## Implications of Green Transport for Socioeconomic Transformation



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## About the SLoCaT Partnership



International multistakeholder partnership



Knowledge and data analysis



Primary focus on land transport



Targeted at developing countries in global South



Policy advocacy and action



Multi-stakeholder dialogue and coalition building

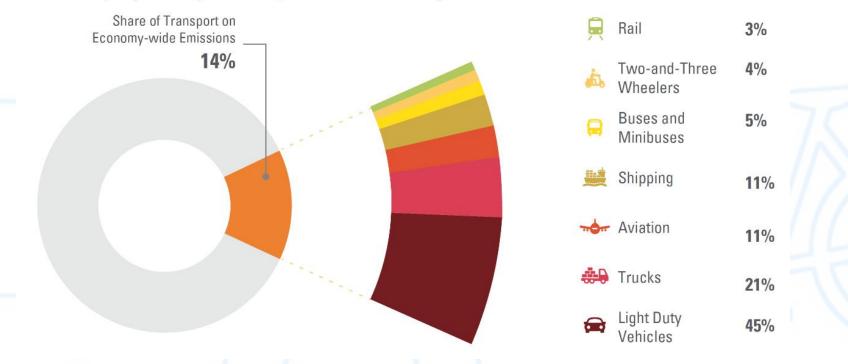
## **Presentation Overview**

- 1. Global transport emission trends
- 2. Sustainable transport policy actions
- 3. Benefits for environment, economy and society

# 1. Global transport emission trends

Transport emissions significant and growing as share of total emissions

#### Share of Transport Sector GHG Emissions by Mode (2015)

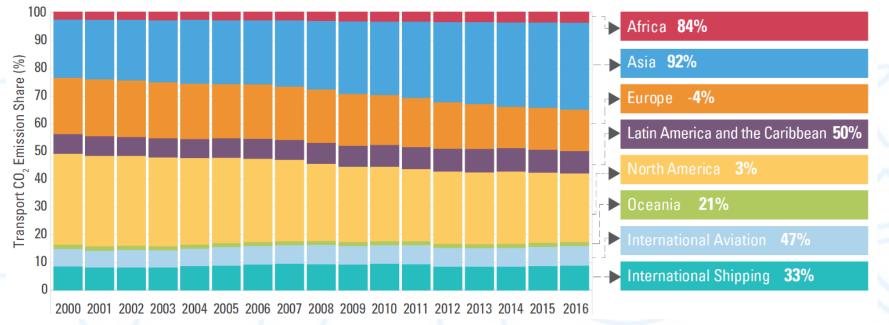


Source: IEA, (2016). Energy Technology Perspectives 2016. Towards Sustainable Urban Energy Systems.

Transport emissions share shifting across regions

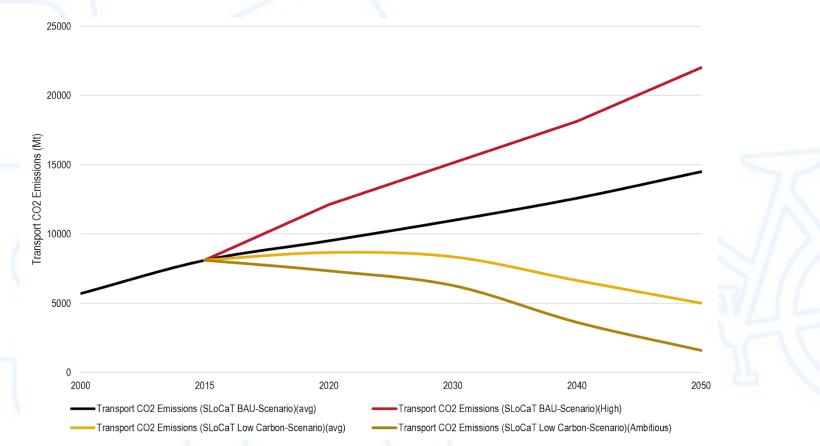
**Regional Share and International Aviation and Shipping Shares** of Transport CO<sub>2</sub> Emissions (2000 to 2016)

