

The energy data-X data ecosystem



energy data-X

CHALLENGES

No achievement of climate protection goals without a data ecosystem

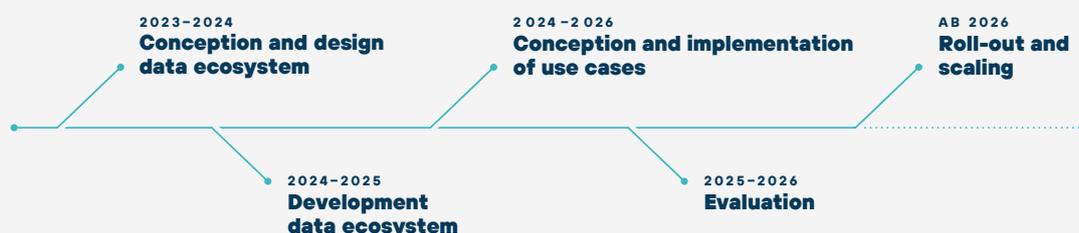
- In order to achieve the national and European climate protection targets, sectors such as electricity, gas, transport and heating must be digitally networked with each other.
- In particular, the increasing number of participants in the energy system and the exponential growth in data require a future-oriented, digital solution.
- What is needed is a data ecosystem that enables the sovereign exchange of data via a federated, open and scalable infrastructure and is based on trustworthy common agreements, rules and standards.

GOALS

A data ecosystem for all market participants in the energy industry

- In the energy data-X research project, a data ecosystem for the energy industry based on Gaia-X is being developed and is being tested using the "imbalance settlement quality" and "Flex" use cases.
- This improves the integration of renewable energy plants and thus contributes to achieving climate protection targets. In addition, comprehensive sector coupling is made possible.
- energy data-X is to become the standard for data exchange in the energy industry.

ed-X Roadmap



ADDED VALUE

The energy data-X data ecosystem ...

- reduces complexity and costs through standardized data exchange, even outside of market communication.
- enables centralized processes while maintaining decentralized data.
- ensures data security and sovereignty.
- ensures interoperability and easy integration into the own systems through established interfaces (API).
- is the "single point of truth" and provides equal data for all entitled persons.
- simplifies the implementation of data-driven Uses
- reduces barriers to entry for new entrants and enables innovative business processes and models.

The basis for this is ...

the Gaia-X Federated Services: Service Offering & Federated Catalogue, Data Sovereignty Services, Identity & Trust, Portal and Compliance.

PARTNERS

energy data-X consists of a consortium of currently 21 partners from the energy sector, industry, ICT, OEM, science and standardization with TenneT as consortium leader.

PLANNED ROLL-OUT

Transfer to operation and scaling from October 2026



WOULD YOU LIKE TO LEARN MORE OR GET INVOLVED?
GET IN TOUCH!

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More information at
energydata-x.eu