

T9.5. Enabling effective mass market deployment of EVs

Ingo Bunzeck, ECN Policy Studies

Commercial and regulatory framework

Policy recommendations and evolution for mass introduction of Smart Grid integrated EV

Timeline: Month 24-48

- The task shall summarize the work conducted in WP9 and the experiences from demonstrations in a digestible manner
- It should contain of a framework to enable mass-market and cost-effective EV roll-out, thereby providing guidance to industry and policy makers
- To inform policy makers what needs to be undertaken in order to reach different targets (i.e. scenarios) in terms of EV mass market introduction



Very visible, high-level outcomes of the project → The outside world wants to know what we have produced in the project

Initial considerations

- The task officially only starts halfway the project and deliverables are scheduled for the end of the project → A possible solution to start informing policy makers and industry stakeholders will be suggested shortly
- There are lot's of methodologies out there (i.e. backcasting/forecasting – depending on chosen methodology we will create a workplan with the other tasks in WP9
- The outputs of WP9 are not the only thing to be considered – we need to align with work from each WP through WP9 represented partners
- Therefore, a suitable process needs to be designed to arrive at an accepted framework → e.g. series of dedicated workshops

We are scientists and/or industry experts, therefore we are very familiar with the topic and tend to underestimate the complexity for outsiders

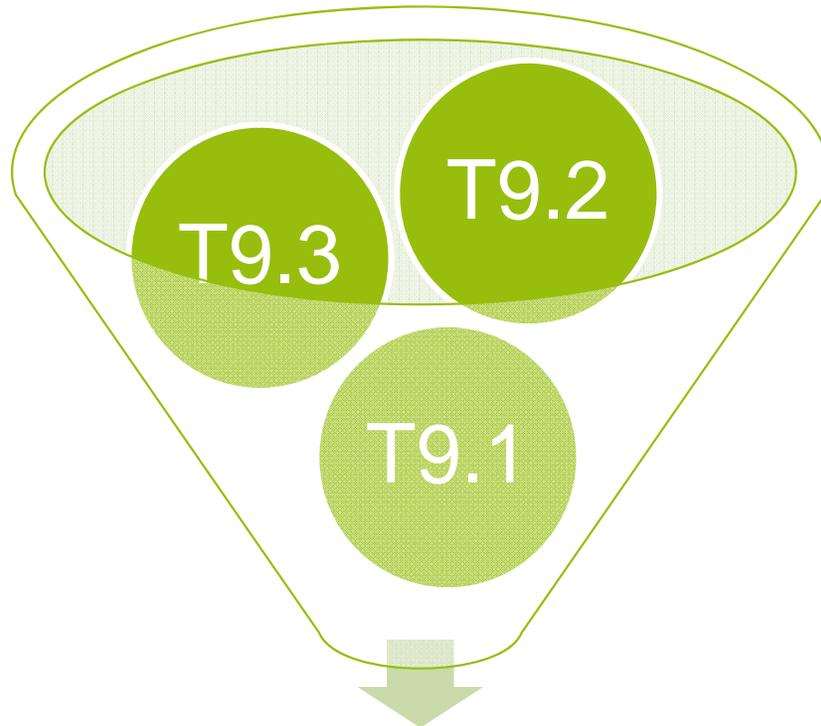
However, decisions are usually taken by people that are NOT scientists nor experts in the field

We should phrase our messages as comprehensive and understandable as possible

Especially for the policy recommendations, it's indispensable to make it understandable for policy makers

Overview of efforts

Partner	Person-months
ECN (lead)	28
Imperial College	15
IREC	7
Trinity College Dublin	6
TECNALIA	5
DTU	4
RSE	4
cidaut	2
BMW	3



Identify barriers and gaps and design commercial and regulatory framework to deliver full EV potential

Evaluate internal and external benefits and cost (power system and environment)

Recommendations under following assumptions:

- Maximise consumer acceptance
- Economic benefits for the power system
- Suitable mobility infrastructure



As we all know, it is hardly possible to please everyone with one solution

T9.1

Identify barriers and gaps and design commercial and regulatory framework to deliver full EV potential

