



# **SLOCAT**

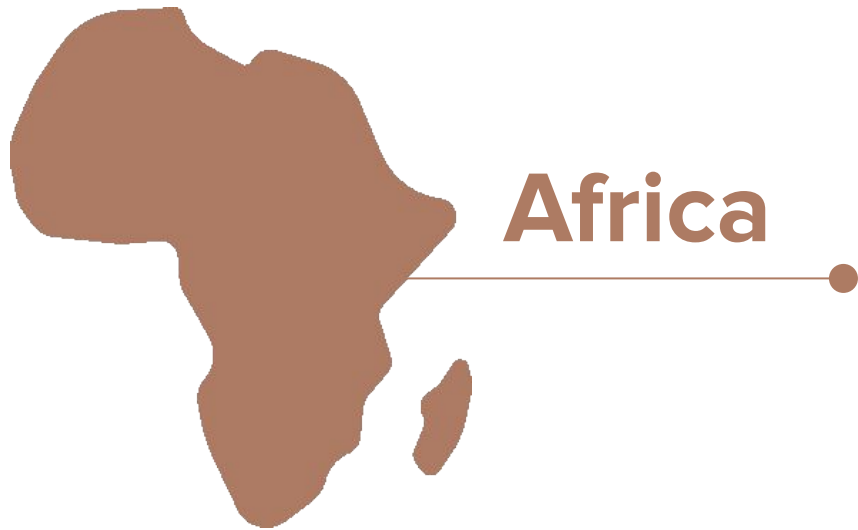
## **Transport, Climate and Sustainability**

### **Global Status Report - 3<sup>rd</sup> edition**

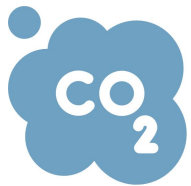
## **Key Regional Insights**

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# Africa



**24%**

of Africa's total CO<sub>2</sub> emissions  
come from transport



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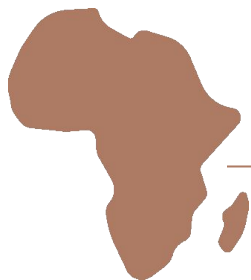
The lowest per capita transport CO<sub>2</sub> emissions among all regions, though with a fast growing trajectory.

→ Only 5.4% of global transport CO<sub>2</sub> emissions in 2021.\*

Africa experienced the second highest regional growth of transport emissions after Asia.

→ Transport CO<sub>2</sub> emissions increased by 34% between 2010 and 2021.

\*Excluding international aviation and shipping



# Africa

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## Momentum in goals to tackle transport emissions

Africa accounted for **43% of the countries that set time-bound transport emissions targets** in **Nationally Determined Contributions** submitted to the Paris Agreement.



## Dangerous levels of air pollution

Africa's **particulate matter 2.5 emissions** (mainly from road transport and power generation) are **97.41  $\mu\text{g}/\text{m}^3$**  in 2019, **above the world average of 82.3  $\mu\text{g}/\text{m}^3$** .

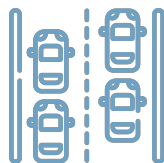


## Soaring road traffic fatalities

**93% of Africa's roads fail to provide an acceptable level of service for pedestrians and cyclists.** 53% of road fatalities are pedestrians, bicyclists and motorcyclists.



# Africa



## Lowest car ownership rate

Between 2016 and 2020, **Africa's motorisation rate was 43 vehicles per 1,000 people**, around **4.6 times below the global average**.



## High dependency on used vehicles

**Africa accounts for less than 1% of global vehicle production.** Africa imported the largest share (40%) of used vehicles among all regions from 2015 to 2018.

**In most African countries, used vehicles account for 85-100% of fleets.**



## Walking and cycling, the primary means of transport

Africans spend **56 minutes per day on walking or cycling**.

Around 59% of people walking and cycling in Africa were supported by a walking and cycling policy.



