

Electric and Plug-in Hybrid Vehicle environmental and technological evaluation in actual use

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PHEVs and EVs context, drivetrain optimization and vehicle type of use

A wide and complex range of technological choices:

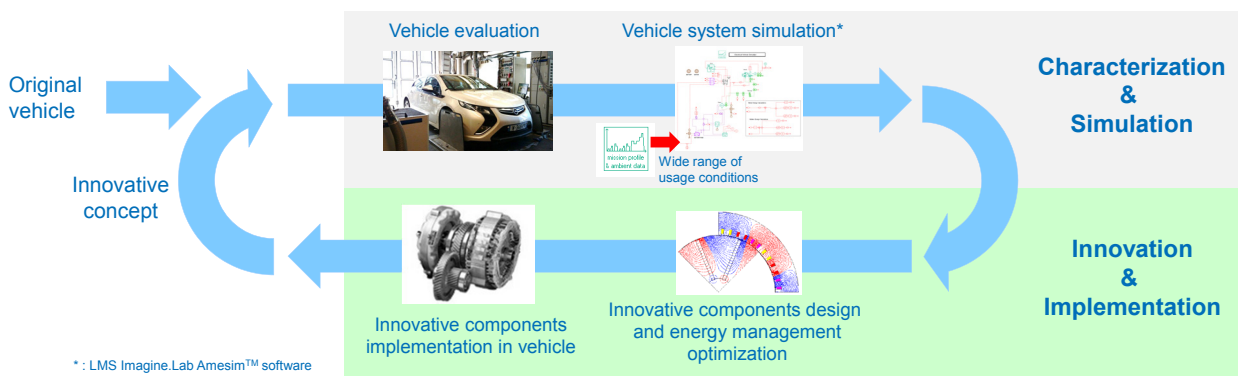
- Batteries (EVs)
- Auxiliaries
- Management
- Architecture (PHEVs)
- Components sizing
- Performances
- Energy management



A great sensibility to the vehicle actual type of use:

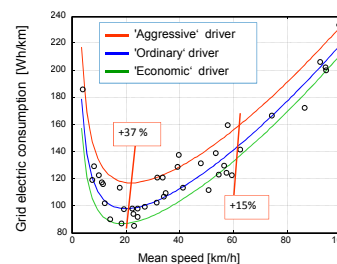
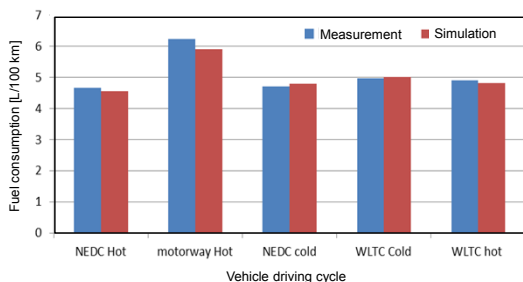
- Type of use (EVs)
- Auxiliaries (A/C, heating)
- Type of use (PHEVs)
- Distance driven between charges

A complete methodology dedicated to PHEVs and EVs evaluation and optimization



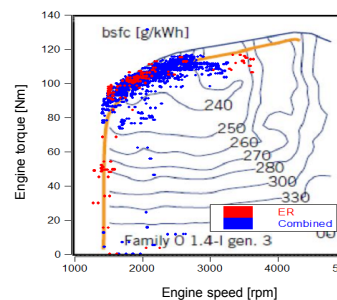
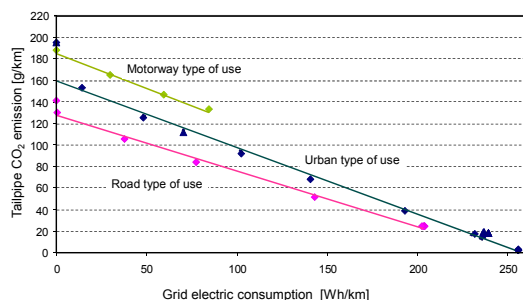
Methodology validation and examples of results obtained on PHEVs and EVs

PHEV simulator validation in charge sustaining mode



Influence of driver's 'aggressiveness' on vehicle energy consumption (Amesim EV simulator)

Influence of energy management and driving distance on vehicle gasoline and electricity consumptions (Amesim PHEV simulator)



PHEV I.C. Engine working area in sustaining mode (IFPEN measurements)