bridge

Cooperation between H2020 and HE projects in the fields of Smart Grids, Energy Storage, Islands and Digitalisation

#bridgeEU
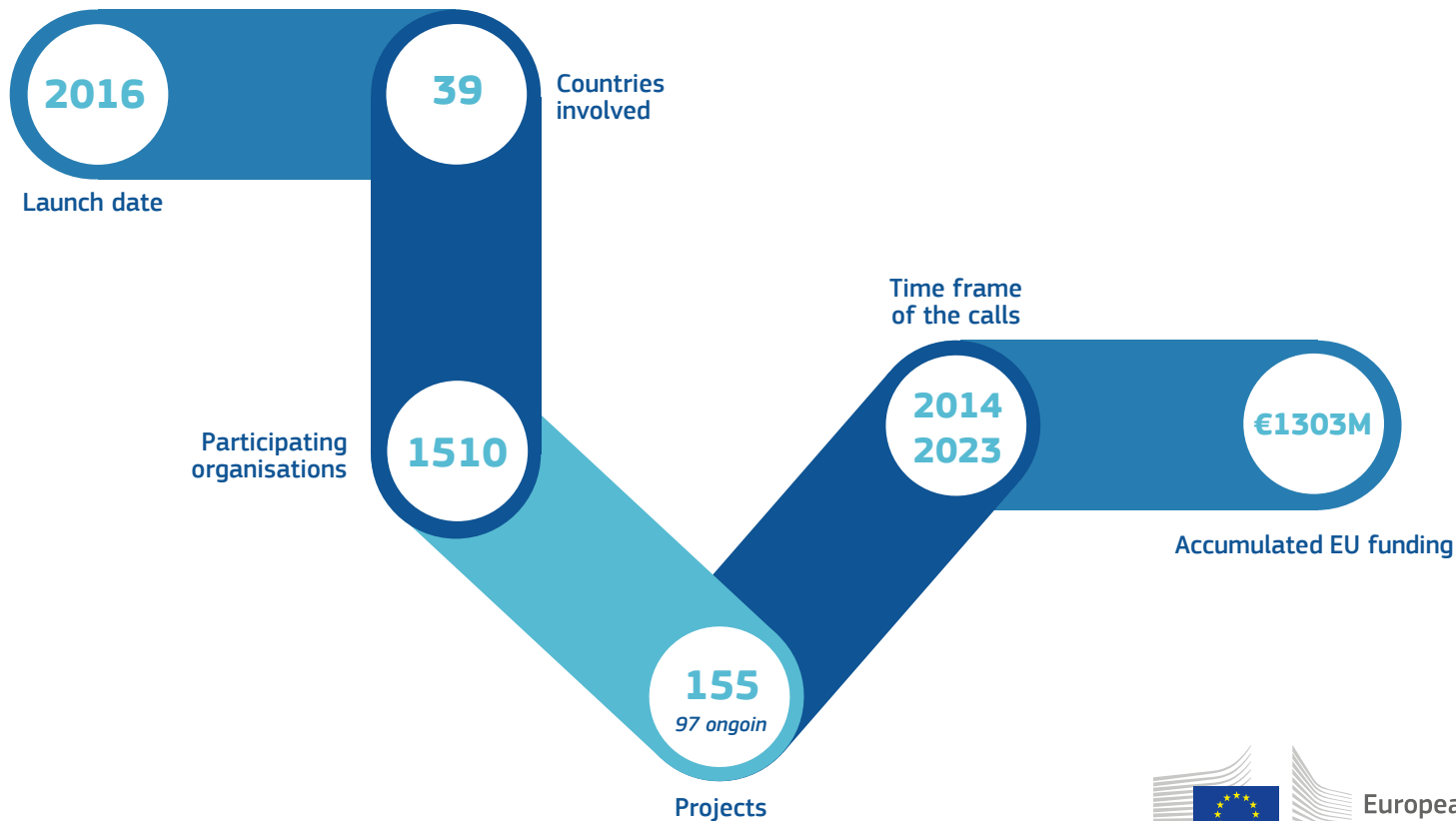
What is BRIDGE

BRIDGE is the European Commission initiative which unites Horizon 2020 and Horizon Europe **Smart Grids**, **Energy Storage**, **Islands**, **and Digitalisation Projects**.

