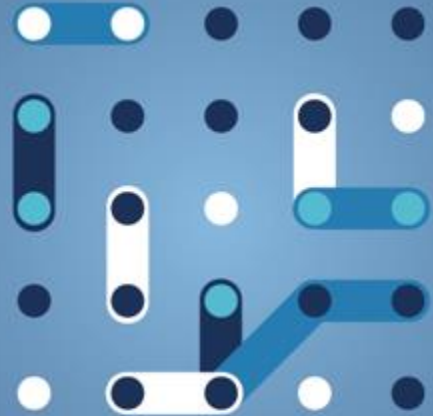




bridge

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

#bridgeEU



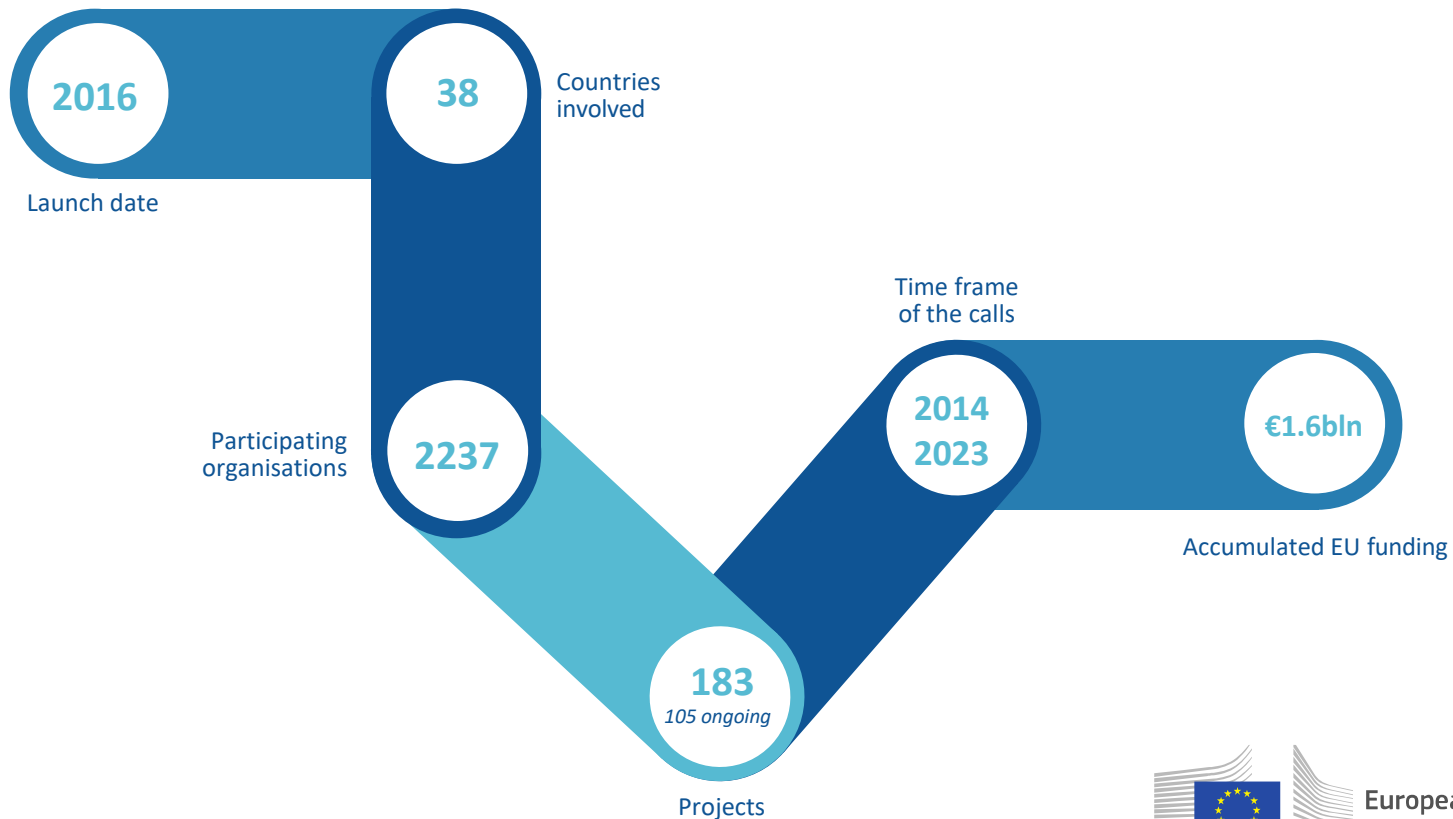


What is BRIDGE

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.