# Africa



## Lack of affordable mobility for urban poor

Urban transport expenses can cost up to **20% of household income (10% in smaller cities)**.

Affordable mobility options are key to alleviate urban poverty.



## Limited access to public transport, prevailing use of informal transport

Only **32% of population** was able to access public transport within a walking distance of 500-1,000 metres in 2020, well below the global average of **56%**.

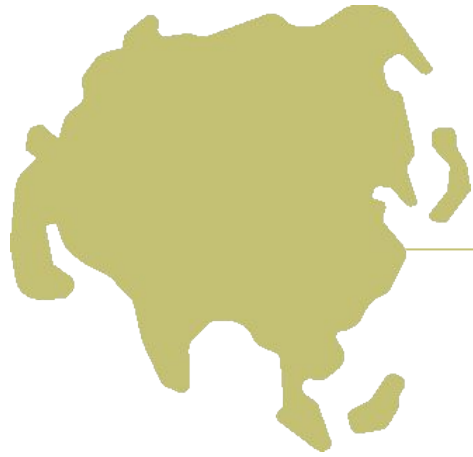
**Informal transport** can account for **40% to 98% of trips** by collective and shared transport in some African countries.



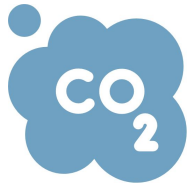
## Road freight dominance

Road freight carries at least **80% of goods in Africa**.

Ports, rail and air freight remain limited due to lack of capacity, technology and high costs.



# Asia



11%

of Asia's total CO<sub>2</sub> emissions  
come from transport



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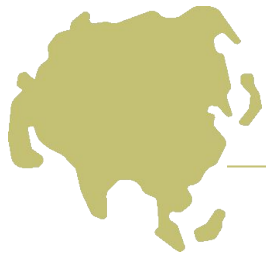
The highest regional transport CO<sub>2</sub> emitter among all regions since 2011.

→ 39% of global transport CO<sub>2</sub> emissions in 2021.\*

Asia experienced the fastest growth of transport CO<sub>2</sub> emissions compared to other regions over the last decade.

→ 36% growth from 2020 to 2021.

\*Excluding international aviation and shipping

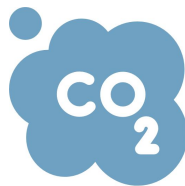


# Asia



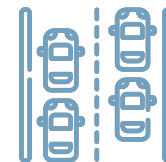
## Air pollution: a fatal crisis in Asia

Air pollution contributed to 6.5 million deaths globally in 2019, with **70% of the deaths occurring in the Asia-Pacific region.**



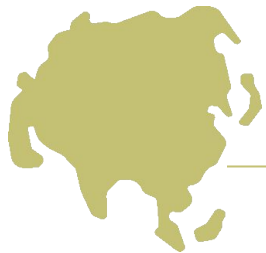
## Emissions trajectory not reaching the net zero pathway

Asia's transport CO<sub>2</sub> emissions positively deviated from pre-2015 projections. However, at its growth rate of 2021, **transport CO<sub>2</sub> emissions would not peak before 2050**, while strong declines are needed to to achieve the Paris Agreement target.



## Soaring private vehicle ownership

Asia recorded **soaring motorisation growth with increases of more than 200%** in some countries during 2010-2019 – as well as significant growth in two- and three-wheelers.



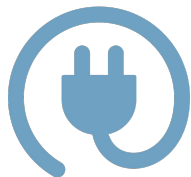
# Asia

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## Growing momentum towards a net zero future

As of 2022, **at least 14 Asian countries** had made **economy-wide pledges towards net zero emissions** in addition to transport targets (which mostly aimed at electric mobility).



## Global leader of electric mobility

In 2021, Asia was home to **95% of the global electric road vehicles fleet**.

