

Bridging the Gap : Transport Policies for Mitigation and Adaptation in Asia

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Co-Team Lead

Asian Transport Observatory

Transport NDC 3.0 Kick-off Workshop - PHL
January 22, 2025

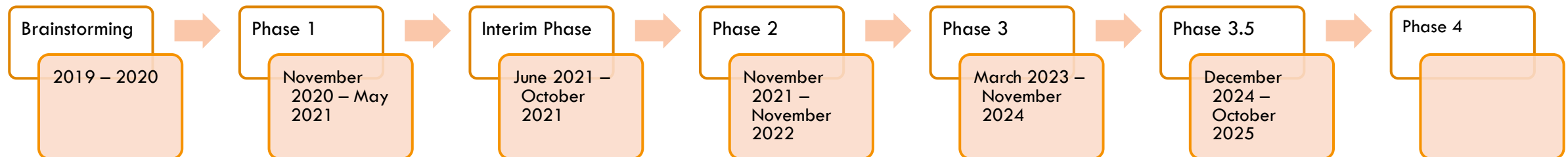
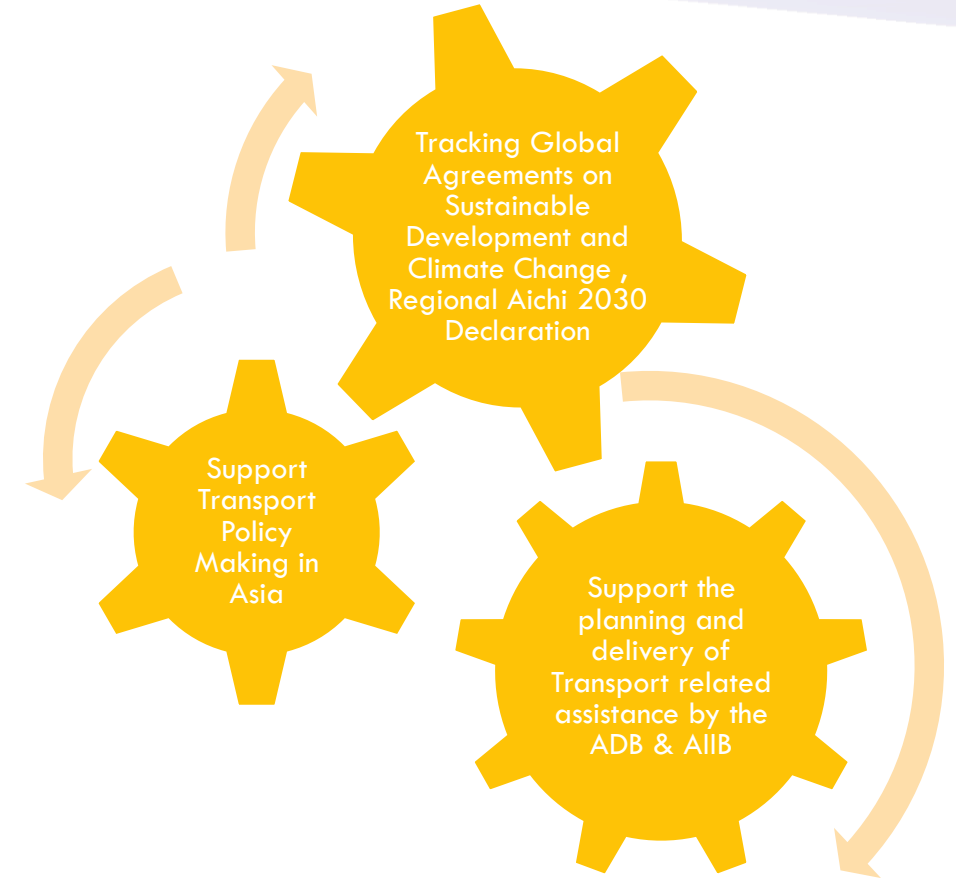


Asian Transport Observatory (ATO)

A Catalyst for Sustainable Transport in Asia

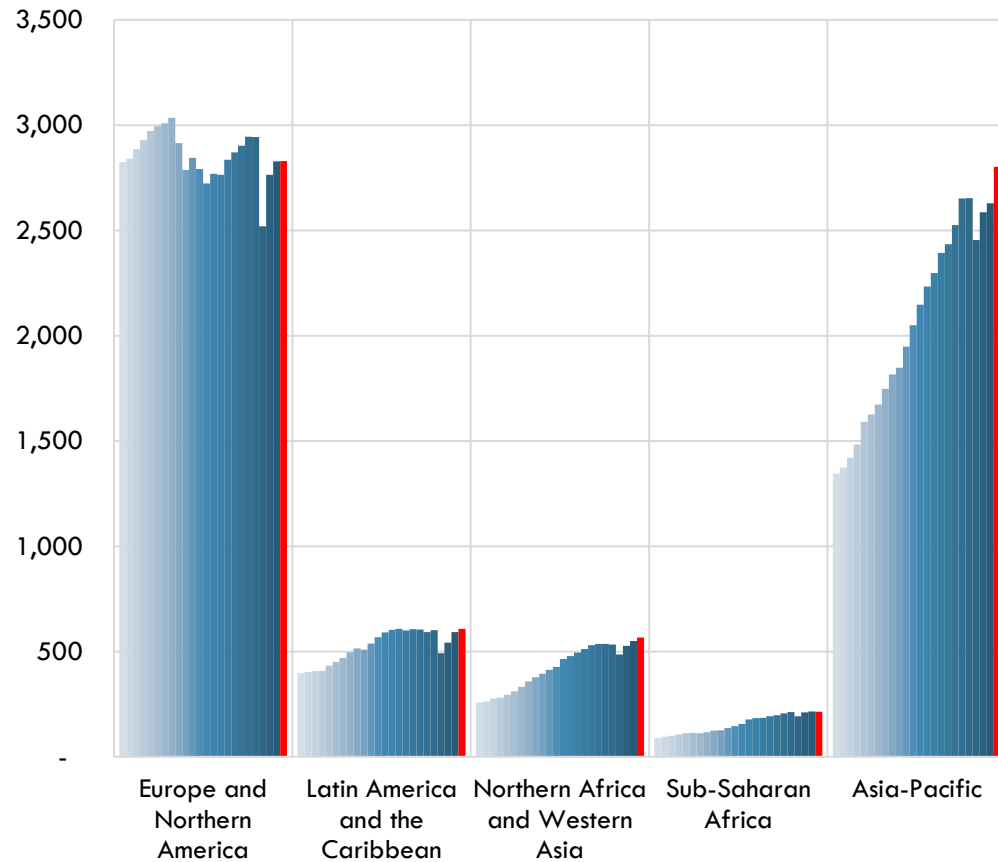


- 51** Economies (ADB Members + Russia and Iran)
- 460** Urban Centers (412 Asia-Pacific, 48 International)
- 47** Urban Centers with a detailed review * To be increased to 50



