









### Mitigating climate change through sustainable urban mobility

01 June 2016, German Habitat Forum 2016

Local Examples | Break | Presentation | Panel | Conclusions





### Introduction

# Climate Change Mitigation through Sustainable Urban Transport / Ecomobility

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01 June 2016, German Habitat Forum 2016, Berlin

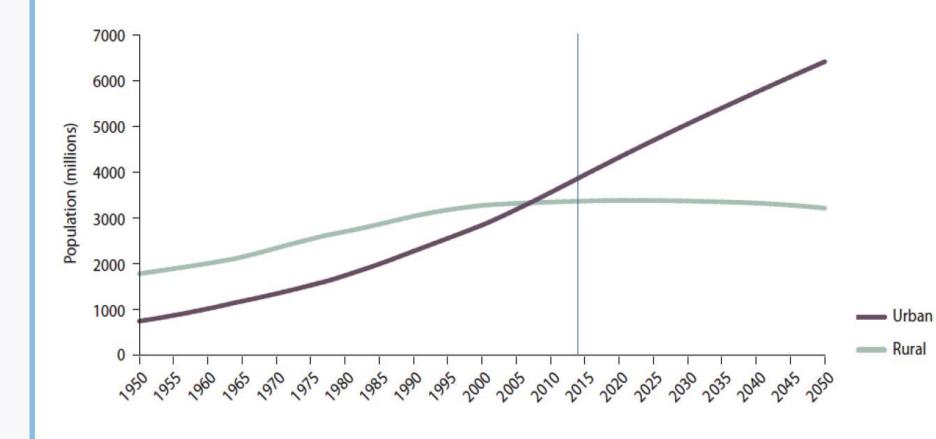


## More urban → more mobile

Increasing urbanization leads to more travel as

urban people tend to travel more





Source: Replogle M and Fulton L, 2014, Global High Shift Scenario: Impacts And Potential For More Public Transport, Walking, And Cycling With Lower Car Use, Institute for Transport and Development Policy (ITDP), November 2014.



# Changing lifestyles & increasing incomes → higher

### → higher motorization





Photo by Santhosh Kodukula, 2011

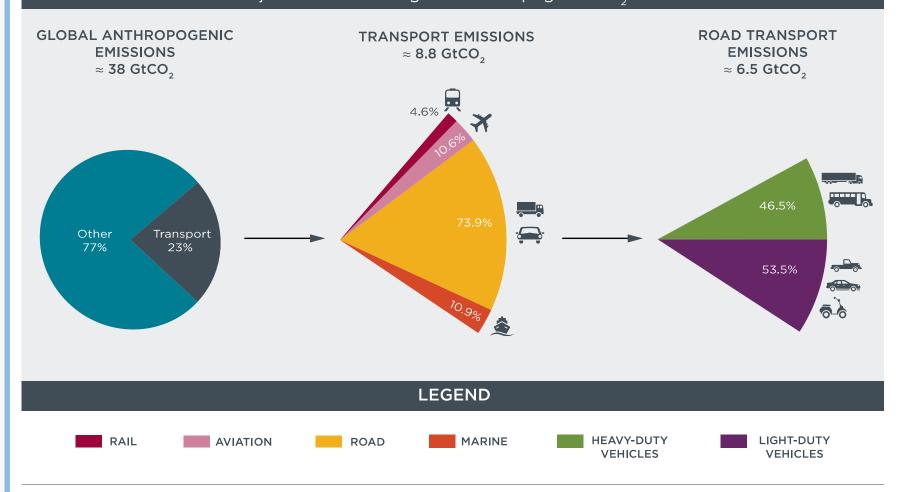


### **Transport** is

- Responsible for 23% of CO<sub>2</sub> emissions
- Road transport (incl. freight) is responsible for around 74% of these emissions
- Personal automobiles: more than 50%







Source: Kodjak D, 2015, Policies To Reduce Fuel Consumption, Air Pollution, and Carbon Emissions from vehicles in G20 Nations, May 2015, The International Council for Clean Transportation (ICCT)



## **Urban Transport** CO<sub>2</sub> **emissions**

We miss global figures on urban mobility CO<sub>2</sub> emissions.

Urban transport could be 5% - 8 % of global CO<sub>2</sub> emissions.

But: Often, transport starts and ends in urban areas.

What are then urban emissions?



