



**ASIA AND THE PACIFIC
TRANSPORT FORUM 2026**
FROM PRIORITIES TO ACTION

19-22 MAY
ADB HEADQUARTERS
MANILA, PHILIPPINES

Training 7: Monitoring Progress of the UN Decade of Sustainable Transport

A Regional Lens on the UN Decade of Sustainable Transport

Asian Transport Observatory

Alvin Mejia and Sudhir Gota
Co-Team Leads
Asian Transport Observatory



Asian Transport Observatory

Strengthening the knowledge base of transport in Asia-Pacific

A leading platform that gathers and shares comprehensive datasets, generate unique policy insights, and delivers novel knowledge products rooted in groundbreaking analysis.

asiantransportobservatory.org



ATO National Database

Explore over 450 transport indicators from 51 economies divided across nine categories



ATO National Transport Policy Documents Database

Explore close to 1100 transport policy documents in Asia and the Pacific



ATO Urban Database

Explore more than 260 urban level transport indicators across nine categories



ATO Cost Database

Explore more than 1,300 transport-related projects and benchmark their costs within subregions or income groups in Asia and the Pacific



ATO Analytical Outputs

Read about analysis made using ATO transport data and policy information

What we do

Asian Transport Observatory

Asian Transport 2035 Outlook: Investment Needs of Asian LMICs

The Asian Transport 2035 Outlook estimates that low- and middle-income economies in Asia and the Pacific will need about US\$2.8 trillion per year for transport infrastructure between 2025 and 2035, more than triple past annual investment levels. It highlights the need to fund not only new infrastructure, but also maintenance, safety, rail, ports, airports, electric mobility, climate resilience, and labor prioritization.

Asia and the Pacific Transport Development Finance Explorer

The Asia and the Pacific Transport Development Finance Explorer is a new interactive ATO platform that makes transport development finance data easier to explore and use. Built mainly around OECD Creditor Reporting System data, and results of roadside assessment through the Accelerating Innovation in Transport, under the Pathways for Decarbonization of the Transport Sector project supported by the UK-FCDO.

Climate Exposure Dashboard for Transport

With support from European Space Agency and ADB through the Global Development Assistance Program, the Asian Transport Observatory collaborated with IASO to develop a prototype Climate Exposure Dashboard for Transport. The tool combines Earth observation data with open geospatial datasets to visualize where major road networks, particularly motorways, may be exposed to flood hazards across the region.

Transport in Review: Working Paper Series

The Transport in Review series provides concise, evidence-based snapshots of transport trends, policies, and priorities across Asia and the Pacific. It brings together data and analysis from the Asian Transport Observatory to help countries and partners understand progress, identify gaps, and support more informed transport planning and investment decisions.

Visit the ATO portal
asiantransportobservatory.org
 Contact us
info@asiantransportobservatory.org

Pacific Transport Observatory

The Pacific Transport Observatory platform has been integrated into the ATO website to serve as a regional space for sharing data, tools, knowledge products relevant to the Pacific sub-region and the Pacific Island Countries. It also features a new mechanism called "Data and Information Catalogue" which houses non-ATO formatted data, and relevant information assets, in addition to the data in the ATO table format and database structure. The development of this portal was supported by the World Bank, through the Accelerating Decarbonization of Road Transport in Papua New Guinea and the Pacific Islands' programmatic advisory services and analytics (PASAA) in addition to the support being provided by the Asian Development Bank and the Asian Infrastructure Investment Bank to the ATO.

PALAU

Ensure access to sustainable transport for all

Access to public transport

Public jobs to drive

Real estate index

Country Dashboards for the UN Decade of Sustainable Transport

These country dashboards provide a concise, country-level view of transport trends, policies, and priorities across Asia and the Pacific. Drawing on information available through the Asian Transport Observatory portal, each dashboard brings together key data and insights around the priority areas of the UN Decade of Sustainable Transport. The dashboards are designed to help governments, development partners, researchers, and practitioners quickly understand where each country stands, what progress is being made, and where further action may be needed.

Collect
 Bring together data from different sources

Curate
 Check, clean, organize, and structure data

Connect
 Link data to policy, planning, and investment questions

Communicate
 Turn data into insights decision-makers can use

Capacitate
 Build capacity to use data and insights in planning and investment decisions

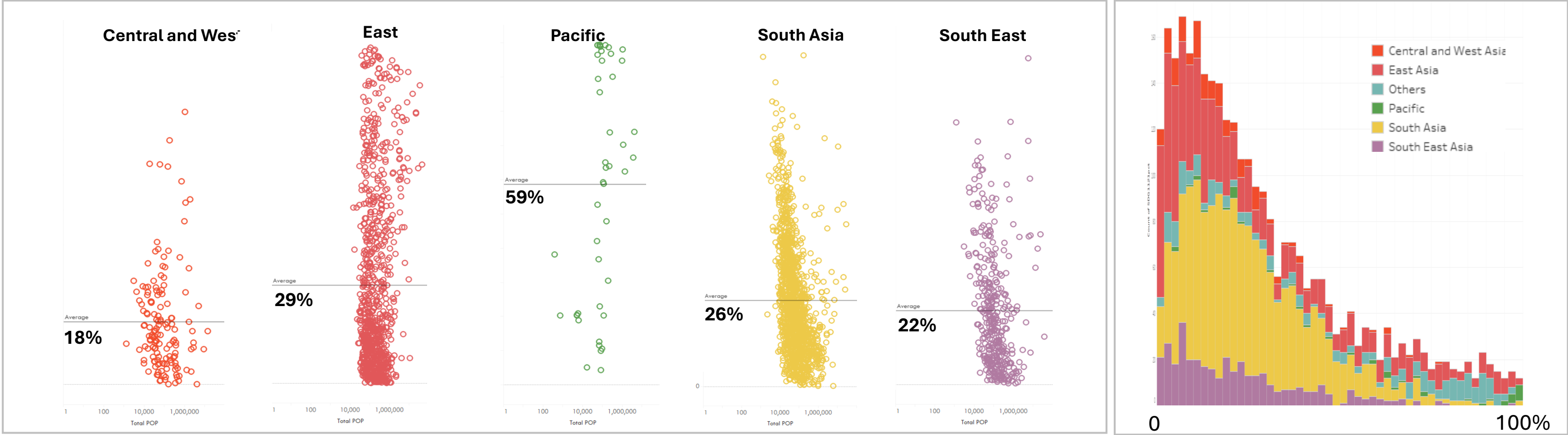
Collaborate
 Strengthen data collection, validation, and use



**1. Ensure access to
sustainable transport for all**

Urban Access

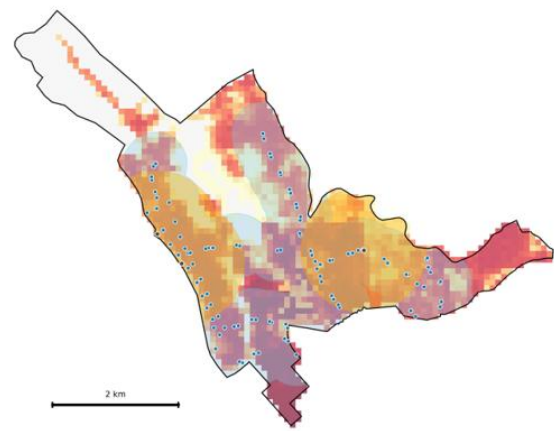
Around **1.4 billion urban residents** in Asia and the Pacific lack convenient access to public transport. ~400 million lack proper access to all-season roads



Source: Visualization by the Asian Transport Outlook (ATO) using data from CIESIN Columbia University (2023)



City of Malabon
Public Transport Access, SDG 11.2.1 Approximation



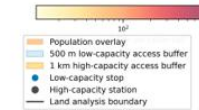
Summary

Population summary
Total population: 440,076
Population with convenient access: 372,695
Population without convenient access: 67,381
Share with convenient access: 84.7%

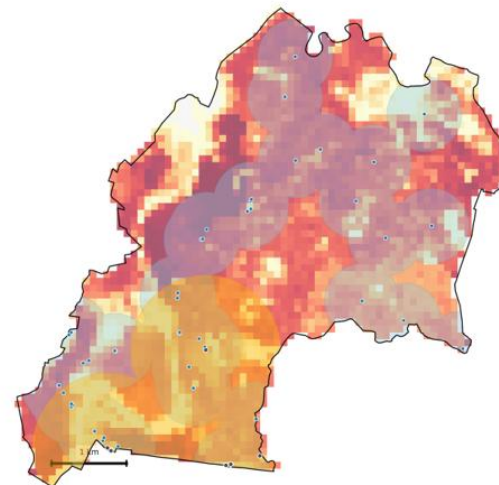
Public transport features
Low-capacity stops, 500 m: 100
High-capacity stations, 1 km: 3

Geospatial summary
Land boundary area: 16.4 km²
Area within access buffers: 11.0 km²
Share of land area covered: 67.3%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Marikina
Public Transport Access, SDG 11.2.1 Approximation



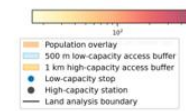
Summary

Population summary
Total population: 491,429
Population with convenient access: 357,590
Population without convenient access: 133,839
Share with convenient access: 72.8%

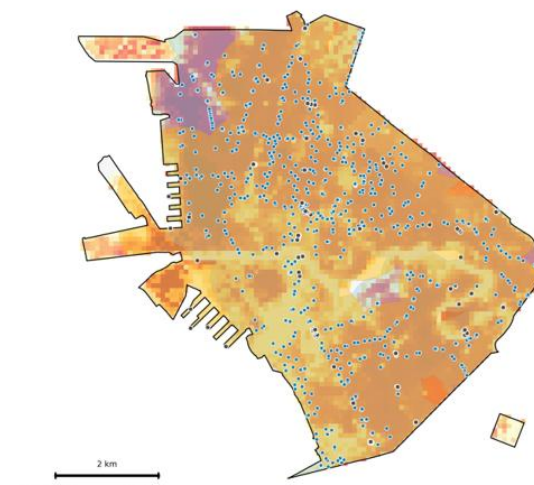
Public transport features
Low-capacity stops, 500 m: 47
High-capacity stations, 1 km: 7

Geospatial summary
Land boundary area: 22.7 km²
Area within access buffers: 14.9 km²
Share of land area covered: 65.9%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Manila
Public Transport Access, SDG 11.2.1 Approximation



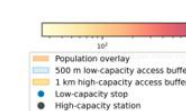
Summary

Population summary
Total population: 1,909,340
Population with convenient access: 1,890,080
Population without convenient access: 19,259
Share with convenient access: 99.0%

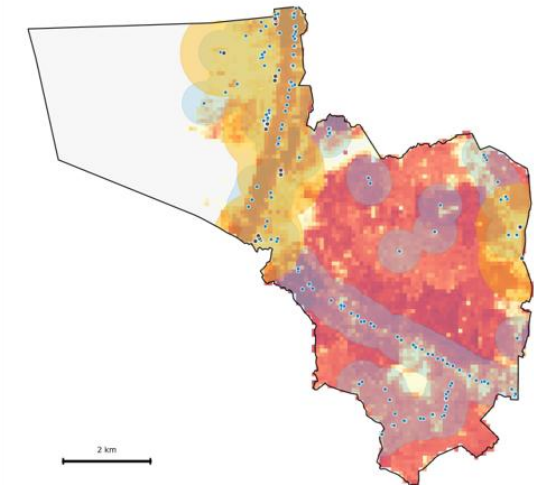
Public transport features
Low-capacity stops, 500 m: 638
High-capacity stations, 1 km: 95

Geospatial summary
Land boundary area: 42.7 km²
Area within access buffers: 40.8 km²
Share of land area covered: 95.6%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Parañaque
Public Transport Access, SDG 11.2.1 Approximation



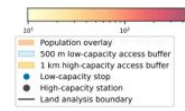
Summary

Population summary
Total population: 759,272
Population with convenient access: 510,172
Population without convenient access: 249,100
Share with convenient access: 67.2%

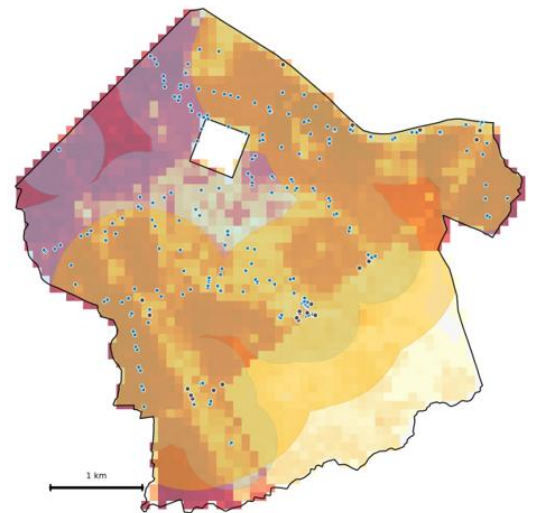
Public transport features
Low-capacity stops, 500 m: 180
High-capacity stations, 1 km: 20

Geospatial summary
Land boundary area: 59.7 km²
Area within access buffers: 30.1 km²
Share of land area covered: 50.3%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Makati
Public Transport Access, SDG 11.2.1 Approximation



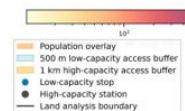
Summary

Population summary
Total population: 431,237
Population with convenient access: 411,545
Population without convenient access: 19,692
Share with convenient access: 95.4%

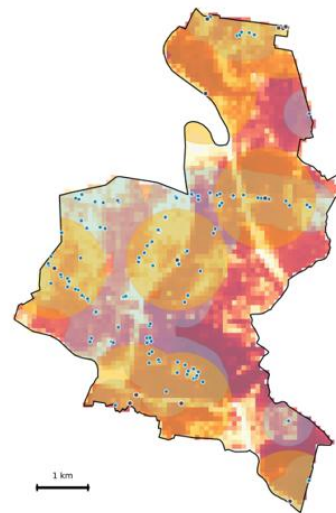
Public transport features
Low-capacity stops, 500 m: 208
High-capacity stations, 1 km: 22

Geospatial summary
Land boundary area: 18.0 km²
Area within access buffers: 15.7 km²
Share of land area covered: 87.2%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Pasig
Public Transport Access, SDG 11.2.1 Approximation



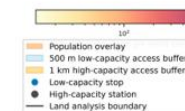
Summary

Population summary
Total population: 841,043
Population with convenient access: 652,644
Population without convenient access: 188,400
Share with convenient access: 77.6%