Its objective is to **create a structured view of cross-cutting issues encountered in demonstration projects**, discuss solutions to overcome obstacles to innovation, share knowledge and deliver recommendations to facilitate the energy transition.

European Commission

BRIDGE in numbers

2016

Launch date

39

Countries involved

Time frame of the calls

2014 2023

€1303M

Accumulated EU funding

Participating organisations

1510

155
97 ongoin

Projects

European Commission

The areas of BRIDGE project

This cooperation group involves projects in the areas of:

Smart Grids **Energy Storage** **Islands** **Digitalisation**

These projects were funded under the Horizon 2020 and Horizon Europe programme over the past 9 years (2014-2023).

European Commission

4

Benefits deriving from the participation to BRIDGE

1 Sharing of best practices and lessons learned

2 Support for the resolution of challenges

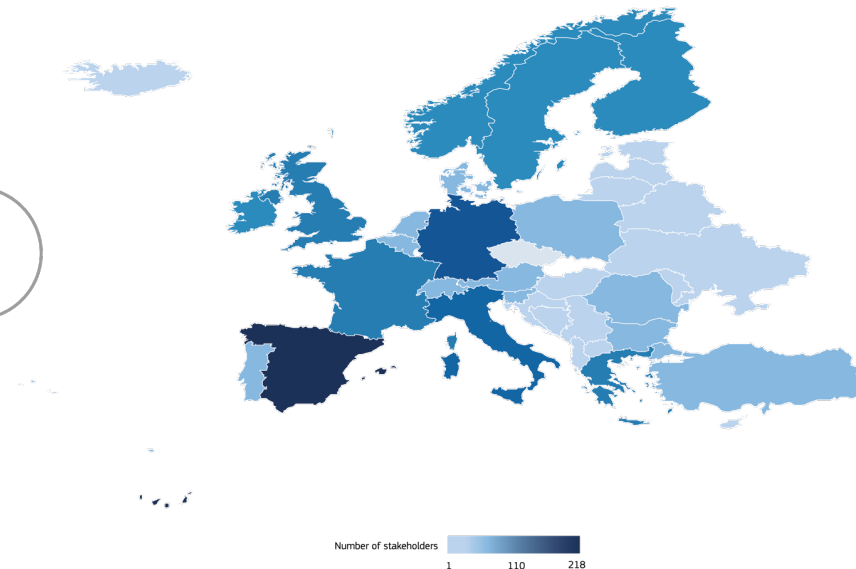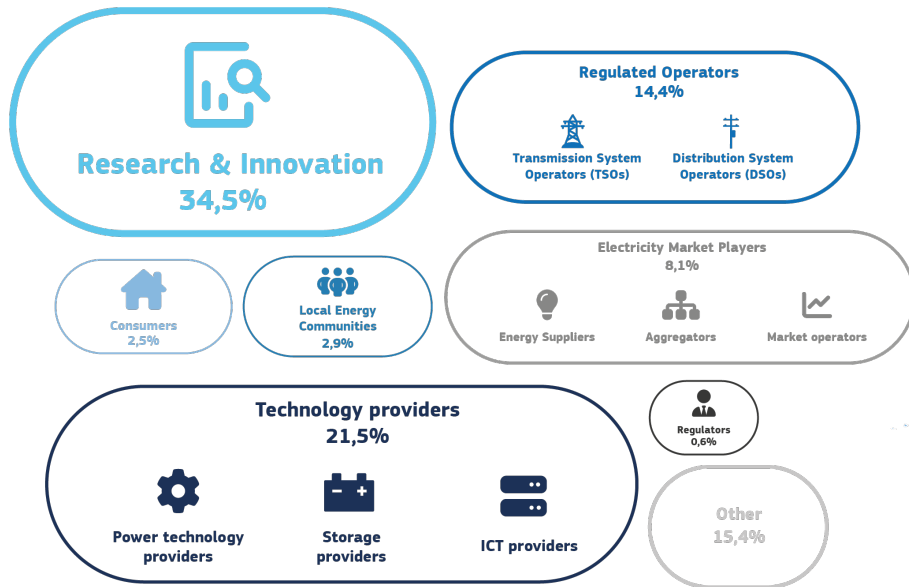**3** Support in the uptake of results

