

# Australia



Australia is the largest emitter of transport CO<sub>2</sub> emissions in the Oceania region. In the past decade, transport CO<sub>2</sub> emissions have grown by 13%, mainly due to a strong increase in domestic freight activity.

The country focuses on improving urban passenger transport through the introduction of light-rail train systems and alternative energy sources for transport, such as hydrogen and electricity.

Income group: High-income

Human Development Index: 0.94

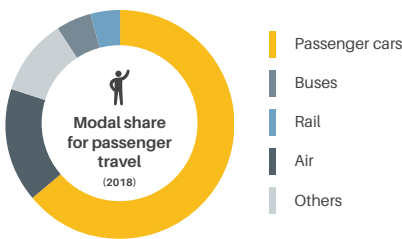
|  | Population size (2020) | Urban population share (2020) | GDP per capita (2019) |
|--|------------------------|-------------------------------|-----------------------|
| <b>Total</b>                                   | 25.5 million           | 85.9%                         | 57 436                |
| <b>Growth</b><br><small>(2010 to 2020)</small> | 15.1%                  | 16.3%                         | 26.3%                 |

## Mobility Demand Trends

### Passenger travel activity

452 650

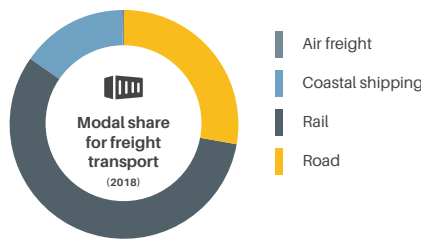
million passenger-km in 2018  
+12% (2010 to 2018)



### Freight transport activity

727 000

million ton-km in 2016  
+29.5% (2010 to 2016)



### Fuel consumption

33 994

thousand tonnes of oil equivalent  
+13% (2010 to 2018)

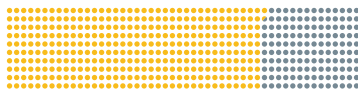
Light Duty Vehicle average fuel consumption (2017)

7.9 Lge/100 km (WLTP)



### Car ownership growth (2005 to 2015)

723 vehicles per 1,000 people



+3.8%

### Vehicle sales (2019)

Passenger (Growth 2010 to 2019)

799 263 -8.5%

Commercial -5.1%

235 116

### Diesel

US cents per litre (2018)

119

### Super gasoline

US cents per litre (2018)

116

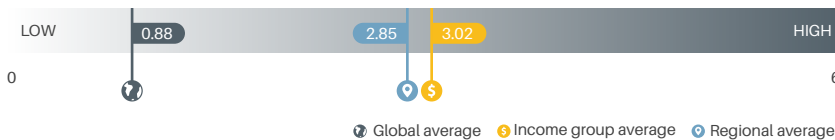
## Transport Emission Trends

### Transport CO<sub>2</sub> emissions (2019)

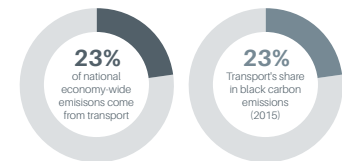
98.8 million tonnes

### Per capita transport CO<sub>2</sub> emissions (2019)

3.9 tonnes

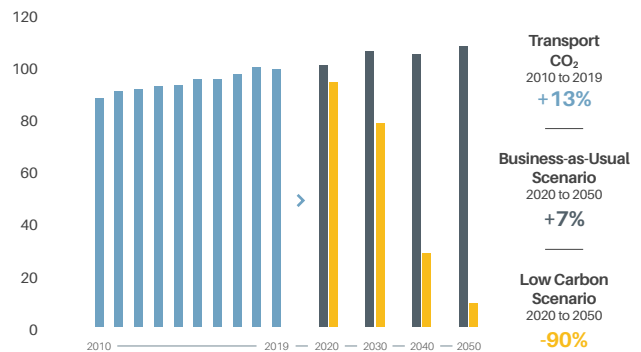


### Second-largest CO<sub>2</sub> producing sector in the country



## Low Carbon Transport Pathways

|   |  |
|---|--|
| Transport strategy identifies climate change        | ✓  |
| Long-term strategy submitted to UNFCCC              | Not submitted  |
| 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 | Not available  |
| VNR highlights transport                            | ✓ 2018 VNR with transport linkages to SDG 3 and SDG 11 |