Evaluate internal and external benefits and cost (power system and environment)

Recommendations under following conditions:

- Maximise acceptance
- Economical for the power system
- Suitable for infrastructure



D9.6. Barriers, gaps and commercial and regulatory framework for broad rollout of electromobility – M45 (2014)

- Includes: Identified social barriers, set-up of power system, outline of the

From our perspective (and hopefully from yours too), it's too long to wait until the end of the project to inform and recommend actions to policy makers and stakeholders

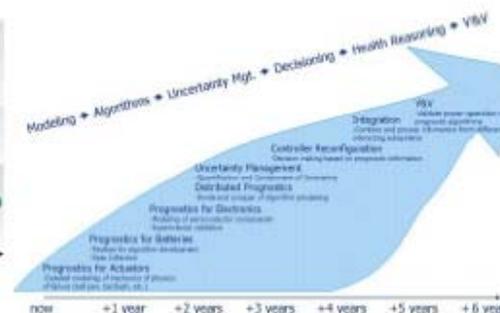
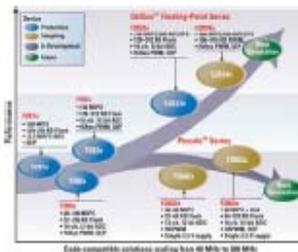
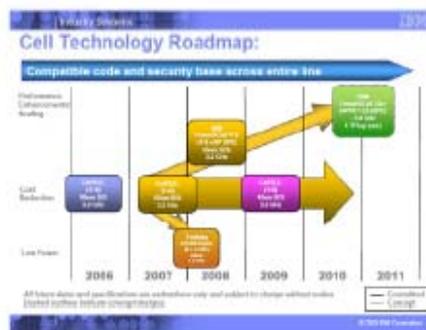
Proposal: Interim Deliverable capturing the status of work, e.g. 'Commercial and regulatory framework light'

Advantage: It provides already some first indications to the outside world and helps T9.5. to fine tune it's methodology for D9.6./D9.7

How to come up with a roll-out master plan

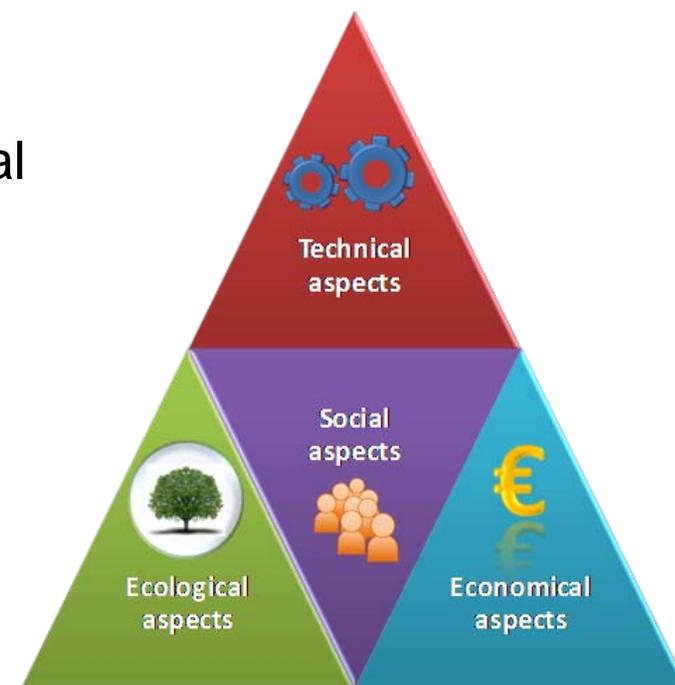
Some brain power already spend on this question in G4V

The Roadmap...



