

ANTWERPEN, 16 - 19 JUNE

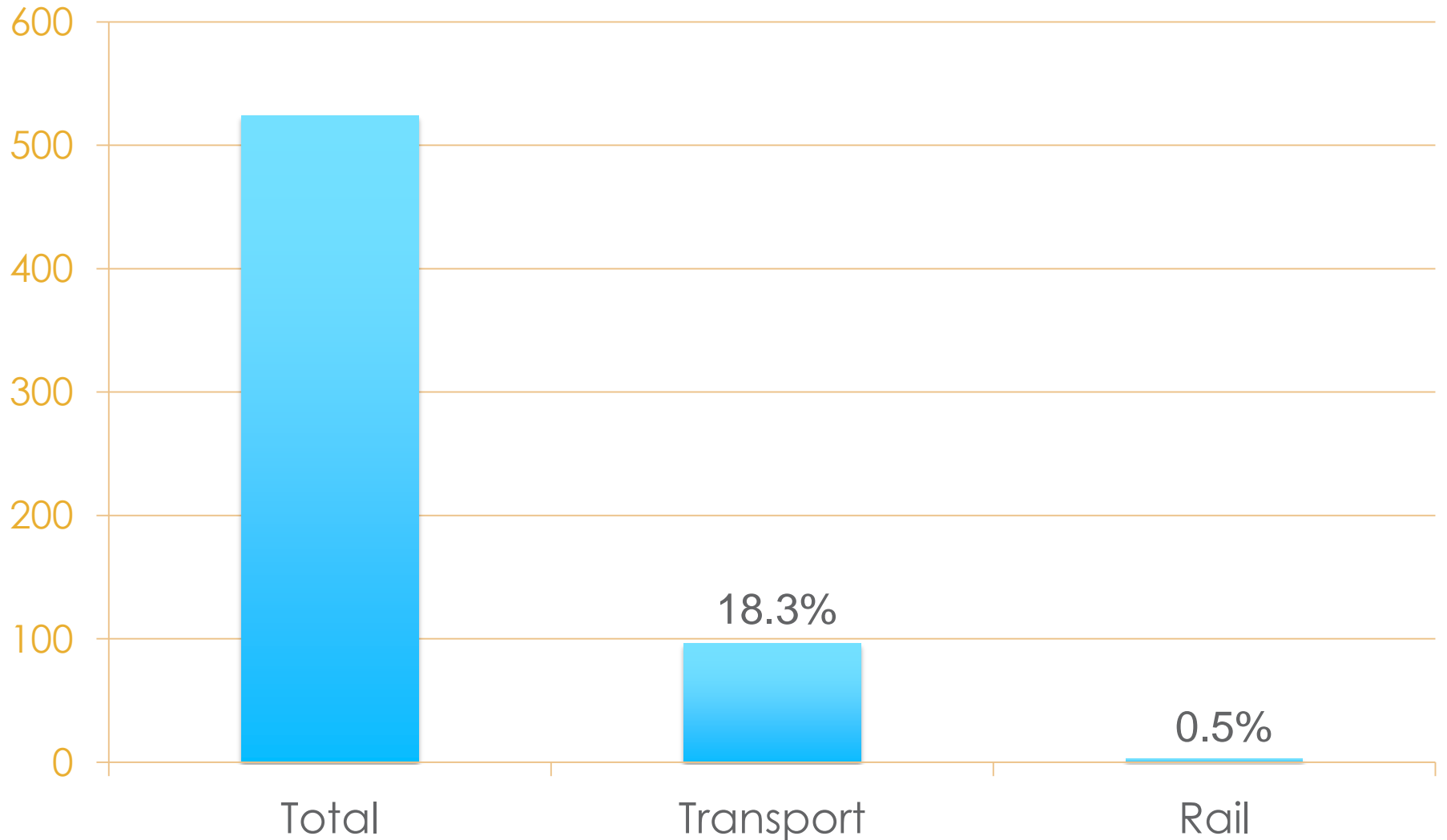


## FUTURE OF SUSTAINABLE TRANSPORT – LOCAL AND GLOBAL OPPORTUNITIES

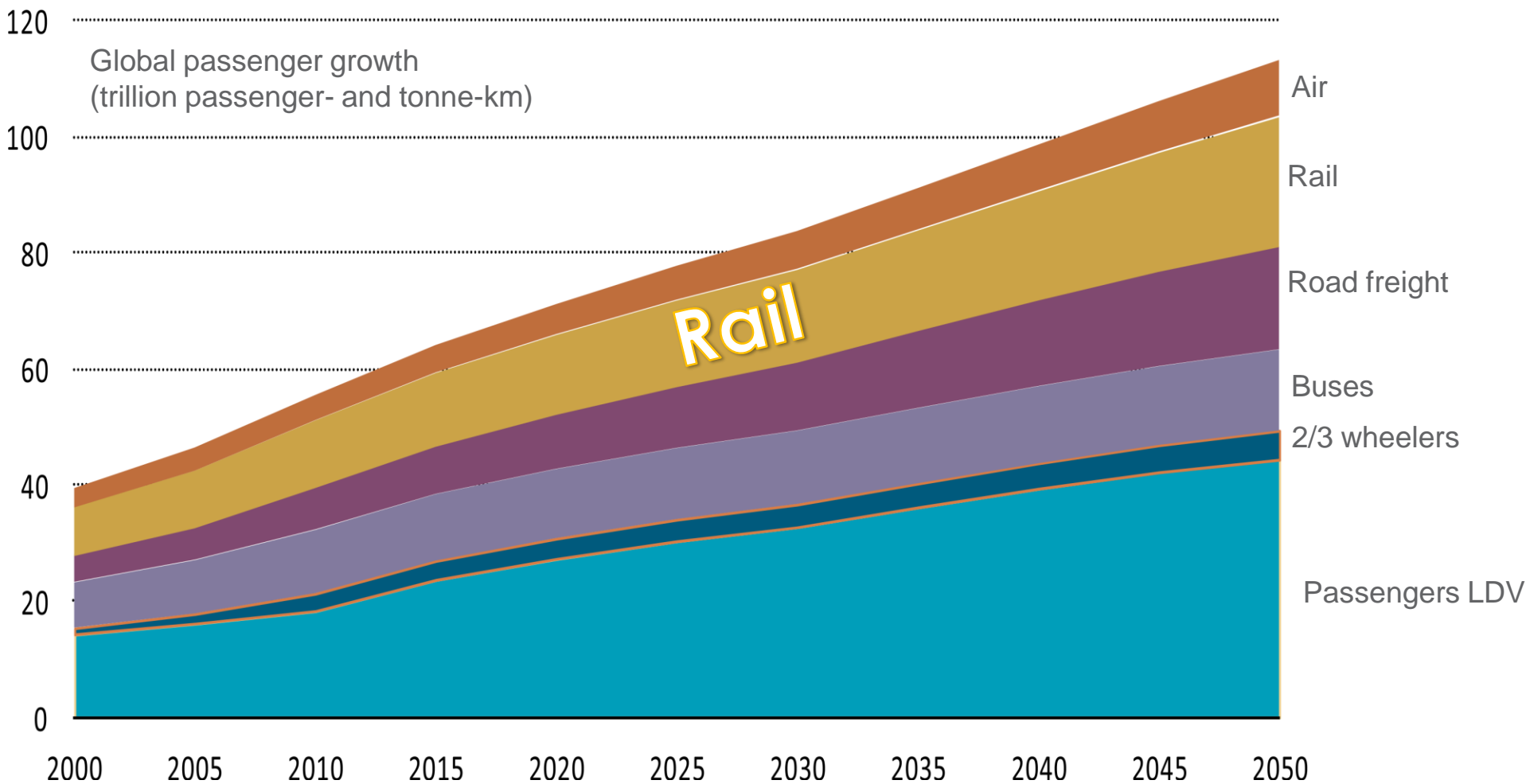
*HOLGER DALKMANN, GLOBAL DIRECTOR CITIES  