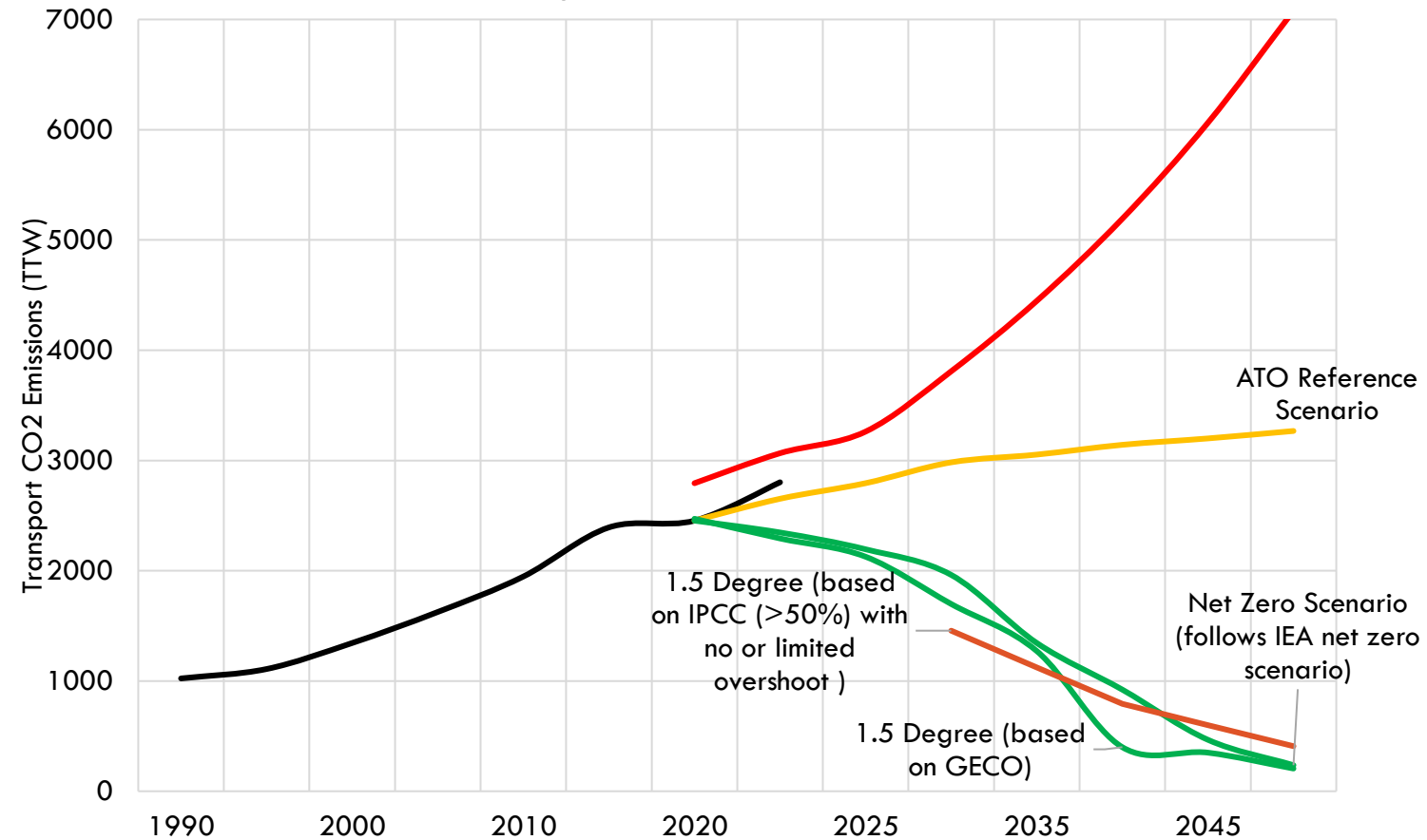
Asia's transport decarbonization progress is lagging

Domestic Transport CO2 Emissions, 2000-2023, Million Tonnes of CO2 Emissions

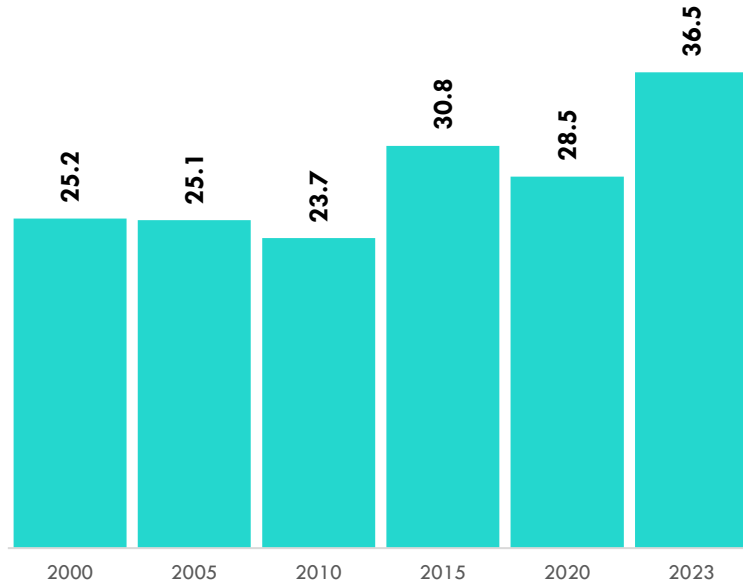


Transport CO2 Emissions in Asia

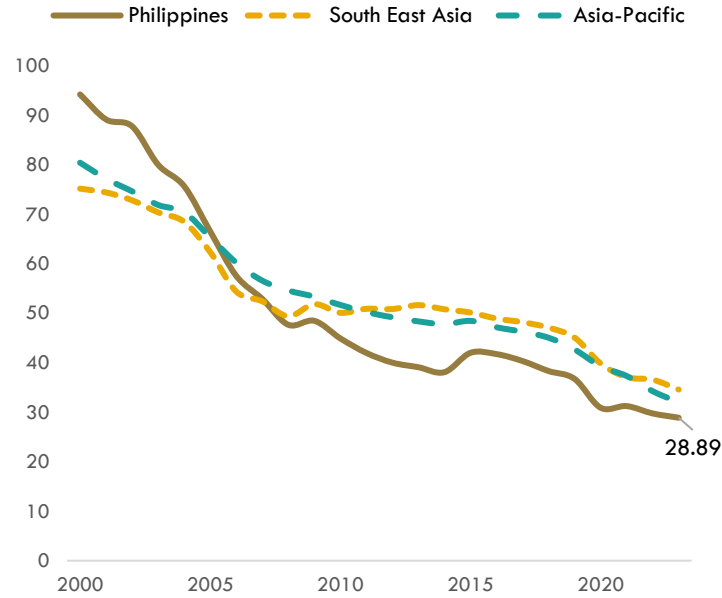
Pre-2015 baseline



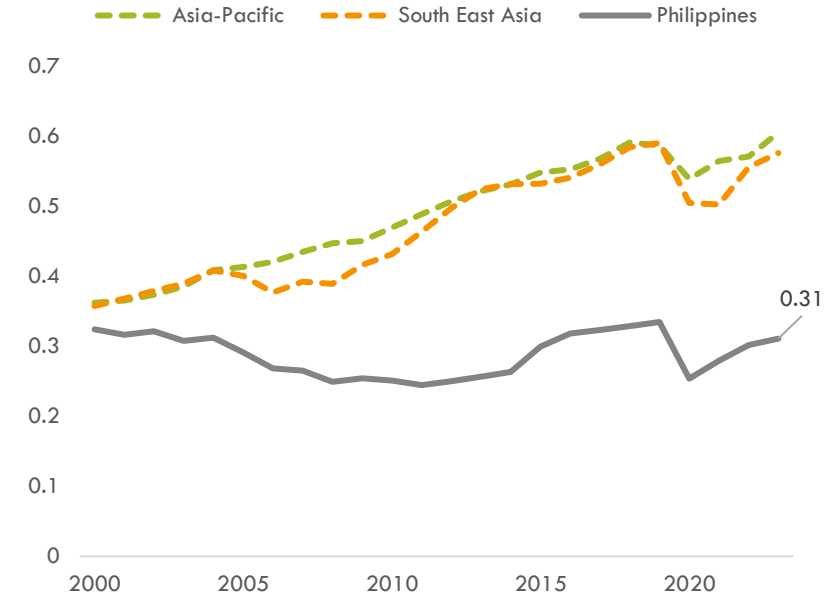
Philippines : Transport CO2 and Emissions Intensities



