SOLUTIONS: QUITO 19 OCTOBER 2016

Urban Electric Mobility Initiative

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Urban Electric Mobility Initiative (UEMI)

www.uemi.net
http://urban-mobility-solutions.eu/
Jointly Initiated by UN-Habitat and SOLUTIONS, UEMI was launched at the UN Climate Summit in New York in September 2014. The initiative aims at:

- Decreasing urban CO$_2$ emissions by increasing the market share of electric vehicles in cities to 30% of annual vehicle sales (incl. LDV and motorized 2-3 wheelers)

- Integrate electric mobility into a wider concept of sustainable urban transport that achieves a 30% reduction of GHG emissions in urban areas by 2030
UEMI Partners and Actions

The UEMI is an international partnership programme that supports the:

- Deployment of electric mobility and sustainable transport by:
  - Feasibility studies
  - Knowledge sharing events
  - Development of project proposals
  - Identify key innovations and examine transferability

- For selected cities implementation concepts will be developed, including:
  - Technical and political feasibility
  - Finance (scalable projects, starting with pilots)
  - Integration in existing activities (added value of the solutions)
UEMI: An Integrated Approach to E-mobility

E-mobility as part of a balanced sustainable urban mobility concept

**Avoid:** reduce travel activity or reduce growth in activity

**Shift:** change travel structure through shifts to different modes of travel

**Improve:** lower vehicle energy intensity and reduce fuel carbon intensity
Potential Benefits of an Integrated Approach

- Cost effectiveness and higher level of socio-economic benefits
- Co-benefits, such as improvements in air quality, traffic congestion, safety and overall societal mobility
Key factors for low-carbon e-mobility

• Currently the well-to-wheel carbon intensity varies greatly among countries/regions.

• When electricity and hydrogen plug-in and fuel cell vehicles reach a substantial market share, they can serve strongly to decrease the average Light Duty Vehicles (LDV) fuel carbon intensity after 2035

Source: IEA
Different Options for E-mobility

E-mobility for car-sharing and public transport fleets

• Public procurement as enabler
• Direct control or indirect through contracts
• Leadership role and test-bed for good practice

Source: Eltis
Different Options for E-mobility

Low carbon taxi fleets

- E-tricycles in Manila (locally produced e-trikes)

- Electric taxis in Shenzhen (entire taxi fleet expected to be electric by 2016)

Source: ADB 2011
Different Options for E-mobility

Electric two-wheelers

• Rapid growth of electric two-wheelers in particular in China driven by regulation
• At the peak there were over 150 million electric two-wheelers on the road in China

Growing safety issues: the Black Death”

• Now electric scooters are being banned in many cities for safety reasons

Source: ADB 2011
Different options for e-mobility

Basic Requirements

- Standardised charging infrastructure
- Battery costs (currently $485/kW/h) and materials
- Battery replacement and recycling

Source: Eltis
A balanced Approach Vital for Success

- Stronger shifts to low-carbon modes, such as public transport and non-motorized transport would require less effort with regard to low-carbon technology and fuel uptake.

- If travel demand is lower, fuel and technology switch targets are easier to achieve.

- A balanced approach includes: reduction of travel demand and foster modal shifts (Avoid/Shift) AND improvements in vehicle technology and fuels (Improve).

Source: Eltis
Knowledge sharing and training

- **CITS**
  - City logistics
  - Integrated Transport Systems / Public Biking Systems
  - Public Transport

- **Michelin Challenge Bibendum**
  - Network Management
  - Clean Vehicles
  - Public Transport

- **CODATU**
  - Clean vehicles
  - SUMP
  - City logistics

- **CIVITAS Forum**
  - Transport infrastructure
  - SUMP
  - Public Transport

- **City Engagement Kick-off:**
  - Thematic cluster session
  - Twinning session

- **SUMP Training event**
  - SOLUTIONS/TIDE/CH4LLENGE
  - EV-workshop (UEMI/SOLUTIONS)

- **Webinars & eLearning:**
  - Over 1800 participants of e-Learning courses and webinars
Take-up cities

Belo Horizonte, Brazil

Belo Horizonte, situated in the state of Minas Gerais in the south-eastern region of Brazil, is one of Brazil’s most populous cities with around 5 million inhabitants.

Guiyang, China

Guiyang, situated in the Guizhou province in Southwest China, has a population of 4.4 million.

León, Mexico

León is located in Guanajuato state of Mexico, with a population of 1.4 million.

Kochi, India

Kochi, situated on the west coast of India in the state of Kerala, is a densely populated city with a population of 2.1 million.

Kocaeli, Turkey

Kocaeli province lies in Marmara region of Turkey with an urban population of 1.6 million.
City actions

Recent updates from take-up cities

Belo-Horizonte, Brazil:
• The pilot project in Belo Horizonte started with a speed limit (30 km/h) zone

Kochi, India
• The first car-free day in Kochi (India) to raise awareness for sustainable transportation
• Development of a e-mobility pilot zone as part of a Smart Cities project

Tools and guidelines
• The team is currently working on a set of assessments, guides and tools that will help developing and integrating sustainable mobility solutions.
Join the Partnership

• Open to all countries, cities, industry, associations and knowledge institutions active in the area of electric mobility

• Join the partnership: [www.uemi.net](http://www.uemi.net)

• Contribute to the actions, tools and events
Thanks!

www.uemi.net

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