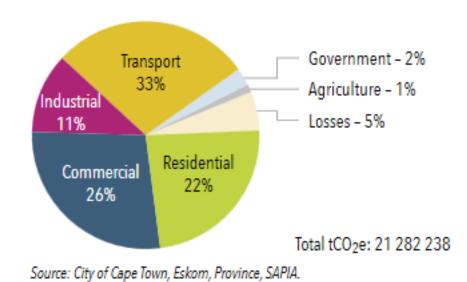


### **Cape Town**

- Years of successful climate action,
- High and growing share of transport related emissions

Figure 6: Carbon emissions by sector, Cape Town, 2012\*

\* Including aviation, international marine, electricity losses



Continued energy growth in Cape
Town, despite the absolute decline
in electricity demand, has been
driven by higher than
business-as-usual levels of transport
fuel consumption growth.

Cape Town
State of the Energy 2015 Report

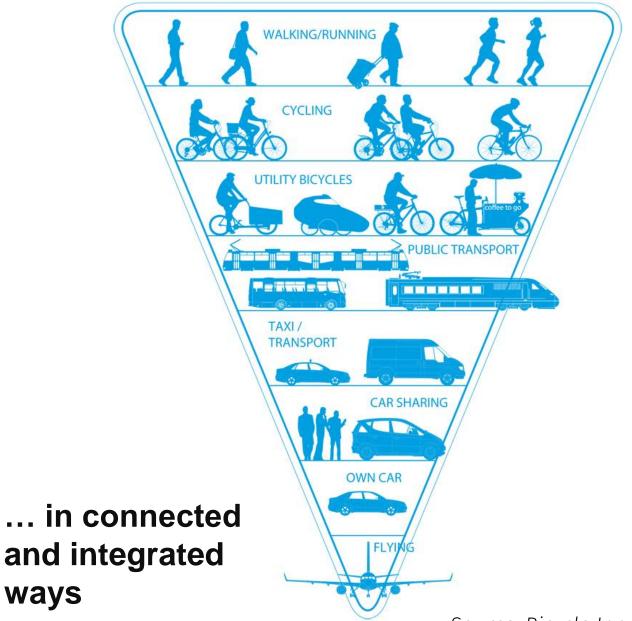




### **Ecomobility is** priority for

- Walking,
- Cycling,
- Public transport,
- Light (e-) vehicles
- Shared mobility and
- other innovative mobility options







#### Sus

### **Ecomobility:**

## Multiple benefits and new urban development opportunities

#### Health and Air Quality Benefits

- Improved air reduced respiratory diseases
- Physical activity increases well-being

#### **Economic Benefits**

- Reducedcongestion reducesthe economic costs
- Fuel reduction will save fuel importing costs

#### Social Benefits

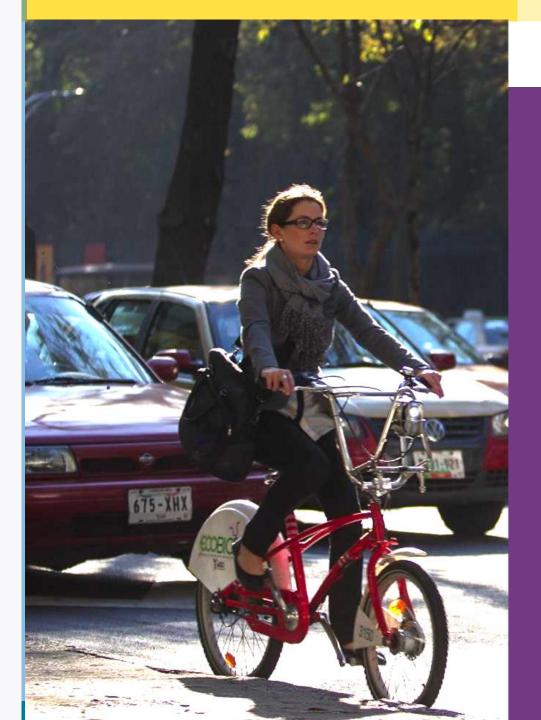
- Equity
- Accessibility
- Quality of life





### **Mexico City**

Mexico City EcoBici Bikesharing Scheme



Nearly 2000 tons of CO<sub>2</sub> reduced in 5 years

Women riding bikes has increased 122%





### Medellin

Public space creation as a result of new urban mobility

- Focus on improving walking and public transport has increased the quality of public spaces
- Integrated mobility (Bus, Metro, BRT and Cable Cars) has increased accessibility for citizens









### San Francisco

San Francisco's SF Park:

Parking management reducing traffic

Target setting!

