



State of Mobility in Asia

Opportunities & Challenges

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Key takeaways

Growth in developing Asia will continue to be resilient this year, despite uncertain external prospects (ADB 2024)

Income → mobility → vehicle ownership → congestion → CO2 emission

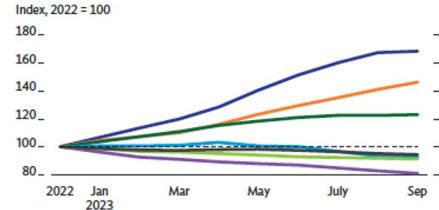
Asia and the Pacific must tackle rapidly rising transport emissions, which is the second-fastest growing source of emissions in the region (WEF, ADB).

Role of National & Sub-National Governments: Decoupling growth from transport emissions

Figure 1.1.6 Best and Worst Performing Goods Exports in Developing Asia

Electric and hybrid cars are leading the upturn in export growth.

- Electric and hybrid cars
- Internal combustion cars
- Rechargeable batteries
- Remaining goods
- Petroleum and derivatives
- Electronic integrated circuits
- Computers, laptops, and parts



Notes: 12-month moving average relative to 2022 average. Goods at Harmonized System (HS) 4-digit classification were selected on the basis of their contribution to the aggregate export growth of the following economies: Armenia; Azerbaijan; Hong Kong, China; Fiji; Georgia; India; the Kyrgyz Republic; Malaysia; the People's Republic of China; the Philippines; and Uzbekistan.

Source: UN Comtrade.

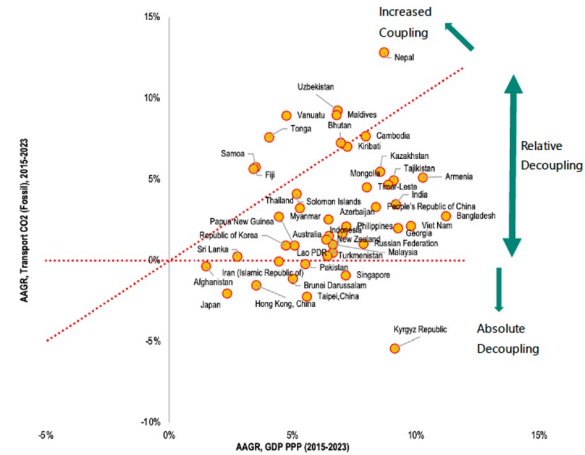


Figure 6: Annual average growth rate of transport CO2 (Fossil) emissions and GDP (PPP)

Source: (European Commission, Joint Research Centre & IEA, 2024)

10 Emerging Trends

1. Limited progress in reducing transport **fossil fuel subsidies**.
2. A significant **transport infrastructure gap**.
3. A widening gap between **vehicle** numbers and **road capacity**.
4. Asia is leading the **electric vehicle revolution**.
5. A **bus crisis**., or informality ?
6. Stagnant **bicycle** trade.
7. A disproportionate **climate burden** on the Asian transport sector.
- 8. Slow renewable energy uptake** in transport.
9. The **Internet's** complex **impact** on transport.
10. A significant increase in climate commitments, but **insufficient long-term ambition for transport**.

Trends in Transport Fossil Fuel Subsidies in Asia

Asia's share of global transport fossil fuel subsidies increased from 32% in 2010-2015 to 44% in 2015-2022.

