

Green eMotion

Policy recommendations for the diffusion of Evs in cities

Liepaja 10th February 2014

Speaker: Gabriele Giustiniani



24.2 Mio. € funded by:



- Introduction;
- Impacts of local measures on the diffusion of e-vehicles;
 - Methodology;
 - Analysis by policy/city;
 - Main outcomes.
- Electro mobility Best Practice Policy recommendations’;
- Conclusions.

Green eMotion carried out a relevant work on local/national policies to support the diffusion of electro mobility aiming at answering to two questions:

- What has, already, been done at local level to support e-mobility (“Impacts of local measures on the diffusion of e-vehicles”, Deliverable 10.10);
- What an Public Body should do to support the diffusion of e-mobility (“Best Practice Policy Development Guidance”, Deliverable 10.7).

A survey was carried out to assess the impact of support/regulatory measures that may be implemented at local level on electric vehicles diffusion.

- *Is there any variation in the number of e-vehicles due to the implementation of a policy? If yes, what is the impact?*
- *Is the variation depending to other factors such as gasoline price or National policies?*

Survey characteristics

Carried out in **2013**

13 e-vehicle supporting policies investigated

6 European cities participated from 5 countries:

- Copenhagen;
- Dublin;
- Malaga, Madrid;
- Malmo;
- Rome;
- Some data collected also in Oslo.

The Questionnaire

The questionnaire was delivered to a local expert (one for each city)

Section 1 - *Questions about your City*

- 4 Questions

Section 2 - *Questions about measures implemented*

- 13 “policy” sub-sections, 5 questions each sub-section

Section 3 - *Trend of e-vehicles*

- Number of registered e-vehicles in your city;
- Number of registered e-vehicles nationwide;
- Number of registered ICE vehicles in your city;
- Number of registered ICE vehicles nationwide.

Investigated Policies at the local level (1)

Stimulating Demand - Reducing trip costs

1. Limited Traffic Zone
2. Road Pricing
3. Free parking
4. Use of bus lanes

Supply improvement

5. Improvement of public recharging network

Stimulating Demand - Reducing energy costs

6. Reduction of recharging cost
7. Free home recharging spots
8. Free recharging spots on public road or at office

Investigated Policies at the local level (2)

