



# Developing clean fuels and vehicles in Europe

**III Congreso Europeo del Vehículo Eléctrico**

**Madrid, 23 de Noviembre 2015**

## Main problems to fix (Policy Drivers)



### 1) Energy supply at risk

Oil accounts for 94% of transport fuels, causing an enormous EU import bill of up to one billion Euros a day.



### 2) GHG emissions reduction necessary

According to the White Paper on Transport 2011, the sector has to reduce 60 % of its CO<sub>2</sub> emissions by 2050 (benchmark 1990).



### 3) Air quality and congested infrastructure

New and clean forms of mobility need to be established.

### 4) Competitiveness of EU industry

Growth and jobs can be created by restoring world leadership of the EU transport industry.



**Renewable Energy Directive (2009/28)** 10% share of Renewable Energy Sources in motor fuels required by 2020

**Fuel Quality Directive (2009/30)**  
Reduction of CO<sub>2</sub> intensity of fuels by 6% by 2020

**Clean Vehicles Directive (2009/33)**  
Public procurers of vehicles have to take into account energy consumption, CO<sub>2</sub> and pollutant emissions -> *currently being evaluated*

**Regulation of pollutant emissions:** EURO 6 for passenger cars

**Regulation of CO<sub>2</sub> emissions:**

- **Cars:** 130g/km by 2015; **95g/km by 2020**
- **Light Duty Vehicles:** **175 g/km by 2017**



# Directive 2014/94

## Alternative fuels



**A minimum infrastructure to be implemented through national policy frameworks for:**

- 1. Electricity:** publicly accessible recharging points to be built by 2020 to allow the circulation of EVs Union-wide, both in urban and sub-urban areas, as well as on the TEN-T Core Network.
- 2. Liquefied Natural Gas (LNG):** publicly accessible Natural gas/bio-methane refuelling points for road vehicles and ships/vessels, **with common standards**, on the TEN-T Core Network;
- 3. Compressed Natural Gas (CNG):** publicly accessible refuelling points to allow the circulation of CNG vehicles Union-wide, both in urban and sub-urban areas, as well as on the TEN-T Core Network;
- 4. Hydrogen:** sufficient number of publicly accessible refuelling points, with common standards, **in the Member States who opt for hydrogen infrastructure.**

# Clean Transport Follow-up...



- **Guidelines to help MS to draft NFP's** (end 2015):  
... with data collection, best practises and recommendations
- **Customer information on alternative fuels**
- **Sustainable Transport Forum** (Next meeting Dec 14th, 2015)  
--> to tackle specific issues such as electrification of transport.
- **Standardisation mandate to the CEN/CENELEC** (adopted in March 2015)
- **New European Alternative Fuels Observatory** (Q4 2015)  
[www.eafo.eu](http://www.eafo.eu) website is live now and people can register



European  
Commission

# Electro mobility



# How to scale-up?

Some progress, but not enough!

- **Electric vehicles for passengers and public transport:** a lot of interest, but neither enough vehicles nor sufficient infrastructure!
- **Clean Logistics:** lots of interest, but not enough vehicles. How to make transport, IT and locally produced renewable energy work together at larger scale?

Innovations are held back by the high cost, a low level of consumer information, lack of infrastructure, but – importantly - also by a lack of joined-up policies.







## The Directive on the deployment of alternative fuels infrastructure

### Electricity supply for transport [Article 4]

- Member States shall ensure, through their NPFs, that **an appropriate number of recharging points accessible to the public** are put in place **by 31 December 2020**, in order to ensure that electric vehicles can circulate **at least in urban/suburban agglomerations**.
- MS shall also take measures within their NPFs to encourage the deployment of **recharging points not accessible to the public**.
- **1 recharging point/10 cars indicated**. An appropriate number of recharging points accessible to the public should be installed, in particular at **public transport stations, such as port passenger terminals, airports or railway stations**.
- **Publicly accessible data on the geographic location** of the recharging points and fair price comparison for electricity supply (article 7).

# Common EU standards for EVs recharging

- **A common plug for EVs in Europe "Type 2 "** for slow and fast charging stations. Compatible with national safety requirements (shutters). Chosen by ACEA, Eurelectric and CLEPA.
- Normal and high power recharging points for EVs, **as from 3 years of the date of entry into force of the Directive**, will **at least** comply with the technical specifications set out in Annex III. Do not ban other technologies!
- European standard for **wireless** recharging, battery swapping for motor vehicles, recharging points **for L-category motor vehicles** and **electric buses** will be pursued.

## Type 2



## Combo Type 2



A photograph of a busy city street with heavy traffic. The street is lined with buildings and many cars are visible, creating a sense of congestion. A teal rectangular box is overlaid on the right side of the image, containing white text. The text reads "Financing sustainable mobility".