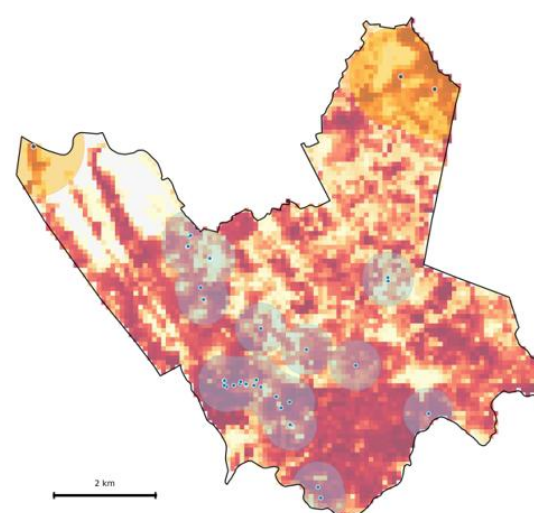
Public transport features
Low-capacity stops, 500 m: 116
High-capacity stations, 1 km: 13

Geospatial summary
Land boundary area: 30.7 km²
Area within access buffers: 23.3 km²
Share of land area covered: 75.9%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Valenzuela
Public Transport Access, SDG 11.2.1 Approximation



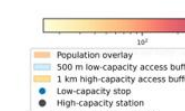
Summary

Population summary
Total population: 778,050
Population with convenient access: 278,812
Population without convenient access: 499,238
Share with convenient access: 35.8%

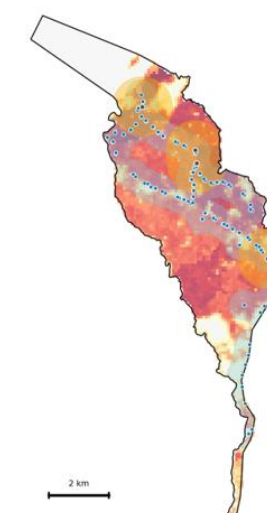
Public transport features
Low-capacity stops, 500 m: 34
High-capacity stations, 1 km: 3

Geospatial summary
Land boundary area: 46.8 km²
Area within access buffers: 13.9 km²
Share of land area covered: 29.6%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Las Piñas
Public Transport Access, SDG 11.2.1 Approximation



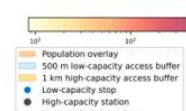
Summary

Population summary
Total population: 664,543
Population with convenient access: 451,716
Population without convenient access: 212,826
Share with convenient access: 68.0%

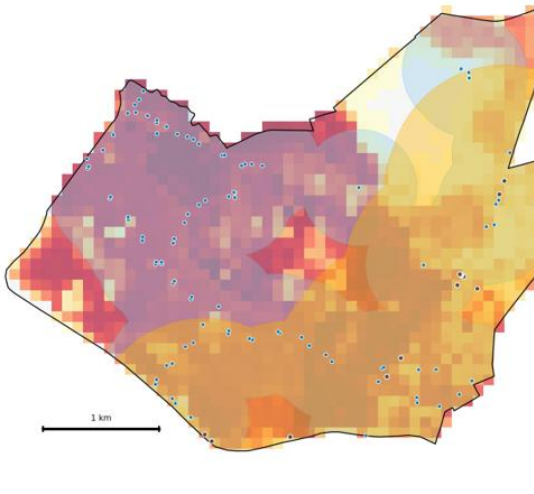
Public transport features
Low-capacity stops, 500 m: 120
High-capacity stations, 1 km: 4

Geospatial summary
Land boundary area: 38.3 km²
Area within access buffers: 20.3 km²
Share of land area covered: 53.1%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Mandaluyong
Public Transport Access, SDG 11.2.1 Approximation



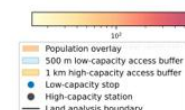
Summary

Population summary
Total population: 401,490
Population with convenient access: 378,467
Population without convenient access: 23,023
Share with convenient access: 94.3%

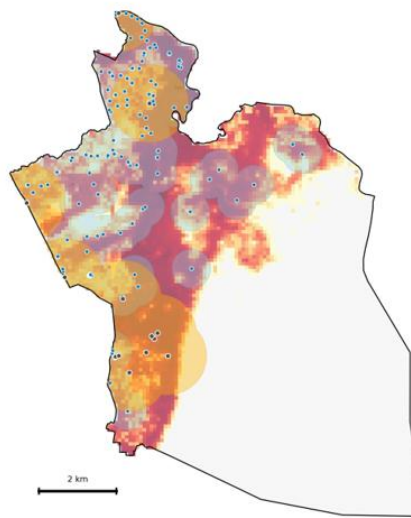
Public transport features
Low-capacity stops, 500 m: 95
High-capacity stations, 1 km: 13

Geospatial summary
Land boundary area: 11.3 km²
Area within access buffers: 10.0 km²
Share of land area covered: 88.6%

Method note
Straight-line buffer approximation,
not street-network walking distance.



Taguig City
Public Transport Access, SDG 11.2.1 Approximation



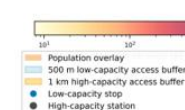
Summary

Population summary
Total population: 1,267,528
Population with convenient access: 998,996
Population without convenient access: 268,532
Share with convenient access: 78.8%

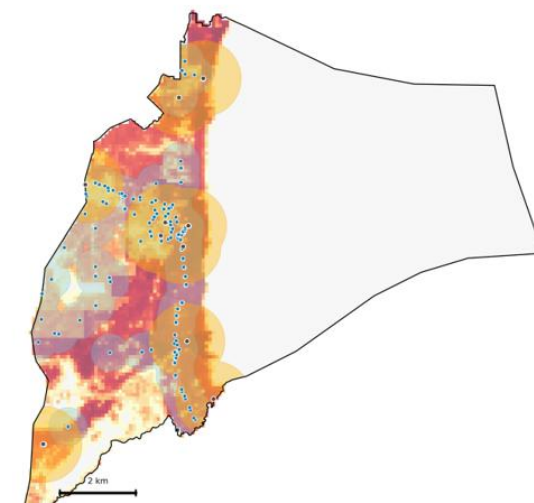
Public transport features
Low-capacity stops, 500 m: 150
High-capacity stations, 1 km: 18

Geospatial summary
Land boundary area: 79.4 km²
Area within access buffers: 29.2 km²
Share of land area covered: 36.8%

Method note
Straight-line buffer approximation,
not street-network walking distance.



City of Muntinlupa
Public Transport Access, SDG 11.2.1 Approximation



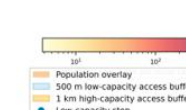
Summary

Population summary
Total population: 596,664
Population with convenient access: 462,269
Population without convenient access: 134,395
Share with convenient access: 77.5%

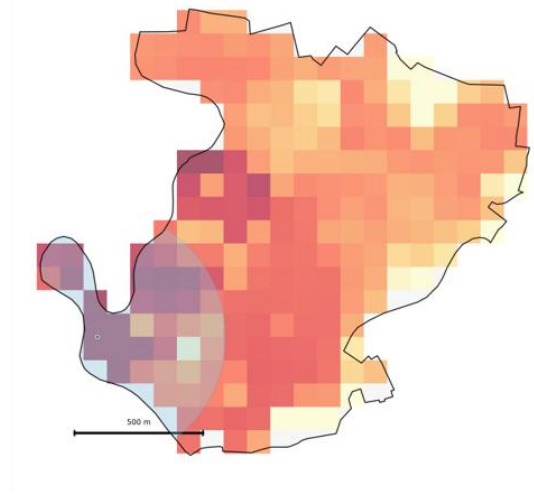
Public transport features
Low-capacity stops, 500 m: 147
High-capacity stations, 1 km: 16

Geospatial summary
Land boundary area: 91.2 km²
Area within access buffers: 28.2 km²
Share of land area covered: 30.9%

Method note
Straight-line buffer approximation,
not street-network walking distance.



Municipality of Pateros
Public Transport Access, SDG 11.2.1 Approximation



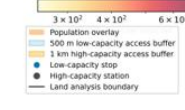
Summary

Population summary
Total population: 98,081
Population with convenient access: 24,204
Population without convenient access: 73,877
Share with convenient access: 24.7%

Public transport features
Low-capacity stops, 500 m: 1
High-capacity stations, 1 km: 0

Geospatial summary
Land boundary area: 1.8 km²
Area within access buffers: 0.3 km²
Share of land area covered: 17.1%

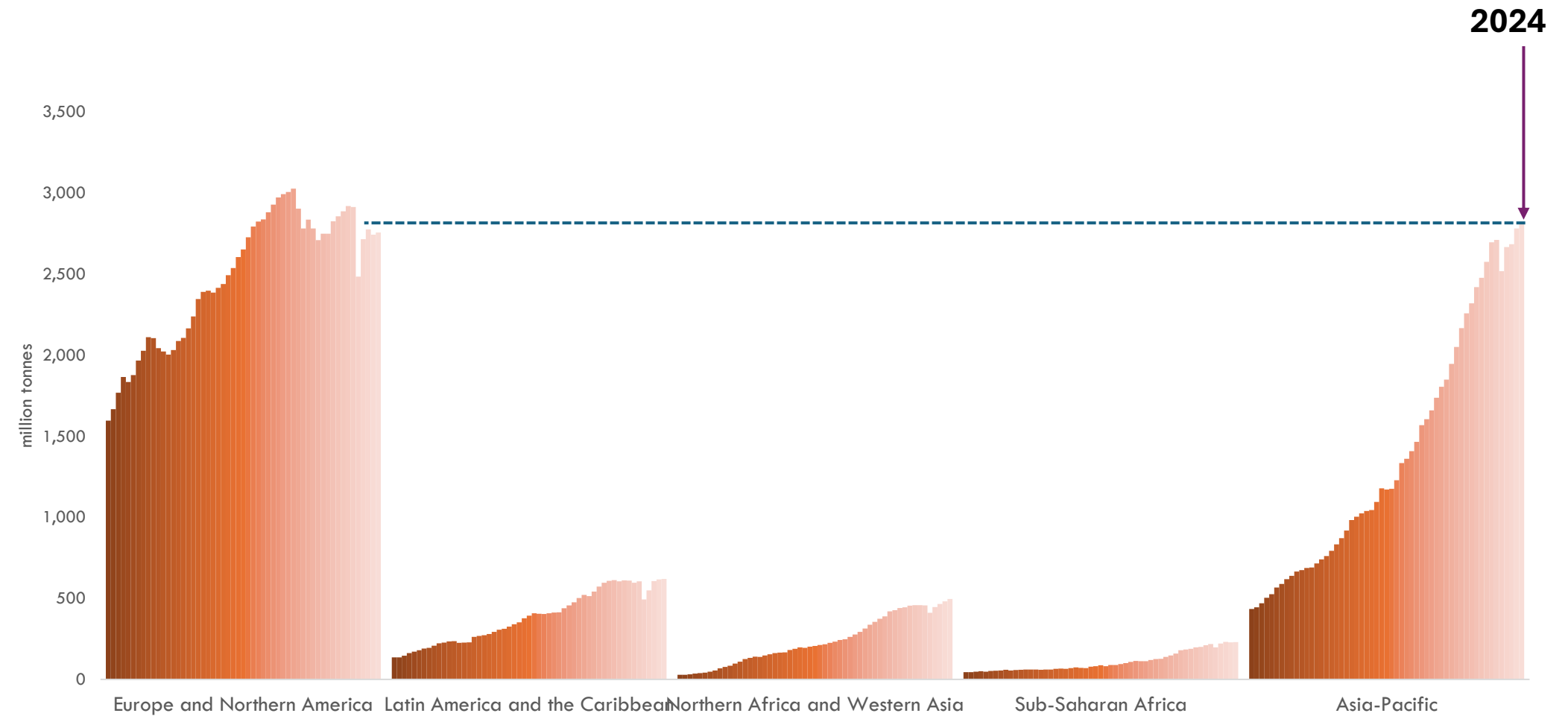
Method note
Straight-line buffer approximation,
not street-network walking distance.



**2. Advance low-carbon,
resilient and
environmentally sound
transport systems**

Transport GHG Emissions

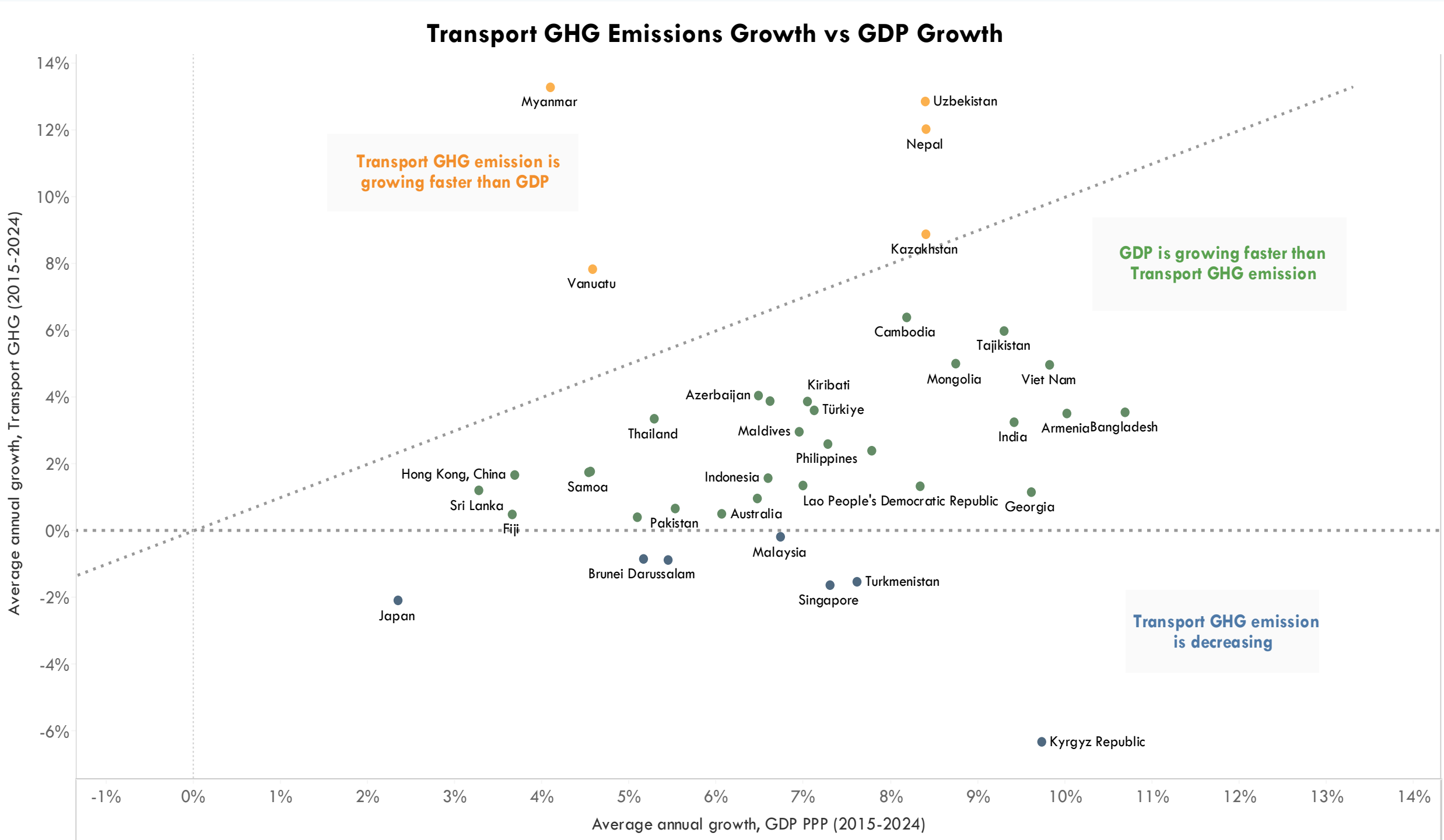
Asia and the Pacific's domestic transport GHG emissions **has exceeded (2.8 billion)** the combined emissions of Europe and North America