AND TRANSPORT – WORLD RESOURCES INSTITUTE*

*Energy Efficiency, the best fuel to move our trains!*

# Rail, only a fraction of the world's energy use

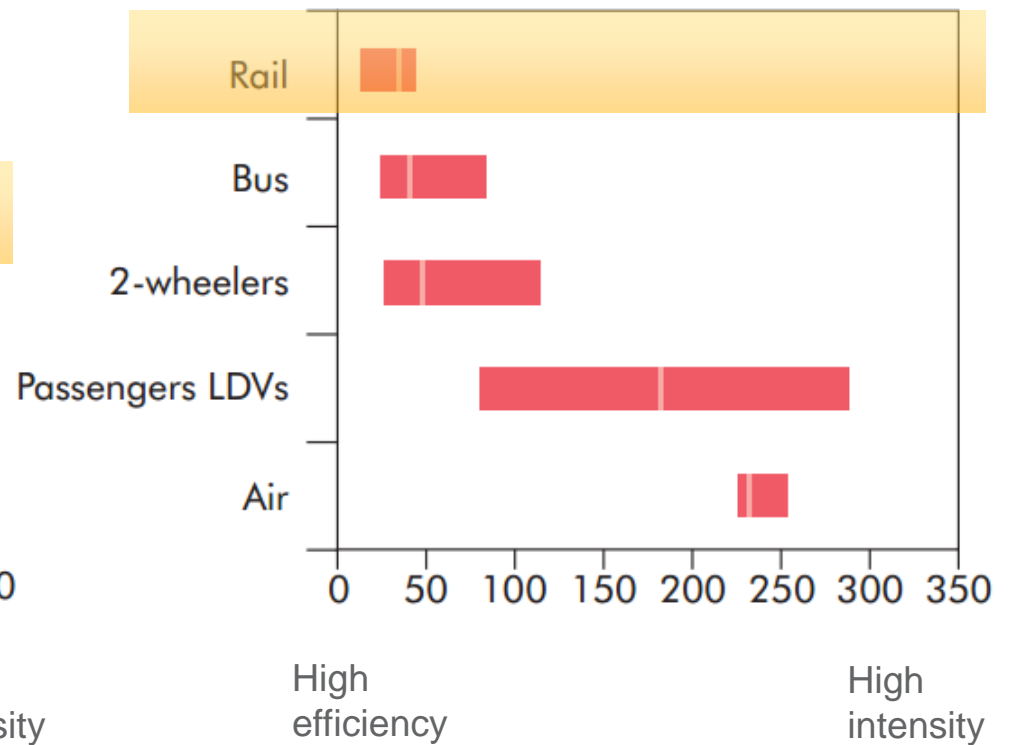
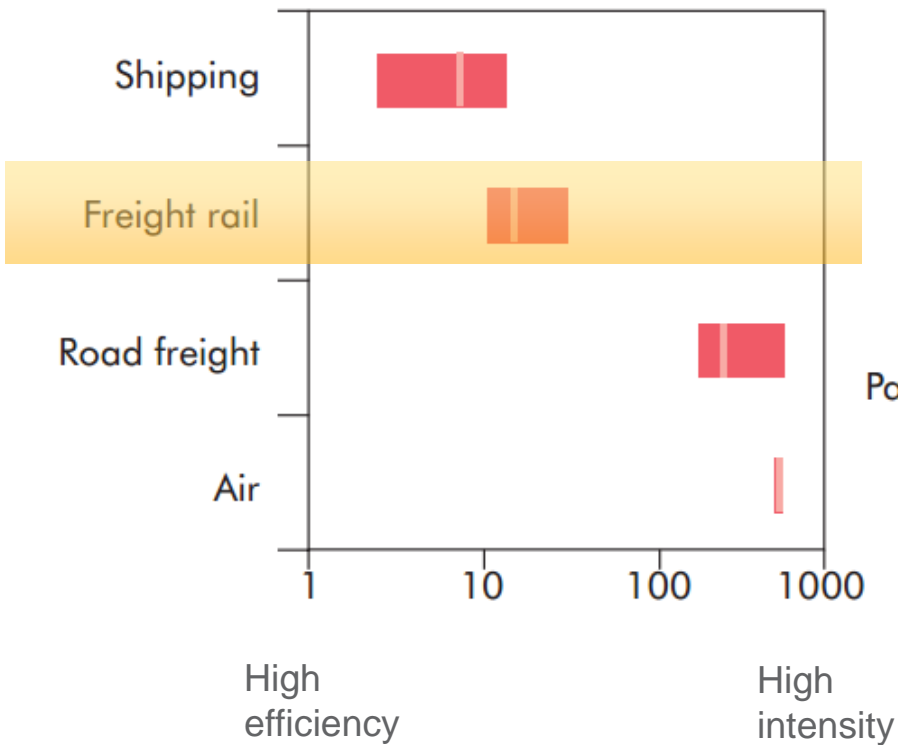