Transport fossil CO2 emissions, million tonnes



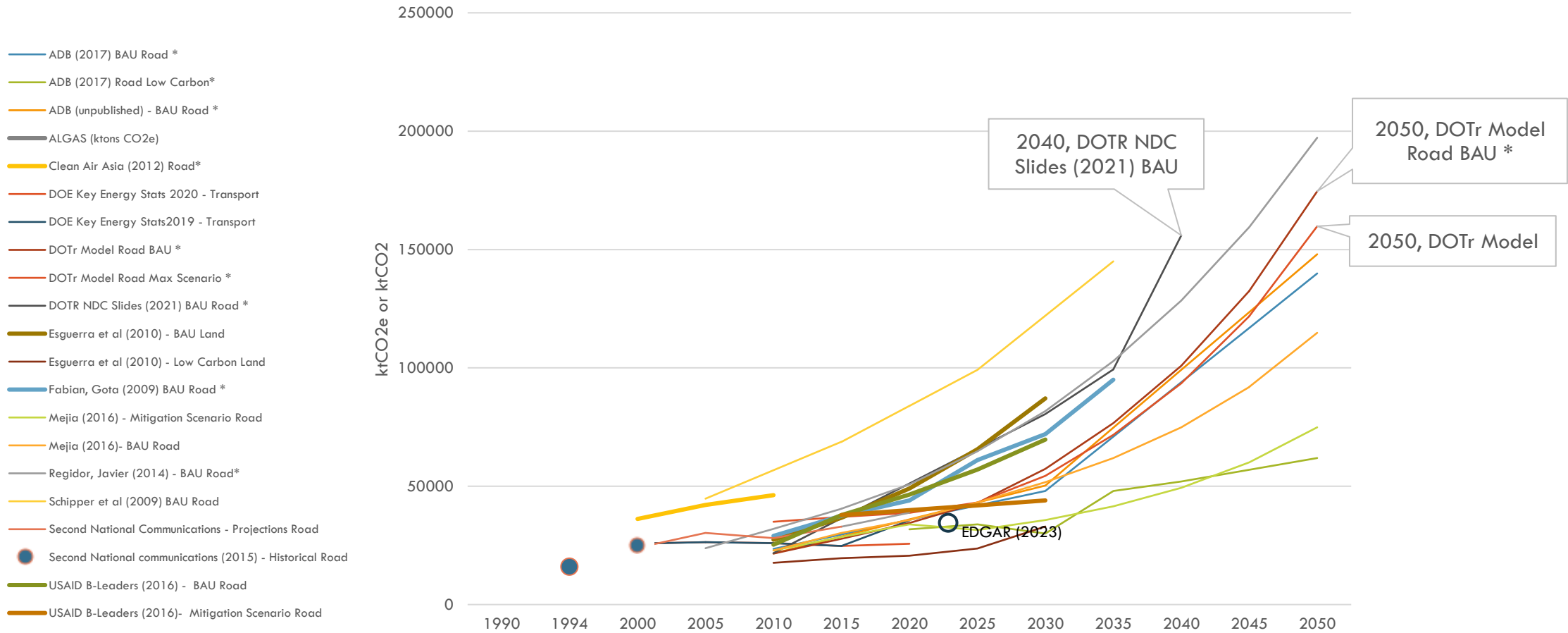
Transport fossil gCO2 per USD of GDP



Transport fossil CO2 (tons/capita)

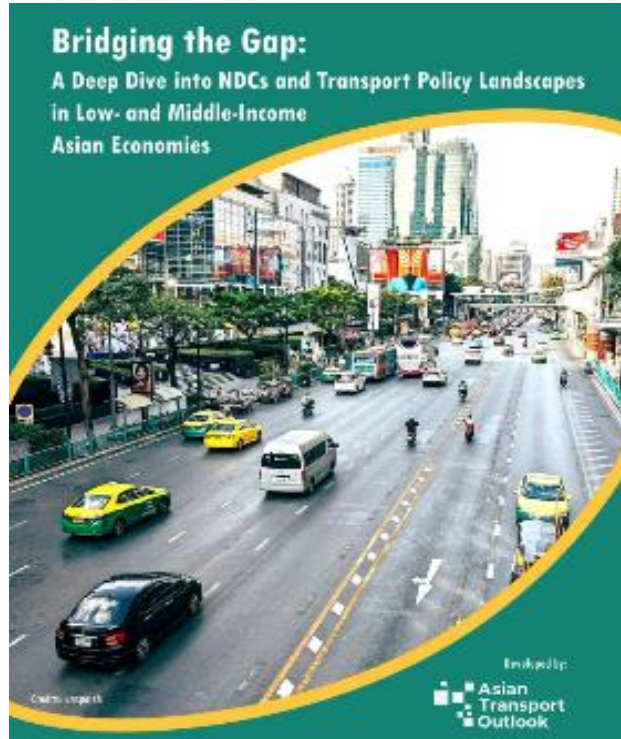
Source: Based on estimates contained in the EDGAR 2023 GHG database

History and Projections



BRIDGING THE GAP: A DEEP DIVE INTO NDC AND TRANSPORT POLICY LANDSCAPES IN ASIAN LMICS

Main Report



Developed with the support of:

ADB ASIAN DEVELOPMENT BANK

AfDB AFRICAN DEVELOPMENT BANK

UNEP United Nations Environment Programme

UK Department for International Trade

DT Global

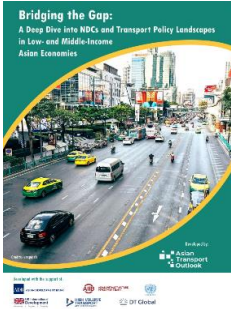
24 Transport and Climate Profiles

	Azerbaijan		Bangladesh
	Cambodia		Indonesia
	Kyrgyz Republic		Lao People's Democratic Republic
	Maldives		Mongolia
	Nepal		Pakistan
	Philippines		Solomon Islands
	Tajikistan		Thailand
	Uzbekistan		Vanuatu
	Bhutan		
	Kazakhstan		
	Malaysia		
	Myanmar		
	Papua New Guinea		
	Sri Lanka		
	Timor-Leste		
	Viet Nam		



<https://tinyurl.com/NDCgapanalysis>

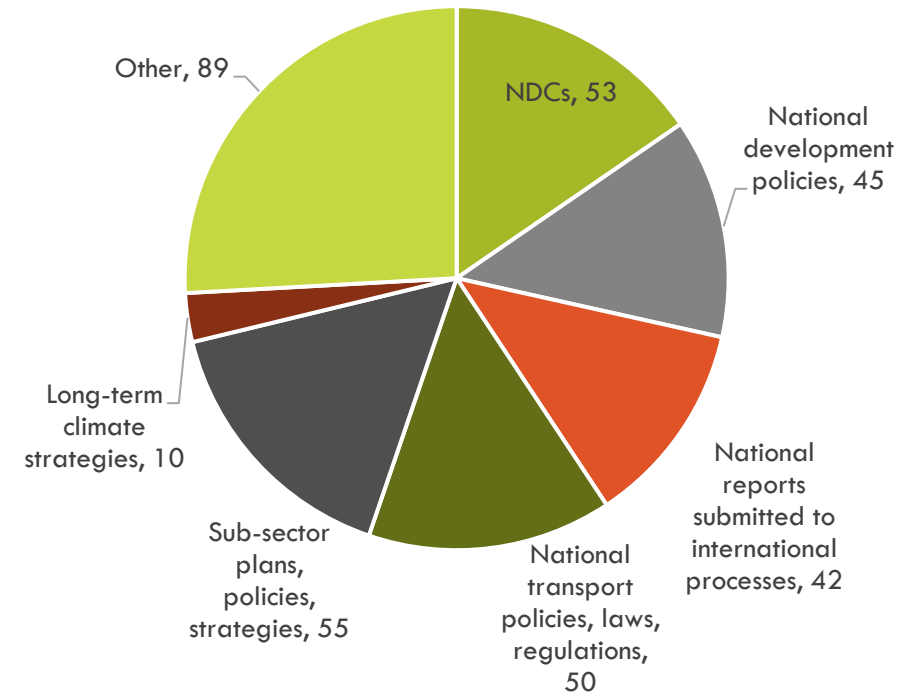
POLICY ANALYSIS



Azerbaijan
Bangladesh
Bhutan
Cambodia
Indonesia
Kazakhstan
Kyrgyz Republic
Lao PDR
Malaysia
Maldives
Marshall Islands
Mongolia
Myanmar

Nepal
Pakistan
Papua New Guinea
Philippines
Solomon Islands
Sri Lanka
Tajikistan
Thailand
Timor-leste
Uzbekistan
Vanuatu
Viet Nam

