



# Monitoring Progress EST Countries on Implementation of Aichi 2030 Declaration (2021-2030)

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Asian Transport Observatory

EST Regional Meeting and Capacity-Building Workshop  
towards Accelerating Implementation of the Aichi 2030  
Declaration (2021-2030)



United Nations

Department of  
Economic and  
Social Affairs



UNCRD



ESCAP  
Economic and Social Commission  
for Asia and the Pacific



Ministry of the Environment  
Japan



# 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](http://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

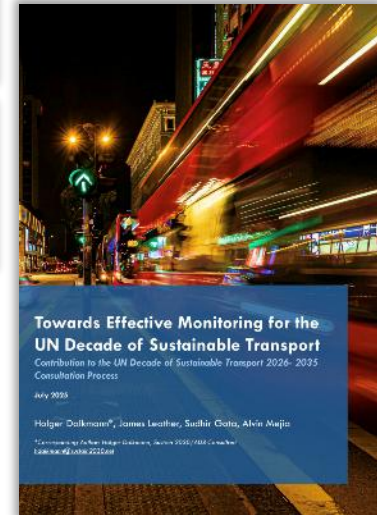
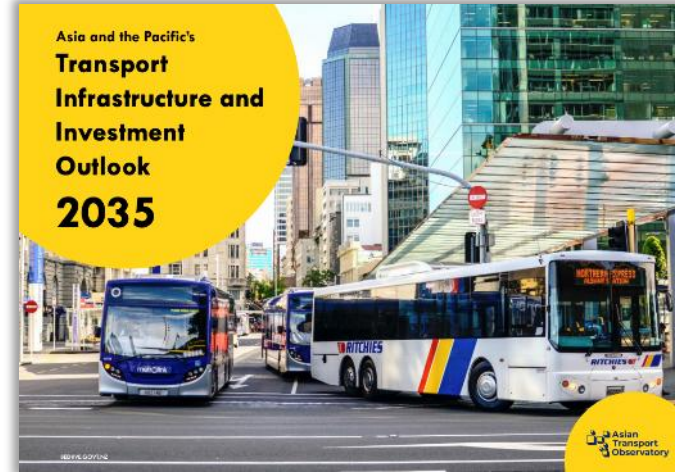
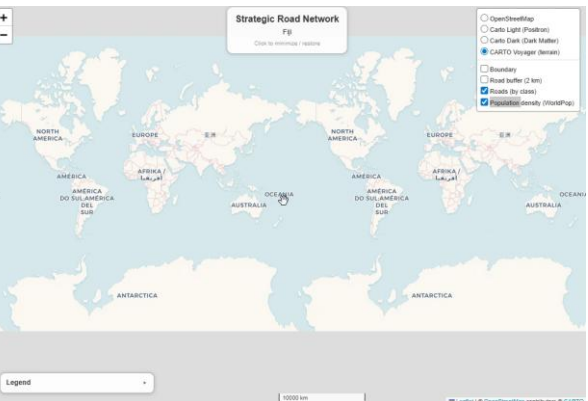
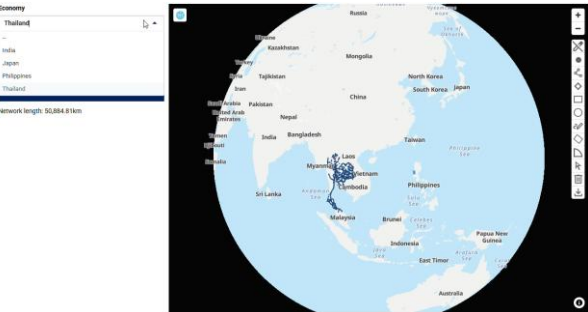
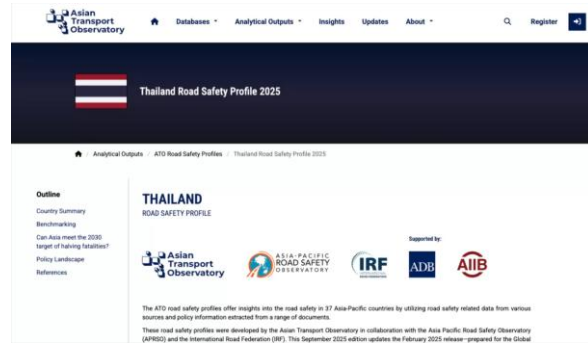
Explore more than 1,300 transport-related projects and benchmark their costs within subregions or income groups in Asia and the Pacific



### ATO Analytical Outputs

Read about analysis made using ATO transport data and policy information

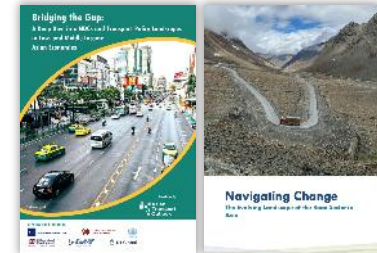
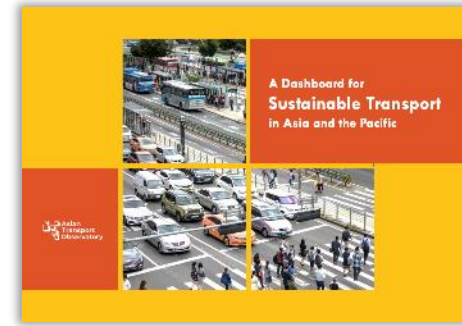
# We translate data into storylines and narrative



## TRANSPORT IN REVIEW Working Paper Series



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## Aichi 2030 Declaration on Environmentally Sustainable Transport - Making Transport in Asia Sustainable (2021-2030)

*Sustainable Transport Goals for Achieving Universally Accessible, Safe, Affordable, Efficient, Resilient, Clean and Low-carbon Passenger and Freight Transport in Asia*

1. We, the participants, who are representatives of Asian countries (Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Indonesia, India, Islamic Republic of Iran, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, the Philippines, Russian Federation, Singapore, Sri Lanka, Thailand, and Viet Nam)<sup>1</sup>, international organizations, bilateral and multilateral agencies, non-governmental organizations (NGOs), research organizations, and expert sustainable transport professionals, having met at the Fourteenth Regional Environmentally Sustainable Transport (EST) Forum in Asia, held in Tokoname City, Aichi Prefecture, Japan, 18<sup>th</sup> - 20<sup>th</sup> October 2021, inspired by the Sustainable Development Goals, the Paris Agreement on Climate Change, the New Urban Agenda and other global agreements, adopt the non-legal, non-binding Aichi 2030 Declaration on Making Transport in Asia Sustainable (the Aichi 2030 Declaration). We affirm our interest in, and commitment to, realizing a decade (2021-2030) of progress in sustainable actions and measures for achieving universally accessible, safe, affordable, efficient, clean, low-carbon, resilient, multi-modal passenger and freight transport in Asia.<sup>2</sup>

### I. Preamble

i. **Recognizing** the urgent need for immediate greater action on sustainability of transport systems in Asia. This considering that by 2030, it is projected that Asia will have about half of the global population, with an increasing number living in cities, close to 40% of global Gross Domestic Product (GDP) (in Purchasing Power Parity), one third of global transport CO<sub>2</sub> emissions, and almost 60% of worldwide road crash fatalities;<sup>3</sup>

ii. **Acknowledging** the global agreements, since 2010, that have a direct relevance for the transport sector in Asia: the 2030 Agenda for Sustainable Development, the Paris Agreement on climate change, the New Urban Agenda, the Addis Ababa Action Agenda on Financing for Development the second UN Decade of Action for Road Safety 2021-



2021

2030

# Goal 1. Environment sustainability

By 2030, improve the environmental sustainability of transport in Asia for the following areas

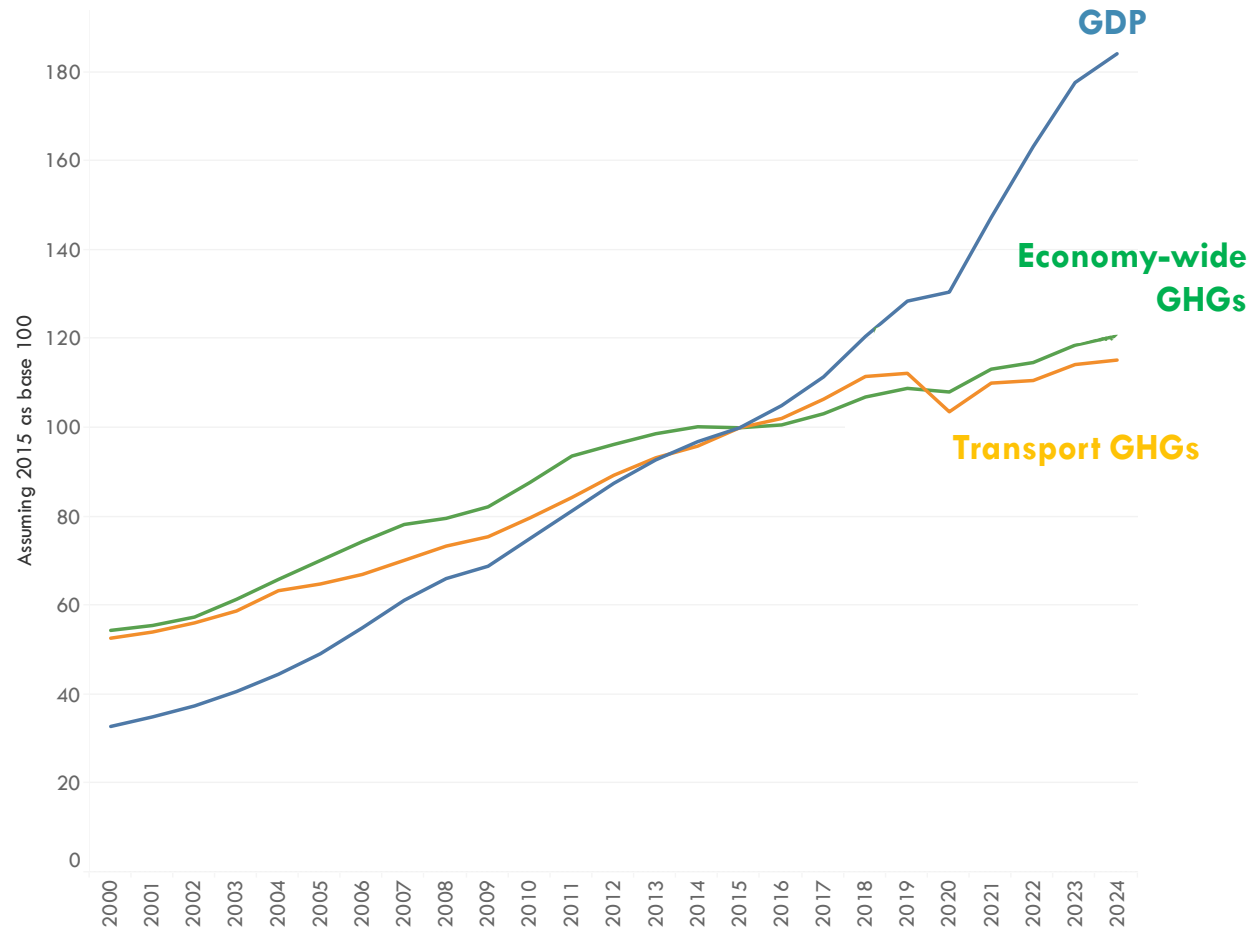
Goal 1 a – **Low-Carbon (climate change mitigation)**: By 2030, aim to peak transport CO<sub>2</sub> emissions and initiate reductions in transport related CO<sub>2</sub> emissions with the intention to move towards decarbonization of the transport sector by 2050, or shortly thereafter

Goal 1 b – **Resilience**: By 2030, increase resilience and adaptive capacity of transport system to climate-related hazards and pandemics

Goal 1 c – **Air pollution**: By 2030, reduce air pollution and contamination caused by traffic, including PM<sub>2.5</sub>, other air pollutants and noise.

