



Hydrogen Europe: European Hydrogen & Fuel cell Project Database

Project AUTO-STACK CORE

Automotive Fuel Cell Stack Cluster Initiative for Europe II

Several automotive OEMs have announced plans for the commercialization of fuel cell vehicles from 2014/15. Industrial partnerships such as H2-Mobility in Germany, the UK or Hydrogen Highway in Scandinavia are working to establish the required initial H2- infrastructure. While this is a clear signal for the functional readiness of fuel cell technology in automotive application, durability, efficiency, power density and cost of the fuel cell stack need further advancements and in some cases substantial improvement in years to come. Industrial fuel cell development in Europe lacks both, state-of-the-art stack products and competitive stack suppliers for automotive application. Only a few European component suppliers can deliver mature state-of-the-art stack components (MEA, bipolar plates) with the requested specifications. "Auto-Stack Core" establishes a coalition with the objective to develop best-of-its-class automotive stack hardware with superior power density and performance while meeting commercial target cost. The project consortium combines the collective expertise of automotive OEMs, component suppliers, system integrators and research institutes and thus removes critical disconnects between stakeholders. The technical concept is based on the Auto-Stack assessments which were carried out under the FCH JU Grant Agreement No. 245 142 and reflects the system requirements of major OEMs. It suggests a platform concept to substantially improve economies of scale and reduce critical investment cost for individual OEMs by sharing the same stack hardware for different vehicles and vehicle categories as well as selected other industrial applications thus addressing one of the most critical challenges of fuel cell commercialization. Presence of key industrial players in the project and strict orientation towards industrial requirements shall facilitate commercial utilization of the project results. The project is of strategic importance for European competitiveness.

Project Information

Type of project : Research

Timing : 01/05/2013 > 31/07/2017

Project website: <http://autostack.zsw-bw.de/index.php?id=1&L=1>

Project Budget : 14.673.625 €

Funding

European Union through FCH JU: Grant agreement 325335 - [CORDIS link](#)

Project partners

Coordinator :

ZSW - Zentrum für Sonnenenergie- und Wasserstoffforschung Baden-Württemberg

Partners :

BMW AG

CEA - Commissariat à l'énergie atomique et aux énergies alternatives

Fraunhofer ICT-IMM Fraunhofer Institute for Chemical Technology ICT, Branch IMM

PSI - Paul Scherrer Institut

Powercell AB Sweden

Symbio

Volvo Group

BELENOS CLEAN POWER HOLDING AG

REINZ-DICHTUNGS GMBH

JRC - JOINT RESEARCH CENTRE- EUROPEAN COMMISSION

FREUDENBERG FCCT SE & CO. KG

SOLVICORE GMBH & CO KG

VOLKSWAGEN AG

FREUDENBERG VLIESTOFFE KG

SWISSHYDROGEN SA

Sub project(s)

Sub project 1

Country: Germany

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Sub project categories

Research

Project Id: 915

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