# But a high share in the world's travel

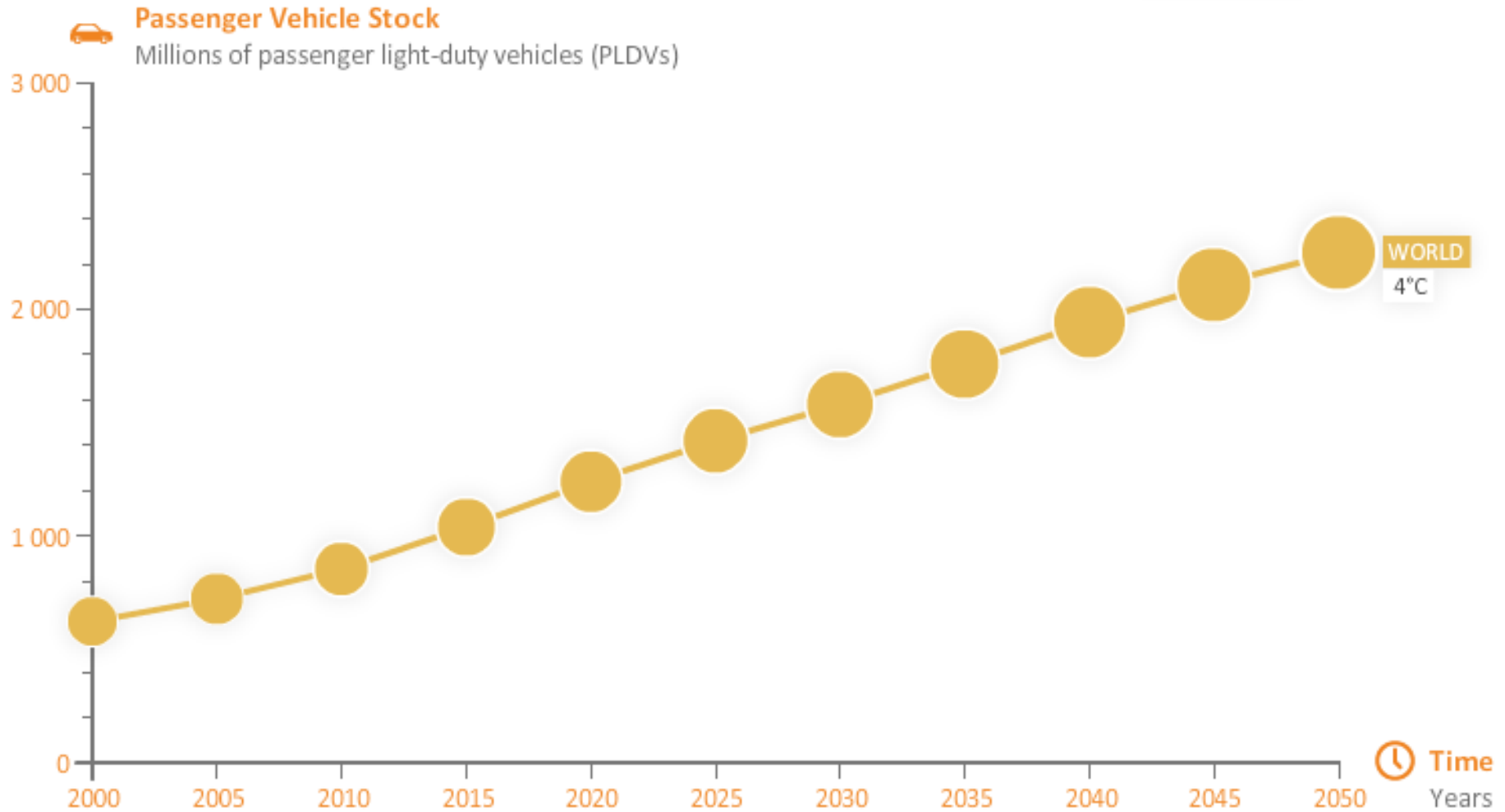


# As rail is very efficient

GHG intensity

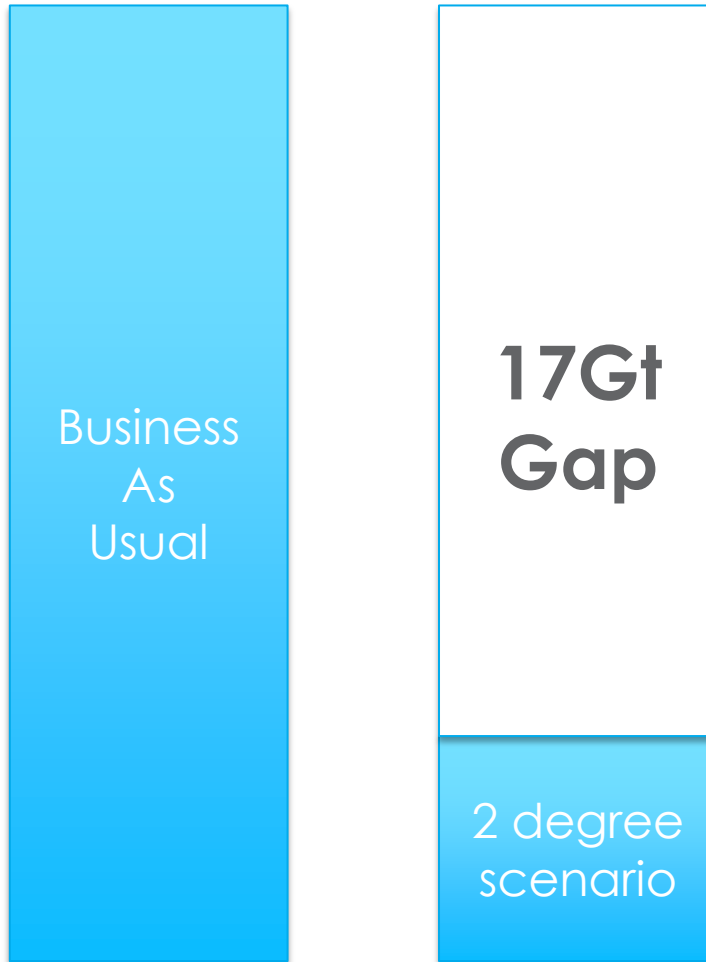


# Risk of a 2+ billion cars world

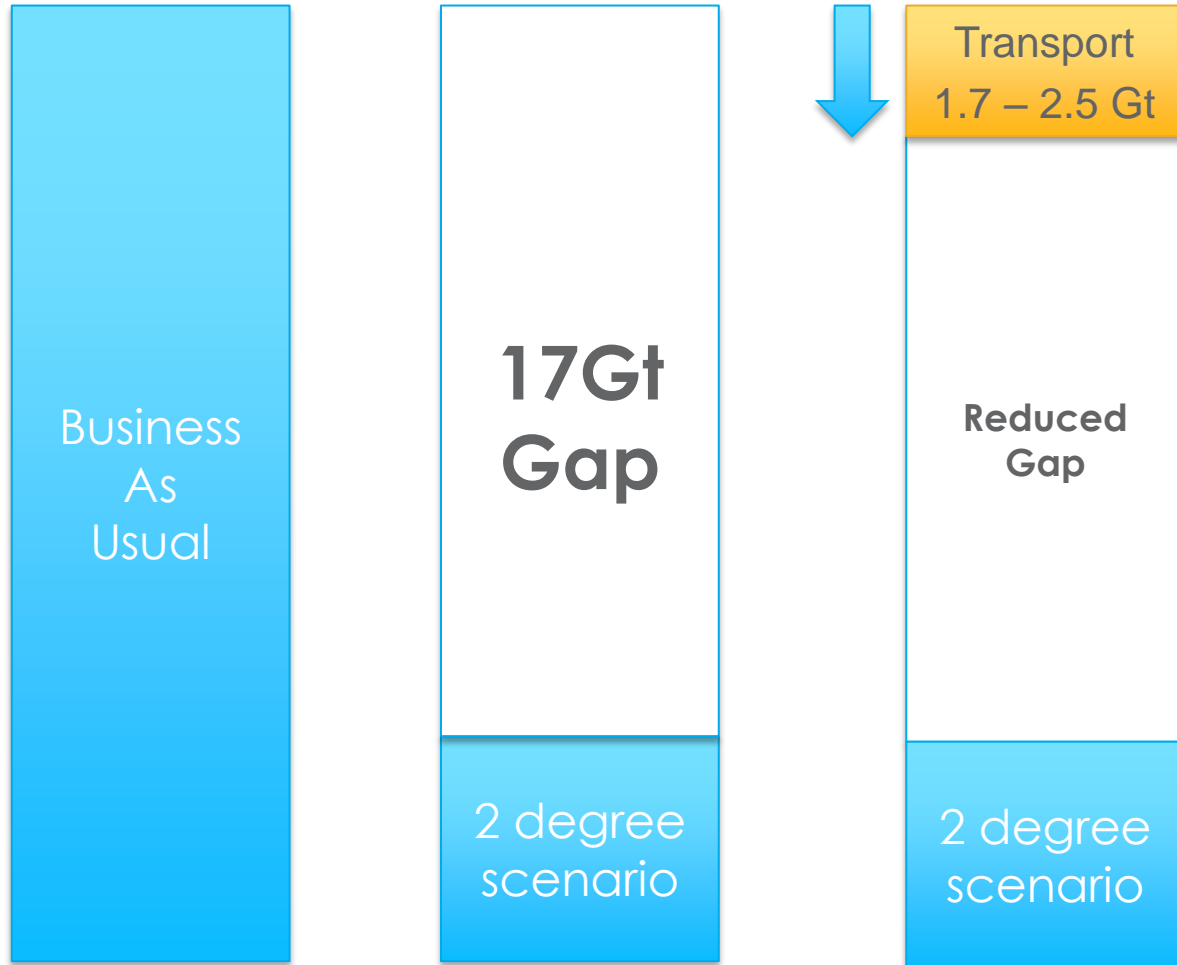


