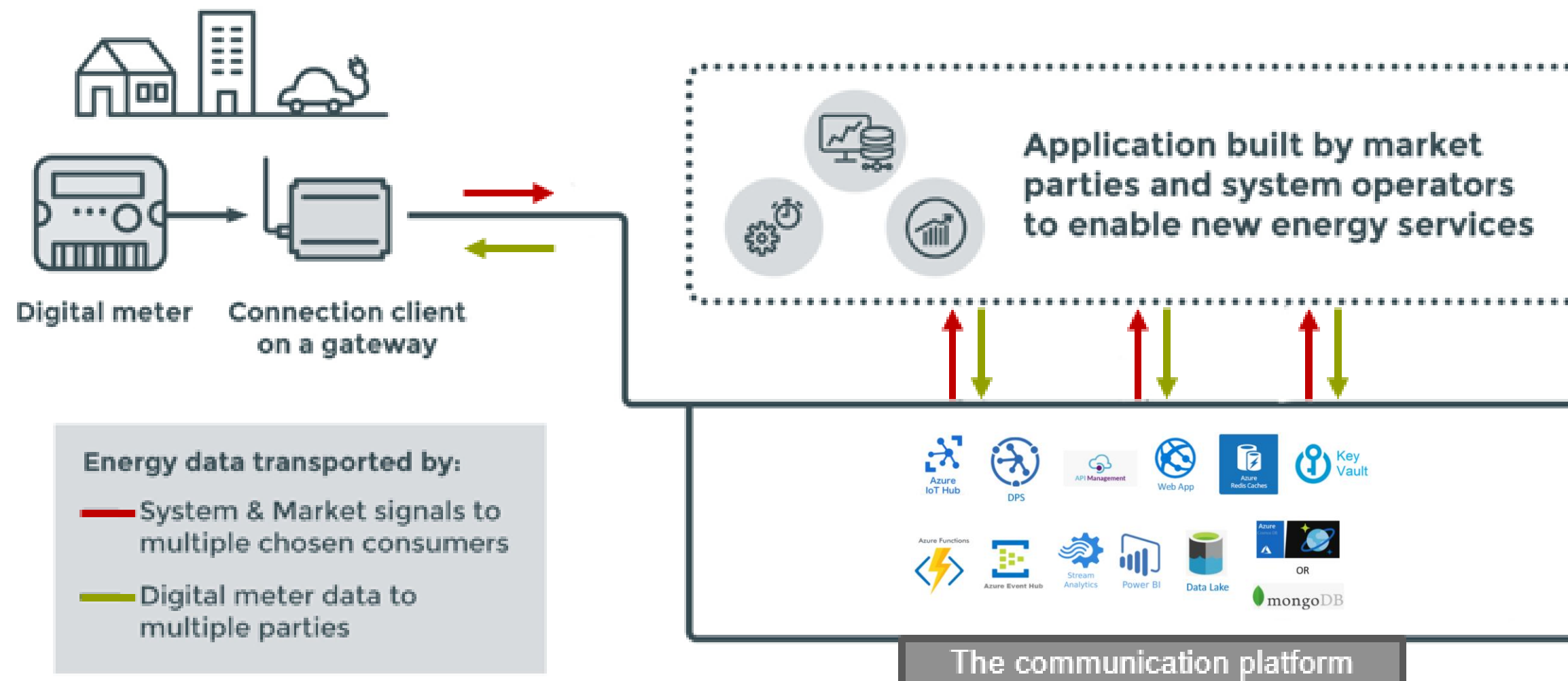


A photograph of a wind farm at sunset. The sky is a mix of blue and orange, with wispy clouds. Several white wind turbines are visible against the horizon. The foreground is a flat, orange-tinted field.

# IO.Energy & Data

Workshop on Flexibility Markets and TSO-DSO Cooperation

# Energy Services, I want them **now**



We test a micro-services architecture :

- **I = Customization**
  - ID for consumers and APPs
  - Granular Data
  - Encryption
- **Now = Near Real time**
  - Real time routing
  - Buffering

☑ Questions 3: how do you ensure/facilitate access ...