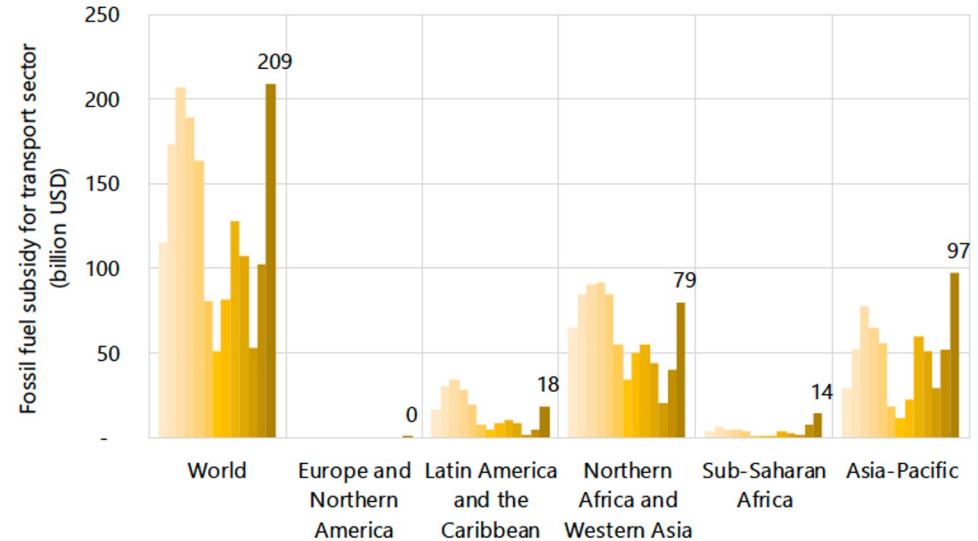


Figure 12: Fossil fuel subsidy for transport sector (billion USD) (2010 – 2022)

Source: (International Energy Agency (IEA), n.d.)

Transport Infrastructure Gap in Asia-Pacific

Asia Pacific: 50% of world population, 38% of global transport infrastructure

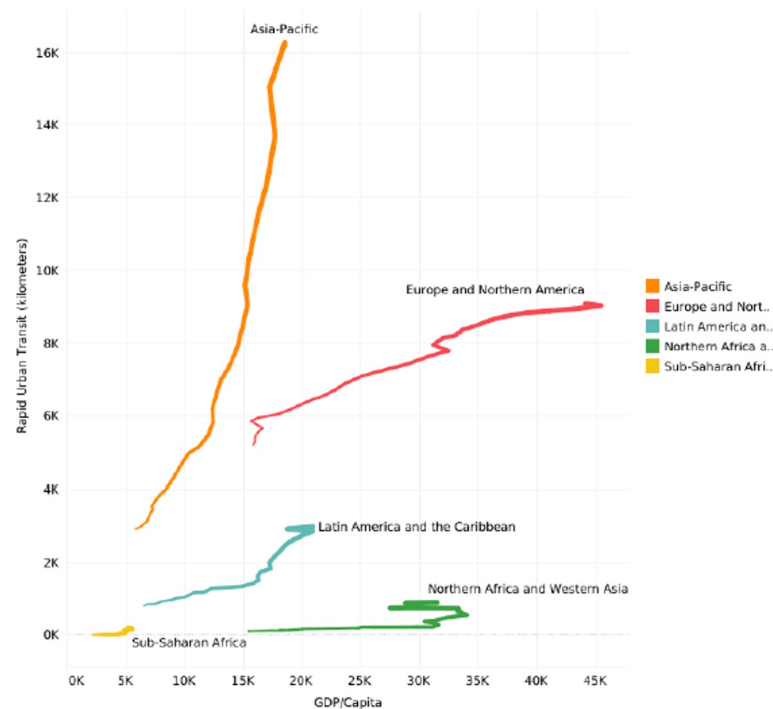
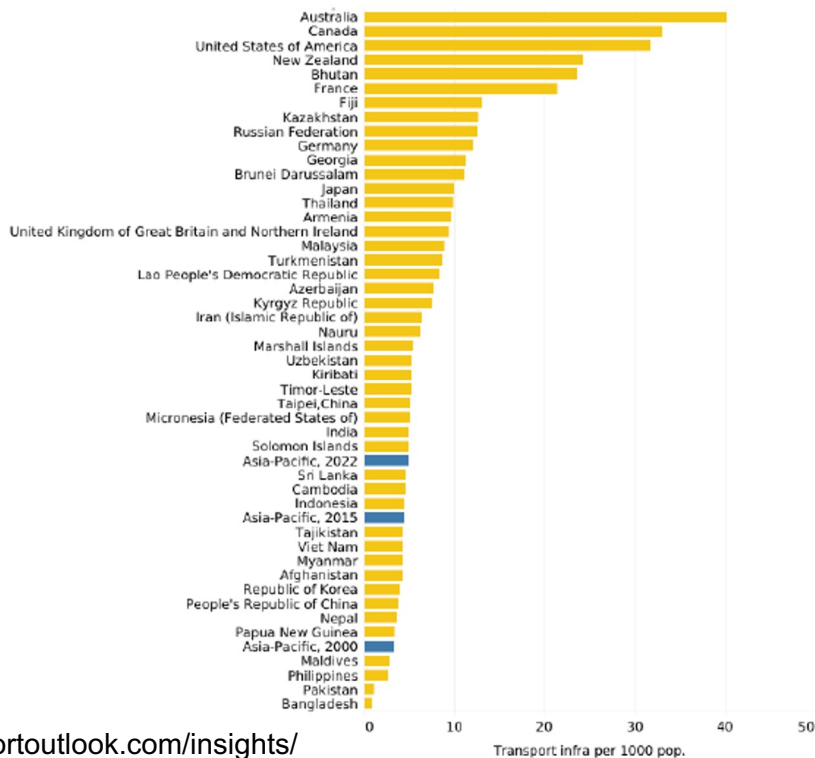


