TRANSPORT AND CLIMATE CHANGE 2018
GLOBAL STATUS REPORT

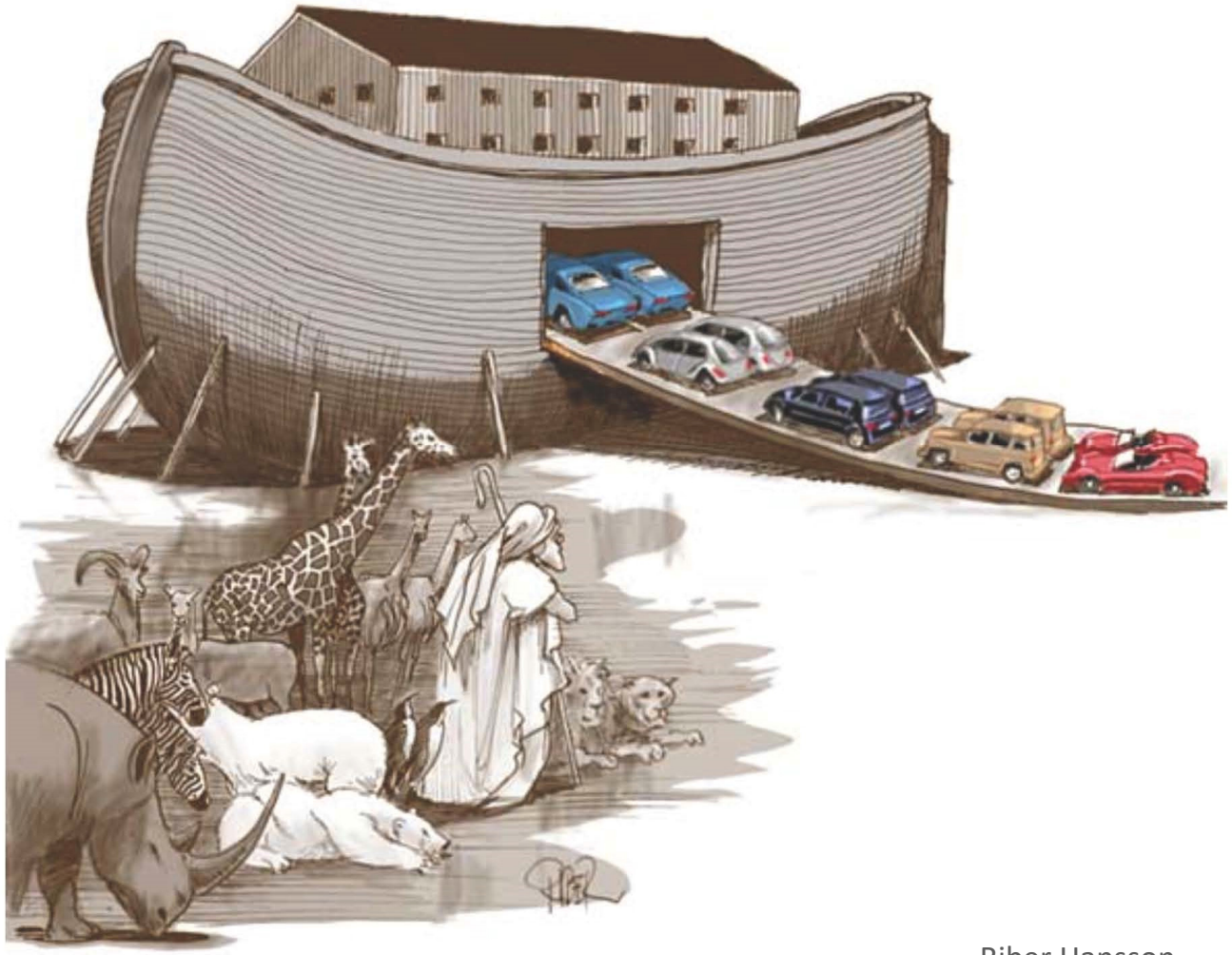
Having a look at the Global Status Quo – Where is the Transition?

#TransportClimateStatus

Partnership on Sustainable Low Carbon Transport

Presented by

Holger Dalkmann,
Interim Secretary General, SLoCaT



Are we going to sacrifice our planet to drive fossil fuel cars?

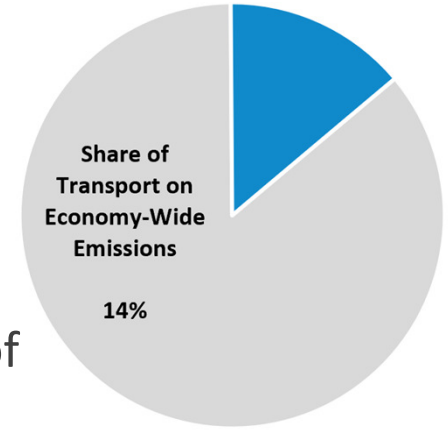
Riber Hansson

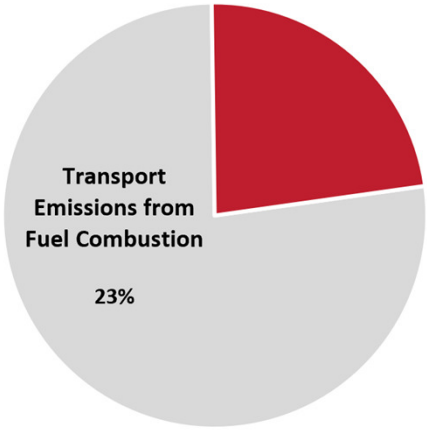
Global transport CO_2 emissions at 7.5 Gt

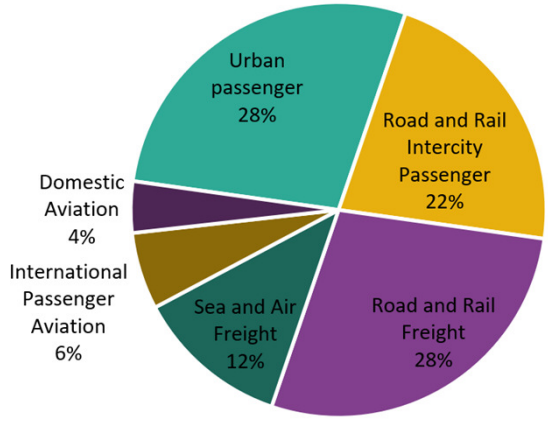
Transport emissions significant and growing as share of total emissions

Transport is responsible for:

- **7.5 Gt of CO_2 emissions** and 28% of global final energy demand
- **14% of economy-wide CO_2 emissions** and 23% of emissions by fuel combustion
- Transport emissions broken down into four primary segments





