Institute of Transport Economics
Norwegian Centre for Transport Research
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AUSTRIAN ENERGY AGENCY

Vejdirektoratet

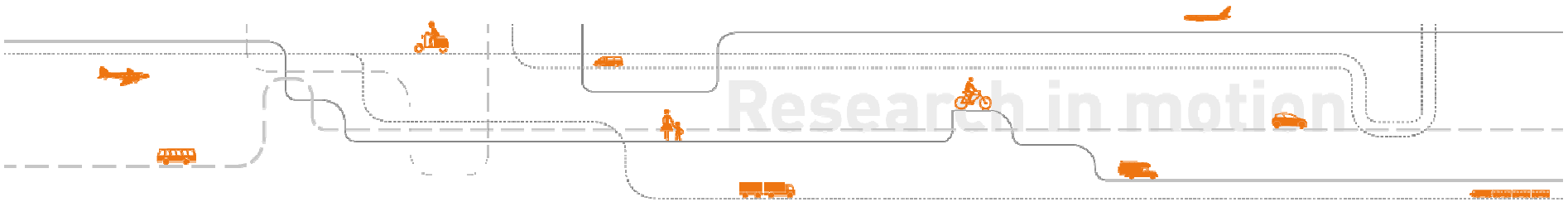
Kongsberg Innovasjon

BUSKERUD University College

COMPETT *Electromobility +*

Erik Figenbaum, Institute of Transport Economics

Electromobility+ launch seminar Paris 13. september 2012



COMPETT
COMPetitive Electric Town Transport

- E-vehicles covered in project:
  - *Battery electric vehicles (EV),*
  - *Plug-in hybrid vehicles (PHV)*
  - *Fuel cell electric vehicles (FEV)*
  - *Light Electric Vehicles (LEV) - 2 wheelers*

- Multi-disciplinary approach to ensure an overall coverage of electromobility
  - *Technical methods*
  - *Sociological methods*
  - *Economic methods*

- Seven Work Packages

- Start with status in present time and move on to the period from 2015-2020

Electromobility +

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Partners

- Austria
  - *Austrian Energy Agency (AEA)*
- Denmark
  - *Danish Road Directorate (DRD)*
- Norway
  - *Institute of Transport Economics (TOI) – Project Coordinator*
  - *Kongsberg Innovasjon AS*
  - *Buskerud University College*

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Research goal

- How can e-vehicles come into use to a greater degree?
  - *Likely niches and types of vehicles that will be competitive*
  - *Social acceptability and travel-behavior changes needed*
  - *Barriers and benefits on the individual, regional and national level.*
  - *How to overcome barriers and use benefits to promote e-vehicles*
  - *Main actors and facilities that will be needed*
  - *Economy of existing regulations and incentives*
  - *How can research based knowledge stimulate marketing and policy making?*

- Results will be of importance for both main orientations of the call, i.e.
  - *Strategic Research for Transport Policy and Technology*
  - *Technology based Applied Research Innovation*

- Second key dimension of the Electromobility system
  - *Usage pattern and the systems spatial and socio-economic operating conditions*

Work Package 1
Dynamic Technical platform - AEA

- Description of work
  - *Overview of e-vehicles, e-vehicle technology and energy supply technologies.*
  - *List of available e-vehicles with perfomance and characteristics per country*
  - *List of typical e-vehicles to be used in the analysis in the other WPs.*

- Deliverables:
  - *Report: State of the art of electric vehicles and energy supply systems (01/2013)*
  - *Final report: Dynamic database e-vehicles and energy supply systems (03/2015)*

- Tools and methods
  - *Literature study*
  - *Continuous market observation*
  - *Dynamic database on vehicles and energy supply systems*

Work Package 2
Electromobility in everyday life (TOI)

- Description of work
  - *Identify which types of daily car trips can be undertaken by e-vehicles.*
  - *Identify possibilities and limitations for substituting ordinary cars with e-vehicles.*