4 Generation of new project ideas

5 Networking with key energy actors

6 Knowledge sharing

European Commission

BRIDGE stakeholders

Stakeholders involved in BRIDGE projects

Research & Innovation
34,5%

Consumers
2,5%

Local Energy Communities
2,9%

Regulated Operators
14,4%

Transmission System Operators (TSOs)

Distribution System Operators (DSOs)

Electricity Market Players
8,1%

Energy Suppliers

Aggregators

Market operators

Technology providers
21,5%

Power technology providers

Storage providers

ICT providers

Regulators
0,6%

Other
15,4%

Number of stakeholders

1   110   218

BRIDGE technologies and demostrators

Technologies tackled by BRIDGE projects

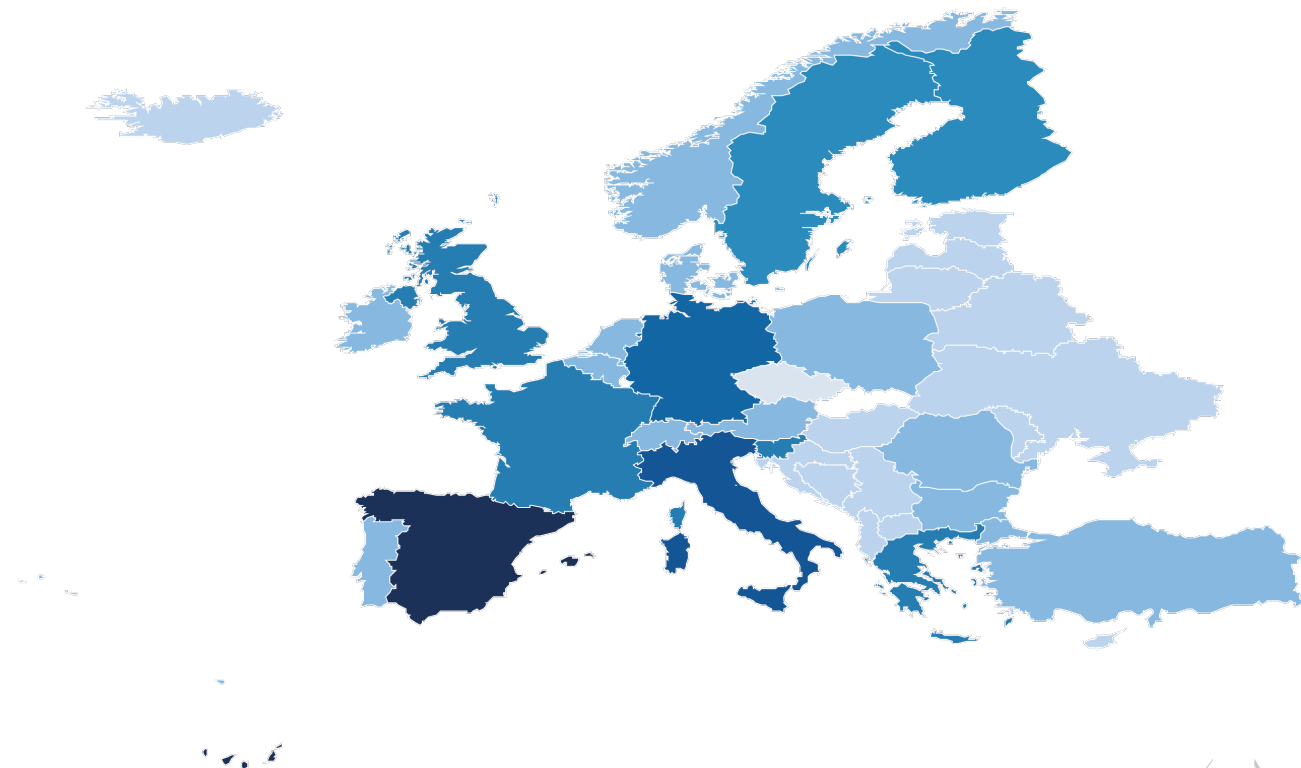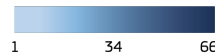|		
	Technologies for Consumers	Demand response, smart appliances, and smart metering.
	Grid Technologies	HVDC, HVAC, protections, HVDC breaker, inertia, network management, monitoring and control tools, and micro-grid.
	Large-scale storage technologies, in general connected at transmission level	Power to Gas (P2G), Compressed Air Energy Storage (CAES) and hydro storage.
	Small-scale storage technologies, in general connected at distribution level	Batteries (including from EVs), thermal energy storage (including PtH, heat pumps, hot water tanks, geothermal storage), and flywheels.
	Generation technologies	Wind turbines, photovoltaic (PV), solar thermal, biogas, tidal energy, and micro-generation.