Figure 14: Rapid urban transit and GDP/ capita

Source: ATO visualization based on country official statistics

Asia: Epicentre of the Electric Vehicle Revolution

2015-2023: 60% of the increase in EV cars & 90% of EV bus

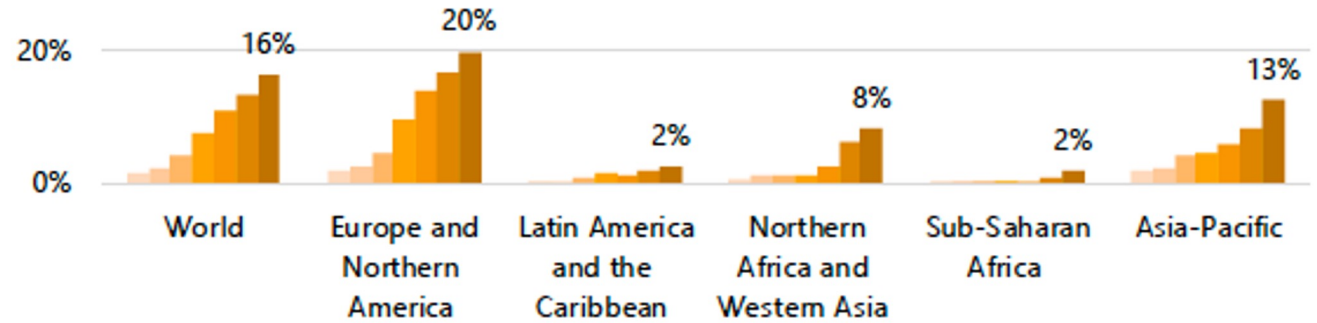


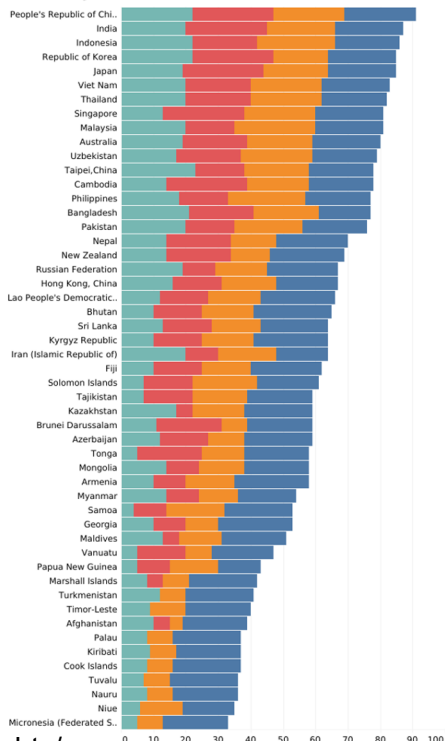
Figure 16: Share of Electric (including hybrid) in road vehicle imports (2017 – 2023)

Source: (International Trade Centre, n.d.)