- Tools and methods:
  - *Literature study*
  - *National and regional travel surveys (number of/length of trips/day)*
  - *Workshop*

- Deliverables
  - *Report on the potential use of different types of e-vehicles (04/2014)*

Work Package 3
Silent urban driving (DRD)

- Description of work
  - *Analyse how introduction of e-vehicles will contribute to less noise in urban areas.*
  - *Analyse how this can be used to introduce electric cars to a greater extent.*

- Tools and methods
  - *Literature study*
  - *On-road noise measurements*

- Deliverables
  - *State of the art report (01/2013)*
  - *Report on noise emission from various driving situations and pavements (06/2014)*
  - *Report on the effect on urban noise exposure (01/2015)*

Work Package 4
Regional Electromobility (AEA)

- Description of work
  - *Theoretical framework for scenarios and regional surveys.*
  - *Establish the regional public and private interests and initiatives in case studies in Austria (Eisenstadt) and in Norway (Kongsberg region),*
  - *Identify users' and potential users' attitudes, preference and behaviour*

- Tools and methods
  - *Info from WP2*
  - *Surveys, questionnaires, interviews and workshops*

- Deliverables
  - *Scenario framework (12/2013)*
  - *Austrian case study - Eisenstadt (12/2014)*
  - *Norwegian case study – Kongsberg region (12/2014)*

Work Package 5
Economic assessment of incentives (TOI)

- Description of work
  - *Assess the potential for e-vehicles to replace traditional vehicles in the 2015-2020 timeframe.*
  - *Analyse the economic implications of future prices, taxes and regulatory incentives*
  - *Investigate models for financing the required infrastructure for recharging e-vehicles.*
  - *Social and economic impacts of alternative policies to be shown in scenarios*

- Tools and methods
  - *Literature study*
  - *Use of data generated in Work packages 1-4 for scenario analysis*
  - *Economic analysis of private and public costs, budget implications etc*
  - *Academic paper (10/2014)*

- Deliverables
  - *Assessment of economic incentives for e-vehicles and recommendations for implementation in Buskerud, Eisenstadt and Copenhagen as well as in Europe in general (report) (06/2015)*

Work Package 6
Dissemination (DRD)

- Description of work
  - *Organize the knowledge transfer of the results to stakeholders and to the public*
  - *Establish a web site for the project where reports, papers etc. will be available*
  - *Produce a practical guideline hand-book about electromobility*

- Tools and methods
  - *Web site*
  - *Workshops*
  - *Handbook*

- Deliverables
  - *Dissemination action plan (10/2012)*
  - *Web site + press release (12/2012)*
  - *Evaluation of dissemination (06/2015)*
  - *Practical guideline hand-book about electro mobility (06/2015)*

