



## Launching the Fuel Cell and Hydrogen Joint Technology Initiative

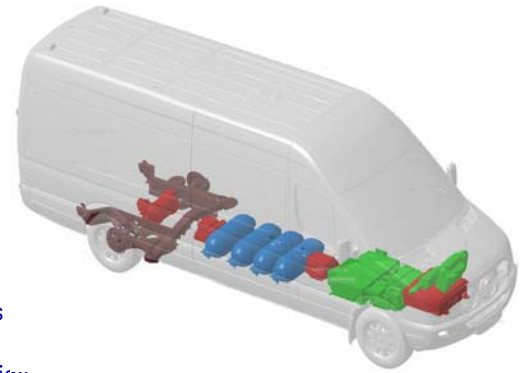


# HySYS

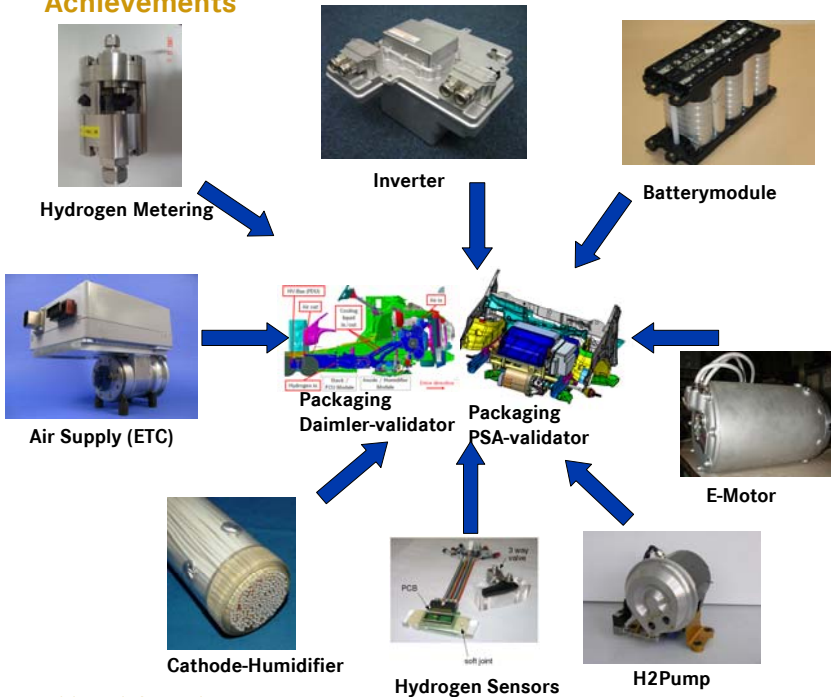
## Fuel Cell Hybrid System Component Development

### Objectives

- Improvement of fuel cell technology for market readiness (functionality, reliability, cost, customer acceptance)
- Focus on components with real research needs and high cost reduction potential
- Optimisation of system architecture for low energy consumption and high performance
- Optimisation of energy management
- Development of low cost mass market FC- & Drive Train components.
- Validation of component and system performance on two FC Vehicles
- Standardisation as very important for cost reduction and European competitiveness
- Identification of common architecture and modular design
- Focus is on FC systems, considering also components that can be used in ICE Hybrids
- Synergies with ICE-Hybrids



### Achievements



### Expected final results:

- Low cost automotive electrical turbochargers for air supply with high efficiency and high dynamics
- Low cost humidifiers with high packaging density
- Low cost hydrogen sensors for automotive use
- Effective low cost hydrogen supply line
- High efficient, high power density drive train
- Low cost high power Li-Ion batteries
- Enhanced FC-drive train efficiency
- Two FC-vehicles to validate the achieved results and visualize the progress

### Additional information

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### Project partners:

Daimler, AVL, Bosch, CNM, Continental Temic, CRF, ENEA, EPFL, Fischer Precise, Fumatech, RWTH Aachen, Magna Steyr, MicroChemical, PSA, Rivoira, Saft, Selin Sistemi, ATB, TNO, Volvo, VW, University of Montpellier, University of Maribor, Renault, Fachhochschule Esslingen, NuCellSys, Eldor