G4V approach

- Covering technical, social, ecological and economical aspects
 - System operation
 - Infrastructure development
 - ICT
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- Two-step approach
 1. Presentation of all key results using a matrix
 2. In-depth analysis of technical and economical aspects



Shortcomings of this approach:

- Focussed on energy sector

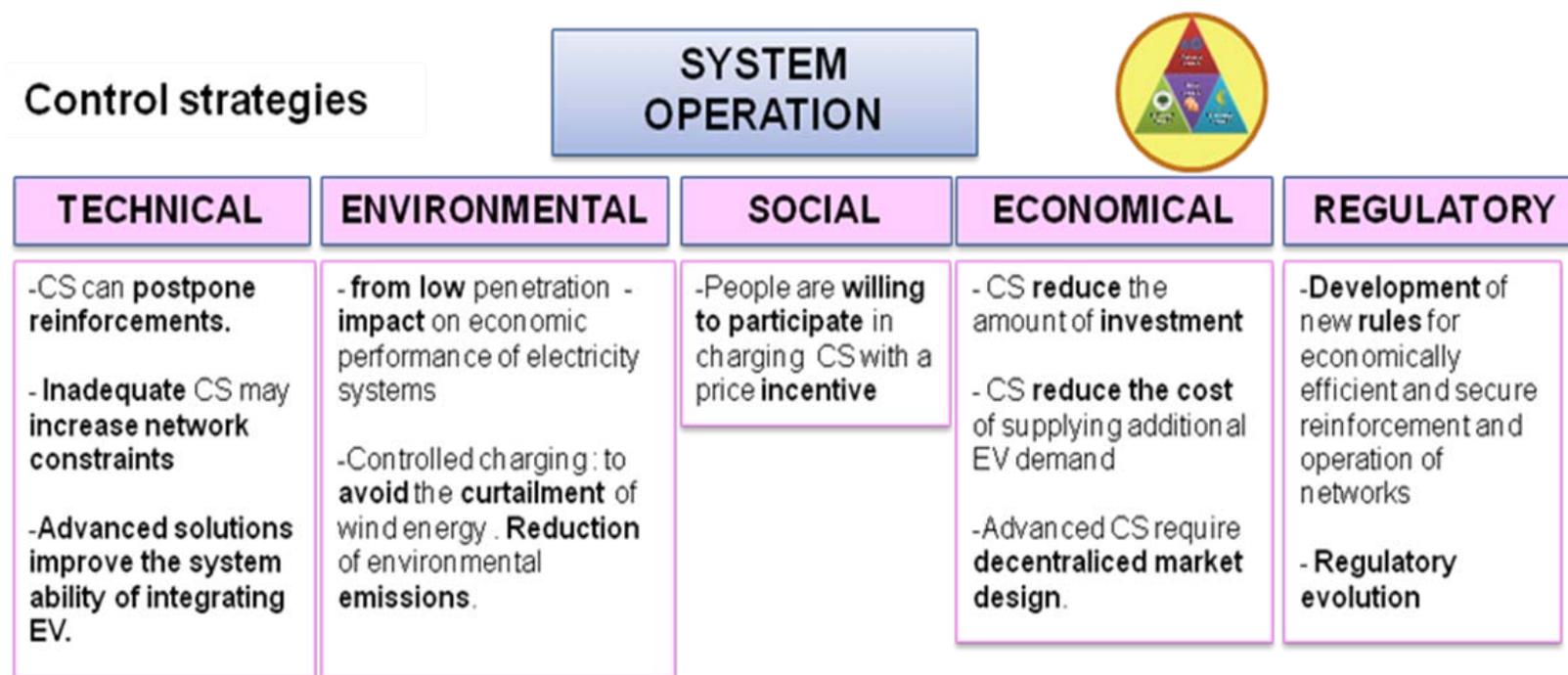
Collection of information created within G4V via Matrix

topic	Technical	Economical	Social	Environmental	Regulation	Recommendation	Further investigations
System operation							
Infrastructure development							
ICTs							

Roadmapping activities in G4V - cont'd II

Recommendations

- Step-by-step recommendations for system and ICT



Charging Strategies should be **flexible** and **adjustable** to the market penetration of EVs. The **charging** of EVs should be **controlled** in such a way to include the needs and constraints relevant for the DSOs. A DSO needs to have a detailed overview of the circumstances and the possibility to control of the system.

To be discussed:

- Development of a commercial and regulatory framework – align with T9.2./T9.3.
- European demand scenarios – part of the roadmap
- Timing and available inputs for interim deliverable
- Review of overall timeline for T9.5.

Thank you
for your attention.

