

# ASIA AND THE PACIFIC TRANSPORT FORUM 2024

14 - 17 May 2024 | ADB Headquarters, Manila Philippines



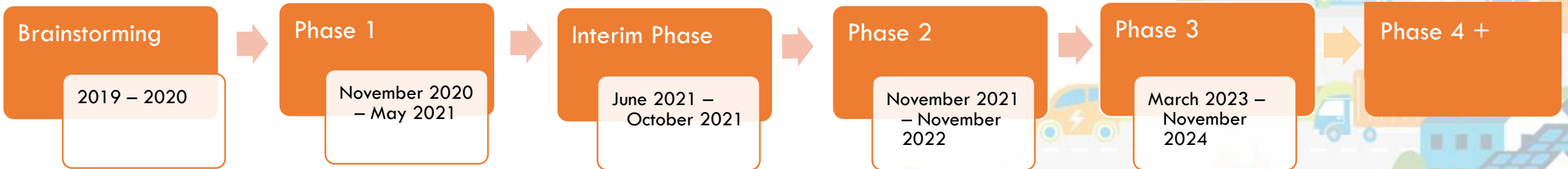
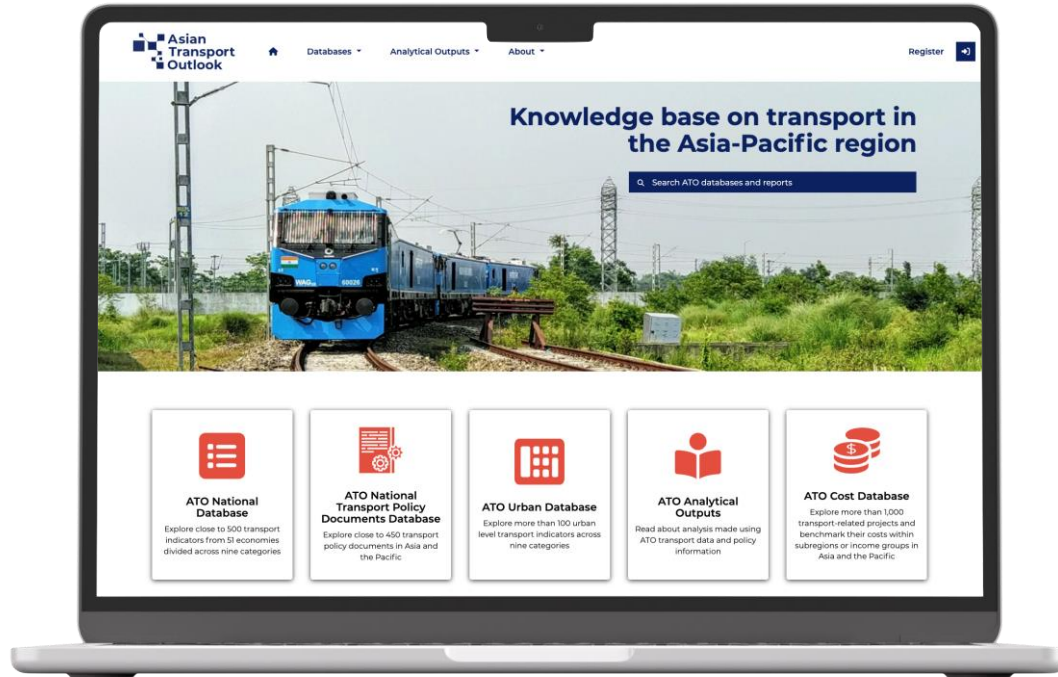
# Snapshots and Insights : E-mobility in Asia & the Pacific – Trends and Actions

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Asian Transport Outlook





# ATO National and Urban Database Indicators



Infrastructure



Transport Activity  
and Services



Access and  
Connectivity



Road Safety



Air Pollution  
and Health



Climate Change



Socio-economic



Miscellaneous



Urban Form and  
Structure + Land use

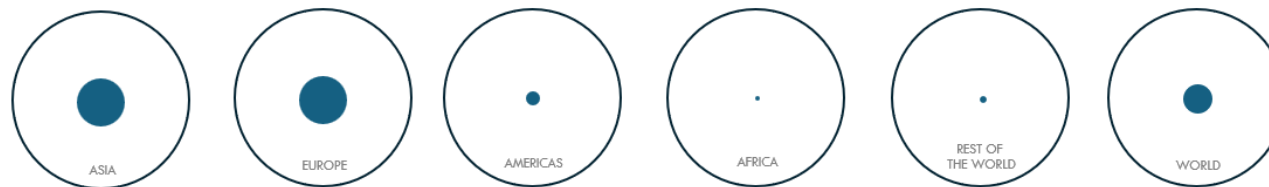
- 51** Economies (ADB Members + Russia and Iran )
- 460** Urban Centers (412 Asia-Pacific, 48 International)
- 46** Urban Centers with a detailed review

**410 national indicators,**  
53% have multi-year data,  
45% have 2022 data ,  
10% have more than 2 sources,  
30% have more than 1 source,

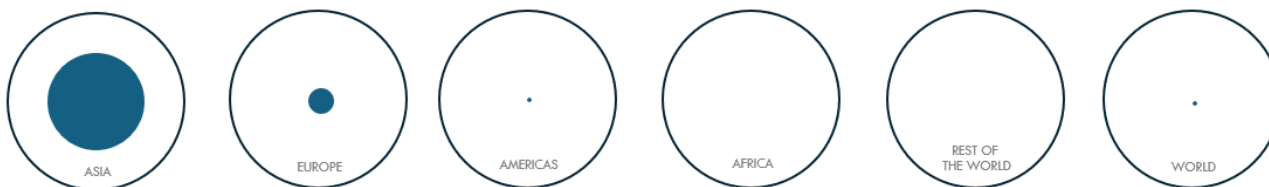
**281 urban indicators,**  
~80% have multi-year data,  
~70% have more than 1 source

