support
 - ▶ Federal regulation for public transport compensation

This fact sheet is part of the SLOCAT Transport, Climate and Sustainability Global Status Report 3rd 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

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