Stimulating Demand - Reducing vehicle related costs

9. Reduction of local/national vehicle ownership tax for e-vehicle

10. Reduction of local/national vehicle registration tax

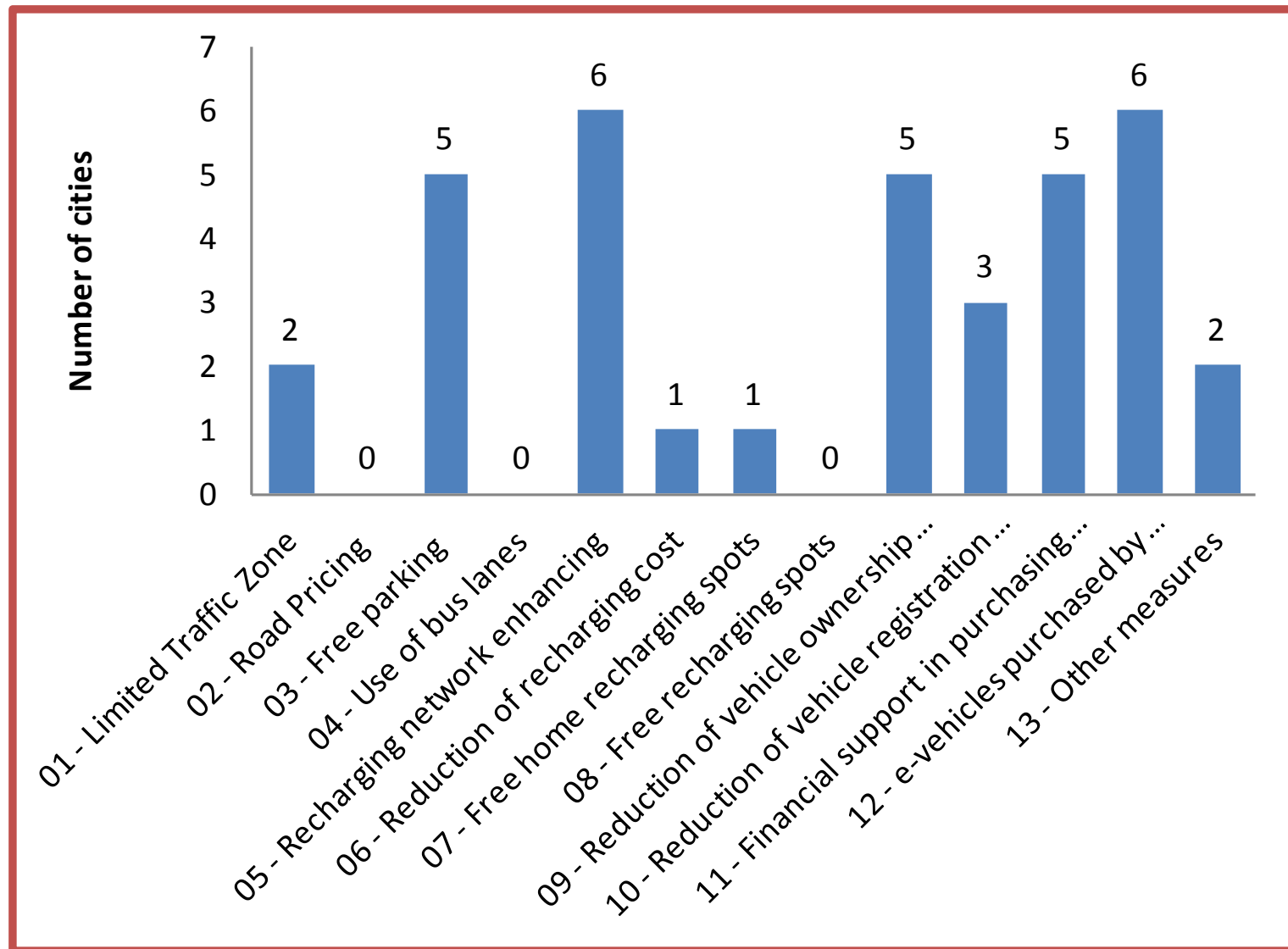
Financial support in purchasing e-vehicle