Source: ATO visualization based on data from EU JRC (2025)



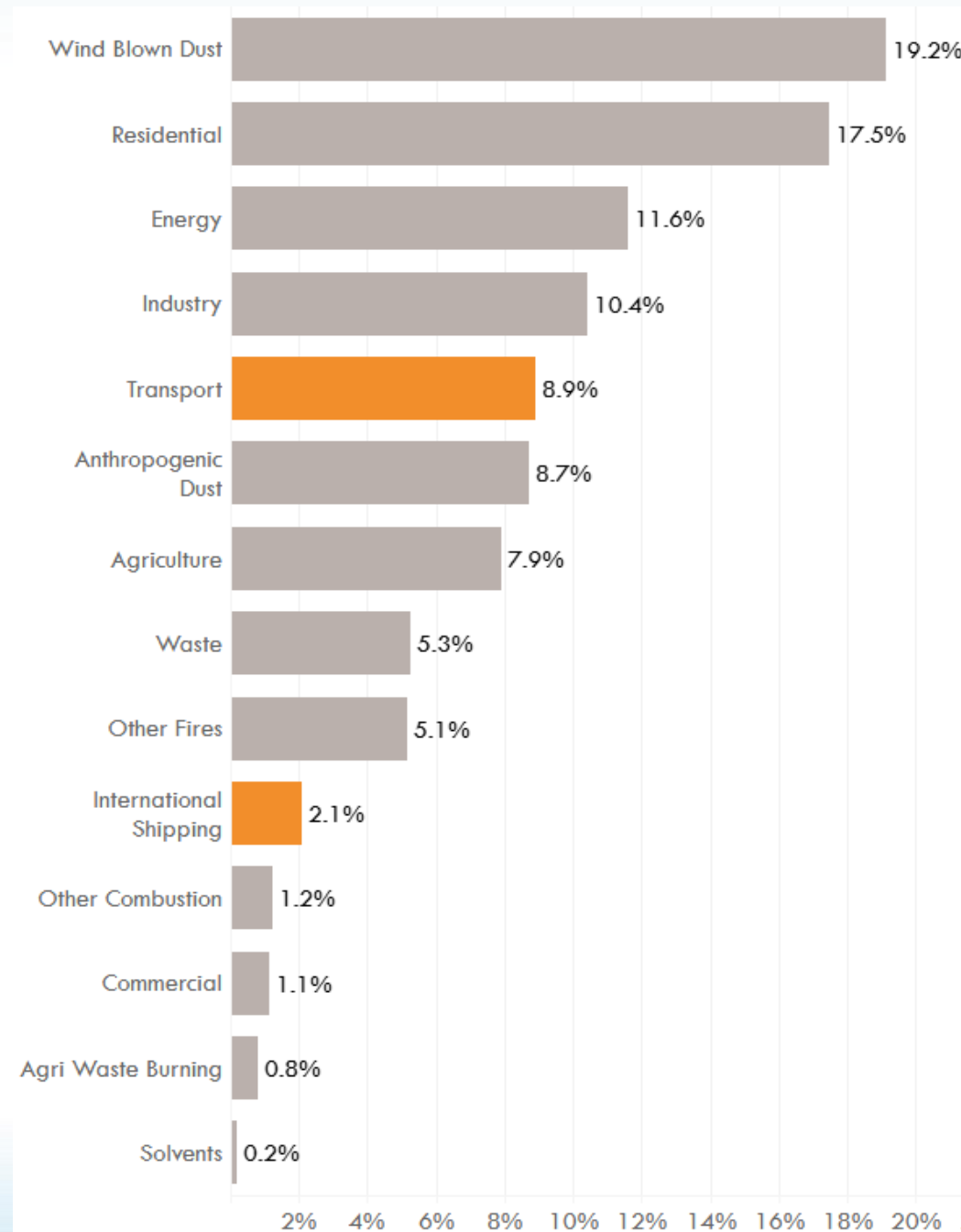
Growth and Decoupling



Source: EDGAR. (2025). GHG emissions of all world countries: 2025. Publications Office. <https://data.europa.eu/doi/10.2760/9816914>



Transport and Air Pollution Loading and Impacts



Transport share in ambient PM2.5 Concentration

Source: ATO visualization based on State of Global Air (2025)

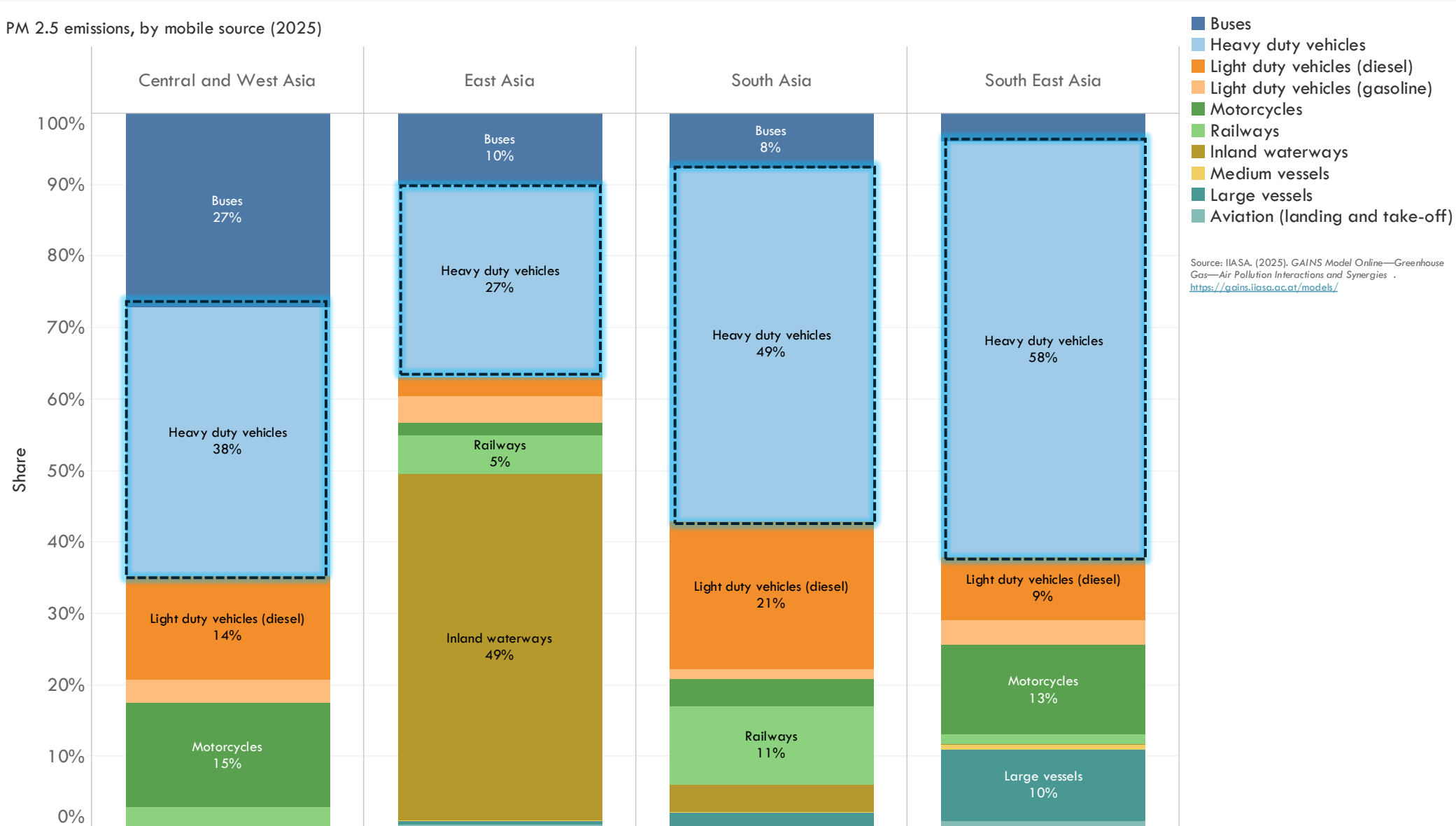
The estimated health impacts associated with exposure to ambient PM2.5 resulted in monetary losses equivalent to 4.7% to 6.5% of global GDP in 2020.

Asia accounts for 70% of the global transport sector's financial penalties (World Bank, 2025)



Road Transport Air Pollution – By Vehicle Types

PM 2.5 emissions, by mobile source (2025)

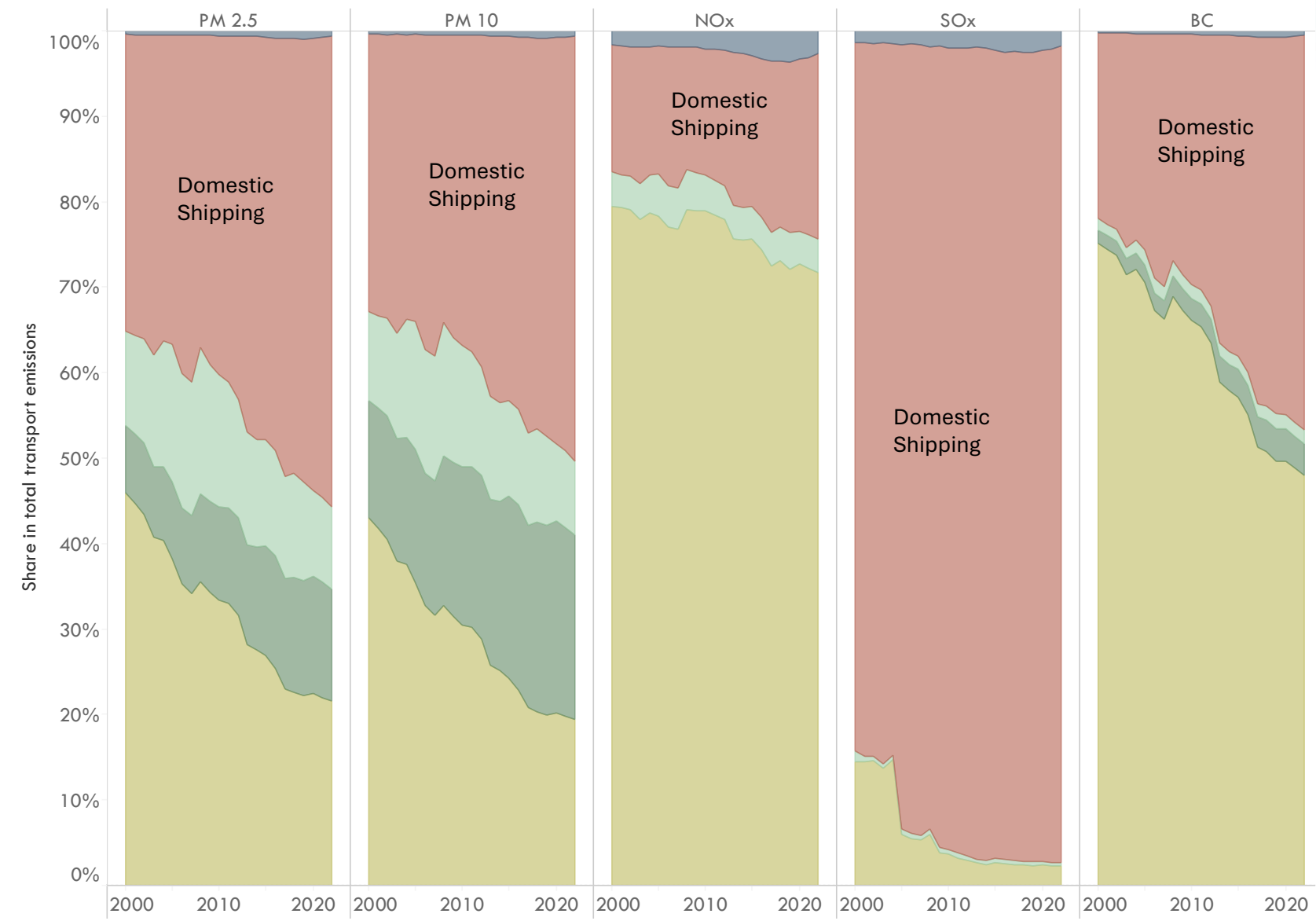


Source: IIASA, (2025). GAINS Model Online—Greenhouse Gas—Air Pollution Interactions and Synergies . <https://gains.iiasa.ac.at/model/>

Although HDVs are estimated to account for only 7% of all vehicle registrations in the region, they are responsible for a disproportionately large share of emissions, producing about 57% of PM2.5 and 64% of NO_x emissions



Transport air pollutant emissions, share by mode



Domestic shipping has become a major and largely unregulated source of air pollution in Asia-Pacific.

