# Replicable solutions for a cross sector compliant energy ecosystem

Promote the adoption and usage of connected interoperable energy smart home appliances (including the EV charging and home storage) and solutions in order to accelerate the deployment of demand-side flexibility services, reduce the entry barrier and facilitate replication.

- Identify a set of open standards for Minimum Interoperability based on the results of multiple research and innovation projects and existing technological developments as well as already available open standards and/or open source solutions to enable energy smart appliances and solutions to participate in demand side flexibility.
- Provide new business models supported by innovative interoperable solutions enabled by connecting systems from different sectors.
- Test interoperable services/solutions based on a reference architecture and minimum interoperability mechanisms that can enable flexibility.
- The solutions initially developed in a pilot in one country will have to be tested, in real life, in at least two other countries, with different energy constraints, by different entities. The overall target is replication in as many Member States/Associated Countries as possible.
- Create and populate a commonly agreed catalogue of energy smart home appliances (including EV charging and storage), services and hardware/software solutions compliant to a set of standards for Minimum Interoperability.
- The call is open to all stakeholders. For instance, utilities, ESCO/aggregators, appliances manufacturers, energy cooperatives, retailers owning buildings (heating/cooling) in many cities, office building that in their parkings offer eV chargers, water treatment plants, public buildings, schools, ICT companies, system integrators, Data Centre operators, EV manufacturers, storage providers, industry and other relevant stakeholders with a role in the energy flexibility market.
- The projects should support the proliferation of innovative energy and energy services markets building on interoperable solutions that can be tailored easily to the type or need of users. Therefore the projects should take into account the social and behavioural dimensions of consumer’s participation and to get the acceptance of different energy technologies.
- The solutions are expected to adapt digital technologies to the specificities and requirements of the energy system (Artificial Intelligence, Big Data, 5G, cloud/edge computing, Internet of Things ...).

- While complying with cybersecurity requirements privacy issues are to be specifically considered. They have to be built on open architectures and commonly agreed standards derived from these technologies (such as SAREF) and relevant European and Global ICT and Energy Standards Development Organisation and associations
- The selected projects will cooperate among themselves and with other relevant projects through regular common workshops, exchange of non-confidential reports, etc.

The selected projects are expected to contribute to relevant BRIDGE[[https://www.h2020-bridge.eu/]] activities.

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