Electromobility +
A European joint research programme

Bernard Duhem,
Conference, Berlin, May 20th, 2015

Electromobility+ is co-funded by the European Commission as part of the ERA-NET Plus scheme of the 7th EU Framework Programme under Grant Agreement No. 287143.

Starting points

- Energy prices
  140 dollars per barrel in May 2008
- Economic crisis
- National and European answers
  Innovation, European green car initiative, national programmes, competition
- Future of FP 7
  Increase states involvment, extend the role of ERA-Net+

ERA-Net Transport

- Basis network, established in 2004
- Supported the development of topic specific cooperations
- Supported the set-up of the Era-Net Plus Eletcromobility+

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Preparation steps

May 2009	High Level Group, Stavanger
September 2009	Position paper
November 2009	High Level Group, The Hague, Decision for a common programme (10 countries)
May 2010	High Level Group, Paris Communication to the EC (10 countries, 20 M€ for call 2011)
September 2010	High Level Group, Stockholm Contents & Governance Five key dimension (socio-economic and technologic), a governance board with 19 bodies from 13 countries or regions, a pilot group with 3 countries)

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Process of the programme

November 2010	1st Governance Board (Berlin), decisions
December 2010	Call opening, ERA-Net Proposal to EC
January 2011	Information and Brokerage Event (Cologne)
March 2011	Call closure : 40 proposals
May-September 2011	Two step evaluation : 20 proposals succeed
November 2011	Governance Board (Utrecht) : 20 projects selected
September 2012	Launching seminar (Paris)
February 2014	Mid-term seminar (Copenhagen)
May 2015	Conference and final results (Berlin)

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The Funding Partners

Funding Partnership

- 19 Partners
- 15 Programmes
- 11 Countries and Regions
  - Austria
  - Denmark
  - Finland
  - France
  - Germany
  - The Netherlands
  - Norway
  - Poland
  - Sweden
  - Piedmont
  - Flanders
- European Commission

