ECOCHAMPS

European COmpetitiveness in Commercial Hybrid and AutoMotive PowertrainS

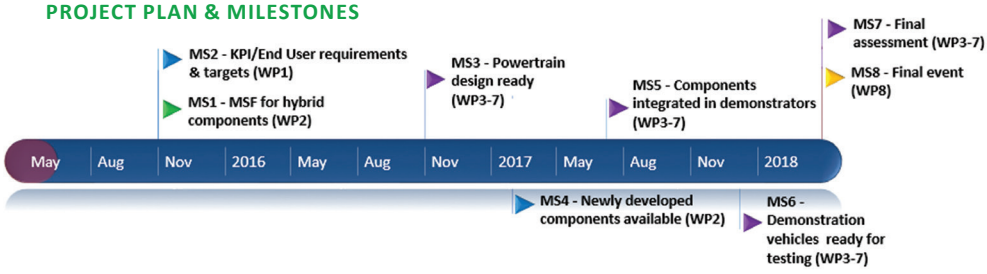
MOTIVATION AND OBJECTIVES

Even though hybrid passenger cars are already in production, their market penetration is still relatively low and limited to certain vehicle classes. To increase user interest in hybrid vehicles, the ECOCHAMPS project aims to extend their functionality while minimising their cost premium.
The overall objective is to achieve efficient, compact, low weight, robust and cost effective hybrid powertrains for both passenger cars and commercial vehicles (buses, medium duty and heavy duty trucks) with increased functionality, improved performance, comfort, functional safety and emission levels below Euro 6 or VI.

The specific technical objectives, main innovations and targeted key results are:

- To devise a modular pre-standard framework (MSF), for the first time, that recommends standards for electric hybrid drivetrain components and auxiliaries for commercial vehicles.
- To develop a set of electric hybrid components for hybrid powertrains.
- To develop optimised drivelines for the selected vehicle classes.
- To demonstrate the key innovations in two light duty and three commercial vehicles at TRL 7.
- To assess the technology development in terms of its efficiency, cost effectiveness, weight and volume.

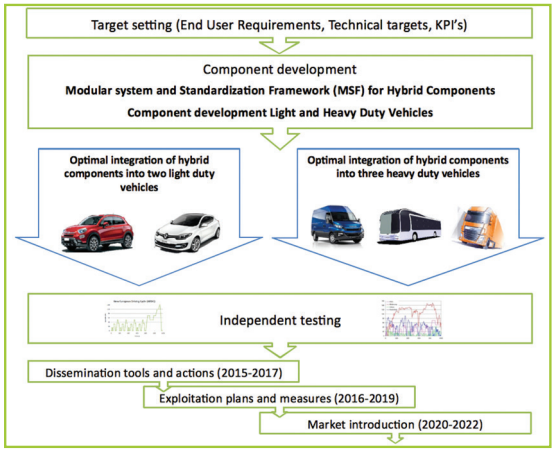
PROJECT PLAN & MILESTONES



TECHNICAL APPROACH

ECOCHAMPS's overall concept, approach and methodology of the work plan, is based on the following logical steps:

- Target setting.
- Modularisation, standardisation and development of hybrid components leading to cost optimisation.
- Design and build up the hybrid drivelines and vehicles.
- Evaluate the demonstration vehicles, underlying hybrid powertrains, components and technologies.
- Prepare the implementation and exploitation of the results and disseminate the findings.



ACHIEVEMENTS

The targeted achievements of ECOCHAMPS are to:

- Improve powertrain efficiency by up to 20% during representative operation.
- Reduce powertrain weight and volume by up to 20%.
- Reduce hybrid vehicles costs, targeting a 10% maximum cost premium.
- ECOCHAMPS will enable a leading European position in hybrid technology. All the vehicles to be developed should be ready for market introduction between 2020 and 2022 and (price-) competitive to the best in-class full hybrid vehicles on the market in 2013.

Budget	28.5 M€	**Funding**	21.1 M€
Duration	36 months	**Start**	May 2015
DG	Research & Innovation	**Contract n°**	653468
Coordinator	Guus Arts, DAF Trucks	**Contact**	guus.arts@daftrucks.com
Partners	26 partners, including CRF, DAF Trucks, Daimler, FPT, IVECO, MAN, Renault and JRC		
Website	www.ecochamps.eu		