Growth between 2000 and 2016

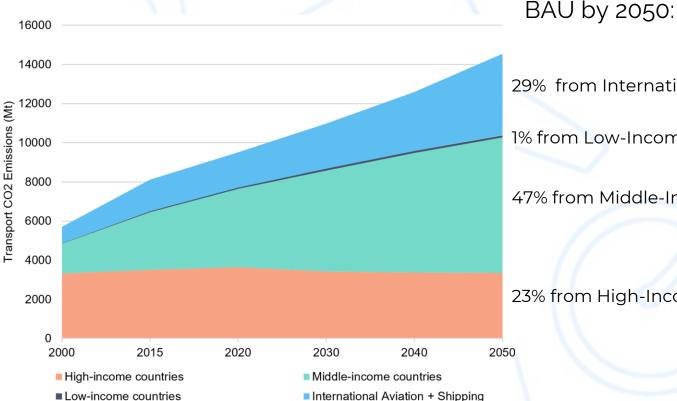


Source: Based on SLoCaT calculations of EDGAR, (2017). EDGAR v4.3.2\_FT2016.

## Low Carbon Transport Research Key Findings



## Future projected transport BAU



29% from International Aviation + Shipping

1% from Low-Income countries

47% from Middle-Income countries

#### 23% from High-Income countries

# Assessment of 2020 NDCs

#### New NDCs will be assessed by SLoCaT on:

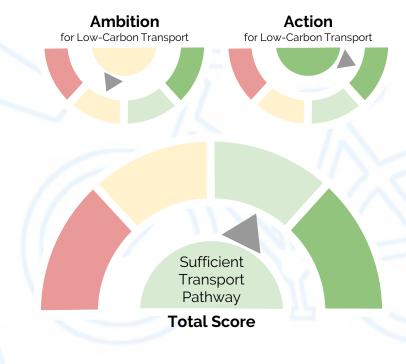
#### Ambition

- Direct transport emission mitigation target
- Other indirect transport targets

#### Action

- Low-carbon measures in NDC
- Balance between Avoid, Shift and Improve

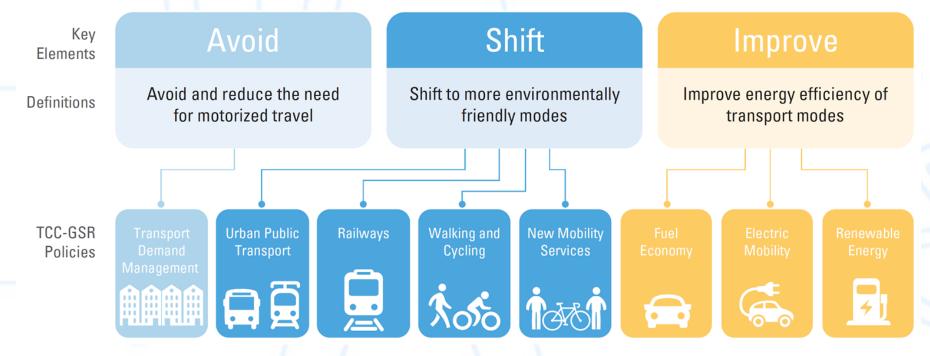




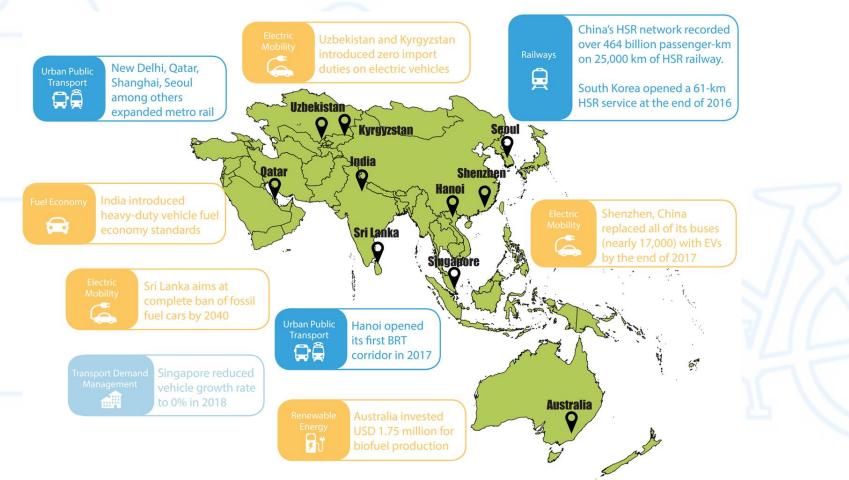
# 2. Sustainable transport policy actions