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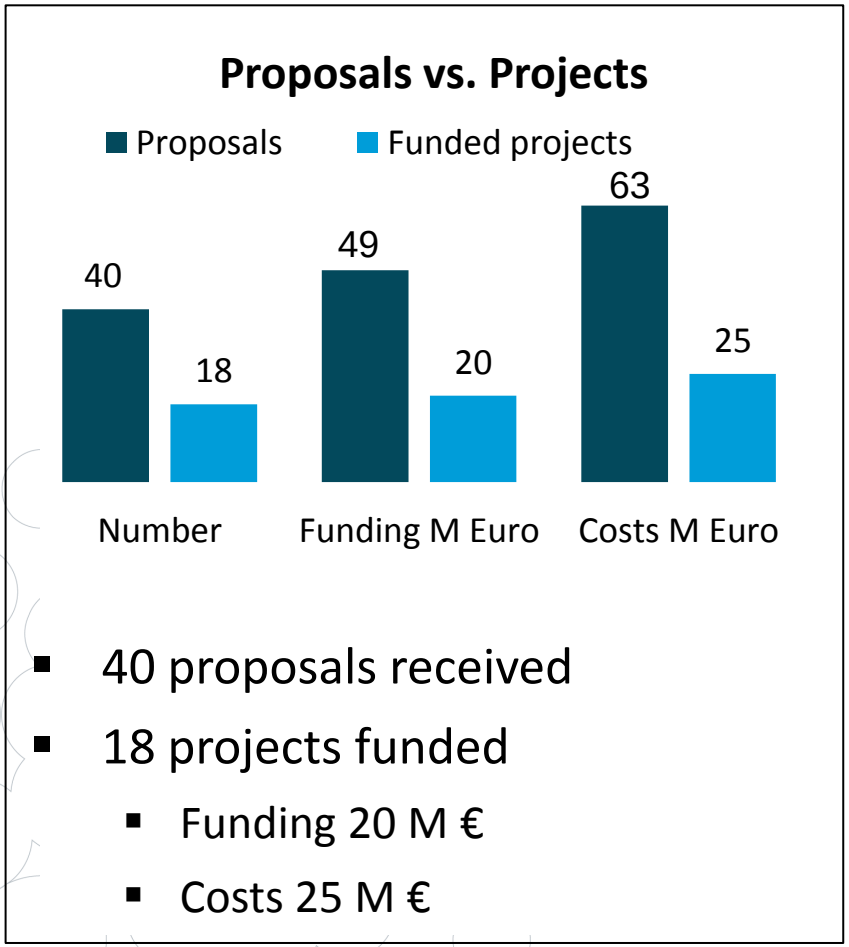
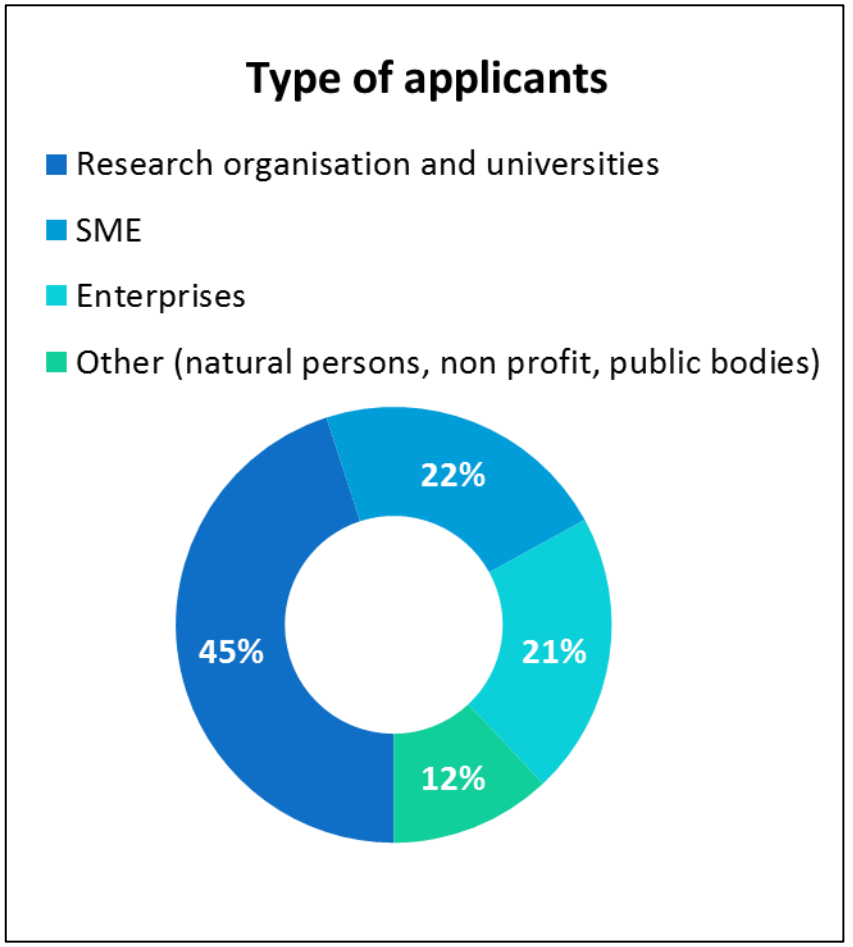
Call statistics



- 40 proposals received
- 18 projects funded
  - Funding 20 M €
  - Costs 25 M €



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Projects

COMPETT	E-FACTS	Socio-economic issues
DEFINE	SCElecTRA	
eMap	SELECT	
EV-STEP		
ABattReLife	EVREST	Technological strategies
CACTUS	NEMO	
DAME	Speed for SMEs	
EVERSAFE		
FCCF-APU		Research & Development
K-VEC		
MaLiSu		
MATLEV		

18 Trans-national projects

- 3 Key dimensions
- 96 partners
  - Industry
  - SME
  - Academia
- 11 countries