# EV Sales % as Strong or Stronger in Asia Compared to Other Regions

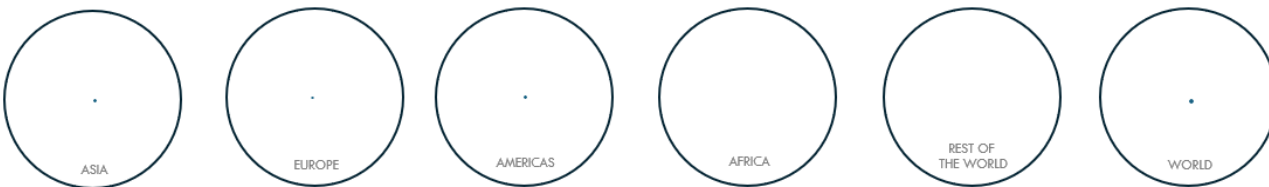
**% EVs - Car Sales 2023 (vs 100%)**



**% EVs - Bus Sales 2023 (vs 100%)**



**% EVs - Truck Sales 2023 (vs 100%)**



**% EVs - Van Sales 2023 (vs 100%)**

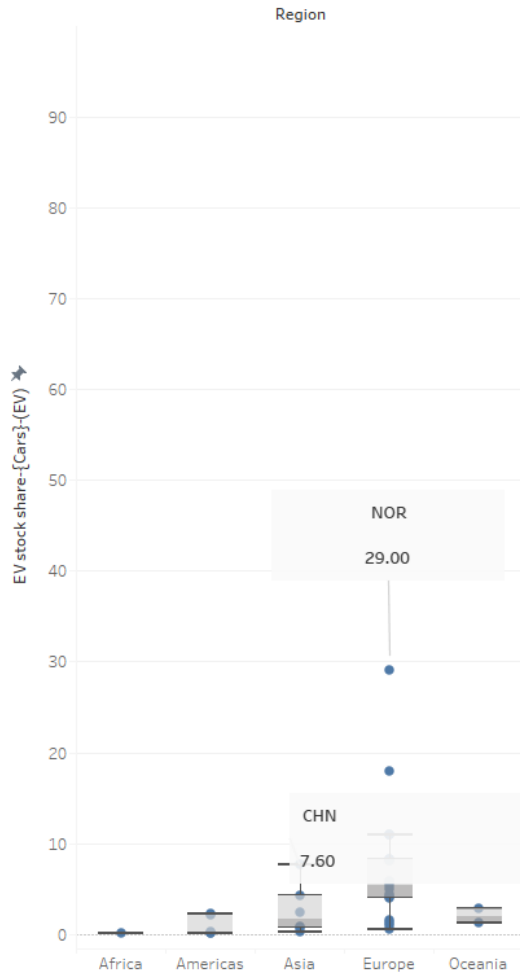


Note: Based only on sample contained in the IEA 2024 EV Outlook

