



# Actions on urban transport : the EU perspective

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# EU urban transport policy actions



## The urban transport challenges

- Better meet the diverse urban transport and mobility needs of citizens, businesses and industry; offer more and more attractive choices
- Reduce the negative impacts of urban transport
  - Ever-growing congestion
  - Energy-supply security (oil dependence)
  - Environment (air quality, noise) and Climate (1/4 quarter GHG emissions from urban areas)
  - Citizens' health and well-being
  - Traffic safety, vulnerable road users
- Contribution to economic recovery (70% EU citizens and 85% EU GDP generated in urban areas)





## Transport policy context and EU strategy

- Action Plan on Urban Mobility (2009-2012)
- Action Plan on ITS (2008): Group on Urban ITS (2010-2012).
- White Paper on Transport policy 2010-2020 (2011), Urban Mobility Package COM (2013) 913
- Clean Vehicles Directive (2009/33 ).
- Clean Power for Transport initiative: COM (2013) 17 on alternative fuels strategy, proposal for a Directive on fuel infrastructures (COM (2013) 18).
- EC type-approval system for motor vehicles (Directive 2007/46/EC and UNECE): incl. for HD vehicles emissions Euro VI (pollutant emissions) and soon on CO2 emissions.



## The 2011 White Paper on Transport – Roadmap to a Single European Transport Area

- Oil dependency, -60% GHG emissions by 2050, Congestion, Competitiveness of the EU economy

- Ten Goals for a competitive and resource efficient transport, including ...two specifically urban:

- Halve the use of 'conventionally-fuelled' vehicles in urban transport by 2030, phase them out by 2050
- Achieve essentially CO<sub>2</sub>-free city logistics by 2030 – in major urban centres



- Transition from a car based mobility to a mobility based on walking, cycling and high quality public transport

## Urban Mobility Package

- Initiative 31: Sustainable urban mobility plans (SUMP) -link EU funds to sustainable urban transport strategy
- Initiative 32: Framework for urban road user charging and access restriction zones
- Initiative 33: Zero-emission urban logistics – in major urban centres by 2030

→ Urban Mobility Package:

**COM (2013) 913 from 17/12/2013** with an annex

on SUMP and 4 working documents on city logistics, urban access regulations, deployment of ITS in urban areas, urban road safety





## Clean Power for Transport Package

1. White Paper on Transport - EU needs to shift away from oil by diversifying its energy sources for transport  
→ **Communication “Clean Power for Transport COM (2013)17: A European alternative fuels strategy”**  
(Electricity, Natural gas, Biofuels, Hydrogen)



2. **Directive on the deployment of alternative fuels infrastructure** COM (2013) 18 - Focusing on the current obstacles, infrastructure and standards

3. Staff Working Document: Actions towards a comprehensive framework on LNG for shipping





# **EU urban transport research and innovation actions: from FP7 to Horizon 2020**





## FP7: A dedicated priority activity of the 'Transport' Theme on 'Sustainable Urban Mobility'

- Improving mobility of people and transport of goods in urban and peri-urban areas (All transport modes and all users) → new transport and mobility concepts
- Developing clean, energy efficient, safe and intelligent urban transport systems
- Technological, economic, regulatory and institutional aspects
- New and accessible public transport systems



## Main activities covered during FP7 for sustainable urban mobility

- High quality public transport  
(vehicles and intermodal interchanges)
- Clean and safe vehicles for passengers  
(automated, electric, natural-gas, soft modes )
- Accessibility for All
- Intelligent mobility systems  
(traffic management, multimodal journey planners,...)
- Clean and efficient urban freight transport  
(city logistics, cargo boxes, electric vehicles,...)
- Environmental noise reduction
- Take-up of urban transport innovation
- International Cooperation





## Example 1: The European Green Cars Initiative (EGCI)



### What:

One of the three PPP for research and innovation proposed in the European recovery Plan of 2008. EGCI includes three action lines: research, innovation and demand side measures.