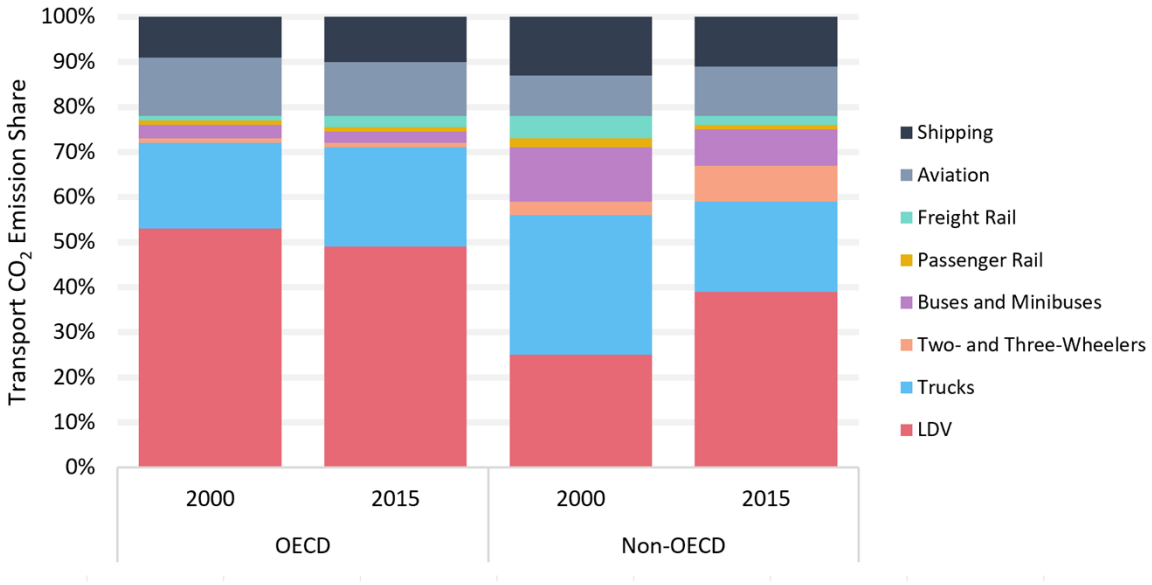


Source: ITF, (2017). ITF Transport Outlook 2017.

Freight growth more intense than passenger

Freight transport emissions increasing faster than passenger transport

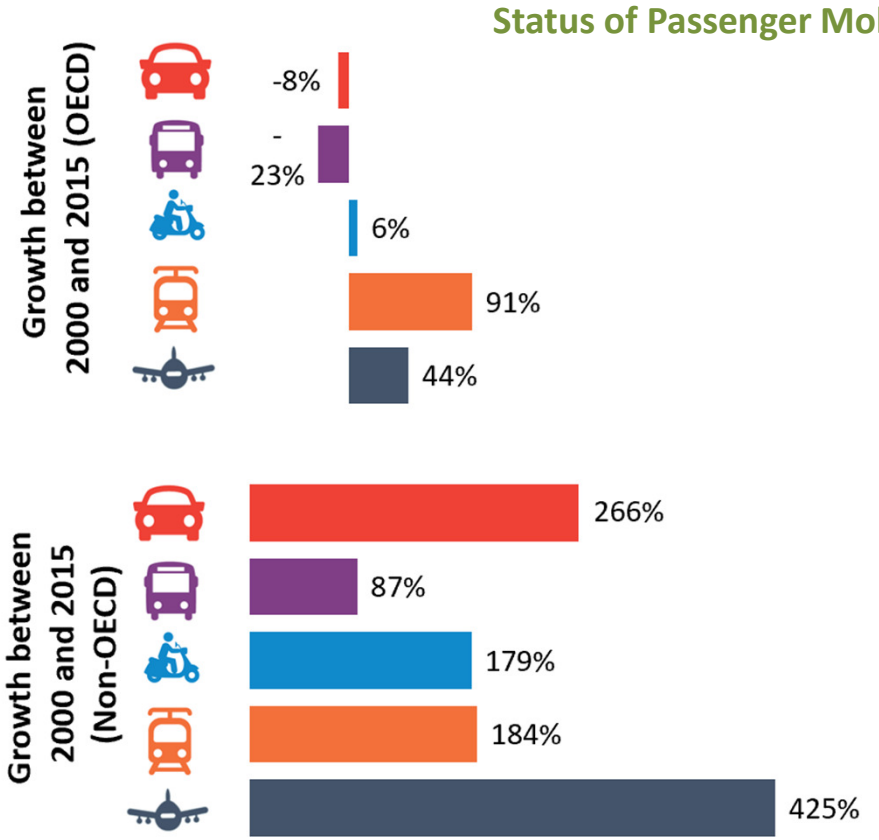
- **Passenger transport emissions** increased by 36% (2000 to 2015)
- **Freight transport emissions** have increased by 75%
- **Emission share by freight share** increased from 35% in 2000 to 41% (2015)
- Passenger transport showed strong increase of **private cars**, freight saw increase of **long-distance trucks**



Source: IEA and WBCSD, (2004). IEA/SMP Model Documentation and Reference Case Projection. IEA, (2016). Energy Technology Perspectives 2016.

Private motorization in non-OECD grew by +266%

Travel demand growing worldwide, spurring increase in private motorization



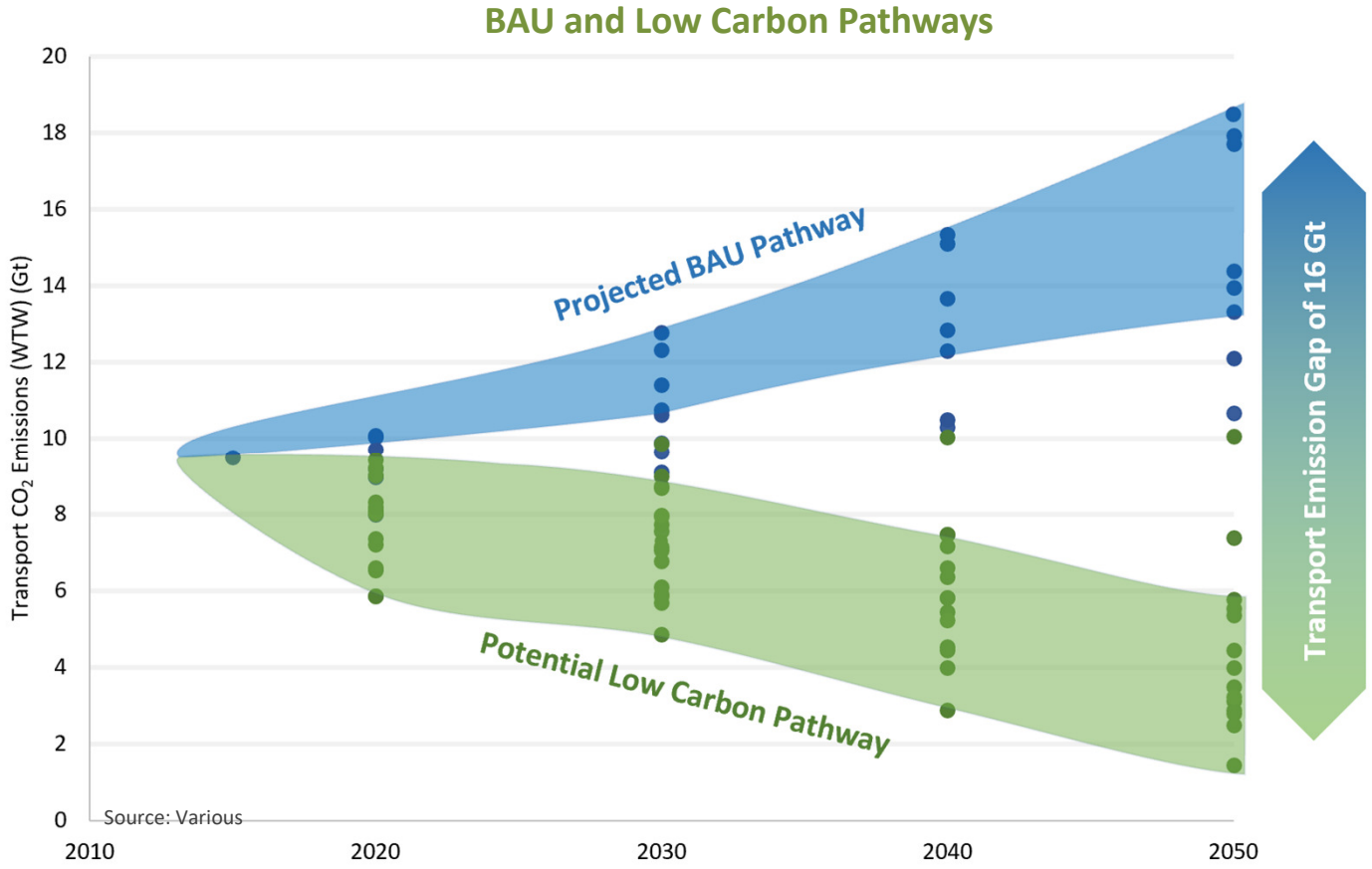
- Modal share shifts rapidly towards **private autos and air travel**
- **Public transport services** being less used in OECD and have slow growth in non-OECD

Source: IEA, (2016). Energy Technology Perspectives 2016.