BRIDGE in numbers*



*Updated in May 2024

The areas of BRIDGE project

This cooperation group involves projects in the areas of:



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

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

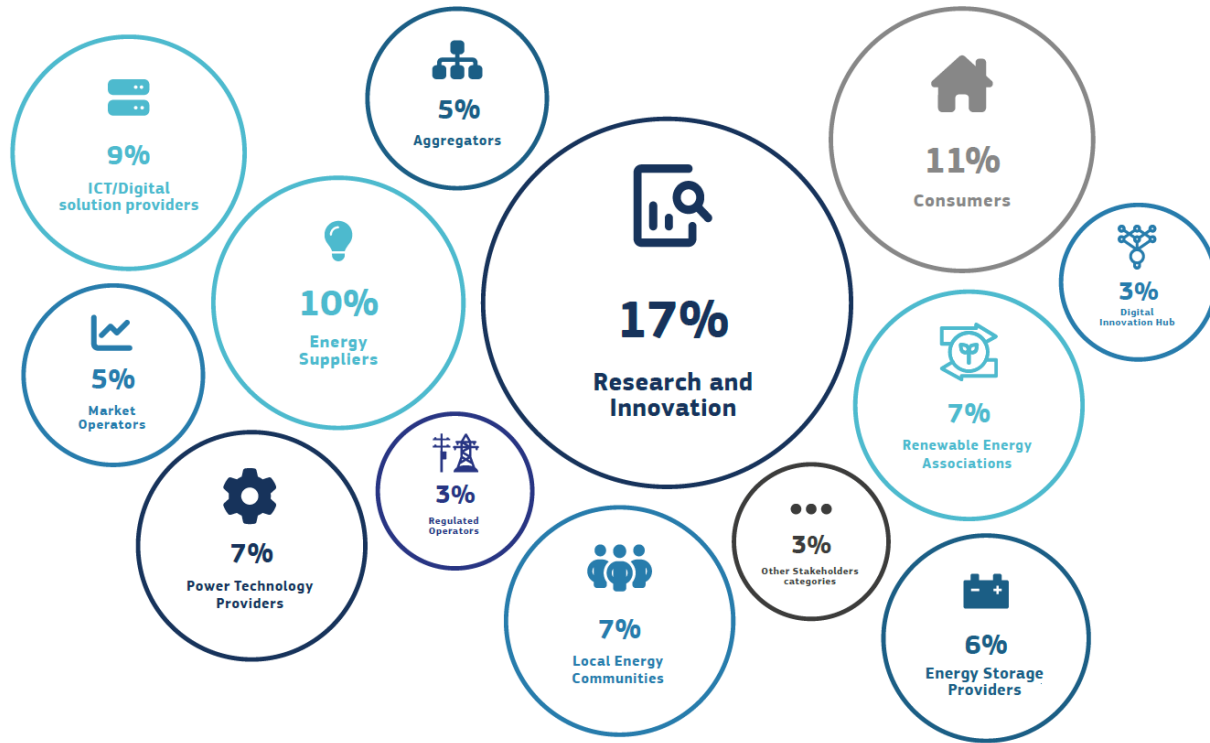
Networking with key energy actors

6

Knowledge sharing

BRIDGE partners

Partners involved in BRIDGE projects*



*Updated in July 2024

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.

Technologies tackled by BRIDGE projects



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.