# Transport GHG Emissions

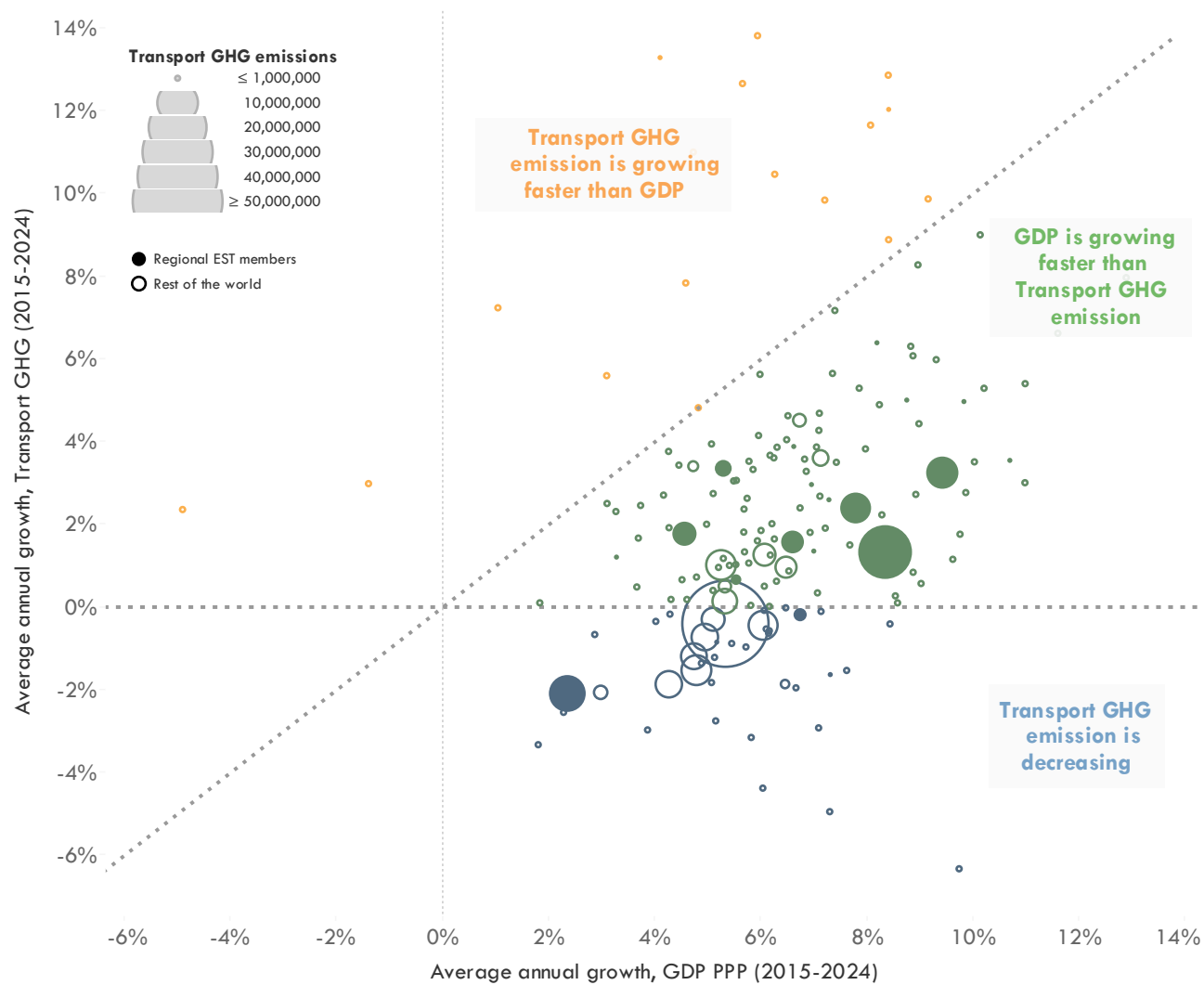
Decoupling of GHG emissions from GDP



Source: EDGAR (2025), World Bank (2025)

- Decoupling between GDP and economy-wide GHG emissions in the EST member countries becoming evident
- Transport GHG emissions have been growing slower than economy-wide GHG emissions
- In 2024, the transport sector for EST member countries emitted around 2.5 billion tons GHGs , roughly within the combined GHG emissions of North America and Europe

### Decoupling of transport GHG emissions from GDP

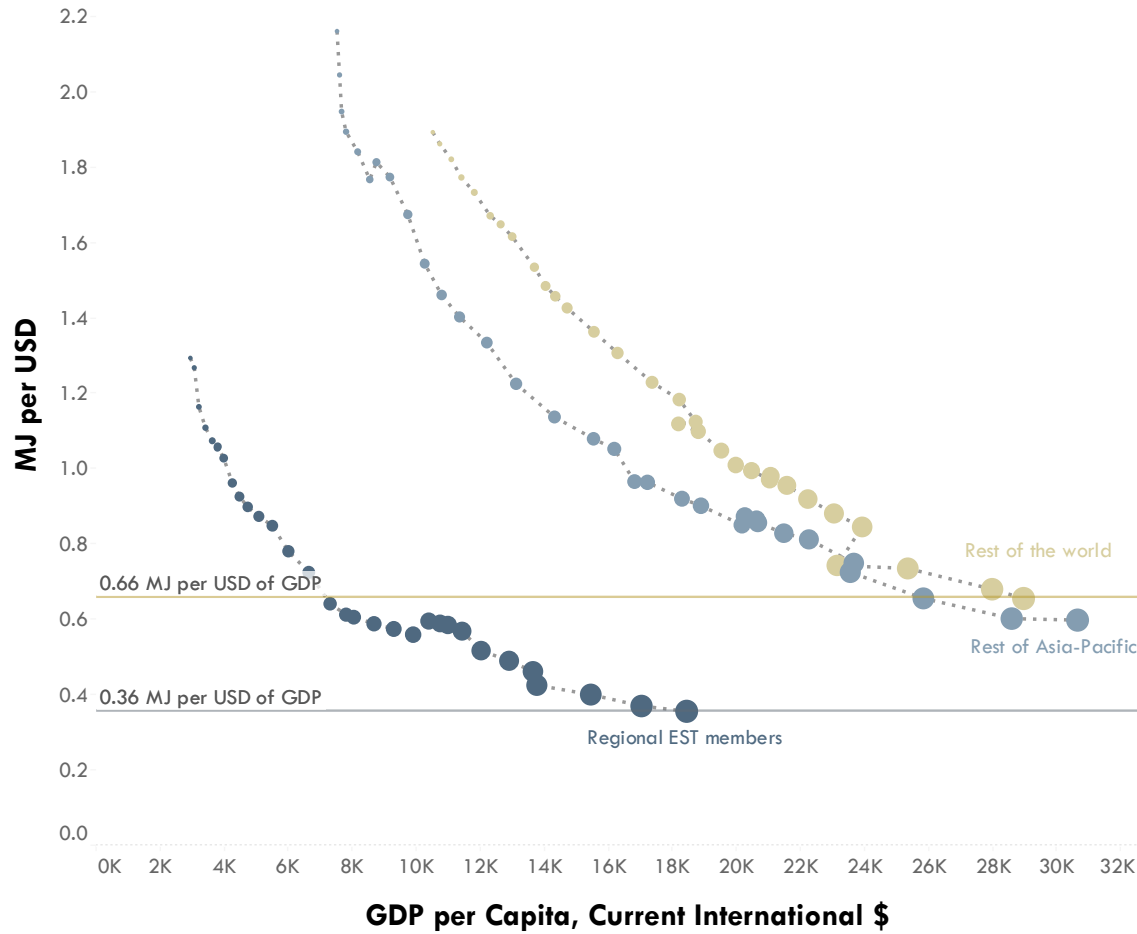


Source: EDGAR (2025), World Bank (2025)

- Between 2021-2024, more than half of the **EST member countries** have slowed down the growth of their transport **GHG emissions** including 4 economies which have started reductions
- EST member countries have **lower GHG emissions intensity at 28 gCO<sub>2</sub>e per USD** of GDP than the rest of Asia (50) and the global average (36)
- Since 2021, **GHG emissions intensity improvements of EST member countries at 19%** surpass any other global region

# Transport Sector – Energy Consumption and Intensity

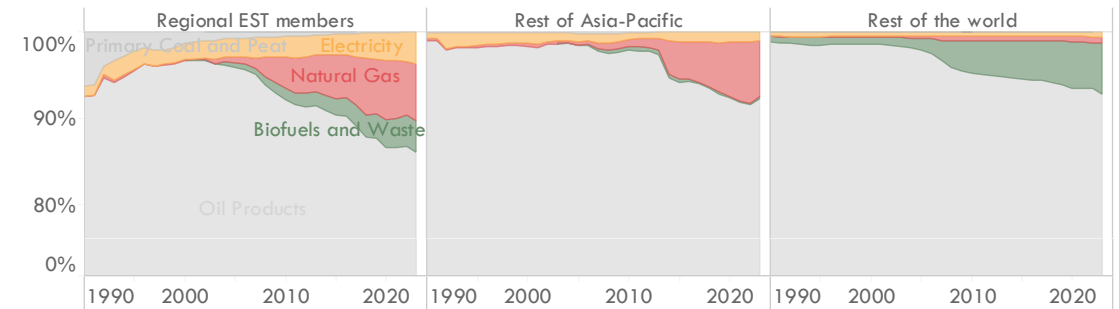
Transport energy consumption intensity with GDP, 1990-2023



Source: UN Energy Statistics (2025)

- Transport sector (EST member countries) is nearly **half as energy intensive** as the rest of the world
- EST member countries - **halved transport energy consumption intensity** between 2015-2023
- EST member countries leading the diversification of the energy sources for transport

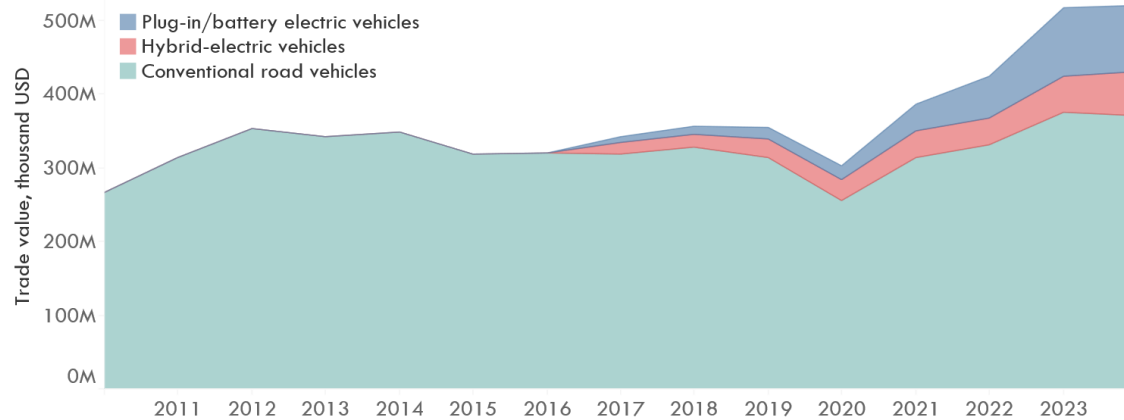
Transport energy consumption by energy source



Source: UN Energy Statistics (2025)