Transport emission gap of 16 Gt

Emission gap growing, but low carbon transport has high mitigation potential

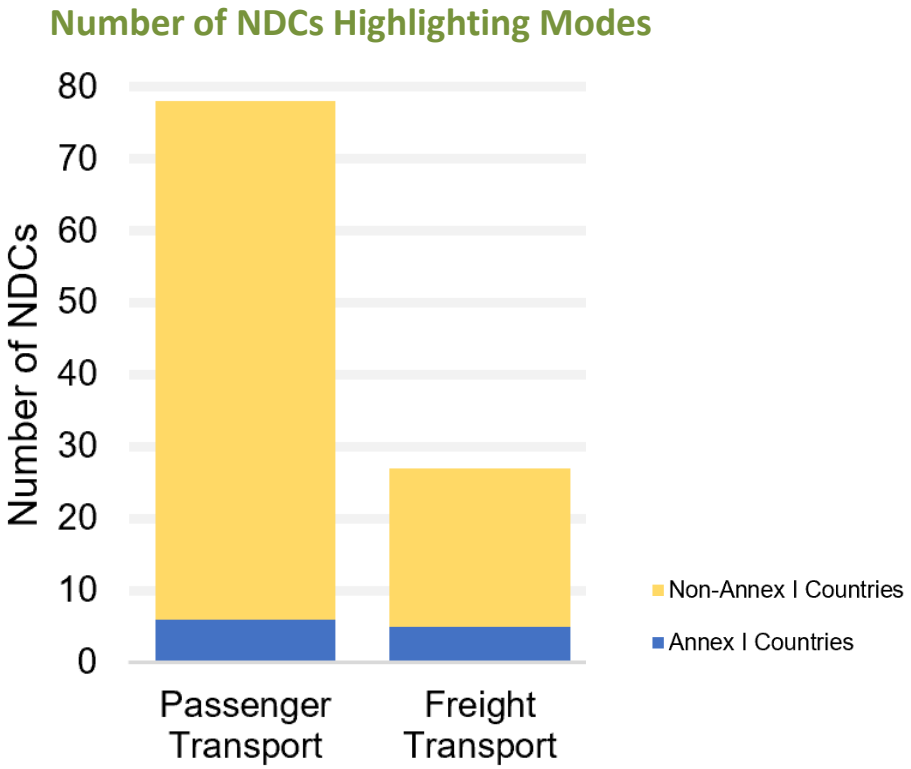
- **Business-as-Usual (BAU) pathways** project further increase, up to 18 Gt CO_2
- For transport to contribute to the **1.5 degree Celsius goal of the Paris Agreement**, CO_2 emissions have to go down to 2 Gt CO_2 by 2050



NDCs focus strongly on passenger transport

Transport measures in NDCs lack ambition and comprehensiveness

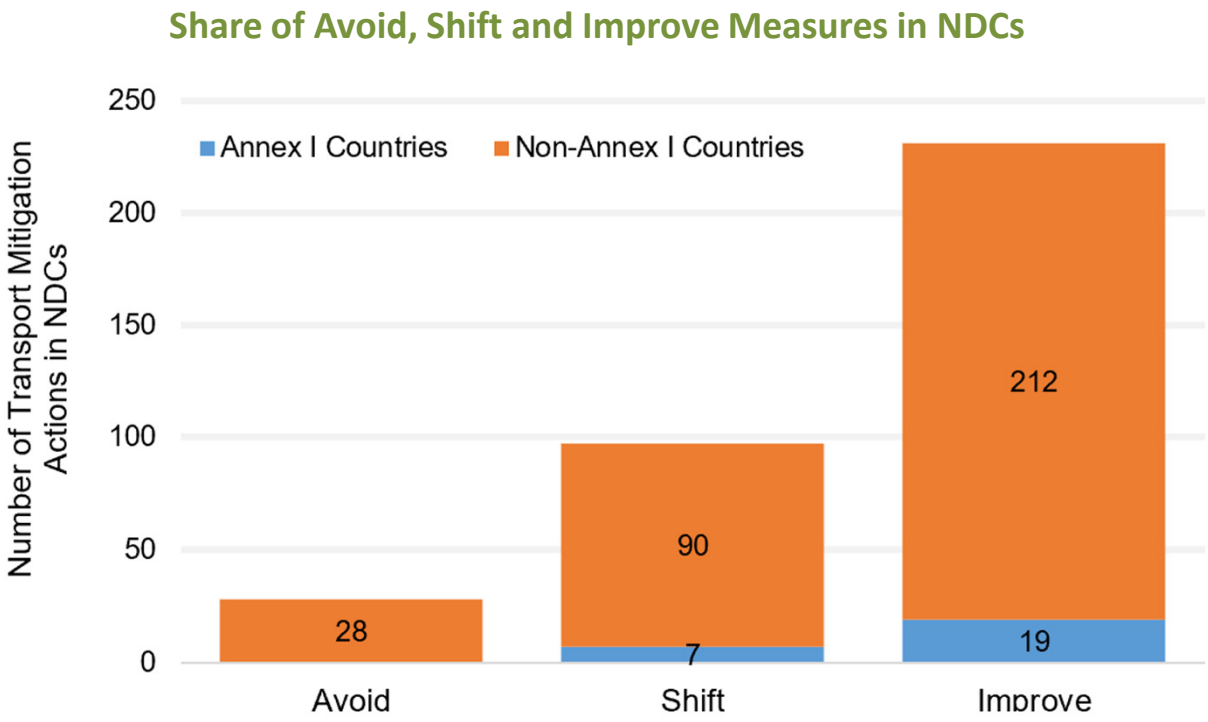
- **76% of the submitted 165 NDCs** highlight the transport sector as a mitigation source
- Only **8% of NDCs** propose transport sector emission reduction targets
- Passenger transport dominates over freight:
  - **62% of NDCs** highlight passenger transport measures
  - only **22%** focus on freight transport



NDCs emphasize 'Improve' measures over 'Avoid' and 'Shift' measures

- Majority (**about 65%**) of the 356 proposed mitigation measures in NDCs represent 'Improve' strategies
- Measures, such as **e-mobility** and **fuel economy standard improvements** are favored