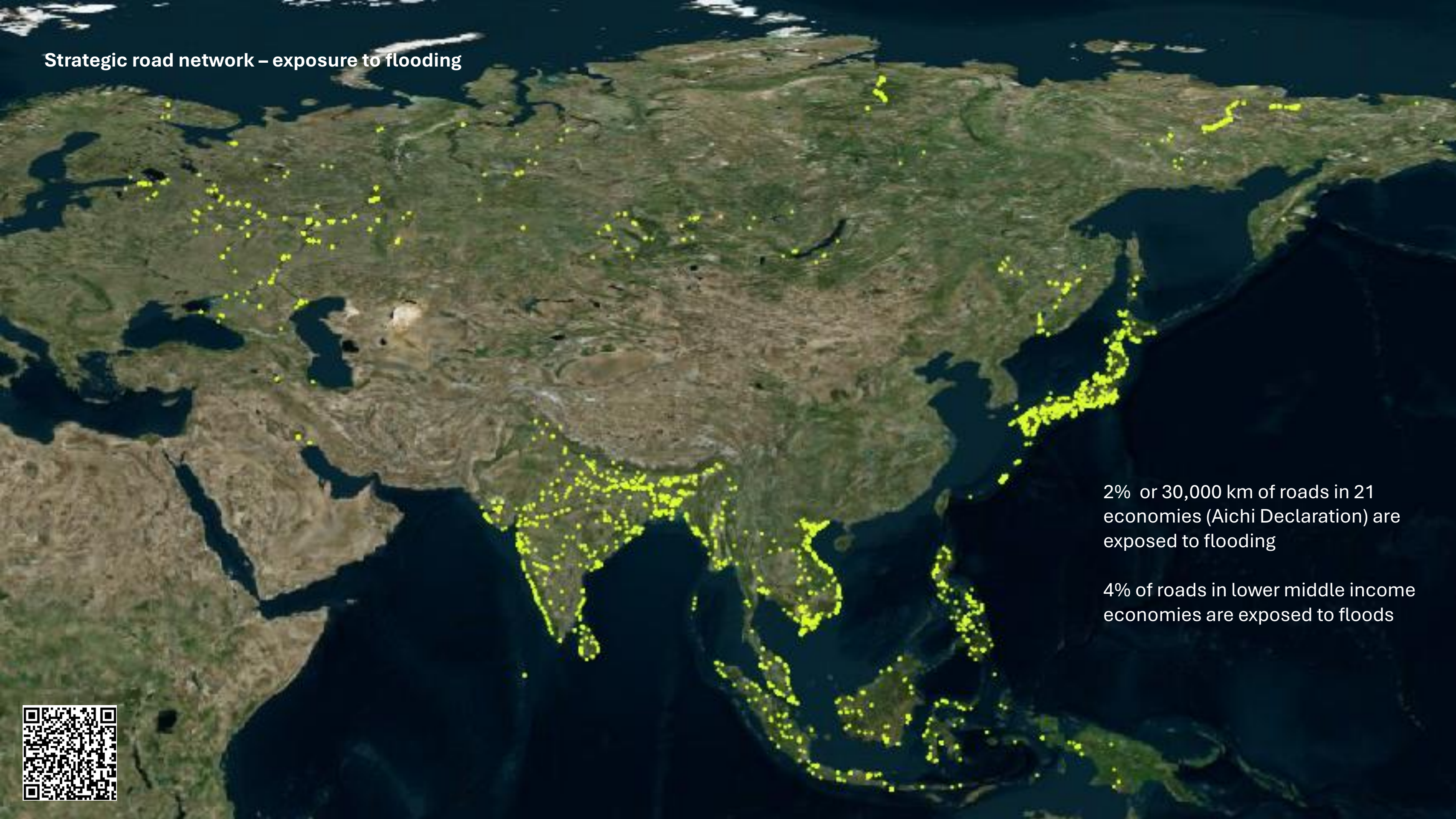
Since 2000, estimated emissions from domestic shipping have grown by about 3% annually for PM_{2.5} and black carbon and 2.5% for NO_x and SO_x. It constitutes: 95% of SO_x, 55% of PM_{2.5} and 46% of black carbon transport emissions of the region.

- Mode
- Domestic aviation
 - Domestic navigation
 - Rail
 - Dust from exhaust, brake and tyre-wear
 - Road

Source: European Commission, (2024). Global Air Pollutant Emissions EDGAR v8.1 [Dataset]. https://edgar.jrc.ec.europa.eu/dataset_ap61#sources



Strategic road network – exposure to flooding



2% or 30,000 km of roads in 21 economies (Aichi Declaration) are exposed to flooding

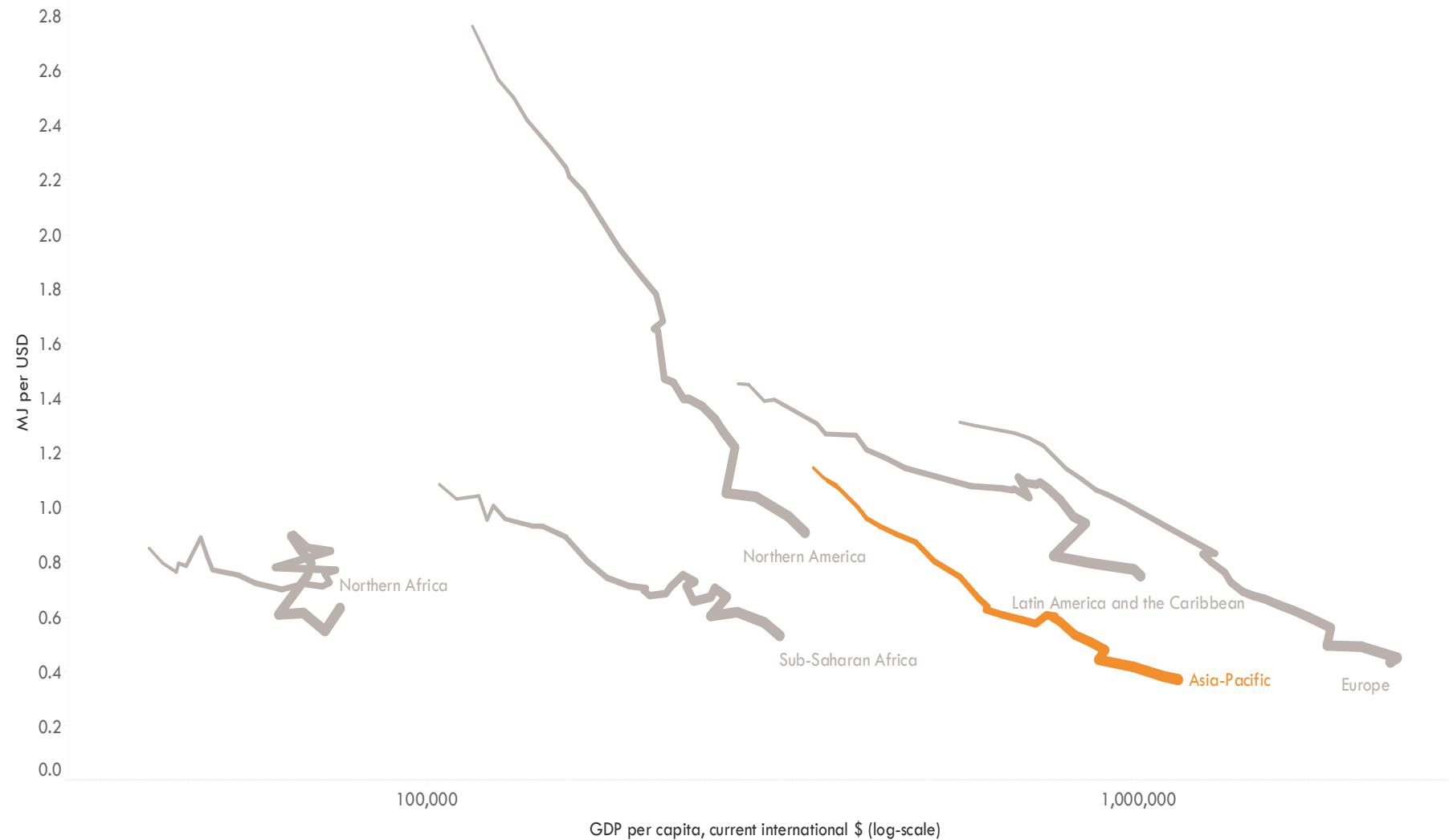
4% of roads in lower middle income economies are exposed to floods



**3. Enhance efficiency and
promote sustainable
connectivity and logistics**

Transport Energy Intensity

Transport Energy Intensity and GDP (1995-2023)



Source: UNSD. (2026). UNSD -- Energy Balance - <https://unstats.un.org/unsd/energy/dataPortal/>

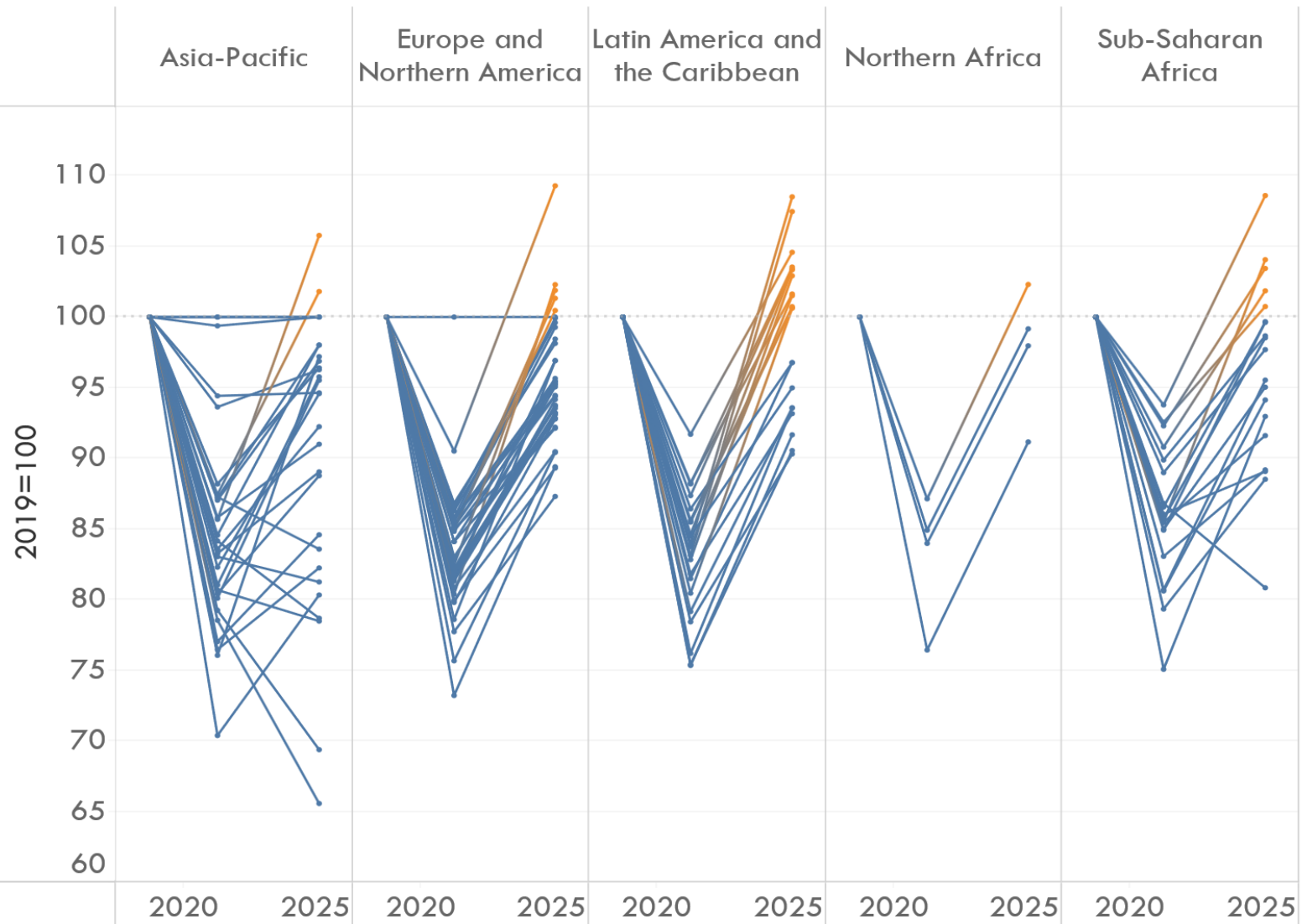
Asia-Pacific is generating economic value with less transport energy.

The Asian region has decreased the energy consumption per GDP from around 1.1 MJ per USD in the mid-1990s to below 0.4 MJ per USD by 2023.

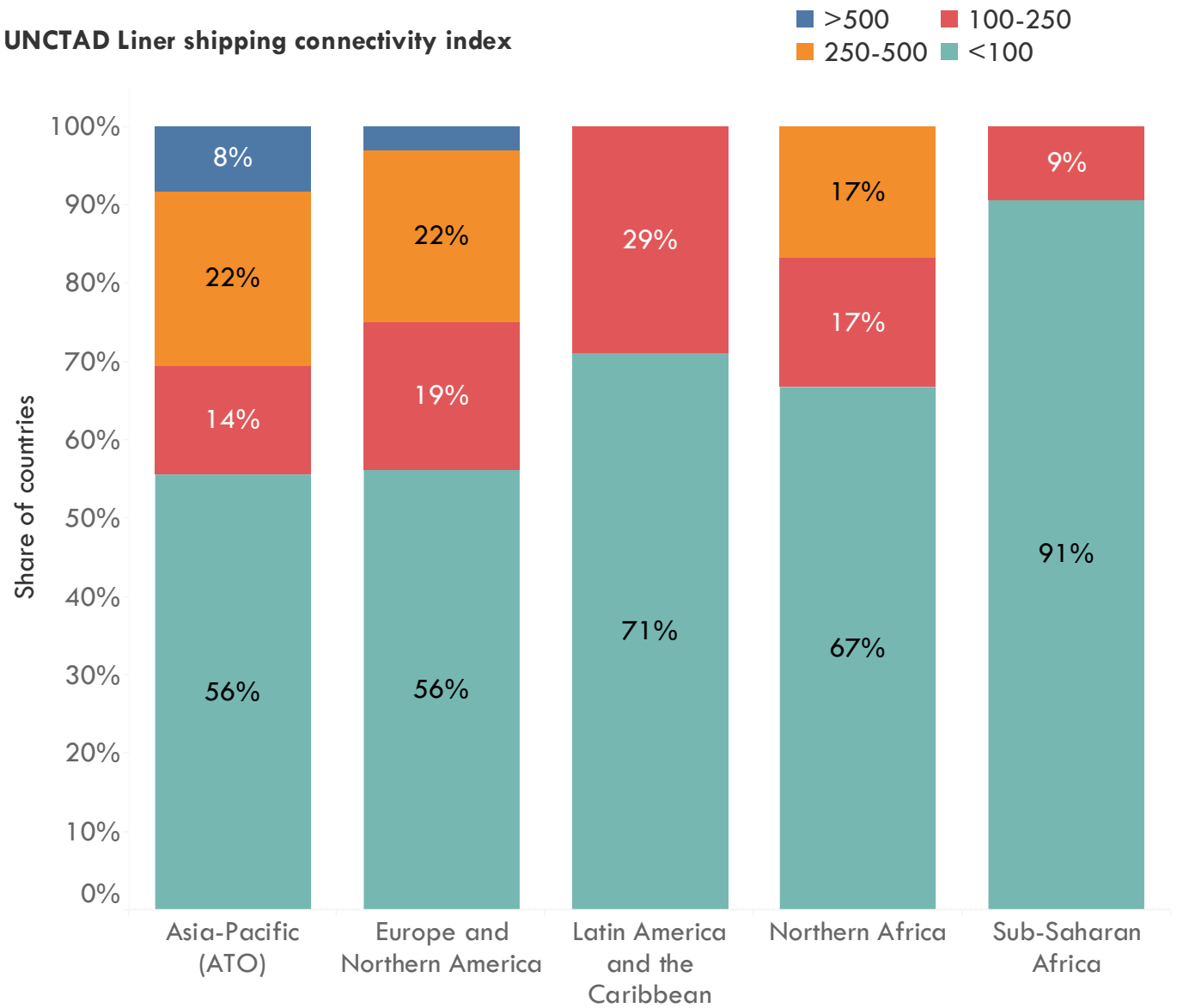


Connectivity Scores

IATA Airport Connectivity Score (trend since 2019)



