



DEMAND SIDE INNOVATION

Developing effective policies for economic
growth by stimulating consumer demand
for innovation

Innovation Demand-Side Monitoring System

Summary of the workshop on clean vehicles

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Introduction – Background to the project

Innovation Demand-Side Monitoring System is a three-years project initiated by the European Commission in 2014. It aims to develop a methodology toolkit for the EU, national and regional policy makers on how to implement and measure the impact of demand-side policies. This would then provide better incentives for research and development and thereby enhance economic growth and international competitiveness.

Demand-side innovation policies support the placing of new innovative goods and services on the market. They add an innovation-pull to innovation-push policy measures such as funding for research and development. Given that demand-side innovation policies are public policy measures funded by the taxpayer, public authorities launching innovation demand-side policy measures wish to ensure that the measures achieve the desired objective.

The project resulted from Call for Tender No 276/PP/ENT/CIP/13/C/N03C041 – ‘Innovation Demand-side Monitoring System’. The project was awarded to a Consortium led by EY and made up of SQW, The Ifo Institute, Cambridge Economics and Capgemini Consulting.

A series of workshops and a conference are organised to disseminate knowledge on the practical application of demand-side innovation policy measures. The purpose of these workshops is to extract good practices and improve the know-how on the practical application of demand-side policies which could be used to refine the Methodology Toolbox.

The third workshop of this series took place on October 2nd 2015 in Riga, Latvia and was centred around demand-side policies for products and/or services in the Clean Vehicles industry.

Demand-Side innovation: Clean Vehicles, the workshop

The Chairman, Arjen Markus, Managing Consultant at Capgemini Consulting, welcomed the participants and introduced the notion of demand-side innovation policies as a group of measures that affect the demand for innovative goods and services and related market conditions as well as actions to integrate customer preferences closer into innovation activities.

Arjen Markus introduced **Senan McGrath, Chief Technology Officer** at ESB eCars from Ireland. ESB established ESB ecars in 2010 to roll out the

charging infrastructure for electric cars and vehicles across Ireland and to support the introduction and demand for electric cars nationally. From this perspective, Senan McGrath structured his presentation around four elements of the electromobility ecosystem, being Infrastructure, Education/PR, Supply of EV's and Incentives. From the beginning of the presentation onwards, he stressed that to increase the adoption of electric vehicles, a mix of policies addressing all four elements in a delicate balance is required.

Regarding the infrastructure, different countries in Europe have different EV charging market models in place. In Portugal for instance, a licence is needed for charge points (known as the separated infrastructure model), while in the United Kingdom anyone can install a charge point (spot operated owned model). This spot operated owned model creates problems for interoperability due to a lack of standardization. Mr. McGrath also stressed the importance of regulation, making it for instance illegal for anyone other than an electronic vehicle to park in a spot designated for charging EV's.

Education and PR are crucial in stimulating the adoption of clean vehicles as well: building awareness and stakeholder management is key. Another key customer issue is still the purchase price of electric vehicles. This can only be solved by implementing financial instruments in order to reducing price for EV's or increase the price of cars with an internal combustion engine. Taking the example of the adoption of new consumer technologies in the United States, Mr. McGrath stressed that the adoption of clean vehicles is not a quick win.

When designing policy instruments to foster innovation, policy makers need to consider the whole innovation ecosystem instead of separate policy initiatives and instruments. It is obvious that financial incentives are important, but they need to be supported by information and awareness campaigns, regulation, and investments into complementary infrastructure. Money helps, but it is not the whole answer. The real need is for a **stable ecosystem**, because industry does not like changing its approach, with incentives and a multi faceted approach. A key political requirement is leadership over time and coordination among all the different players. Specialized agencies, such as the United Kingdom office for low emission vehicles, are needed at governmental level to provide this coordination and leadership.

