

TwinEU

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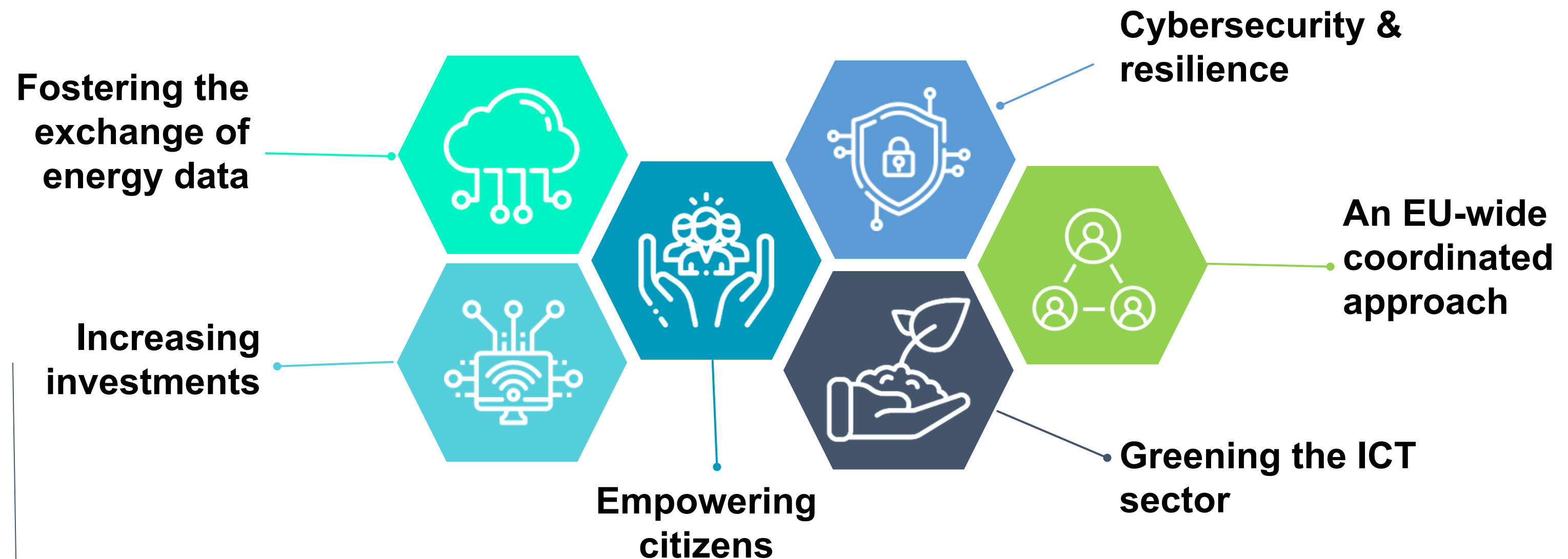
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TwinEU

TWINEU - the flagship project to implement the Digitalisation of the Energy System Action Plan (DESAP)



Creating a **digital twin** of the electricity grid

TwinEU – Key Facts

- **Programme:** Horizon Europe Innovation Action
- **Topic:** HORIZON-CL5-2023-D3-01-10 - Supporting the development of a digital twin to improve management, operations and resilience of the EU Electricity System in support to REPowerEU
- **Start:** Jan 2024
- **Duration:** 36 Months
- **Budget:**
Estimated Project Cost: €25,216,061.25
Requested EU Contribution: €19,999,999.50
- **Number of partners:** 75

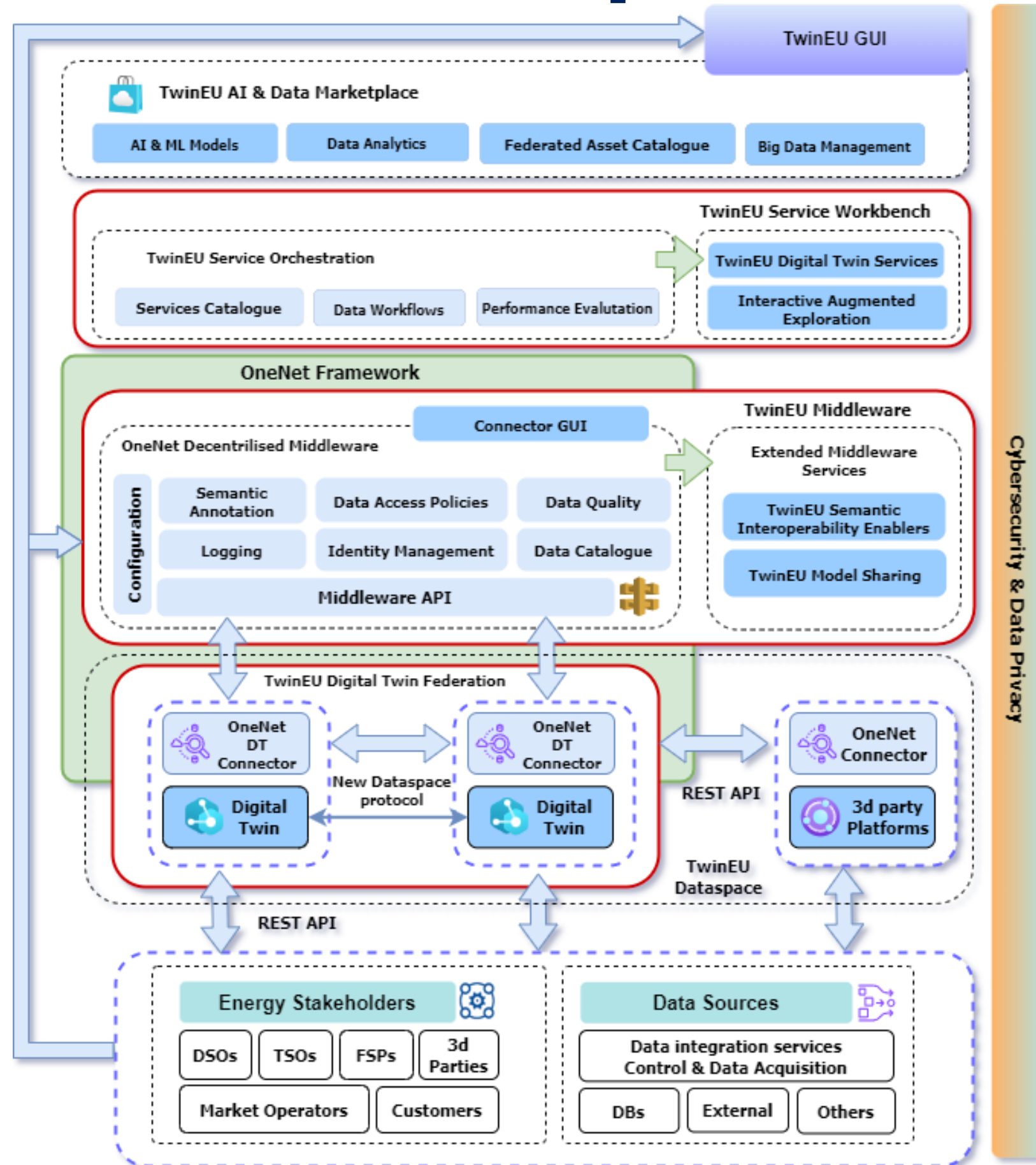


TwinEU Strategic Goal

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.

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TwinEU's open reference architecture



AI & Data Marketplace

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

Service Workbench

Provides TwinEU DT services and AR Exploration module

Federation Layer

DT Connector implemented in each Digital Twin
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

TwinEU and the hourglass approach