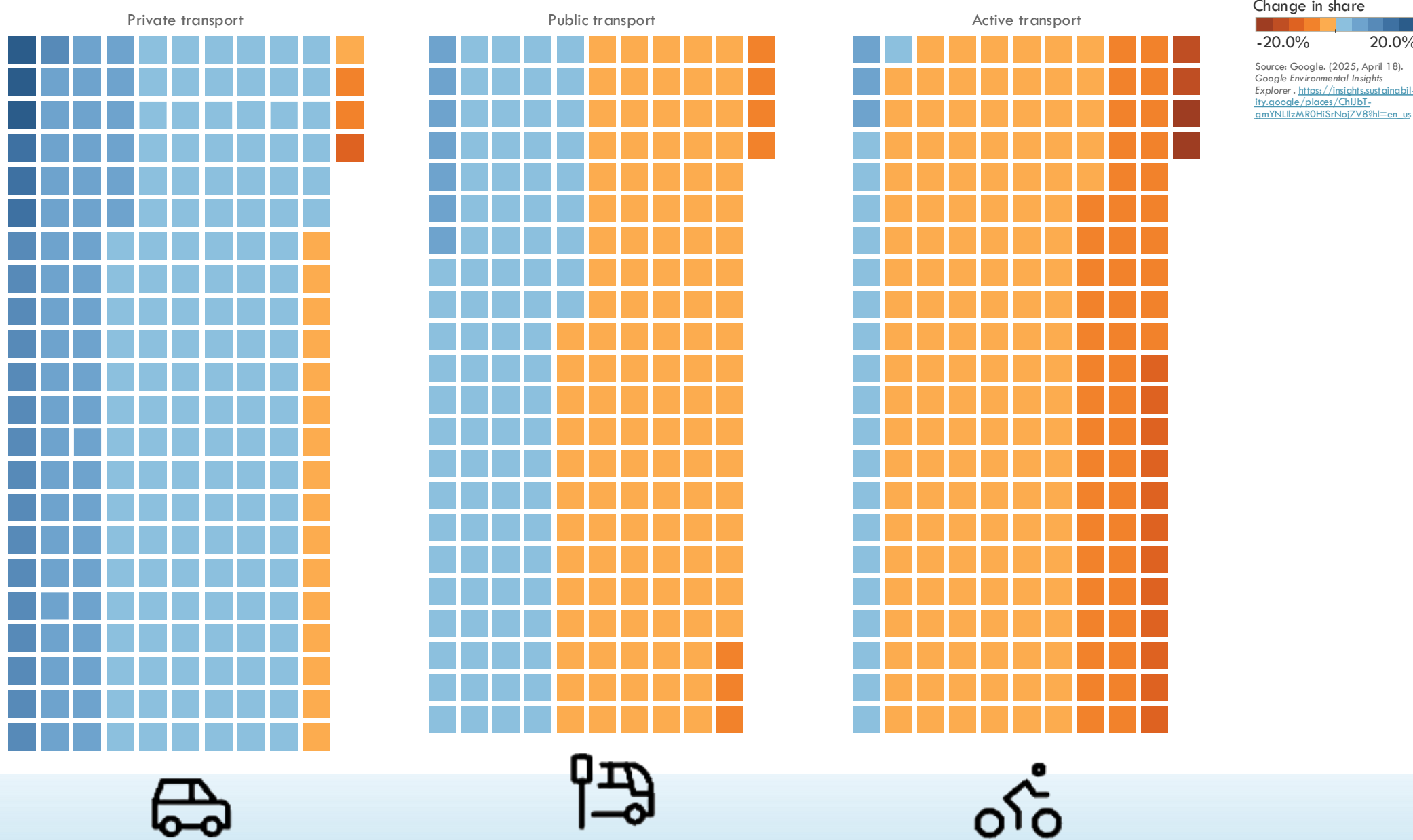
UNCTAD Liner shipping connectivity index



4. Shape people-centered urban mobility and liveable cities

Urban Mode Shares

Urban Transport Mode Shares (2018 – 2023)

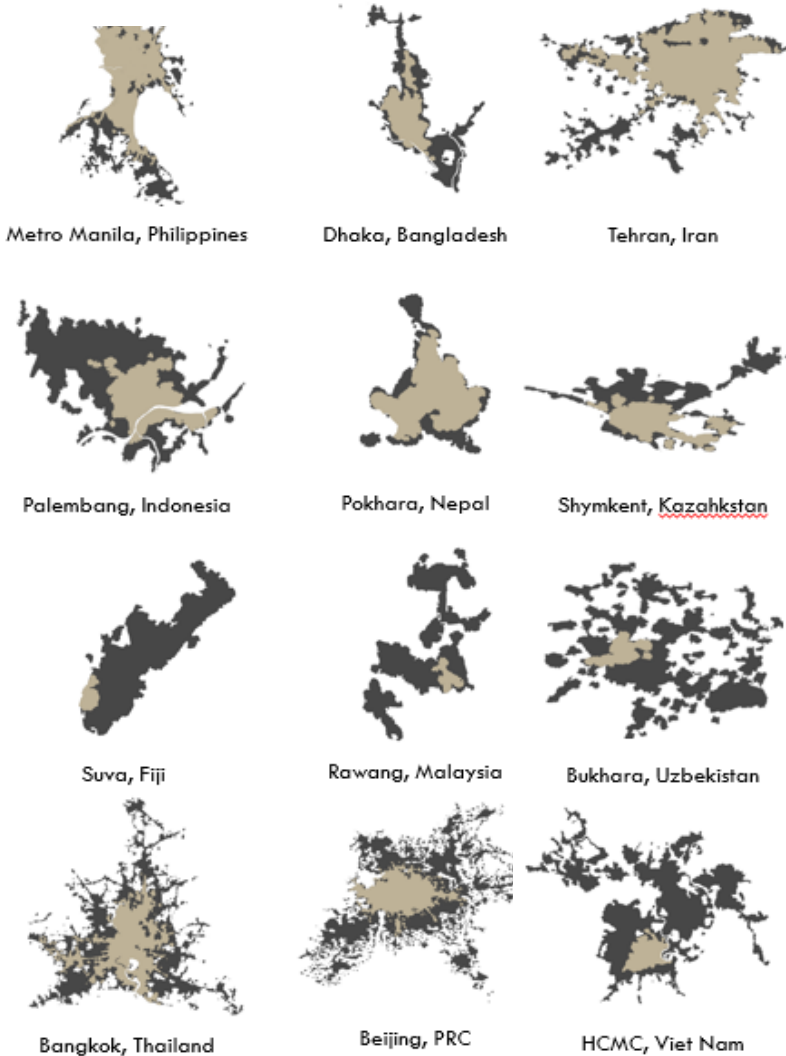
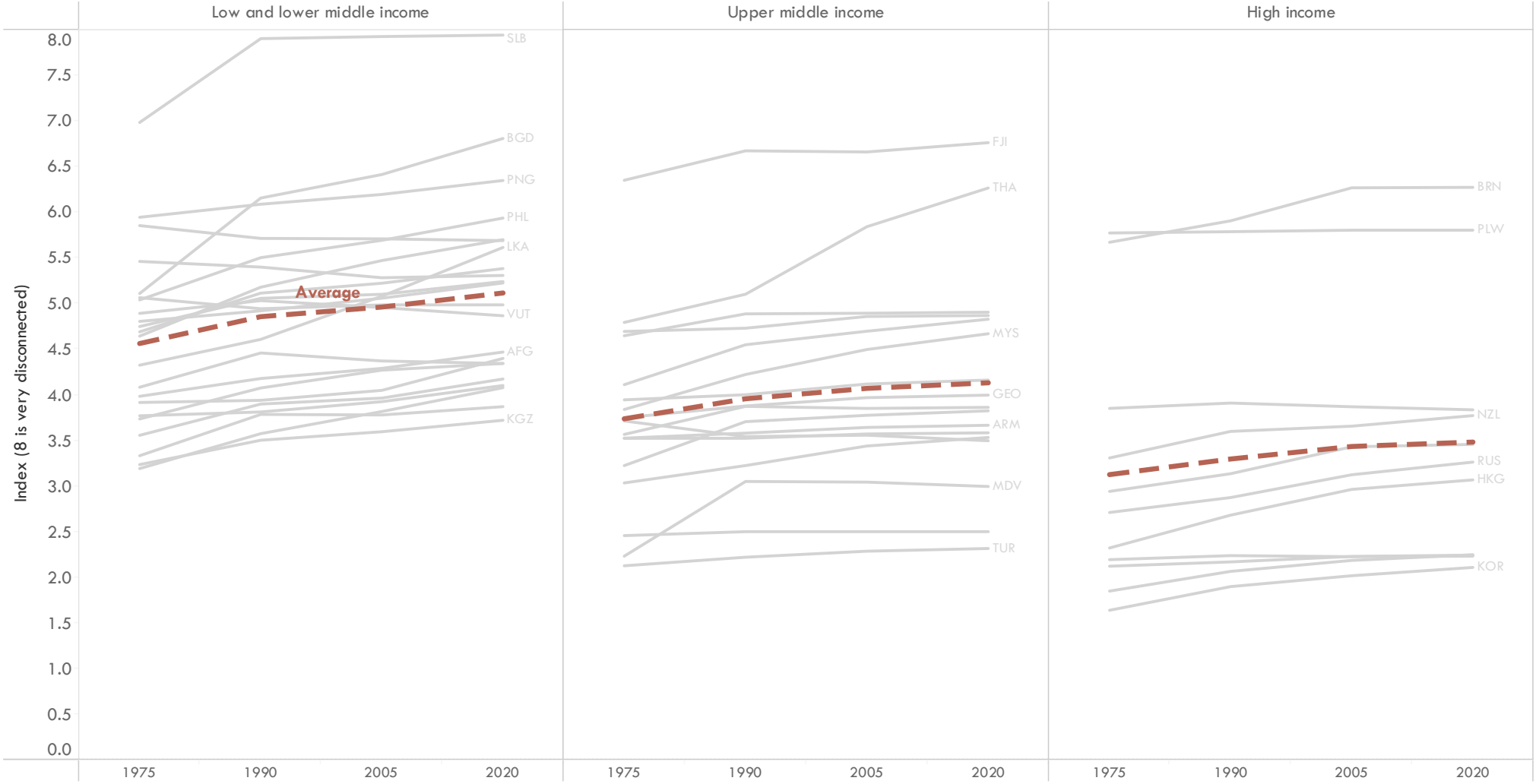


These patterns suggest a broad shift towards private transport and away from active transport.

Across the cities shown, private transport gained ground in 91% of cities, while active transport lost share in 90%. Public transport showed a more mixed pattern, but still declined in more cities than it increased.

Urban Sprawl and Disconnectedness

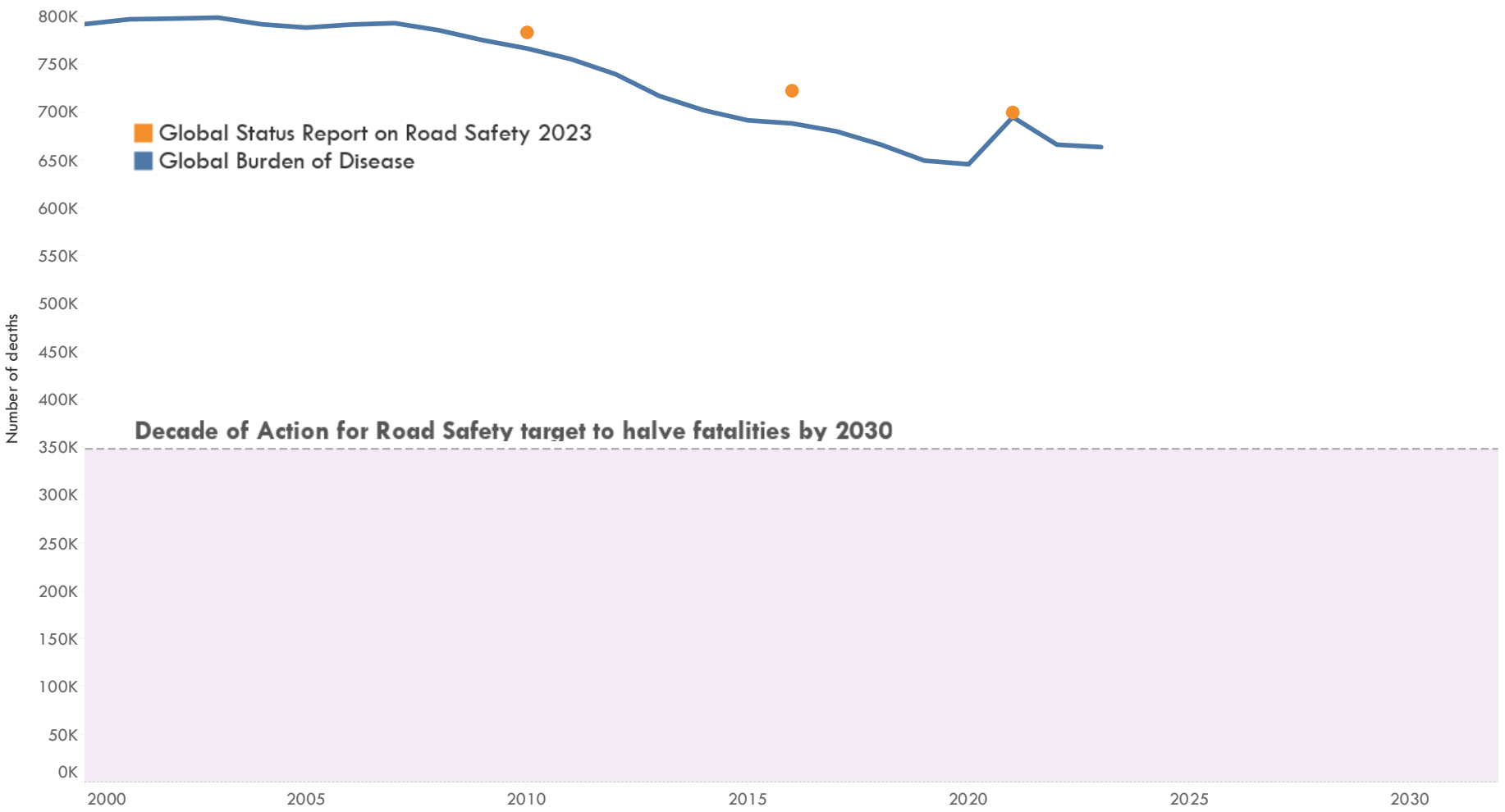
Street Network Disconnectedness Index



Source: Barrington-Leigh, C., & Millard-Ball, A. (2025, April 18). Global trends toward urban street-network sprawl. <https://www.pnas.org/doi/10.1073/pnas.1905232116>