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Lessons on the process

- Innovative funding mechanism : funds from 15 national programmes + topped up by EC
- Complex set-up due to “pioneer situation” for partners
- Tools and procedures basically work well
- Blue print for the funding mechanism has been developed
- User-friendliness and process efficiency can be improved
  - Harmonize national evaluations
  - A two-step submission may have advantages
  - Reduce time to contract for the research projects

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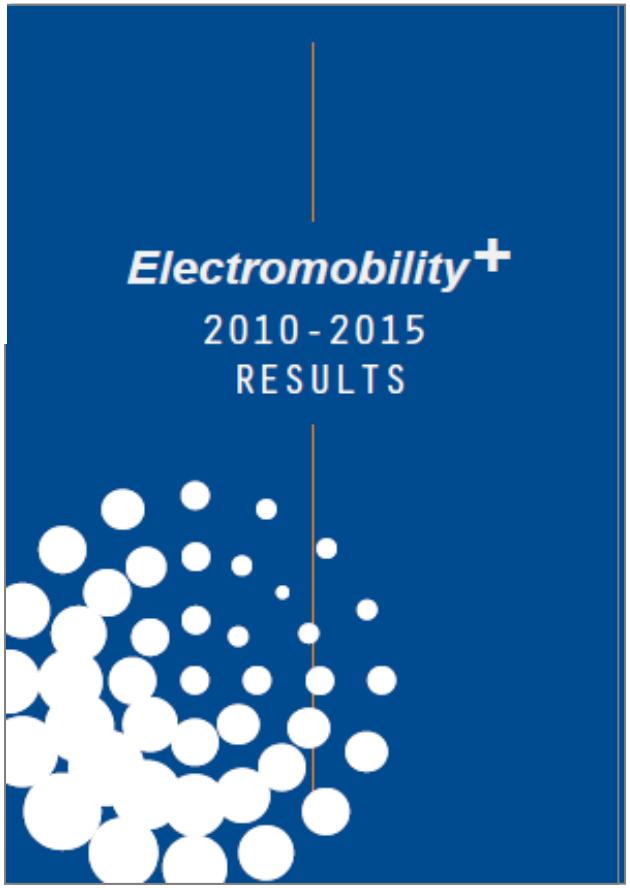
Global results

- A clear validation of the global strategy of the programme
- Experience of large cooperation between countries (EN+)
- A lot of knowledge, expertise and tools (usable by actors)
- Many comparisons between countries



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Present situation and inputs of the programme (1)

- **Energy context not favourable**
  Climate and local pollution still strong issues, but low price, shale gas, new coal and nuclear dynamic
- **Electromobility in progress**
  + 60% in Europe from 2013 to 2014, raising visibility (Norway), a lot of new models, unless some missing for commercial vehicles *(SELECT),* safety standards already high (*EVERSAFE)*
- **But still a niche and an uncertain potential**
  Market share of 0,57% in France in 2014 and hybrid cars four times more, mostly fleet operators except in Norway (*COMPETT*), potential vary depending to countries and scenarios : 30% of sales in Europe in 2030 for *SCelecTRA* but 7% for cars and 4% for commercial vehicles and buses for *EV-STEP*

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Present situation and inputs of the programme (2)

- **Public policies strongly necessary**
  Infrastructure, incentives, visibility, advantages in use, EC regulation on CO2 emissions ; conditions to reach the goal of the German governement of 1 millions vehicles on the road in 2020 (*eMAP*)
- **Technology still open**
  Batteries, Plug-in hybrid, fuel cell and hydrogen, range extenders *(EVREST)*, charging strategies, charging technologies including ultra capacitors for buses (*K-VEC)*, materials for components *(Speed for SMEs, MATLEV)*
- **Economic models and actors still open too**
  Cost of batteries and residual value of vehicles are still strong barriers (*COMPETT, SELECT*), Impact on the growth not completly clear, new actors in managing the relation to the grid, for second use and recycling *(ABattReLife)*

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Present situation and inputs of the programme (3)

- **An important role for the fleets**
  A strong part of the market (50% in some countries), well known uses, easy management
- **The connection to the grid to be prepared**
  Value the flexibility brought by vehicles, avoid negative references

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Thank you for your attention

Continuation?

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