

Germany



Transport is the second largest CO₂-emitting sector in Germany and no emission reductions have been recorded thus far. The large majority of transport activity is conducted through road transport, for both passengers and goods.

Supported by the European Union's climate action plan and important policy frameworks, Germany intends to drastically reduce transport CO₂ emissions by 2050. However, the country currently has only implemented a limited number of measures to initiate a transformational change of the transport system. National strategies for urban mobility, walking, cycling, and railways aim to improve the efficiency of transport.

Income group: High-income

Human Development Index: 0.95

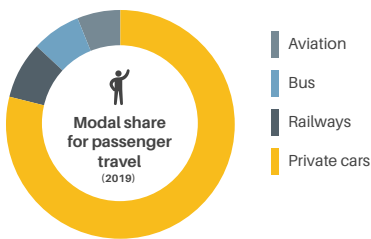
	Population size (2020)	Urban population share (2020)	GDP per capita (2019)
Total	83.8 million	76.3%	47 408.9
Growth <small>(2010 to 2020)</small>	3.7%	2.7%	16.6%

Mobility Demand Trends

Passenger travel activity

1 187 640

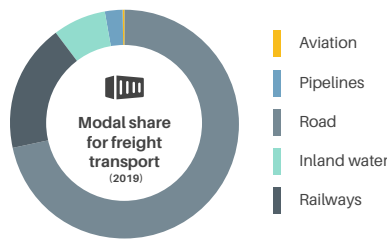
million passenger-km in 2019
+6% (2010 to 2019)



Freight transport activity

695 434

million ton-km in 2019
+14.5% (2010 to 2019)



Fuel consumption (2018)

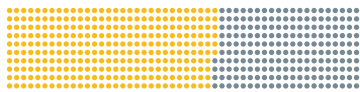
56 140

thousand tonnes of oil equivalent
+6% (2010 to 2018)

Average light duty fuel economy consumption (2017)
5.9 Lge/100 km (WLTP)



Car ownership growth (2005 to 2015)
592.7 vehicles per 1,000 people



Vehicle sales (2019)

Passenger (Growth 2010 to 2019) 3 607 258 **5%**
Commercial 4 09 801 **6%**



Diesel
US cents per litre (2018)



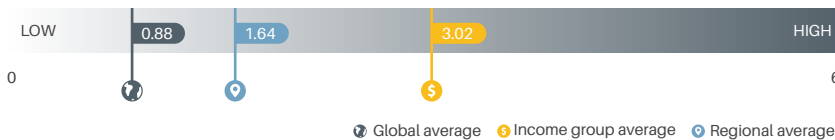
Super gasoline
US cents per litre (2018)



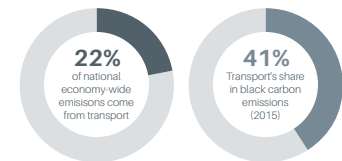
Transport Emission Trends

Transport CO₂ emissions (2019)
152.6 million tonnes

Per capita transport CO₂ emissions (2019)
1.8 tonnes

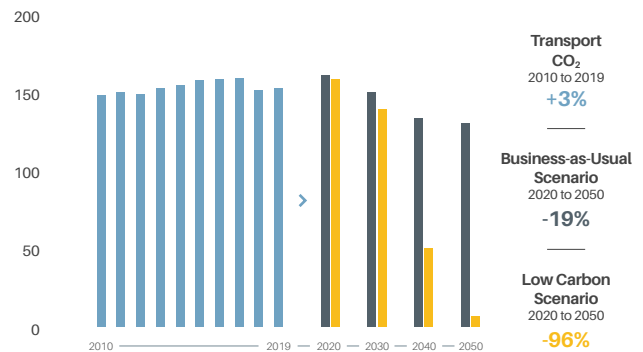


Second-largest CO₂ producing sector in the country



Low Carbon Transport 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	✓
CO ₂ emissions per kilometre from new passenger cars sold to be reduced by 37.5% on average by 2030 (from 2021 levels), with new vans reduced by 31%, and new large lorries reduced by 30% (from 2019/2020 levels)	
Other non-emission related transport targets in NDC	Not available
Voluntary National Review highlights transport	✓ ✗
2016 VNR with transport linkages to SDG 7, SDG 9, SDG 11 and SDG 13	