# Alone, you do nothing

**60+ Gigawatt partners**

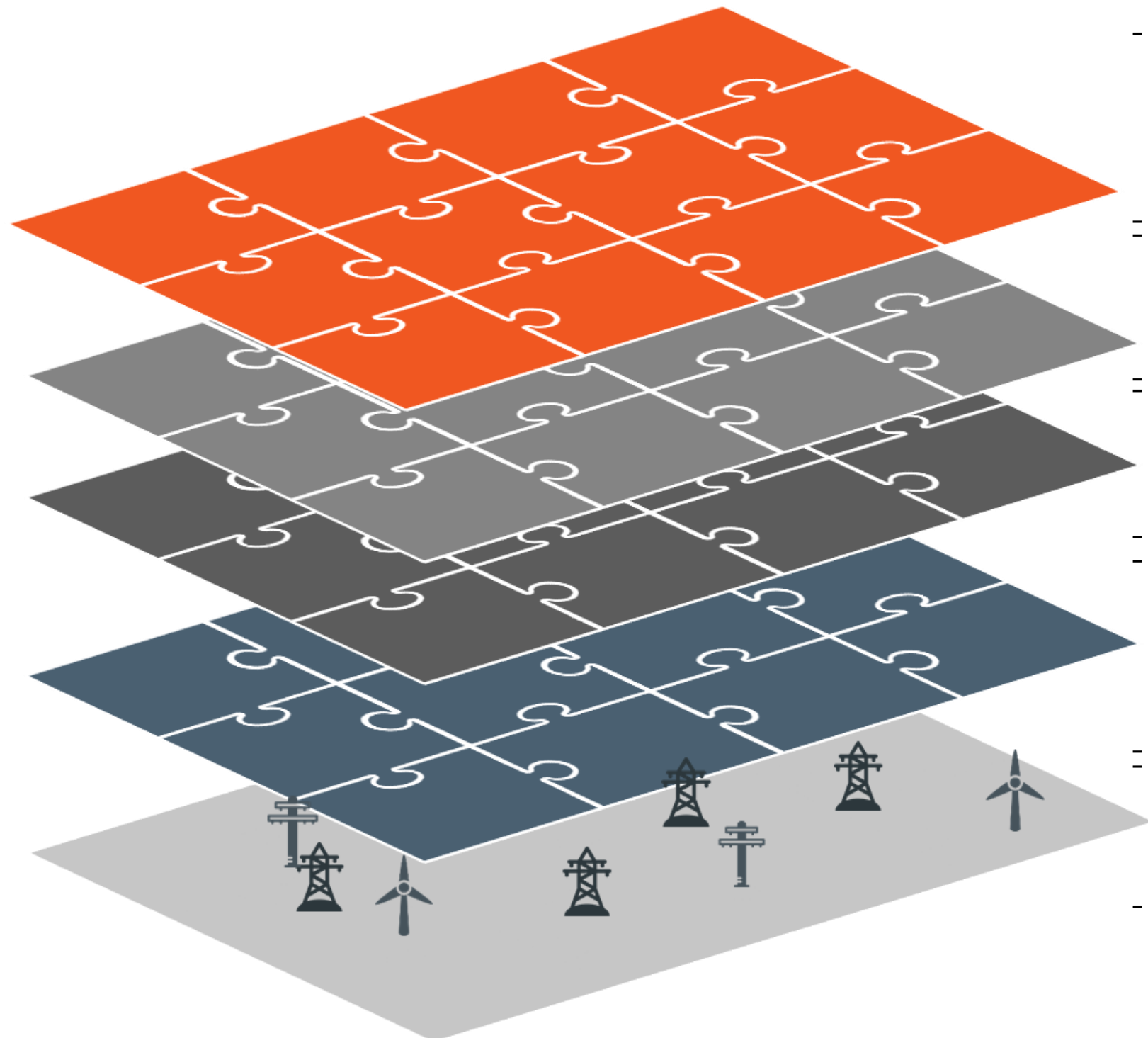
**5 System operators**

**30+ Megawatt partners**

The image displays a large collection of logos for various companies, organized into three main categories indicated by dashed boxes:

- 60+ Gigawatt partners:** Includes logos for BESIX, GORILLA, block0, ABB, NRB, REstore, KBC, Energent, hauglogy, ENGIe, SIEMENS, ThermoVault, june, Enervalis, FLUXYS, solar edge, EDF, flux50, Cegelec, N-SIDE, dFakto, CO.STATION, and NØDES.
- 5 System operators:** Includes logos for Actility, ORES, elia, pulselabs, and fluvius.
- 30+ Megawatt partners:** Includes logos for Quimesis, GreenWatch, GREEN COM NETWORKS, Greenbird, emaze, quanta, FINESCO, CGI, alien concept electronics, Air Liquide, MICROPOL, ORDINA, Cogarius, Quant Co., EOLY, JEDLIX, SCHOLT, Klarrio, KU LEUVEN, YUSO, FINESCO, antea group, verv, DNB, ae, NEXTLAB, Twed, NEXT KRAFTWERKE, Sibelga, DXC technology, BNP PARIBAS FORTIS, GHENT UNIVERSITY, sixsq, Vlaamse overheid, tiko, accenture, IOT FACTORY, .AGORIA, energieID, and flux50.

