

# ESTFEED project

Data Exchange Platform and e-elering Client Portal

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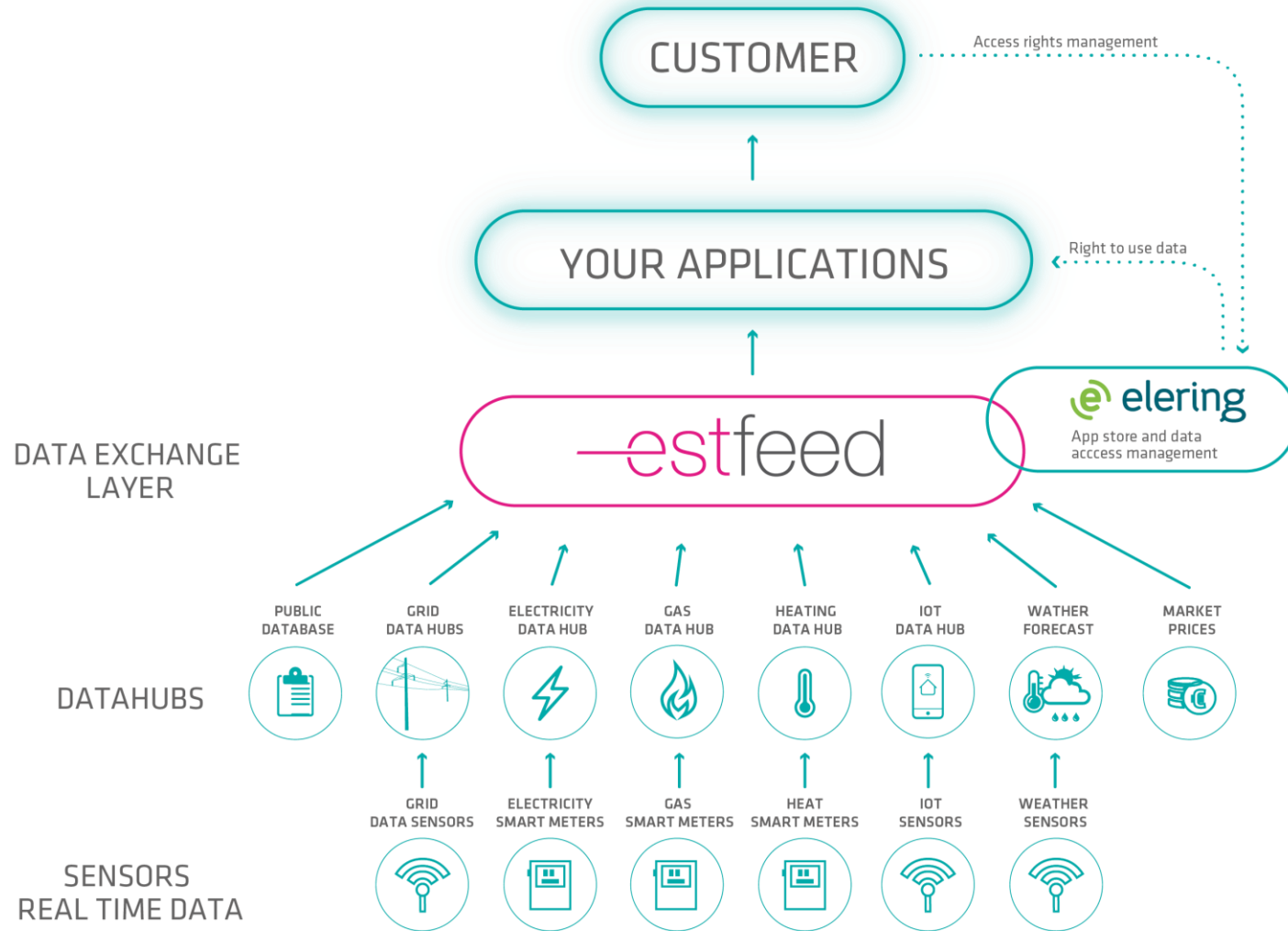
elering