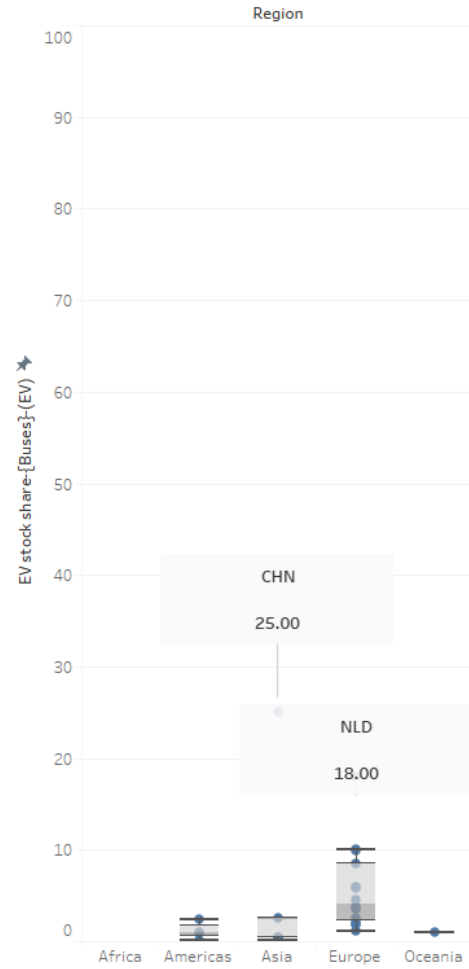


# Still a Long Way Towards Transition Across the Globe

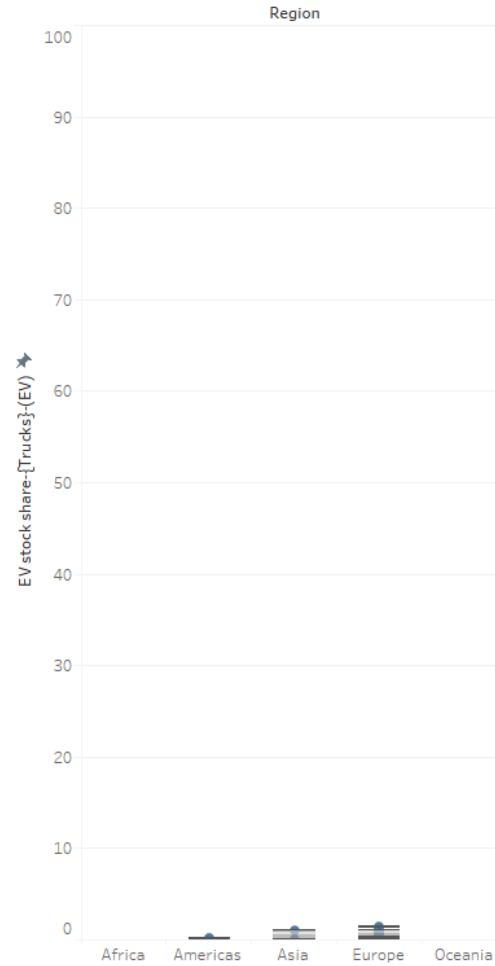
EV % in Car Stock - 2023



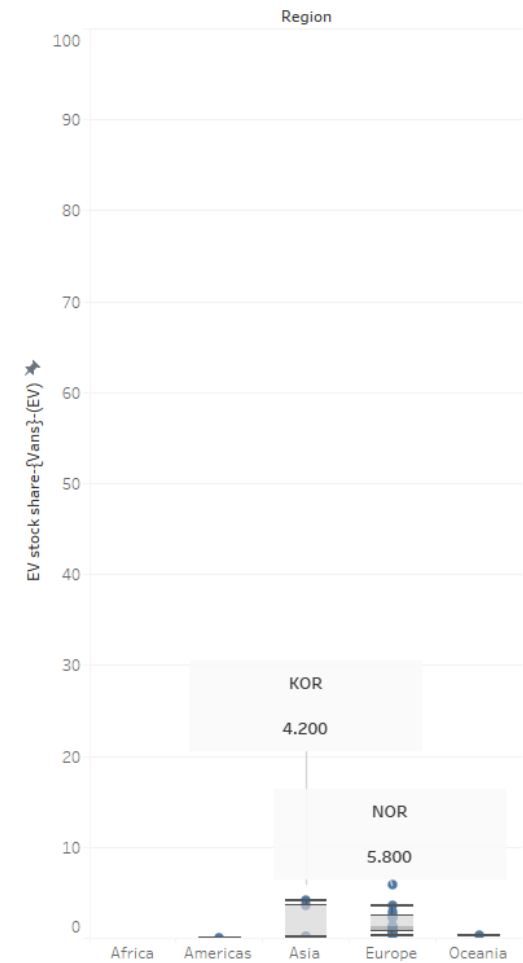
EV % in Bus Stock - 2023

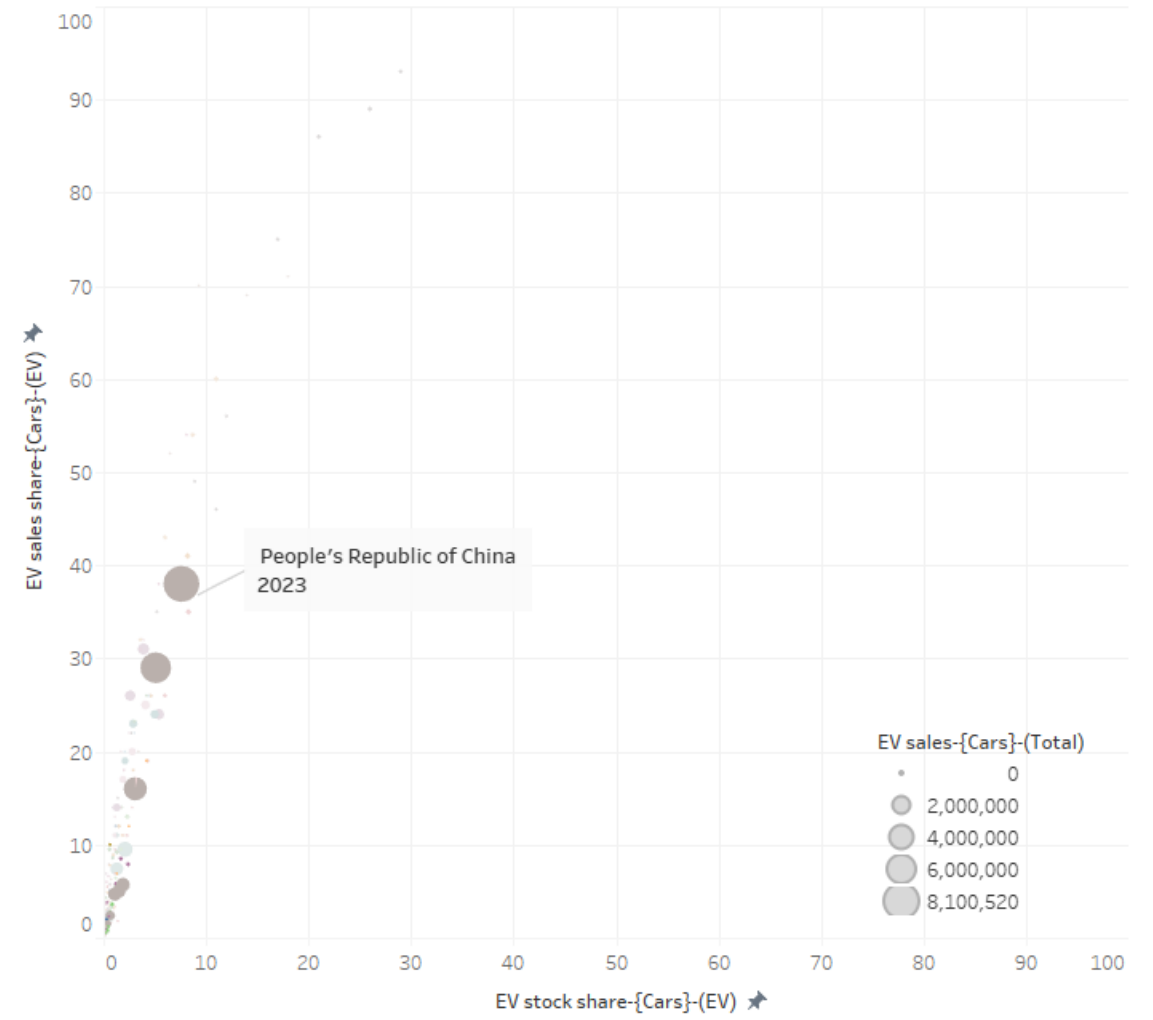
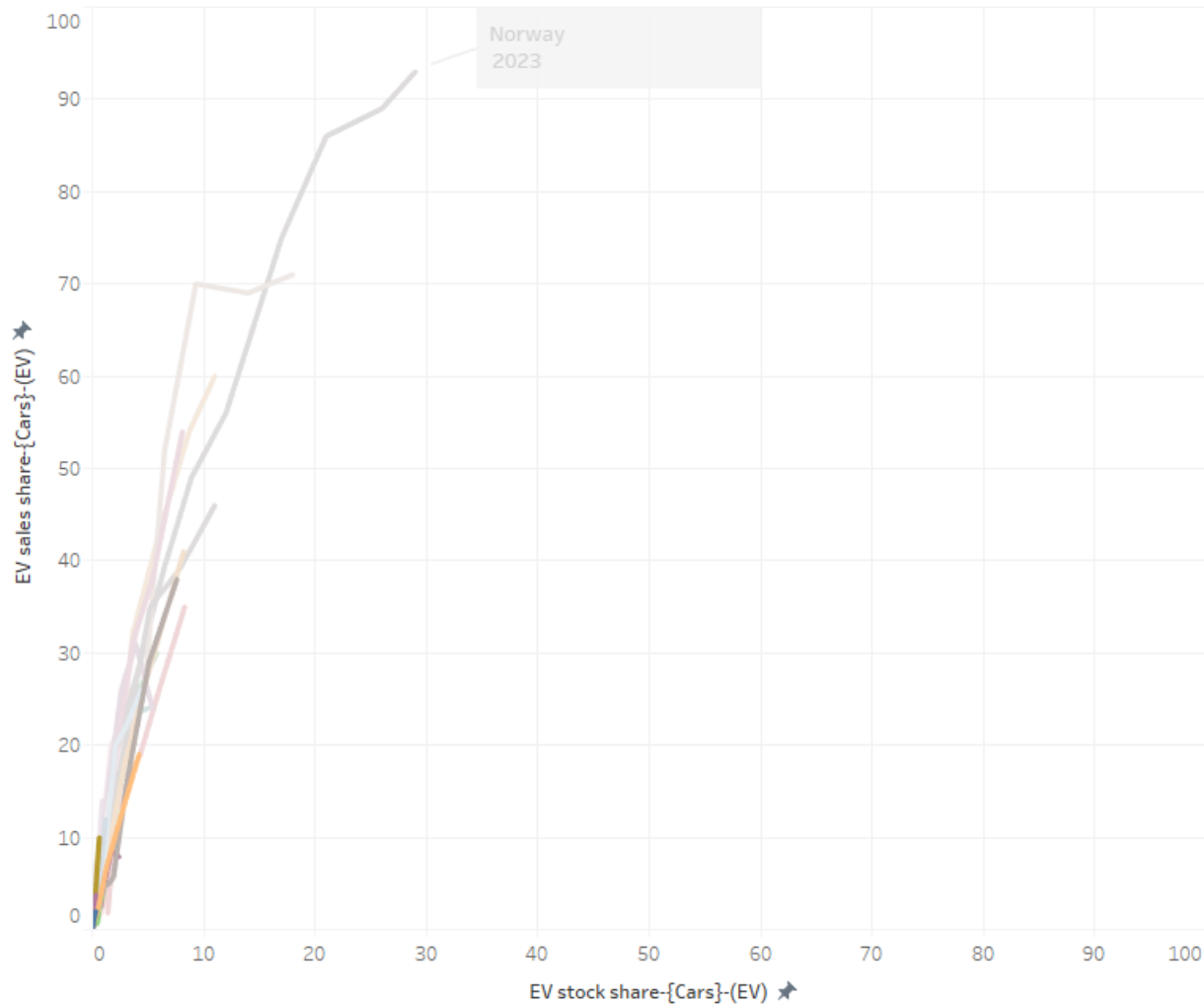


