

The Energy Data Space for Europe

Bringing together energy and data value chains to enable the energy transition

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The Context

The recently adopted Digitization of Energy Action Plan (DOEaP) paves way for the new data-driven concepts, architectures, solutions, tools, services governance and business models to deploy a more integrated and decarbonized consumercentric energy system.

Nevertheless the lack of reciprocal trust among data providers and data consumers along energy value chain, together with the immaturity of business models insufficiently capturing and spreading the value of the shared energy data along the overall energy and data value chains, prevents to date to fully realize the digitized energy system of the future.





Objectives

Enershare aims at developing, deploying and validating the first-of-its-kind Reference Implementation of the European Common Energy Data Space along a variety of different cross-domain pilots (7) to facilitate, speed up and enable the transition towards the smarter, sectors-integrated, decarbonized and participatory energy system of the future.







Our Vision

Enershare will enable an electricity-centered data-driven energy ecosystem where energy (electricity, heat, natural gas), non-energy (e-mobility, water, security, health) and ICT/data stakeholders and operators can securely share, exchange and reuse energy data assets (datasets, Data models, learning algorithms, data-driven services) against energy & non-energy physical assets usage.





Concept and Approach

Enershare concept articulates around the deployment of a trusted, secure and sovereign level playing field for energy data sharing and exchange and a stack of cross-stakeholder data-driven services among energy and non-energy stakeholders, which will build upon 11 intra-energy/sector-coupling and cross-sector beyond-energy user scenarios and underlying field validation along 7 field large scale pilots with a view to hybridize energy, non-energy and data value chains and design and validate new market roles at the interplay.











Enershare capitalizes and align with leadingedge projects, initiatives, and technologies

to deploy IDSA, FIWARE and GAIA-X compliant open and standardizable technological building blocks aimed to



Extend interoperability to different energy commodities (electricity, heat, natural gas) and beyond through the adoption of open standards and data model, in full compliance to SGAM.



Reciprocal trust through data sovereignty technology layers, where the data owner can determine the Usage Access Control rules and can understand who is going to use its own data.



Deploy a broader concept and implementation for assets and services marketplaces where data assets may be shared and exchanged with energy assets and services (es one year of maintenance of heat boiler at home), through a beyond financial compensation.



The Enershare Vision

SSH-DRIVEN APPROACH

Consumer-centric
P2P marketplace models
Decentralised

Decentralised data governance

CROSS-SECTOR DATA SPACE

incl. financial, healthcare, water and mobility sectors

INTRA-ENERGY DATA SPACE

Across Energy Sector

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Demonstration & validation

COMMON FEDERATED DATA SPACE

Interoperability
Trust & Sovereignty
Data Value Stack
Services & Digital Twin

BUSINESS LAYER

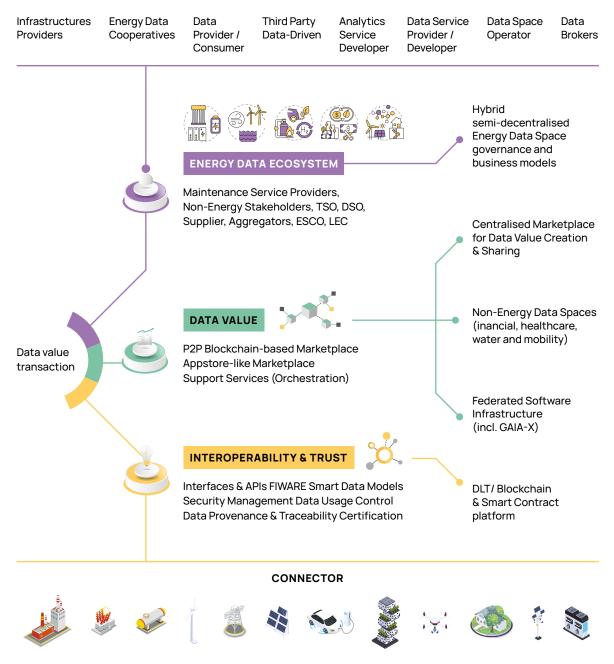
Participatory Business Models New Data-driven Value Proposition Governance Models

INTRA-ENERGY DATA SPACE

Intra-Electricity Value Chain



The Enershare concept



Data Hubs / Data Marketplaces / Data Platforms



Expected Impact / Achievements

Enershare will enable to set up a level playing field for energy B2B and B2C data sharing and exchange and significant contribute at creating a single market for data to be shared and exchanged within and across energy sectors efficiently and securely within the EU.

The Enershare Data Space will enable access, control, share and reuse of large amount of currently dispersed energy data for private consumers, energy and non-energy business stakeholders, regulated operators and the public sector that will make the energy industry more secure and sustainable, while allowing energy consumers to take their energy future in their hands.

Enershare Consortium



Consortium

































































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