







## **Decarbonising Transport** in Asia

Intergovernmental 13th Regional Environmentally Sustainable Transport Forum in Asia

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### **Intergovernmental Organisation**

- ▶ 62 member countries on five continents, 8 in Asia (25 non-OECD)
- ▶ Administratively integrated with OECD yet politically independent
- ▶ Only global transport body with a mandate for all modes
- ▶ Platform for discussion and development of global dialogue for better transport
- ▶ Priority focus areas include accessibility, connectivity, decarbonisation, digitalisation, and safety and security

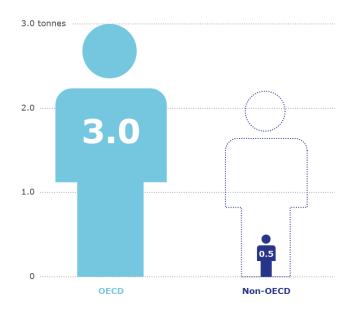


#### **Introduction**

- ▶ Differences between Asian transport trends and the rest of the world
- ▶The world is growing differently, even within Asia
- ►The importance of evaluating the impact of different policies and measures on travel behaviour, transport patterns, energy use and CO<sub>2</sub> emissions
- ▶ Quantitative analysis and impact assessment tools will help countries identify priority policies that can effectively reduce transport carbon emissions



#### CO<sub>2</sub> emissions from domestic transport per capita



The per capita CO<sub>2</sub> emissions gap between OECD and non-OECD economies will narrow over time.



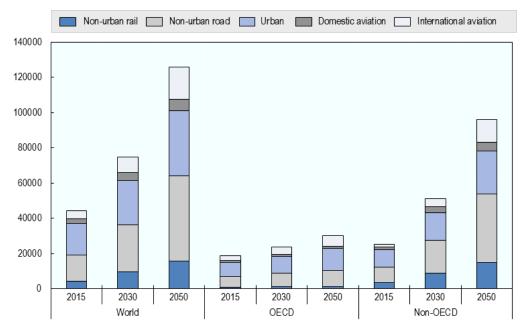
# Passenger transport demand to triple by 2050

China and India to generate 1/3 of global pkm

OECD share of pkm falls from 43% to 24%

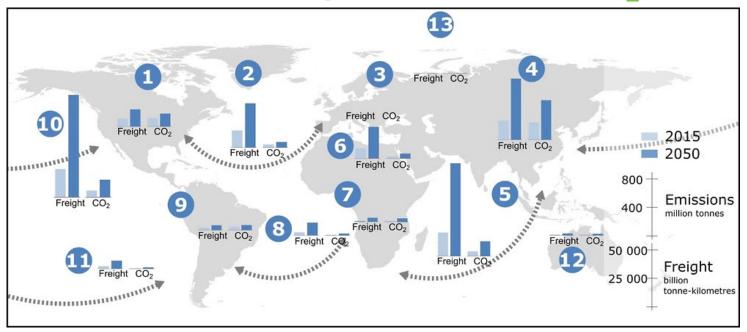
Non-urban road has the largest mode share by 2050

#### Current demand pathway, billion passenger-kilometres





### International freight flows and CO<sub>2</sub> emissions



► Freight flows to Asia, from Asia, and within Asia are expected to grow most.

Note: 1. North America; 2. North Atlantic; 3. Europe; 4. Asia; 5. Indian Ocean; 6. Mediterranean and Caspian seas; 7. Africa; 8. South Atlantic; 9. Latin America; 10. North Pacific; 11. South Pacific; 12. Oceania; 13. Northern Sea Route.



