# Open Source Community Day .... TwinEU

Flagship project to implement the Digitalisation of the Energy System Action Plan (DESAP)

## 23 - 24 September



Co-located with AIOTI Days 2025

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### Open Source ..... Community Day

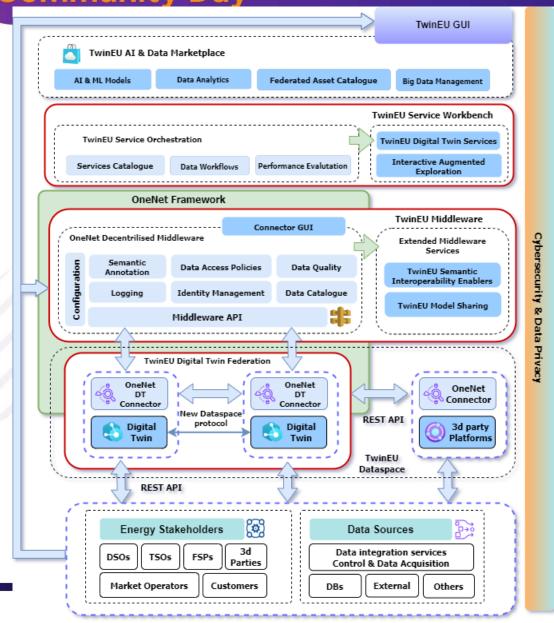
TwinEU Strategic Goal

TwinEU leverages a unique set of competences coming from grid and market operators, technology providers and research centres to create a concept of Pan-European digital twin based on the **federation of local twins** so to enable a reliable, resilient, and safe operation of the infrastructure while facilitating new business models that will accelerate the deployment of renewable energy sources in Europe.





## Open Source .....TwinEU's open reference architecture



Al & Data
Marketplace

Al/ML Models, Data Analytics and Big
Data Mgmt supporting DT development

Provides TwinEU DT services and AR
Exploration module

DT Connector implemented in each
Digital Twin

Layer

**Federation** 

Middleware providing Data Quality,
Data Access Policies, IDM, Semantic
Interoperability, Data/Model catalogue

DT Layer External DTs managed by energy stakeholders (TSO, DSO, etc.), outside the TwinEU platform



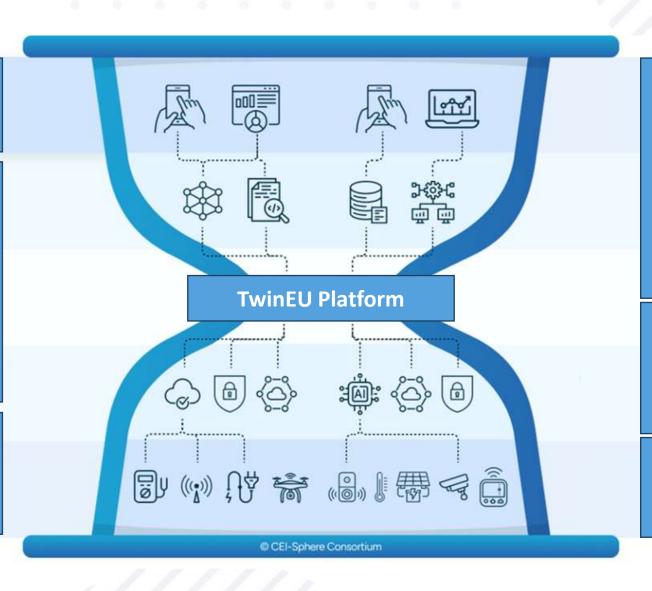
## Open Source ..... TwinEU and the hourglass approach

# **TAKEHOLDERS**

Energy Data Users (e.g., RES project developers)

Service providers for DTs (models, tools, etc...)

Systems operators (TSOs, DSOs, MOs, FSPs, etc...) Data owners/providers



Federator beyond the data space Data and model sharing

Information models management and standards

## Federator as data space

Information models management and standards

### **Data collection**

Information models management and standards





# Thank you

# TwinEU

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