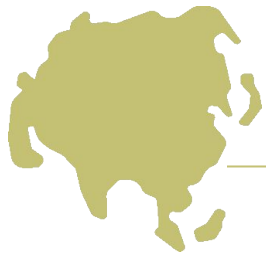
**92%** of the electric vehicles in Asia were **two-wheelers**.



## Surge in public transport services

Number of cities with **bus rapid transit increased by 36%** and cities with **metros and light-rail transit increased by 49%** from 2015 to 2021.





# Asia

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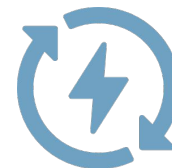
## Rising demand for bike sharing

Asia is the world's largest bike sharing market. As of 2021, **nearly 800 bike sharing schemes were operating across Asia.**



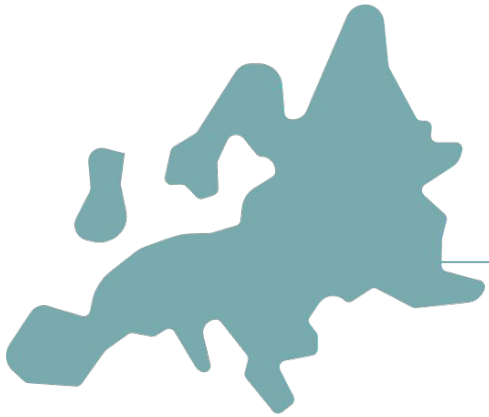
## Increasing decarbonisation efforts for shipping

Some countries (Japan and Singapore) and ports (Shanghai) have pledged to **decarbonise the sector and implement green shipping corridors.**

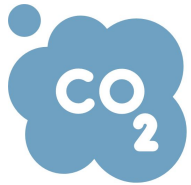


## Rapid renewables uptake in transport

Use of renewables in transport **increased annually by 14%** from 2010 to 2019, **the fastest annual growth among all regions.**



# Europe



**22%**

of Europe's total CO<sub>2</sub> emissions come from transport



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**The third highest transport CO<sub>2</sub> emitter among regions.**

→ 18% of global transport CO<sub>2</sub> emissions in 2021.\*

→ 2% growth of transport emissions between 2010 and 2019.

**Transport CO<sub>2</sub> emissions remain below pre-pandemic levels.**

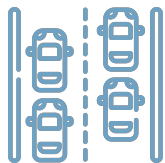
→ Dropped by 12.6% in 2020, rebounded by 5.9% in 2021.

\*Excluding international aviation and shipping



# Europe

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## Continuing dominance of cars

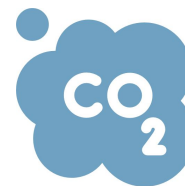
Passenger cars accounted for **86%** of the travel activity in the EU in 2020.

Nearly all countries rely heavily on fossil-fuelled vehicles.



## Surge in fuel prices due to the Russian war on Ukraine

Between February and July 2022, **natural gas wholesale prices in Europe rose 115%** and **electricity prices rose 237%**.



## Phasing out fossil fuel cars by 2035

Approval of EU ban on sales of internal combustion engine (ICE) vehicles as of **2035**.

At least 9 European countries had adopted either a target for 100% electric vehicles or a ban on ICE vehicles.



# Europe

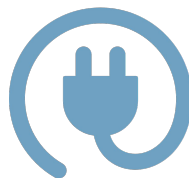
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## Slow public transport ridership recovery

Public transport use plummeted due to the pandemic and **remained below 2019 levels in several countries** as of 2022.



## Exponential increase in electric vehicles

Europe is the world's **second largest electric car market** after China.

However, **only 2.4% of passenger cars were electric** as of 2022.