EV % in Truck Stock - 2023



EV % in Van Stock - 2023

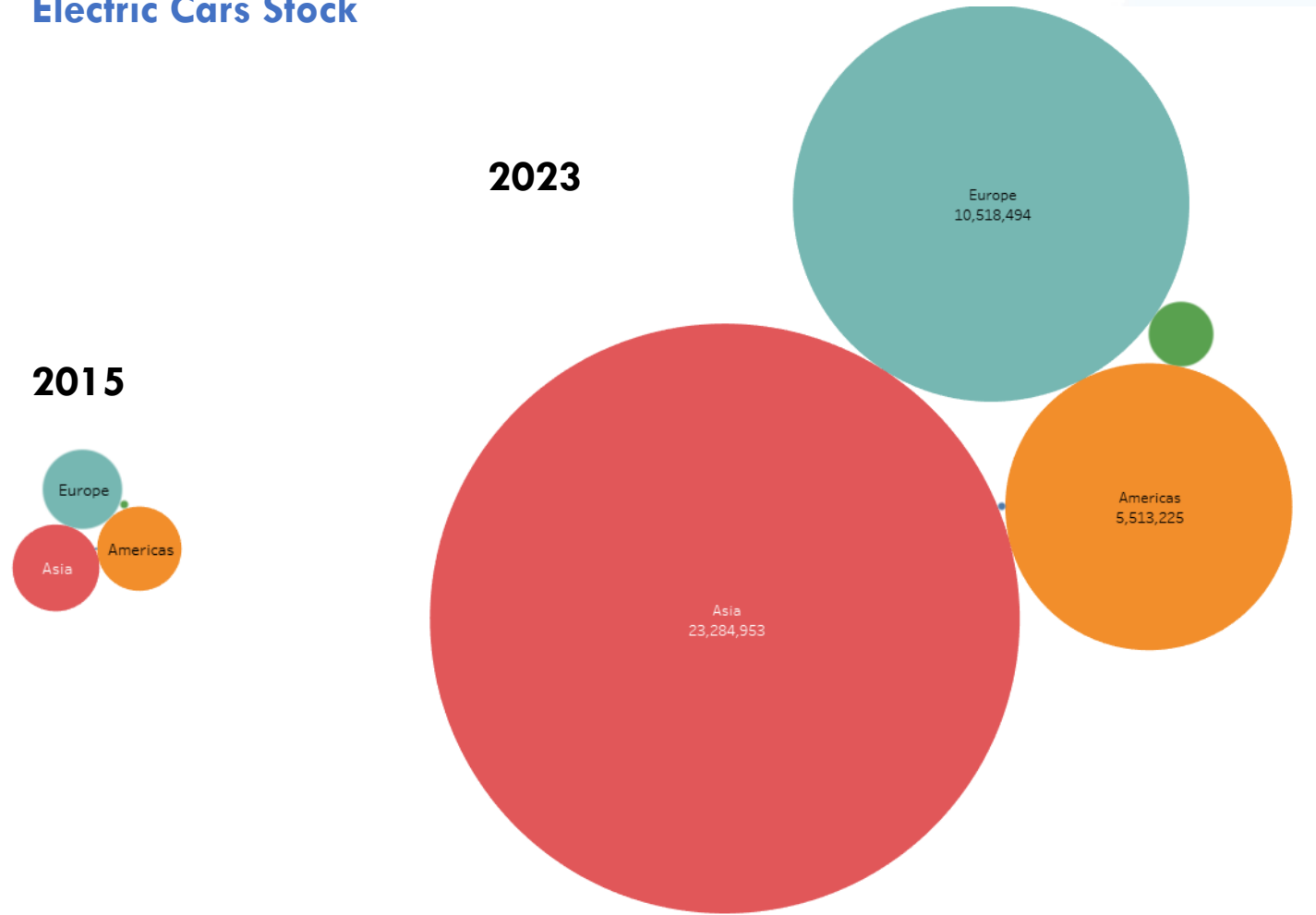




# Asia is Driving the Volume of Transition

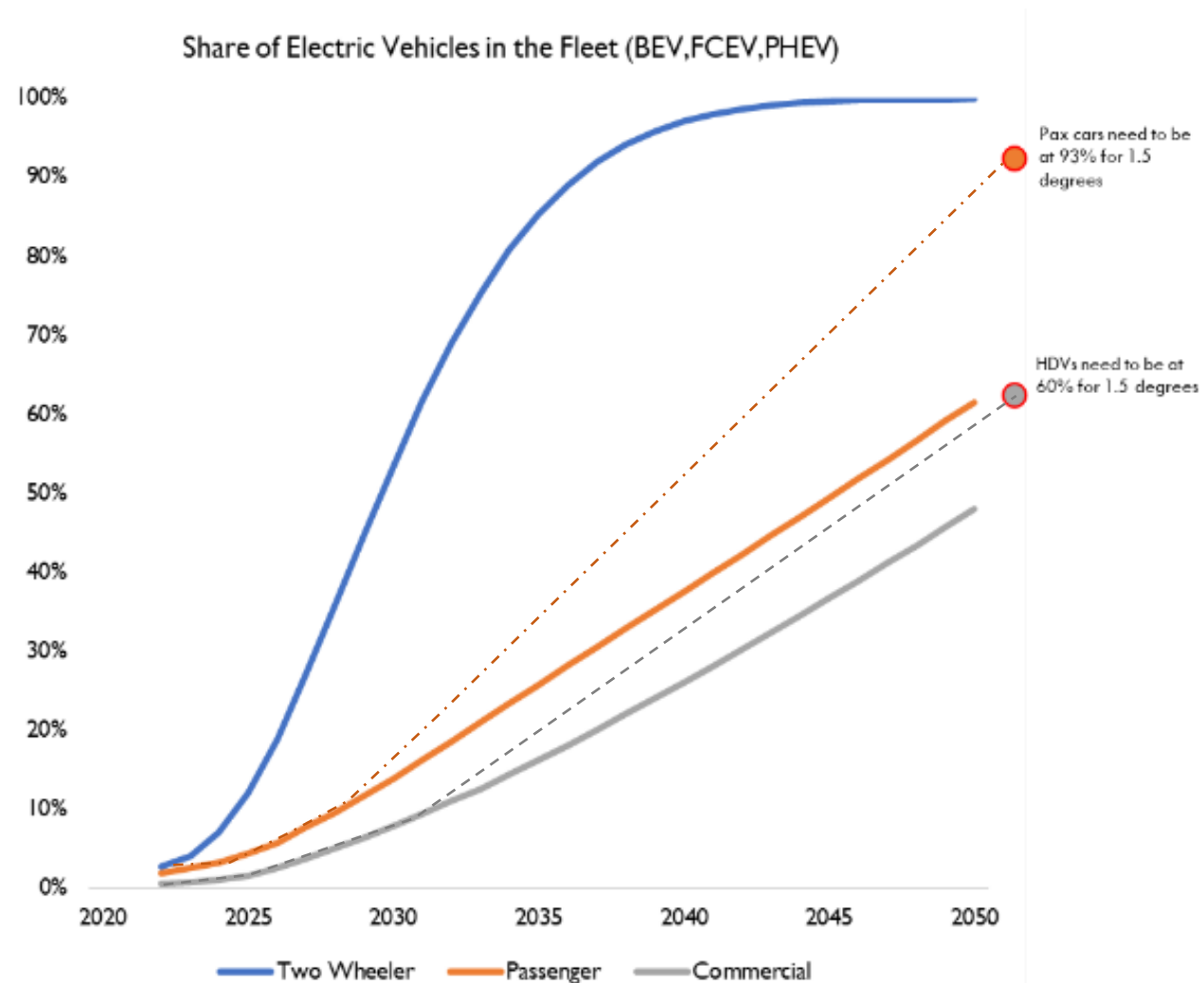
- 60% of the additional electric cars from 2015- 2023 have been added in Asia
- >90% of the additional e-buses between 2015-2023 have been added in Asia

## Electric Cars Stock





# Asia's Importance in Achieving 1.5 Degrees



Source: Based on DNV (2023) Energy Transition Outlook and IRENA (2023)