# Transport Electrification - Momentum

Road vehicle trade in Regional EST members

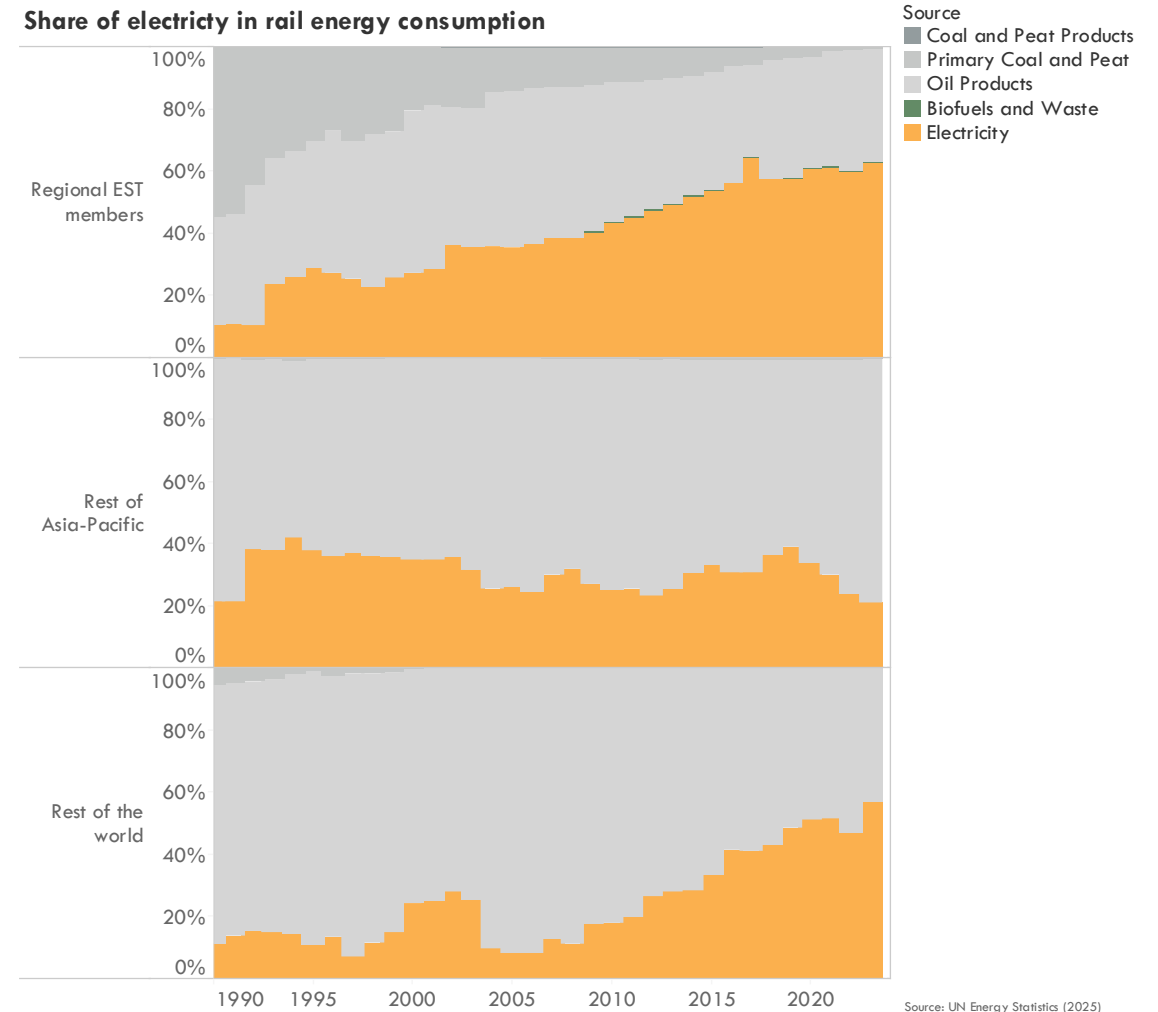


**Asia dominates global electric mobility, holding about 82% of the world's EV stock**

The share of (plug in hybrid/ battery) EVs in Asian vehicle trade value rose to **17% in 2024**.

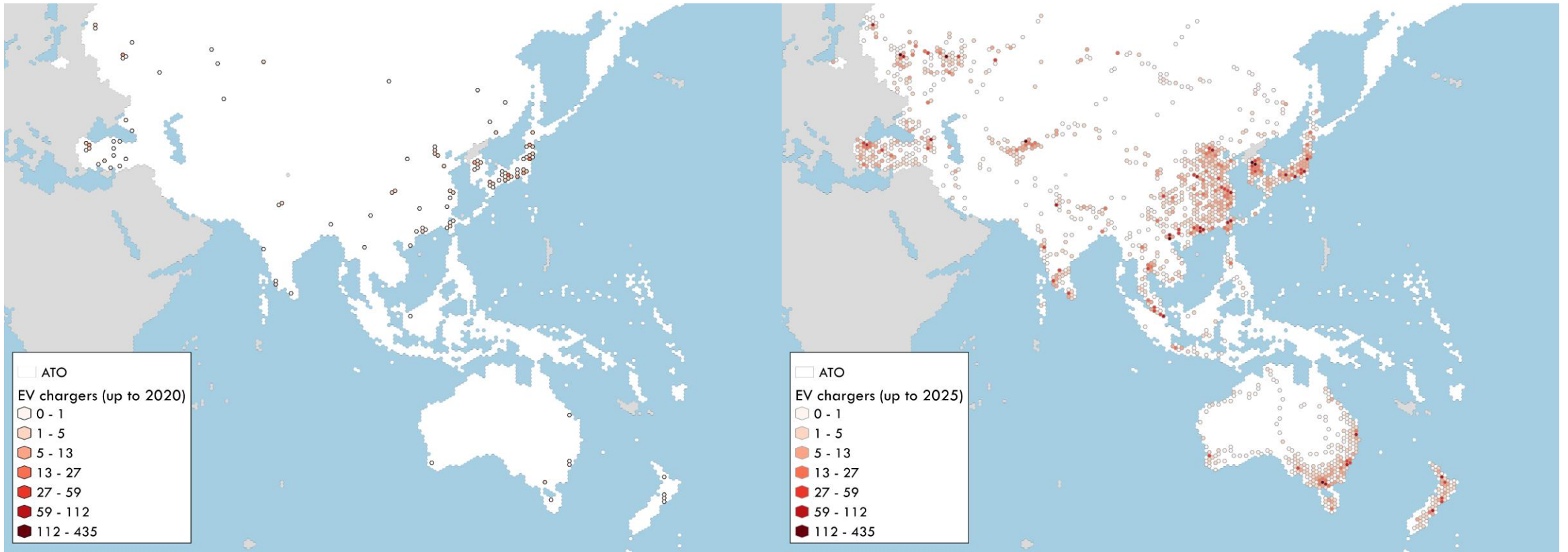
Half of the countries (with rail) among the EST members have at least **50% electricity share** in rail

Share of electricity in rail energy consumption



Source: UN Energy Statistics (2025)

# Charging Infrastructure



Source: ATO visualization based on OSM data

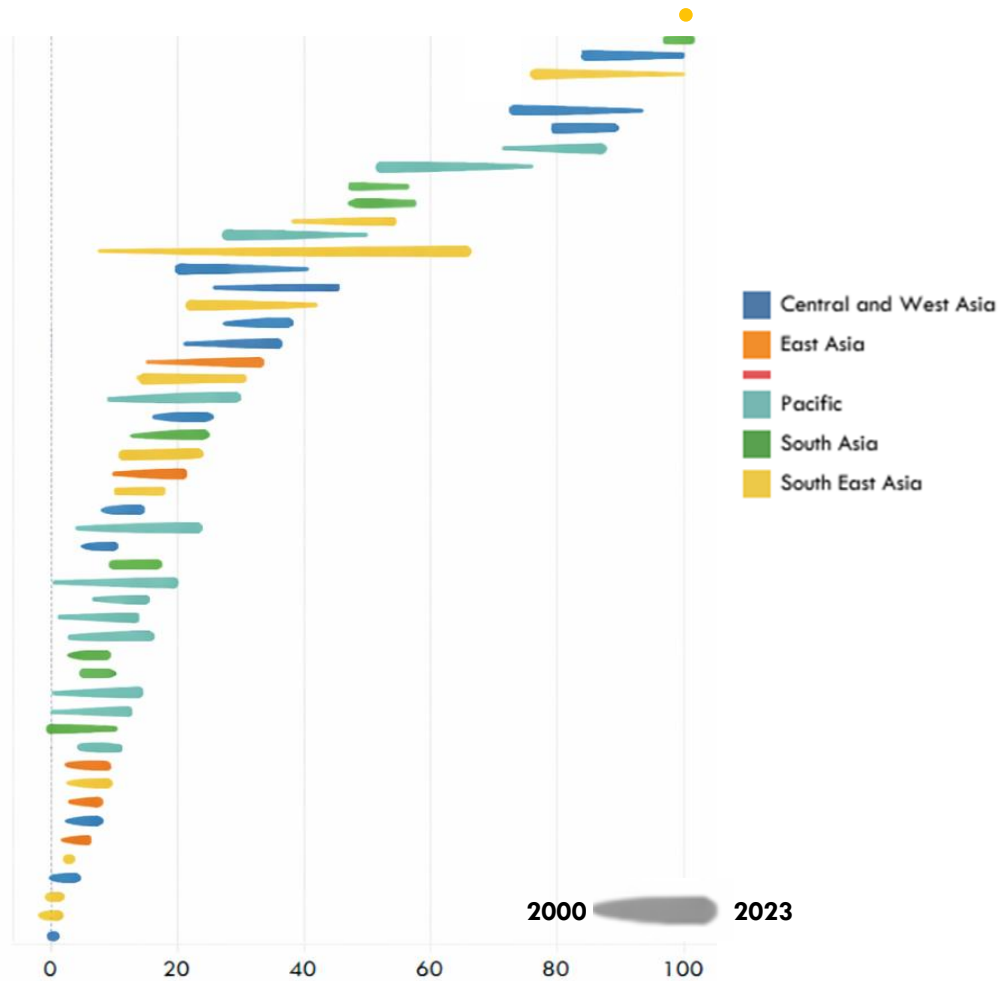
**800% increase in EV charging facilities**

2020-2025

Source: ATO visualization based on OSM data

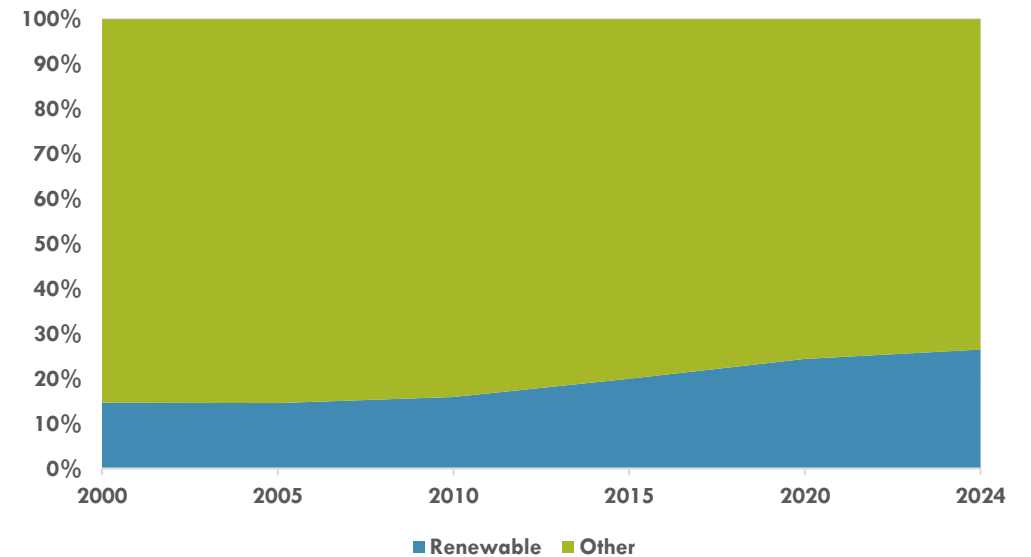
# Other Side of E-mobility

% RE in Electricity Grid Generation- Asia and the Pacific



- In the EST member countries electricity generation from renewables have increased from **15% in 2000, 23% in 2023**
- Varying progress and degree of transition to RE