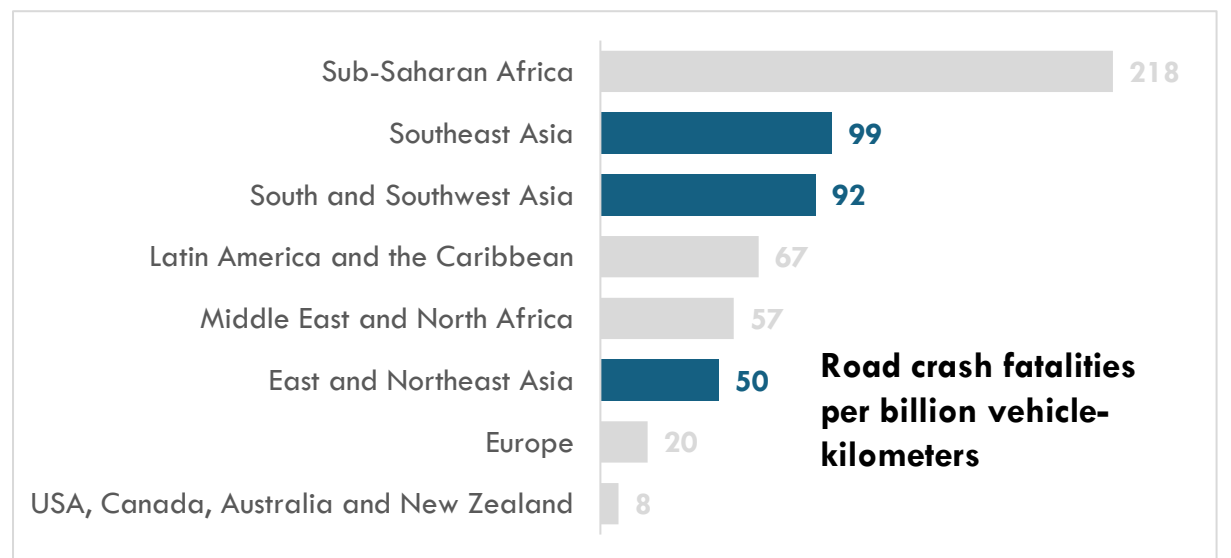
5. Make Transport Safe and Secure

Road Safety



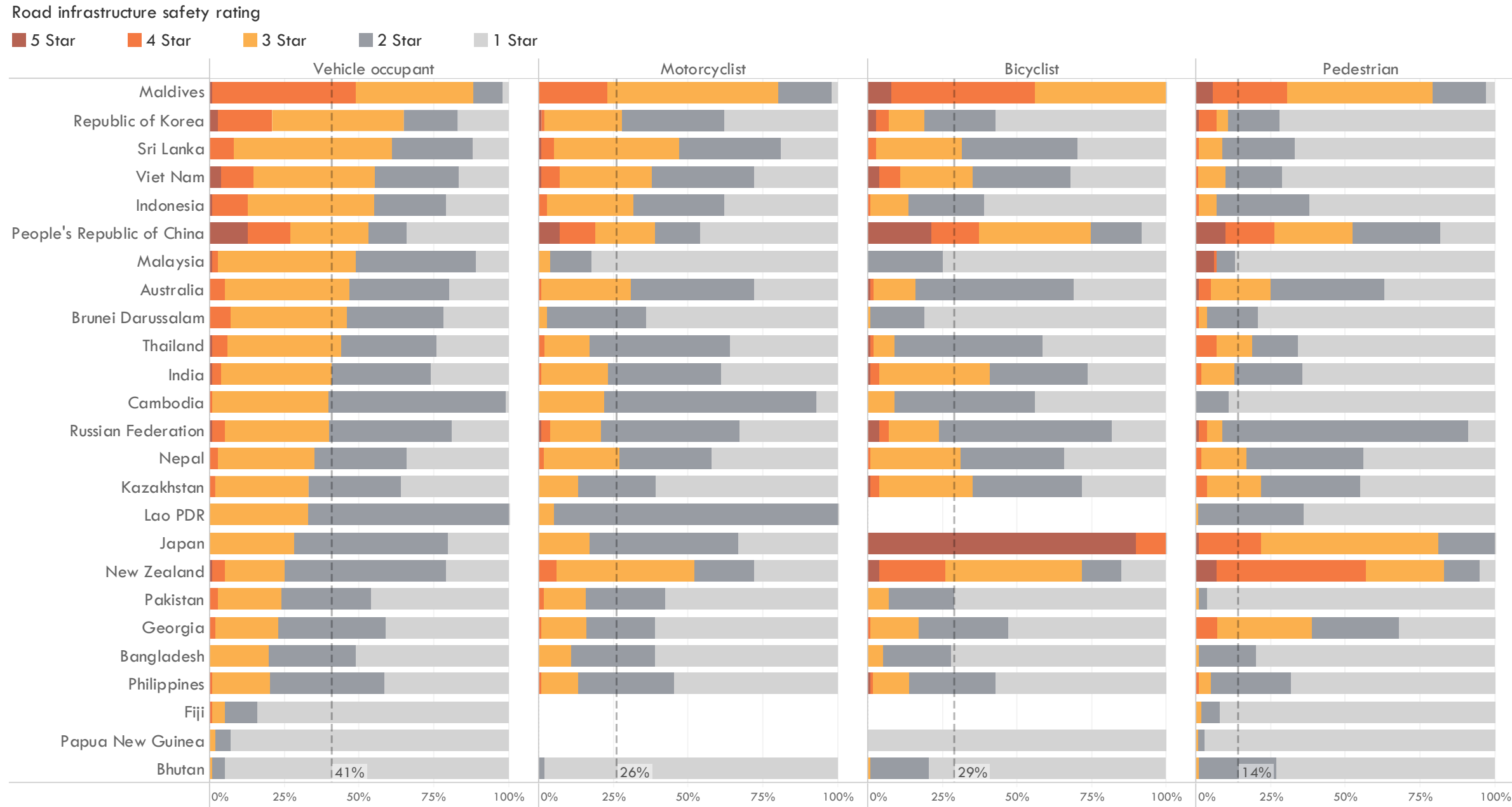
700 thousand, or ~60% of the global 1.1 million road fatalities in 2021 occurred in Asia and the Pacific (WHO 2023).

The region is off the trajectory needed to achieve the 2030 global road safety target



Own visualization based on data from Centre for Research on the Epidemiology of Disasters (2025).

Infrastructure Safety Ratings



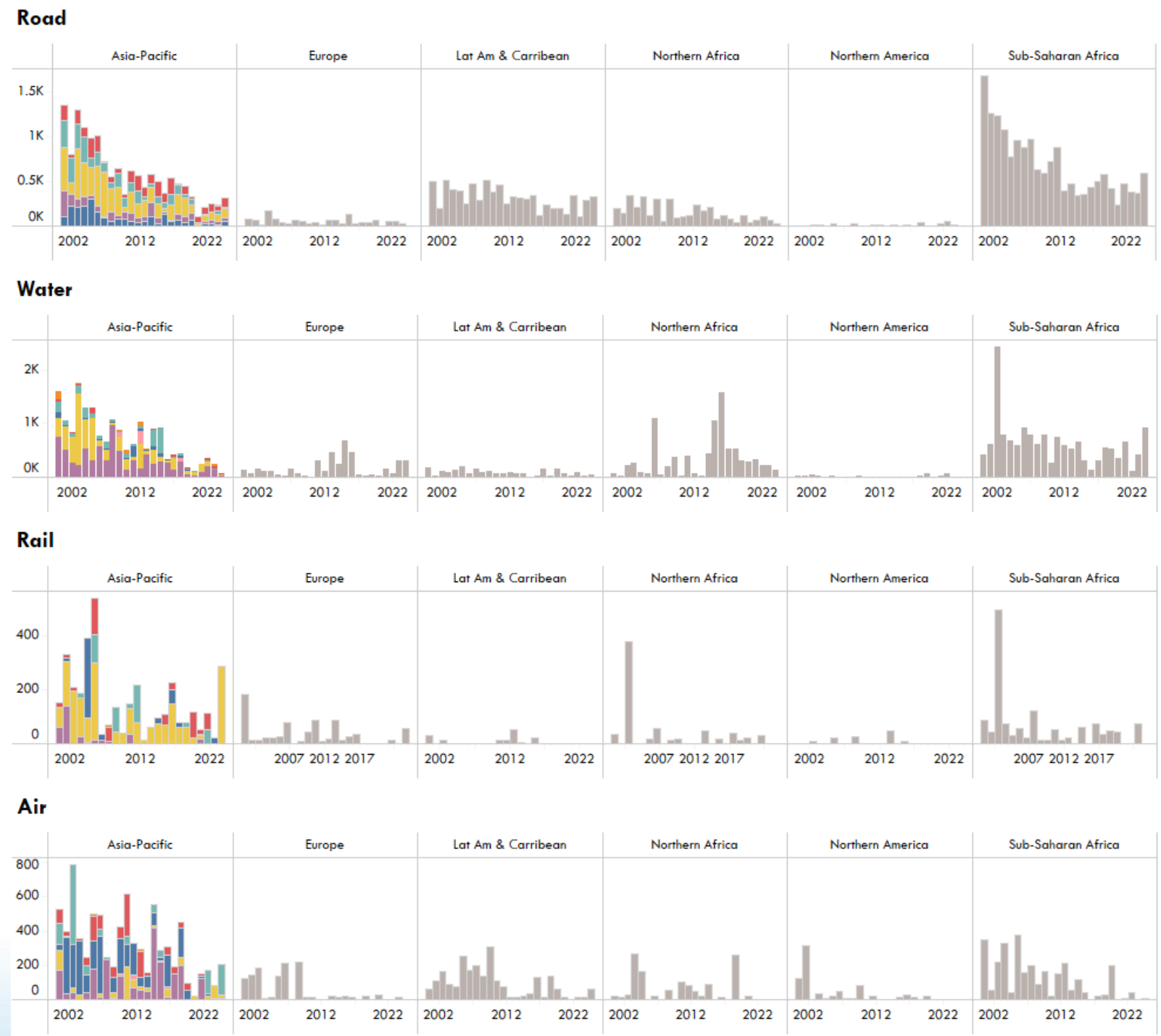
Source: IRAP. (2026). Safety Insights Explorer—IRAP . <https://irap.org/safety-insights-explorer/>



Transport-related Disasters

Since the turn of the century, there have been more than 4,000 transport-related disasters, with a third of these occurring in the Asia-Pacific (29% of road, 32% of water, 44% of air, and 49% of rail-related disasters).

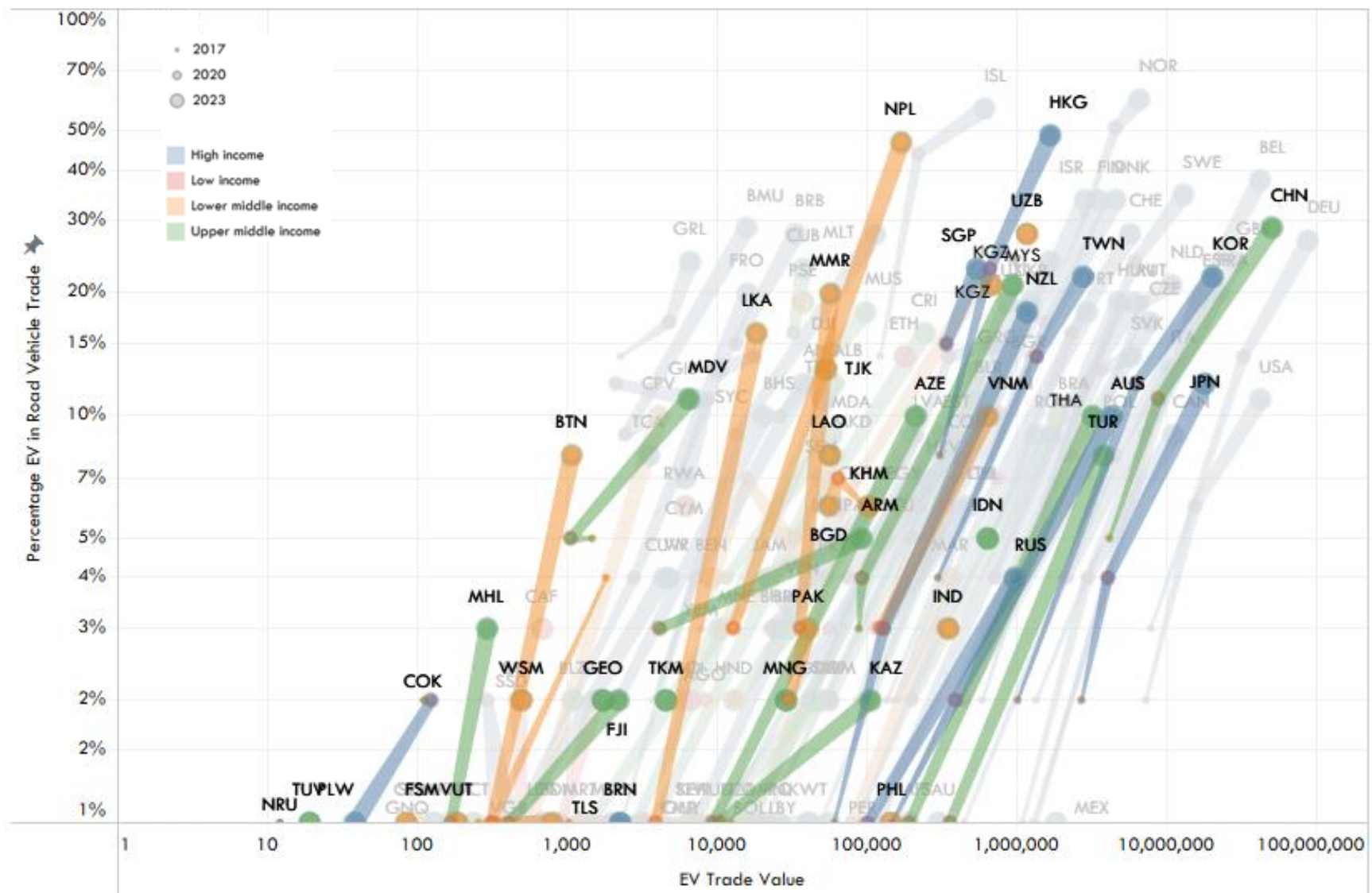
On the bright side, overall disaster-related transport fatalities have reduced significantly.