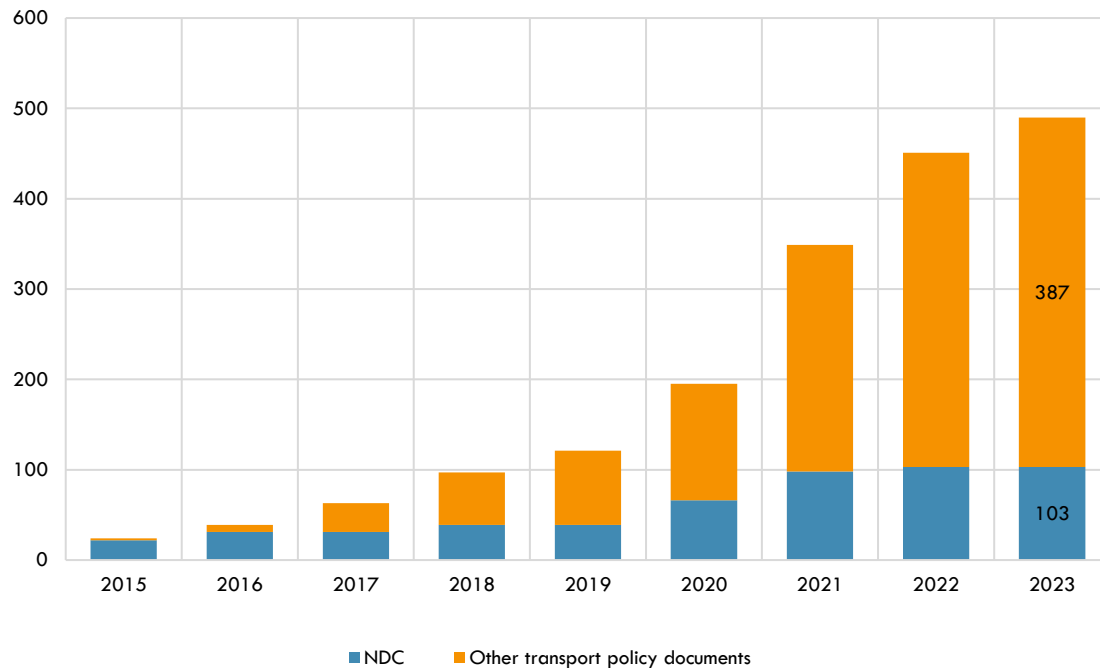
Total policy documents = 344



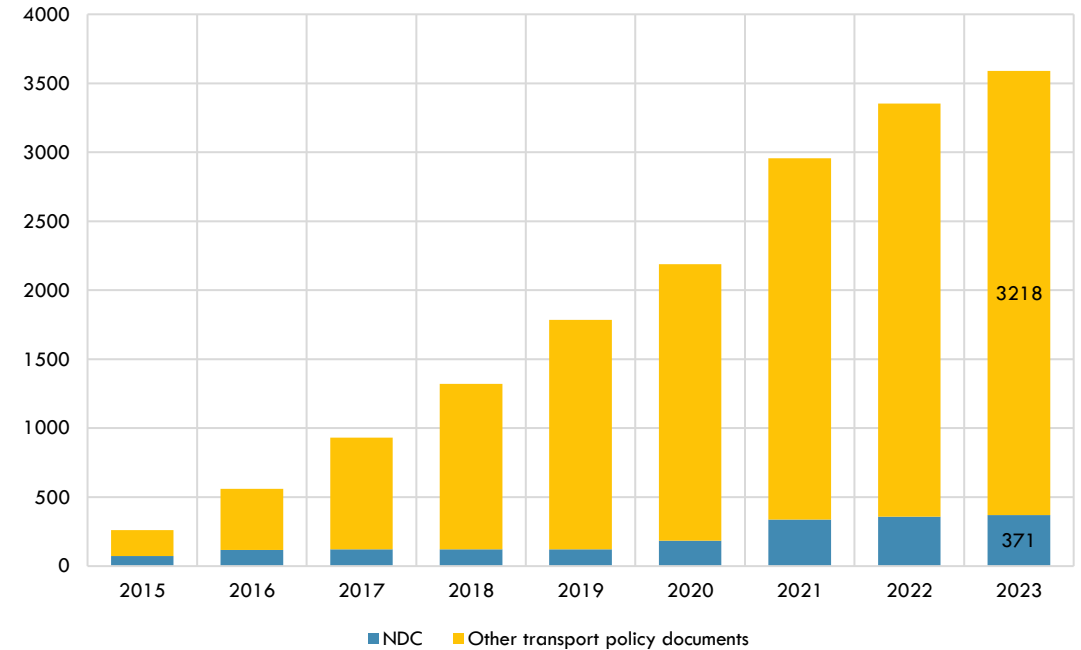
NDCs Fall Short on capturing climate ambitions by the transport sector

“Emerging economies need more detailed and ambitious transport-related commitments in their NDCs.”

Cumulative Distribution of targets by Year of Publication (2015-2023)

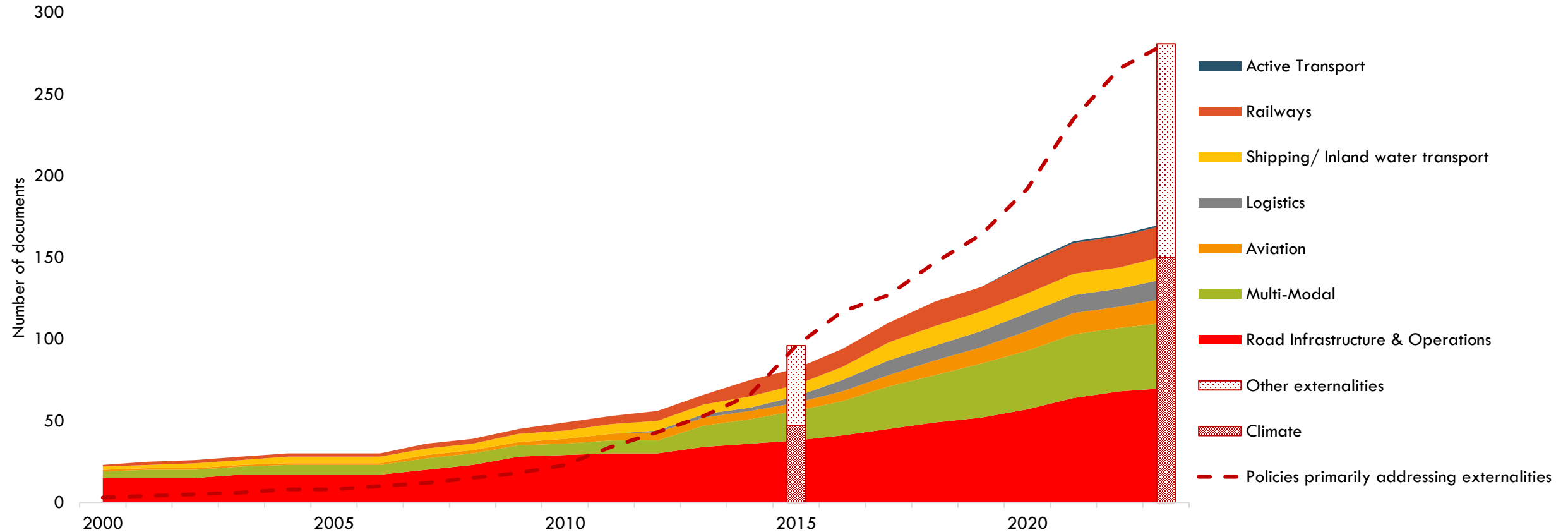


Cumulative Distribution of measures by Year of Publication (2015-2023)



Incremental progress in the Integration of Climate considerations into Wider Transport Policies

