

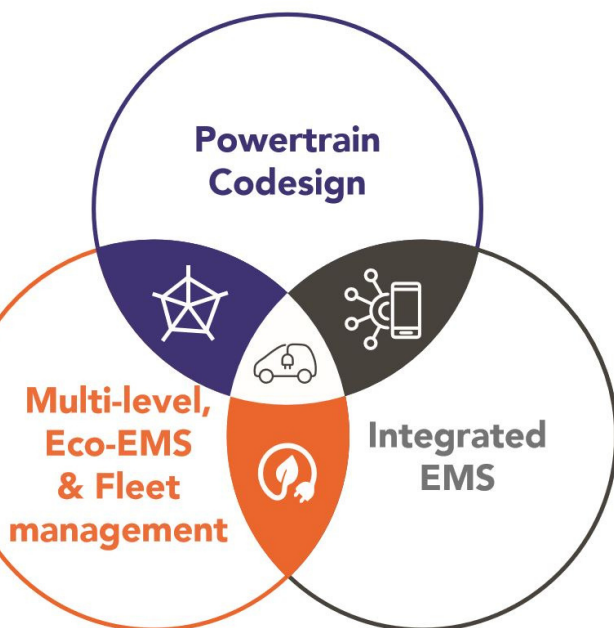
passion for future technologies..

# ELECTRIC & HYBRID POWERTRAINS

EPOWERS is your go to research group in developing clean and energy-efficient vehicles of tomorrow.

EPOWERS offers highly-advanced research, development and testing services for electric and plug-in hybrid vehicles, thanks to its expertise in roller bench and on-road tests, and vehicle fleet monitoring. The cutting-edge lab infrastructure and equipment at our disposal allow a broad range of comprehensive assessments of vehicles, their performances and behaviour. We are also a MOBI Core-Lab within Flanders Make - Driving innovation.

*Let's create tomorrow's vehicles together...*



## Powertrain Codesign Optimization

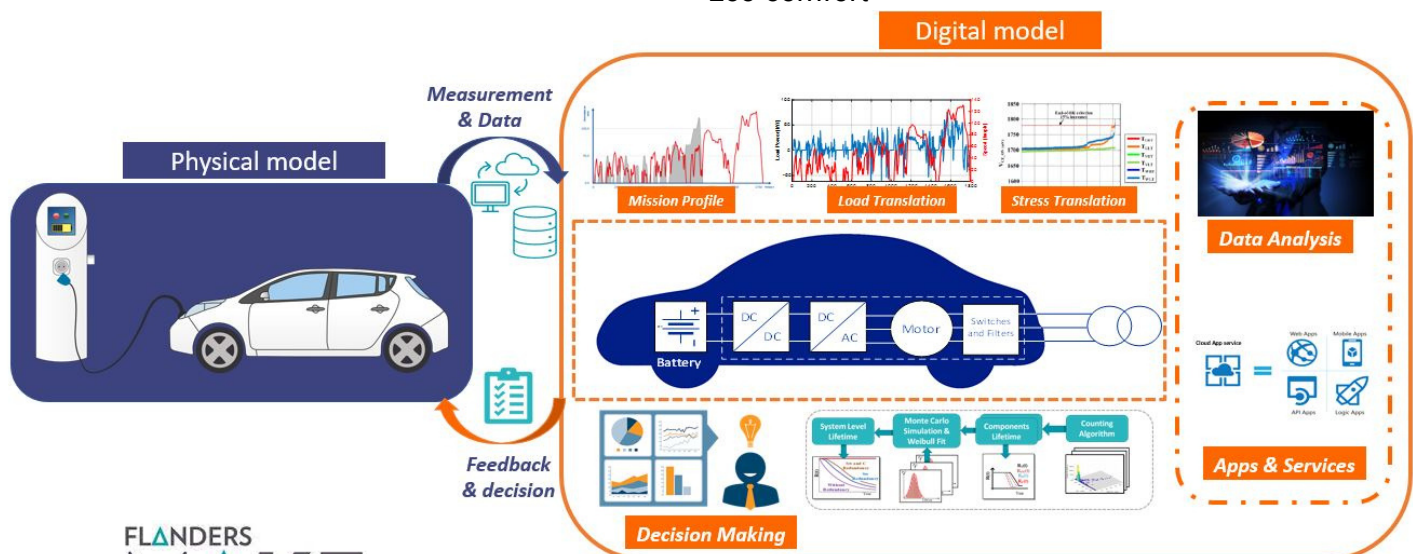
- Virtual simulation platform based on forward/backward facing models
- Modular Scalable Models (ICE, EM, battery, gearbox)
- Hardware-controller coordination = codesign
- SiL / MiL optimization

## Integrated Energy Management System (EMS) for Connected Plug-in/Hybrid/Electric Vehicles

- Rule-based EMS
- Optimization-based EMS
- Learning-based EMS

## Multi-level and Eco-EMS for Connected Plug-in/Hybrid/Electric Vehicles and Fleets

- Full electrification of bus-lines in cities
- Eco-driving
- Eco-charging
- Eco-comfort



FLANDERS  
**MAKE**  
DRIVING INNOVATION IN MANUFACTURING

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