### Main RTD priorities:

- Electrification of road and urban transport;
- Improved energy efficiency for heavy-duty vehicles;
- Logistics and co-modality

**Funding:** Up to € 500 million for research





## The EGCI Industrial Advisory Group

- integration of all involved sectors and EC services
- strategic dialogue between Commission and industry
- implementation of the Green Cars Initiative as a PPP

Members (also representing ETPs ERTRAC, EPoSS, SmartGrids, EIRAC):

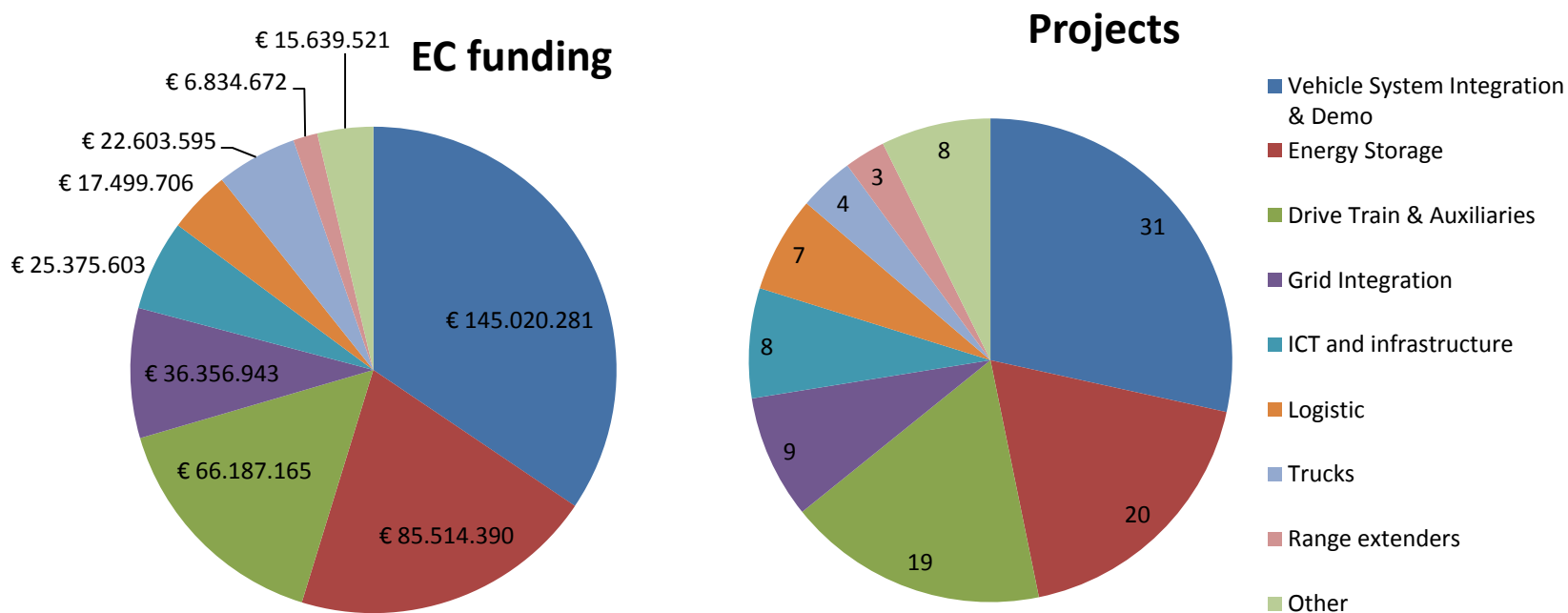


- AVL
- Bosch
- Continental
- ECT
- FEV
- Fiat Research Center
- Iberdrola
- IFP
- KU Leuven
- Procter & Gamble
- PTV
- Renault
- Ricardo
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- Siemens
- Valeo
- VDI/VDE-IT
- Volkswagen
- Volvo
- +
- DG RTD
- DG INFSO
- DG MOVE
- DG ENVI
- DG ENTR
- EIB



## EGCI - Results

- 108 projects running or under negotiation for the whole EGCI, of which around 65 on electrification
- Almost complete coverage of the EGCI roadmap



# Example 2: ZeEUS



European  
Commission



## Mission:

Bringing electrification to the heart of the urban bus network

## Focus:

- Extend the fully electric solution to the core part of the urban bus network composed of high capacity buses
- 6 demonstrations in 8 European countries:
  - Testing Plug-in Hybrid, Full-electric, Battery Trolleys
  - With fast and slow charging strategies
  - With different energy supply modes: plug-in, conductive, inductive, overhead line



## Project outputs and results:

- Evaluate the economic, environmental and societal feasibility of electric buses
- Facilitate the market uptake of electric buses in Europe
- Support decision makers with guidelines and tools on 'if', 'how' and 'when' to introduce electric bus systems
- Define Electric bus standards for charging
- ZeEUS Observatory to widely monitor the introduction of electric bus systems across Europe and beyond

Coordinator: UITP



40 partners (6 manufactures, 6 PTO/PTA)