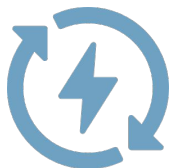


## Emerging active mobility trends

**Active travel increased.** Several cities **reconfigured streets** to enable greater walking and cycling. **Cycling particularly boomed** due to **increased funding for bike lanes and infrastructure.**



# Europe



## Global leader in renewables in transport

**18% of the global demand for renewables for transport in 2019.**

**EU 2020 target of 10% renewables in transport achieved, with nearly half of the EU surpassing the target.**



## Minor shocks for freight activities in pandemic

**Minor decreases in the share of maritime, rail and inland waterway transport while the share of road freight increased slightly from 2011 to 2021.**



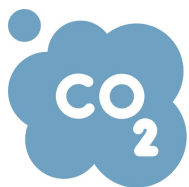
## Ambitious freight decarbonisation

**Shipping emissions will be included in the EU Emissions Trading System.**

**FuelEU Maritime aims to reduce 80% of GHG emission intensity of shipping fuels by 2050.**



# Latin America and the Caribbean



**33%**

of LAC region's total CO<sub>2</sub> emissions come from transport



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Despite high motorisation levels, LAC has relatively small impact on global transport CO<sub>2</sub> emissions.

→ 8.5% of global transport CO<sub>2</sub> emissions in 2021.\*

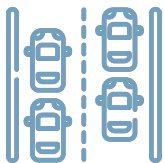
→ 3% growth of transport CO<sub>2</sub> emissions between 2010 and 2021.

\*Excluding international aviation and shipping



# Latin America and the Caribbean

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## High car ownership rate

**267 vehicles per 1,000 people** (data years from 2016 to 2020).

**1.35 times above the global average.**



## Limited access to public transport remains a challenge

In two-thirds of **218 cities** surveyed in the region, just half or less of the population had convenient access to public transport in 2021.



## Emerging public transport systems despite ridership loss

New systems operational in 2022 in **Bolivia, Ecuador, Mexico and Panama.**



# Latin America and the Caribbean

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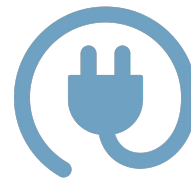
## Growing priority for cycling in major cities

Major cities like Bogotá, Lima, Mexico City and Rio de Janeiro are **prioritising investments to expand cycle lanes, bicycle parking and shared systems.**



## Sustained momentum for integrated transport planning

Sustainable Urban Mobility Plans (**SUMPs**) **continued to expand** in Brazil, Chile, Cuba, Ecuador and Peru.



## Rapidly deployment electric bus fleets

**Electric buses fleet doubled** between 2020 and 2023, operating **in 30 cities across 11 countries** and accounting for **nearly 5% of the regional urban bus fleet.**





# Latin America and the Caribbean

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## Prevailing development of climate strategies

**90+% LAC countries** submitted second-generation Nationally Determined Contributions; **four** include transport emission targets (Belize, Dominica, El Salvador and Grenada).



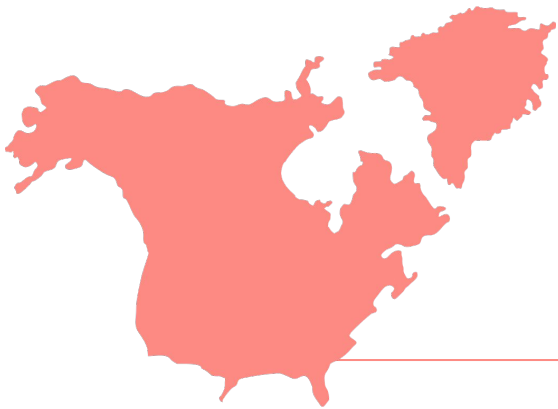
## A long way for modal modal shift in freight

Road transport carries **85% of national freight in South America** and **almost 100% of freight in Central America**.