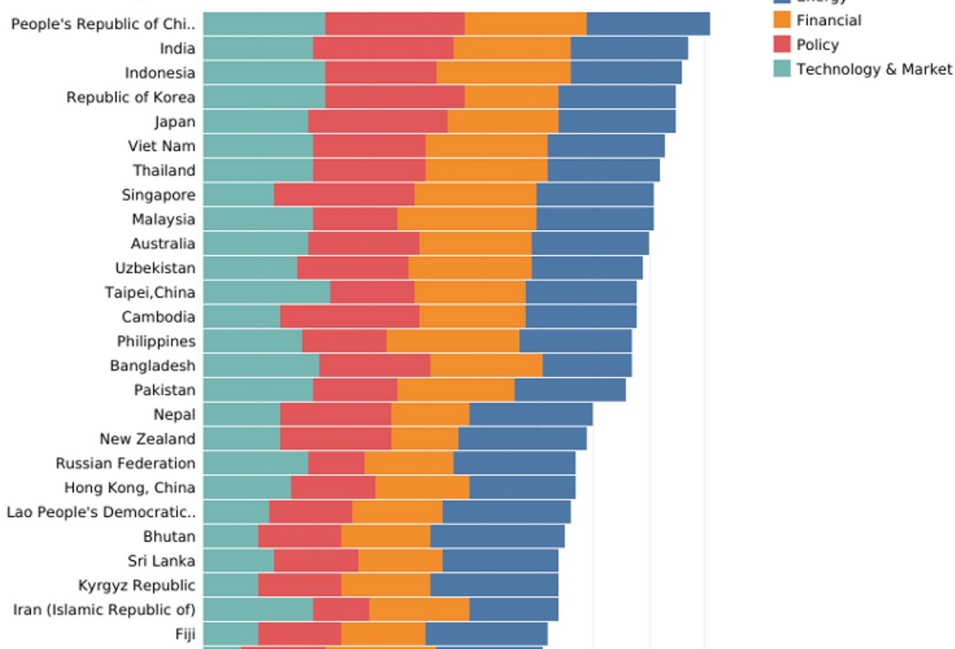
Asia: Epicentre of the Electric Vehicle Revolution

