INNO-SOFC

Project ID: 671403
Funded under: H2020-EU.3.3.8.1.

Development of innovative 50 kW SOFC system and related value chain

From 2015-09-01 to 2019-10-31, ongoing project

Project details

<table>
<thead>
<tr>
<th>Total cost:</th>
<th>EUR 3 998 081,25</th>
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<tbody>
<tr>
<td>EU contribution:</td>
<td>EUR 3 998 081,25</td>
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<tr>
<td>Coordinated in:</td>
<td>Finland</td>
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<th>Topic(s):</th>
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<tr>
<td>FCH-02.5-2014 - Innovative fuel cell systems at intermediate power range for distributed combined heat and power generation</td>
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<th>Funding scheme:</th>
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<tr>
<td>FCH2-RIA - Research and Innovation action</td>
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Objective

INNO-SOFC project combines leading European SOFC technology companies and research centres to collaborate and form required phases in the SOFC value chain. Within this project a next generation 50 kW SOFC system together with its key components will be developed, manufactured, and validated. This system includes many significant improvements compared to current State of the Art, leading to 30000 hours operating time, 4000 €/kW system costs, 60% electrical efficiency, and 85% total efficiency, which are required for large-scale commercialization of stationary fuel cells. Efficiency, performance, and lifetime of the system and its key components will be validated according to IEC standards in conditions that are relevant for end-users. Proof of reliability and durability of the system will be achieved in 3000 hours demonstration together with 10000 hours stack validation runs.

The project is based on the products of industrial partners (Convion, EnergyMatters, Elcogen, and ElringKlinger) and motivated by their interest to further improve their products and consolidate an efficient value chain by collaboration. Industrial partners are operating at different phases of the value chain and are not therefore competing against each other, which enables an efficient collaboration and knowledge sharing within the project. Within this approach, whole system and its components will be optimized comprehensively to fulfil and exceed end-users' requirements. Research centres (VTT, Jülich, and ENEA) support these companies to develop, experimentally validate and demonstrate their products.

Effective exploitation and dissemination of resulting improved products, services, and know-how is a natural purpose of each partner and these actions are boosted by this project. This makes project results available also for other parties and increases competitiveness of European fuel cell industry.

Related information

Report Summaries

Periodic Reporting for period 1 - INNO-SOFC (Development of innovative 50 kW SOFC system and related value chain)
Coordinator

Teknologian tutkimuskeskus VTT Oy
VUORIMIEHENTIE 3
02150 Espoo
Finland

EU contribution: EUR 560
263,75

See on map

Activity type: Research Organisations
Contact the organisation

Participants

ELCOGEN OY
NIITTYVILLANKUJA 4
01510 VANTAA
Finland

EU contribution: EUR 1 099
937,50

See on map

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

CONVION OY
TEKNIKANTIE 12
02150 ESPOO
Finland

EU contribution: EUR 1 201 875

See on map

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

ELRINGKLINGER AG
MAX EYTH STRASSE 2
72581 DETTINGEN AN DER ERMS
Germany

EU contribution: EUR 487
656,25

See on map

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

FORSCHUNGSZENTRUM JULICH GMBH
WILHELM JOHNEN STRASSE
52428 JULICH
Germany

EU contribution: EUR 184 375

See on map

Activity type: Research Organisations
Contact the organisation
AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE

LUNGOTEVERE GRANDE AMMIRAGLIO THAON DI REVEL 76
000196 ROMA
Italy
See on map

**Activity type:** Research Organisations
Contact the organisation

ENERGY MATTERS BV
PRINCENHOF PARK 10
3972 NG DRIEBERGEN RIJSENBURG
Netherlands
See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

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