# Main goal and background

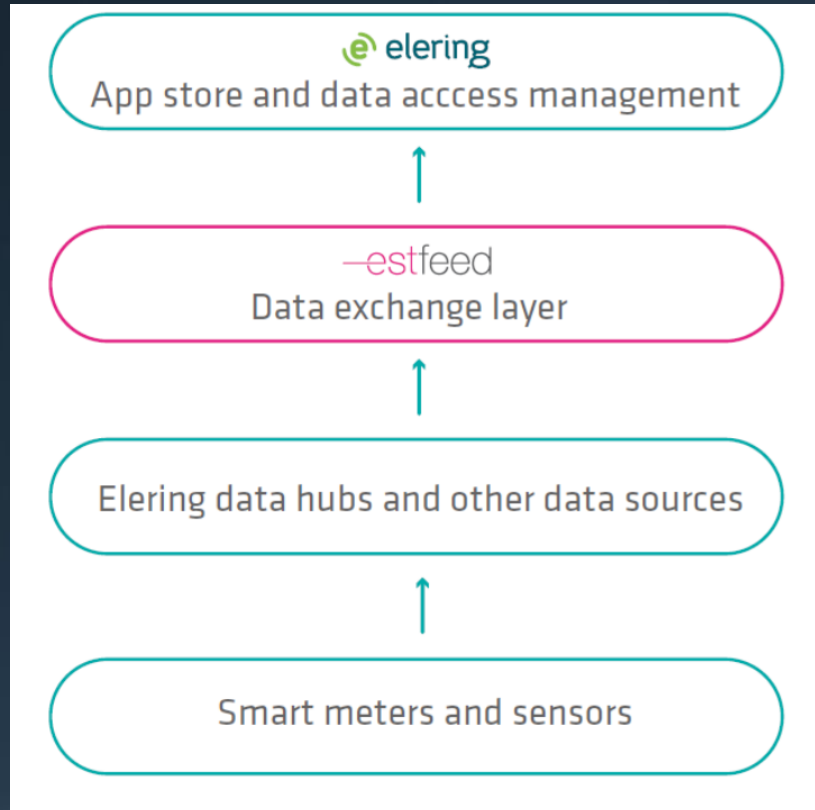
- **Legal, secure and one stop access to energy consumption data**
  - Owner of the data is the end-consumer (grid contract owner)
  - Mandate management system
- **Enabling factors:**
  - 100% smart meters installed in electricity, 80% in gas
  - 2013 opening of the electricity market
  - Electricity Data Hub (2012) and Gas Data Hub (2016) – regulated by the law (Electricity Market Act and Natural Gas Act)
  - Public X-road data exchange layer and ID-card

# Data flows and data access management



**Estfeed Protocol**  
HTTP and TLS connections  
Built on X-road technology  
(adapter and security servers)

# Estfeed



- Connects data sources, applications and consumers
- Secure access and management of data
- 12 Estfeed services
- Electricity & Gas Data Hubs, Central Commercial Register, Electricity price (Nord Pool), weather forecast (Foreca)

# E-eling – Estfeed UI

The screenshot displays the E-eling web application interface. On the left is a dark sidebar with the 'eeling' logo and a 'Log In' button. Below the logo, a 'Portal Services' list includes: Energy Consumption Data, Data Sharing, Data Usage History, Contract Information, and Representation Rights. The main content area features a 'What is e-eling?' section with a descriptive paragraph and a background image of a power plant. To its right is an 'Energy Consumption' section with a line graph and a message: 'You must be logged in to see your energy consumption data.' Below these is a grid of six 'Main functionalities' represented by icons: Energy Consumption Data (bar chart), Data Sharing (folder), Data Usage History (folder with coin), Contract Information (document), and Representation Rights (two people). At the bottom is a 'Smart Grid Applications' section with four items: Electricity price packages comparison tool (calculator icon), Renewable energy information system (sun icon), Transmission grid connection (power lines icon), and Elekrihind.ee (hand icon).

**Energy data, applications, e-services + management of related rights!**

## Uniqueness:

- Comparison of electricity and gas consumption data
- Data sharing with applications, private persons and energy suppliers
- Smart Grid applications

**Main functionalities**

eeling

# Partners

- Cybernetica AS (R&D contract)
- Thinklab, Aktors, Girf (procurement contract)
- Other interested parties, clients of Estfeed – different energy service providers who need energy consumption data
- 15 applications, 4 integrated with the platform
- Smart grid council once every quarter

# Main lessons learned and barriers to innovation deployment

- High complexity & tense deadlines
- External very competent R&D partner
- Analysis and realization at the same time
- Value proposition
- Business model

# Estfeed next developments

- **Short run:**
  - Easy integration process and client administration
  - More applications and data sources
- **Long run:**
  - Cross-border data exchange
  - Transmission of on/off commands
  - Alternative data exchange channels, platforms
  - Service fee



# *Elering – Electricity, Gas and Smart Grid System Operator*

*Estfeed – Tool for Realizing Smart Grid*

*E-elering – Customer Access to Data and Services*

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