## VISION

**CEVOLVER** takes a user-centric approach for optimising the development and operation of electric vehicles.

The project exploits the opportunities of novel connected functions in combination with right-sized components.

## MAIN OBJECTIVES

**I. Ensure a leap forward in user's confidence, functionalities and energy efficiency of future EVs**

- Realise novel connected functionalities as reliable range prediction, Eco-routing and Eco-driving integrated together with Assured & Fast Charging;
- Achieve significant energy savings and enable long(er) distance trips with minimal additional travel time due to charging;
- Leverage user convenience and user's confidence and largely increase the trust in future EVs.

**II. Ensure the affordability of future electric vehicles by a user centric development approach**

- Improve affordability and consider actual vehicle usage patterns to verify the design specification of the components;
- Refine or derive methodologies for supporting electric vehicle(subsystem) simulation models;
- Provide innovative solutions to increase sales volumes and to open up further cost reductions in mass production.

**III. Validation of advanced components and systems, novel connected control strategies and functionalities**

- Implement / integrate selected components and systems, the connected control strategies and functionalities into an early assessment prototyping vehicles (BOSCH) & demonstrators (CRF, FORD).

**IV. Assessment of the impact of the technical advancements of CEVOLVER and their applicability in different EV types and vehicle classes**

- Assess the impact of CEVOLVER innovations in terms of energy saving potential, user experience and market potential (incl. cost reduction in mass production);
- Prove the feasibility of ensuring durability and lifetime of specific vehicle components through use of optimal connected control strategies.

### User centric approach

Driver/user specifications, preferences and behaviour

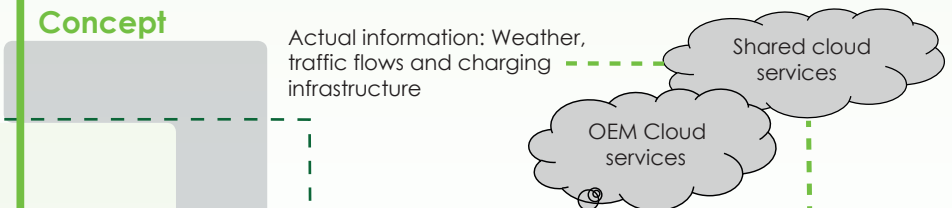
User centric development approach

Optimal EV architecture per vehicle class and application (use cases)

Selection, development, rightsizing and implementation of innovative hardware components and systems.

Development and implementation of advanced control strategies:
- Enabling optimal thermal management
- Connected control strategies

### Concept



## PROJECTS PARTNERS

FEV Europe GmbH
www.fev.com

Robert Bosch GmbH - Germany
www.bosch.de
Robert Bosch AG - Austria
www.bosch.at

Ford-Werke GmbH
www.ford.de

IFP Energies Nouvelles
www.ifpenergiesnouvelles.com

Vrije Universiteit Brussel
mobi.vub.ac.be

RWTH Aachen University
Institute for Combustion Engines
Mechatronic Systems for Combustion Engines
www.rwth-aachen.de

Uniresearch B.V.
www.uniresearch.com

i2m Unternehmensentwicklung GmbH
www.i2m.at

Centre Richerche Fiat
www.crf.it

## FACTS AND FIGURES

**CEVOLVER** is a research and innovation project to develop battery-electric vehicle that are usable for comfortable long day trips with an affordable battery.

**CEVOLVER** is a 3,5 year EU-funded project launched in November 2018 and a part of Horizon 2020's Research and Innovation action programme.

| | |
|---|---|
| **Start date** | 1 November 2018 |
| **Duration** | 42 months |
| **EC Funding** | 5 M€ |

11 Partners from 6 countries in Europe


**CONTACT**

**Coordinator**
FEV Europe GmbH
Mr Christof Schernus
schernus@fev.com
Mr Jens Tang
tang@fev.com

**Project Manager**
Uniresearch B.V.
Ms Annemarie Mahieu
a.mahieu@uniresearch.com



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824295


# CEVOLVER

Connected Electric Vehicle Optimised for Life, Value, Efficiency and Range

**A leap forward in user's confidence, functionalities and energy efficiency of Future Electric Vehicles**

**www.cevolver.eu**