EV Readiness dominated by Asian countries

E-mobility Readiness Index



E-mobility Readiness Index

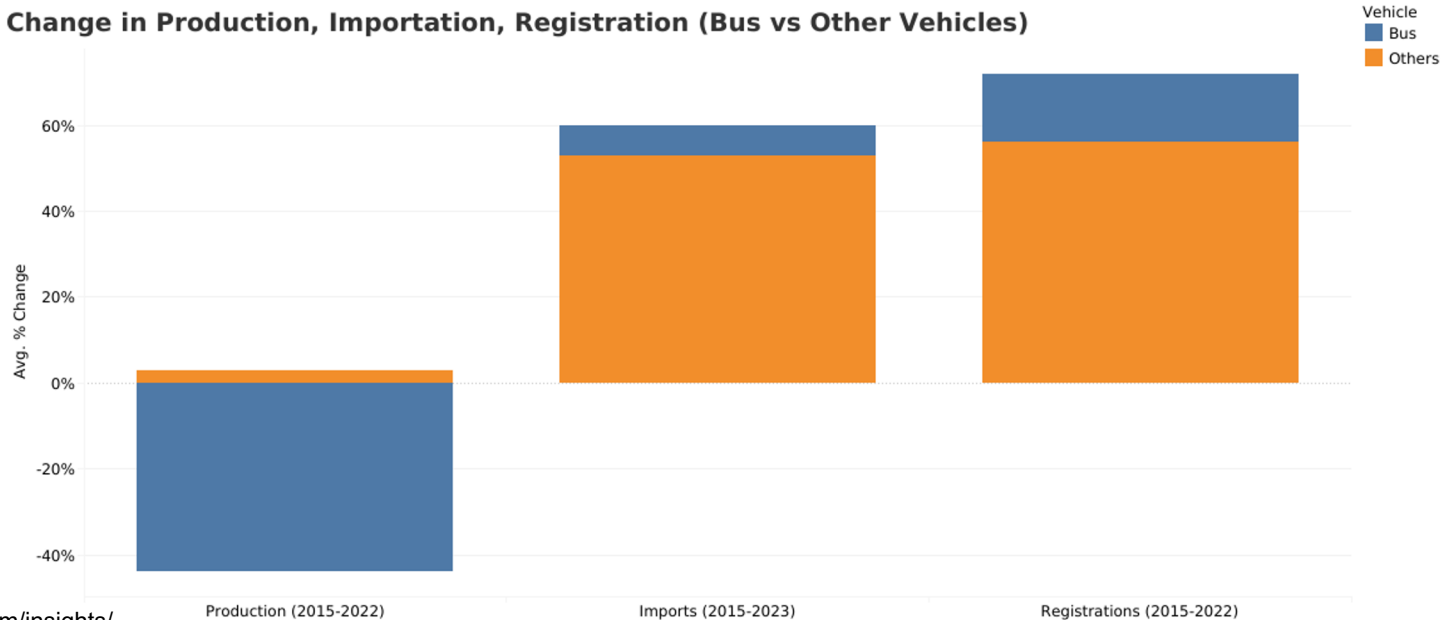


Bus Crisis; informality ?

Bus production (-), Bus registration < Other vehicles, but why?

- 2W & 3W motorization, informality, app-based taxis?
- Income, Livelihood vs. Decarbonization goals

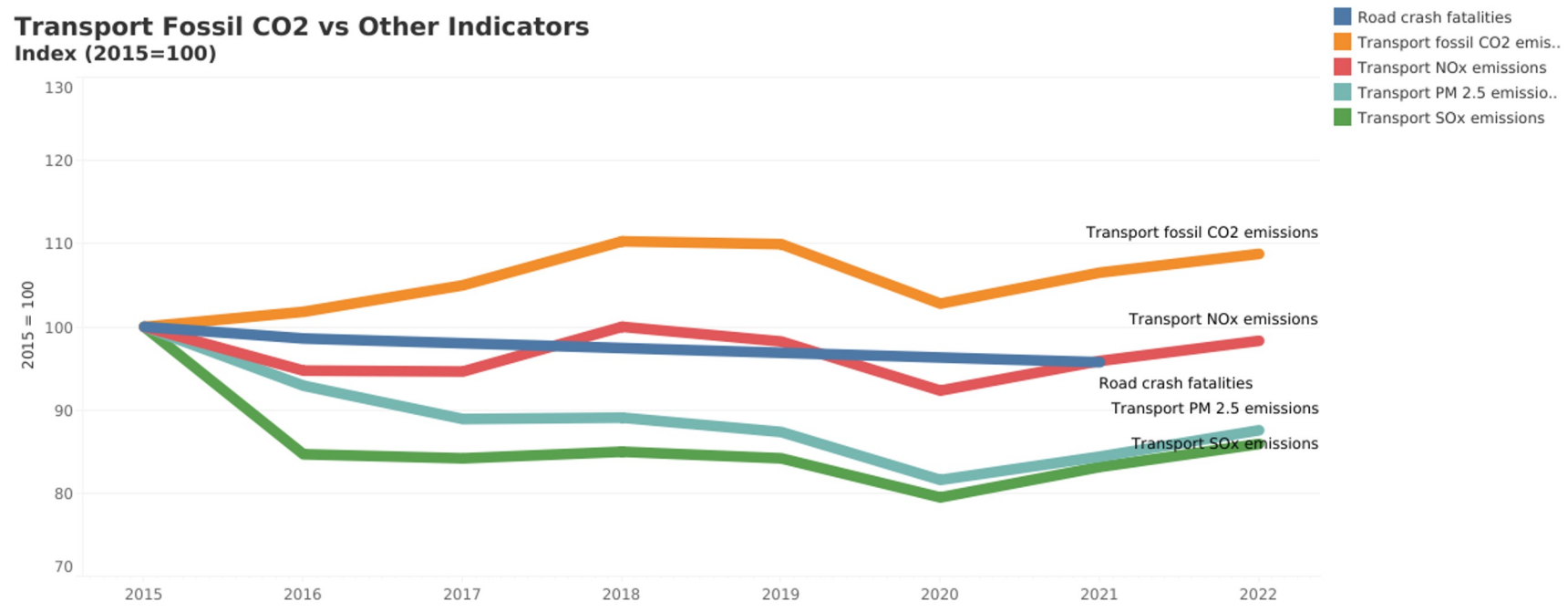
Change in Production, Importation, Registration (Bus vs Other Vehicles)



