

EnergizePro

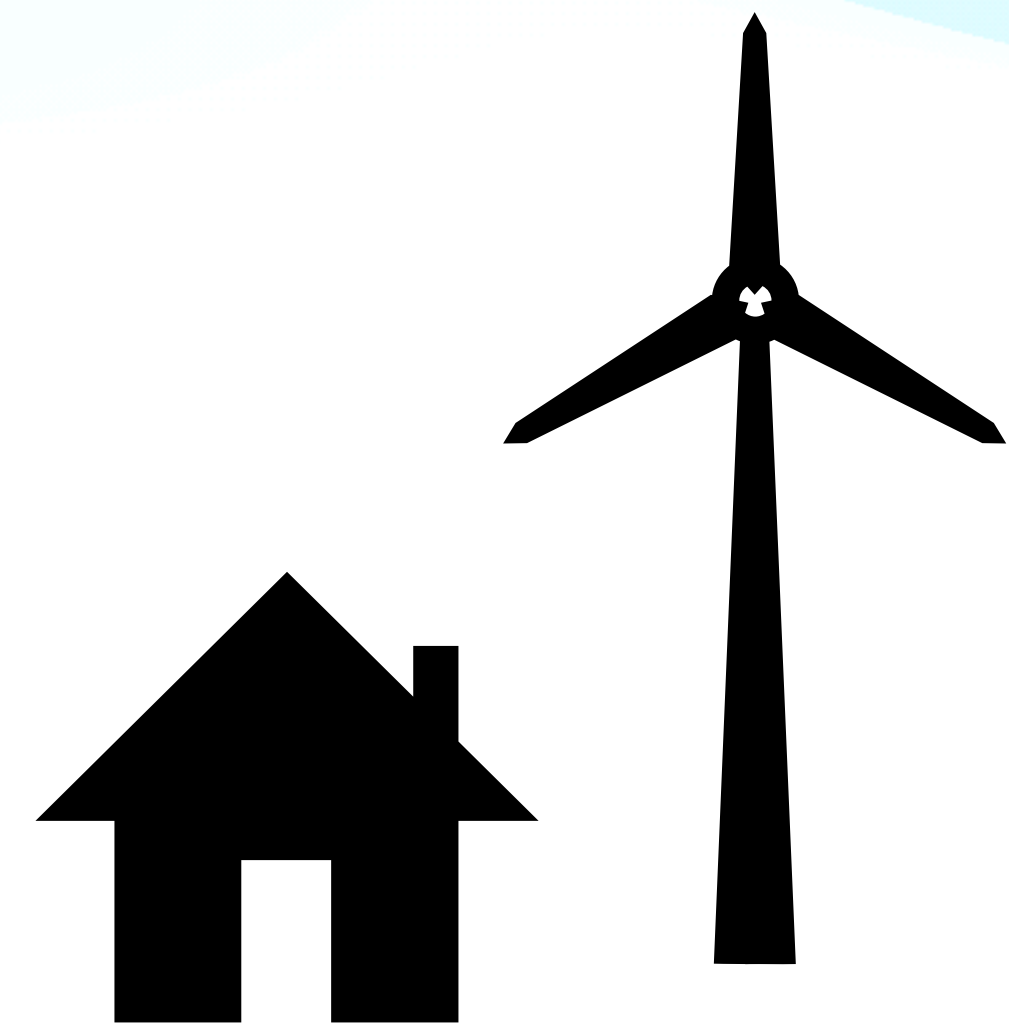
Energymanagement

By Key-Energy

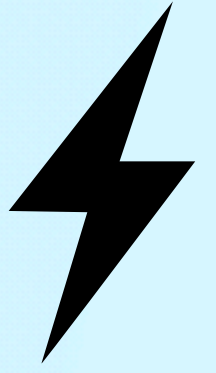
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What is the EnergizePro Energymanagement?

- The EnergizePro energy management system enables the end customer to manage the energy purchased from energy suppliers as well as self-produced electricity (e.g. using a solar system) in a software database.