# Financing sustainable mobility



## • **HORIZON 2020: R&D funding**

- Urban mobility = CIVITAS label (66.5 mEUR in 2015): electro-mobility topics
- Smart Cities and Communities (106 mEUR in 2015)
- SME transport fund: 58 mEUR (2016-2017)
- **Green Cars Initiative**, Fuel Cells and Hydrogen (PPPs)- > **GV calls : now with a price for the cleanest engine!**
- **ELENA facility**: technical assistance with EIB + **JESSICA** (sustainable urban-renewal projects).

## • **European Structural and Investment Funds**

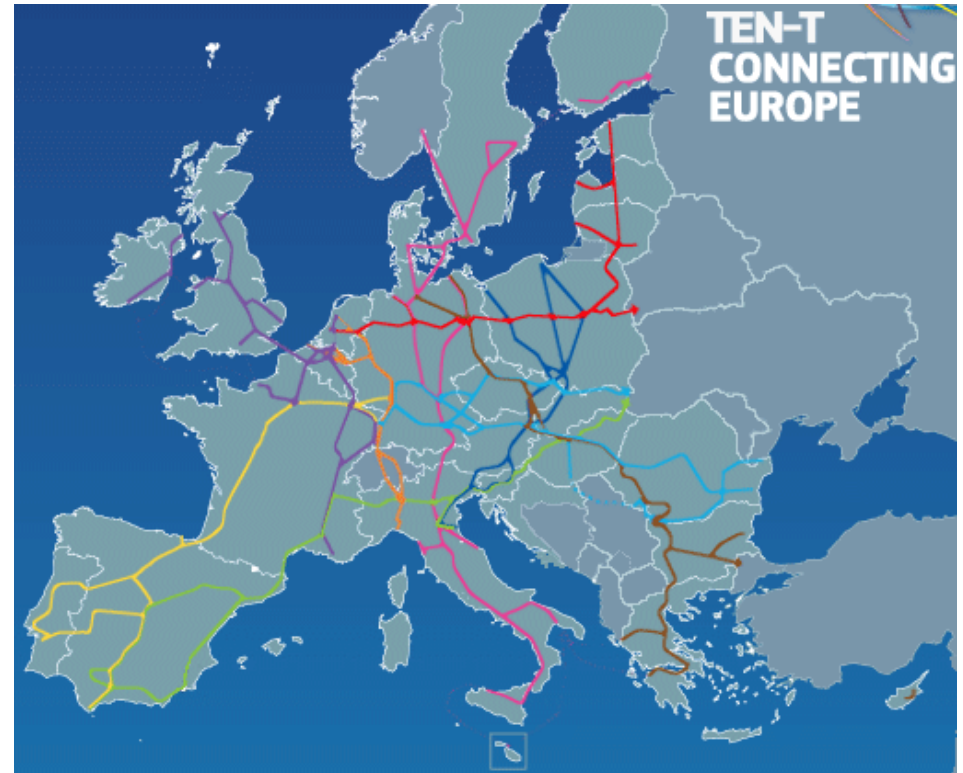
- **TEN-T/CEF for innovation and urban nodes**
- **EFSI financial instruments -> blending with grants !**

# Connecting Europe Facility (CEF)



Regular calls

- **2015 calls published November 5th:**  
Innovation calls focus on decarbonisation (clean fuels...)
- **Mobile equipment (10% max of the grant)**
- Deadline for submission **February 16th, 2016**
- General envelope **€60M**
- Cohesion envelope\* **€180M**



\* Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia

# The European Fund for Strategic Investments (EFSI)

The image features a close-up of a grey sign with the European Investment Bank logo and the text 'European Investment Bank' in blue. The background is a blurred view of a large-scale construction site with extensive scaffolding under a clear blue sky.

European  
Investment  
Bank

- €21 billion guarantee to leverage an extra financing capacity of €255 billion => total extra financing of €315 billion
- Cities and private promoters active in cities should engage with the EIB and the National Promotional Banks
- Investment Platforms will be created under the EFSI Regulations for certain countries and sectors, for example transport



- **EFSI guarantee will enable the EIB to take riskier projects, e.g. smart urban mobility and alternative fuels projects**
- **Research and innovation is one of the key priorities, as is urban mobility.**
- **Innovative projects can also employ financial instruments, facilitated by investment platforms**
- **Advisory Hub : one-stop-shop / work together with a network of national promotional banks.**
- **Regional hubs are likely to be created:**  
<http://www.eib.org/eiah/index.htm>



# Thank you for your attention!

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