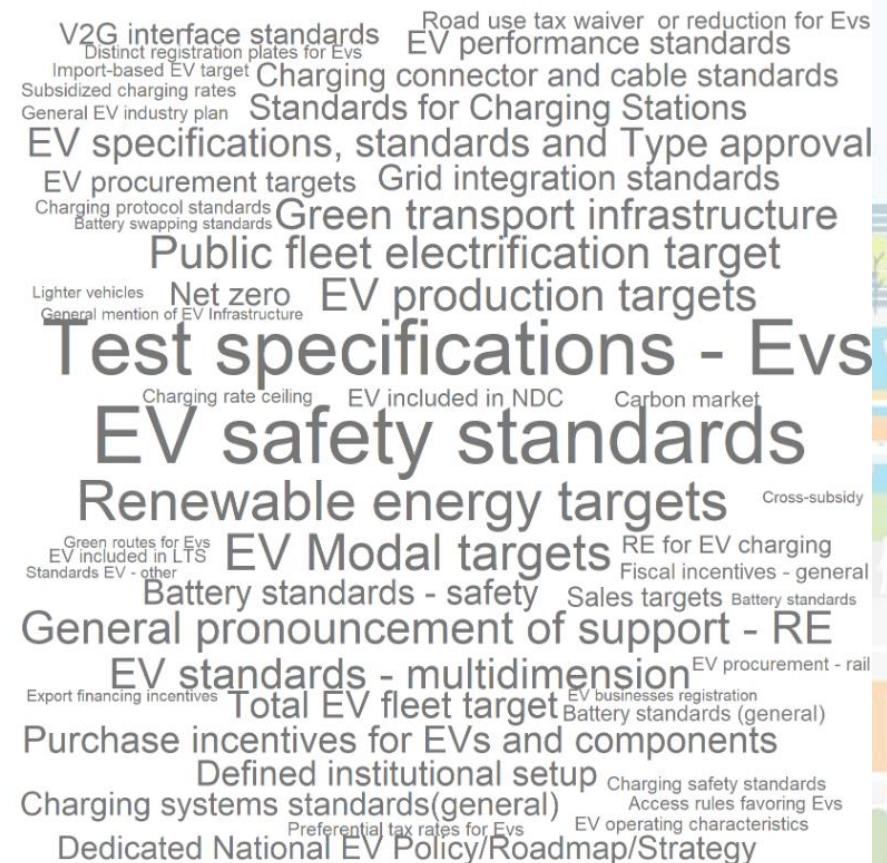
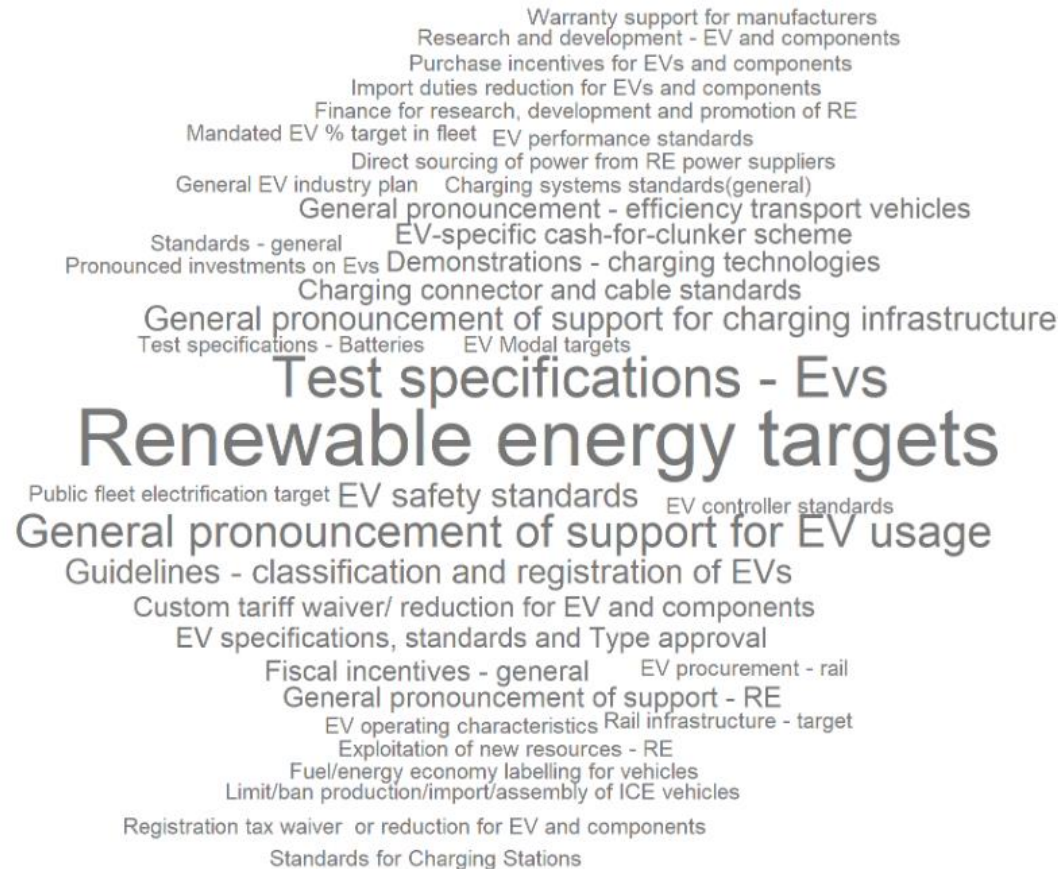




