Hydrogen Europe:
European Hydrogen & Fuel cell Project Database

Project FITUP

Fuel cell field test demonstration of economic and environmental viability for portable generators, backup and UPS power system applications

A total of 19 market-ready fuel cell systems from 2 suppliers (ElectroPS, FutureE) will be installed as UPS/ backup power sources in selected sites across the EU. Real-world customers from the telecommunications and hotel industry will utilize these fuel cell-based systems, with power levels in the 1-10kW range, in their sites. These units will demonstrate a level of technical performance (start-up time, reliability, durability, number of cycles) that qualifies them for market entry, thereby accelerating the commercialisation of this technology in Europe and elsewhere. The demonstration project will involve the benchmarking of units from both fuel cell suppliers according to a test protocol to be developed within the project. It will employ this test protocol to conduct extensive tests in field trials in sites selected by final users in Italy, Switzerland and Turkey. The performance will be logged and analysed to draw conclusions regarding commercial viability and degree to which they meet customer requirements, as well as suggesting areas for improvement. A lifecycle cost analysis using data from the project will be carried out to determine economic value proposition over incumbent technologies such as batteries or diesel generators. The system producers use the results to obtain valuable first hand feedback from customers, optimise their systems as needed, and demonstrate commercial viability. On the other hand, final users from the telecommunications and hotel industry will experience first-hand the advantages of fuel cells for their applications under real world conditions. The optimisation potential is expected from the production process itself, from the installation of a significant amount of fuel cell systems and from the testing. The project will also develop a certification procedure valid in the EU27 under the lead of TÜV Süd.

Project Information

Type of project : Demonstration
Timing : 01/11/2010 > 30/04/2014
Project website: http://fitup.engr.bilgi.edu.tr/
Project Budget : 5.289.900 €

Funding

European Union through FCH JU: **Grant agreement 256766 - CORDIS link**

Project partners

Coordinator :

ELECTRO POWER SYSTEMS

HELIOCENTRIS FUEL CELL SOLUTIONS GMBH
PARCO SCIENTIFICO E TECNOLOGICO PER L'AMBIENTE - ENVIRONMENT PARK SPA
FACHHOCHSCHULE ZENTRALSCHWEIZ - HOCHSCHULE LUZERN
UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION
TUV SUD INDUSTRIE SERVICE GmbH
Swisscom (Schweiz) AG
WIND TELECOMUNICAZIONI SPA
Kanton Nidwalden
Kanton Luzern
UNIVERSITA DEGLI STUDI DI ROMA TOR VERGATA
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Sub project(s)

Sub project 1

Country: Italy
Address:
VIA LIVORNO 60 10144 TORINO
Sub project categories
Demonstration

Project Id: 969
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