### **Decarbonising Transport in Asia**

#### **Current Projects:**

- ►ITF-ASEAN Transport Research Proposal
- ► Decarbonising Transport in Emerging Economies (**Azerbaijan**, **India**, Argentina and Morocco)
- ▶ NDC Transport Initiative for Asia (China, **India** and Vietnam)



## ITF-ASEAN: Implementation of the ASEAN Fuel Economy Roadmap (Aug 2020 – Jan 2022)

Project is aligned with the Sustainable Transport Goal 1.3 of the "Kuala Lumpur Transport Strategic Plan 2016 - 2025"

▶ Improvement of fuel economy standards is a direct way of reducing CO<sub>2</sub> emissions as they reduce carbon intensity and increase vehicle efficiency

#### **Project Objectives**

- ▶ Assist ASEAN to improve the fuel efficiency of its vehicle market to facilitate the achievement of global, regional and national goals for sustainable transport, energy efficiency and climate change mitigation,
- ► To foster industrial development and to support the recommended actions identified in the "ASEAN Fuel Economy Roadmap for the Transport Sector 2018-2025: with Focus on Light-Duty Vehicles"



## Shared mobility accelerates clean tech penetration



intense use shorter life cycle

rapid fleet renewal

new technologies

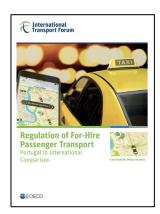
less CO<sub>2</sub> emissions



## ITF-ASEAN: Regulation of App- Based Mobility

**Services** (Oct 2020-Sep 2021)

- ▶ This initiative will build upon previous projects conducted by the ITF on how new app-based mobility services can be effectively regulated but with a focus on ASEAN.
- ▶ It will address risks, the regulatory treatment of other competing mobility services, the alignment of regulation with other urban transport policies, as well as safety concerns for app-based mobility services.
- ▶ It will also address the impact of Covid-19 and recovery measures where appropriate.







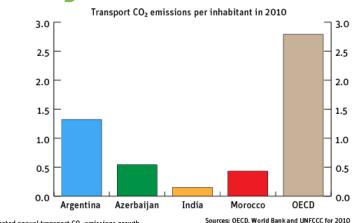


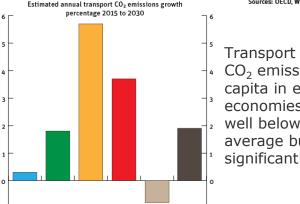
### Decarbonising Transport in Azerbaijan and India

(Oct 2020-Sep 2021)

▶ The project scope includes the design of a common assessment framework for transport emissions that will cover several transport sub-sectors and transport modes.

- Country-specific modelling tools and policy scenarios will help governments implement ambitious CO<sub>2</sub> reduction initiatives for their transport sectors.
- ➤ Stakeholder workshops, training sessions, briefings for policy makers and mitigation action plans will stimulate further research and the development of policies beyond the duration of the project.





Transport CO<sub>2</sub> emissions per capita in emerging economies are still well below the OECD average but will grow significantly faster.



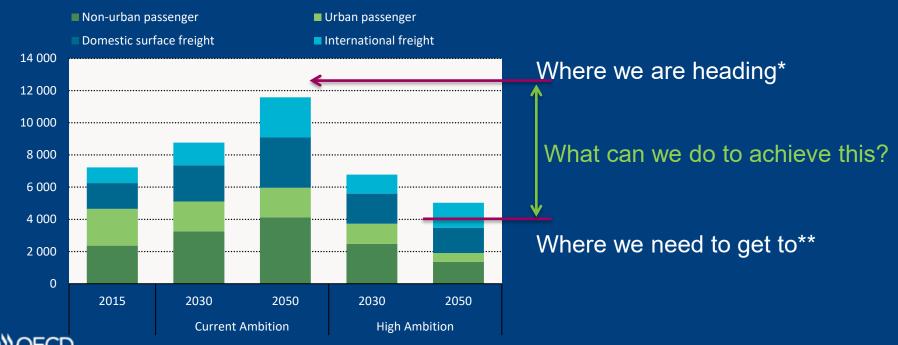
### NDC Transport Initiative for Asia (Oct 2020-Sep 2021)

- ▶ This initiative aims at promoting a **coherent strategy** of effective policies for decarbonising transport that are co-ordinated among various sector ministries, civil society and the private sector.
- ▶ The goal is to enable the countries' transport sectors to make a contribution towards achieving their Nationally Determined Contributions (NDCs) and **increase ambition** in transport sections of long-term strategies and 2025 NDCs.
- ▶ As a regional initiative, the project will disseminate knowledge in Asia.
- ▶ The ITF contributes to the India component of the project and focuses on **capacity building in modelling and in developing mitigation scenarios** in India.
- ► This is a joint project of seven organisations (GIZ, ITF, WRI, AGORA, SLOCAT, ICCT and REN21) funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).



