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gaia-x  
Lighthouses

# energy data-X

Energy data space for data exchange in Gaia-X

Data Spaces as a central component of the  
energy transition  
September 13, 2024




# Framework from EU-Legislation, Federal Ministries and Gaia-X



- **Data Governance Act:** supports the setup and development of **Common European Data Spaces in strategic domains** (cross-sectoral instrument)
- **EU Action Plan:** Europe needs a common **European energy data space** and must start deploying it by **2024 at the latest**
- **RED III:** requires data provision out of the **BEV-battery** from **OEMs non discriminant and free of cost**
- **Gaia-X:** is creating the **framework** for an **interoperable data infrastructure**, based on **open-source principles** and **full data sovereignty of data owners**<sup>1)</sup>



**energy data-X**<sup>2)</sup> Based on Gaia-X, energy data-X can map the RED III requirement as a further use case

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1) <https://gaia-x.eu/gaia-x-framework/>

2) energy data-X is in constant knowledge exchange with Catena-X especially with respect to applied technologies

# Five Federated Services as an Entry Point into the Energy Data Space



## Energy data space



### Data Sovereignty Service

Access to the data space, which also implements the rules on who may use which data and with what level of security, e.g. regulated grid operators with different rights than a non regulated energy service provider/distributor



### Compliance

What rules exist for data exchange, e.g. which data/services may be used by which participant for what purpose and for how long



### Service Offering / Federated Catalogue

Description of the data/services offered according to an agreed data model

Finding the data/services you are looking for via a catalogue that describes the data and, for example, its granularity



### Portal/API, Clearinghouse

Registration/onboarding in the data space  
Machine to machine communication via APIs for automated access to data/services  
(How are services billed?)



### Identity & Trust

What identity do participants have, how do they gain access, e.g. what market role does a participant have, is the participant really who they claim to be





# Within Framework of the Energy Data Space, Participants Realize Cross Sector Use Cases



## Framework: energy data space

Five federated services ensure the secure and sovereign operation of the Data Space

### Participants realizing data exchange via connectors



### Use cases from participants



## Characteristics

- Standardized connection to data space
- Use Cases are realized on the basis of participant request
- Open to all market parties
- Non discriminatory, sovereign and secure data exchange
- Cross-sector
- Scaling perspective on European level
- Realization from mid-2025

# Evaluation and Legislative Needs



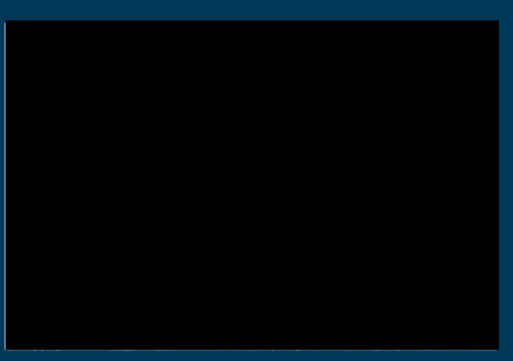
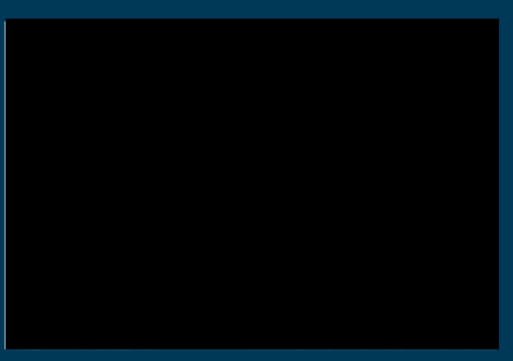
## **Evaluation of data space approach**

- energy data-X can provide a standardized data access cross sectors and participants and ensure a sovereign data exchange
- Regulated and non regulated participants (and platforms) can connect to energy data-X in a non discriminatory way

## **Legislative needs**

- Clear statement in legislation with respect to the usage of data spaces to manage data in a sovereign manner and make it accessible in a non discriminatory way (following EU legislation)

Thank you for your attention



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