# Bridging the gap to a 2 degree scenario

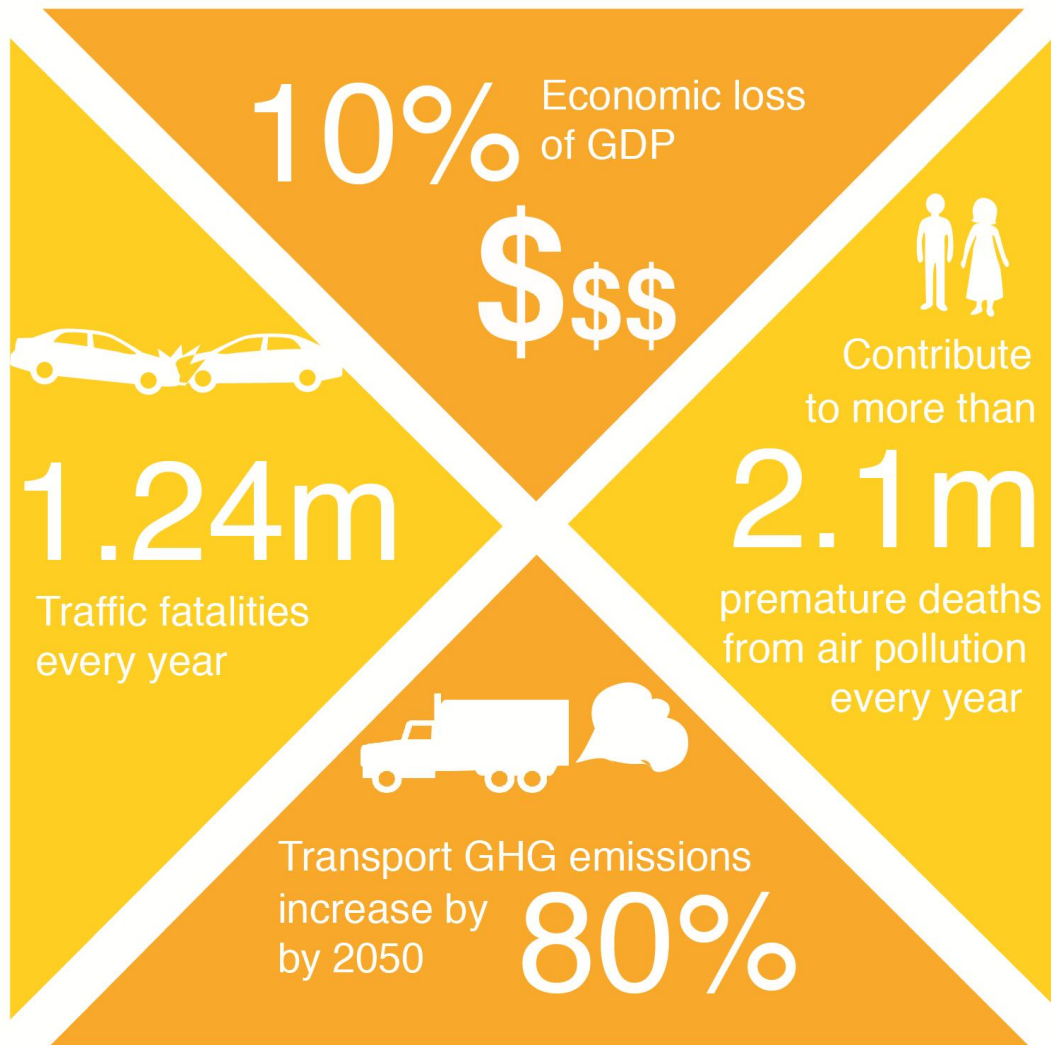
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# Bridging the gap to a 2 degree scenario



# Cost of externalities





# Need for a Paradigm Shift

## Current transport



**Strategy: Avoid-Shift-  
Improve**