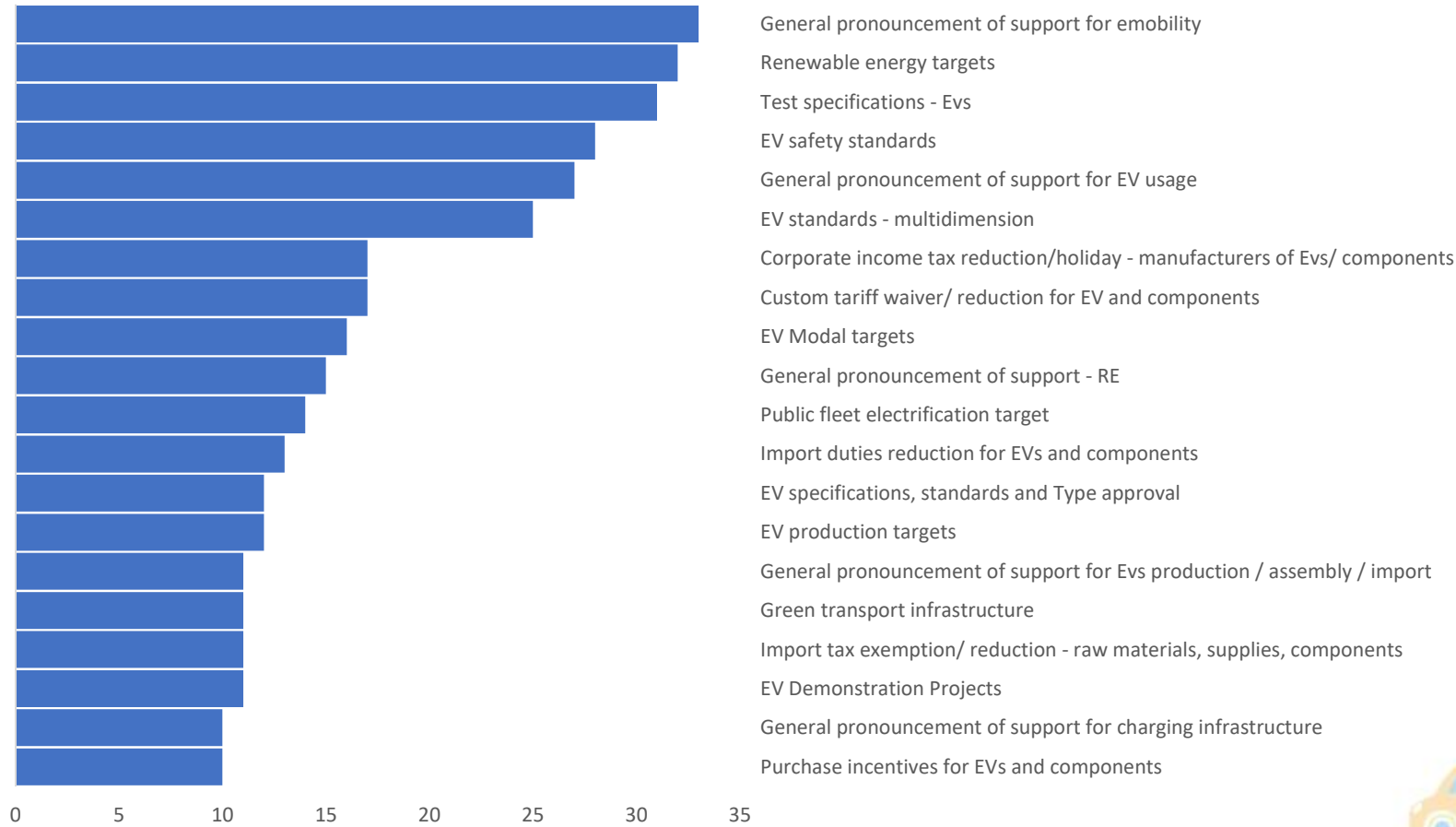
# E-mobility Measures : Keywords Evolution