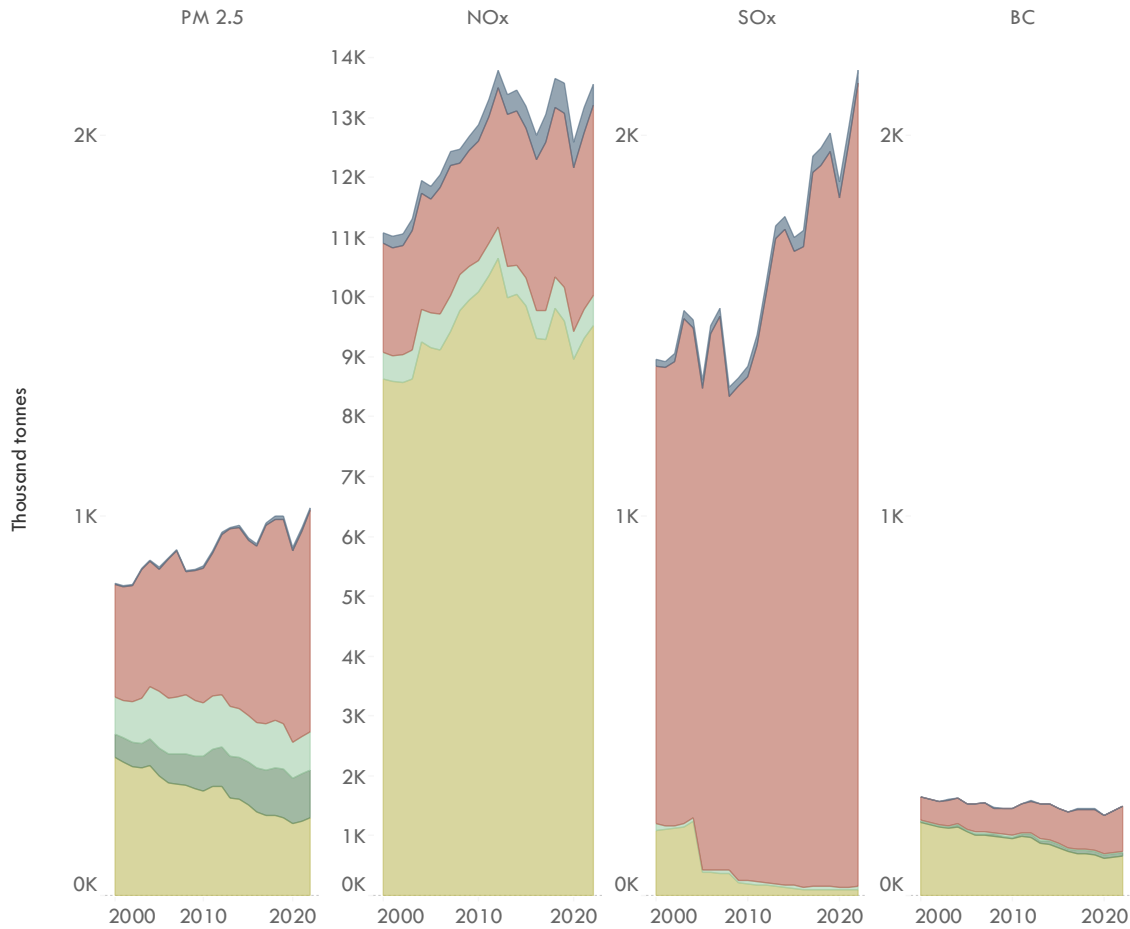
% RE in Electricity Generation - EST Member Countries



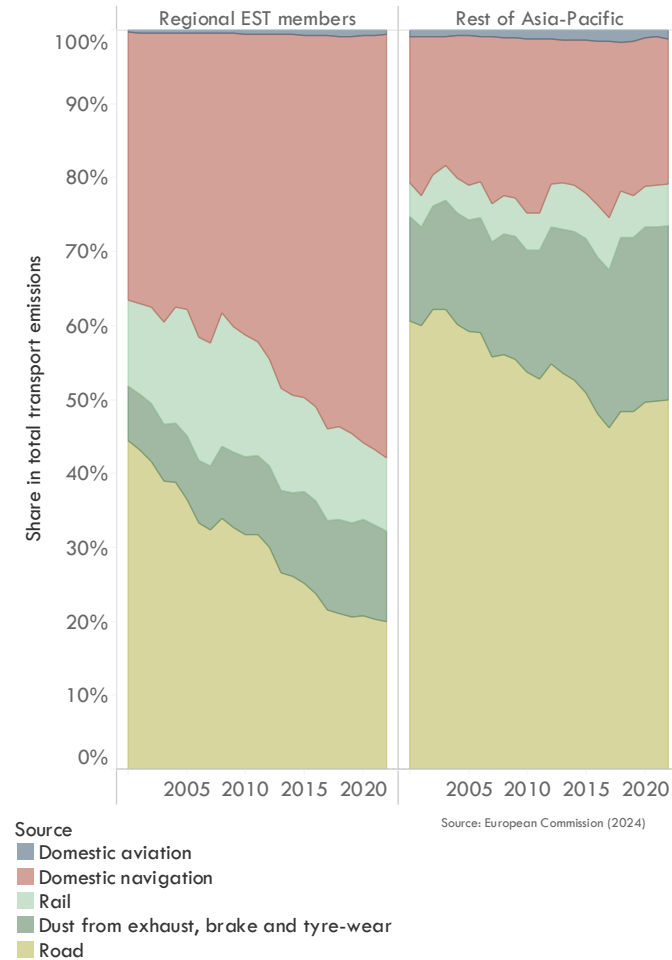
Source: ATO visualization based on data from IRENA

# Transport air pollution wins and blindspots

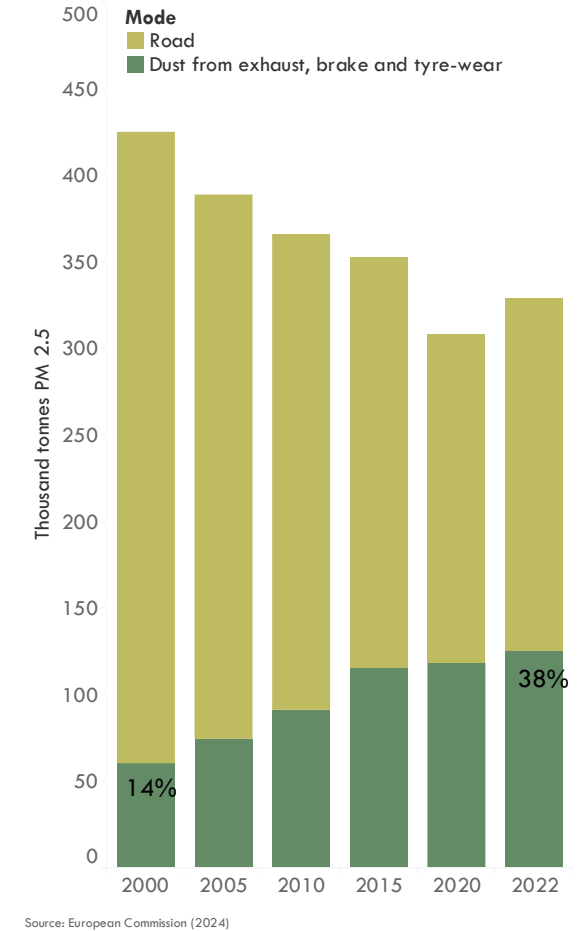
Transport air pollutant emissions by mode



Transport PM 2.5 emissions share by mode

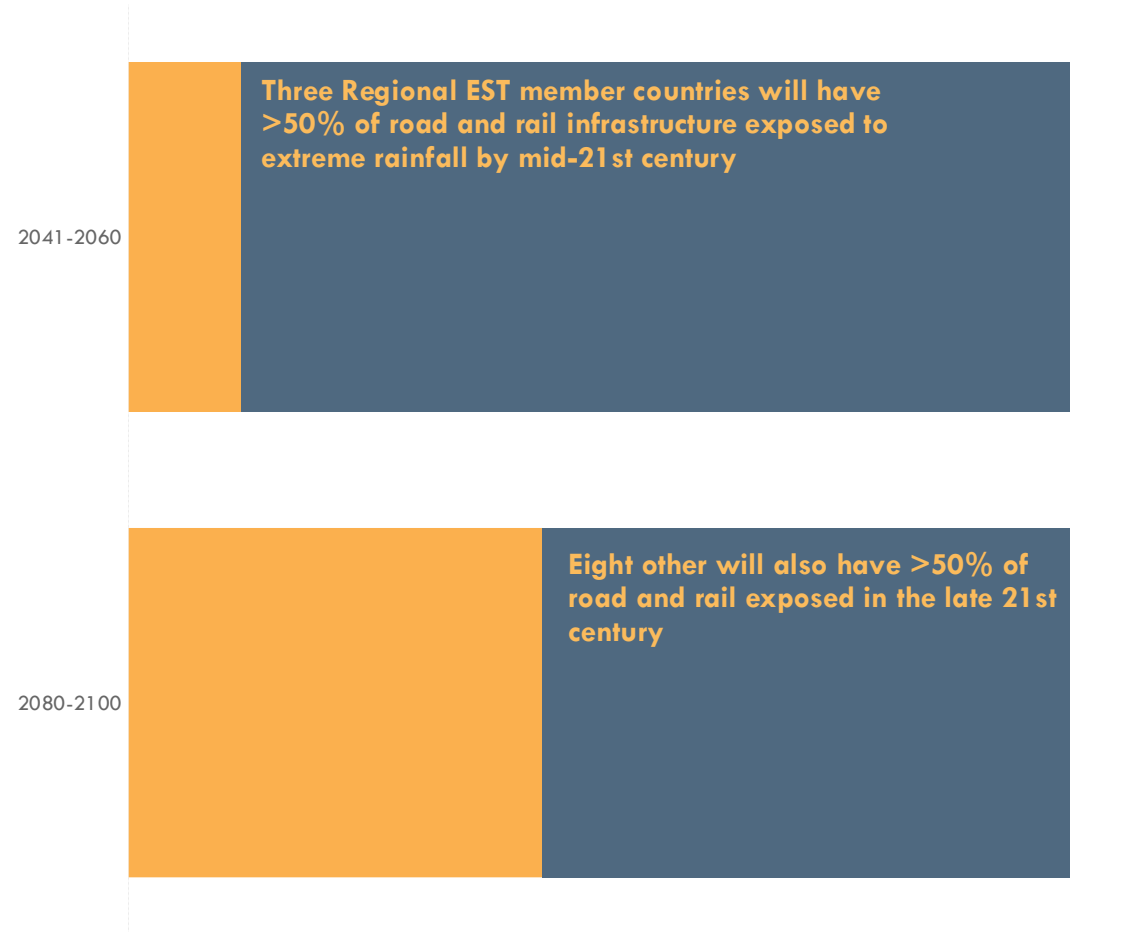


Dust from exhaust, brake and tyre-wear, as share in road PM 2.5 emissions



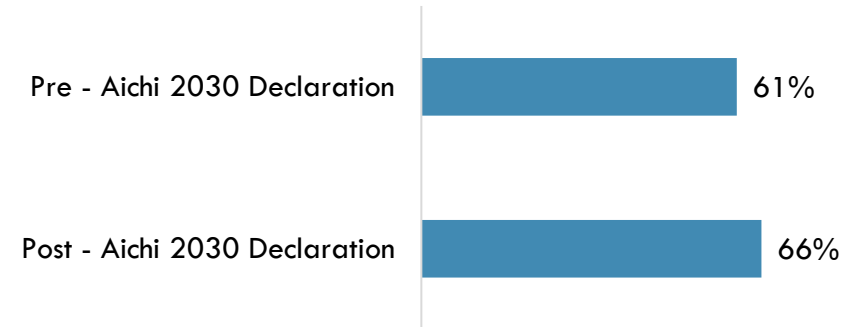
# Climate resilience

In a middle-road climate scenario...