**Actions / Investments**

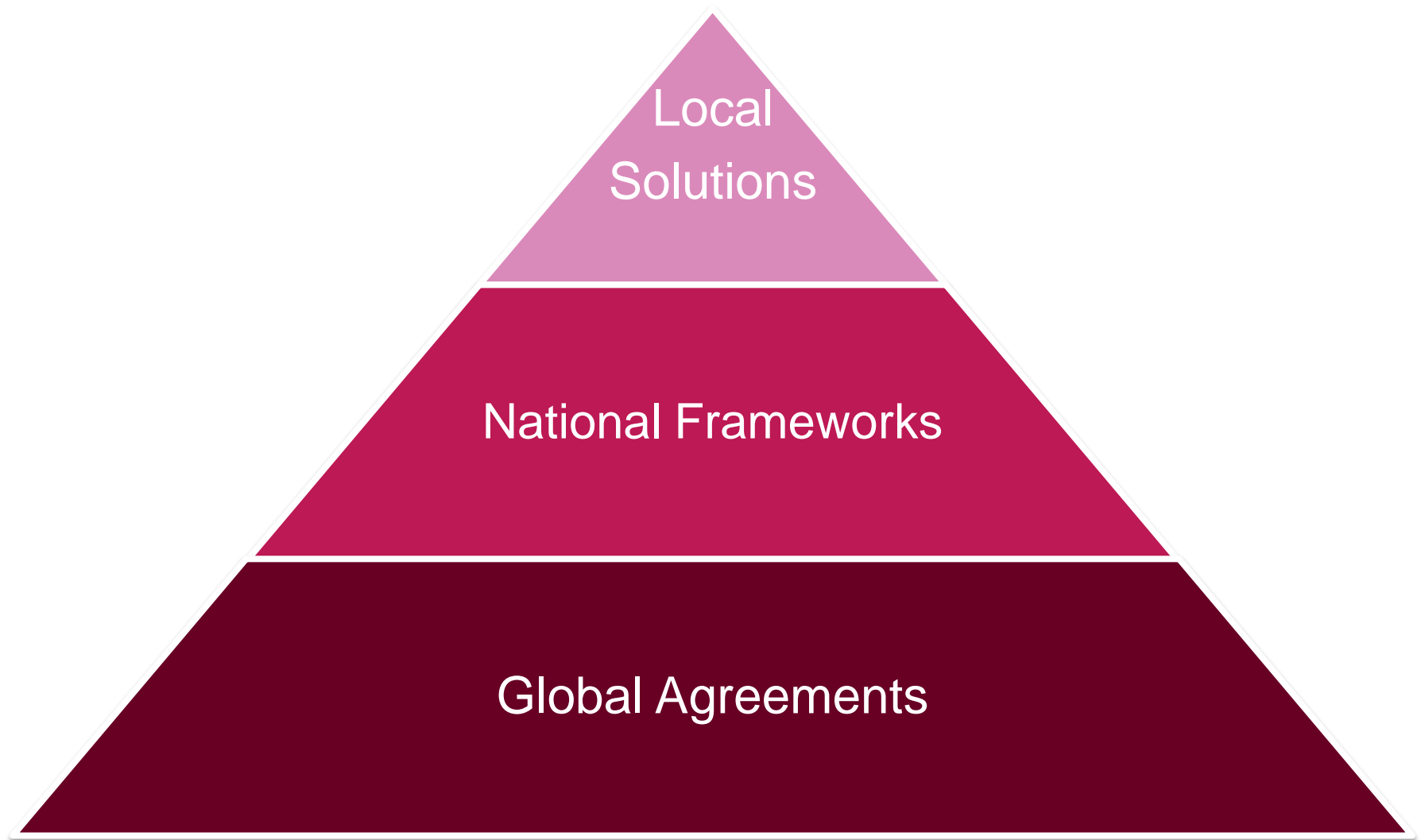
**Enabling Conditions**

## Sustainable transport



# 3 keys to “unlock”

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# 3 keys to “unlock”: key 1 “Local Solutions”

