



CELTIC-NEXT Proposers Day

25th September 2019, in Istanbul



Pitch of the Project Proposal
BENTRADE



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KoçSistem Profile



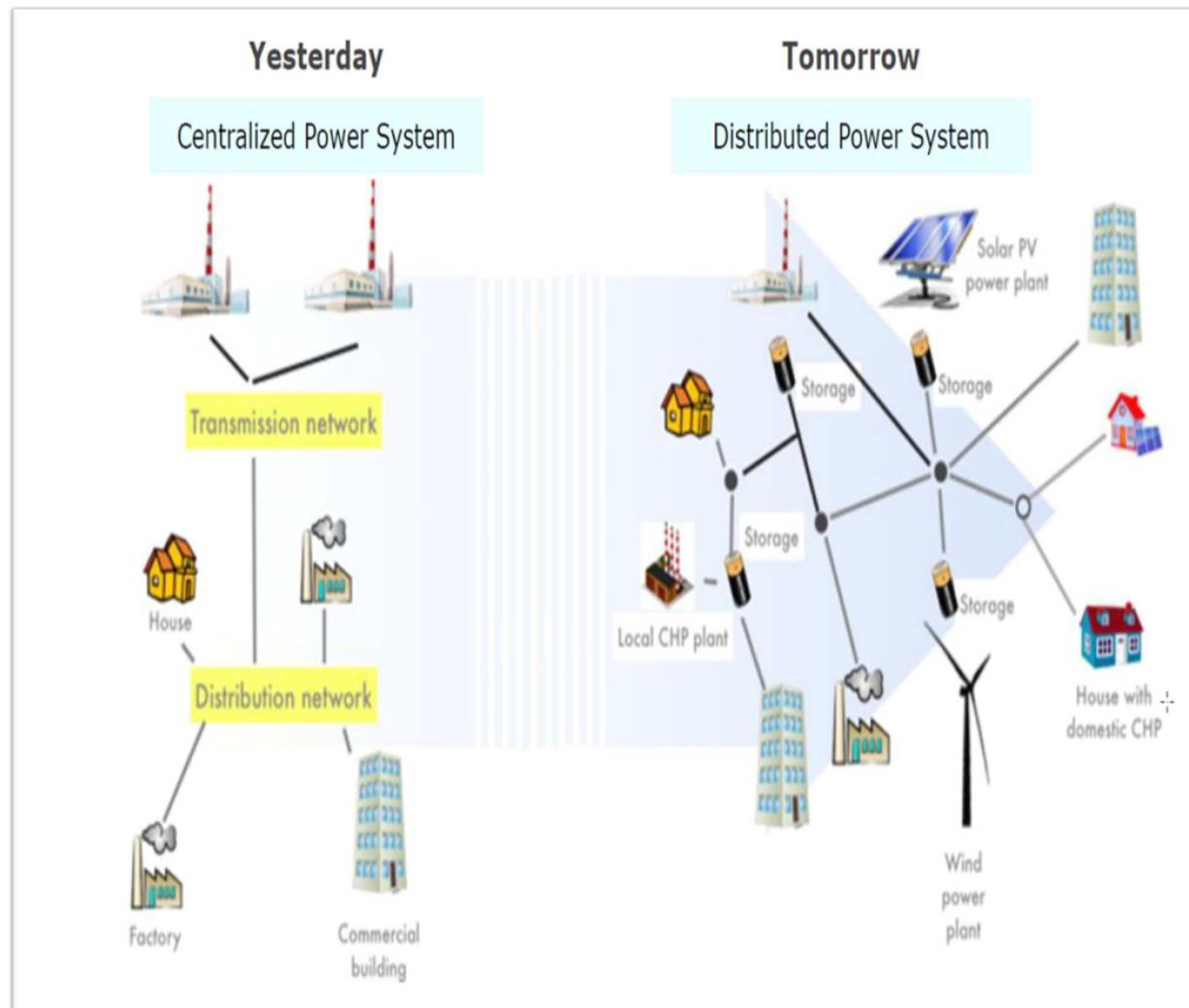
1300+ Number of employees **30+** National and International Business Partnerships **60+** SAP Customers

100+ R&D Engineer **1st** Turkey's first private sector R&D center in the area of software **1st** Turkey's first Security Operation Center (SOC)

Internet of Things	Security
Analytics	Data Center & Cloud
Business Solutions	Network and Voice
Digital Signage	Workstations

- Internet of Things Platform: Platform360
- Digital Signage Solution: Pixage
- Digital Workforce–RPA
- e-Government Products
- Leasing Solutions
- Mobile Workplace
- Cybersecurity solutions
- 3 Data Centers
- 150+ Maximus Cloud Customers
- 250+ Managed Service Customers
- 60+ SAP Customers
- 8.500+ Virtual Servers