Market

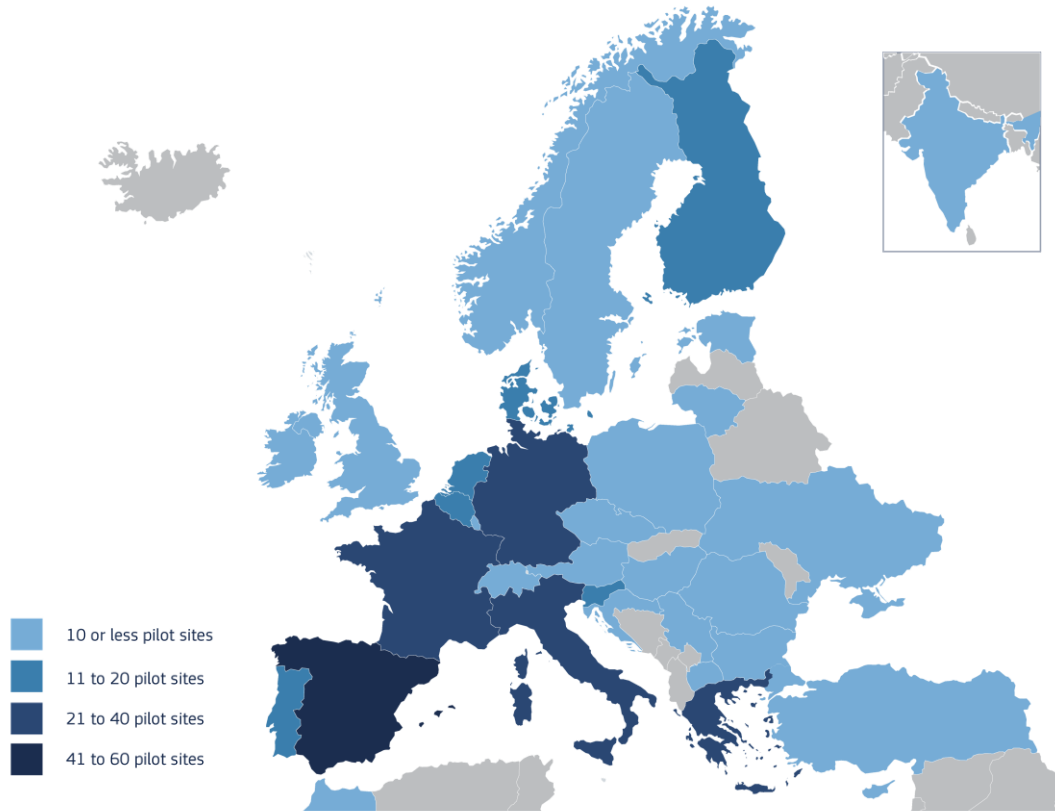
Infrastructures costs, electricity market, ancillary services, other market services



Other technologies and services

Recycling demonstration plant for EoL windmill blades, Ultra-High-Strength, innovative materials, LCA, energy system modelling.

Number of demos or pilot sites per country*

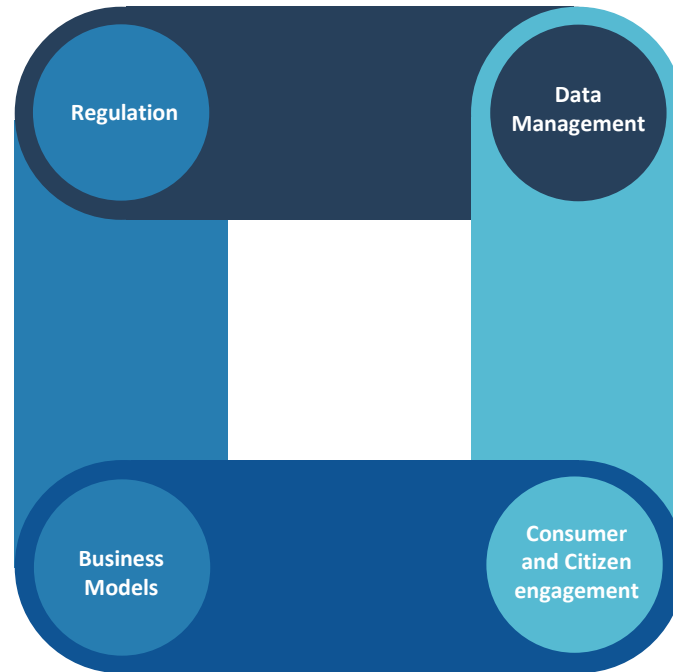


*Updated in July 2024

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, 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: Michael Brenner-Fliesser (Joanneum Research)

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

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, 2022*

**Learn more
on our website**





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