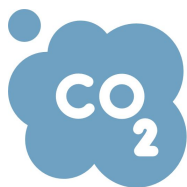


## Country efforts to decarbonise freight

**Argentina, Brazil, Chile and Mexico** launched programmes to improve energy efficiency and decarbonise freight.



# North America



**34%**

of North America's total CO<sub>2</sub> emissions come from transport



**Second highest  
transport CO<sub>2</sub> emitter  
among regions after Asia.**

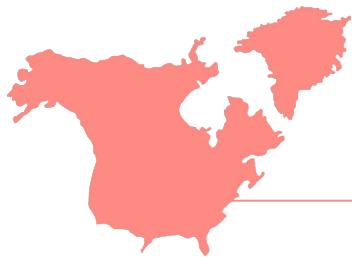
→ 28% of global transport CO<sub>2</sub> emissions in 2021.

**The pandemic changed its overall CO<sub>2</sub> emissions trajectory.**

→ 5% increase in transport CO<sub>2</sub> emissions between 2010 and 2019.

→ 7% decline in transport CO<sub>2</sub> emissions between 2019 and 2021.

\*Excluding international aviation and shipping



# North America

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## Soaring road traffic fatalities

Total traffic deaths in the USA significantly increased by **18%** from 2019 to 2021. Pedestrian fatalities reached an all-time high.

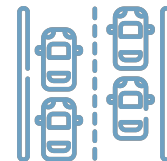
Around **20%** of the people killed in road traffic crashes in 2021 were pedestrians or cyclists.



## Significant shifts in commuting patterns

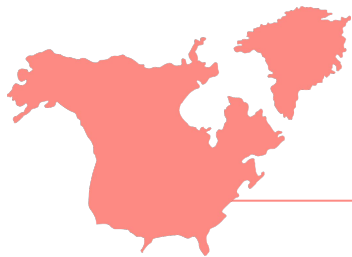
In the USA, the number of people working from home increased **three-fold** between 2019 and 2021 induced by the pandemic.

Public transport usage fell at least **30%** nationwide in 2021.



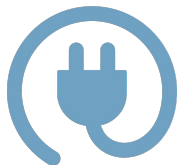
## Car ownership rate remained at an all-time high

**4 times** the global average motorisation rate and **18 times higher** than Africa's.



# North America

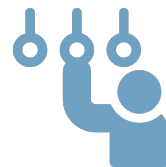
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## Declining vehicle sales, increasing EV demand

**Overall vehicle sales declined** in 2022 due to inflation, energy prices and supply chain issues.

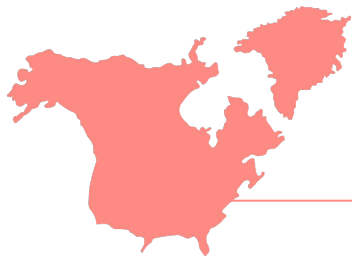
**Battery electric vehicle sales in Canada and USA tripled** to account for **more than 6% of total vehicle sales in 2022.**



## Public transport ridership rebounding slowly

**Biggest drop in metro ridership among world regions in 2020**, with passenger numbers **plummeting by 64%.**

**In 2022, ridership increased in several USA public transport systems**, though it remained **well below pre-pandemic levels.**



# North America

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## Russian war on Ukraine imposed challenges in production

**Major bottlenecks for key materials** used in industries in the **USA**, including transport.

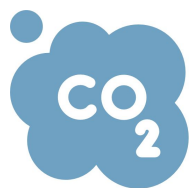
**Source of key materials for electric vehicle batteries:**  
90% of semiconductor-grade neon, 35% of palladium and 20% of nickel were obtained from Russia.



## Transport emissions shifting from passenger to freight transport

**USA:** Share of emissions from light-duty vehicles fell from **60% to 57%** from 2015 to 2020, while that from **medium- and heavy-duty trucks grew from 23% to 26%**.

**Canada:** Road transport was the **major contributor to emission growth until 2019**, but it experienced the **greatest decline in 2020**.