The next speaker, **Peter Wiederkehr**, senior policy advisor at the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water

Management, presented the **Austrian Klimaaktiv Mobil program** and the role of demand-side innovation policies. Mr. Wiederkehr underlined the importance of demand-side policies, because we tend to talk mostly about the supply-side only. Influencing the demand-side is difficult, and influencing innovation is difficult as well, because we do not know exactly what triggers innovation and how to organize it. The border between supply side and demand side is sometimes a bit blurry, which is illustrated by the 7 keys to sustainable mobility in the Klimaaktiv mobil program:

- Clean technology and fuels, alternative cars and electro-mobility
- Attractive rail, bus and public transport networks
- Better networks for human powered mobility (walking and cycling)
- Intelligent Mobility Management: manage demand, efficiency planning and logistics, modal shift, car-sharing, eco-driving, awareness-raising
- Getting prices right: internalization & incentives
- Integration of transport, health, environment, land use and planning
- Co-operation of actors.

Klimaaktiv mobil is not solely focused on electric vehicles, but is taking a broader approach to motivate and financially support cities, municipalities and regions, companies, fleet operators, tourism operators, schools and youth groups to implement mobility projects for reducing CO2 emissions and air pollution. The program offers technical advice & support, funding, awareness raising & partnerships, ecodriving training and certification. The program exists for over 10 years now, and has achieved major reductions in CO2-emissions. Essential for the success of the program is the continuous renewal and adaptation of the program. The importance of cooperation is stressed. How to motivate and create impact in the regions? Local initiatives are important, but this requires coordination and cooperation. Another success factor mentioned was the integrated approach: it is not only about clean vehicles, but how to integrate the several mobility modalities.

The **expert panel discussion** with Ashley Abraham (Electromobility Consultant at Digital City Ltd), Neils Kalnins (Co-founder Blue Shock Bike) and Ilze Pruse (Director Climate Change at the Latvian Ministry of Environmental Protection and Regional Development) and the participants of the workshop reflected on the presented cases. The discussion was kick-started by Arjen Markus, who stated: "We do not need policies for innovation, the market will sort it out themselves". The panel did not reach consensus on this statement, as on the one side it was argued that

a framework and steering is crucial, while others argued that “the market is King”. There is a role for governments, mostly on the education and awareness part. Clean mobility is mostly a technology business. Another comment referred to the role of Europe: the Commission has to create a framework and set standards. This triggered a participant to comment: “do not forget that we have many differences within Europe. The Commission cannot take into account all regional differences, and we have to regionalize programs, as has been done in Austria. Programs must be grounded on territorial realities.”.

Concerning the current state of play of clean vehicles in Latvia, it was argued that Latvia is missing an overall framework or program in this area. Some minor projects were carried out successfully, but a holistic approach is missing, that may unify these initiatives. Cooperation is also key in this regard, which is sometimes lacking nowadays between the different ministries in Latvia. It was also argued that the adoption of clean vehicles in Latvia is still in its infancy, because there is not really a problem: there are no traffic jams for instance. Dependency on Russian oil was mentioned as being a problem, but it is difficult to make people aware of this. And of course budgetary constraints play a role. A cost-benefit analysis would hardly justify a major initiative in the present conditions. Latvia was contrasted against the situation in Norway, where they could afford it to deploy tax exemptions and other financial incentives to spur the clean vehicles industry. It was argued that Latvia should start with small steps, for instance in terms of education and awareness.

After the panel discussion, the group was split up in three subgroups for the **breakout sessions**. Based on the question - **Which policy measure(s) and instruments have the most potential to stimulate the adoption of clean vehicles?** – several policy instruments and ways to stimulate innovation were discussed. Generalising the experiences discussed, the discussion pointed to a mix of instruments and ways to stimulate innovation:

- Regulation, a mix of restrictive and supportive measures: local zoning, priority lanes, regulation on EV charging places at parkings;
- Green public procurement;
- Dedicate a specific government institution responsible for the EV infrastructure;
- PR, awareness campaigns.

The workshop resulted also in a number of take-aways as **input for other work packages** in the project. Financial incentives are considered

important, but need to be accompanied by other policy instruments, such as information and awareness campaigns and complementary infrastructure. Governments have to think of the whole concept. Incentives are needed, but money will be wasted if there no investments in infrastructure and awareness. The other two take-aways, are rather generic, but considered as important by the participants of this workshop: cooperation and flexibility. Cooperation between different actors involved, between ministries and municipalities, business, NGOs, etc. Flexibility is needed in programs targeted at driving clean mobility, as demonstrated in the Austrian Klimaaktiv Mobil program.