11. Direct purchasing of e-vehicles by local/national bodies

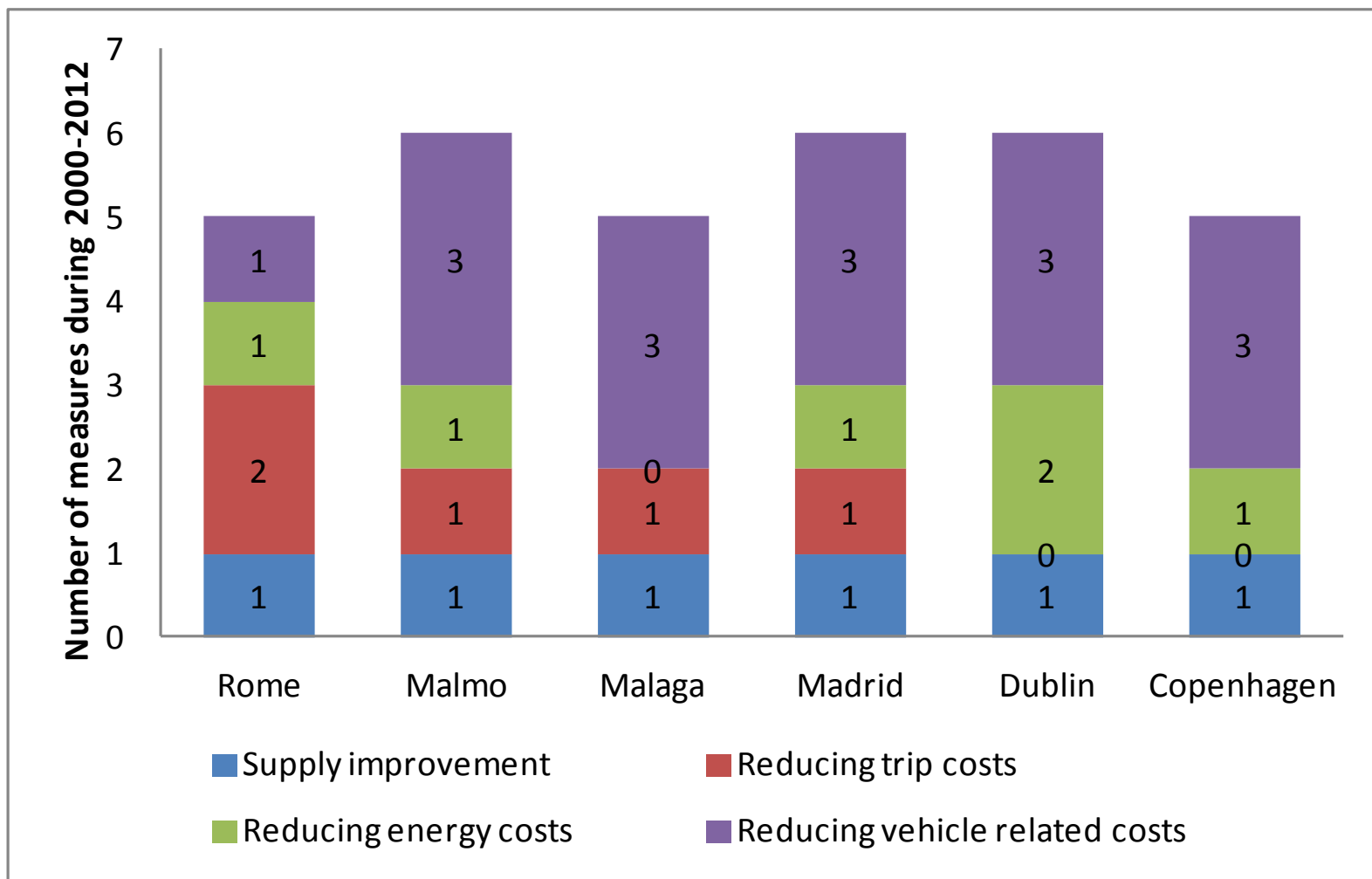
12. Other