Source: Liu, et al. (2023)

## Share of policy documents with climate adaptation/disaster resilience component



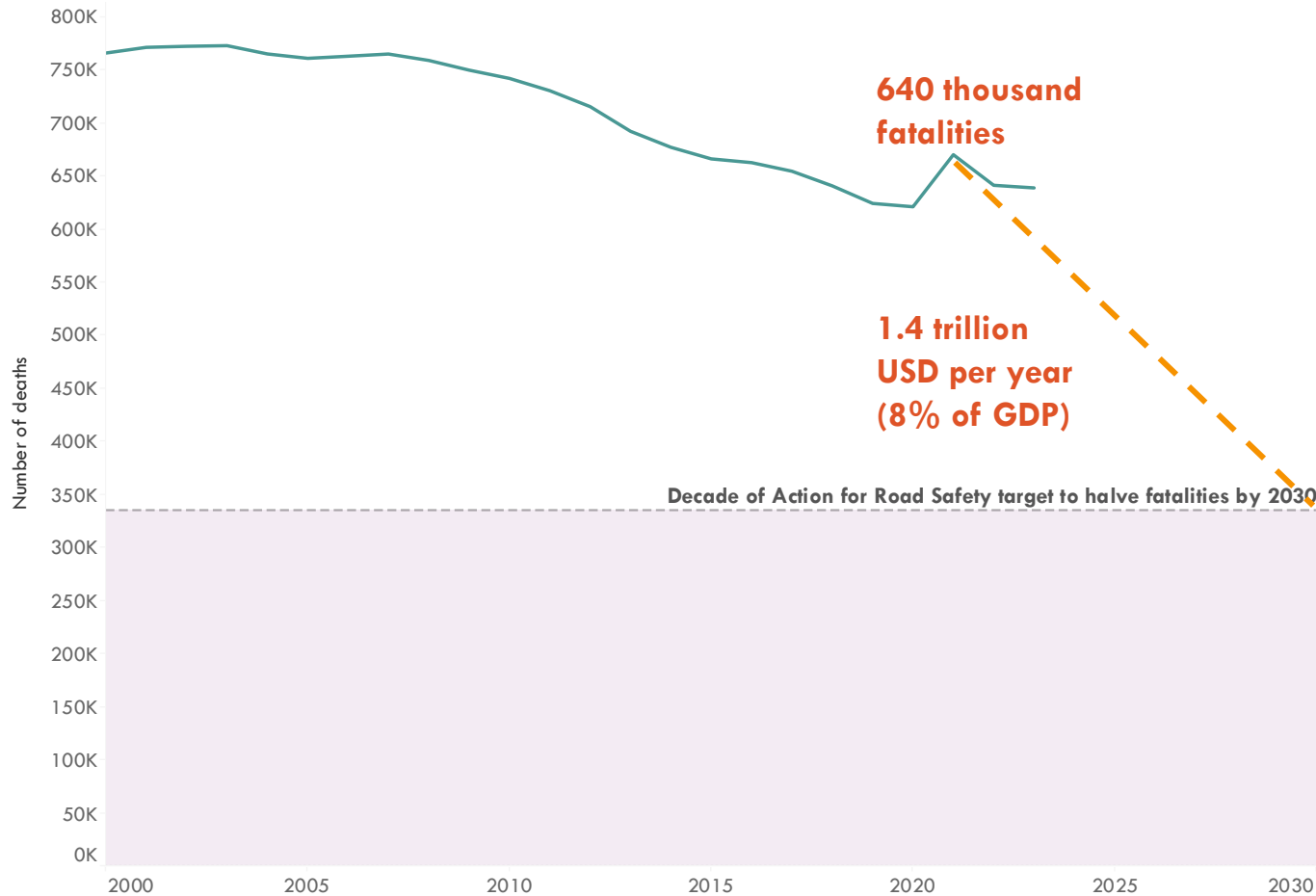
- Climate impacts on transport infrastructure will continue to increase
- Average annual losses to transport infrastructure of EST members due to natural hazards is valued at **8 to 50 billion USD per year** (up to 0.4% GDP in some countries)
- 62% of damages is on roads, 26% on rail, 12% on ports and airports

## Goal 2. Road Safety

By 2030, halve the number of deaths and injuries from road traffic accidents in Asia compared to 2020, with specific attention to vulnerable road users.

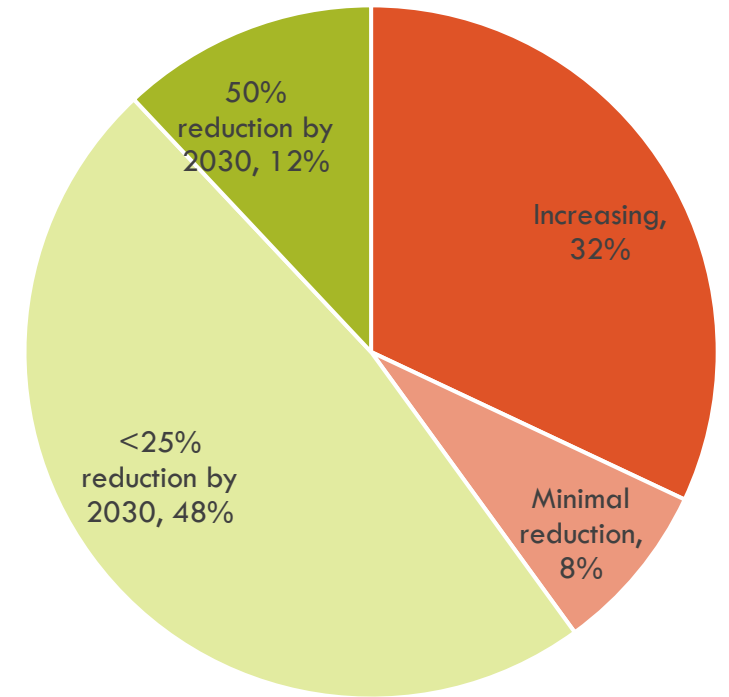
# Road Crash Fatalities

Deaths due to road crash injuries – Regional EST members



Source: IHME (2026)

Share of EST member countries on/off-track the 50% reduction target (if not 7.4% or more reduction rate)



■ Increasing ■ Minimal reduction ■ <25% reduction by 2030 ■ 50% reduction by 2030

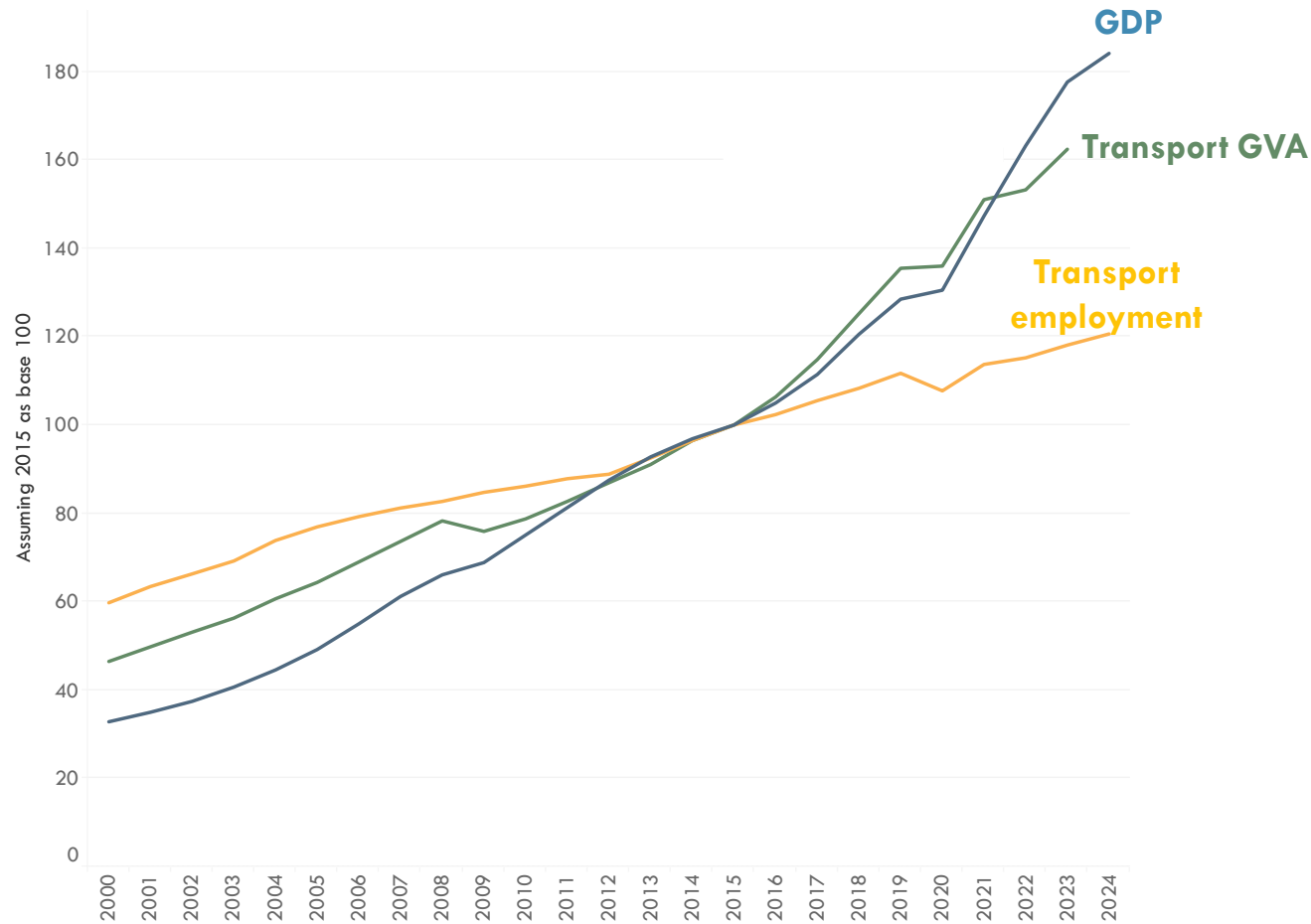
Source: WHO and IHME

## Goal 3. Economic Sustainability

By 2030, realize sustainable economic and employment **growth** by leveraging science, technology and innovation and green investments in quality passenger and freight transport infrastructure and services in a manner that fully incorporates environmental and social impacts throughout the lifecycle of the transport infrastructure and services

