

Electromobility+, the next level:

Electric Urban Mobility (2016-2021)

Peter Wilbers

(peter.wilbers@rws.nl)

Rijkswaterstaat, The Netherlands

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Rijkswaterstaat

RWS

EUM

- Executive agency of Ministry of Infrastructure and the Environment
- Over 7,500 employees
- Responsible for
 - Construction and maintenance of main road infrastructure and water works
 - Optimal and sustainable utilisation of existing infrastructure
- Main offices Utrecht, Rijswijk, Lelystad, Rotterdam
- Several regional offices + RWS Brussels Office
- Myself: coordinator Era-Net Transport, ERA-NET Plus Infravation, co-management ERA-NET Plus Electromobility+



Electromobility+

ERA-NET Plus, FP7 (2010-2015)

- Multiple value for money
 - 18 transnational projects (socio-economic issues, technological strategies, R&I)
 - 20 M EURO of practical results
- Strong and homogenous network
 - 11 countries
 - National programmes on electric mobility
- Innovative funding mechanism
 - Funded by 15 national programmes (2/3rd)
 - Topped-up by EC (1/3rd) → incentive!
 - Virtual common pot + well working mechanism management fees

EUM

Available

Electromobility+

2010-2015
RESULTS

**Pilot Group:
TUV (DE),
MEDDE (FR),
RWS (NL)**



Electromobility+

Results

EUM

Electromobility+ delivered policy makers and stakeholders across Europe a variety of tools, scenario's, guidelines and models e.g. for:

- Simulation and forecasting the impact on and optimal integration of electric vehicles into the electricity grid
- Behaviour of electric vehicle in accidents and incidents and resulting guidelines for emergency and towing services
- Innovative concepts for extending electric vehicles range to optimise charging infrastructure and minimise range anxiety
- Efficient, cost effective and sustainable battery recycling, charging and swapping and application of super capacitors



Electromobility+ Concluding conference

- Presentations results 18 Electromobility+ research and innovation projects
- Debates on future e-mobility developments and need for next level: Electric Urban Mobility



Berlin
20 May 2015



Electric Urban Mobility

Why going for next level?

EUM

- Practical deployment of e-mobility in European cities still requires substantial efforts
- Resources are scarce, every euro must count
- Complementary transnational and transboundary approach needed to
 - speed up and support e-mobility developments and implementation
 - accelerate the time to market of affordable, cost-effective and socially acceptable solutions
 - build the necessary scale and scope to achieve bigger impact from scarce public and private resources



H2020 2016-2017 Work Programme

ERA-NET Co-fund Electric Urban Mobility

EUM

**ERA-NET
Cofund**

- Topic GV-12-2016 'ERA-NET Co-fund on electromobility'
- Section 11. Smart, green and integrated transport
- Max 10 M EURO EC

**Call for
proposals**

- Call launch: 15 October 2015
- Call closure: 26 January 2016



Electric Urban Mobility Objectives

EUM

- Clear focus on (sub)urban areas and cities
- Focus on implementation and demonstration (higher TRL*)
- Highly visible transnational (lighthouse) projects
- Triple helix cooperation (policy-industry-research)
- Mutual learning on best practice implementation approaches
- Tackle barriers and demonstrate solutions
- Guidance to decision makers in public authorities

* Technology Readiness Level (scale 1-9)



Electric Urban Mobility

Interested countries / regions

- Open to all countries and regions in Europe and associated countries in H2020
- Interest from 18 countries / regions so far
- Accession possible till mid December 2015
- Information / promotion paper available
- Initiative strongly driven by Germany and Netherlands
- Pilot Group: TUV (DE), RWS (NL), in search for 3rd party

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Interested countries/regions

- Austria
- Belarus
- Czech Republic
- Denmark
- Finland
- Flanders
- France
- Germany
- Israel
- Lazio
- Nord Pas de Calais
- Norway
- Piedmonte
- Poland
- Sweden
- The Netherlands
- Turkey
- Spain
- ?