# Mapping what we are doing



## B2C Energy applications



## B2Business applications



## System and market enablers

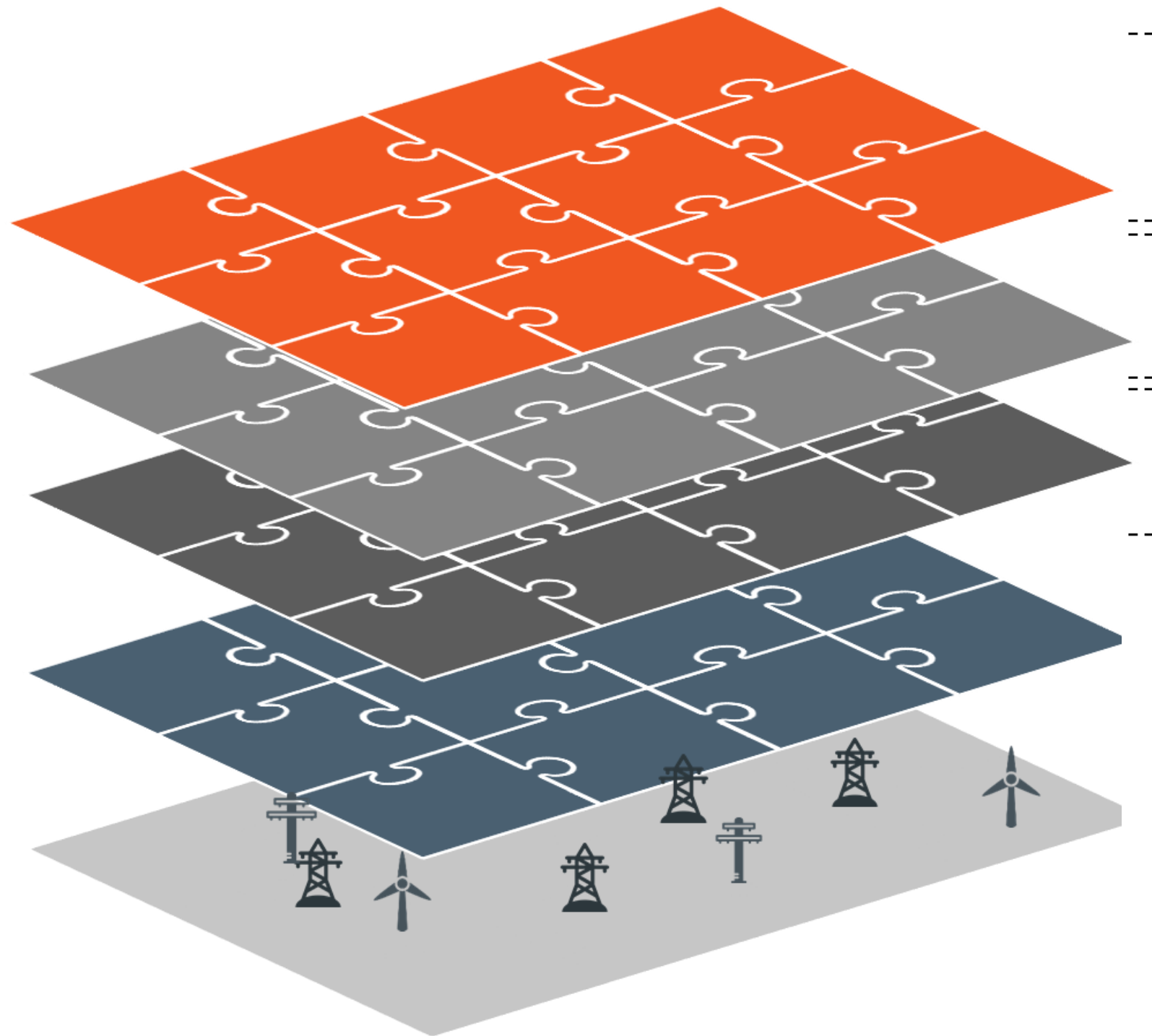
- Tool for dynamic qualification of access point
- Implicit demand response through dynamic tariff
- Data driven activation control for multi BRP/BSP environment