➔ Current NDCs are **not sufficient** enough to reach Paris Agreement goals



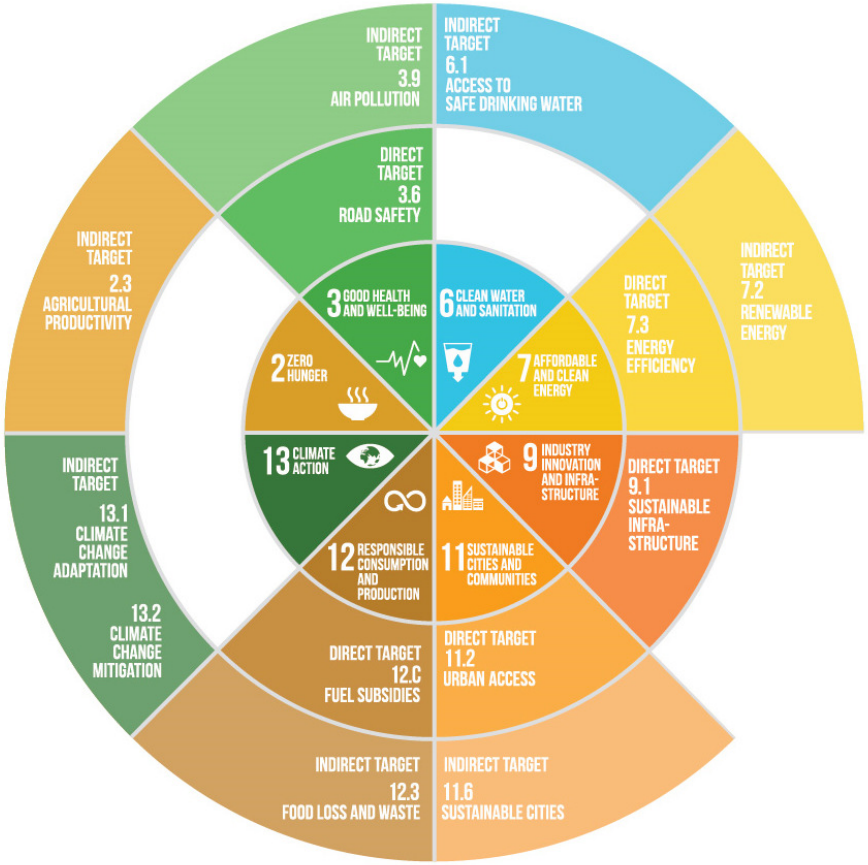
Few countries have targets for transport

Synergies in SDGs and NDCs to ensure ambitious action

- Progress on SDGs are tracked through **Voluntary National Review (VNRs)** which lack specific transport actions

- **2030 Agenda and Paris Agreement** can work together by:
  - **Coordinating** activities and targets
  - **Mainstreaming** goals into policy planning
  - **Optimizing** financial resources
  - **Building** mutually reinforcing monitoring and reporting frameworks

Direct and Indirect Targets of SDGs Linked to Transport



Slide 9

KP34 Suggest to convert table to map or put separtately at bottom of deck (with other slides to be developed later). Too much info to absorb in slide show.

Karl Peet; 31/08/2018

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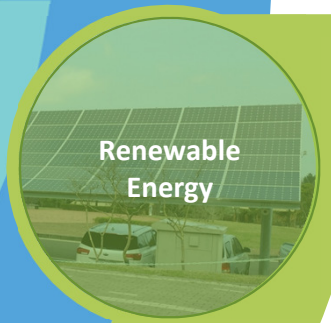
Policy Landscapes

Partnership on Sustainable Low Carbon Transport



Avoid-Shift-Improve Framework in support of low carbon mobility

Avoid

Avoid and reduce the need for motorized travel

Shift

Shift to more environmentally friendly modes

Improve

Improve energy efficiency of transport modes

Policy Instruments of Sustainable Transport

- Solutions **do exist** and they are being implemented in many places around the world

Transport Demand Management

Urban Public Transport

Railways

Walking and Cycling

Shared Mobility

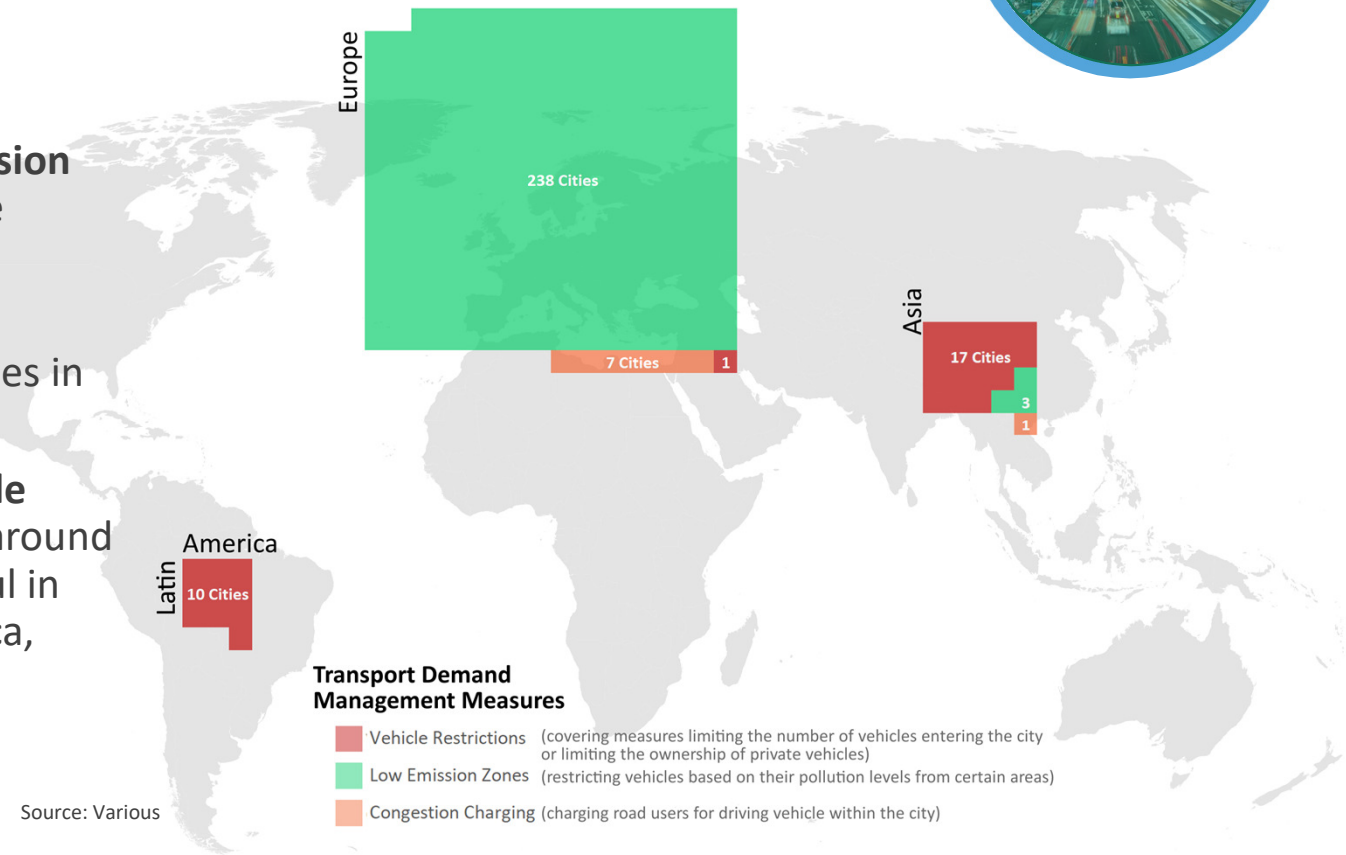
Fuel Economy

Electric Mobility

Renewable Energy

More cities embrace measures on Transport Demand Management

- 8 cities introduced new **low emission zones (LEZs)** in 2017, bringing the global total to 241 cities
- **Congestion charging** has been implemented in relatively few cities in Europe (7 cities) and Singapore
- **Vehicle quota systems and vehicle restrictions** are used in 28 cities around the world, proved to be successful in Shanghai, Japan and Latin America,