Total cost: 22,5 M€, EC funds: 13,5 M€

Start date: 1/11/2013,

Duration: 42 months

[www.zeeus.eu](http://www.zeeus.eu)



## Example 3: SOLUTIONS - Sharing Opportunities for Low carbon Urban transportaTIONS



- CSA Funded by: Seventh Framework Programme (FP7) of the European Commission to support international cooperation activities in the field of green urban transport
- Consortium Partners: 27 Partners from 18 countries in Europe, Asia, Latin America and Africa
- Duration: May 2013 – April 2016



## SOLUTIONS Objectives/key actions

- Foster the worldwide uptake of sustainable urban mobility solutions
- Assess the transferability of sustainable urban mobility solutions from around the world
- Assess their uptake potential in: Europe, Asia, Latin America, The Mediterranean region
- Foster sustainable urban mobility solutions implementation in four cities in: China, India, Brazil, Mexico

- Areas covered:

- Sustainable Urban Mobility Plans
- Public Transport
- Infrastructure
- City Logistics
- Clean Vehicles
- Mobility Management







## The Urban Electric Mobility Initiative



Launched at the United Nations Climate Summit in New York in September 2014 and supported by the EC through the **SOLUTIONS** project the **Urban Electric Mobility Vehicles Initiative (UEMI)** aims to:



- Increase the market share of electric vehicles in cities to least 30%
- Achieve a 30% reduction of CO<sub>2</sub> emissions in urban areas by 2030.





- Horizon 2020 (2014-2020): The new Framework Programmes for research and innovation, in line with EU 2020 strategy.
- Three pillars: Excellent science, Industrial leadership, societal challenges.
- A dedicated societal challenge on "**Smart, green and integrated transport**" with 4 priorities (Specific Programme):
  1. Resource efficient transport that respect the environment
  2. Better mobility, less congestion, more safety and security
  3. Global leadership for the European transport industry
  4. Socio-economic research and forward looking activities for policy making





## Horizon 2020 for Urban Mobility

- **6,33 b€ for Transport** research in H2020, largest shares for aeronautics and road.
- Challenge based approach
- Expansion towards closer to market activities
- Simplified procedures and work programmes
- Main calls of road transport interests in the field of Transport:
  - **Call Mobility for Growth** (Mode & Transport Integration Specific Challenges, Cross-Cutting Issues).
  - **Call Green Vehicles**
- Launch 1<sup>st</sup> Calls: **11 December 2013** ; closure Calls: **28 August 2014**





## Research content (1/2)

- **The European Green Vehicles Initiative (EGVI):**

a new cPPP with € 750 million EC funding

- To support the competitiveness of the automotive industry

(CARS 2020 strategy)

- Help to reach the ambitious targets set by the EU transport, energy and climate protection policies:

- the 20/20/20 targets on renewable energy use,

- the CO2 emissions regulation,

- the Euro emissions standards for road vehicles

- **The call on Green Vehicles is an essential component of road and urban transport R&I, funding:**

- Improvement of energy efficiency of road transport vehicles

- Use of new types of non-conventional energies in road transport, such as electricity, CNG and LNG, bio-based fuels



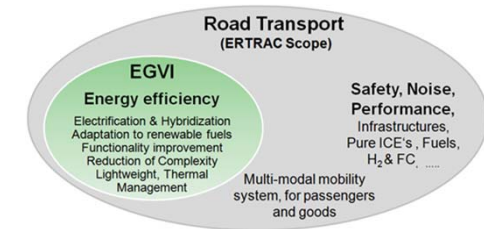
**EGVI**  
European Green  
Vehicles Initiative



## Research content (2/2)

- **The mode-specific Road area funds:**

- R&I for road transport in complement to the 'Green Vehicles' call
- Activities in the field of Internal combustion engines; support to air quality policy; safety of road transport; production technology; new vehicle concepts for road and urban transport



- **The Urban mobility area:**

- Innovation in resource-efficient and competitive urban mobility and transport ('CIVITAS 2020'):
- Transformation towards a cleaner and better urban mobility and transport with five complementary challenge-topics - Build on legacy (CIVITAS, STEER market take-up, ...)





## Other relevant opportunities

- Smart Cities and Communities
- Enabling and Industrial Technologies (LEIT) for
  - ICT
  - Manufacturing
  - Materials
- Joint Undertakings (Fuel Cells and Hydrogen 2, ECSEL)
- Small Business and Fast-Track Innovation for Transport