### Transport measures in NDC

- Mitigation**
- Hydrogen
  - General technical improvements
- Adaptation** Not available

| Sustainable Mobility Planning & Transport Demand Management |  |
|---|--|
| National Urban Mobility Framework (2020)                    | ✓  |
| <b>Targets</b>  | Objectives around productivity, sustainability and liveability |
| Sustainable Urban Mobility Plans (2020)                     | ✗  |
| Low Emission Zones (2020)                                   | Not available  |

| Walking and Cycling                      |  |
|--|--|
| National walking strategies (2020)       | Not on national level, but subnational (e.g. Queensland)   |
| <b>Targets</b>                           | <ul style="list-style-type: none"> <li>Planning for walkable communities and places</li> <li>Building connected, comfortable and safe walking environments for all</li> <li>Encouraging more people to walk as part of their 'everyday'</li> <li>Working together to deliver on walking</li> </ul> |
| National cycling strategies (2020)       | ✓  |
| <b>Target</b>                            | Double the number of people cycling  |
| Cycling infrastructure in capital (2020) | Not available  |

| Urban Passenger and Freight Transport           |                    |
|---|--------------------|
| Bus rapid transit (2020)                        | 90 km in 3 cities  |
| Urban rail (LRT, metro, tram) (2020)            | 608 km in 7 cities |
| Bus rapid transit daily passenger volume (2020) | 413 300            |
| Rapid Transit to Resident Ratio (2019)          | 9.1                |

| Passenger and Freight Railways                                 |   |
|--|---|
| Rail network (2011)  | 8 829 km  |
| High-speed rail (2018)   | Not available   |
| High-speed rail travel activity (2018)                         | Not available   |
| National plans for passenger and freight rail expansion (2020) | ✓   |
| <b>Targets</b>   | <ul style="list-style-type: none"> <li>AUD 10 billion for passenger rail</li> <li>Several targets in support of resilient rail freight</li> </ul> |
| Rail travel activity (2018)                                    | 17 586 million passenger-km   |
| Rail freight activity (2016)                                   | 413 490 million ton-km  |

| Shared Mobility Services                                  |                          |
|---|--------------------------|
| Bike-sharing systems (2020)                               | 22 systems               |
| Electric scooter services (2020)                          | 3 operators in 11 cities |
| Carsharing services (2021)                                | 19 services              |
| National legal frameworks for shared mobility (2020)      | Varying by state         |
| Autonomous vehicles in operation or in preparation (2020) | 7                        |
| Autonomous vehicles strategies (2020)                     | ✓                        |

| Fuel Economy  |                          |
|---|--------------------------|
| Emission standards for LDVs (2018)                    | Euro 6                   |
| CO <sub>2</sub> emissions performance for LDVs (2017) | 188 gCO <sub>2</sub> /km |
| Emission standards for HDVs (2018)                    | Euro VI                  |
| Targeted CO <sub>2</sub> emissions performance        | Not available            |

| Electric Mobility                        |        |
|--|--------|
| Electric vehicles (2019)                 | 20 100 |
| Market share of electric vehicles (2019) | 1.1%   |
| No. of cities with electric buses (2019) | 1      |
| ICE phase-out targets                    | ✗      |

| Renewable Energy  |               |
|---|---------------|
| Biofuel blend mandate (2019)  | Not available |
| Renewable energy (biofuels and electricity) share in transport (2018) | 1.86%         |
| Targeted % of renewable energy  | Not available |

| Aviation                          |                       |
|-----------------------------------|-----------------------|
| Air passengers carried (2019)     | 76.9 million people   |
| Air freight activity (2019)       | 1931.2 million ton-km |
| Carbon-accredited airports (2020) | 12 airports           |
| <i>of which carbon neutral</i>    | 1 airport             |

| Shipping                                 |               |
|--|---------------|
| Liner shipping connectivity index (2019) | 34.3          |
| Container port traffic (2019)            | 8 282 189 TEU |

| COVID-19  |                   |
|---|-------------------|
| Traditional transport infrastructure investment | 12.13 billion USD |
| Clean transport infrastructure investment       | Not available     |

| Examples |   |
|----------|---|
|          | <ul style="list-style-type: none"> <li>Geelong to Melbourne railway line</li> <li>Melbourne airport rail link</li> <li>Infrastructure investment and road safety</li> </ul> |

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

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#### List of acronyms

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