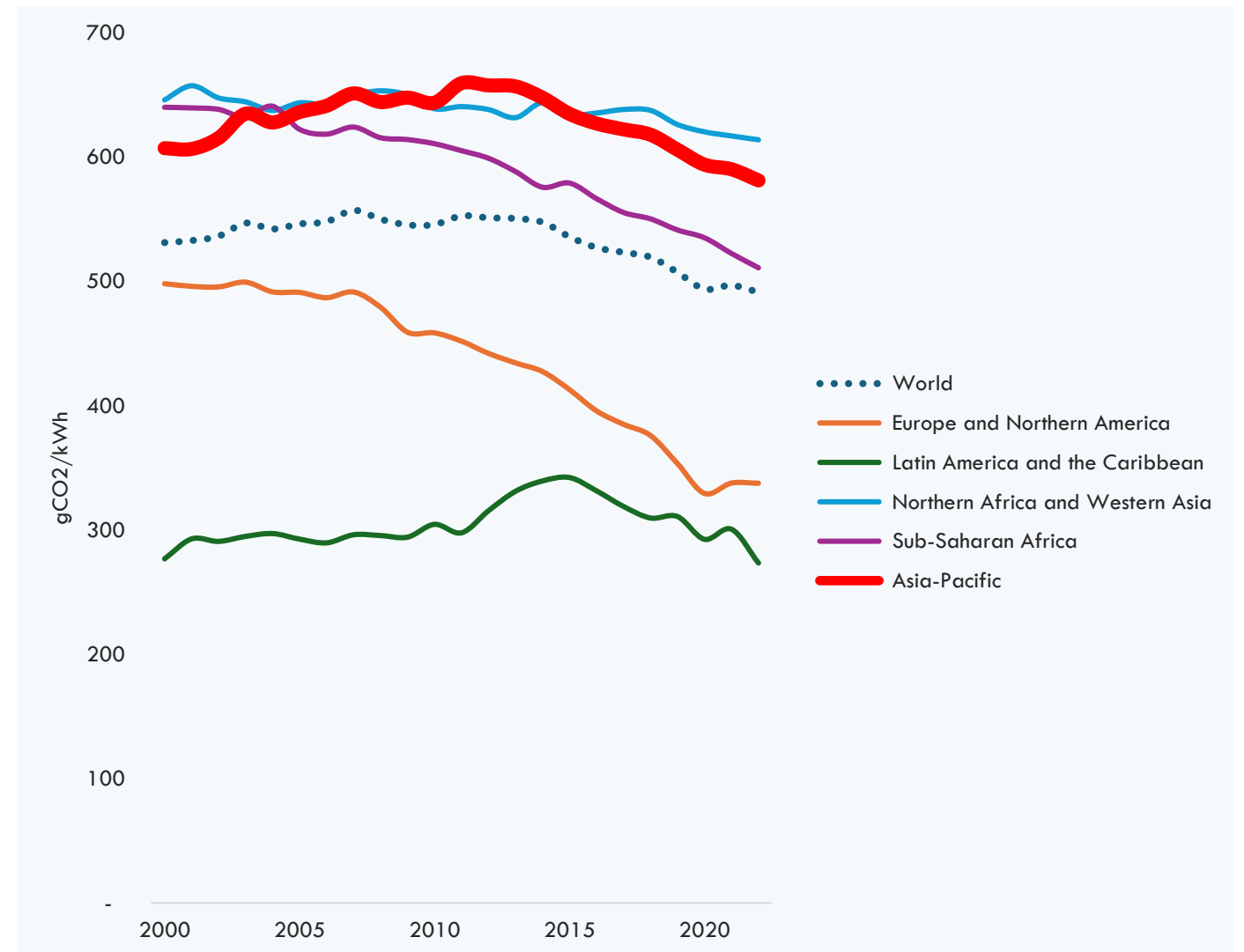
6. Leveraging on Science, Technology and Innovation

E-mobility Transition

EV Trade Volume and % Share in Total Road Vehicle Trade Volume

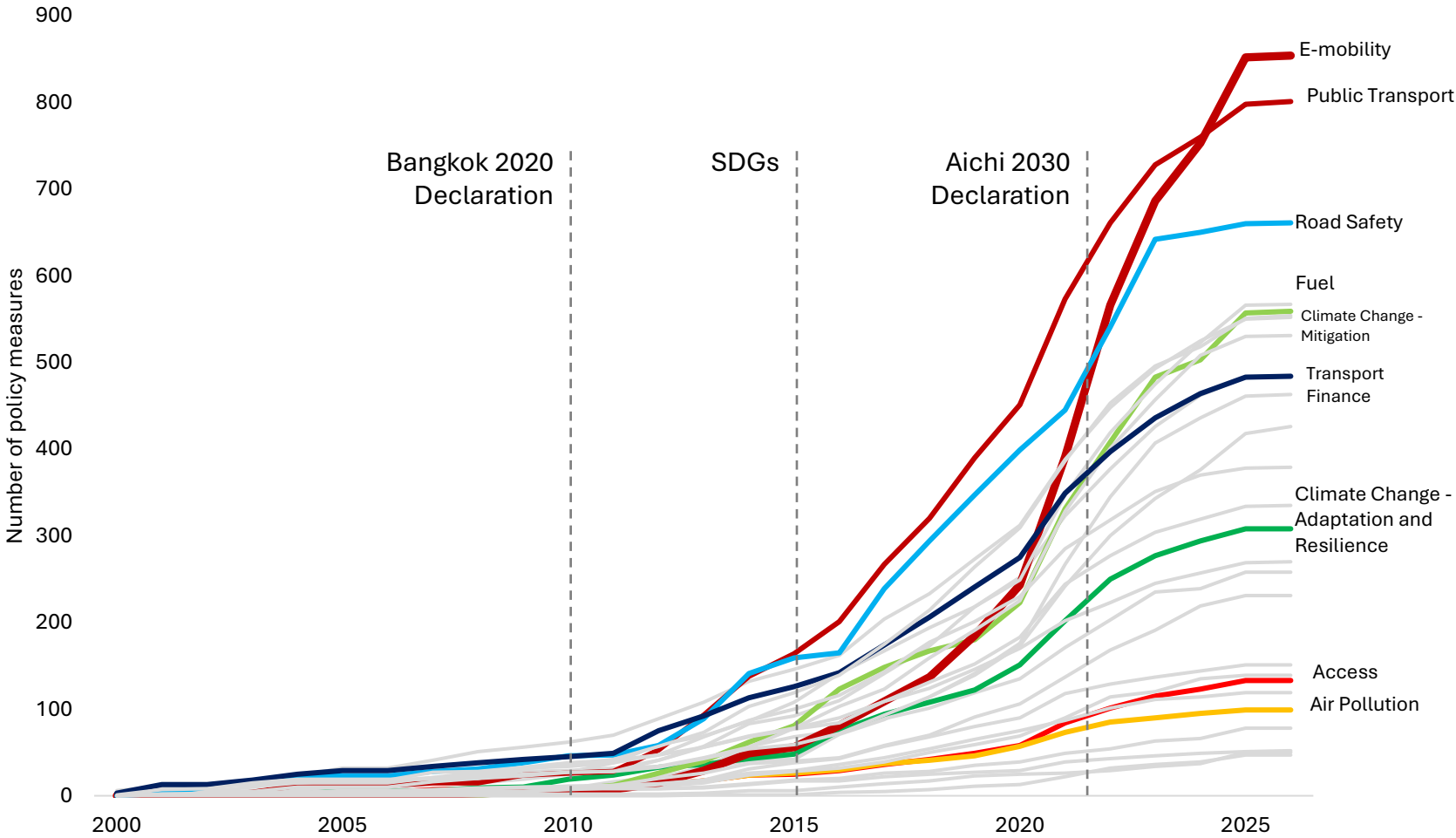


Grid Emission Factor

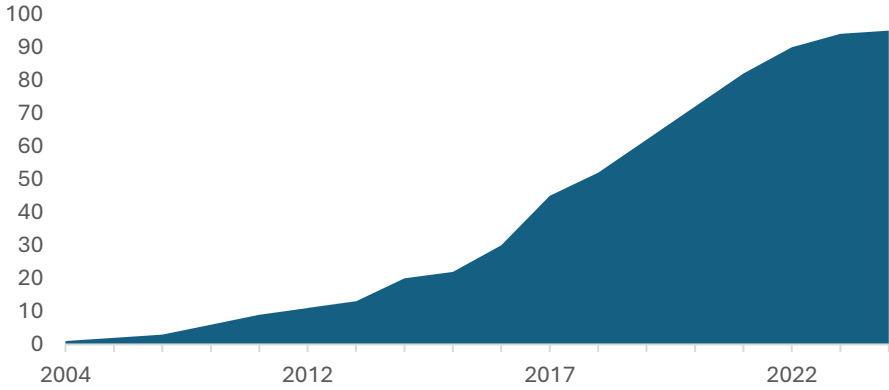


Policy Landscape – Science, Technology and Innovation

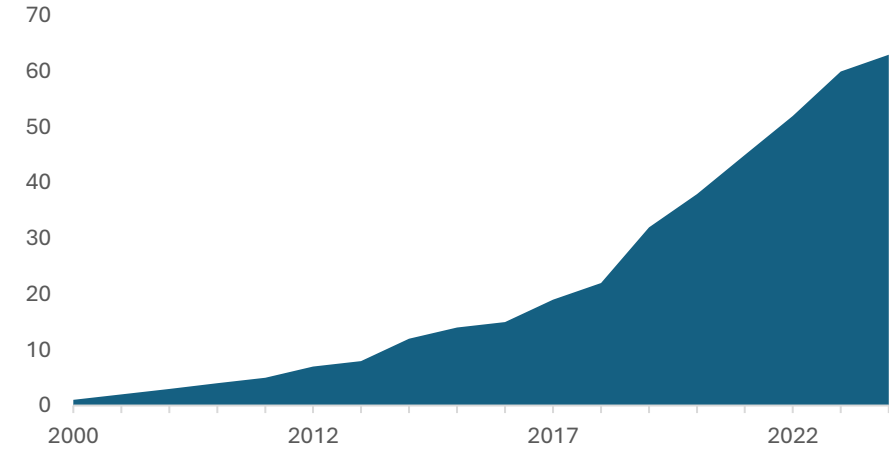
Transport policy measures from EST participating countries, cumulative



Cumulative Measures "Tech and Knowledge Transfer"



Cumulative Measures "Digitalization"



Magnitude of Investments Needed

Transport Infrastructure Investment in LMICs per Subregion (2025-2035)