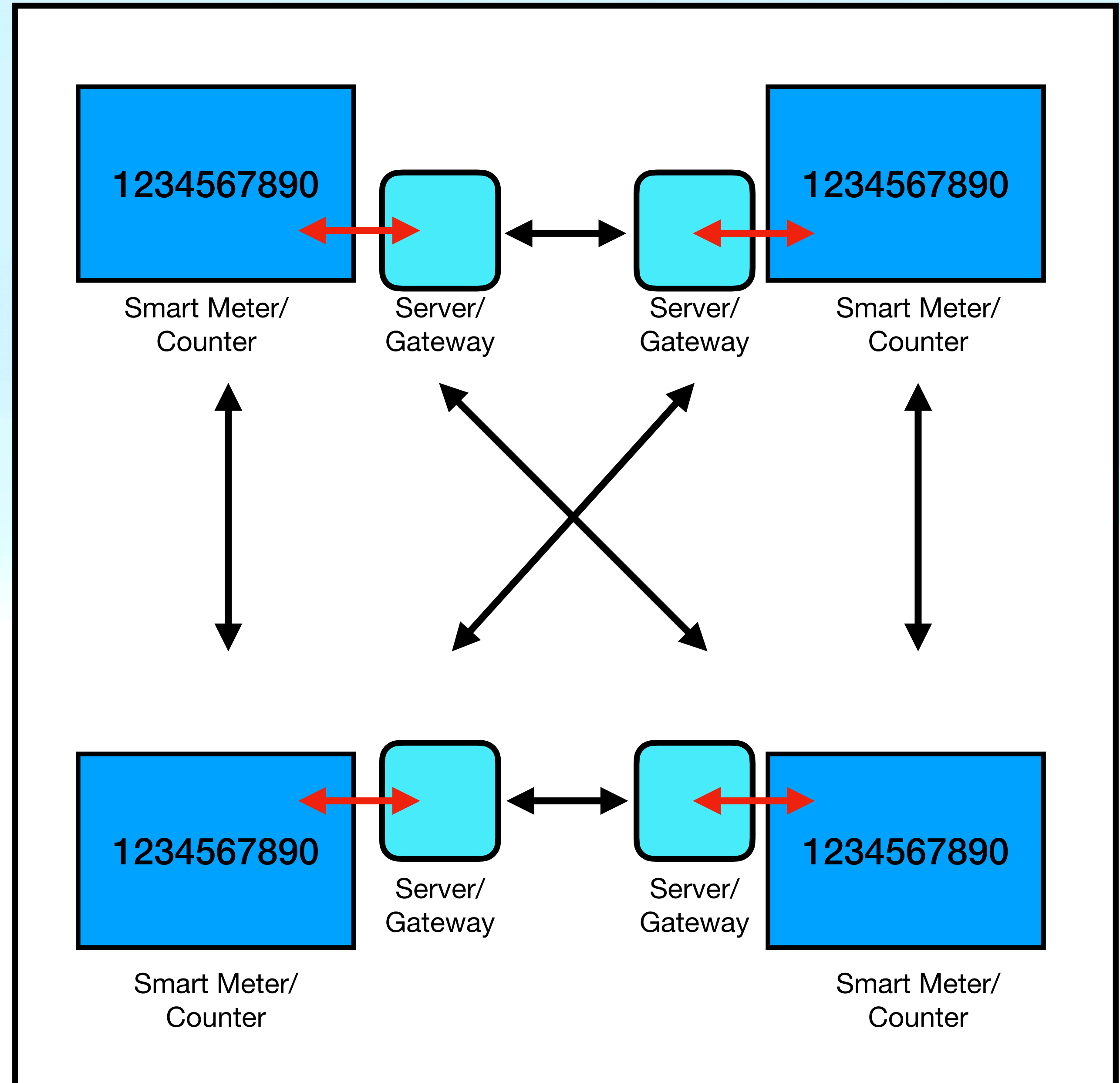
Detailed Information



Each consumer has their own "Server" that allows him to interact with everyone else on the network. This intelligent system allows an efficient use of electricity within the system. The system also communicates via a decentralized control system in which the data is managed. The principle is based on a decentralized database system. The same data is stored in each system, providing better protection against possible manipulation of central control systems. It will be defined which consumers may be supplied with external excess energy, or how much energy from self-production (photovoltaics, storage, etc.) is available for other providers. The customers form their own network in which all the data is managed. The software manages all servers in the network (houses, companies, schools, etc.) and thus enables the most efficient use of energy within the network. All data is encrypted during transmission, all servers are connected via IP-Ethernet interconnected, ensuring a reliable data exchange. With the energy management system, end consumers can exchange their electricity autonomously and act completely independently. With this function, the consumer network could also be operated entirely without electricity producers. This Method represents a unique exchange and communication in the network.

