

Use case 1

Imbalance settlement quality



energy data-X

CHALLENGES

Balancing group management requires more real-time data

- The balancing group manager (BGM) is responsible for balancing electricity supply and demand.
- In its role as balancing group coordinator (BGC), the transmission system operator checks all balancing groups in total for deviations and compensates for them with balancing energy. This currently causes costs for consumers as well as CO₂ emissions.
- Due to the increasing number of new market players (e.g. prosumers, e-vehicles) with changed load profiles in the power grid, the management of balanced balancing groups is becoming more complex.
- More real-time data is needed for a prompt assessment of the situation by the BGM in order to react to deviations at short notice – as an important building block for ensuring security of supply.

GOALS

Optimized balancing group management quality through faster data availability

- Provision of measured values close to real time and fine temporal granularity for BGM and BGC
- For this purpose, connection of smart meter gateways and the balancing group managers and coordinators via connectors to the energy data-X data ecosystem
- Provision of a forecasting service as a contract data processor for the BGM

USE CASE 1 "IMBALANCE SETTLEMENT QUALITY"



ADDED VALUE

The use case "imbalance settlement quality" ...

- enables the BGM to determine the status of its balancing group in near real time by integrating a forecasting service.
- can - by integrating the "Flex" use case - activate flexibility in a timely manner and thus reduce deviations in the balancing group of the BGM
- can reduce CO₂ emissions and costs for electricity consumers by reducing the need for balancing energy

PARTNERS

The use case is led by Amprion and supported by 50Hertz, ARGE Netz, BMW Group, EWE Netz, Fraunhofer, MVV, PPC, Schneider Electric, Spherity, Syneco, TenneT, TransnetBW and Westnetz.

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 