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Local  
Solutions

# Local solutions: New York City

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- Urban Development
- Sustainable and Healthy Transport



New York is pedestrianizing symbolic streets, improving public transport and making its transport fleet more efficient



## Local solutions: Delhi Metro

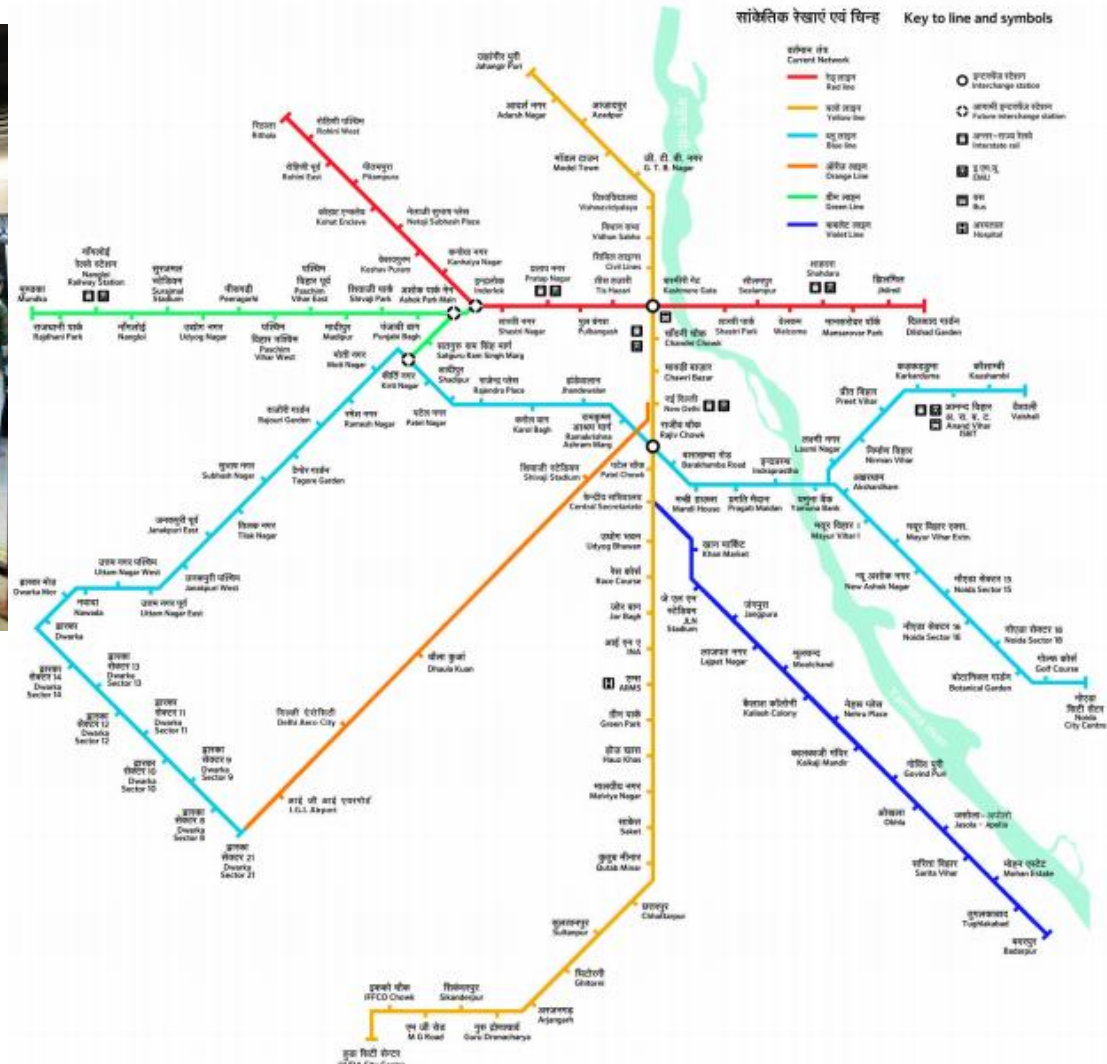


## Construction started 1998

## Initial operation 2002 (8 km)

## Current network 190 km

## 2.4 million passengers per day



# Local solutions: integrated transport and land use

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# National solutions: Freight Corridor India



- Eastern Corridor- 1805 km Ludhiana – Kolkata
- Western Corridor- 1515 km from Mumbai(J.N. port) to Dadri
- Liberal Moving Dimensions  
Higher payload/axle
- Higher capacity freight cars
- Speed: 100 -120 kmph+