# Employment and Productivity in the Transport Sector

Transport employment and gross-value added trend

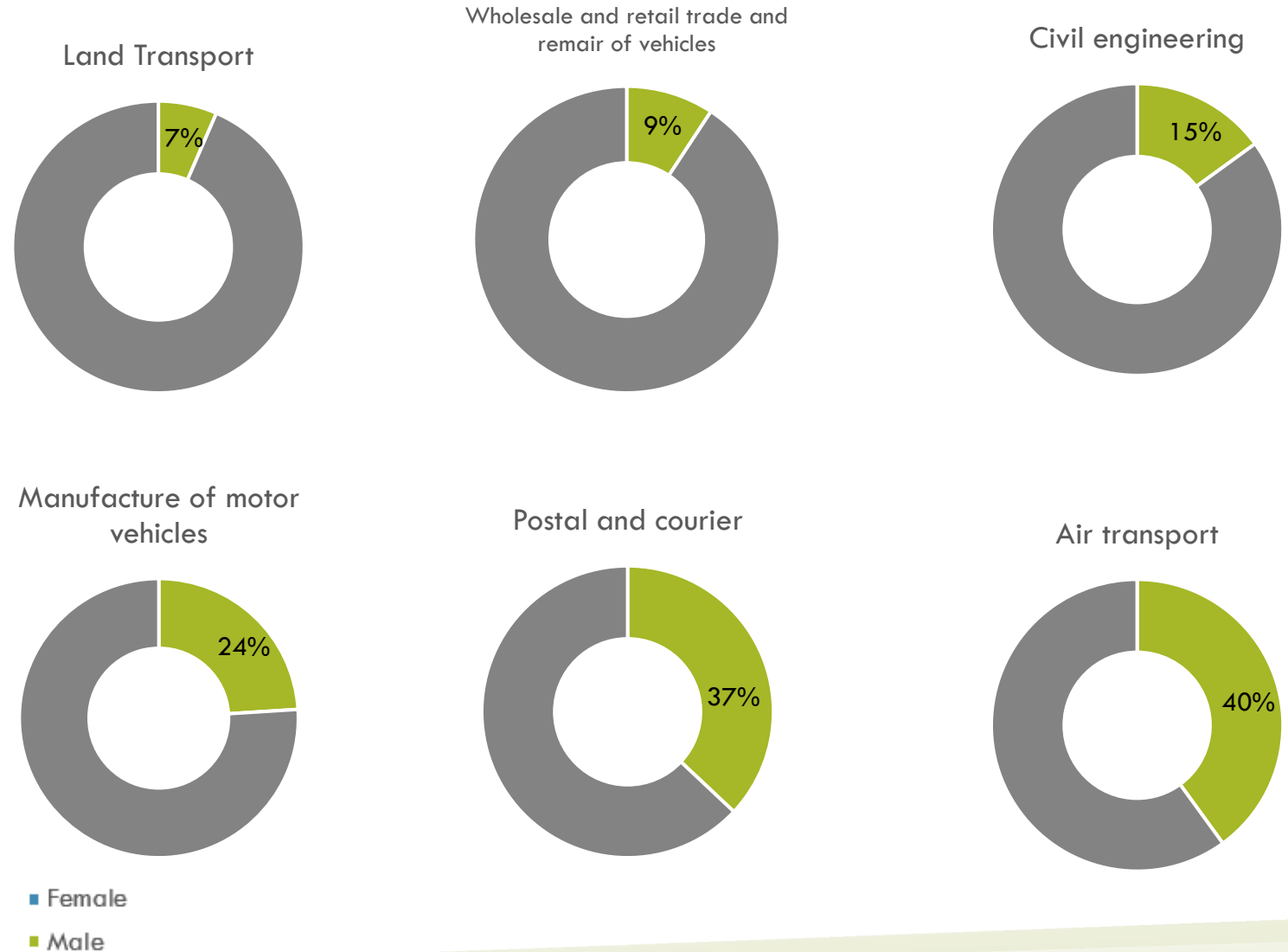


Source: World Bank (2025), ILO (2026), UNStats (2025)

- Transport employs **6.5% of working population in EST**
- **Transport employment growth has slowed down** from 2.2% between 2015-2021 to just 1.9% per year between 2021-2025
- **Productivity (gross value added per transport employee) has increased 4.1% per annum** in 2015-2023

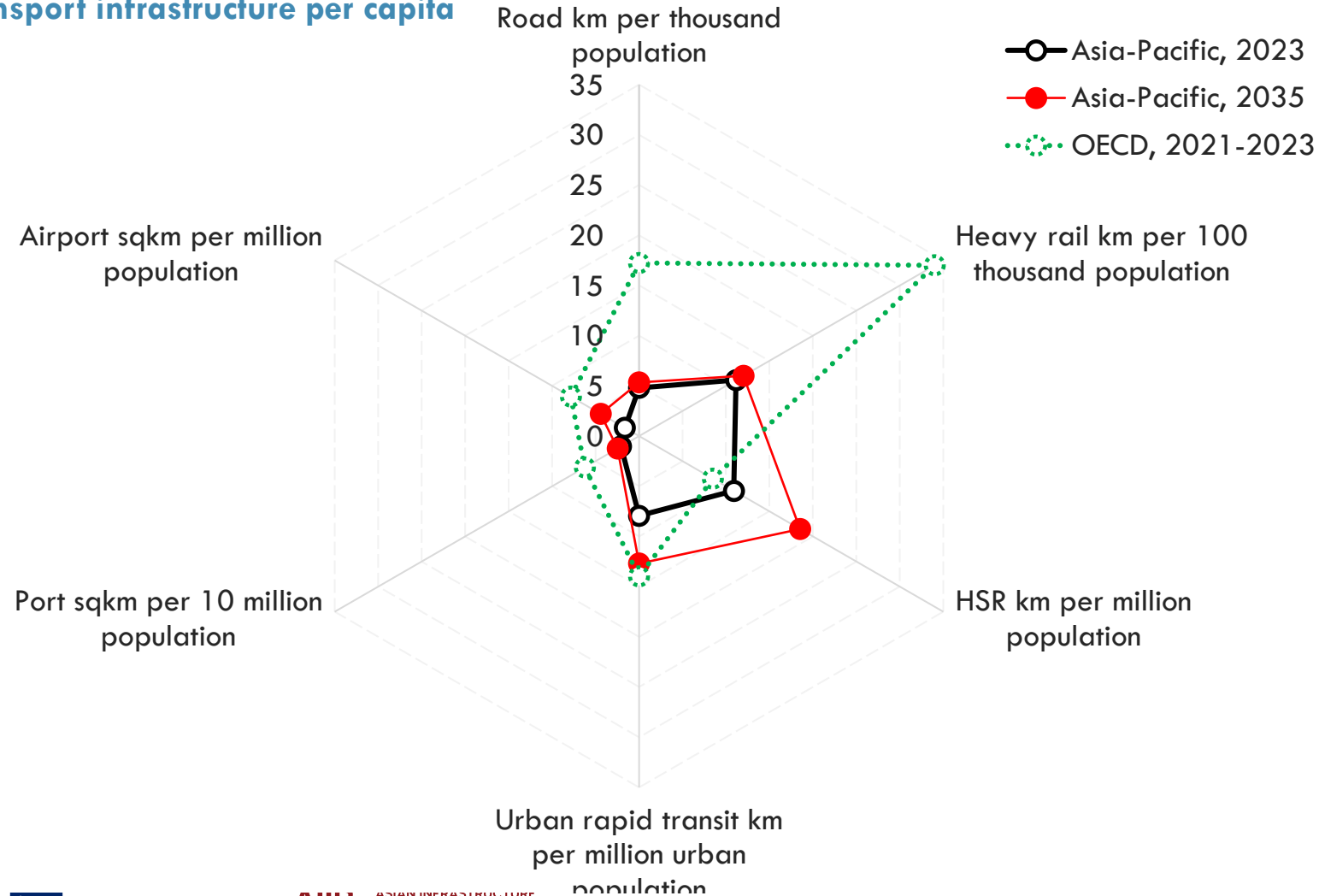
# Gender in Transport Employment

In 2025, within the transport sector, **females constituted 14% of total transport employment in Asia**, while it was roughly half of the share in Europe and Northern America.



# Infrastructure Requirements

## Transport infrastructure per capita



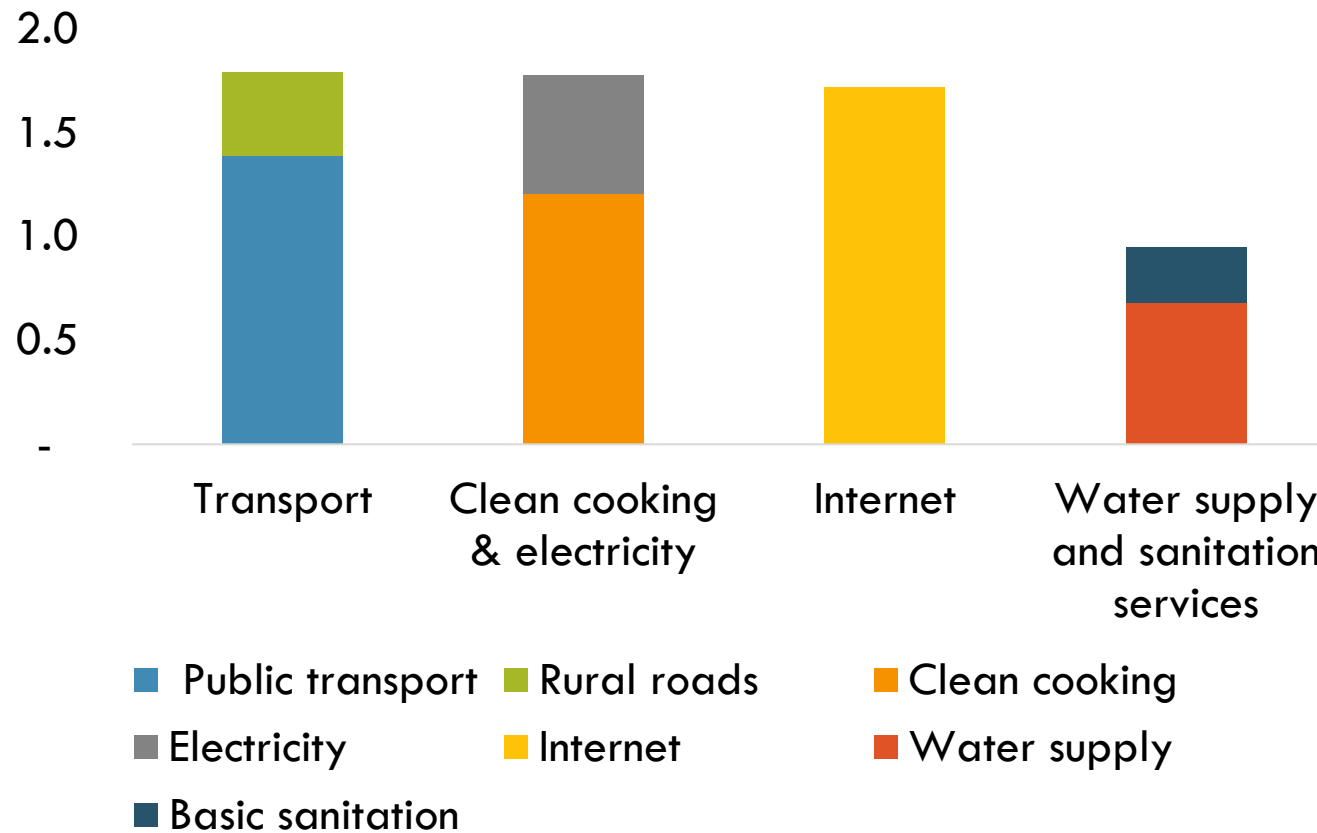
- Regional EST members will require **30 trillion USD** in the next 10 years for transport infrastructure
- Equivalent to roughly 1.5% of GDP
- Still would be lower than current OECD averages

## Goal 4. Rural Access

By 2030, realize **accessible, inclusive, safe, affordable, and resilient rural transport infrastructure and services**, thus facilitating improved access to markets, basic utilities and services including health and education by the farming community, and other rural population including physically disabled and vulnerable groups

# Rural access

Access gap in Asia, transport vs. other sectors  
million population without access



400 million rural population lack proper access (**380 million for EST countries**) to all season roads

28% of the EST member countries still have rural access below 70%

180 million population in EST member countries have to travel more than 3 hours to reach the cities

