GridEye agent-based distributed control for Home Energy Management System

Fact Sheet

Project Information

GEHEMS
Grant agreement ID: 884291

Funded under
EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

DOI
10.3030/884291

Project terminated on 31 December 2022

Total cost
€ 191 149,44

EU contribution
€ 191 149,44

Coordinated by
DEPSYS SA
Switzerland

Start date
1 May 2021

End date
30 April 2023

Project description

Saving energy at home, the smart way

Smart homes can increase energy efficiency in the environments of electrical distribution systems and smart grids. Making this system work is a top priority for the EU, which is striving to increase the penetration of renewable energy sources in power systems. However, electrical distribution systems and smart grids are developing independently from each other and end-customers in electrical distribution systems do not have an active role. The EU-funded GEHEMS project will develop a two-level control approach to narrow this gap. As such, each user is considered an agent that can manage electricity consumption in addition to deciding about its own available renewable energy resources and energy storage devices. For instance, the project will enable a low-level control model that can make an appliance
start when needed and at low-cost time intervals. It will also include a high-level control model that will plan for the activation of appliances for the next day.

**Fields of science**

- **engineering and technology**  >  **environmental engineering**  >  **energy and fuels**  >  **renewable energy**
- **social sciences**  >  **sociology**  >  **industrial relations**  >  **automation**
- **natural sciences**  >  **computer and information sciences**
- **engineering and technology**  >  **electrical engineering, electronic engineering, information engineering**  >  **electronic engineering**  >  **control systems**  >  **home automation**

**Keywords**

- Smart Grids
- Renewable Energies
- Electrical Grids
- Home Energy Management
- Internet of Things
- Cleantech
- Smart Homes
- Household Appliance Scheduling

**Programme(s)**

- **H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions**
  - MAIN PROGRAMME
- **H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility**

**Topic(s)**

- **MSCA-IF-2019 - Individual Fellowships**

**Call for proposal**

- **H2020-MSCA-IF-2019**

See other projects for this call

**Funding Scheme**

- **MSCA-IF - Marie Skłodowska-Curie Individual Fellowships (IF)**
DEPSYS SA

Net EU contribution
€ 191 149,44

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Switzerland

Region
Schweiz/Suisse/Svizzera > Région lémanique > Vaud

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

EC signature date 16 March 2020
Last update: 24 July 2023

Permalink: https://cordis.europa.eu/project/id/884291

European Union, 2023