### Avoid-Shift-Improve framework can support sustainable transport implementation

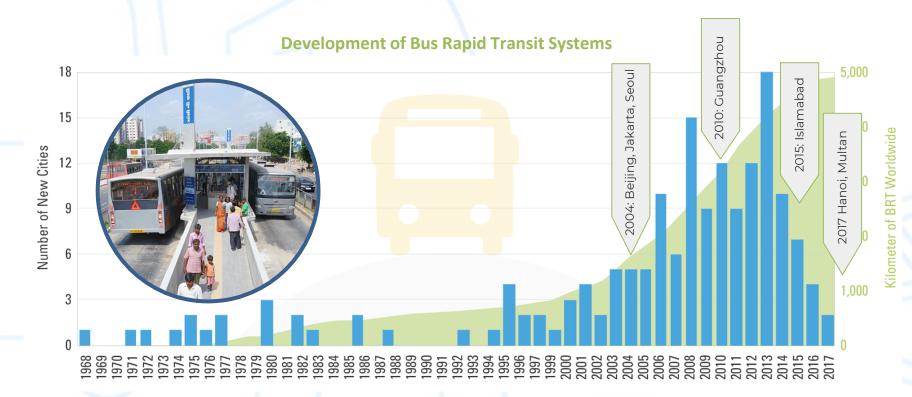




### Sustainable transport actions in Asia-Pacific



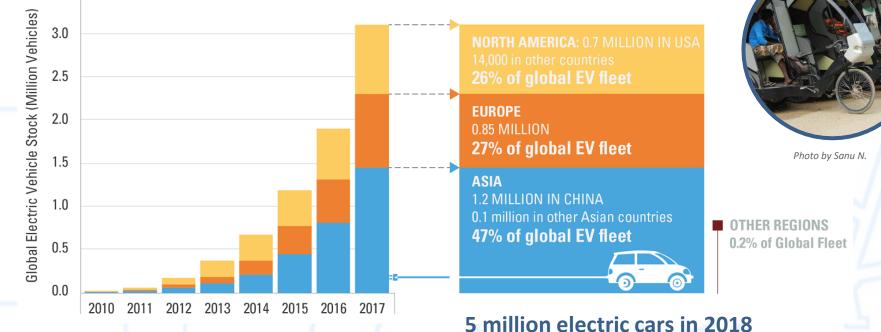
## Bus Rapid Transit Development Trends



Source: BRT+ Centre of Excellence and EMBARQ, (2018). Global BRTData. Version 3.37.

## Electric vehicle fleet growing at exponential rate

Electric Vehicle Stock (battery and plug-in electric hybrids)



# 3. Benefits for environment, economy and society

## Socio-economic benefits of sustainable transport



#### A better environment:

Asian cities have high pollution levels, zero-emission transport could reduce up to 80% of pollution.

- Less pollution
- Better health, fewer premature deaths
- Mitigating climate change



#### A better economy:

Congestion in Asia costs 2-5% of national GDP every year.

- Increases efficiency
- Reduces congestion



- More access for all
- Increases equity and equality Creates jobs



#### A better society:

The transport sector created 2.3 million jobs in the Philippines in 2011.

# Sustainable urban mobility plans (SUMPs) enable comprehensive mobility solutions

#### SUMPs in Europe



# Walking and cycling have more economic benefits than costs for society and economy

**External Costs and Benefits of Transport in Switzerland (2015)** 



Verkehrs in der Schweiz. Strassen-, Schienen-, Luft- und Schiffsverkehr 2015.

### Safa Tempos in Kathmandu, Nepal: Economic Benefits and Female Empowerment



Source: World Bank and UITP, (2018). Barriers to Adopting Electric Buses.

## Conclusions

- 1. Global transport emission trends currently moving in wrong direction.
- 2. Sustainable transport policy actions must be scaled up across broader set of regions, countries, cities.
- 3. Benefits for environment, economy and society must be emphasised to accelerate transformational change.

# Thank you for your attention!

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Partnership on Sustainable, Low Carbon Transport