Transport decarbonization is lagging

Decarbonization is underperforming other transport sector goals

Transport Fossil CO2 vs Other Indicators
Index (2015=100)



Growth → Motorization → CO₂

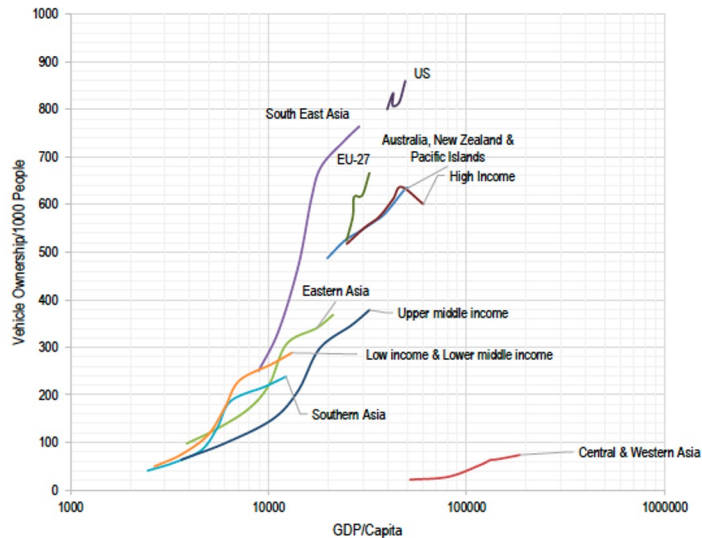


Fig. 8: Motorization growth

GDP = Gross Domestic Product

Source: Asian Transport Outlook (2022) National Database TAS-VEP-038, SEC-SEG-002

Higher income + Cheaper Vehicles → motorization

Higher income → Larger house → Suburbanization

→ Drives longer → more fuel consumption → CO₂

→ Low public transport patronage/ridership

→ Equity issues surrounding vehicle ownership

How to balance growth, mobility needs, & climate goals?

Decoupling is key

Some Asian countries have successfully decouple growth from transport emissions
 Key metrics: Transport CO2 intensity (gCO2 per GDP PPP in USD)