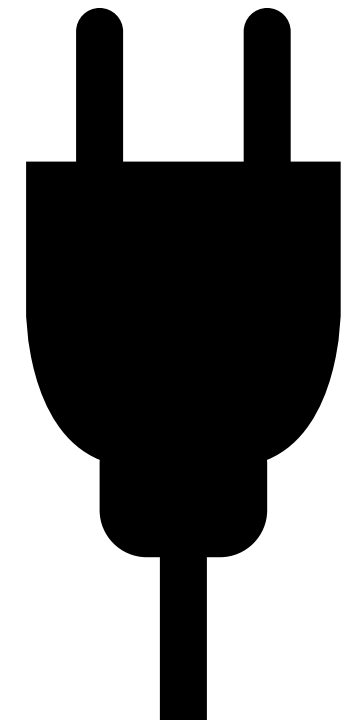
Picture 1

- Example: Smart Meter or similar Counter (electricity counter) with a server and how the communication would look like (star shaped)



Power Distribution

Since excess energy from the own system can also be passed on in the system, this value can also be defined by the customer. Either a fixed power can be selected, which is fed into the network system, or a dynamic value that exceeds self-consumption at a certain point in time.



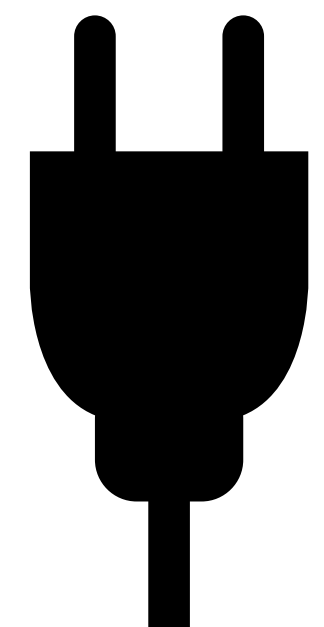
Detailed Information

Power Distribution

The server can communicate with the smart meter or with a separate Counter that transmits the exact data of the system. The consumers are controlled directly via the server. All consumers of the respective customer are listed in the gateway's software and can be activated individually for the network system or, if desired, remain under self-administration.

This interaction between consumers - performance - energy and producers results in a unique and future-oriented system.

Consumers are e.g. dishwasher, washing machine, heating. Pool pump, charging stations etc.



Management of surplus energy

EnergizePro is also an approach to the exchange of electricity between electricity end customers, which can significantly increase the efficiency of the electricity network.

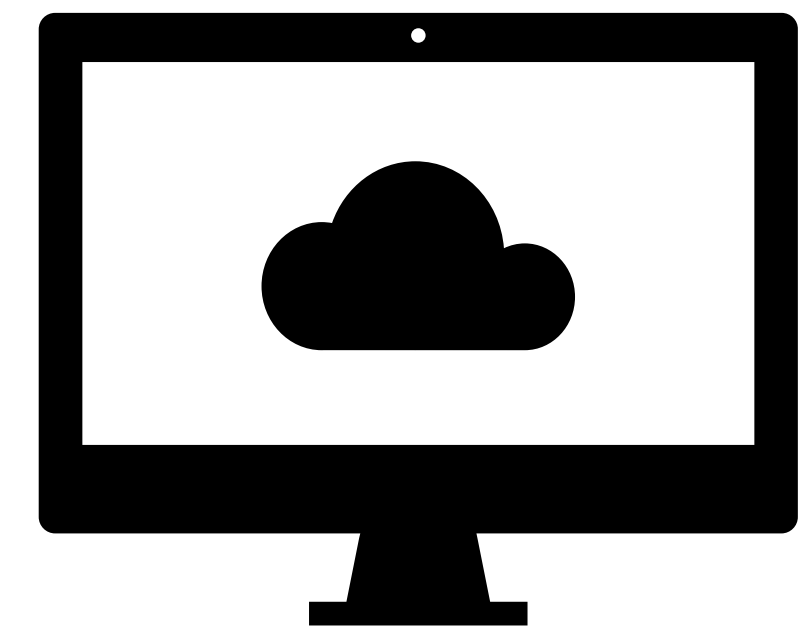
Existing smart grid solutions only affect the relationship between the energy supplier and the consumer.

In the future, end consumers will increasingly become electricity producers with their own photovoltaic systems, whereby energy from storage systems can also be regulated and controlled between end consumers.

EnergizePro can therefore also ensure the self-sufficient operation of the consumers regulate among themselves.

In the best case, conventional smart meter solutions transmit the data with a 15-minute delay and can therefore not be used in various applications.

EnergizePro uses a separate counter to generate data and thus has real-time data.



Picture 2

- Database