13. Other measures that supported the diffusion of e-vehicles

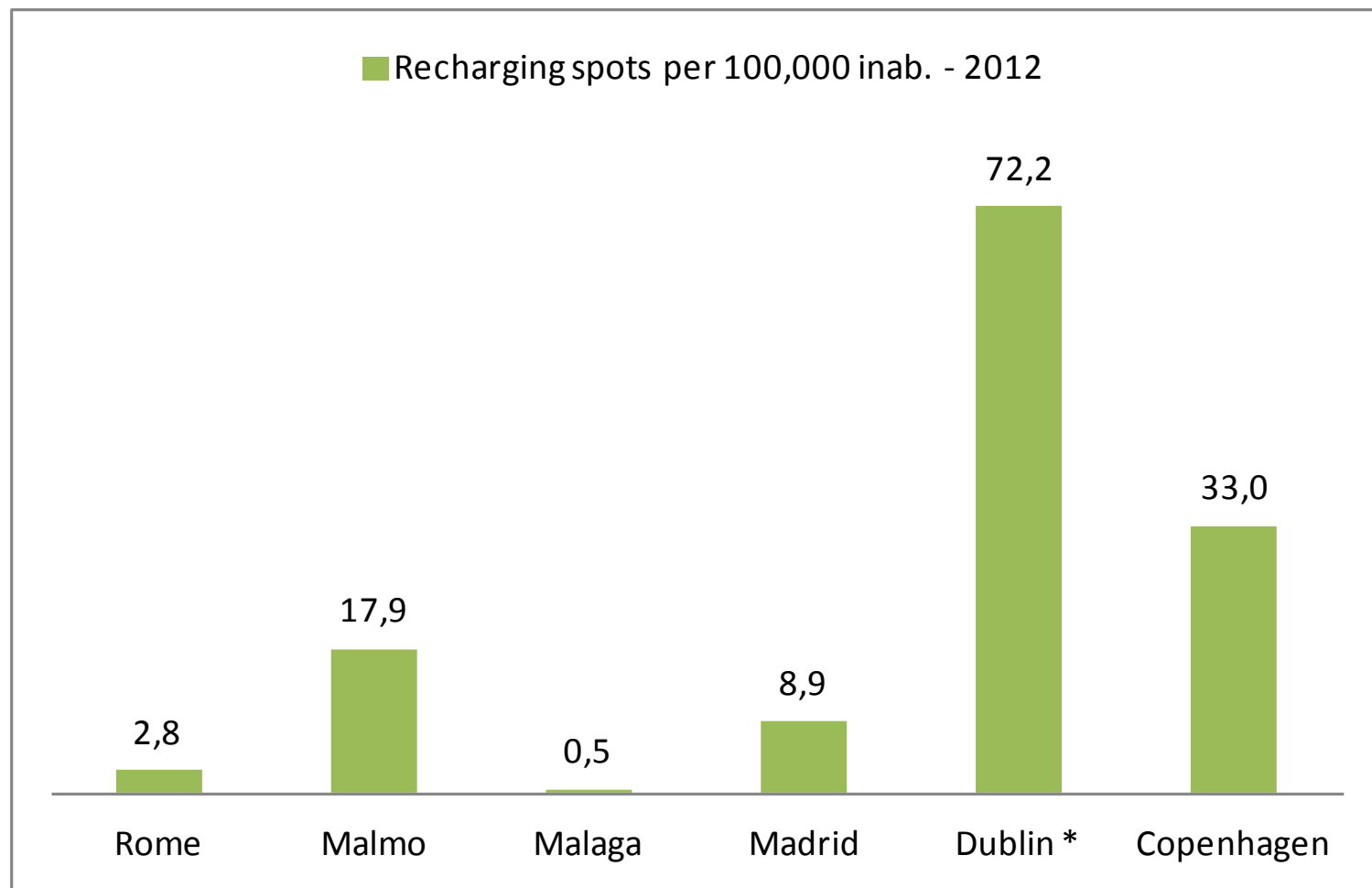
Implemented policies in the sample of cities