# 3 keys to “unlock”: key 2 “National Frameworks”

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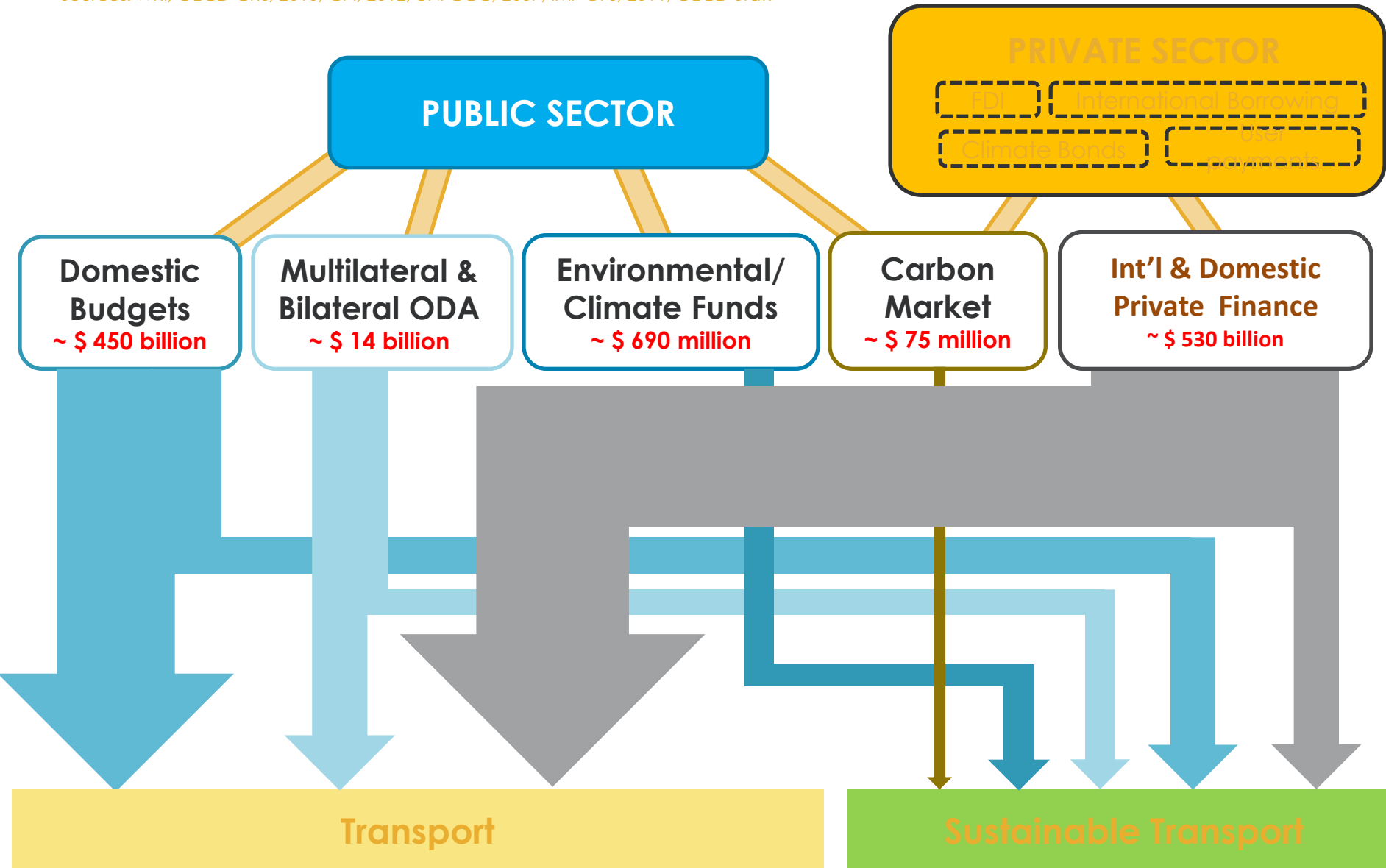


National Frameworks



# National frameworks: importance of domestic budgets

Sources: WRI; OECD CRS, 2010; CPI, 2012; UNFCCC, 2007; IMF GFS, 2011; OECD Stat.



# National frameworks: PROTRAM Mexico

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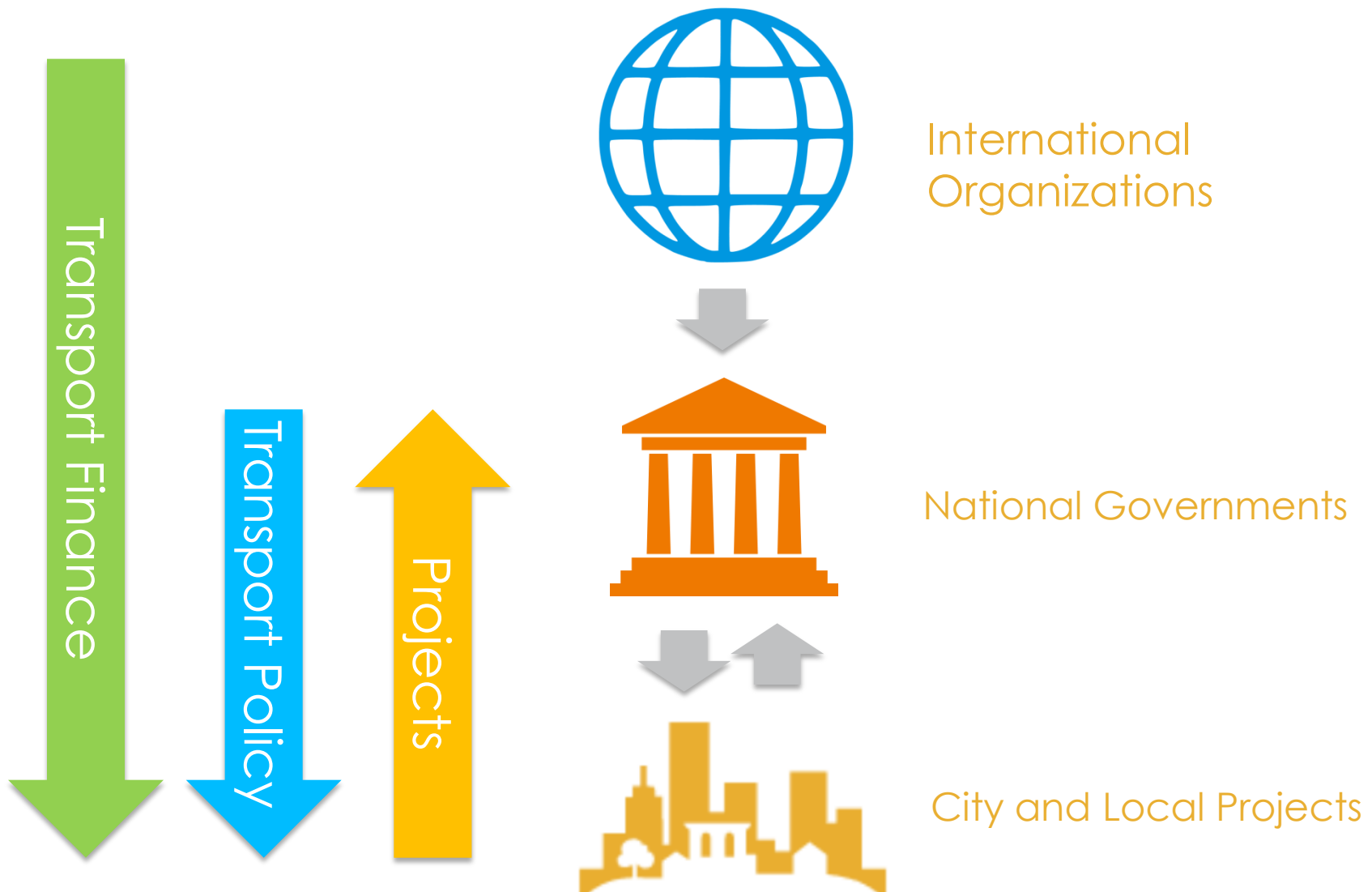
- Mass transit program (PROTRAM) USD 2.4 billion
- 50% of project capital cost for Rail and BRT
- 5 Cities in operation/final construction; 34 cities identified
- Requires private participation