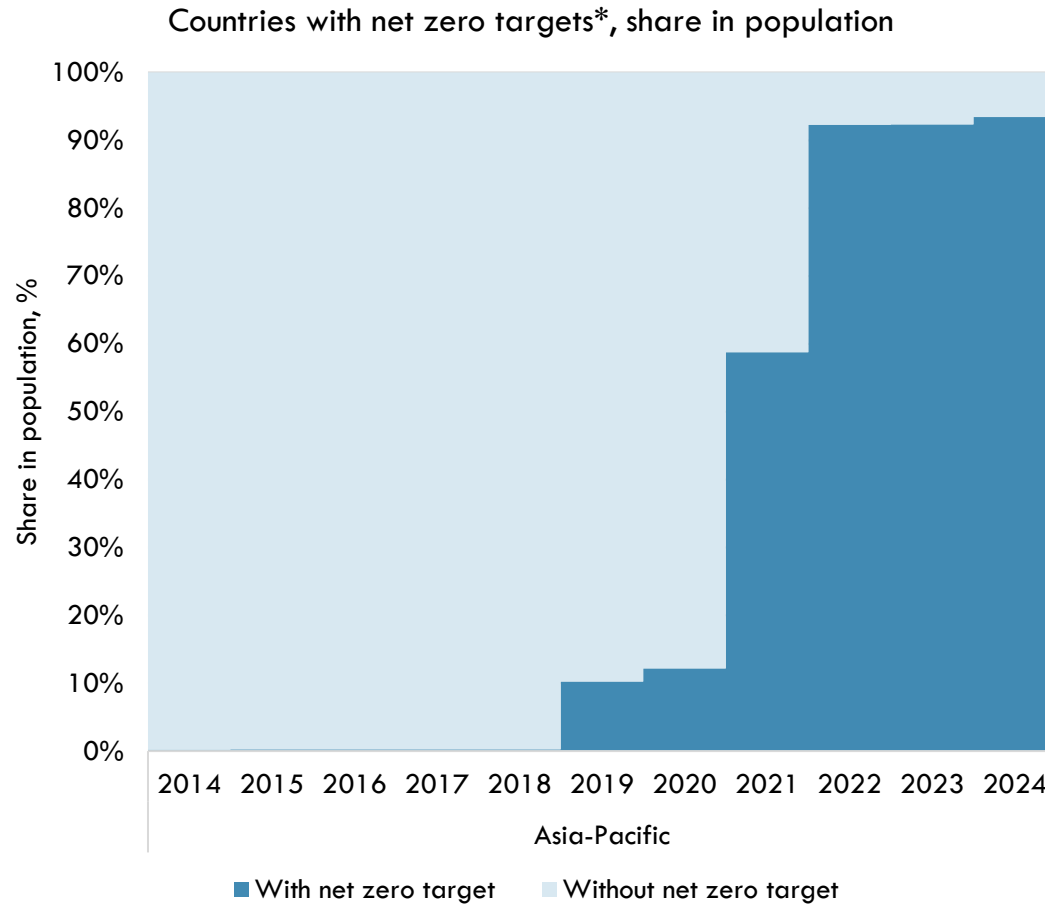
Transport policy documents by theme



“While transport policies are increasingly addressing climate concerns, progress has been gradual, and more substantial action is needed”

Lack of Long-Term Ambition, and Delays in Setting Targets for Peaking of Transport Emissions

“Current NDCs and transport policies often need more ambitious long-term targets for emissions reduction in the transport sector.”

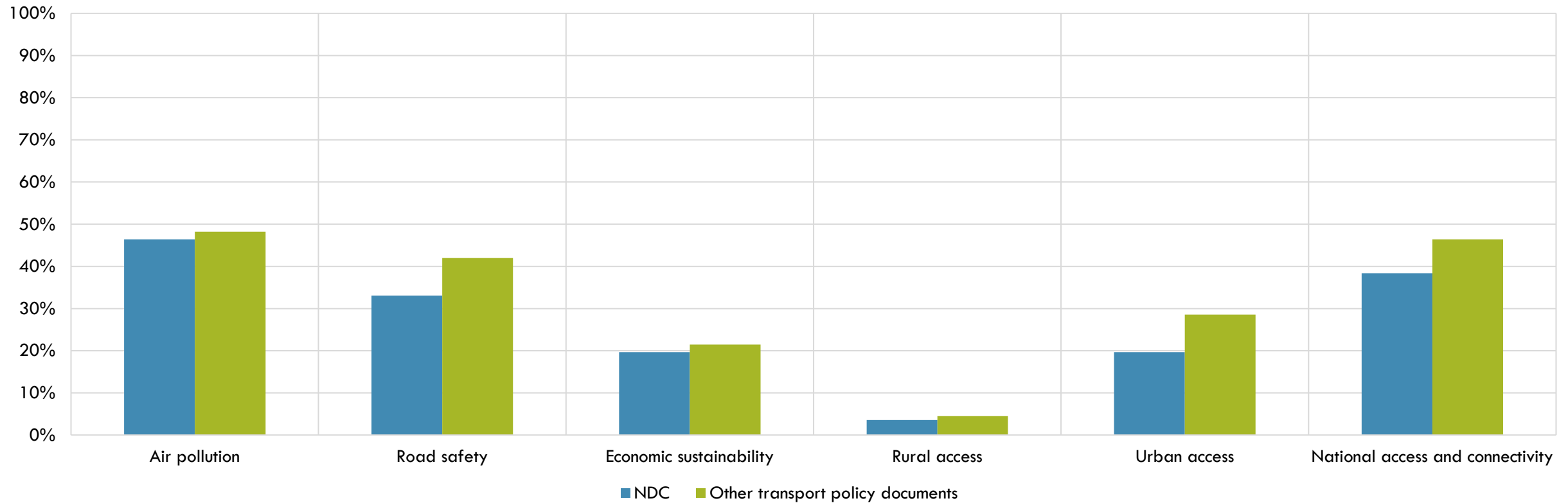


Country	Net zero and Carbon neutrality	NDC			Other Transport Policy Documents
		Economy-wide emissions	Transport GHG emission	Indirect transport targets	Transport GHG emission
Azerbaijan		2030			
Bangladesh		2030	2030	Modal shift, transport energy consumption	
Bhutan	2050		2030	Vehicle restrictions (import, age, access, sale, taxation)	
Cambodia	2050	2030	2030		2030
Indonesia	2060 or sooner	2030			
Kazakhstan	2060	2030			
Kyrgyz Republic		2025, 2030, 2050			
Lao PDR		2030		Biofuels, E-mobility	2030
Malaysia	2050	2030			2030
Maldives	2030	2030			
Marshall Islands	2050			2025, 2030, 2035	2025, 2030
Mongolia		2030	2030	E-mobility	
Myanmar		2030			
Nepal	2045			E-mobility, public transport, railway electrification	
Pakistan		2030		E-mobility	
Papua New Guinea	2030, 2050				
Philippines		2030			2028
Solomon Islands	2050	2025, 2030, 2050			2030, 2050
Sri Lanka	2050	2030	2030	Vehicles scrappage scheme	
Tajikistan		2030			
Thailand	2030, 2050, 2065	2030	2030		2027, 2030
Timor-Leste					
Uzbekistan		2030		E-mobility, LPG/ CNG/ LNG	2025, 2035
Vanuatu	2050	2030		Biofuels, E-mobility, Ship efficiency improvements, Vehicle efficiency standards	2050
Viet Nam	2050	2030			

Need for Integrated Development Priorities

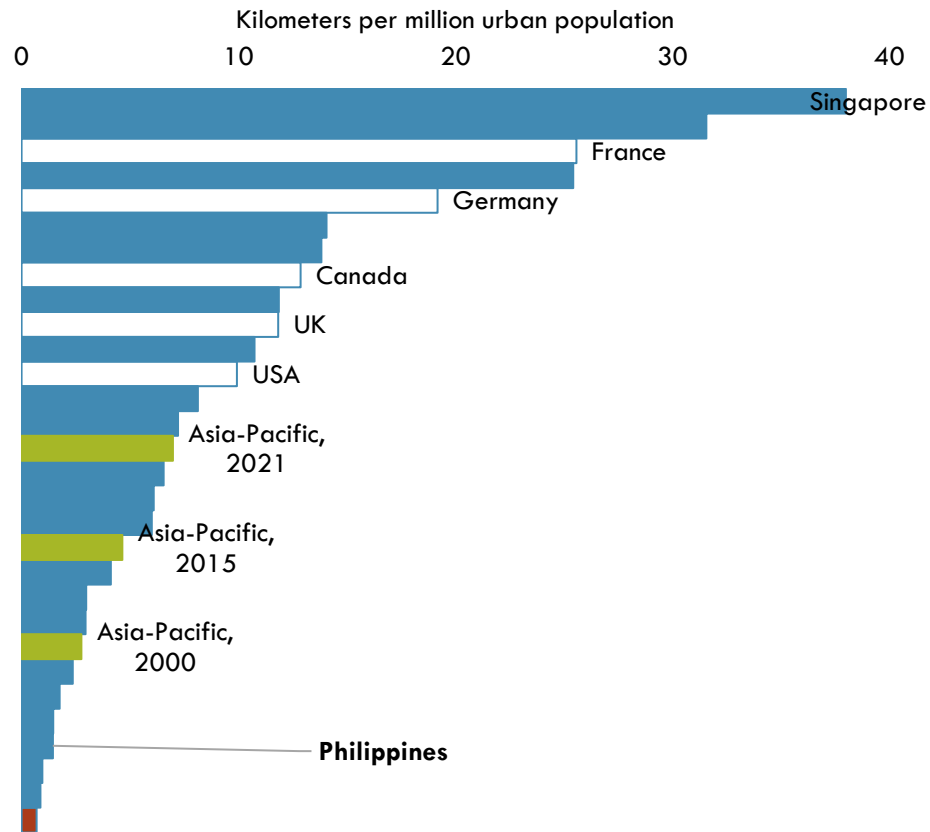
“Effective transport mitigation and adaptation policies must align with broader development goals”