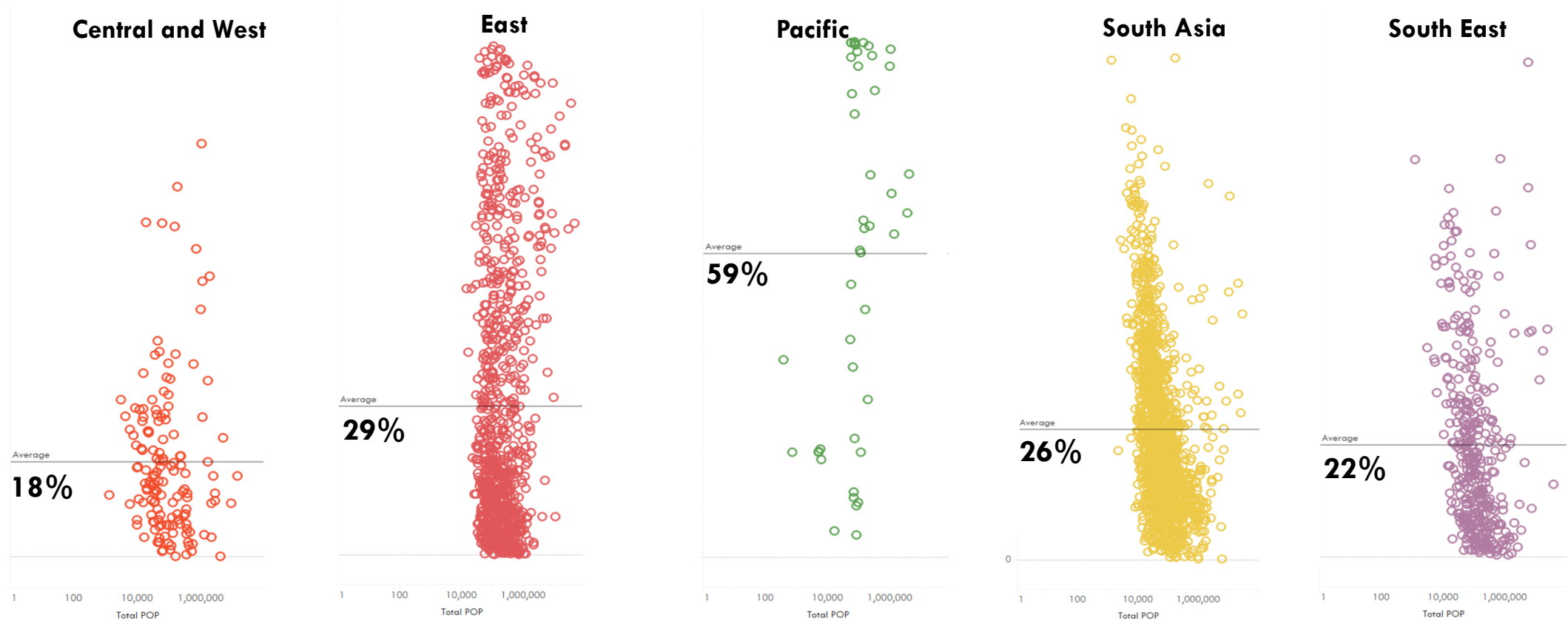
2022

## Goal 5. Urban Access

By 2030, ensure access to accessible, inclusive, safe, efficient, affordable, and sustainable transport facilities, systems and services for urban dwellers, including physically disabled and vulnerable groups through the development of urban transport infrastructure and services

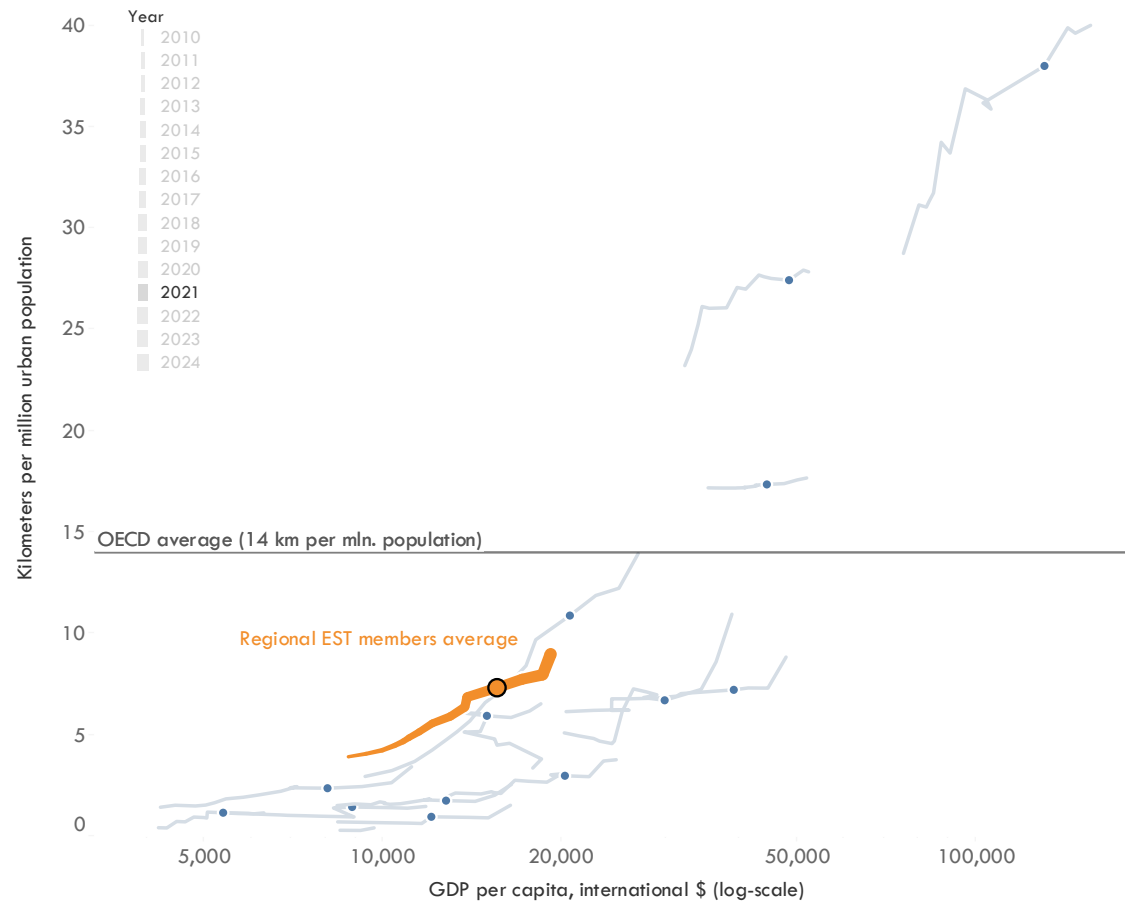
# Percentage of Population with Convenient Access to Public Transport

1.4 billion urban residents do not have access to public transport in Asia  
 Half of all cities have access below 20%  
 Only 2% of cities have access >80%



# Public Transport Infrastructure (km per capita)

Kilometers of metro, LRT, BRT per capita (2010-2024)



Source: Estimate using ITDP (2023), IRJPro (n.d.)

- Rapid transit projects in pipeline indicate EST members would add at least 11 thousand kilometers of metro, LRT, and BRT (2025-2035).
- However this would still fall short of the current OECD levels

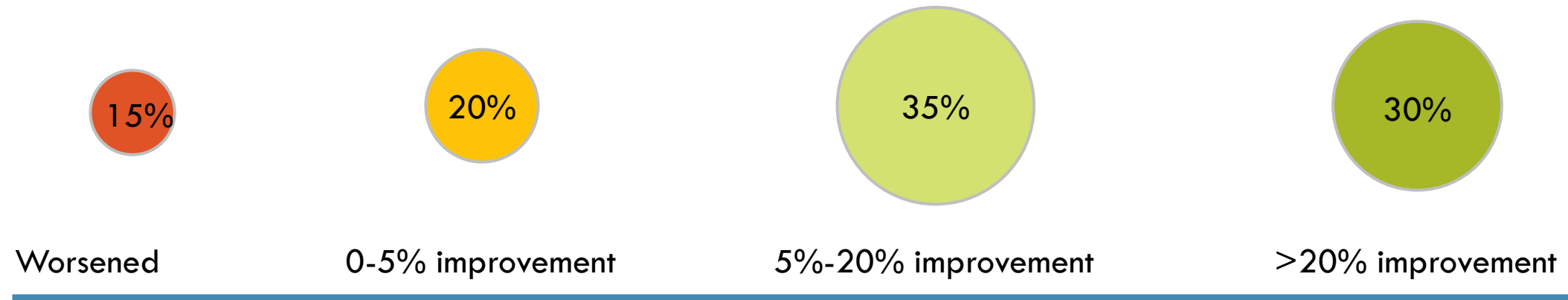
## **Goal 6. National Access and Connectivity**

**By 2030, facilitate inclusive multi-modal national (including rural-urban) and regional (cross-border) connectivity through the provision of sustainable multi-modal freight and passenger transport infrastructure and services**

# Liner Shipping Connectivity

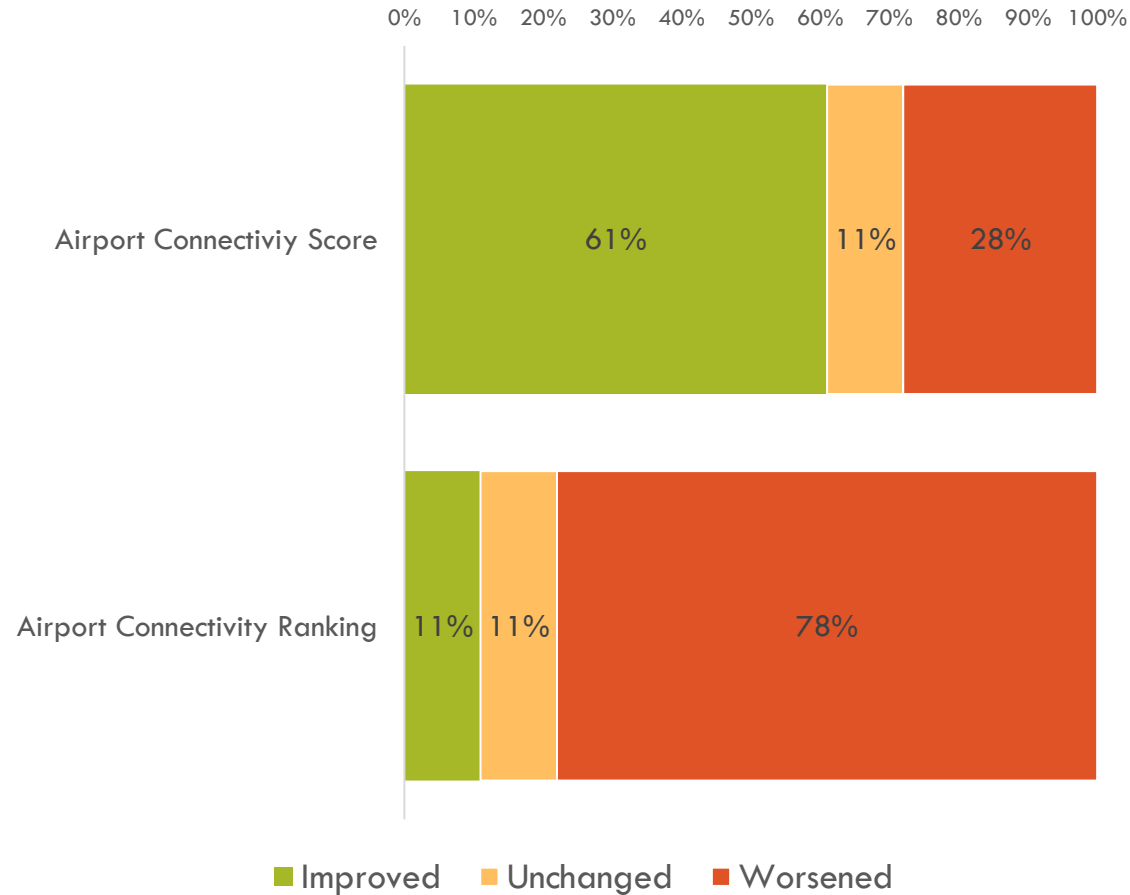
- EST member countries - The **fastest growing and most connected** domestic navigation and shipping globally
- Volume saw a total increase of 32% since 2015. Since 2020 however, much like the rest of the world, growth has slowed down to only 10%

