Hydrogen Europe:
European Hydrogen & Fuel cell Project Database

Project FCpoweredRBS

Demonstration Project for Power Supply to Telecom Stations through FC technology

FC and H2 may represent an enabling technology for a wider diffusion of Radio Base Station “energized” by renewable energy sources. While the expected higher energy efficiency already has an attractive potential for these applications, the energy storage potential of H2 (either locally produced or stored in bottles) is even more interesting as it could extend significantly the number of hours of unattended operation which very much determines the overall energy cost for these installation. This is an instrumental feature of H2 and FC which could favour the further diffusion of mobile applications in remote sites. To clearly demonstrate this potential a minimum of 17 sites of really operating off-grid Radio Base Stations will be equipped with an integrated power generation system using Fuel Cell technology and H2 and tested for a significant period. This very large demonstration program will be used to assess the readiness of available technological solution to make the potential viable and demonstrate the industrial readiness of the fuel cell technology in this early market. 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 commercialization of this technology in Europe and elsewhere. The RBSPoweredFCH2 Project consortium integrates different EU FC and H2 related technology maker with a market leader for Telecom Systems and with R&D institution. This peculiar opportunity is also fundamental to pursue a bottom-up approach which allows to modify the energy requirements and load profile of the energy utilization to fit in an optimum way the performances expected for the Fuel Cell system. The demonstration project will involve the benchmarking of different technical configurations for fuel cells integrated with other local Renewable Energy sources (mainly PV but also wind). One of the key factor for this off-grid application market

Project Information

Type of project : Demonstration
Timing : 01/01/2012 > 31/12/2015
Project website: http://www.fcpoweredrbs.eu
Project Budget : 10.591.649 €

Funding

European Union through FCH JU: **Grant agreement 278921 - CORDIS link**

Project partners

Coordinator :
ERICSSON TELECOMUNICAZIONI
Partners :
Ballard Power System Europe AS
GREENHYDROGEN DK APS
MES SA
JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION
UNIVERSITA DEGLI STUDI DI ROMA TOR VERGATA

Sub project(s)

Sub project 1

Country: Italy
Address:
VIA ANAGNINA 203 00118 Roma
Sub project categories
Demonstration

Project Id: 965
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