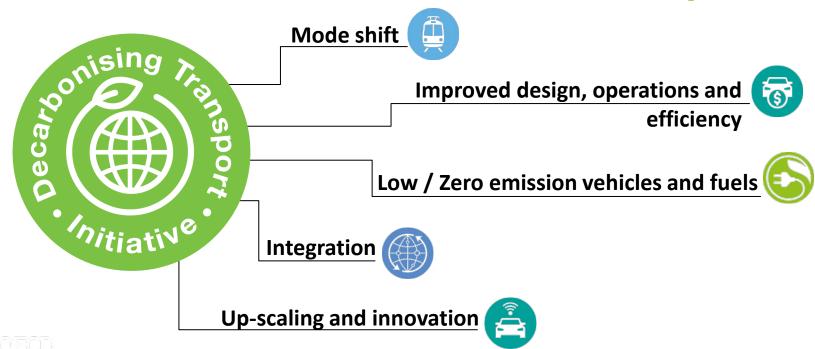
## A Catalogue of Measures: Transport Climate Action Directory

Transport CO<sub>2</sub> emissions, million tonnes





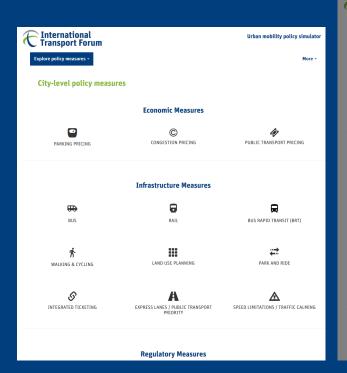
## Multiple objectives must be achieved, across different sectors, to decarbonise transport

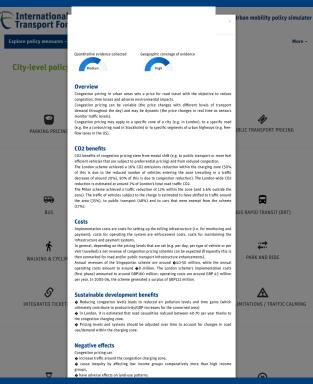




## Catalogue of measures online tool (https://www.itf-oecd.org/tcad)

- Based on literature
- For inclusion in future ITF models and case specific studies
- Intended to facilitate dialogue on decarbonising transport









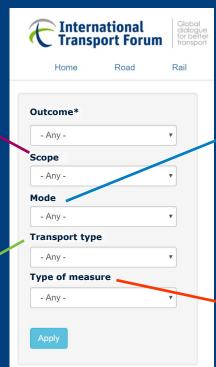
#### **Catalogue structure**

#### Scope

- ▶ Urban
- ▶ National
- ▶ International
- ► Regional
- ► Supra-regional

#### **Transport type**

- Passenger
- ► Freight
- ► Passenger or Freight



#### Mode

- Aviation
- Maritime & Inland Waterways
- ▶ Road
- ► Rail

#### **Type of Measure**

- ▶ Fiscal
- ► Regulatory
- ► Enhancement of infrastructure
- ► Technology / Research & Development
- ► Education and awareness raising
- ► Operational / management



## **UNFCCC Climate Action Pathway 2020: Transport Structure**

Impact Areas

Impact 1	Reduce Transport Distance Travelled and Vehicle Use
Impact 2	Shift to Low Carbon Passenger and Freight Transport
Impact 3	Resilient Transport Systems, Infrastructure and Modes
Impact 4	Improve Vehicle, Fuel and Operational Efficiency of Land Transport
Impact 5	Improve Shipping Technology, Operation and Fuel Efficiency
Impact 6	Improve Aviation Efficiency and Reduce the Carbon Intensity of Aviation Fuels





Global dialogue for better transport

