

Saudi Arabia



Saudi Arabia has with 3.68 tonnes a high level of per capita transport CO₂ emissions. Transport is completely fossil fuel-based and responsible for 22% of national CO₂ emissions.

The country's ambitions focus on public transport, vehicle efficiency and rail network expansion. There is no information on strategies in support of walking, cycling and vehicle electrification.

| | |
|--------------------------------|---------------------------------|
| Income group | High-income |
| Human Development Index (2021) | 0.875 |
| Population size (2022) | 16 136 651 +11.4% (2015 - 2022) |
| Urban population share (2022) | 83.9% +15.5% (2015 - 2022) |
| GDP per capita (2021) | 18 793.26 -6.81% (2015 - 2021) |

Transport Demand Trends

Passenger travel activity

464

million passenger-km for rail in 2018 in 2018

+23%
(2014 to 2018)

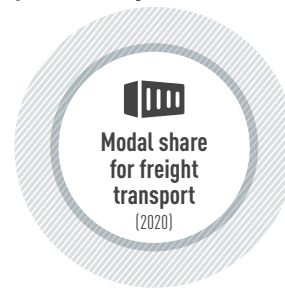


Freight transport activity

1 772

million ton-km for rail in 2018

+18%
(2014 to 2018)



Energy consumption (2020)

409

million tonnes of oil equivalent

+16.7%
(2015 to 2020)

Average light duty fuel economy consumption Lge/100 km (WLTP) (n/a)

100%
Oil Products

Transport Emission Trends

Transport CO₂ emissions (2021)

131.7 million tonnes

+10.4%
(2015 to 2021)

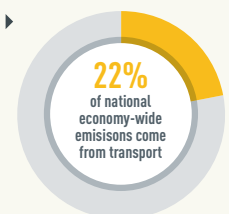
Per capita transport CO₂ emissions (2021)

3.68 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 | Not available |
| VNR highlights transport | ✗ 2018 VNR with no transport linkages |

Transport actions in VNRs

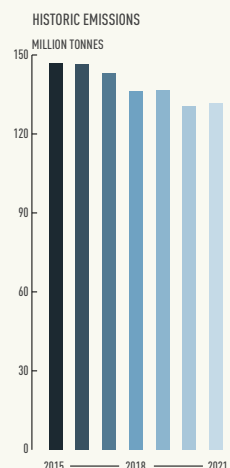
▶ Not available

Transport actions in NDC

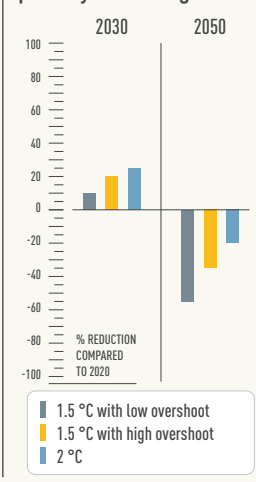
- Mitigation
 - ▶ Public transit integration and expansion
 - ▶ Vehicle efficiency standards

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) | Not available |

| Cycling | |
|--|---------------|
| National walking strategies (2022) | Not available |
| Cycling infrastructure in capital (2022) | Not available |

| Shared Mobility, Public Transport and Informal Transport | |
|--|------------------|
| Bus rapid transit (2022) | ✗ |
| Bus rapid transit daily passenger volume (2022) | |
| Urban rail (LRT, metro, tram) (2022) | 176 km in 1 city |
| Rapid Transit to Resident Ratio (2021) | 0 |

| Intercity Rail | |
|--|---------------------------------------|
| Rail network (2018) | 2 639 km |
| Rail travel activity (2018) | 134.65 million-passenger-km |
| Rail freight activity (2010) | 1 852.5 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) | Yes under national transport strategy |

- Target**
- Efficiently and effectively connect the centers of economic activities of the Kingdom by developing strategic rail infrastructure
 - Establish a high capacity and high quality railway connection between Dammam and Riyadh which is integrated with other transport modes
 - Ensure safety on the railway network system
 - Trigger public transport demand and support passenger railway transport by subsidies
 - Reduce air pollution including minimizing energy consumption for railway services
 - Maximize rail revenues from a variety of sources to reduce dependence on public funding

| Road Transport | |
|--|---------------|
| Total road vehicles in use per 1,000 people (2020) | Not available |
| Average annual growth rate (from 2015 to 2020) | Not available |

| Aviation | |
|-----------------------------------|----------------------|
| Air passengers carried (2020) | 270 million people |
| Air freight activity (2020): | 649.3 million ton-km |
| Carbon-accredited airports (2022) | 1 airport |
| of which carbon neutral: | ✗ |

| Shipping | |
|---|---------------|
| Liner shipping connectivity index (2021): | 69.5 |
| Container port traffic (2020): | 9 394 100 TEU |

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

| Vehicle Technologies | |
|---|---------------------------------|
| Emission standards for LDVs (2020) | Not available |
| CO ₂ emissions performance for passenger cars (2018) | 140 gCO ₂ /km |
| Targeted CO ₂ emissions performance | 59 gCO ₂ /km by 2030 |
| Regulatory environment ranking on used vehicles by UNEP (2021) | Good |
| Electric vehicles (2022) | Not available |
| Share of electric vehicles in car sales (2022) | Not available |
| ICE phase-out targets: | Not available |

| COVID-19 | |
|--|-------------------------------------|
| Strongest impact of COVID-19 on... | (compared to pre-COVID-19 baseline) |
| ... trips to public transport | -82.4% Week of 19 April 2020 |
| ... navigation request for walking | -52.5% Week of 26 April 2020 |
| ... navigation request for driving | -60.9% Week of 26 April 2020 |
| ... driven kilometres | Not available |
| Traditional transport infrastructure investment: | Not available |
| Clean transport infrastructure investment: | Not available |

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