### The role of EST for Developing Low Carbon Cities and Communities in Asia

### Holger Dalkmann, Transformative Urban Mobility Initiative (TUMI)































## Unsustainable Transport Dynamics

**28%** of global carbon emissions

**61%** of global oil demand

Doubling of emissions till **2050** [under BAU Scenarios]

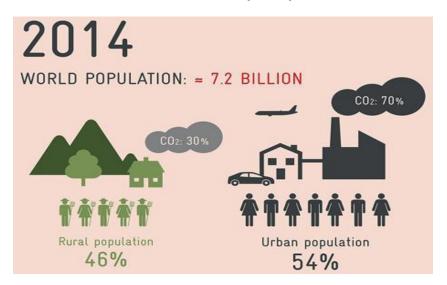
More than 10 billion trips per day

[urban share rapidly increasing]

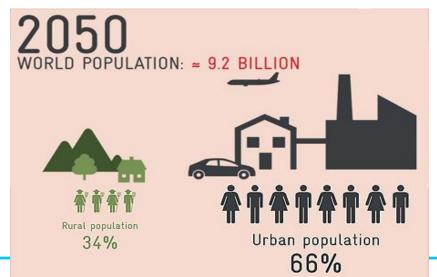
## The Urban Mobility Opportunity

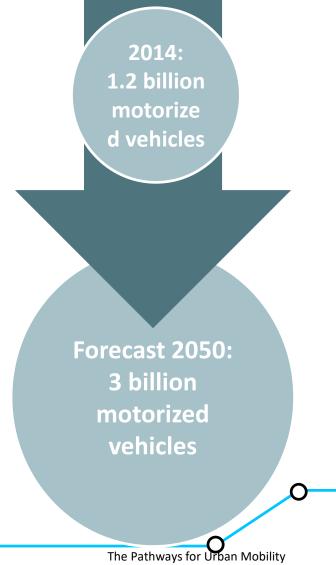


• In 2014, **3,6 billion** people lived in cities



By 2050, 6 billion people will live in cities





## The Urban Mobility Opportunity





Compact Urban Growth



Smart and Low Carbon Transport Infrastructure



Coordinated Urban Governance: Integrated authorities, transport planning



## The leading global implementation initiative supporting city makers in developing and emerging countries in the transformation towards sustainable urban mobility.























# mages: © GIZ SUTP Photo Collection

## TUMI - A 3D Approach to Urban Mobility



## **Pilot Projects**



- Supporting innovative pilot projects with measurable impacts
- Scalable and replicable solutions for sustainable urban mobility

## **1500 Urban Leaders**



- · Ambitious training initiative
- Supporting leaders in transformation processes
- Learning, networking, reflecting
- Promoting partnerships

## **Financing**



Mobilization of a total of EUR
1 billion by KfW in
cooperation with other
donors

All 3 pillars are closely linked and support each other.

## 3 Global Trends which:



- Have a major influence on social, environmental and economic landscape over next decade
- Permeate across all sectors of economy and society
- Showing strong links to other megatrends, fundamentally disrupt industries and shape societies

Public Transport & Non-Motorized Transport & Shared Mobility

Digitalization & Data Based Decision Making

## **Electrification of Transport**



→ TUMI partners mobilise knowledge to guide your journey towards EST

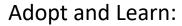
## How to prepare?



Public Transport & Non-Motorized Transport & Shared Mobility:

Great new resources





https://www.sharedmobilityprinciples.org/

www.brtguide.org

https://sutp.org/en/resources/publication-by-series/inua.html





## How to prepare?



Digitalization & Data Based Decision Making: Great new resources



#### Learn more:

https://www.itdp.org/publication/walkability-tool/

https://sutp.org/files/contents/documents/resources/B Technical-

Documents/GIZ SUTP TD17 GPS Tracking EN.pdf

http://slocat.net/tcc-gsr

## How to prepare?

#### **Transformative Urban Mobility** INITIATIVE

## **Electrification of Transport**

## How Did Shenzhen, China Build World's Largest **Electric Bus Fleet?**



by Ku Lu Lu, Lulu Xue and Weimin Zhou - April 04, 2018









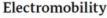


Diesel buses-and the choking smog they spew-are a common sight in most cities. But not in Shenzhen, China.

The southeastern city, which connects Hong Kong to mainland China, announced at the end of last vear that all of its 16,359 buses had







Sustainable Urban Transport Technical Document #15





#### Learn more:

https://www.wri.org/blog/2018/04/how-did-shenzhen-china-build-world-s-largest-electric-bus-fleet https://sutp.org/files/contents/documents/resources/B Technical-Documents/GIZ SUTP TD15 Mobility.pdf

## Innovations to Scale up urban mobility

Global Urban Mobility Challenge supporting cities and their low-carbon, people-centered pilot projects



**Awards** up to € 200k per pilot Oct. 16th:

project

New call!

- Supporting innovative pilot projects measurable impacts
- Scalable and replicable solutions for sustainable urban mobility

**Annual Awards** collaboration With TUMI **Partners** 





Country	City	Project
Ethiopia	Addis	Bike Sharing Pilot
Colombia	Bogotá	Sefetipin App
South Africa	Cape Town	Open Streets Cape Town
India	Chennai	Inclusive Street Design
Tanzania	Dar Es Salaam	Dar City Navigator
Maroc	El Kelaa des Sraghna	Shared Electric Mobility
Vietnam	Hoi An	Bike Sharing Pilot
Nigeria	Lagos	Lagos Sidewalk Challenge
Kenya	Nairobi	Mobility StartUp Accelerator
Bangladesh	Singra	E-Rikshaw Sharing







## e-Rickshaws

as public transport and health service in Singra



### The challenge

Lack of proper public transportation systems within the city. Privately owned illegal rickshaw updates (electrifaction) led to a safety issue with increasing accidents.



#### The solution

The city promotes e-rickshaws as public and emergency health transport by buying e-rickshaws.



### The pilot

The project aims to improve the city's public transportation system as well as the health services and make the streets safer.







## Sharing Program in Hoi An City



## The challenge

Shared mobility in Hoi An is mostly based on motorbikes and cars and the trend "shared mobility" has not caught on in the non-motorized transport sector.



#### The solution

Develop a bicycle network and establish a public-private partnership bicycle sharing program to foster non-motorized shared mobility solutions.



### The pilot

A non-motorized transportation plan to support sustainable transportation in Hoi An will be developed.







## Shared electric transport in

El Kelaa des Sraghna



## The challenge

Perishable goods do not reach local markets, as there are no transport options with cooling available.



#### The solution

Shared transport system with 25 e-tricycles (including 5 with a solar cooling system) for transport of goods in El Kelaa des Sraghna province, Morocco.



### The pilot

The project creates better access to jobs as well as a reduction of transport costs to markets in the region.

## Challenge 2019

## Modus Operandi



- Financing <u>up to 10 projects (max €200k each)</u>
- Smaller projects are highly encouraged
- Up to <u>5 can be updated 2018 proposals</u> of the TUMI Challenge 2018
- The TUMI Partner Jury <u>rates and selects</u> the top 20 projects
- Out of these, the TUMI Board of high level influencers selects the 10 winning projects



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