Electric Urban Mobility

Tentative scope (1)

EUM

System integration (transport, (sub)urban areas)

- **Safety of EV vehicles and charging infrastructure, integration in the city (e.g. e-bikes, bike paths), noise issues**
- **E-mobility adjusted and shared infrastructure (incl. inductive charging) and housing**
- **ICT applications, e.g. for optimisation of forecast issues and battery management**

Urban freight and city logistics

- **Zero emission city logistics**
- **Innovative e-mobility solutions, considering last mile delivery**

Smart Mobility concepts

- **Interconnected services for cross-modal e-mobility chains (e.g. smart phone applications)**
- **Mobility and housing: technical aspects like home charging, organisational changes like novel e-car sharing systems and neighbourhood centred solutions**
- **Shared use of physical & virtual e-(mobility) infrastructures: e.g. (trolley)bus + tram**
- **Cross links with automated driving**



Electric Urban Mobility

Tentative scope (2)

EUM

Public Transport

- **Application in public transport, electric busses, personal rapid transport**
- **Optimisation of remote/inductive charging system**
- **Testing EV's and charging in extreme weather conditions, e.g. in Polar areas**

Consumer demands and behaviour

- **Regulations and standards, interoperability, compatibility and charging payment solutions**
- **Fiscal measures, local planning measures, integration into the transport system, consumer information (e.g. charging infrastructure, access to charging)**
- **Application in fleet companies (waste collection, taxis...)**
- **Electric Car sharing system, rental system of city electric vehicles**
- **Second hand market issues**



Electric Urban Mobility Considerations

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Considerations

- Anticipate information/research results and policy demand needs in 2020
- Structure process and projects in a way that risks of outdated results are minimised, looking back from 2020
- Call should be explicit and prescriptive about objectives and impact of research projects
- Call should be relatively open on how researchers reach objectives and impact
- Close collaboration with EGVI
- Funding providers should preferably support all call topics/ domains (no selections)

Guiding information

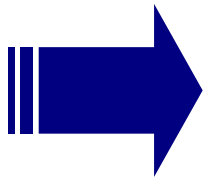
- Tentative budget 30 M EURO (20 M EURO National + 10 M EURO EC)
- Public funding according to European standards in line with H2020 and national provisions
- Focus on demonstrating and validating solutions
- Innovation and deployment needs for 2020



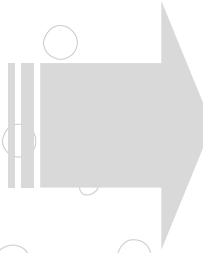
Electric Urban Mobility

Funding and evaluation

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**EC top up
up to
1/3rd total**



**Total national
commitments
at least
2/3rd total**

**Two step
procedure
(light – full)**

Public funding mechanism

- Joint funding by national/ regional programmes and EC
- EC topping up to 50% of sum of national/regional grants

Evaluation process

- Light proposal phase: evaluation by national experts
- Full proposal phase: international peer review
- Order of ranking list peer review to be followed for EC top up



ERA-NET Cofund: two components

I. Call for proposals (transnational call)

Call launch

Proposal
preparation

Evaluation

Selection

Negotiation

Monitoring

II. Additional activities

- complementary activities for networking and coordination between programmes in countries
- Intensification mutual learning and inspiration

Electric Urban Mobility Timeline

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Date	Milestone
15 October 2015	Opening ERA-NET Cofund call
26 January 2016	Closure ERA-NET Cofund call
February – May 2016	Evaluation, Grant Agreement
May – July 2016	Preparations transnational call
July – August 2016	Opening transnational call light proposals
October – November 2016	Closure transnational call light proposals
November – January 2017	National evaluation, selection, invitation full proposal submission best proposals
March – April 2017	Submission deadline full proposals
April – June 2017	Peer review, ranking, selection list full proposals
June – September 2017	Negotiations, Grant Agreements, start projects
2020 – 2021	Conclusion projects and ERA-NET Cofund



Shaping the future
with e-mobility



Thanks!

Further information:

<http://electromobility-plus.eu>