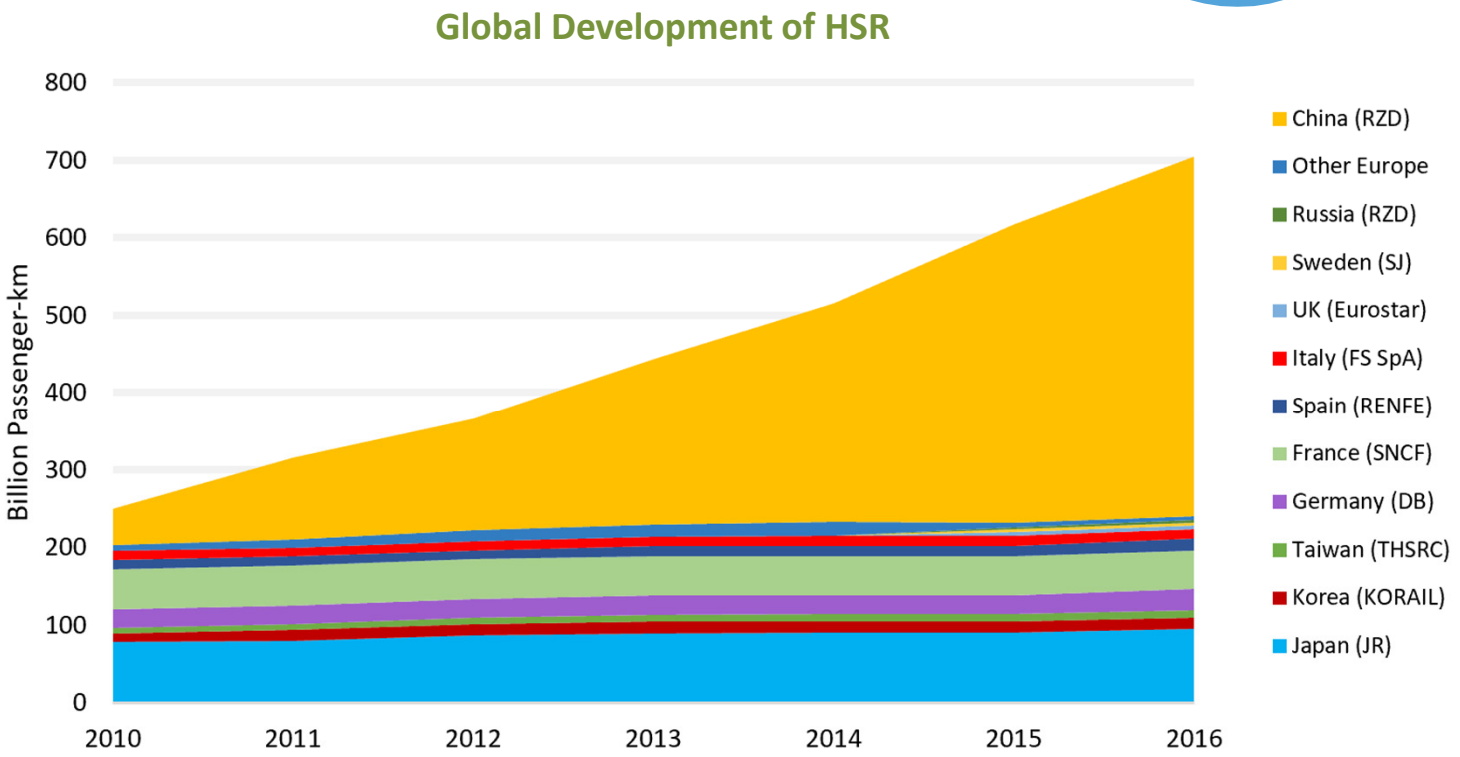


Source: Various

High-speed rail booming in China, expanding in other key markets

HSR grew share from 10 to 20%

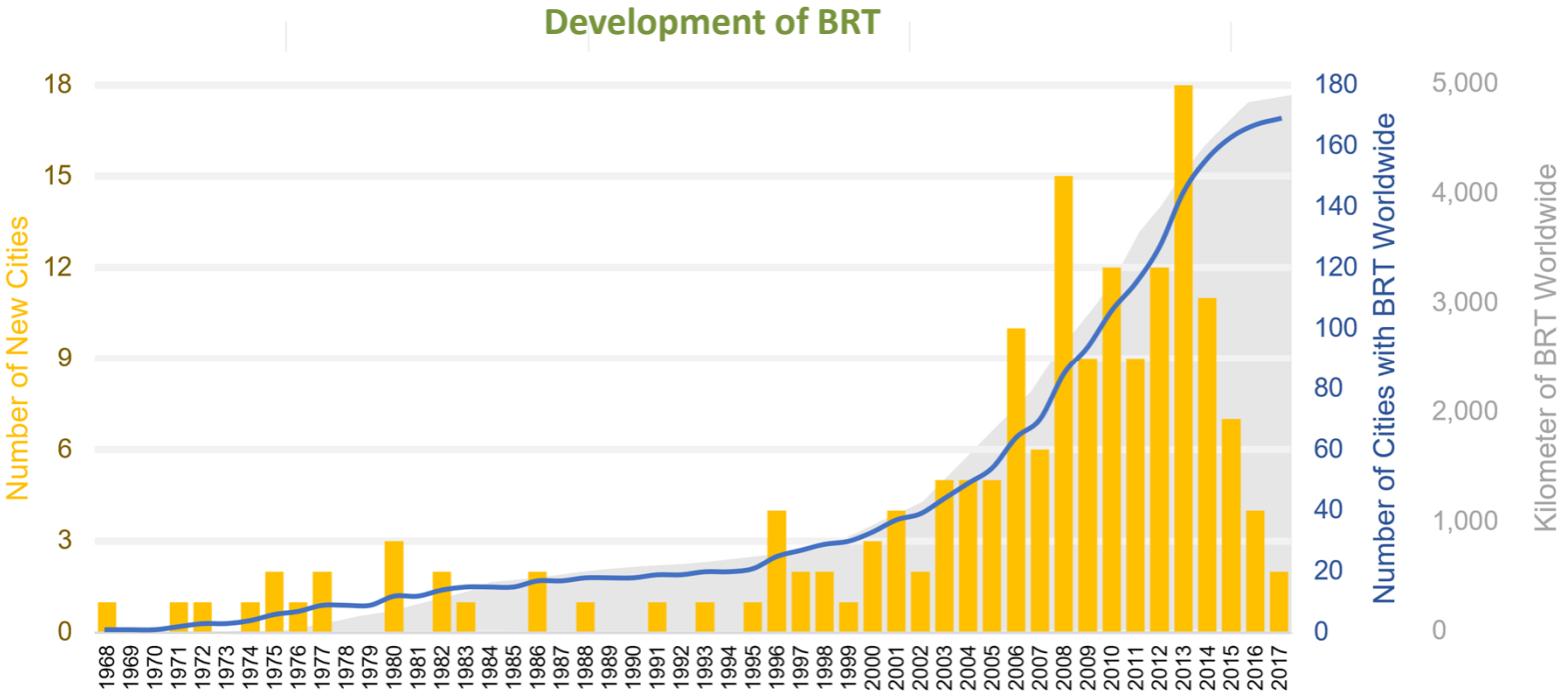
- **Total HSR network** spans around 32,000 km
- **China** leads growth of high-speed rail
- Potential to shift away from domestic and international aviation