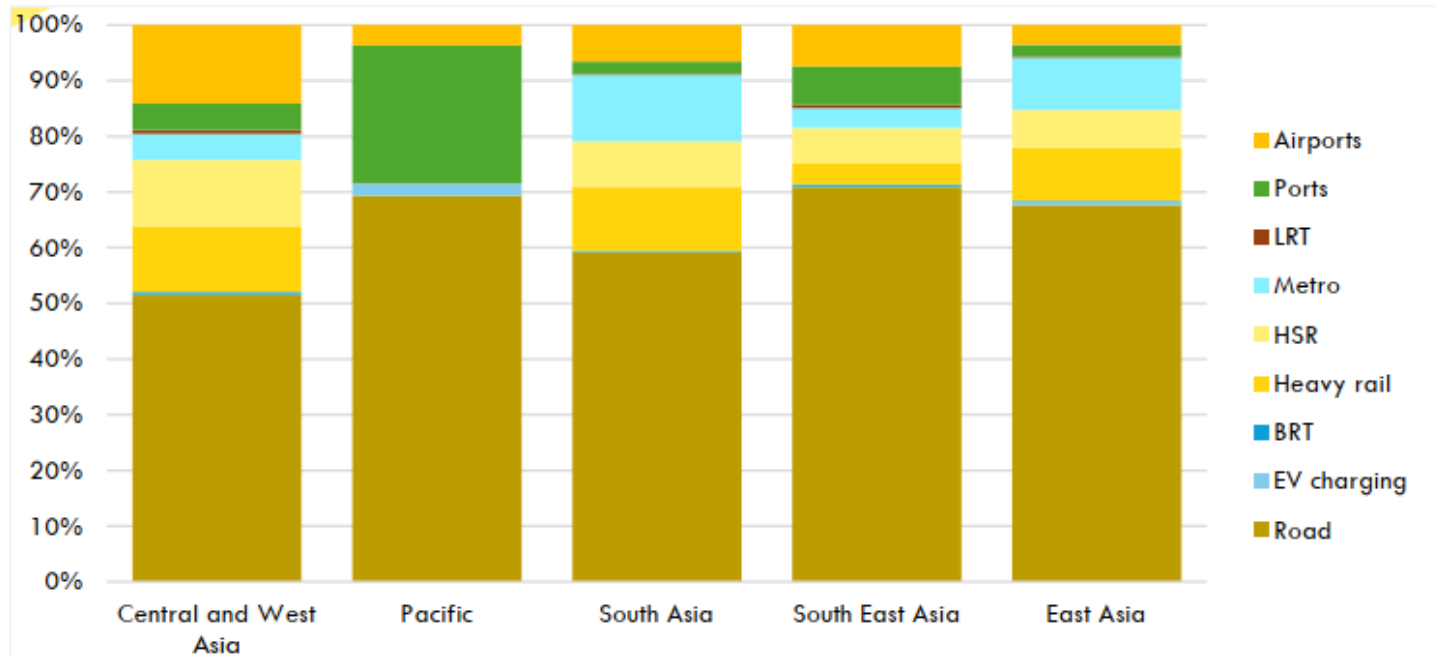
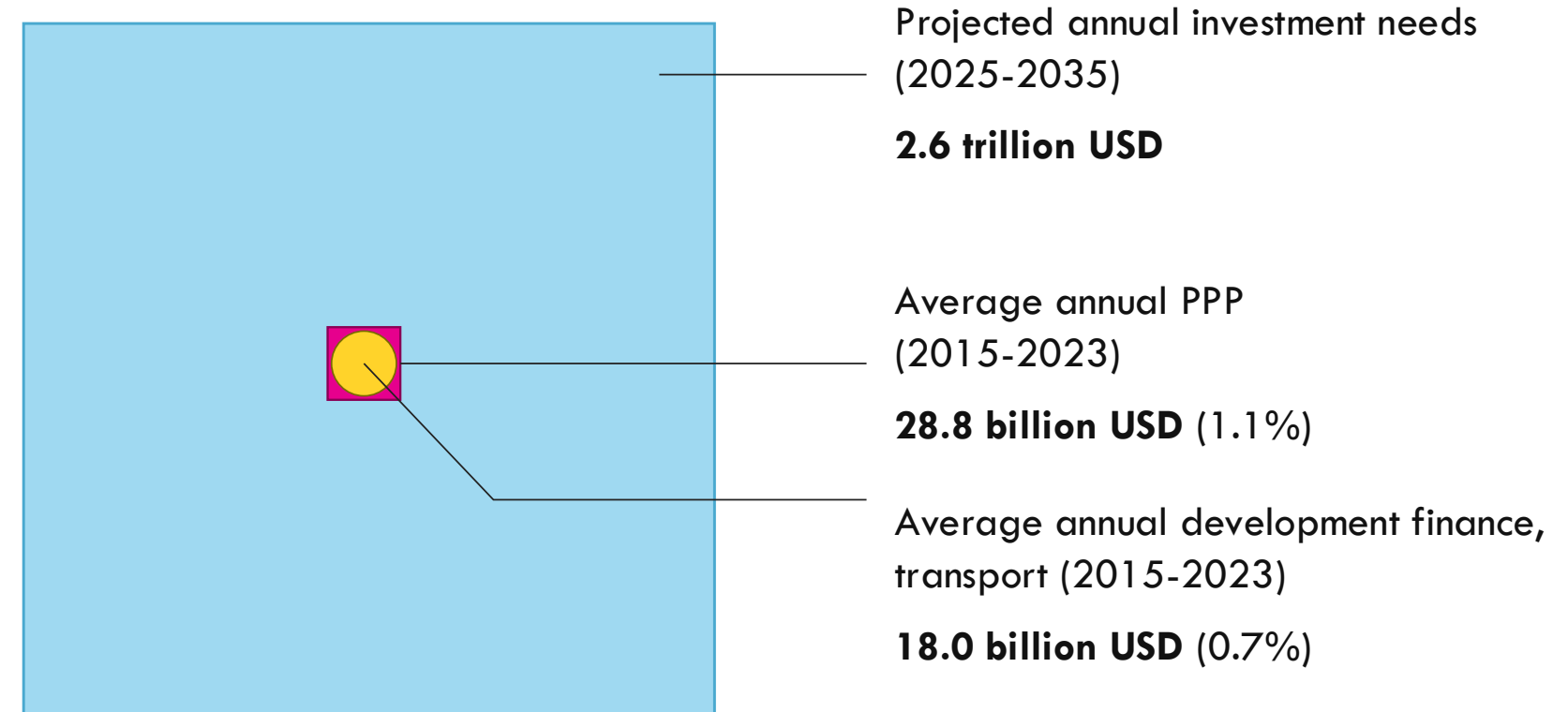


Figure 18. Transport infrastructure investment in LMIC per subregion between 2025 to 2035 (%)



Source: ATO estimates



US\$ 2.6 trillion investments, equivalent to roughly 2% of GDP needed up to 2035 in Asian LMICs for transport



UN Decade Country Dashboards

PALAU
COUNTRY DASHBOARD

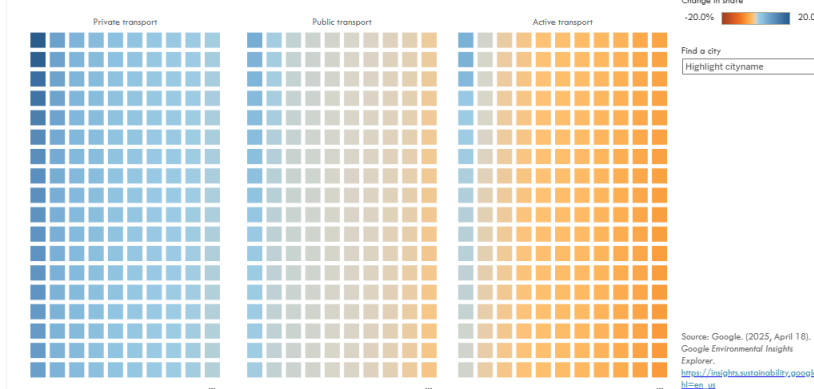
Ensure access to sustainable transport for all Advance low- or zero-carbon, resilient, and environmentally sound transport systems Enhance efficiency

Ensure access to sustainable transport for all

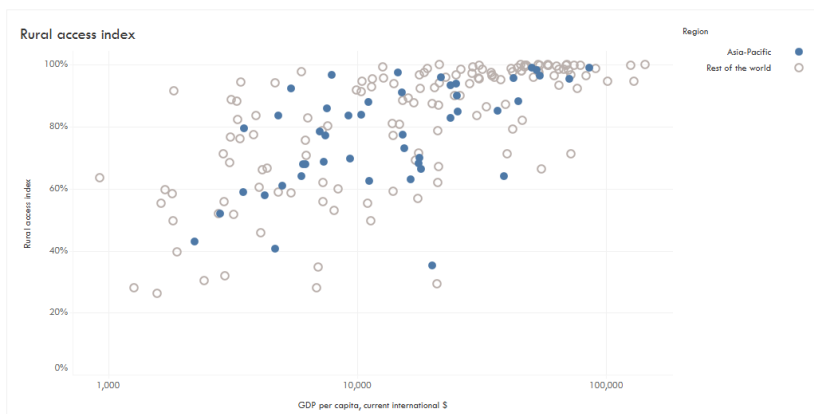
Public transport access



Modal shift in cities



Rural access index



Export PDF Export Image

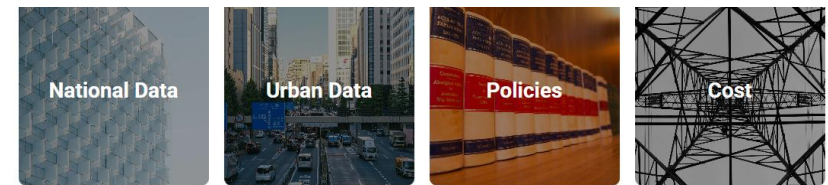
Pacific Sub-Observatory

Asian Transport Observatory Data Analytical Outputs Insights Countries In the Loop



Knowledge base on transport in the Pacific

A Pacific-focused platform of the Asian Transport Observatory that gathers and shares comprehensive datasets, generate unique policy insights, and delivers novel knowledge products rooted in groundbreaking analysis.



Latest insights

Interactive, Visualization

Passenger Transport Emissions Pathways (PATH) model by World Bank

Passenger Transport Emissions Pathways (PATH) model, a framework developed by the World Bank's Transport and Logistics Unit.

Pacific

Interactive, Visualization

Pacific Regional Dashboards

Pacific Regional Dashboards

Pacific

Interactive, Visualization

A Snapshot of Recent Fuel Price Shifts

Recent fuel price movements are unfolding against the backdrop of renewed geopolitical tensions that have tightened global oil markets and heightened supply uncertainty. For Asia —where ...

Pacific

Interactive, Visualization

Climate Exposure Dashboard for Transport

Transport systems across Asia and the Pacific are increasingly exposed to climate-related hazards, particularly flooding. Understanding where transport infrastructure is vulnerable is becoming an important ...

Pacific

ATO Data and Information Catalog

VEHICLE Found 113 items

Databases:

- All
- National Database
- Urban Database
- Policy Documents
- Cost Database
- Analytical Outputs
- Unstructured Data

ATO URBAN DATABASE | TRANSPORT ACTIVITY & SERVICES (TAS)

Vehicle registration (Others) [TAS-UDB-056(N)]

Vehicle categories excluding freight vehicles (LCV, trucks) and passenger vehicles (motorized 2W, 3W, LDV, taxi, minibus and buses).

Mode: Road
Source:

Download

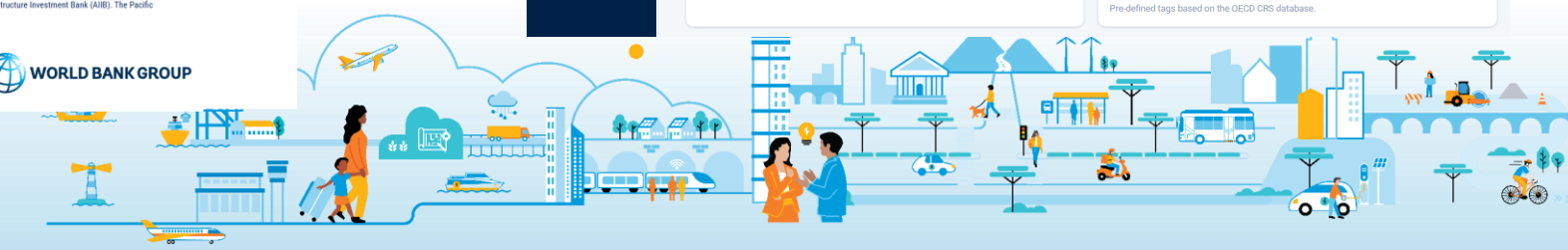
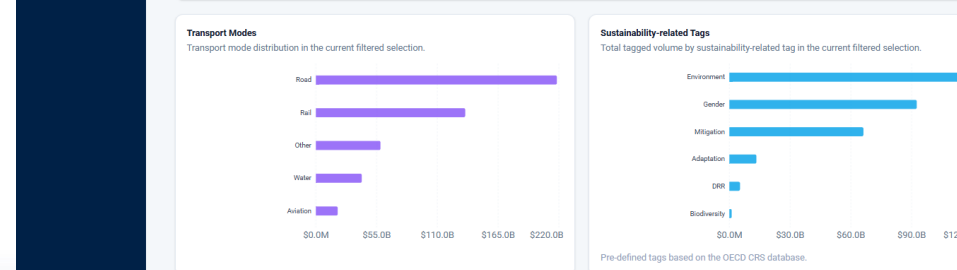
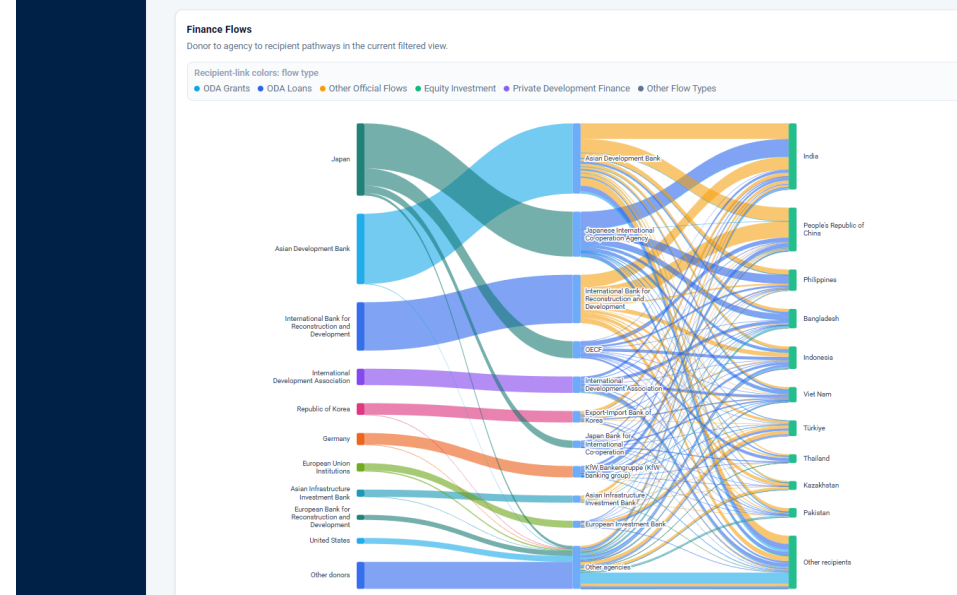
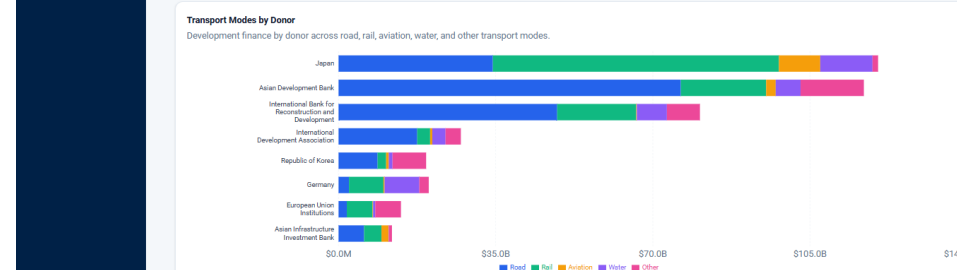
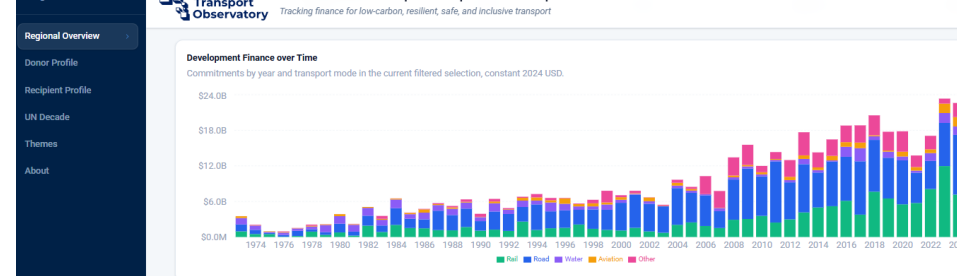
Platform developed with the support of

The Asian Transport Observatory (ATO) was initiated by the Asian Development Bank (ADB) and is supported by ADB alongside the Asian Infrastructure Investment Bank (AIIB). The Pacific platform further draws on support from the World Bank.



Transport Development Finance Explorer

Asia and the Pacific Transport Development Finance Explorer
Tracking finance for low-carbon, resilient, safe, and inclusive transport



Maraming salamat po!

alvinmejia@asiantransportobservatory.org

