

Transatlantic Workshop on Electric Vehicles and Grid Connectivity Session B: Industrial Policy in Support of Electromobility Main messages

The European Commission representatives explained the industrial policy tools that are employed by European Union in support of clean and energy-efficient vehicles, including the electric vehicles.

For the European Commission, support of clean automotive technologies has been a priority for a long time taking into account the challenges of climate change, oil dependency, air pollution and ensuring competitiveness of the automotive industry. These considerations, which are similar for the US administration, have led to the establishment of emission standards in the EU. In 2010, the Commission proposed a strategy for clean and energy-efficient vehicles which, in addition to obligatory emission standards, pulled together research financing, the guidance of national financial incentives, and international cooperation as well as measures aiming at improving workers' skills. These target all « green » automotive technologies, although a specific block of actions is aimed at electric vehicles which are currently considered as a very promising technology.

Research financing and support for investment is one of the main industrial policy tools. The EU research programmes insist on the pooling of resources and cooperation between different companies as research and investment costs in new technologies such as electric powertrains are very high. The current EU financing for research in clean automotive technologies has the financial envelope of € 0.5 bn − to be matched by private funding. Additional financing comes in a form of the European Investment Bank's loans The US research programs include national labs and 50% cost-shared industry programs. Recent investments by the US include \$1.5B for battery and electric drive component manufacturing facilities − matched by industry.

Current EU research financing covers mostly electric vehicles but in the next years the improvement of the energy efficiency of truck engines and logistics will be equally important aspects. The issue of combining resources is also key for the US administration where the best effects can be achieved if federal and state funding is combined.

Discussions also focused on the role of industrial actors which have to operate in different markets and in different market segments. While the electromobility market is expected to grow significantly over the coming years, companies still need the certainty about the political framework in order to undertake the heavy investments linked to the new technology.

The Valeo representative stressed that both the US and European markets are very important for their operations. Valeo has already been successful in providing components for the $\mathbf{1}^{\text{st}}$ generation of electric vehicles that are available now and it now operates in consortium with other companies in order to work on 2^{nd} generation electric vehicle which should be attractive for consumers by the time government incentives are phased out.

While electrification is mostly associated with light vehicles, there is also a potential for heavy-duty vehicles notably via regenerative braking or continuous power supply. The most promising area being explored by Volvo are vehicles for specific uses such as short-range delivery.

The workshop confirmed the importance of the industrial policy « jump starting » the market for electric vehicles. There are similarities and good degree of consistency between the EU and US approaches, notably with respect to the target of transport decarbonisation and the choice of tools used. Workshop participants stressed the need for the support schemes to remain open to market players regardless of where the company headquarters are situated.

This session proved that the exchange of information and experiences between the US administration and the European Commission, together with the companies operating on both the EU and US markets, on the industrial policy toolbox could be beneficial for both sides.