Expansion of BRT slowed down

Bus Rapid Transit slowing down after strong growth in past decade

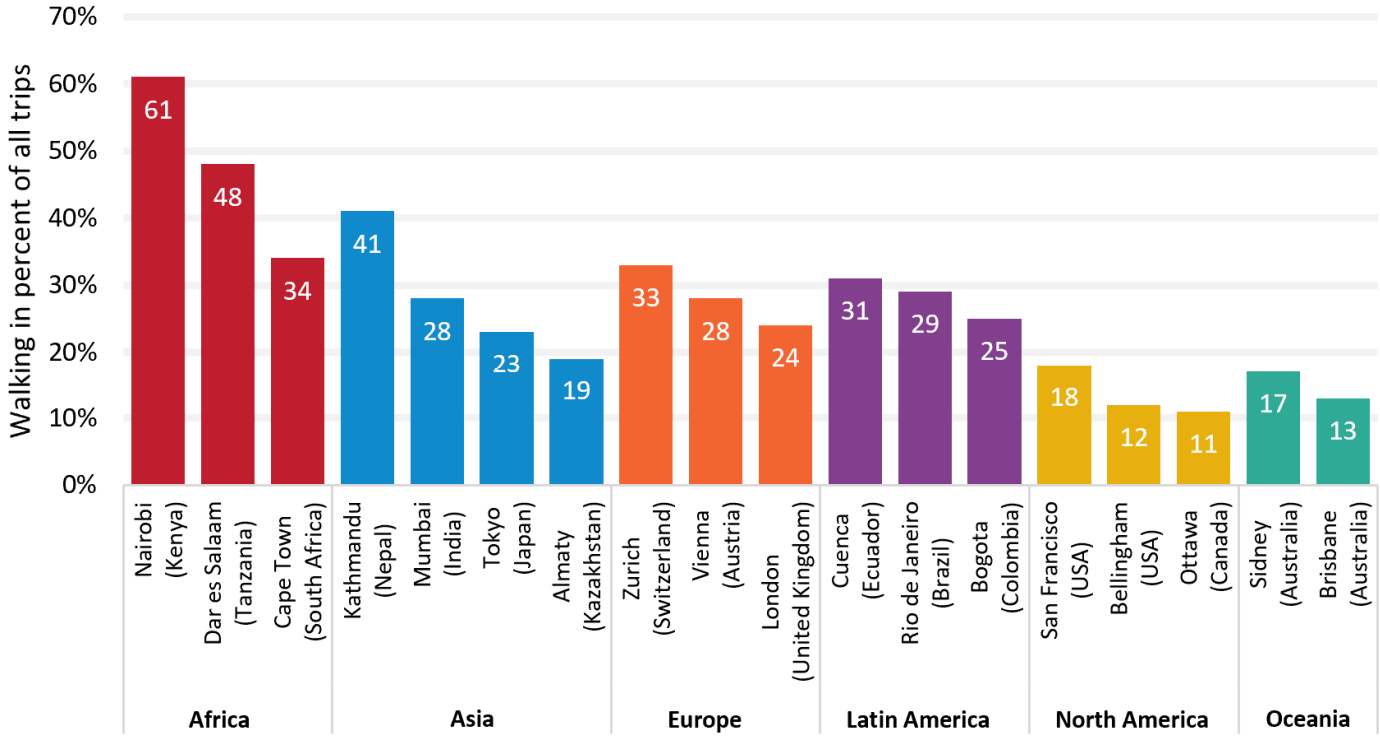
- **BRT systems** implemented in in 169 cities by end of 2017
- **Total length of systems** increased to 5,000 km
- Only 2 new systems opened in 2017



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

Walking share highest in dense cities and developing countries

- Walking in **Nairobi** accounts for 61% of trips
- **Cities in Asia** record between 19 and 41%
- Just 13% of trips on foot in **Brisbane** and even fewer in **North America**



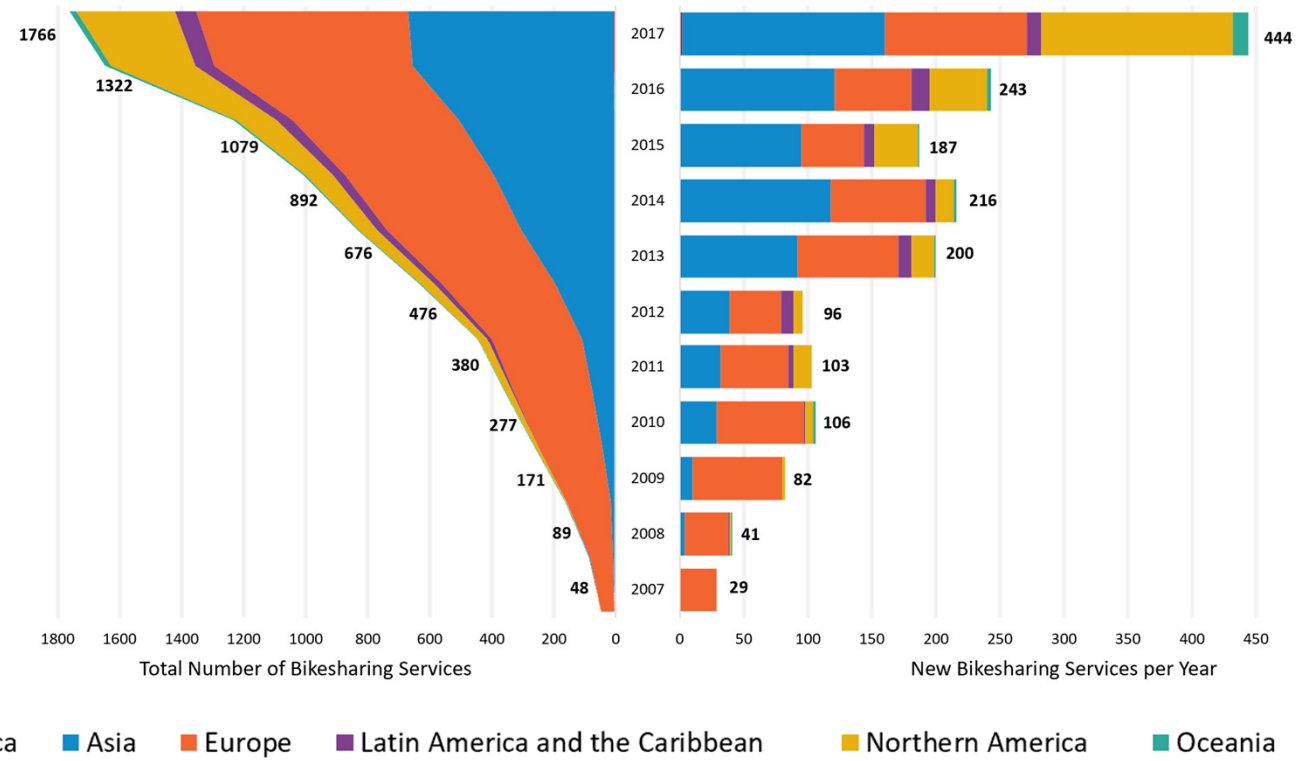
Source: Various

Over 1,700 bikesharing services globally

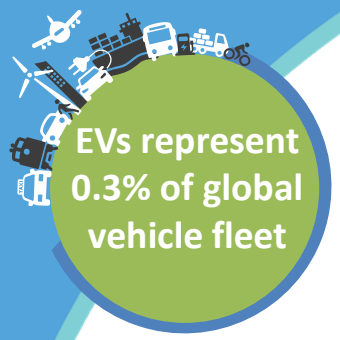
Bikesharing gaining popularity in past decade, accelerated through dockless services

- Bikesharing services accelerated since 2010, expanding to cities in Asia, Europe and North America
- **33% growth between 2016 and 2017**, motivated by launch of dockless bikesharing services in China and the US
- First bikesharing in Africa opened in **2016 in Morocco**, followed by service in **Cairo in 2017**