2021-2024 Liner Shipping Connectivity Index Trends – EST



# Airport Connectivity

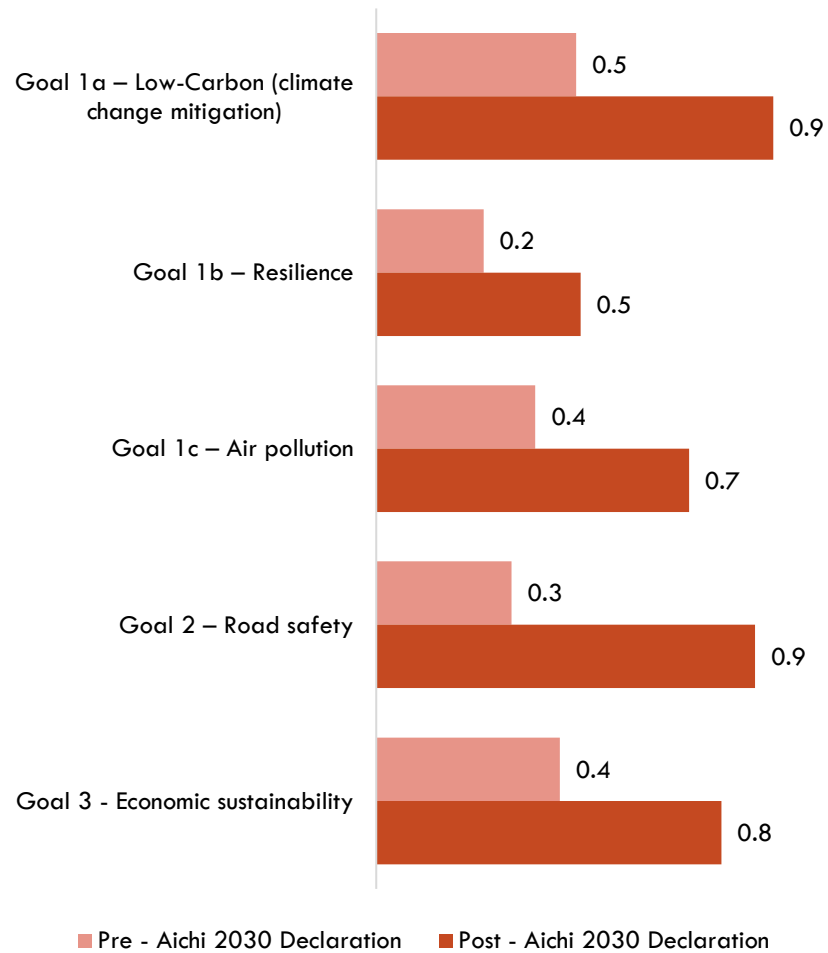
EST Member Countries – IATA Airport Connectivity



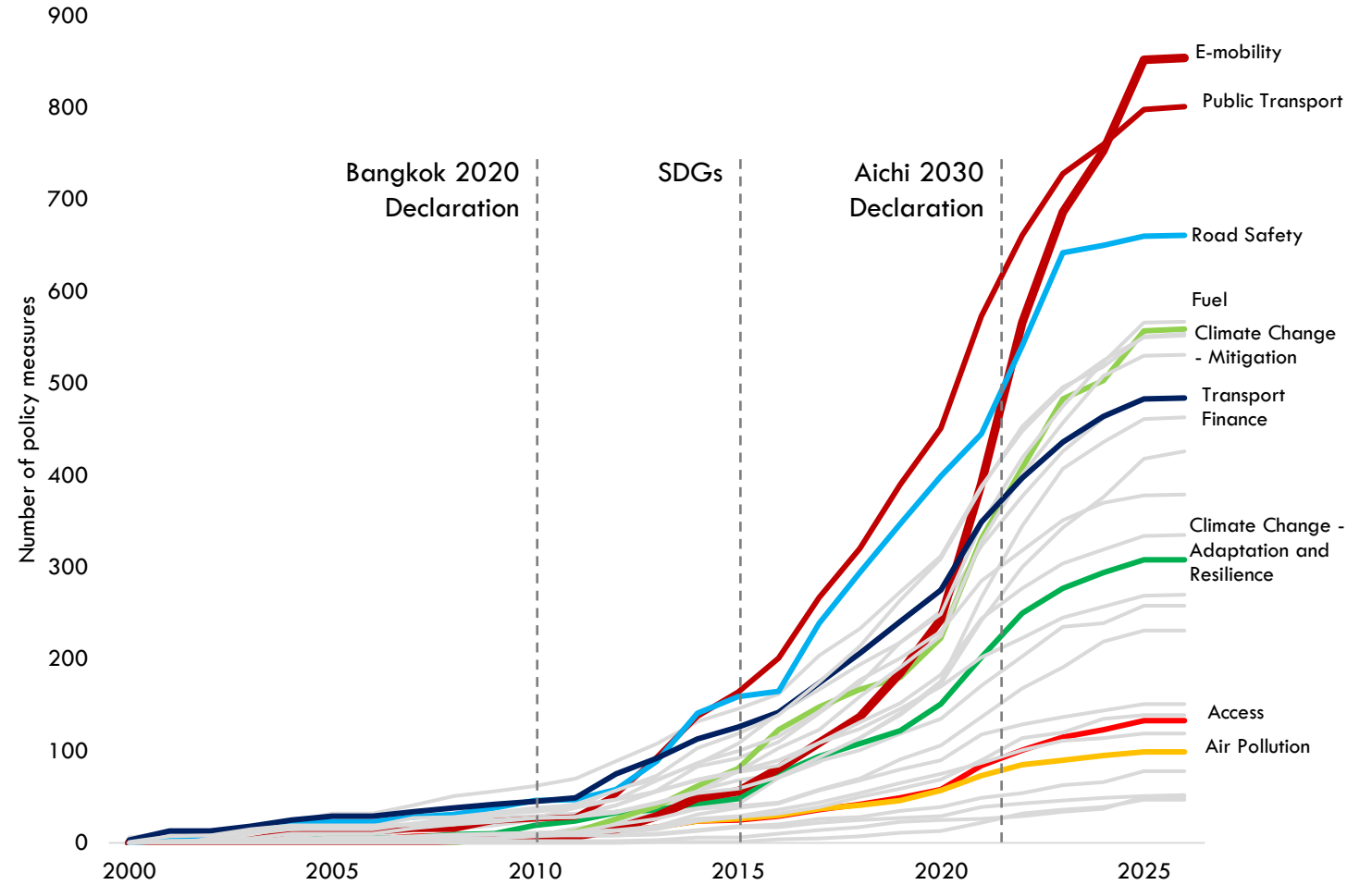
- In 2024, trips/capita in EST member countries **have returned back to 2019 levels**. However, airbus estimates propensity to travel could double to 1.7 trips per capita per year by 2034/ in the next decade
- 11 of 18 countries improved airport connectivity since 2021, however improvement is outpaced by other regions as only 2 improved their global ranking

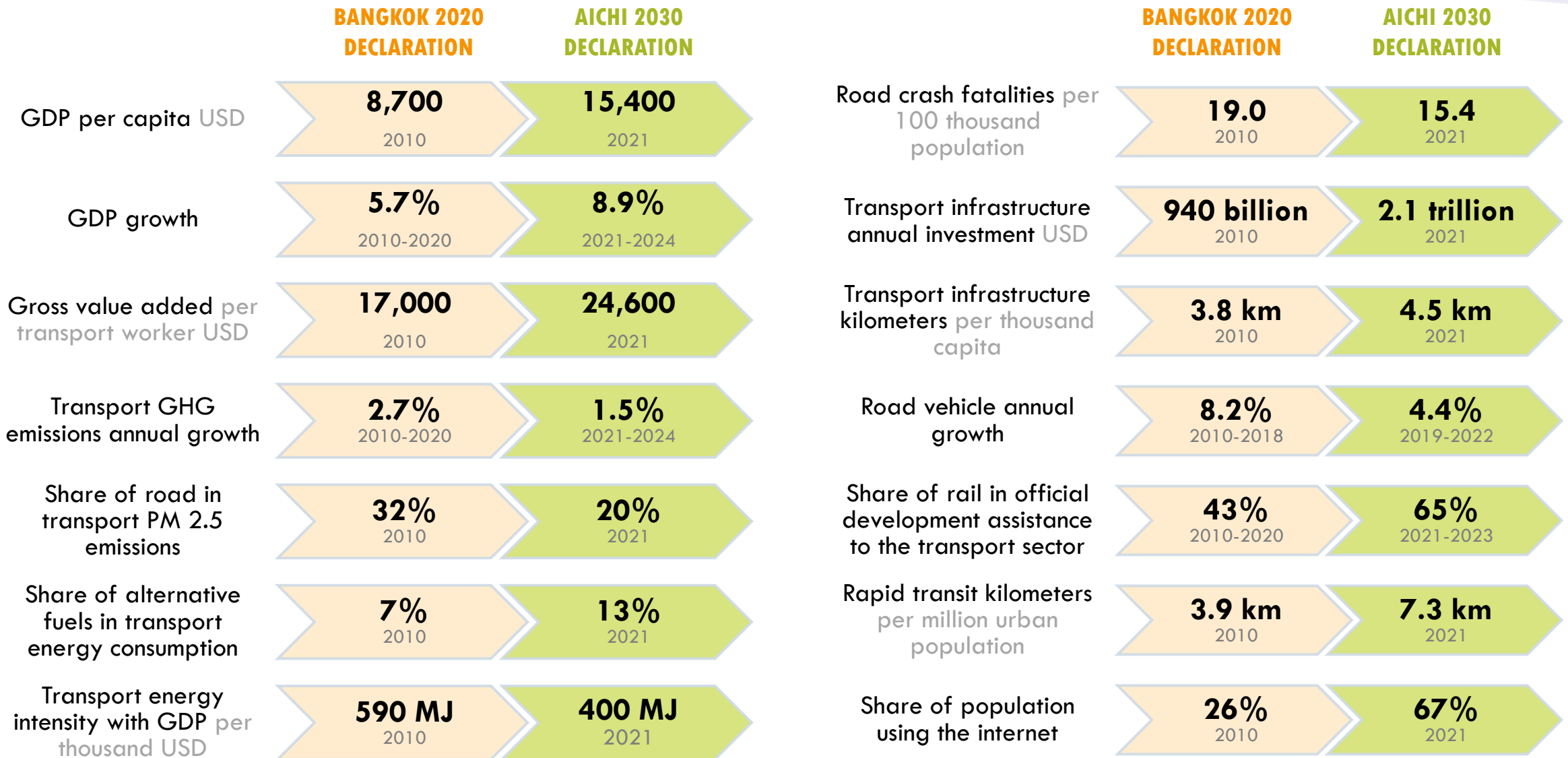
# Policy landscape

Average number of Targets per document



Transport policy measures from EST participating countries, cumulative





# asiantransportobservatory.org

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**“ATO translates data into insights, policies, and investments”**

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