Transport measures in NDC

Mitigation	• Vehicle efficiency standards
Adaptation	• Not available

Sustainable Mobility Planning & Transport Demand Management	
National Urban Mobility Framework (2020)	✓
Sustainable Urban Mobility Plans (2020)	✓
Low Emission Zones (2020)	82 cities

Walking and Cycling	
National walking strategies (2020)	✓
Targets	• Increase of foot traffic and more shorter ways
National cycling strategies (2020)	✓
Targets	• To make cycling more attractive and safer
Cycling infrastructure in capital (2020)	620 km of separated bikelanes

Urban Passenger and Freight Transport	
Bus rapid transit (2020)	31 km in 2 cities
Urban rail (LRT, metro, tram) (2020)	Over 2200 km in 57 cities
Bus rapid transit daily passenger volume (2020)	42000
Rapid Transit to Resident Ratio (2019)	87.9

Passenger and Freight Railways	
Rail network (2019)	33422 km
High-speed rail (2019)	2663 km
High-speed rail travel activity (2019)	33.2 billion passenger-km
National plans for passenger and freight rail expansion (2020)	✓
Targets	• Modernising and maintaining as well as building and expanding the rail network
Rail travel activity (2019)	98000 million passenger-km
Rail freight activity (2019)	113 114 million ton-km

Shared Mobility Services	
Bike-sharing systems (2020)	106 systems
Electric scooter services (2020)	9 operators in 52 cities
Carsharing services (2021)	1646 services
National legal frameworks for shared mobility (2020)	✓
Autonomous vehicles in operation or in preparation (2020)	4
Autonomous vehicles strategies (2020)	✓

Fuel Economy	
Emission standards for LDVs (2018)	Euro 6
CO ₂ emissions performance for LDVs (2017)	140 gCO ₂ /km
Emission standards for HDVs (2018)	Euro VI
Targeted CO ₂ emissions performance	59 gCO ₂ /km by 2030

Electric Mobility	
Electric vehicles (2019)	258800
Market share of electric vehicles (2019)	3%
No. of cities with electric buses (2019)	14
ICE phase-out targets	✗

Renewable Energy	
Biofuel blend mandate (2019)	10% Biodiesel, 10% Ethanol
Renewable energy (biofuels and electricity) share in transport (2018)	6.7%
Targeted % of renewable energy	0.05% advanced biofuels from 2020 and 0.5% by 2025

Aviation	
Air passengers carried (2019)	109.6 million people
Air freight activity (2019)	7763.6 million ton-km
Carbon-accredited airports (2020)	5 airports
<i>of which carbon neutral</i>	✗

Shipping	
Liner shipping connectivity index (2019)	82.8
Container port traffic (2019)	19 596 420 TEU

COVID-19	
Traditional transport infrastructure investment	Not available
Clean transport infrastructure investment	USD 2.97 billion
Examples	• Public transport infrastructure and service support

This fact sheet is part of the SLOCAT Transport and Climate Change Global Status Report - 2nd edition.

The information shown is based on desk research. Data has been collected to the best knowledge and availability. However, it might not be complete or reflect the most recent status. 'Not available' is indicated, when no information has been retrieved. The content does not represent the opinion of the SLOCAT Partnership. Find data sources and indicator glossary here.

- 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
 - UNFCCC** United Nations Framework Convention on Climate Change
 - VNR** Voluntary national review of the Sustainable Development Goals
 - WLTP** Worldwide harmonised light vehicles test procedure