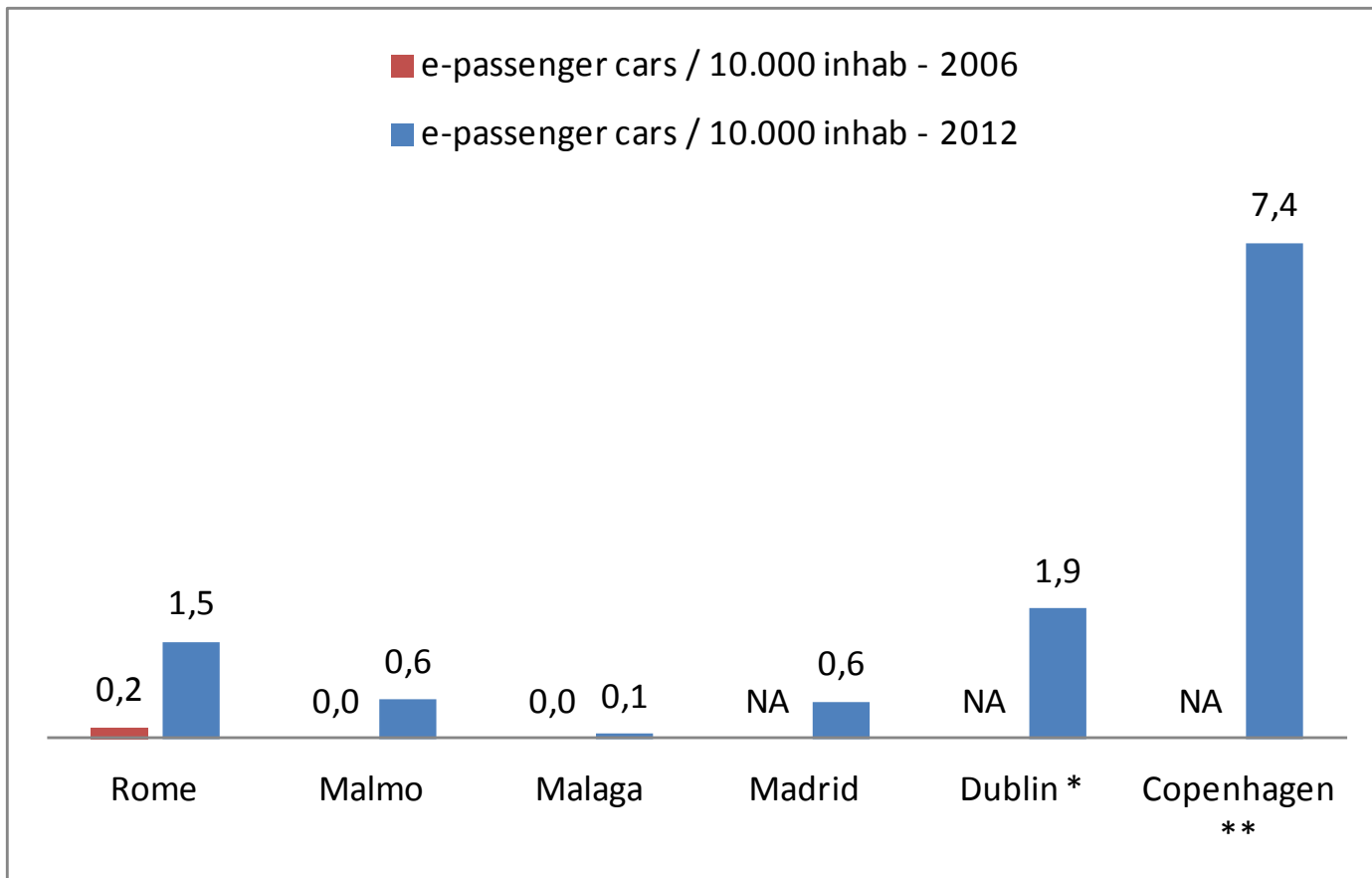
Number of policies implemented in 2000-2012



Number of recharging spots per 100.000 inhab.(2012)



Number of e-cars per 10.000 inhab. (2006-2012)



* Data referred to **County** level
 ** Data referred to all e-vehicles

All cities implemented:

- Increase of the Public recharging network
- Direct purchasing of e-vehicles by local/national bodies

Almost all the policies were implemented and was not possible to make a before after analysis.

Cities with higher number of e-cars per 10.000 people are Copenhagen and Dublin; both cities show the higher number of public recharging spots per 100.000 people.

D 10 7 recommendations for local policy makers



In GeM also analysed the best practices world wide. According to this analysis the main steps to launch the e-mobility in City are:

- Develop a local implementation plan with a stepwise approach.
- Engage all relevant stakeholders.
- Create an (imbedded) EV municipal taskforce.
- Timely decide how to realize a city wide public charging infrastructure.
- Optimize the licensing processes to limit the time between application and the installation.
- Take part in electro mobility platforms with other municipalities to exchange experiences and cooperate.
- Electrify the municipalities fleet.



The choice of appropriate policy tools for a city will be depending of local circumstances, therefore one should take into account the following aspects:

- Measures should contribute to the cities objectives. Moreover, which measures to select is also depending on the role the municipality wants to take: regulate, support and/or promote.
- Access the (likely) effectiveness of a measure.
- Consulting other municipalities about their experiences.
- Involve stakeholders to create support.
- Implementing a package of measures is often more effective than a single measure.

Conclusions

An increasing trend in the number of e-vehicles is observed (2004-2013)

All cities, analysed, implemented:

- Increase of the Public recharging network.
- Direct purchasing of e-vehicles by local/national bodies.

If you want to launch EV in your city it is suggested to make a plan, involving all the relevant stakeholders (and other cities) and setting up a dedicated office to EV. The first two measures of the plan should be:

- Set up of a city wide public charging infrastructure.
- Turn to electric part of the municipality fleet.

Thank you for your attention.

Contact: giustiniani@ctl.uniroma1.it

www.greenemotion-project.eu