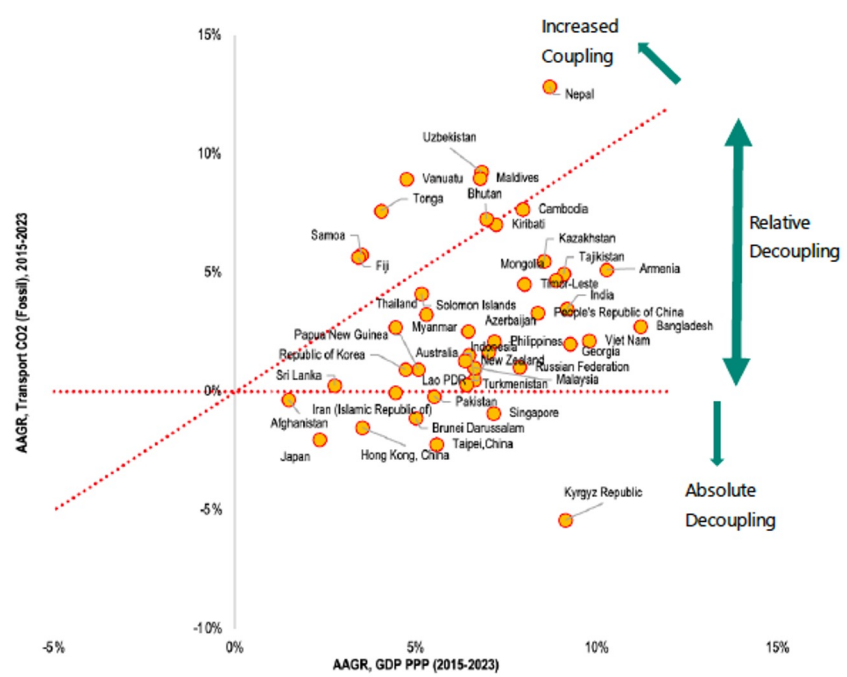
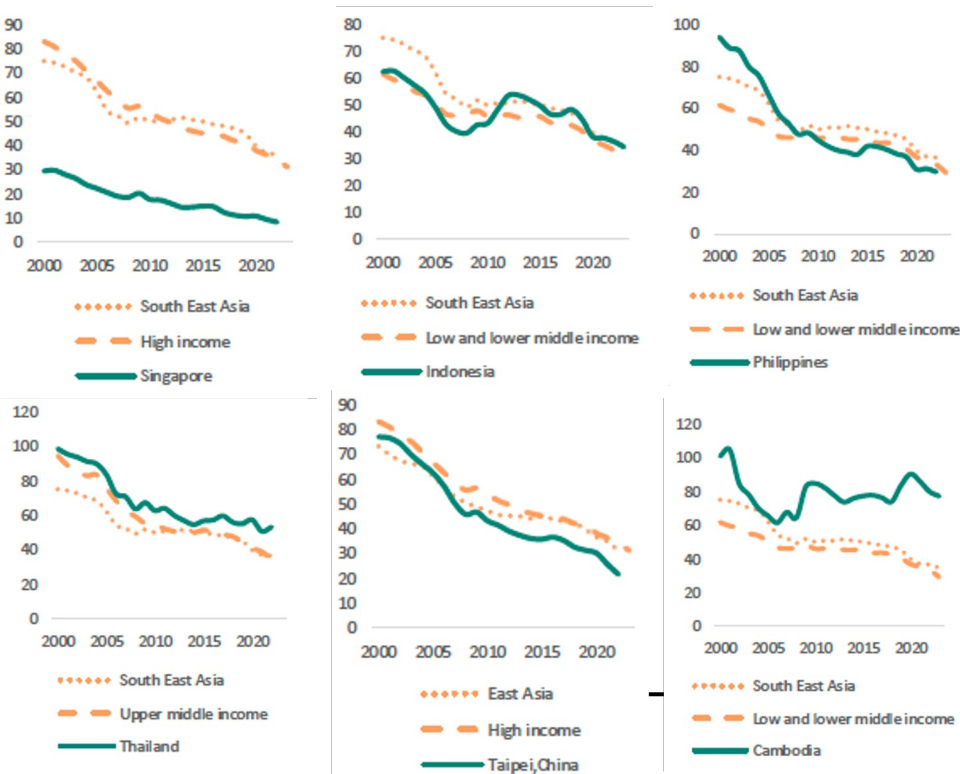


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ADB: 6-steps

How Asia can develop more sustainable transport

1. Set clear emission reduction/decarbonization targets
2. Boosting public transport
3. Supporting EV adoption
4. Protecting against climate-related disruption
5. Finding innovative finance
6. Nurturing sustainable transport expertise

Mobility for All Manifesto - 2023

“We therefore declare urban mobility as an essential public good.”

5-point Action Plan to transform mobility:

1. Mobility as a right
2. Public transportation as a backbone of mobility services
3. Building safe and walkable residential neighborhoods
4. Judicious use of digital technology
5. Environmental sustainability & decarbonization



Council of
Asian Liberals
and Democrats

Thank You!
