

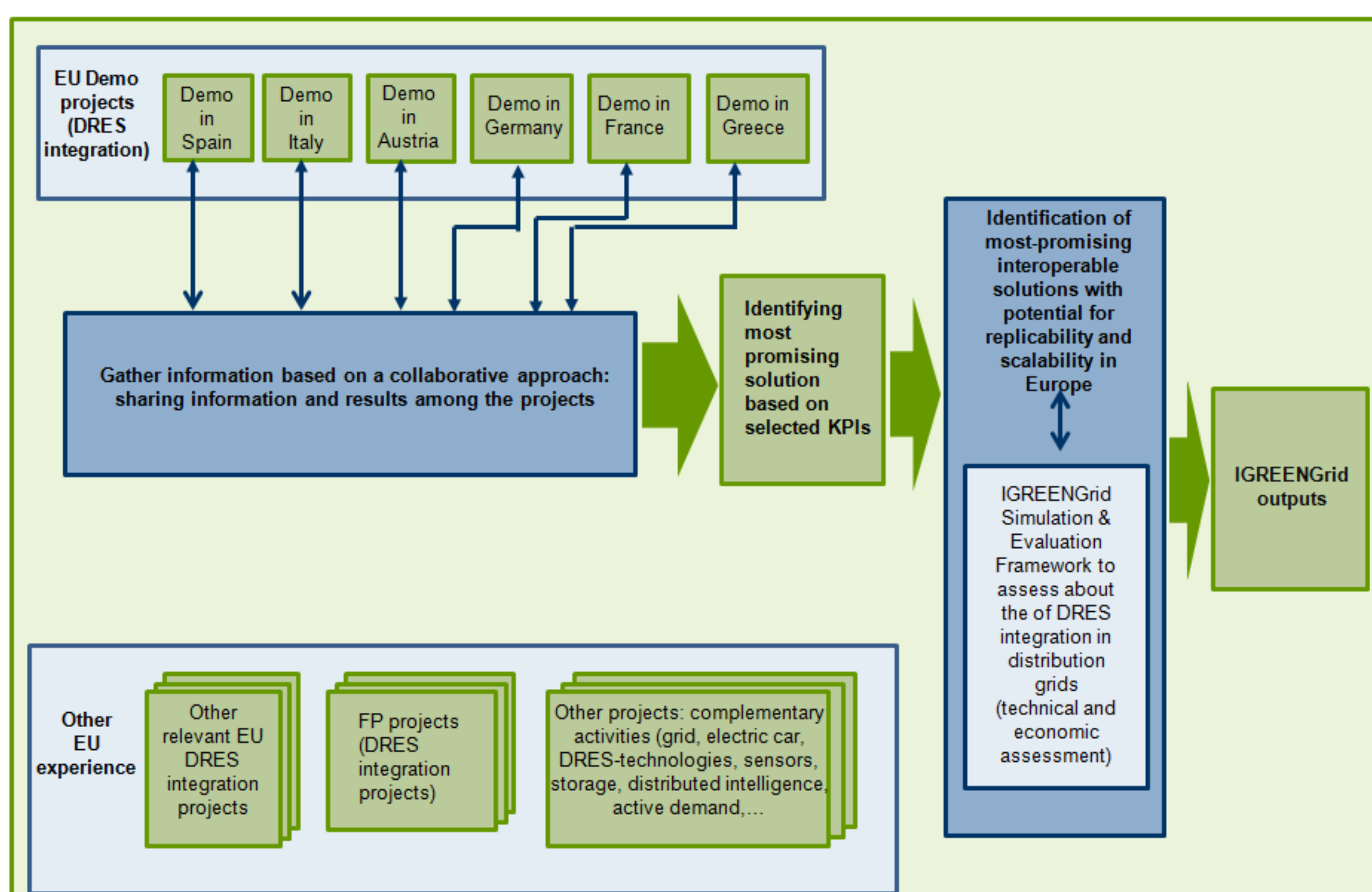
Introduction

IGREENGrid (Integrating Renewables in the European Electricity Grid) project focuses on increasing the hosting capacity for Distributed Renewable Energy Sources (DRES) in power distribution grids without compromising the reliability or jeopardizing the quality of supply.

Objectives

The core of IGREENGrid is to share knowledge and promote the best practices identifying potential solutions for the effective integration of DRES in the six existing Demo Projects in LV and MV grids participating to the project and validating them via simulation in other environments to assess the scalability and replicability at EU level.

Approach



- Select a family of local projects (or FP7 initiatives).
- Using EEGI KPIs, establish an economic and technical evaluation framework and assessment methodology for the evaluation of different DEMO projects.
- Using EEGI approach, evaluate relevant DER integration initiatives and provide feedback to GRID+.
- Using EEGI KPIs, evaluate and classify the solutions developed for the effective integration of DER in Europe.
- Identify the most promising solutions and learnt lessons of DER penetration in distribution grids.
- Design and development of IGREENGrid simulation & evaluation framework in order to simulate and test these solutions.
- Share the knowledge about the different solutions based on real experience and simulation studies among the IGREENGrid DSOs.
- Produce guidelines for the DER future massive integration in distribution grids.

Key figures

Project coordinator: Iberdrola
12 partners from six European countries
8 DSO and 4 R&D institutes
6 Demonstrators
7 Work Packages
32 Deliverables
Budget: 6,6 M€ (EC grant 4,3 M€)
Execution period: 01/01/2013-31/03/2016

Results

IGREENGrid main final result will be a set of guidelines:

- Identification of barriers for DRES Integration.
- Most promising solutions selection.
- Recommendations for the integration of DRES, methodologies and tools.
- Criteria to establish hosting capacity and to manage curtailment procedures.
- DRES Guidelines for technical requirement, equipment manufacturers & technology providers.
- Assessment of the scalability and replicability at EU level (from technical, regulatory and economic point of view) of most promising solutions.

References

Website: <http://www.igreengrid-fp7.eu>

Partners

