



# Hydrogen Europe: European Hydrogen & Fuel cell Project Database

## Project Asterix3

Assessment of SOFC CHP systems build on the TEchnology of htceRamIX 3

The Asterix project consortium was initiated as a privately financed initiative in 2005 between EIFER/EDF, Dantherm, Danfoss and HTceramix. The objective of the collaboration was to evaluate HTceramix's SOFC technology in perspective of development of a residential micro-CHP application with a strong and well defined market focus. The project has achieved its goals in providing a serious evaluation of the feasibility of fuel cell based micro CHP. The viability of the technology has been validated and a proof of concept, for most aspects of the system, has been developed and tested. The CHP market segment we are targeting, as well as the next steps towards a full Proof of Concept system has been clearly defined: The main objectives of this project are: • Improving lifetime, reliability and robustness of the overall system • Improve component quality • Increase robustness and tolerance to thermal cycling • Develop and integrate fully automated control of the system • Reduce cost and volume of the system • Increase thermal and electrical efficiency Achieving these objectives will enable us to demonstrate a residential CHP concept fulfilling market requirements, and we can start working on the next step towards commercialization; validation of fuel cell system readiness, field trials and preparation for scale production. The Asterix consortium cover the entire value chain from R&D over stack core technology (HTceramics), systems integration (Dantherm) and heat management (Danfoss) to market access (via Eifer). Each partner brings a high level of expertise and specific competencies to the project. With the recent involvement of CNR-ITAE in the consortium, we have now added the complementary competences to our consortium, which we are sure, can bring us successfully through the next phases towards market introduction. All the partners in the project have extensive experience in working in nationally or EU funded consortia projects.

## Project Information

**Type of project :** Research

**Timing :** 01/01/2011 > 31/12/2014

**Project Budget :** 3.096.890 €

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## Funding

European Union through FCH JU: [Grant agreement 256764 - CORDIS link](#)

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## Project partners

**Coordinator :**

[Ballard Power System Europe A/S \(Previously Dantherm\)](#)

**Partners :**

[Asterix3](#)

[CNR - Consiglio Nazionale delle Ricerche](#)

[HTceramix SA](#)

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[Sub project\(s\)](#)

**Sub project 1**

**Country:** Denmark

**Address:**

MAJSMARKEN 1 9500 HOBRO

**Sub project categories**

Research

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Project Id: 913

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