**25%**

of Oceania's total CO<sub>2</sub> emissions come from transport



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**The lowest emitter  
of transport CO<sub>2</sub>  
emissions among all  
regions.**

→ **Less than 2% of global transport CO<sub>2</sub> emissions in 2021.**

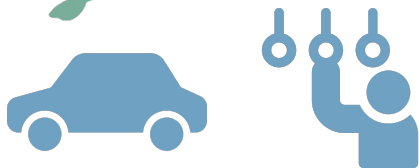
→ **14% growth of transport CO<sub>2</sub> emissions between 2010 and 2019.**

\*Excluding international aviation and shipping



# Oceania

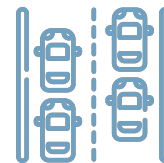
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## Dominance of private vehicles despite high access to public transport

In **Australia**, 87% of **work commutes** in 2021 were by drivers or passengers of a car, motorcycle, or truck. **Only 5% were by walking or cycling and 7% by public transport.**

**Australia and New Zealand** had the **world's highest share of the urban population with access to public transport** in 2021 (**82.8%**), compared to the global average of 56%.



## Rapid growth in car ownership

Largest growth in **Fiji and Micronesia**, with **increases near or above 40%** from 2010 to 2019.

**Australia and New Zealand** maintained the region's **highest motorisation levels, 4 times of global average.**



# Oceania

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## Net zero pledges for maritime sector

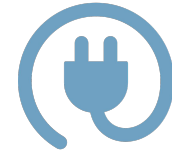
**Marshall Islands:** reduce domestic shipping emissions 40% by 2030; fully decarbonise by 2050.

**Pacific Blue Shipping Partnership:** to decarbonise shipping and achieve net zero carbon by 2050 (**Fiji, the Marshall Islands, Samoa, Solomon Islands, Tuvalu and Vanuatu**).



## Strengthening transport resilience in small-island states

There are **growing investments** to support resilient transport systems in **Fiji, Kiribati, Papua New Guinea, Samoa, Tonga, Tuvalu and Vanuatu**.



## Oceania's electric vehicle uptake still lags behind other regions

Although EV sales have grown exponentially in Australia, **Australia and New Zealand's electric passenger cars accounted for less than 1% of global stock.**





# Oceania



## Severe revenue losses in exports and tourism due to the pandemic

**Collapsed tourism was devastating for already vulnerable economies of Pacific islands** (e.g. Fiji, Palau, Samoa and Tonga).

**Passenger maritime transport fell 18% in the first half of 2020.**

**Russia's war on Ukraine further threatens the economic recovery** as disruptions **affected shipping and freight corridors** for the Pacific islands.



## High coverage of public transport in some Small-island states, but some struggle

More than 60% of residents in **Suva (Fiji)** live within 500 metres of a bus route with 20-minute service frequency. In 2015, trips by bus accounted for 46%, much higher than by cars (34%).

Only 20 of **Vanuatu's** 45 islands have airstrips, and some islands have no road network at all.



**Also check out [www.tcct-gsr.com](http://www.tcct-gsr.com) for Key Insights**  
**Module 1 on Transport Pathways to Reach**  
**Global Climate and Sustainability Goals**

# SLOCAT

## Transport, Climate and Sustainability

### Global Status Report

#### 3<sup>rd</sup> edition



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# 5 Modules



**Transport Pathways to Reach Global Climate and Sustainability Goals**



**Regional Trends**



**Responses in Transport Sub-Sectors and Modes**



**Transport and Energy**



**Finance, Capacity and Institutional Support**

# 12 Transport Areas



Integrated  
transport planning



Rail



Walking



Road Transport



Cycling



Aviation



Public Transport



Shipping



Informal Transport



Transport Energy Sources



App-Driven Shared  
Transport



Vehicle Technologies

# 6

## Spotlights on cross-cutting issues



**Freight and Logistics**



**Global Supply Chains**



**Health**



**Small Island Developing States**



**Capacity Building**



**Engagement in UNFCCC**

# 30

## Country Fact Sheets



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