Growth of Bikesharing



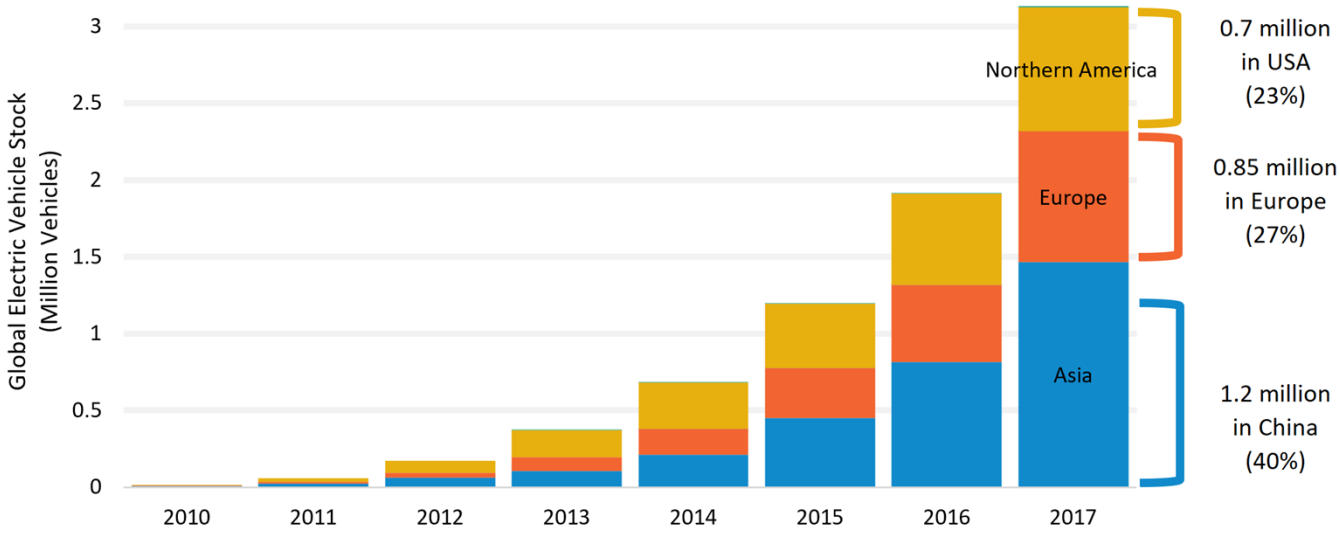
Source: SLoCaT calculations based on Meddin, R., (2018). Bikesharing Map.



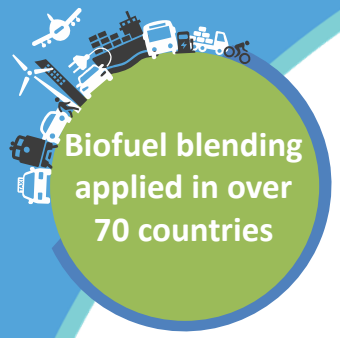
Electric vehicles growing rapidly but overall share still modest

- Road transport accounts for 75% of transport emissions
- **In 2017, EVs passed 3 million**, from near-zero in
- 40% of EVs are driven in China
- Global electric bus stock was around **380,000 buses in 2017 (13% of the global bus fleet)**

Passenger Electric Vehicle Stock (4-wheelers)

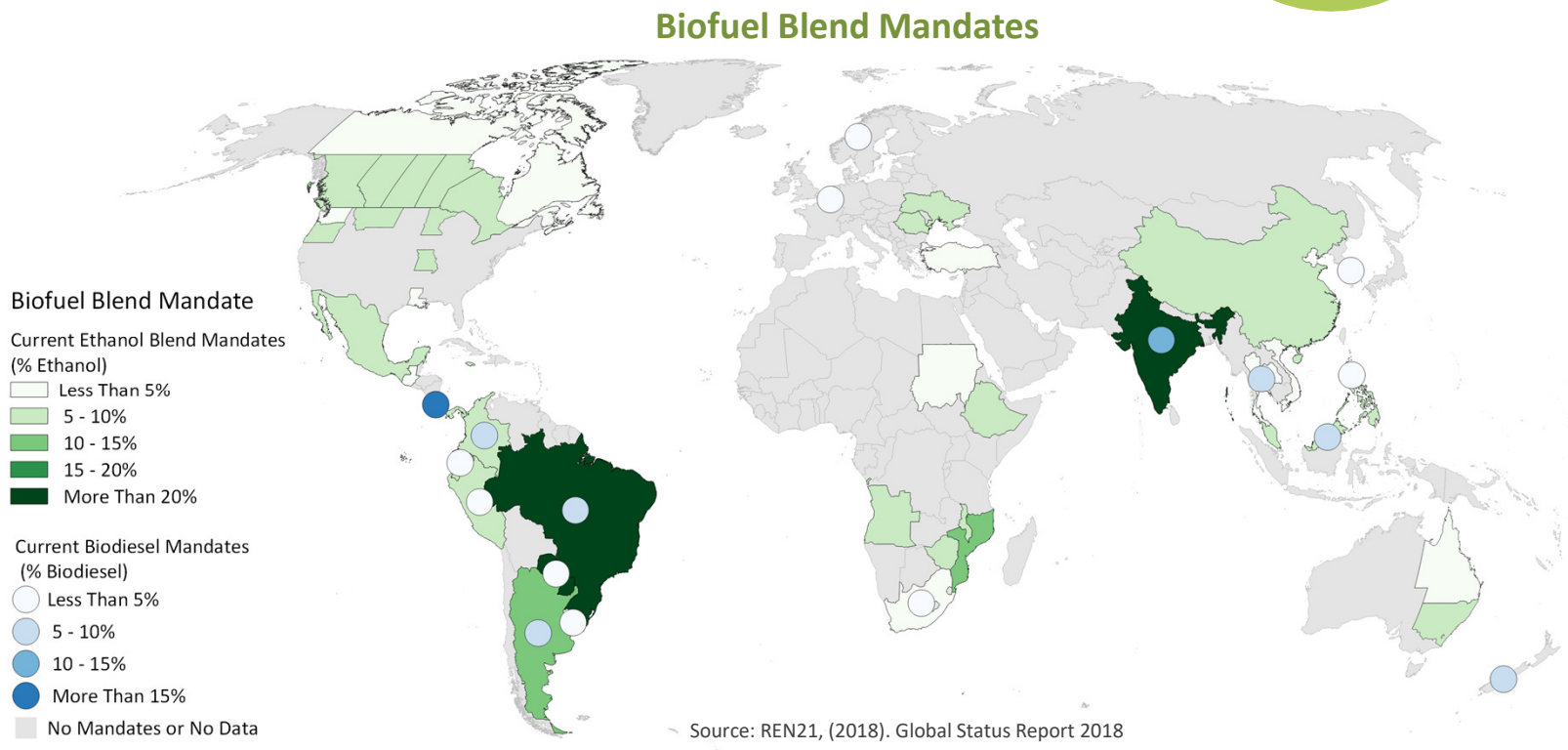


Source: IEA, (2018). Global EV Outlook 2018.



