

Australia



TRANSPORT, CLIMATE
AND SUSTAINABILITY
GLOBAL STATUS REPORT



Australia remains the largest emitter of transport CO₂ emissions in the Oceania region. Before the COVID-19 pandemic, transport CO₂ emissions were on the way to surpass 100 million tonnes in 2020, but the lockdowns reduced annual transport emissions to 83 million tonnes CO₂. Freight transport activity continued to grow, over 10% from 2015 to 2020.

As a high-income country with high levels of per capita transport CO₂ emissions, Australia needs to decarbonise transport until 2050. However, since the second edition there were few achievements in the major transport policy areas. The main activities continue to happen on the subnational level. There is no phase-out target for fossil fuel vehicle sales and a lack of support mechanisms for sustainable urban mobility.

Income group	High-income
Human Development Index (2021)	0.951
Population size (2022)	26 046 256 +10.2% (2015 - 2022)
Urban population share (2022)	86.3% +10.2% (2015 - 2022)
GDP per capita (2021)	58651.21 +2.67% (2015 - 2021)

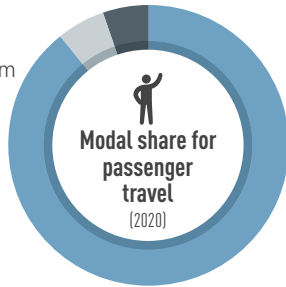
Transport Demand Trends

Passenger travel activity

280 680

million passenger-km in 2020

-5.2%
(2015 to 2020)

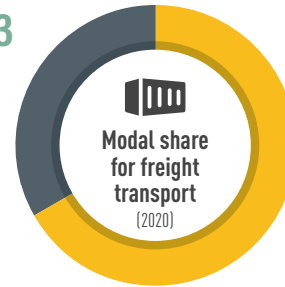


Freight transport activity

670 373

million ton-km in 2020

+11%
(2015 to 2020)



Energy consumption (2020)

31.57

million tonnes of oil equivalent

-2.5%
(2015 to 2020)

Average light duty fuel economy consumption Lge/100 km (WLTP) **8.3** (2019)

96.4%
Oil Products

1.5%
Natural Gas

0.4%
Biofuels

1.7%
Electricity

Transport Emission Trends

Transport CO₂ emissions (2021)

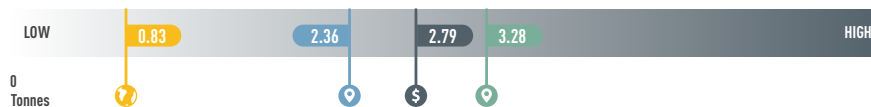
84.7 million tonnes

-10%
(2015 to 2021)

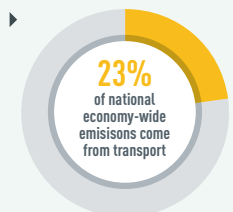
Per capita transport CO₂ emissions (2021)

3.28 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
NDC highlights transport for GHG mitigation	✓
Transport mitigation targets in NDC	✗
Other non-emission related transport targets in NDC	✗
VNR highlights transport	✓ 2018 VNR with transport linkages to SDG 3 and SDG 11

Transport actions in VNRs

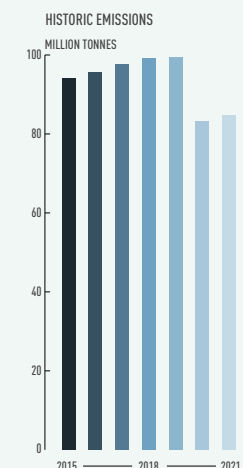
- ▶ Road safety improvements
- ▶ Transport system modernisation

Transport actions in NDC

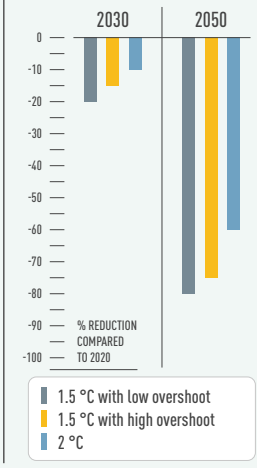
- ▶ EV purchase incentives
- ▶ General e-mobility
- ▶ Inspection and maintenance

Adaptation ▶ 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)	Not available
Number of sustainable urban mobility plans (2022)	Not available
Low emission zones (2022)	Not available

Walking	
National walking strategies (2022)	Only on subnational level
Targets Example of Queensland: <ul style="list-style-type: none"> ▶ Planning for walkable communities and places ▶ Building connected, comfortable and safe walking environments for all ▶ Encouraging more people to walk as part of their 'everyday' ▶ Working together to deliver for walking 	

Cycling	
National walking strategies (2022)	Only on subnational level
Targets Example of South Australia: <ul style="list-style-type: none"> ▶ Objectives on inclusive cycling, accessibility, integration with land use planning and cycle tourism 	
Cycling infrastructure in capital (2022)	Not available

Shared Mobility, Public Transport and Informal Transport	
Bus rapid transit (2022)	90 km in 3 cities
Bus rapid transit daily passenger volume (2022)	413 300
Urban rail (LRT, metro, tram) (2022)	622 km in 7 cities
Rapid Transit to Resident Ratio (2021)	11.2

Intercity Rail	
Rail network (1989)	7 147 km
Rail travel activity (2021)	93276 million-passenger-km
Rail freight activity (2021)	453 091 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 (2022)	✓
Target <ul style="list-style-type: none"> ▶ Inland Rail Project to upgrade 1,100 km and build 600 km new tracks 	

Road Transport	
Total road vehicles in use per 1,000 people (2020)	737.2
Average annual growth rate (from 2015 to 2020)	1.90%

Aviation	
Air passengers carried (2020)	24 million people
Air freight activity (2020):	1 200.6 million ton-km
Carbon-accredited airports (2022)	13 airports
of which carbon neutral:	1 airport

Shipping	
Liner shipping connectivity index (2021):	35.7
Container port traffic (2020):	8 656 995 TEU

Transport Energy Sources	
Biofuel blend mandate (2022)	Not available
Renewable energy (biofuels and electricity) share in transport (2020)	2.10%
Targeted % of renewable energy	Not available

Vehicle Technologies	
Emission standards for LDVs (2020)	Euro 6
CO ₂ emissions performance for passenger cars (2020)	Not available
Targeted CO ₂ emissions performance	Not available
Regulatory environment ranking on used vehicles by UNEP (2021)	Not available
Electric vehicles (2022)	67 000
Share of electric vehicles in car sales (2022)	5.1%
ICE phase-out targets:	✗

COVID-19	
Strongest impact of COVID-19 on...	(compared to pre-COVID-19 baseline)
... trips to public transport	-63.70% Week of 12 April 2020
... navigation request for walking	-61.20% Week of 12 April 2020
... navigation request for driving	-57.80% Week of 12 April 2020
... driven kilometres	-53.60% Week of 12 April 2020
Traditional transport infrastructure investment:	USD 18.14 billion
Clean transport infrastructure investment:	USD 5.12 billion
Examples <ul style="list-style-type: none"> ▶ Supporting infrastructure ▶ Infrastructure Investment — road safety and upgrades 	

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