2030 ASIAN TRANSPORT OUTLOOK: THE ROAD AHEAD FOR CARBON EMISSIONS AND AIR QUALITY

SHAPES AND SHIFTS OF TRANSPORT SECTOR IN ASIA

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Foundation of ATO

51 Economies (ADB Members + Russia and Iran)

460 Urban Centers (412 Asia-Pacific, 48 International)

46 Urban Centers with a detailed review *To be increased to 50

373 national indicators,
53% have multi-year data,
20% have 2021 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,
Key Objectives of ATO

Tracking Global Agreements on Sustainable Development and Climate Change, Regional Aichi 2030 Declaration

Support the planning and delivery of Transport related assistance by the ADB & AIIB

Support Transport Policy Making in Asia
Drivers of Transport Sector in Asia

Transport sector emissions share by region

Source: EDGAR
Road Transport Air Pollutant Emissions by Income Level

Low and lower middle income
- PM10
- BC
- NOx
- SOx
- 1990-2000
- 2000-2010
- 2010-2018

Upper middle income
- PM10
- BC
- NOx
- SOx
- 1990-2000
- 2000-2010
- 2010-2018

High income
- PM10
- BC
- NOx
- SOx
- 1990-2000
- 2000-2010
- 2010-2018

Source: EDGAR
State of Clean Vehicles in Asia

Share of countries with Euro 4 or better LDV emissions standards implemented (in terms of vehicles registered)

Vehicle imports in Asia-Pacific (Used and New)

Source: Clean Air Asia, Country Official Statistics
Source: Trademap
Comprehensive Policy Tracker - The 2nd Foundation

265 measure types 
of which 158 have air pollution element, 
180 have climate change mitigation element

1,000+ documents

5000 measures 
of which 3200+ have air pollution element, 
3700+ have climate change mitigation element

in a survey of 15 countries* and 300 policy documents

*Countries considered – Bangladesh, Bhutan, Indonesia, Kazakhstan, Lao People’s Democratic Republic, Malaysia, Maldives, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Timor-Leste, Uzbekistan & Viet Nam
Evolution of Transport Policies in Asia

Transport-related policy documents from 15 countries

Example cobenefit of air pollution and climate change mitigation transport measures

- Air Pollution and Climate Change Mitigation Co-benefit Measures
- Climate
- Air Pollution

Source: National Policies
Managing Transport Demand

Vehicle registration limit, Prevention of construction of roads, Road access restriction

Based on 15-country survey

Transport Fossil Fuel Subsidy

Source: IEA

Source: National Policies
Modal Shift

Modal Shift Targets in Asia-Pacific

Kyrgyz Republic
Uzbekistan
Iran (Islamic Republic of)
Georgia
Pakistan
Afghanistan
India
Bhutan
Bangladesh
Sri Lanka
Brunei Darussalam

Mongolia
People’s Republic of China
Republic of Korea
Hong Kong, China
Viet Nam
Philippines

Source: National Policies
Source: Asian Transport Outlook
Source: World Bank

Cumulative transport sector public-private partnerships investments in Asia Pacific, by subsector (billion USD)

Source: World Bank
Electrification of Transport

Transport Sector Energy Demand

Source: DNV-Energy Outlook 2023

Share in air pollution-related measures, %

Source: National Policies
Shifting the Shape

Road PM10 per GDP = -52%
Road PM10 per capita = -30%
Road PM10 per vehicles registered = -56%
Total absolute decrease = -75 thousand tonnes

Road crash fatality per GDP = -43%
Road crash fatality per capita = -13%
Road crash fatality per vehicles registered = -48%
Total absolute decrease = -42,000 premature deaths

Road CO2 emissions per GDP = -34%
Road CO2 emissions per capita = +22%
Road CO2 emissions per vehicles registered = -34%
Total absolute increase = 573 million tonnes

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

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