2006-2015

2015-2023

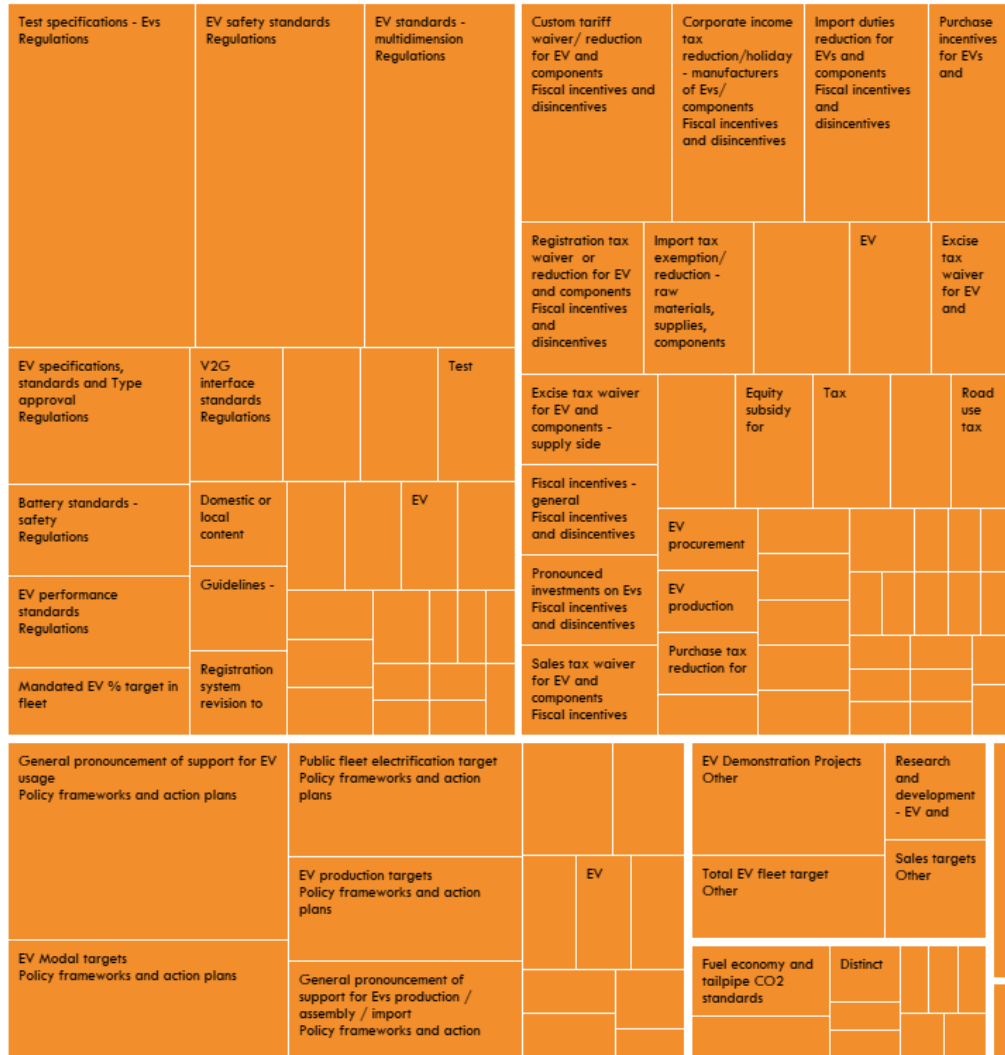


# Overall – Most Frequent

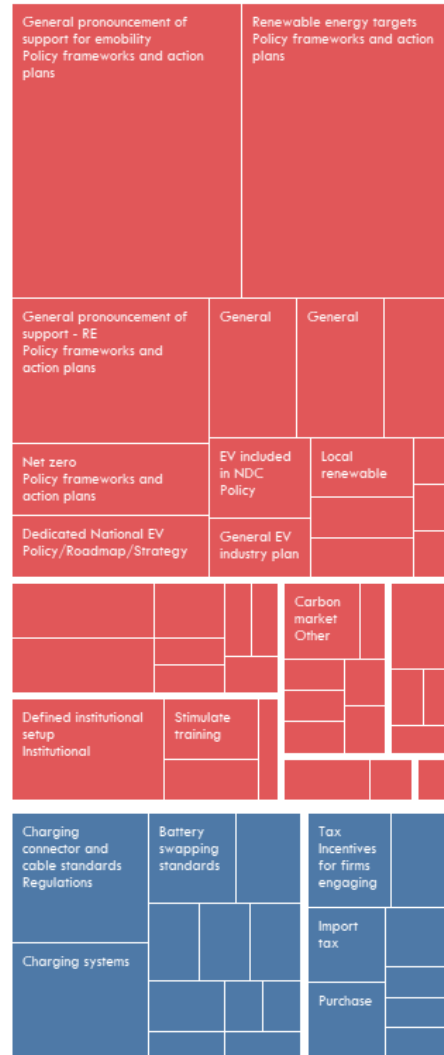


# Distribution of Measures by "Pillar"

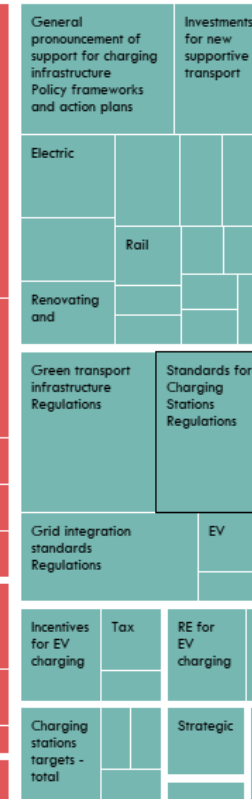
## EVs and EV components



## General



## Infrastructure



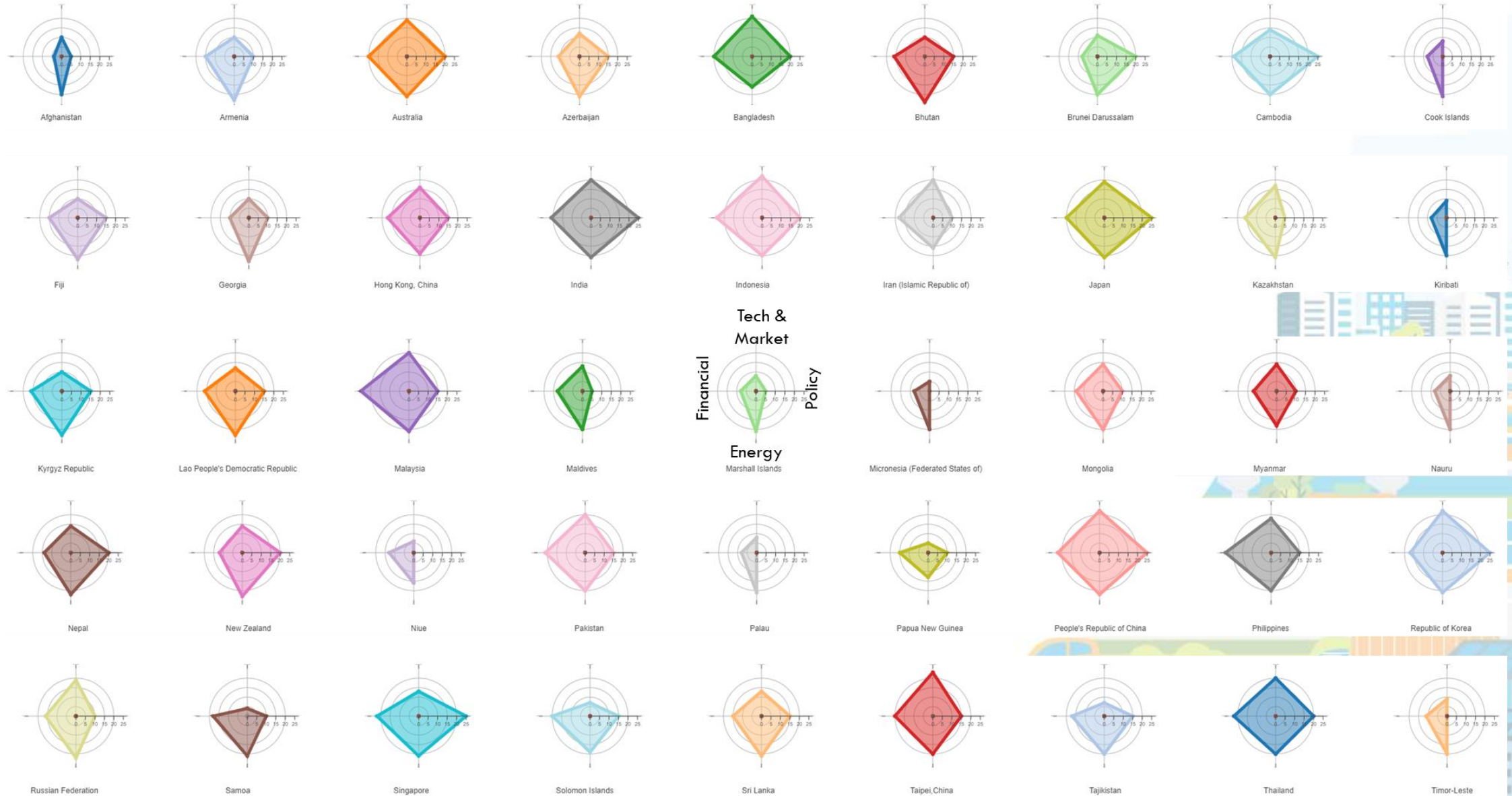
## Charging Equipment & components



## Services



# Various Needs in Various Countries



## E-2&3wheelers – Nuanced Approaches Emerging



- Different approaches in governing light electric vehicles (i.e. electric 2&3 wheelers)
- Dire need to integrate in policies, infra planning, regulations
- Important to take note of potential consequences (e.g. in terms of registration requirements; operational requirements, etc...; how they are integrated in the existing systems)
- Integrate in data collection