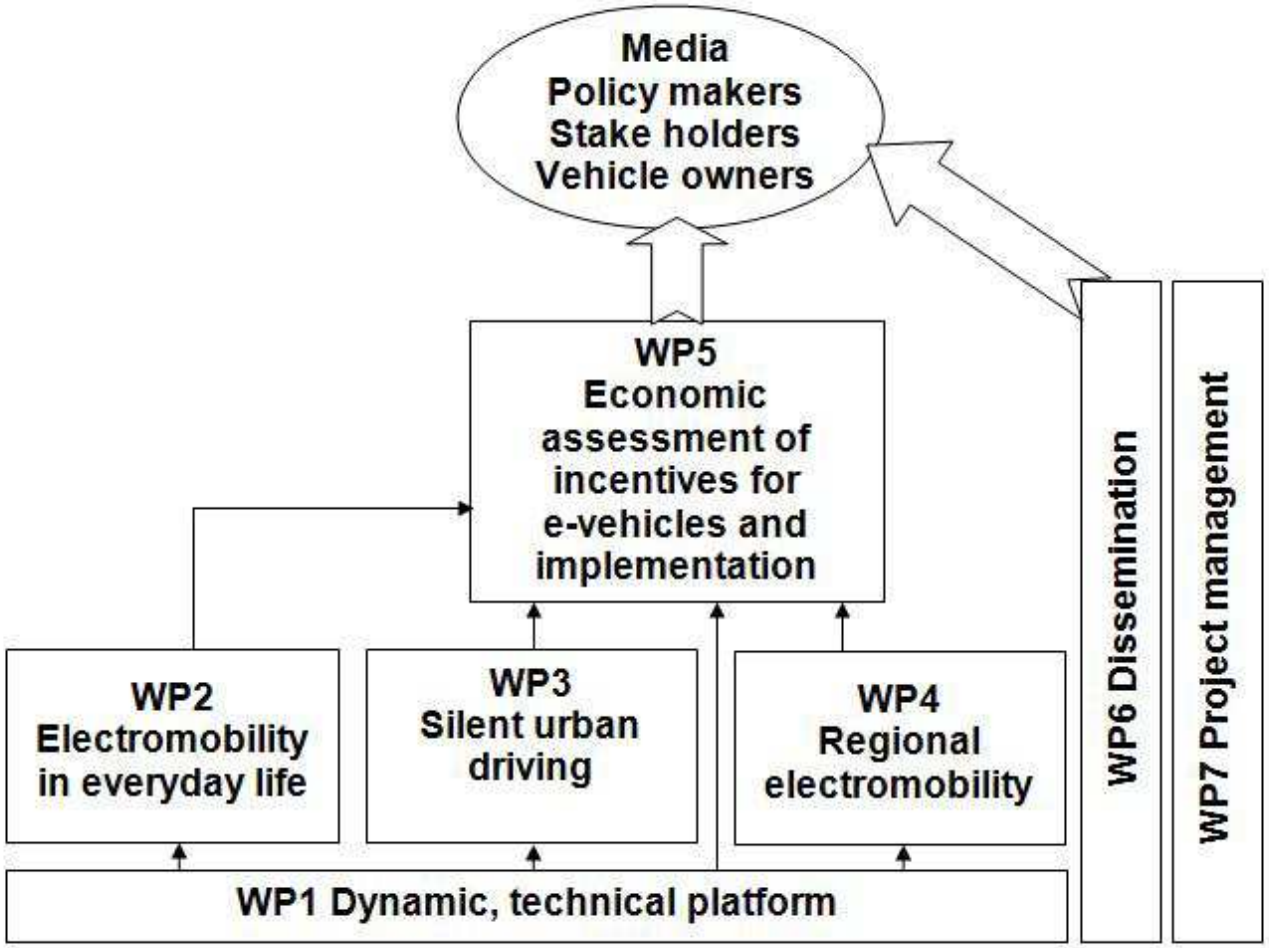
Work package 7
Management (TOI)

- Description of work
  - *Ensure a reliable administrative and financial management of the project.*
  - *Monitor progress of the project and coordinate the technical activities in the WPs.*

- Tools and methods
  - *Management Committee*
  - *Quality assurance, risk management and financial reporting routines*

- Deliverables
  - *Periodic report 1, Financial Statements and Summary Financial Report (12/2013)*
  - *Final report, Financial Statements and Summary Financial Report (06/2015)*

Structure


Media
Policy makers
Stake holders
Vehicle owners
WP5
Economic assessment of incentives for e-vehicles and implementation
WP6 Dissemination
WP7 Project management
WP2
Electromobility in everyday life
WP3
Silent urban driving
WP4
Regional electromobility
WP1 Dynamic, technical platform

Final results

- *Assessment of economic incentives for e-vehicles and recommendations for implementation in Buskerud, Eisenstadt as well as in Europe in general (report) (06/2015)*

- *Practical guideline hand-book about electromobility (06/2015)*

- *Final workshop (06/2015)*