Problem - Rationale



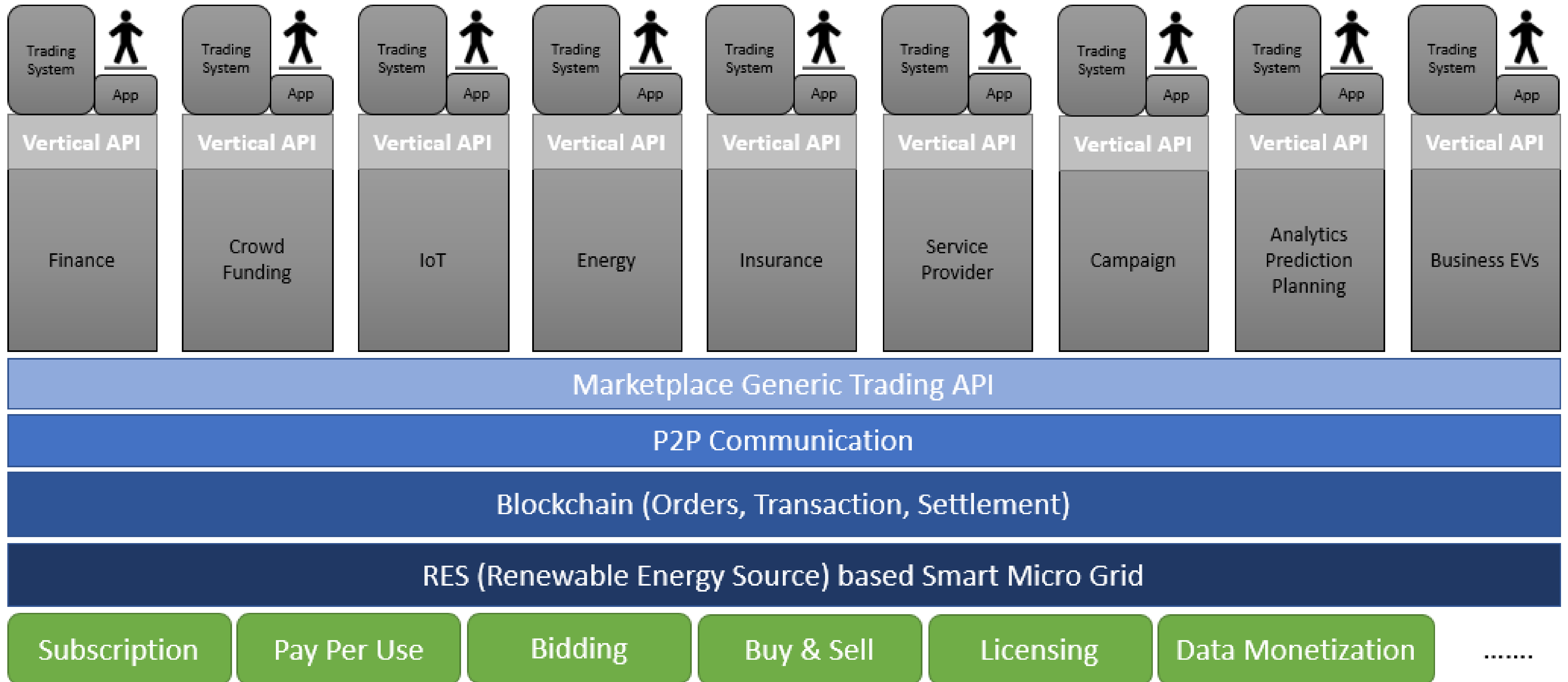
- As technological advancements come to life, **new smart energy delivering services** become available such as rooftop solar panels and storage devices.
- Triggered by new technologies, policy, regulation, and customer expectations are all contributing to a **shifting paradigm**
- Traditional utility businesses can no longer only rely on **demand for the commodity**
- Demand grows and become distributed and **centralized grid is too costly** and sluggish for these needs
- **Lack of customer choice** as well as financial models are locked in
- **Too much energy waste** and loss take place

Goal



- Decrease dependence on commodity electricity and disseminate use of renewable energy sources
- Create distributed energy asset owners (Prosumer)
- Track and audit energy production, consumption and transfer
- Balance demand response
- Reduce risks of failure and cyber attacks by distributed model
- Help create disruptive business and revenue models
- Provide smart energy services to customer with trust
- Create alternative financial models
- Create digital asset history