Share of climate documents also covering other development goals

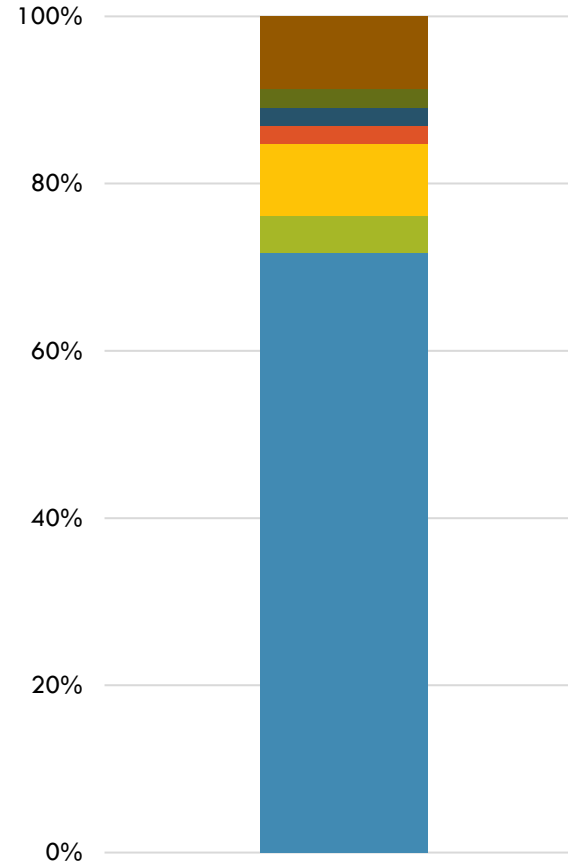


Addressing the Public Transit Gap

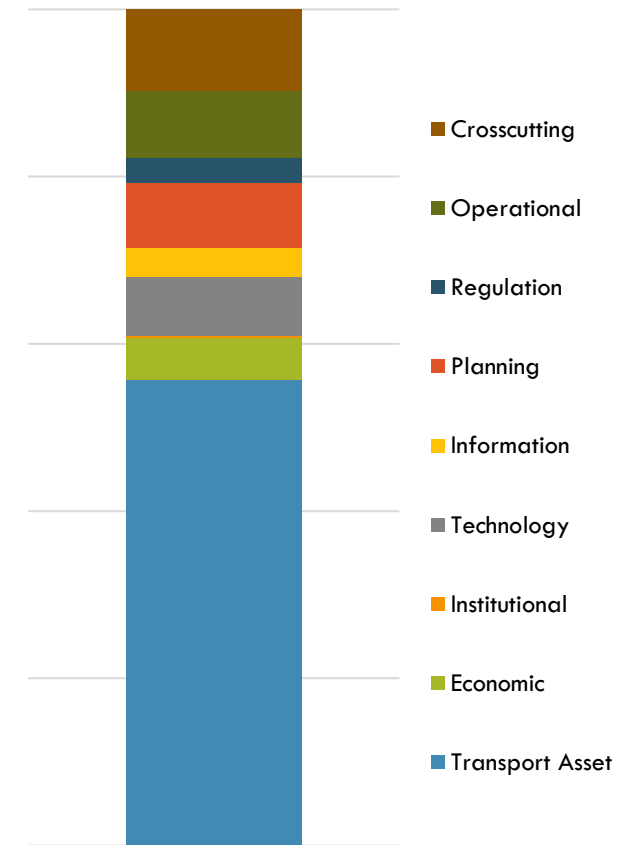
Rapid urban transit (BRT, LRT, metro) availability,
2021



Public transport related measures
from NDCs, by framework

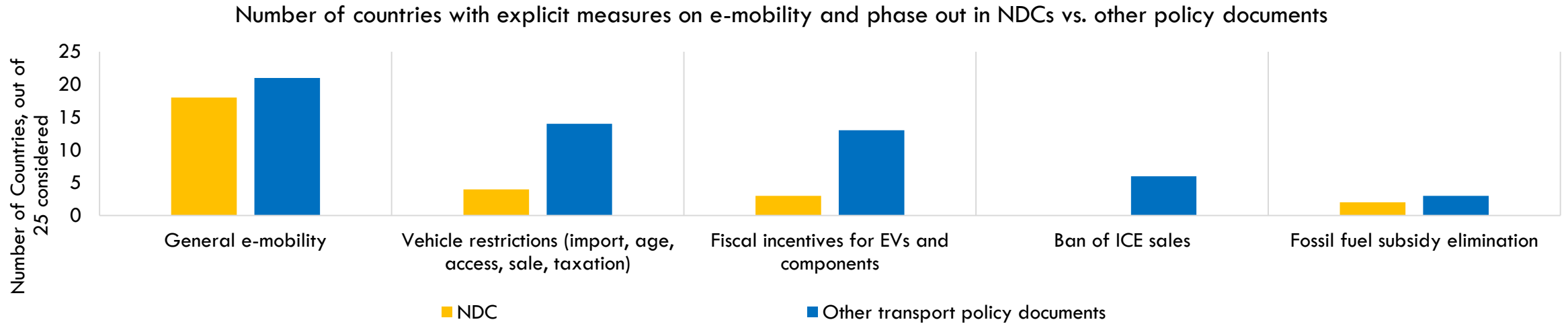


Public transport related measures
from non-NDCs, by framework



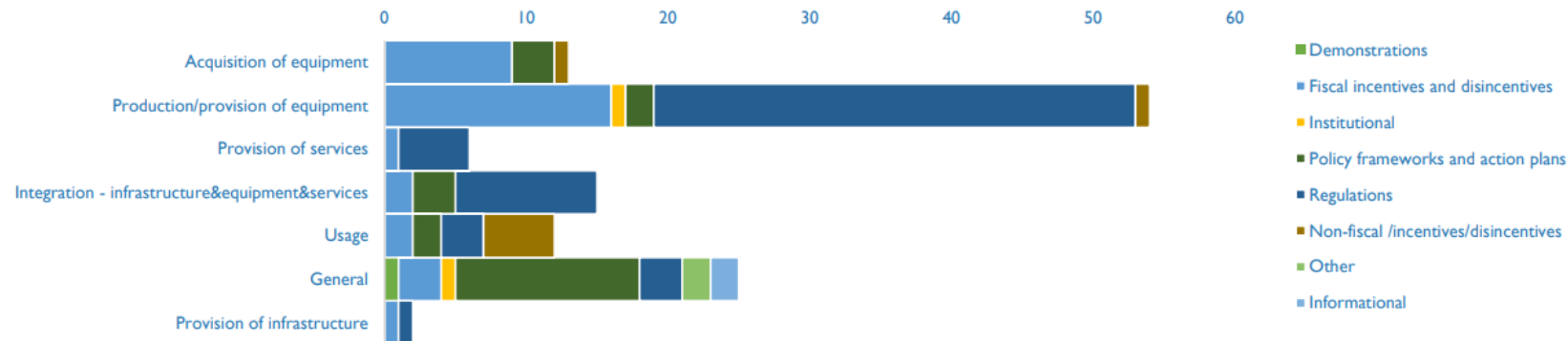
“Prioritizing the expansion and improvement of public transportation systems is crucial for both climate action and sustainable development”

