



omega-x



Orchestrating an interoperable sovereign federated Multi-vector  
Energy data space built on open standards and ready for GAia-X

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## Objective

The aim of OMEGA-X is to implement a **Data Space** (based on European common standards), including **federated infrastructure**, **data marketplace** and **service marketplace**, involving **data sharing** between different stakeholders and **demonstrating** its value for real and concrete **energy use cases** and needs, while guaranteeing **scalability** and **interoperability** with other data space initiatives, not just for energy but also cross-sector.

## Federated infrastructure

The goal is to define the **minimum interoperability and federation requirements** needed for these platforms to adhere to the **Energy Data Space** and be able to share data in a trusted and secure way.

- Single Energy Data Space
- European common and open standards (interfaces, protocols)
- Interoperability between data platforms
- Diverse data inputs (energy generation, transmission, distribution and consumption)
- Scalability and interoperability with other cross-sector data space initiatives

# Use Cases

## ♥ Renewables

3 pilots sites. 2 countries (Spain, France)

7 partners involved (3 data owners, 4 service providers)

Intra-pilot: O&M and smart grid data-driven services

Inter-pilot: Benchmarking and synthetic data generation

## ♥ Local Energy Communities

4 pilot sites. 3 Countries (Spain, Italy, Serbia)

9 partners involved (5 data owners, 5 service providers)

Intra-pilot: multi-vector optimization/planning. Engagement

Inter-pilot: Benchmarking

## ♥ Electromobility

2 pilots sites. 3 countries (France, Germany, Belgium)

8 partners involved (4 data owners, 5 service providers)

Intra-pilot: Roaming of booking and self-consumption

Inter-pilot: TSO-DSO collaboration

## ♥ Flexibility

1 pilots sites. 1 country (Portugal)

7 partners involved (5 data owners, 4 service providers)


Intra-pilot: Advanced data-driven flexibility

MAIN



# Thank you!

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