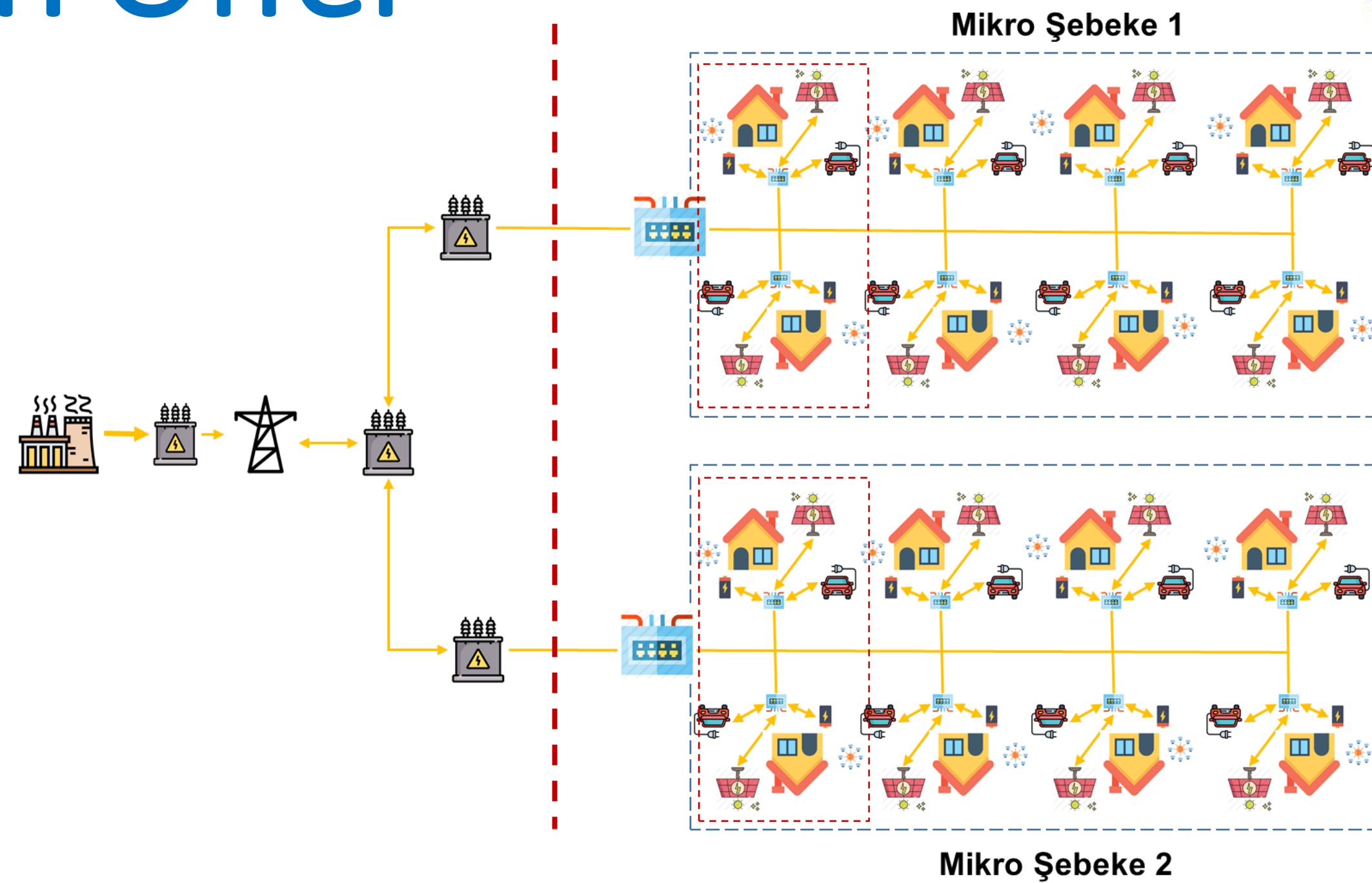
Solution Offer



Solution Offer



CELTIC-NEXT
Next Generation Telecommunications



LAYERS	COMPONENTS	VALUE
Power Grid	Distribution Generation, loads, storage, electric voltage	Paid for installation, configuration, operation and maintenance costs
ICT	Communication network devices, data storage, information flow, smart contracts, ledgers	Paid as service provider, licensing
Control	Monitoring and control systems	Paid for service and infrastructure usage
Business	Market Authorities, local market participants, trading platforms, mobile service providers	Paid for electronic services, contribution fees

Impact

- Introduce DLT in electricity market
- Achieve better understanding of customers behavior, interest and acceptance of active participation
- Develop new algorithms and techniques to support service and business innovations based on big data, AI and interoperable DLT
- Give suggestions to the national governance method and regulations related to DLT

Issue	Traditional Approach	Blockchain Approach
Single Point of Failure	Yes	No
Energy Profile Anonymity	No	Yes
Payment System	Centralized	Peer-to-peer sales/purchase system
Payment Settlement	By central authority	Through Consensus between all nodes
Energy Profiles Integration and Aggregation	By central authority	Through distributed ledger and consensus between all nodes
Demand Response Programs	By central authority	Autonomous signaling through node cooperation and smart contracts
Energy Agreements Verification	By central authority	Through consensus between all nodes

Partners



Turkey

KoçSistem
KoçDigital
Entek
Sedaş (DSO)
Tredaş (DSO)

Sweden

Stockholm University
IBM Sweden
Lulea University of Technology
Jamkraft AB
SuperGrid



Expertise Needed

- Micro grid communication and infrastructure provider, operator
- DSO - Distribution System Operator
- Business model and market operator
- Policies, rules, regulation facilitator

- IOT
- Cybersecurity
- Blockchain
- Data analysis, mining, deep learning

Contact Info



For more information and for interest to participate please contact:

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