## Incentives – Review and iteration

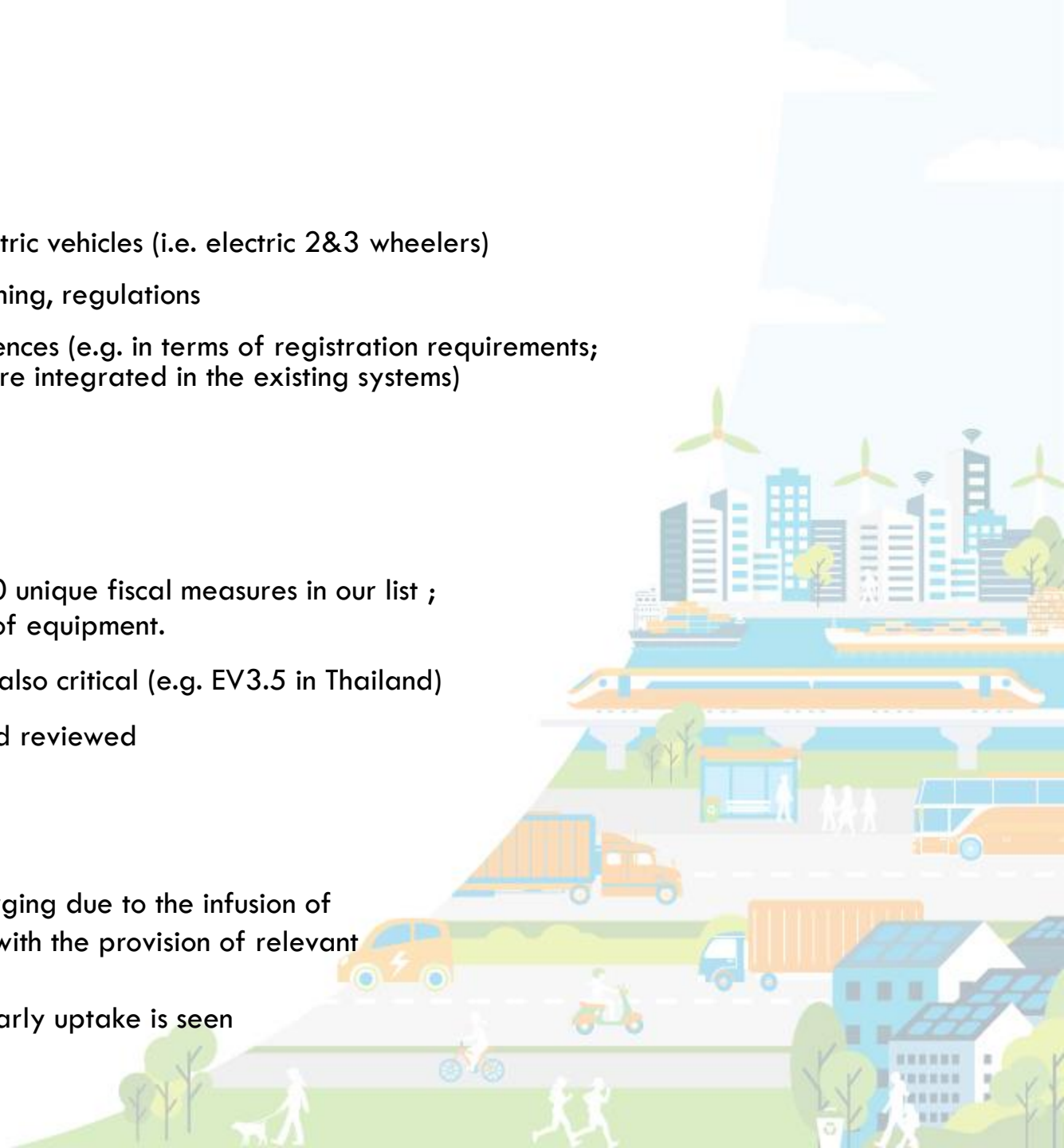


- Wide variety of fiscal measures (so far, >70 unique fiscal measures in our list ; almost 40% are focusing on the acquisition of equipment.
- Review and adjustments for fiscal incentives also critical (e.g. EV3.5 in Thailand)
- Non-fiscal incentives need to be iterated and reviewed

## Emergent use cases need to be acknowledged



- Various use cases business models are emerging due to the infusion of electric vehicles to mobility services, along with the provision of relevant services
- Policies have been scant, but evidence of early uptake is seen



## Charging Infrastructure and Supporting Services



- Countries now issuing various guidelines related to charging and related services and infrastructure
- Integration with new developments seen in policies of some countries
- Simplification of procedures; combination with other incentives may prove to be effective

## Evolving Institutional Setups, Supporting Capacity Development



- Setting up of dedicated committees composed of multi-sectoral/multi-thematic representation
- Recognition of importance of building capacities of local institutions and ecosystem stakeholders (users, drivers, maintenance, etc...)

## End-of-Life Measures still at Infancy



- Bangladesh –Incentives for setting up battery recycling industry
- Kazakhstan has adopted an ambitious framework for extended producer responsibility (EPR)
- Tajikistan – Integration of battery recycling technologies development in their Electric Transport Development Program (2023-2028)





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The collage displays six country-specific transport outlook reports. Each report features a cover image, a 'Background' section with text, and a 'Key Statistics' section with various charts and graphs. The countries included are Philippines, Uzbekistan, Thailand, Bangladesh, Indonesia, and Armenia. The reports provide detailed insights into the transport sectors of these countries, including trends, challenges, and opportunities.



<https://asiantransportoutlook.com/>



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THEMATIC AREAS

- VEHICLES
- BUSINESS AND FINANCE
- DEMONSTRATIONS
- INTEGRATION
- OPERATION
- POLICY
- SUSTAINABILITY
- USERS

SEARCH

QUICK GUIDE



### Policy Guidelines for Electric 2- & 3-wheelers for...

This document has been developed as part of of the program being implemented by the United Nations Environment Program (UNEP)...

Search tools

## Other tools related to E-3 wheelers



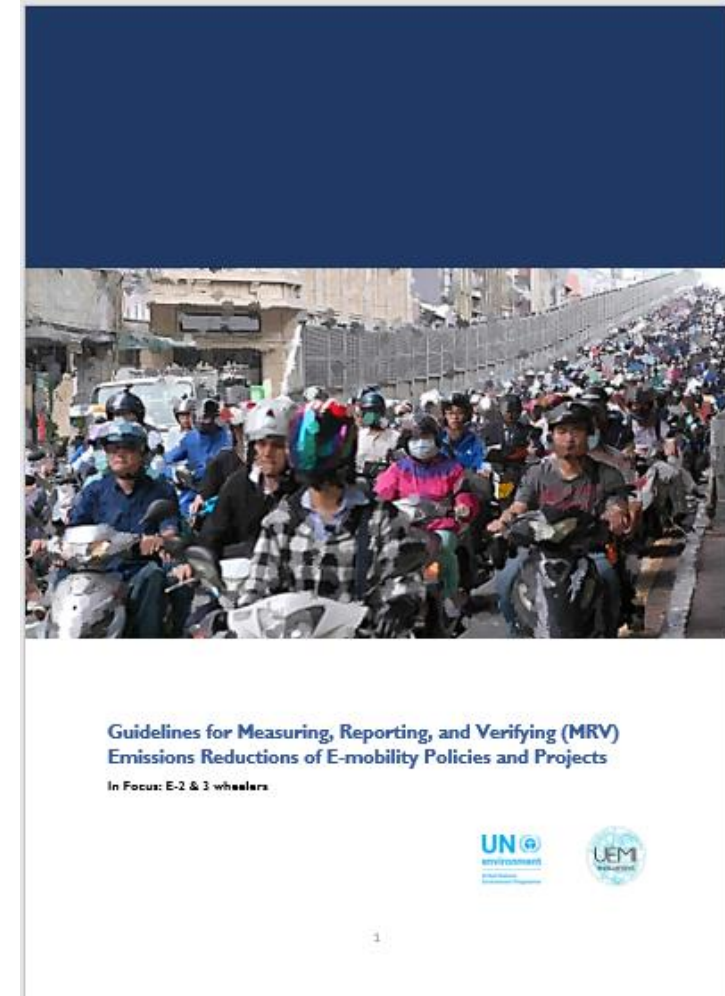
### A new move for business - Electric cycle logistics in...

### EV City Casebook

Electric cars, buses, and taxis have rapidly increased in numbers, moving beyond early

# GUIDELINES FOR MRVing Emission Reduction of Emobility Policies and Projects

- Based on the guidelines produced through the No and Low Emission Transport project being implemented by the United Nations Environment Programme (UNEP). The project aims to promote a global transition to no and low emissions mobility for improved air quality and climate change mitigation.
- The purpose of this document is to provide bespoke guidance towards the measurement, reporting, and verification (MRV) of the emissions impacts of projects, programmes, and interventions focusing on the electrification of 2&3 wheelers.
- In particular, the guidance is directed at proponents of such initiatives in developing countries wherein data, resources and capacities may not be at optimal levels.
- This report has been produced for UNEP by the Urban Electric Mobility Initiative (UEMI).



- Asia is **key** to determining the future of e-mobility globally.
- Policy measures are **diversifying, expanding**, though we are seeing evidence of lop-sided prioritization of measures focusing on bolstering EV production and EV demand – are we merely electrifying congestion?
- It is worthwhile to emphasize that e-mobility needs to be **embedded** in a wider sustainability framework
- **Adaptive** evolution and adjustment of the policy measures are key towards successful scaling up
- Electrification of the sector entails a recognition of the **interlinkages** of the different sectors, and the need to utilize a socio-technical paradigm in moving forth with scaling up effortsE-mobility should not just about the vehicles.



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

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