Promoting Electric Mobility and Reducing Fossil Fuel Dependency



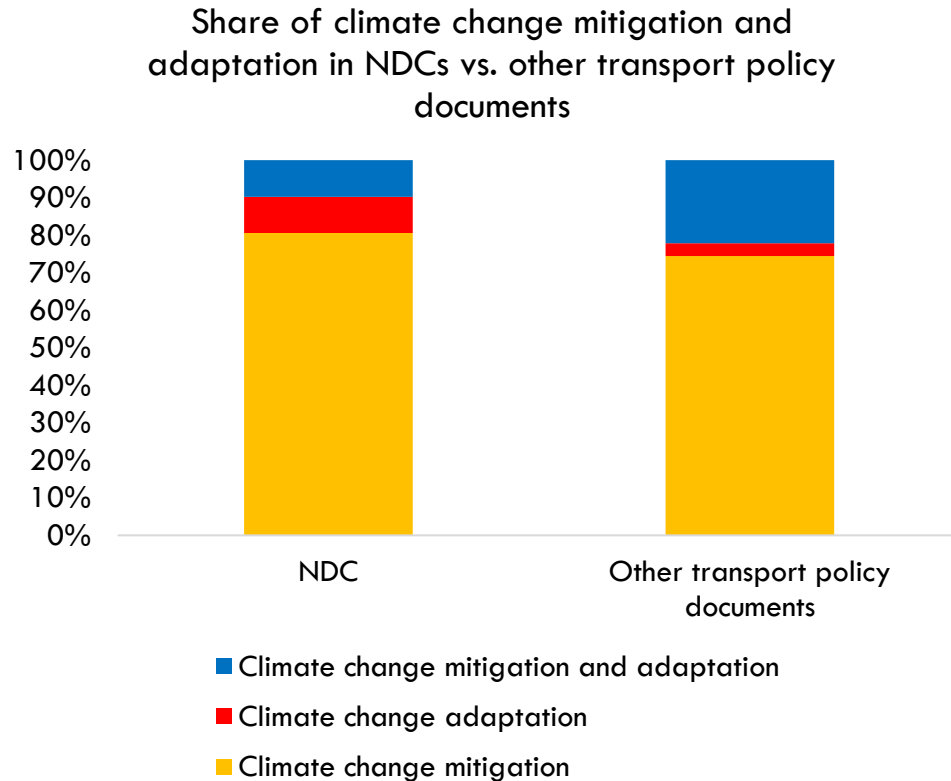
“While electric vehicles are gaining traction, more balanced action is needed”

PHL E-mobility Landscape



Strengthening Transport Adaptation and Resilience

“NDCs and transport policies often overlook measures to adapt transport systems to the impacts of climate change and build resilience to extreme weather events”

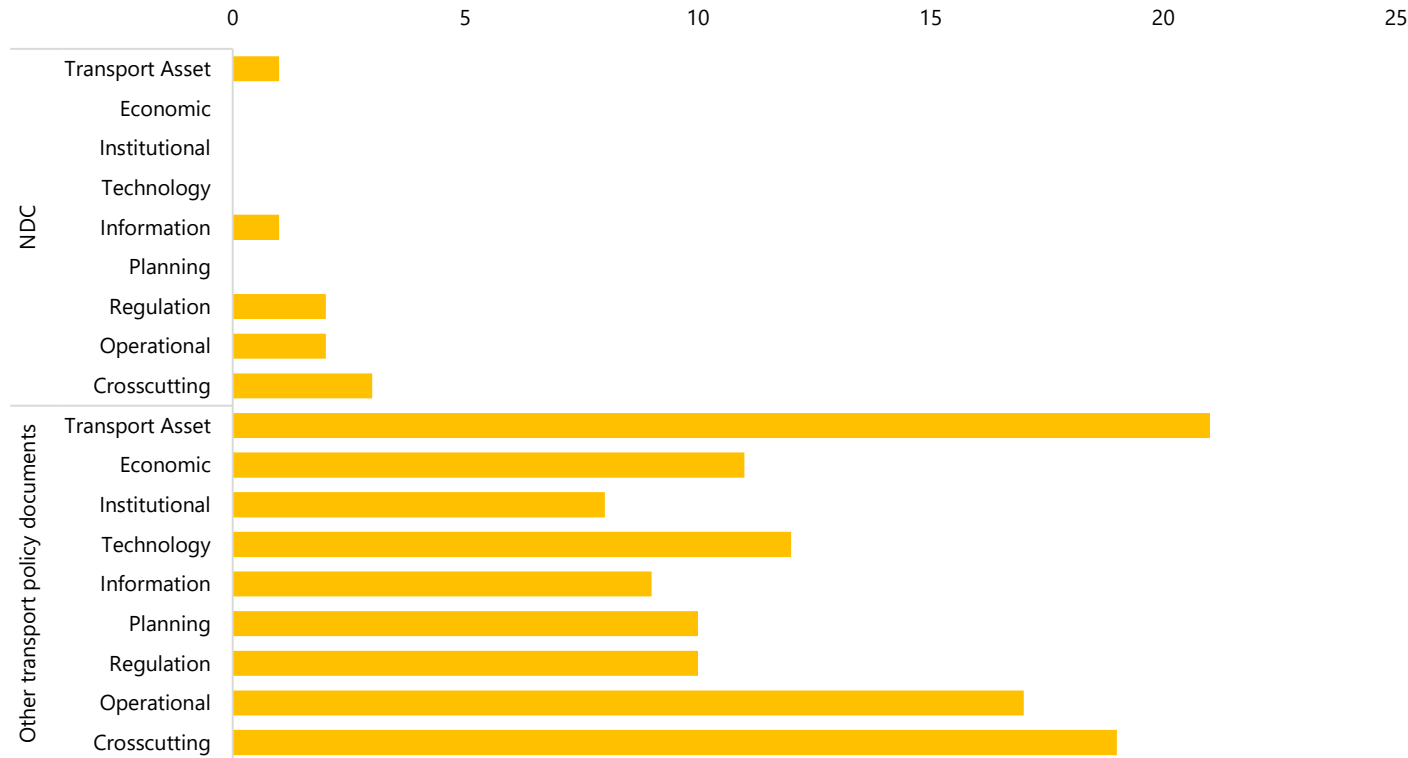


Philippine Development Plan 2023-2028
 National Logistics Master Plan 2017-2022
 National Urban Development and Housing Framework 2017-2022
 National Climate change Action Plan 2011-2028
 National Transport Policy and its Implementing Rules and Regulations
 Philippine New Urban Agenda (PhiNUA)
 Comprehensive Roadmap for the Electric Vehicle Industry

Also includes DRRM

Freight Decarbonization: A Climate Blind Spot Amidst Rapid Growth

Number of countries with freight-specific measures by framework, NDC vs. other transport policy documents

