



Hydrogen Europe: European Hydrogen & Fuel cell Project Database

Project High V.LO-City

Cities speeding up the integration of hydrogen buses in public fleets

Several European bus manufacturers consider the hybrid fuel cell (FCH) bus as the most promising technology to facilitate the decarbonisation of public transport. By leveraging the experiences of past fuel cell bus projects, implementing technical improvements that increase efficiency and reduce costs of FCH buses, as well as introducing a modular approach to hydrogen refuelling infrastructure build-up, the High V(Flanders).L(Liguria) O(Scotland)-City project aims at significantly increasing the “velocity” of integrating these buses on a larger scale in European bus operations. • The project will address the following key issues: Increase energy efficiency of the buses and reduce cost of ownership: o hydrogen consumption down to 7–9 kg H₂/100km o integrating latest drive train and battery technologies o availability of 90% without the need of permanent support o >12.000 hours warranty and decreased additional warranty cost o increase lifetime of key components as fuel cells and batteries. o investment cost <1,3 million euro • Reduce the cost of hydrogen supply: o Liguria: linking with renewable hydrogen sources o Antwerp: using by-product hydrogen from industry o Aberdeen: making use of an existing hydrogen production and distribution mechanisms and eventually Scotland’s extensive wind energy resources • Consolidate past, current and future fuel cell bus demonstration activities by creating an active dissemination network of Hydrogen Bus Centres of Excellence in collaboration with the Hydrogen Bus Alliance, Global Hydrogen Bus Platform, CHIC Dissemination task force and JTI hydrogen bus demonstration projects. More specifically High V.LO City will: o Building on the experience of Van Hool the USA (21 buses 2005-2010) and Oslo (5 buses 2011) o Link Liguria, Antwerp, and Aberdeen, with already existing activities in United Kingdom (London), the Netherlands (Amsterdam and Arnhem), Germany (Cologne, Hamburg, Berlin), Spain (Madrid, Barcelona) and Italy (Bolzano and Milano).

Project Information

Type of project : Demonstration

Timing : 01/01/2012 > 31/12/2019

Project website: <http://highvlocity.eu/>

Project Budget : 29.243.442 €

Funding

European Union through FCH JU: Grant agreement 278192 - [CORDIS link](#)

Project partners

Coordinator :[Van Hool NV](#)**Partners :**[Ballard Power System Europe A/S \(Previously Dantherm\)](#)[WaterstofNet vzw](#)[University of Birmingham](#)

RIVIERA TRASPORTI SPA

SOLVAY SA

Vlaamse Vervoersmaatschappij De Lijn

HYDROGEN, FUEL CELLS AND ELECTRO-MOBILITY IN EUROPEAN REGIONS

REGIONE LIGURIA

FIT CONSULTING SRL

ABERDEEN CITY COUNCIL*

BALLAST NEDAM INTERNATIONAL PRODUCT MANAGEMENT B.V.

PITPOINT.CNG BV

Sub project(s)**Sub project 1****Country:** Belgium**Address:**

BERNARD VAN HOOL STRAAT 58 2500 LIER KONINGSHOOIKT

Sub project categories

Demonstration

Project Id: 987

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