European Commission

Number of demos or pilot sites per country

Project demos

1 34 66
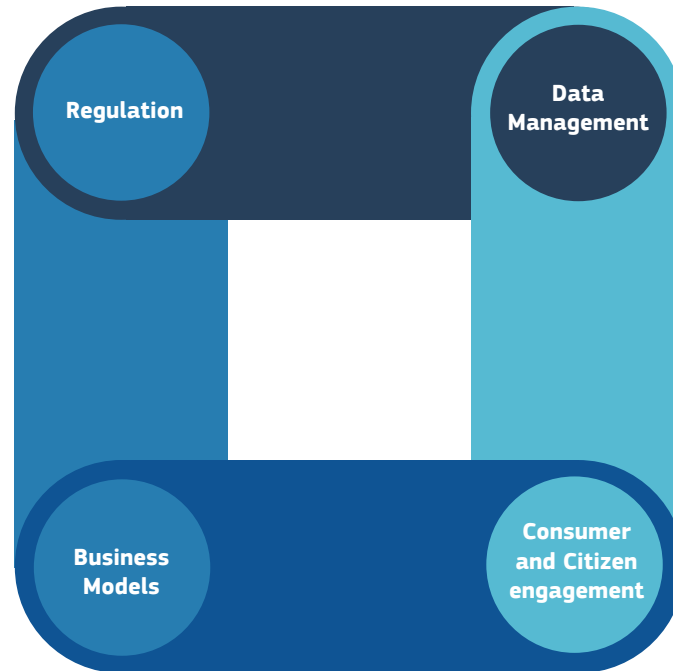
BRIDGE structure

BRIDGE structure overview

BRIDGE enables projects to **share knowledge continuously and speak with a single voice** when delivering conclusions and recommendations for future project result utilization through **four working groups**:

WG Regulation

Improve market access for consumers to value their flexibility

Support system operators to identify necessary innovations in processes and tools for network planning operation

Peer-to-peer and energy sharing

Understanding the regulatory barriers which currently limit the potential of sector coupling/sector integration

Energy and flexibility market coordination and integration

Understanding the regulatory barriers to tackle in support of data spaces

Chair: Helena Gerard (VITO) EU

Latest report: *Energy Market Design and Flexibility (May 2023)*

WG Data Management

Embracing the technical and non-technical aspects of the **communication infrastructure** needed to exchange data and the related requirements

Cybersecurity and Data Privacy, entailing data integrity, customer privacy and protection

Data Handling, including the framework for data exchange, interoperability and data analytics techniques

Chair: Olivier Genest (TRIALOG)

Latest report: *European (energy) data exchange reference architecture 3.0, 2023*

WG Consumer and Citizen engagement

Consumer segmentation and analysis

Triggers of behavioral changes

Drivers and strategies for consumer and citizen engagement

Co-design and use of accessible and affordable smart tools

Indicators to assess the effectiveness of engagement activities

Regulatory innovation to empower consumers

Chair: Johanna Höffken (Eindhoven University of Technology)

Latest report: "*Exploration of citizen engagement methodologies in European R&I projects", 2023*

European Commission

WG Business Models

Design of tools to evaluate the benefit of the services and solutions:
- Investigate the tools to capture business ideas and build BM
- Quantification methods for BM benefits

Design of BM to better include data value chain observability

Chairs: Christina Papadimitriou   **Co-chair:** Evangelos Koulis

Latest report: *Investigation of relationship of use cases and cross-domain business models. Report on topic 1 (September 2022)*

Learn more
on our website