



Session B: Industrial Policy in Support of Electromobility

Moderator: Keith Hardy (ANL/DOE)

Rapporteur: Thomas Spoormans (EC, DG ENTR)

How will government and industry cooperate to address the technical and economic challenges to volume production of electric vehicles?



Agenda

Presentations

- **Ewelina Daniel**, Policy Officer (**EC, DG ENTR**)
European Industrial Policy Supporting Electromobility
- **Maurizio Maggiore**, Research Programme Officer (**EC, DG RTD-H**)
EU Research Activities in Support of Electric Vehicles
- **Jean-Luc Di Paola-Galloni**, Corporate Vice President, Sustainable Development and External Affairs (**VALEO**)
Integrated Suppliers' Approach to Electromobility
- **Rolf Willkrans**, Director Environmental Affairs (**Volvo Group**)
The Role of Electromobility in Heavy Duty Vehicles

Panel Discussion

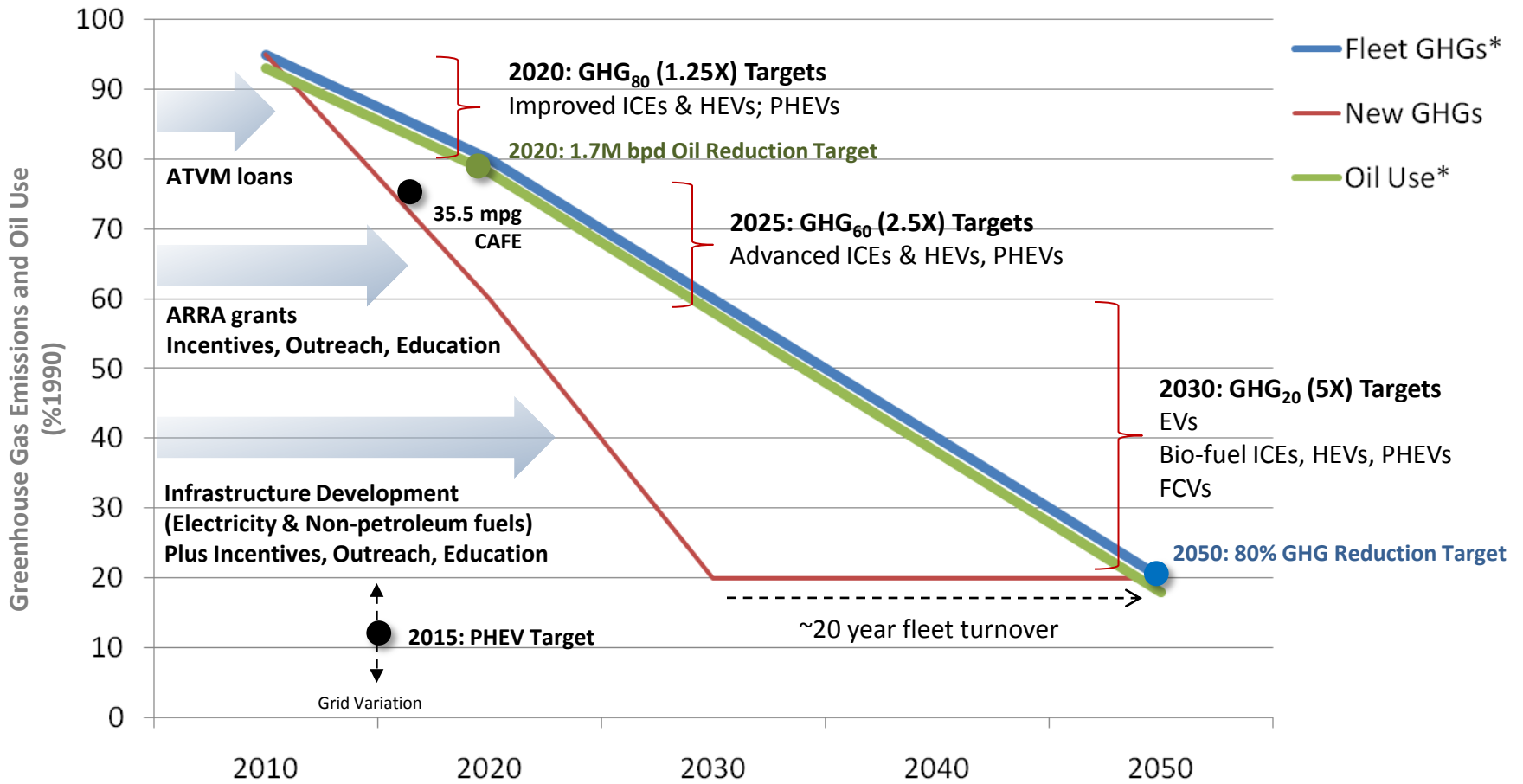


Industrial Policy Questions

- *What are the challenges to volume production of plug-in hybrid and electric vehicles?*
- *What is the government role?*
 - *Regulatory framework*
 - *Codes & Standards*
 - *Incentives*
 - *Infrastructure*
 - *Investments/Subsidies*
- *Are EU and US policies consistent from manufacturer and supplier perspectives?*
- *Are public and private investments adequate to meet the technical challenges and economic risks?*



Aggressive National/International Targets Necessitate Substantial Government Participation



* Reduced VMT is required in addition to new vehicle technology to achieve reductions in fleet GHGs and oil use



Policy Questions/Answers (e.g., US)

- What are the challenges to volume production of plug-in hybrid and electric vehicles?
 - **Technical ... Battery performance, life, cost and manufacturing investment; vehicle affordability**
 - **Political ... Uncertainty in economic environment/recovery rate and continuity of government policy, e.g., petroleum fuel price, initiatives/incentives, capital recovery constraints**
- What is the government role?
 - Regulatory framework – **increase CAFE requirement to 35.5 mpg by 2016**
 - Codes & Standards – **support development and promote harmonization**
 - Incentives – **subsidize purchases; guarantee loans (\$25B) and provide investment tax credits**
 - Infrastructure – **support development of smart grid and utility investments***
 - Investments/Subsidies – **ARRA: \$2.5B vehicle; \$4.2B smart grid (50% government share)**
- Are EU and US policies consistent from manufacturer and supplier perspectives?
- Are public and private investments adequate to meet the technical challenges and economic risks?
TBD ... DOE has obligated battery manufacturing investments to produce half of the batteries required for 1 million plug-in vehicles by 2015; Vehicle Technologies R&D budget over \$300M/yr

* State/regional Public Utilities Commissions must approve passing capital costs on to consumers in the rate structure