## Digital infrastructure

- Existing micro services
- Facilitated consent management under discussion

## Power system

# Mapping what we need



## B2C Energy applications

- Historical data from consumers (15 ‘)
- Historical granular data

## B2Business applications

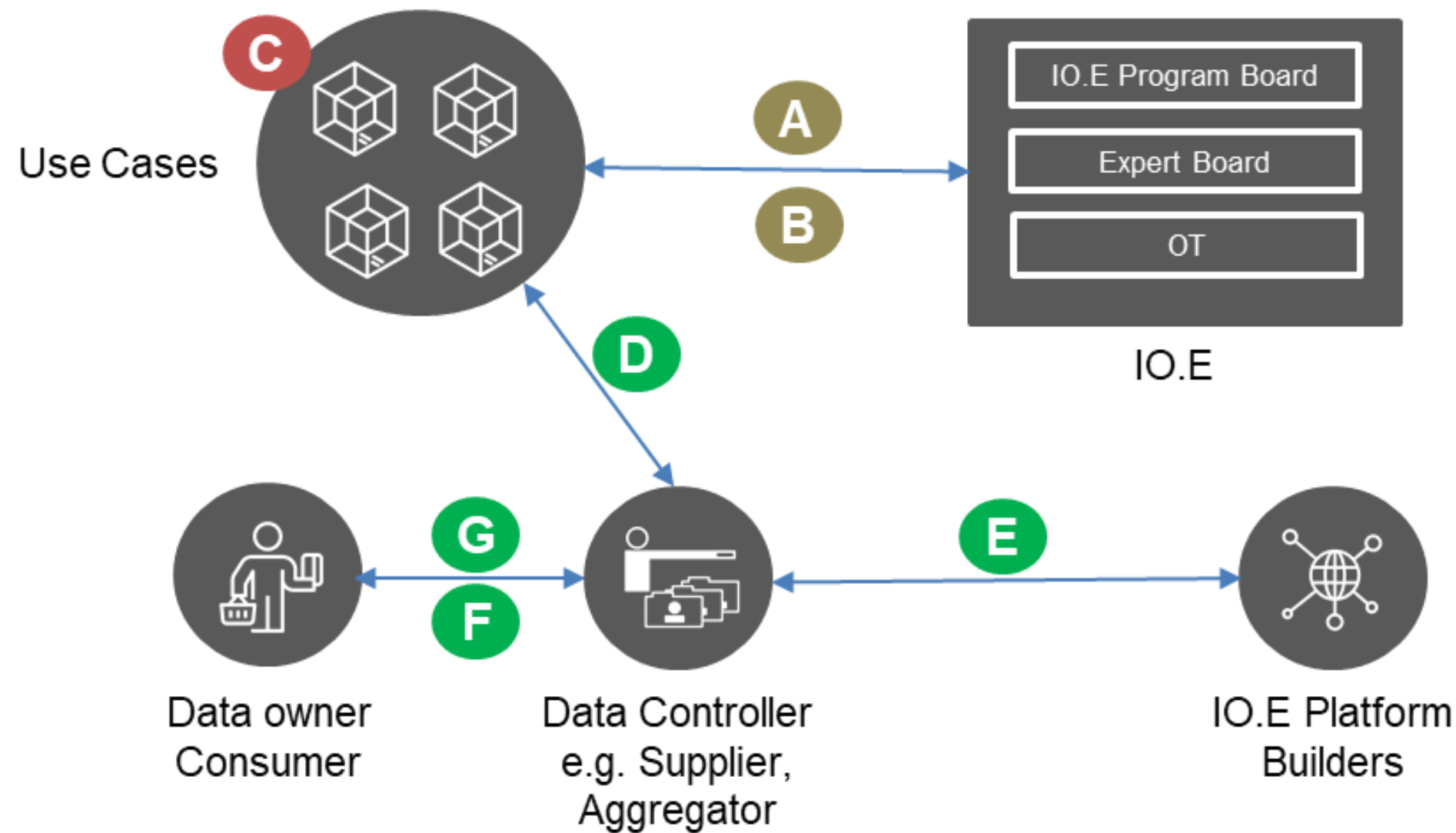
- Mapping ongoing, start of API interaction between use case on System imbalance forecast, soalar forecast aggregated consumer data

## System and market enablers

- Access to RT meter data at different granularity

- Questions 1: What data do “WE” need
- Questions 4: Do we use API ?

# And mapping contracts.....



- A** Rules of Engagement
- B** Sandboxing Rules
- C** MoU
- D** Controller to Controller Agreement
- E** Data Processing Agreement
- F** Informed consent
- G** Service Level Agreement

Question 2: What data sharing agreement do you have...