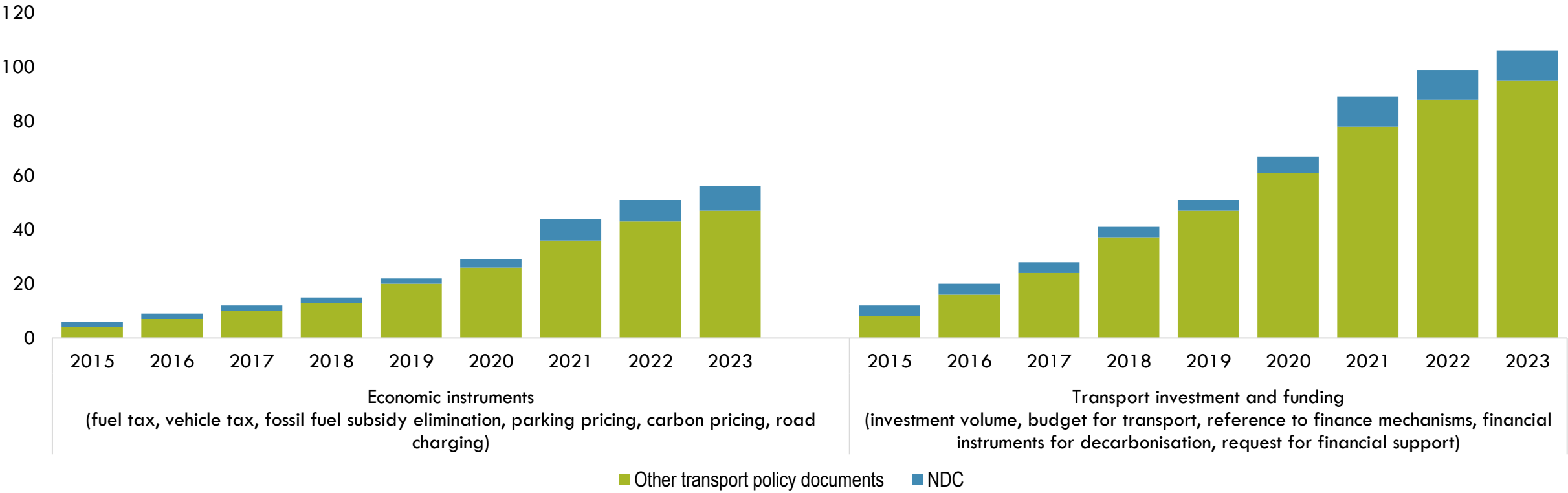


- National Logistics Master Plan 2017-2022
- Philippine Development Plan 2023-2028
- National Transport Policy and its Implementing Rules and Regulations
- Maritime Industry Development Plan 2019-2028
- Philippines Action Plan on CO2 Reduction - aviation

“Urgent action is needed to decarbonize the freight and logistics sector, which currently remains a significant source of emissions”

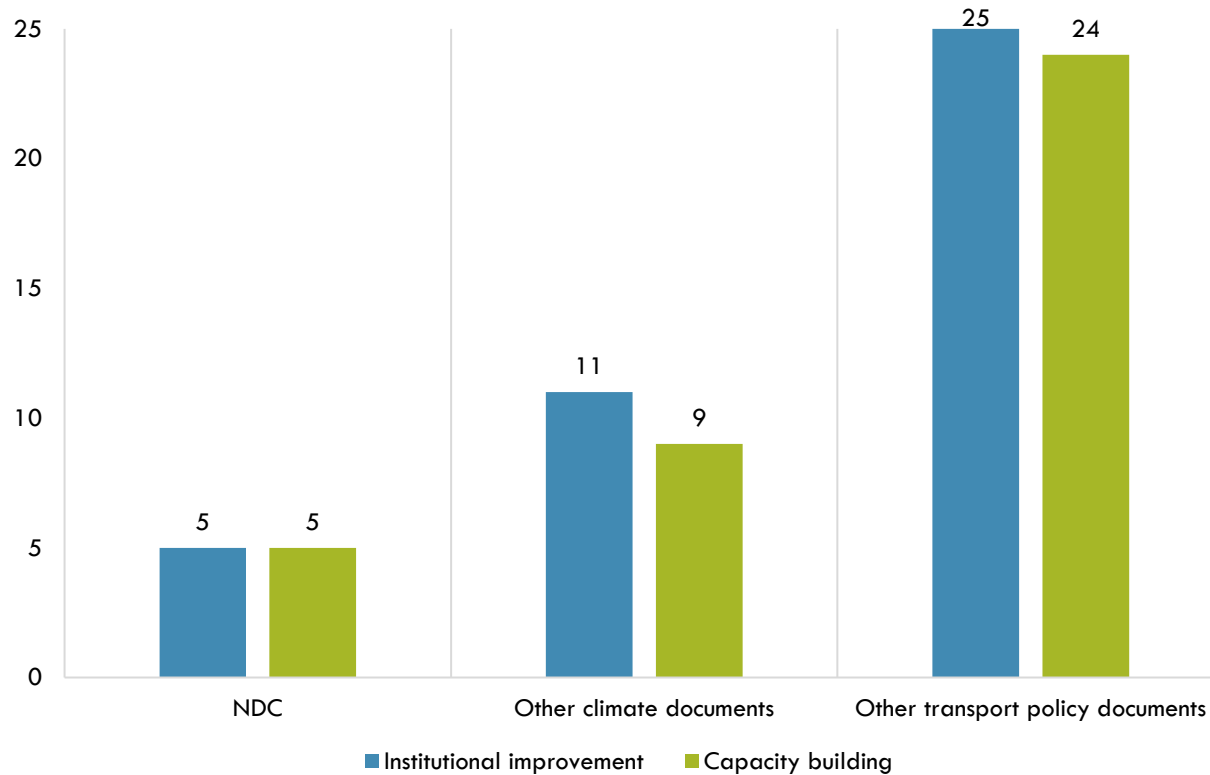
Increasing the Availability and Access to Transport Economic Instruments

Cumulative number of documents with reference to investment and economic instruments



“Facilitating access to adequate financing is crucial for implementing necessary transport projects and reforms”

Prioritizing Institutional Strengthening and Capacity Development



- Maritime Industry Development Plan 2019-2028
- National Logistics Master Plan 2017-2022
- Philippine Road Safety Action Plan 2023-2028
- National Transport Policy and its Implementing Rules and Regulations
- Philippine Development Plan 2023-2028
- National Climate change Action Plan 2011-2028
- Technology Needs Assessment for Climate Change Mitigation
- Philippine Energy Plan 2020-2040

“Building institutional capacity and technical expertise will be vital for successful implementation as the policy landscape evolves.”

In summary



Priority areas for action:

- **Raising the bar towards more ambitious targets** and measures for reducing transport sector emissions
- **Integrating climate** considerations into broader transport policies and aligning them with sustainable development goals **AND vice versa**
- Prioritizing the expansion and improvement of **public transportation** systems
- Promoting electric mobility and **phasing out fossil fuel subsidies** and internal combustion engine vehicles
- **Strengthening transport adaptation** and resilience to climate change impacts
- Addressing the growing emissions from **freight** transport
- Increasing the availability and accessibility of **transport finance**
- Building **institutional capacity** and **technical expertise** for effective policy implementation.

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ATO Cost Database

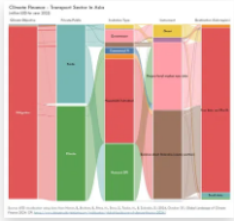
Access over 450 transport indicators divided over eight main categories



ATO Analytical Outputs

Get all the relevant information on transport through factsheets, reports and storylines

ATO Insights: Interactive visualisations



Climate Financing: Transport Sector in Asia - Visualization

2024-11-26

The dashboard presents a detailed overview of climate finance flows specific to regional trends, funding distribution, and sources of investment.

Interactive Visualization

Tags: Climate, Climate finance



Liner Connectivity Index - Visualization

2024-11-08

The Liner Shipping Bilateral Connectivity Index (LSBCI) provides a comprehensive measure between pairs of countries, capturing their level of integration into global liner shipping.

Interactive Visualization

Tags: connectivity, Sustainable Transport, Maritime Transport, Global Trade, Supply chain



Transport CO2 Emissions Visualization Tool

2024-11-18

ATO has created a visualization / animation tool using the data from IEA-EDG. Data from 1990 onwards is represented in the visualization tool which aims at magnitude, direction, and speed of change in transport-sector emissions, ...

Interactive Visualization

Tags: emissions



Renewable Energy Share in Electricity Generation - Visualization

2024-10-30

The renewable energy (RE) share in electricity generation (%) refers to the proportion of renewable sources such as wind, solar, hydro, and geothermal.

Interactive Visualization

Tags: energy, e-mobility, electrification



Urban Access to Public Transport - Visualization

2024-10-24

Access to public transport plays a critical role in creating inclusive cities. Access to Public Transport—focuses on how well urban residents have access to public transport, social equity, environmental sustainability, and economic opportunities.

Interactive Visualization

Tags: urban access, cities, public transport, urban centers



Transport CO2 Intensity of the Economy

2024-10-15

Interactive Visualization

Tags:

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

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