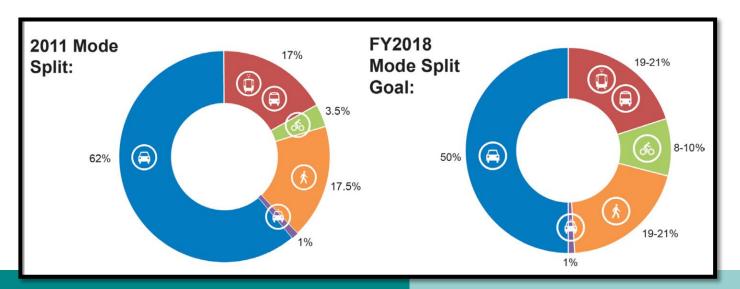


#### Daily greenhouse gas emissions (metric tons)

Before vs. after Pilot vs. control areas | Weekdays 9am to 6pm



Control before: 2.7 6% decrease after: 2.5





### ICLEI's approach

- Dedicated agenda on sustainable urban mobility for our 1500 network cities
- Mobility is essential for our low carbon agenda
- Exchange among most ambitious cities:
   EcoMobility Alliance
- Experiencing automobile free lifestyle:
   EcoMobility World
   Festivals









### **EcoMobility Alliance**

Enthusiastic cities
with a common goal:
to create and
implement urban
mobility strategies
that prioritize
people, urban
quality and
environment







## EcoMobility World Festival 2013

### Suwon

South Korea

### One neighborhood, one month, no cars



Before After

#### Citizens

- experience their area without cars, lesser cars
- demand new urban mobility solutions





## EcoMobility World Festival 2015

Johannesburg

South Africa





**9.7%** increse in users compared to July 2015

**22%** less private car use





15 min commuter time saving through managed lanes







## EcoMobility World Festival 2017

### Kaohsiung

Chinese Taipei

### October 2017 You are invited!











# Johannesburg Declaration on Ecomobility in Cities, 2015

- ✓ Recognise "Ecomobility" and its benefits in reduction in GHG emissions
- ✓ Create streets for people
- ✓ Implement immediate low cost measures; and develop long-term financially sound ecomobility solutions
- ✓ Phase out incentives encouraging private motorized vehicles
- ✓ Introduce concepts of new and shared mobility (including car sharing, carpooling and bike sharing).
- ✓ **Switch to low carbon energy** vehicles, small (human-scale) light electric vehicles.



The Johannesburg Declaration on Ecomobility in Cities

October 2015, Johannesburg, South Afric











# National and international framework conditions

- ✓ Modify road standards, legislation, regulation and codes to strengthen ecomobility
- ✓ Support low emissions, and soot-free vehicles
- ✓ Improve the direct access for local and regional governments to financing opportunities
- ✓ Make ecomobility a central concept in the New Urban Agenda

"Any attempt at limiting global average temperature rise to less than 2°C without including the transport sector is infeasible, and local transport actions will play an essential role in meeting national transport targets."

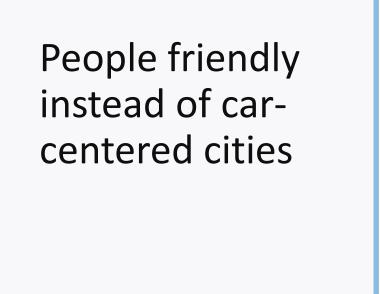
The Partnership on Sustainable, Low Carbon Transport (SLoCaT), Transport and Climate Change, Technical Paper, EcoMobility Dialogues, September 2015







## Ecomobility helps to reach SDGs





- Road safety and air quality.
- Physical activity and well-being



7 AFFORDABLE AND CLEAN ENERGY



 Reducing the energy demand for transport



 Encouraging vehicles and infrastructure innovation



Sustainable and resilient cities and communities





Key local action for combating climate change



### We welcome

Paul Lindvall,

Pex Langenberg ●

Rotterdam, The Netherlands

**Juan Martin Salazar** Medellin, Colombia

Marcelo Cabrera Palacios

Cuenca, Ecuador

Luis A. Revilla Herrero La Paz, Bolivia

Mohlago Flora Mokgohloa Johannesburg, South Africa



### **City examples**

- Relevance of sustainable urban transport within your city's policies and goals
- How mobility and transport infrastructure can be a solution to climate mitigation?
- What framework conditions would be needed to accelerate?













### Safe, clean, fair and green sustainable urban mobility

Shiela Watson, Director of Environment, FIA Foundation











#### **Panel**

- Peter Stein, Member of German Parliament and its Committee for Economic Cooperation and Development
- Shiela Watson, Director of Environment, FIA Foundation
- Pex Langenberg, Vice Mayor, City of Rotterdam, Netherlands
- Luis A. Revilla Herrero, Mayor, City of La Paz, Bolivia
- Mohlago Flora Mokgohloa, Advisor City Sustainability, City of Johannesburg, South Africa
- Marcelo Cabrera Palacios, Mayor, Cuenca City, Ecuador
- Juan Martin Salazar, Technical Infrastructure Secretary, Medellin City Government, Colombia
- Paul Lindvall, Deputy Mayor, City of Linköping, Sweden
- Santhosh Kodukula, EcoMobility Program Manager, ICLEI