Biofuel blend mandates expand further

- 70 countries have **biofuel blending mandates**
- Advanced biofuel regulations introduced in Denmark, Italy and the US in 2017



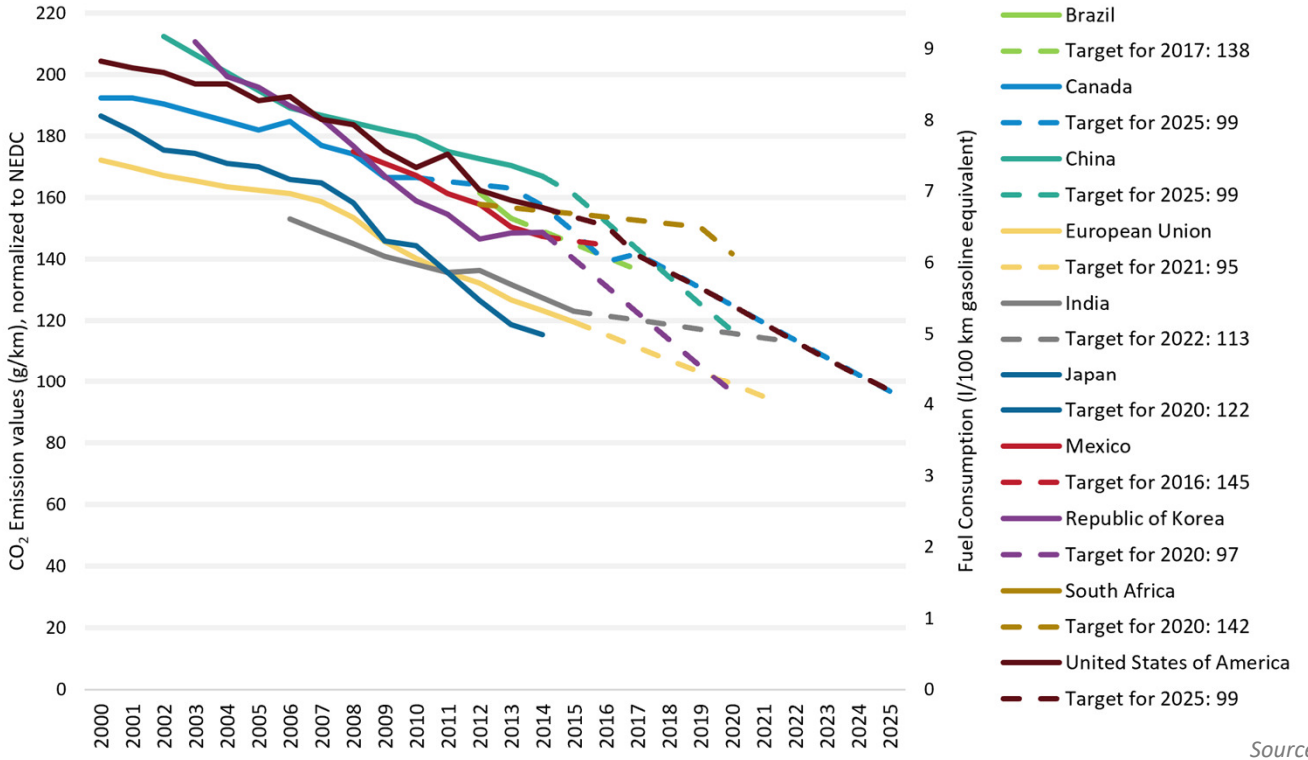
Source: REN21, (2018). Global Status Report 2018

37 Countries have LDV Fuel Economy Standards

Fuel economy a tested tool to reduce CO_2 emissions

- Since 1970s countries implement standards on LDV fuel economy
- 37 countries have **LDV fuel economy standards**
- Just 5 countries with **HDV fuel economy standards**

CO_2 Emissions Performance and Standards for Light Duty Vehicles (2000-2025)



Source: ICCT

How is the TCC-GSR structured?

Part I. Executive Summary and Global Overview	A. Executive Summary B. Global Overview					
Part II. Transport Demands and Impacts	A. Transport Demand B. Transport Emissions and Other Impacts C. Transport Mitigation Potential					
Part III. Transport and Climate Change Policy Measures	A.Policy Framework	B.Policy Landscape	I. Transport Demand Management	III. Railways	V. Shared Mobility	VII. Electric Mobility
			II. Urban Public Transport	IV. Walking and Cycling	VI. Fuel Economy	VIII. Renewable Energy
Part IV. Mobilizing Action on Transport and Climate Change	A. Finance B. Stakeholders					

Which organizations are contributing to the TCC-GSR?

- The TCC-GSR is **primarily supported** by these organizations:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

William + Flora Hewlett Foundation

- Organizations/experts contributing to the TCC-GSR **strategy team**:

ALSTOM

CAF Development Bank of Latin America

ECF European Cyclists' Federation

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

iea International Energy Agency

IRENA International Renewable Energy Agency

International Transport Forum

IsDB البنك الإسلامي للتنمية Islamic Development Bank

ITDP Institute for Transportation & Development Policy

Mobilise Your City

REN21 Renewable Energy Policy Network for the 21st Century

UITP Advancing Public Transport

VREF Volvo Research & Educational Foundations

Walk21

The World Bank

World Health Organization

World Resources Institute

- Others contributing as **section authors** and **feedback teams**

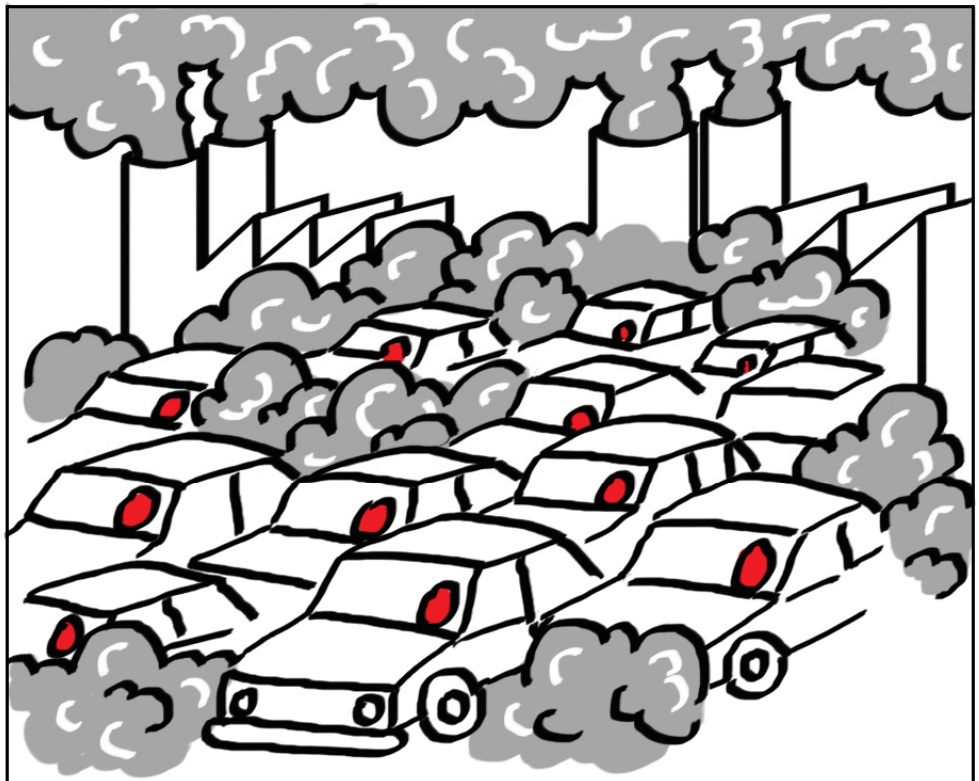
Contact us!

How can you contribute to the TCC-GSR?

- SLoCaT is looking for participation from the transport community (and peers in related fields):
  - To provide **quantitative or qualitative data**
  - To **peer review** draft sections (10-21 September)
  - To support **outreach** on report results

Please contact us at **tcc-gsr@slocatpartnership.org**

THE REAL THREAT OF CLIMATE CHANGE ISN'T ONE BAD GUY DOING SOMETHING EVIL....



...IT'S ALL OF US CONTINUING TO DO THE SAME OLD THINGS...

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Thank You!

For more information, please visit:

http:// www.slocat.net/tcc-gsr

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