Fig. 13: Suburban Train Mexico City financed by PROTRAM.  
©EMBARQ, Mexico

# National frameworks: National Gov. are central

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# 3 keys to “unlock”: key 3 “Global Agreements”

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Global Agreements

# Global agreements: \$175bn from MDBs



# Global agreements: inclusion in Climate agenda

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**Transport Day**  
**2013 • Warsaw**





# CLIMATE SUMMIT 2014

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## CATALYZING ACTION

# Global agreements: 2015 Paris Climate Summit

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# Sustainable Development Goals Post 2015

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Universal access to safe, affordable, accessible, and *low-carbon* sustainable transport for all, expand public transport, *walking, and biking*, and improve road safety

Draft Zero Goal 11.3 (*italics are proposed wording*)



# Global agreements: Vision for Climate Outcome

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## ➤ **Compact of Mayors**

Report and action

## ➤ **Multi-laterals**

Continue commitment and add to other urban infrastructure

## ➤ **National governments**

Financial commitment

### 3 Closing messages

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- **Rail** is key part of the picture, as a **very efficient** component of integrated public transport systems and the future of intercity travel
- **Local, national and international action** in support of sustainable, affordable, low carbon transport is needed to make a change in paradigms
- Opportunity for the rail sector to play a role in the **national and international agenda** promoting its benefits

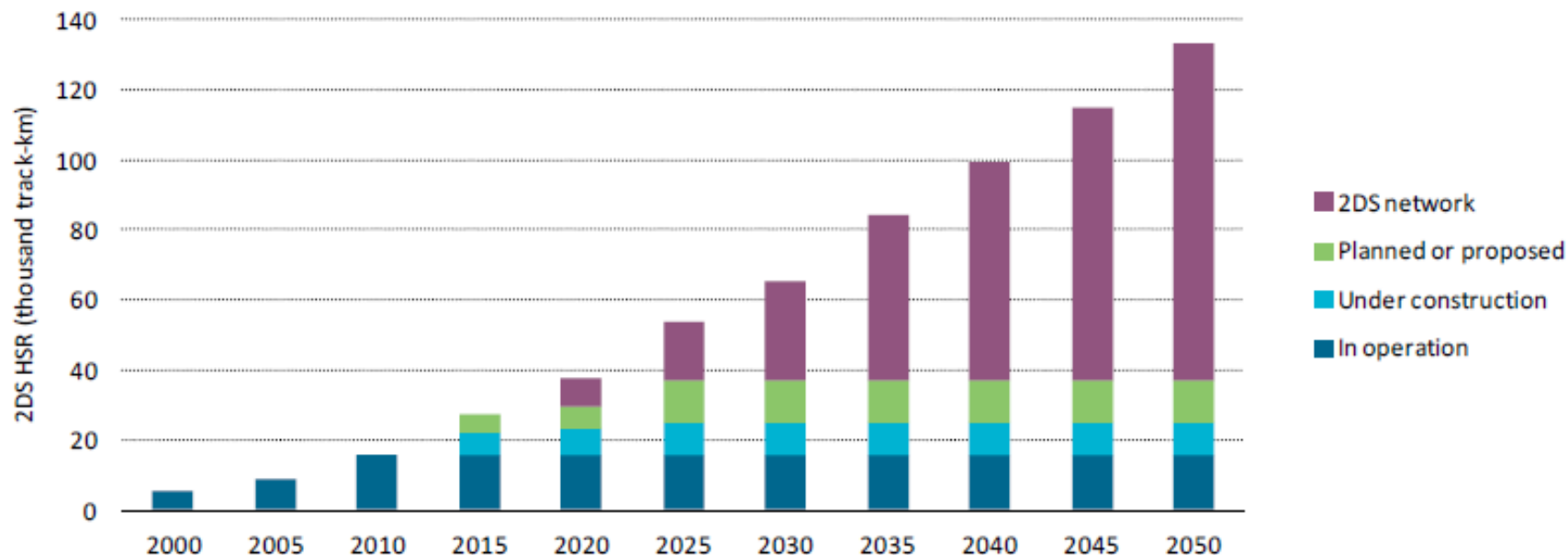
# Thank you!

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- A woman with long dark hair, wearing a red sari with a green border and gold jewelry, is looking out from behind a weathered metal gate. The gate has circular patterns. In the background, a yellow train is visible, with a sign that says 'COACH' and a red 'X' symbol. The scene is set in what appears to be a train station in India.
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An initiative of the WRI Ross Center for Sustainable Cities

# Support slide for High Speed Rail

**Figure 17 • 4DS HSR network and 2DS HSR network potential**



**Key message •** HSR network length under the 2DS could increase nearly 8.5-fold over 2010 levels, which equates to an additional USD 4 trillion in projected infrastructure spending.

<http://www.iea.org/publications/freepublications/publication/name-34742-en.html>